



Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

Faculty of Natural Resources and
Agricultural Sciences

Social Acceptance of the Vesterhav Syd Wind Power Project

– Quantitative and Qualitative Content Analysis of Social Acceptance towards a Wind Power Project in the Ringkøbing-Skjern Municipality at the West Coast of Jutland, Denmark

Daniel Valentini

Social Acceptance of the Vesterhav Syd Wind Power Project

- Quantitative and Qualitative Content Analysis of Social Acceptance towards a Wind Power Project in the Ringkøbing-Skjern Municipality at the West Coast of Jutland, Denmark

Daniel Valentini

Supervisor: Lotten Westberg, Swedish University of Agricultural Sciences,
Department of Urban and Rural Development

Assistant Supervisor: Jens Emborg, University of Copenhagen,
Department of Food and Resource Economics (IFRO)

Examiner: Erica von Essen, Swedish University of Agricultural Sciences,
Department of Urban and Rural Development
Lars Hallgren, Swedish University of Agricultural Sciences,
Department of Urban and Rural Development

Credits: 30 HEC

Level: Second cycle (A2E)

Course title: Independent Project in Environmental Science - Master's thesis

Course code: EX0431

Programme/Education: European Master in Environmental Science (EnvEuro)

Place of publication: Uppsala

Year of publication: 2018

Copyright: all featured images are used with permission from copyright owner.

Online publication: <http://stud.epsilon.slu.se>

Keywords: Social Acceptance, Nearshore Wind Power, Vesterhav Syd, Mixed Methods, Quantitative Content Analysis, Qualitative Content Analysis

Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

Faculty of Natural Resources and Agricultural Sciences
Department of Urban and Rural Development

Abstract

Essential for the effectiveness of green technology projects is the acceptance of these projects by local actors, from the planning phase to the implementation. It is especially important to understand those people who oppose the idea of having wind turbines in their “backyard” since local resistance can hamper or even prevent the installation of wind power projects.

The aim of this study is to gain a deeper understanding of acceptance towards coastal wind power technology on a local level. By employing a mixed methods design, this study investigates a contested coastal wind power case at the Danish west coast of Jutland; Vesterhav Syd. In investigating acceptance towards wind power on a broad level and subsequently in more detail, this study is among the first to investigate acceptance in a holistic bottom up approach. Based on a quantitative content analysis of survey responses (n=148), it could be shown that 71.6% of the respondents are concerned about the wind park construction in their region. Concerns are dominantly related to the perception of visual and natural impairment and a fear of losing tourists in this popular holiday destination.

The survey results were further operationalised through the concept of social acceptance (Wüstenhagen, Wolsink & Bürer, 2007) to investigate location-specific concerns in more detail. Semi-structured interviews were conducted with people working in the tourism sector (n=7 confirmed after n=50 were originally asked for an interview). A qualitative content analysis of the interview revealed diverging acceptance about the wind park; while four in seven participants are in favour of the project, common concerns are uncertainties regarding outcome effects (e.g. reduced tourist numbers and more employment in the energy sector), as well as a perceived inadequate planning process. A combination of unique contextual factors (e.g. social and occupational networks) furthermore shapes the interview participants’ acceptance.

While these results cannot be assumed to be representative given the small sample size and the narrow focus of the interview group, they reveal a more nuanced picture of local acceptance that could be important to take into consideration when initiating similar coastal wind power projects in the future.

Based on the results, improved uncertainty management, enhanced collaboration in decision-making on a community level, as well as the appreciation of divergent perspectives are recommended to enhance the planning process of coastal wind power installations.

Popular Scientific Summary

Imagine you lived in a coastal region with an open view to the coast. The landscape was so beautiful and undisturbed that tourists came to enjoy, too. Now, what if it was decided to place 20 wind turbines along the beach that is so important to you and the region? Would you accept it? One likely reaction could be: "Indeed, clean energy is important, but does it have to be right here?" To find answers to such questions is getting more important, as the energy demand increases, while space on land to place wind turbines is getting scarcer. It is especially important to understand the acceptance towards coastal wind power projects, because acceptance (or a lack of it) makes people support a project or oppose it. Lack of acceptance can affect the effectiveness of such projects severely.

This thesis investigates how accepting people are in a scenario like this and the reasons that underlie their acceptance. Because it raised controversies, a recent wind power case at the Danish coast along the island of Jutland is investigated; the case of Vesterhav Syd. To address the issue of acceptance, this study first investigated broadly, what 148 local people think about the idea of having a wind park in their region. The results show that 71.6% voice concerns about the idea. While some people reject the project idea categorically, a major share would like to see the wind park further out. Most people explained their opposition through a fear of spoiling the beautiful seascape and a fear of losing tourists. While these results are not surprising, they were just the starting point for a deeper investigation. To gain a profounder understanding of acceptance towards the wind power project Vesterhav Syd, a more in-depth analysis of acceptance was undertaken.

Since tourism could be confirmed to be of major importance in the eyes of the local population, 50 people working in the tourism sector were contacted for an interview out of which seven agreed to describe in detail, what they think about the plan to construct a wind park in their region. The interviews helped to gain a deeper understanding of the opinions (their hopes, concerns, attitudes etc.) that these people hold regarding the Vesterhav Syd wind park. While the results cannot be generalised to reflect the opinion of tourism businesses in general, or of the whole municipality, they are still valuable, as the opinion of the interview participants resonates with previous empirical studies and provides the opportunity to explore options for an improved coastal wind power planning. This might make people more accepting towards similar projects. Generalisation is not possible, because the interview group comprised a special selection of people, who might hold different and special ideas about the wind park.

The analysis of the interviews revealed that four of the seven interviewed persons support the idea of a wind park in their region, for example because they see a potential for the combination of wind power and tourism. From their perspective, tourists could sail out to the wind mills, or climb up to enjoy the view. However, three people were concerned about losing tourists. Investigating what underlies their concerns, it could be revealed that they also support the general idea of wind power as a clean and renewable source of energy, but that they are uncertain about the effects a wind park will have on tourism. As long as there is no reliable information, they do not support the idea to a great extent.

Uncertainty is a general concern that affects acceptance. The planning process (from the central government's vision to construct more coastal wind power to the decision to construct it on the west coast of Jutland) was unclear to many of the interview participants and more information was requested to improve transparency.

To overcome these concerns in the future, it is suggested to address uncertainty actively through better information provision and by working together to obtain more reliable information on the effects a wind park might have for the region. The people who feel affected by it should have a chance to be involved. They should be able to work

together and contribute to overcome the issues that concern them, e.g. by developing surveys that can capture tourists' attitudes towards the wind park adequately. Generally, it is thereby important to take different opinions into account. This can help to find a solution that combines many interests, such as tourism and the generation of coastal wind power.

Contents

Abbreviations	9
1 Introduction: The Case of Vesterhav Syd and local Acceptance	10
2 Background on previous Wind Power Acceptance Research	12
2.1 Factors Influencing Wind Power Acceptance (Installations)	12
2.2 Specific Factors relevant for Acceptance in Coastal Wind Settings with Tourist Land Use	14
2.3 Utilisation of Literature Review Information	14
2.3.1 Research Gap	15
3 Research Design	17
3.1 Research Aims and Research Questions	17
4 Concepts of Acceptance	19
4.1 Attitudes and Acceptance	19
4.2 Social Acceptance	19
4.2.1 Socio-political Acceptance and Market Acceptance	20
4.2.2 Community Social Acceptance	20
5 Danish Wind Power Legislation and the Vesterhav Syd Case	23
5.1 Legal Background and Decision-Making	23
5.1.1 Basic legal Background for nearshore Projects	23
5.1.2 Compensation Schemes applicable to Nearshore Projects	24
5.1.3 Public Consultation in Practice	25
5.2 Vesterhav Syd Case Description	26
6 Quantitative Content Analysis	28
6.1 Quantitative Content Analysis Applied	29
6.2 Coding Schedule and Coding Manual	29
7 Results Quantitative Content Analysis	31
8 Discussion Quantitative Content Analysis	34
9 Qualitative Content Analysis	36
9.1 Focus and Sampling Considerations	36
9.2 Sampling in Practice	37
9.3 Interview Setup	39
9.3.1 Interview Guide	40
9.4 Analysis Strategy	40
9.4.1 Theoretical Reading	41
9.4.2 Abductive Reasoning	41
10 Results Qualitative Content Analysis	43
10.1 Participants' Backgrounds	43
10.2 Distributional Justice	44
10.2.1 Outcome (Costs and Benefits) for the Country	44

10.2.2 Outcome (Costs and Benefits) for the RSK Region	44
10.2.3 Outcome (Costs and Benefits) on the Interview Participants	48
10.2.4 Desired Improvements of Outcomes	48
10.3 Procedural Justice	49
10.3.1 Information Provision during the Process	49
10.3.2 Participation and expressing Opinion	50
10.3.3 Perceived Influence of Opinions	51
10.3.4 Desired Improvements of the Process	51
10.4 Trust	52
10.5 Factors that influence Acceptance not captured by the Community Dimension of Social Acceptance	54
11 Discussion of Qualitative Content Analysis	58
12 Conclusion	66
12.1 Improved Uncertainty Management	66
12.2 Enhanced Collaboration in Decision-making on a Community Level	67
12.3 Appreciation of divergent Perspectives	68
12.4 Collaborative Process Design	69
12.5 Caveats of this Study	70
12.6 Research Contribution	71
12.7 Future Research	72
Acknowledgements	73
References	74
Appendix	80

Abbreviations

Table 1. Abbreviations used in this thesis

Acronyms	Meaning
EIA	Environmental Impact Assessment
IP	Interview Participant
NIMBY	Not in my back yard
RKSK	Ringkøbing-Skjern
RE	Renewable Energy
REI	Renewable Energy Installation

1 Introduction: The Case of Vesterhav Syd and local Acceptance

This introduction aims to outline the relevance of this study. To achieve this, the Danish ambitions to increase employment of more coastal wind power projects are presented first. Furthermore, the concept of acceptance is introduced as a way of making sense of opposition and support of wind energy in general and specifically concerning individual projects, such as the Vesterhav Syd wind power project. Often, lack of acceptance on a local level can hamper project implementation of coastal wind parks. Based on this understanding, the problem formulation and an overall aim are introduced. The research approach to address these are briefly presented thereafter. Lastly, an outline of the overall thesis structure is given.

For several decades wind power has been an important renewable energy carrier in Denmark (Meyer, 1995; Möller *et al.*, 2012). Its importance is growing further, as the demand for “green” energy is increasing. Today, the wind power industry is a strong pillar of the Danish economy that employs close to 30,000 people in 500 companies nation-wide (Vindmøllerindustrien, 2016). More than 40% of Denmark’s total energy consumption is already covered by wind power production (Breum, 2015), but the plan is to increase the share further. The aim is to reach 50% wind energy contribution in 2020 and to reach renewable self-sufficiency by 2050 (Danish Ministry of Climate Energy and Building, 2012). To foster the energy transition, Denmark manifested their renewable energy goals politically. Part of these political ambition is the construction of new nearshore wind parks.

While renewable energy goals are worth pursuing to curb greenhouse gas emission from energy generation and at the same time meet an increasing energy demand, a strong focus on wind power necessitates more siting decisions (Wolsink, 2007a; Kaldellis *et al.*, 2013). This can causes problems of acceptance. While the support of wind energy is generally high in Denmark, on a regional and local level, public opinions diverge regarding individual projects and their siting decisions. While some support wind turbines in close proximity, others oppose them fundamentally. It is essential to understand the reasons behind people’s opposition against wind power installations to be able to successfully implement them (e.g. Graham *et al.* 2009; Wüstenhagen, Wolsink & Bürer 2007; Wolsink 2012). It is especially important to understand those people who oppose the idea of having wind turbines in their “backyard” since local resistance can hamper or even prevent the installation of wind power projects.

The concept of acceptance is frequently used to capture people’s attitudes towards wind power. Attitudes can take on forms from negative to positive and anything in between. Consequently, the concept of acceptance can capture positive attitudes as well as negative attitudes. Opinion polls and nation-wide surveys are often used to assess acceptance on a broad scale (e.g. on a national level) and reveal a high level of general acceptance (Firestone *et al.*, 2012). These assessments can then inform policy decisions for more wind power (Wüstenhagen, Wolsink & Bürer, 2007). But a broad and general assessment can draw a misleading picture about acceptance on a local level (*ibid.*), as local opposition to wind power projects show. Therefore, it should be distinguished between the general acceptance towards wind power and the acceptance of specific siting decisions on a local level (Firestone *et al.*, 2012; Wolsink 2012; de Sousa and Kastenholz, 2015).

Coastal offshore wind power projects are particularly susceptible to face opposition because they disturb the perception of the ocean as one of the last undisturbed natural

spaces (Soma and Haggett, 2015; Bidwell, 2017). Opposition is often linked to uncertainty about the costs and benefits of such project for the region and becomes more complex when different land-use practices, such as tourism and wind power are perceived to be competing (Papageorgiou, 2016).

Because of this complexity, the overall aim of this study is to gain a deeper understanding of the acceptance (or the lack of it) towards coastal wind power installations on a local level and the relevant reasons people express for their acceptance. This thesis was designed to extract the dominant reasons and the reportedly most affected actor group to conduct an in-depth analysis on their acceptance. To pursue this goal, the public opinions towards the planned near shore wind park “Vesterhav Syd” at the Danish west coast of Jutland was chosen as a case study. The investigation was carried out through a sequential mixed methods research approach including two interrelated steps. In the first step, a quantitative content analysis of survey data on local residents’ attitudes towards the planned wind park was conducted to identify dominant responses and expressed reasons for their stated attitudes. The results of this step revealed that the dominant concerns were related to the perception of nature and concerns about losing tourists in this popular holiday region. This became indicative for the second step, where the responses of a group of actors representing tourism businesses in the area were investigated in more detail based on a qualitative analysis of semi-structured interviews. This thesis is thereby, to the researcher’s knowledge, the first to utilise a mixed methods research design to investigate social acceptance towards a coastal wind power installation based on the previous assessment of relevant acceptance factors. The present mixed methods design aims to combine the advantages of quantitative and qualitative methods to gain a comprehensive, yet detailed account of acceptance.

To give the reader an indication of what to expect in this thesis, it is beneficial to give an outline of its structure.

Chapter 2 presents the background of this thesis, including a literature review of factors known to influence the acceptance of renewable energy installations (REI), as well as a section on how this information is utilised. In front of this background, a research gap, which is addressed with this study, is formulated.

In *chapter 3*, the research aims and research questions are derived and explained, before in *chapter 4* the core concept of this study –social acceptance– is investigated as a theoretical background. To prepare for the application of the concept to the Vesterhav Syd case, the legal background for coastal wind power planning and an introduction to the Vesterhav Syd location are presented in *chapter 5*. *Chapter 6* then presents the quantitative content analysis as an analytical method for the first part of this mixed methods research. In *chapter 7* the results in application on the case are presented, and later discussed by revisiting the research questions in *chapter 8*. The results obtained in these two chapters form the basis for, and give focus to, the second part of this study; the qualitative content analysis. The second part of this study is introduced in a similar way to the first analysis part. *Chapter 9* introduces the qualitative content analysis method, *chapter 10* presents the findings in application to the case and *chapter 11* discusses the result of this second and last analysis phase in relation to the previous results and furthermore summarise the main findings. Finally, in *chapter 12*, the conclusions gained from this study are applied to derive potential value of the findings in practice and recommendation for further research in the field of localised coastal wind power acceptance. It also outlines caveats of this study.

2 Background on previous Wind Power Acceptance Research

This study and the research on the Case of Vesterhav Syd can be embedded in a broader state of research on the acceptance of wind power projects. Thus, this chapter:

1. Provides an overview of factors influencing acceptance towards wind power projects
2. Maps out the field of research specifically concerned with the perception of nature and tourism in relation to local wind power projects¹
3. Based on objective 1, selects a concept for the analysis of the Vesterhav Syd case by incorporating the identified contributing factors to acceptance.
4. Based on objectives 1-3, identifies a gap in research to address with this study

Each objective is addressed in a separate subchapter. Beginning with *subchapter 2.1*, factors influencing the acceptance towards wind power are reviewed.

2.1 Factors Influencing Wind Power Acceptance (Installations)

Langer et al. (2016) provide an extensive overview of the research on acceptance in a REI context, specialising on wind power acceptance by combining literature from various fields. Langer et al. (2016) separate their findings into three categories: personal characteristics, perceived side effects, technical and geographical issues and process related variables. Each of the literature categories comprises a multitude of contributors that have been found to influence acceptance (Langer *et al.*, 2016).

Personal Characteristics influence people on an individual level (Langer *et al.*, 2016). Predispositions, beliefs, attitudes and knowledge a person holds, can affect the acceptance of wind energy positively or negatively. In a local context, attitudes are furthermore an important precursor to acceptance and form a crucial part of this study. Therefore, attitudes in connection with local acceptance are revisited later in *19 4*.

Place attachment is concerned with the cultural and recreational value of a landscape (e.g. Waldo 2012; Jones & Eiser 2009; Firestone et al. 2015; Ladenburg 2008; Swofford & Slattery 2010; Devine-Wright & Howes 2010; van der Horst 2007). Close attachment to a location will influence acceptance of new wind power projects in that location. Especially in terms of visual amenity (Jones and Richard Eiser, 2010), place attachment becomes entwined with acceptance. The attachment to a place can reduce the acceptance of wind power projects, as they are perceived to spoil the landscape, or it might be increased when windmills are perceived as visually appealing or are seen as a symbol for renewability in general. Place attachment gained importance as a factor that influences acceptance on a local level. A growing research branch is concerned with the location specifics of nearshore offshore installations, where the placement in vicinity of the coast is frequently perceived to be intrusive (e.g. Haggett, 2011; Ladenburg, Termansen and Hasler, 2013). In relation to the Vesterhav Syd project, place attachment

¹ Objective 2 was added after the preliminary literature review has been conducted because of the special importance for this thesis: After the first (quantitative) analysis of survey data, which revealed a dominant concern about visual disturbance and an effect on tourism in the RKSK municipality, subsequent research about the perception of wind power in relation to tourism was undertaken. Knowing about the importance of nature perception and tourism in retrospect, this objective was chosen to highlight these issues in relation to the acceptance towards wind power projects.

is an issue of significance, because inhabitants of the RSKS municipality are considered to be closely connected to their region.

Following Langer et al.'s (2016) categorization, the second category, *Perceived Side Effects*, is concerned with the perceived negative effects wind turbines have and thereby affect acceptance. The term perception in this context necessitates an emphasis, because the effect wind turbines have are experienced differently and are therefore individual. It is important to discern between the measurable/ quantifiable effect of e.g. the noise a wind turbine generates, versus the perception of it as being noisy. Two persons might perceive the same noise level differently and therefore consider it disturbing, or not.

Perceived site effects are also concerned with natural aesthetics, as siting of wind turbines impacts the view and thereby the acceptance towards the installation, especially within pristine areas that are otherwise not affected by visual intrusion (e.g. Wolsink 2007b; Wolsink 2000; Ladenburg 2008; Firestone et al. 2015; Ladenburg & Dubgaard 2007; Wolsink 2007a; Toke et al. 2008; Dimitropoulos & Kontoleon 2009). The importance of this factor is highlighted by Wolsink (2012, p. 1811): “The attribute *landscape* is by far the most significant in social acceptance. In individual attitudes, the beliefs and valuation concerning landscapes are the strongest determinants of attitudes toward the energy source wind power”. Place attachment is thereby related to perceived site effects. Despite this fluid boundary between these factors, a distinction is useful for the comprehension of this literature review, also because visual and intrusive concerns in terms of side effects can further be broken down to specific stressors that can cause visual nuisance.

Stressors can for example be: wind shadow creation, navigation light flashing (Hübner and Pohl, 2010; Hübner and Hahn, 2013) and a combination of both (“disco effect”) (Gibbons, 2015). Also more technical aspects, such as the design of a turbine, their height (e.g. Wolsink, 2000, 2007a; 2009; Kaldellis *et al.*, 2013), the shape of a wind park (Devine-Wright, 2005a) and the distance to residential areas (Devine-Wright, 2005a, 2007, 2011) were found to affect acceptance, as well as number and performance of the wind mills (e.g. Ladenburg, Termansen and Hasler, 2013; Gibbons, 2015). Furthermore, impacts on human health and the environment can affect acceptance, such as noise (Devine-Wright, 2007; Waldo, 2012; Firestone, Bates and Knapp, 2015), and the general fear of adverse health effects. Any combination of perceived side effects can also increase the fear of dropping real estate values (e.g. Jones and Richard Eiser, 2010), but also on tourism, (e.g. Lockington and Baldock, 2008; Hübner and Pohl, 2010) and eventually on local development (Eltham, Harrison and Allen, 2008; Frantál and Kučera, 2009).

Lastly, the category of *process-related variables* shapes acceptance of wind power projects. Legal frameworks set the boundaries for an acceptable process and therefore final outcome (Breukers and Wolsink, 2007; Wolsink, 2007a; Hübner and Hahn, 2013). The *perception* of the process, is important in order to raise or inhibit acceptance (Dimitropoulos and Kontoleon, 2009). When people that feel affected by a project are not sufficiently involved in the planning process, or can shape the outcome, acceptance is reduced. For this, clear communication and information provision hold a key role with which acceptance can rise or fall (Jones and Eiser, 2009; Swofford and Slaterry, 2010). Clear communication, still depends on different actors' perceptions.

Entwined with communication are issues of transparency (e.g. Breukers and Wolsink, 2007; Gross, 2007; Toke, Breukers and Wolsink, 2008). Besides quality and quantity of information provision (e.g. Devine-Wright, 2005b; Walter and Gutscher, 2010), the general public involvement, trust in involved actors and the process, (e.g. Graham, Stephenson and Smith, 2009) and the perceived fairness of it (e.g. Wolsink, 2007b;

Wüstenhagen, Wolsink & Bürer, 2007; Firestone, Bates and Knapp, 2015), as well as perceived benefits and risks (Devine-Wright, 2005a, 2007; Wolsink, 2007b; Huijts, Molin and Steg, 2012) are known to correlate with acceptance. Concluding about process-related variables, this group of factors will be explained further in connection to the Vesterhav Syd case and its process design in *subchapter 5.1*.

2.2 Specific Factors relevant for Acceptance in Coastal Wind Settings with Tourist Land Use

The general acceptance of wind power as a technology is often interpreted as project specific, local acceptance (e.g. Wolsink 2012). This can lead to conflicts, when policy makers and project investors base their assessment of project specific acceptance on an assessment of general acceptance of wind power technology, e.g. through broad surveys. The general acceptance of wind power and local projects are essentially different, because they describe the acceptance towards different “attribute objects” (Wolsink 2012, p.1793) as (1) renewable energy in general and (2) a specific energy project. The result is a gap between the general support of wind power, and the opposition of specific projects on a local level that is often not recognised, let alone addressed by policy makers and investors and therefore leads to opposition, which hampers project implementation (Ibid.).

To investigate this difference in acceptance, especially place attachment gained importance in acceptance research in recent years (Devine-Wright, 2011; Bell *et al.*, 2013). Place attachment describes the connections people develop to “their” area because of two reasons: place dependence, as the understanding that a region provides unique opportunities for employment and recreation, and place identity, as the region to form a part of a persons’ identity (Rudolph, 2014). In place dependence, viewing the seascape can be interpreted as an economic resource of tourism which competes with the wind energy sector for land use (Brownlee *et al.*, 2015; de Sousa and Kastenholz, 2015). Frequently, this perceived inconsistency in land-use between wind power and tourism prevails, “because it may easily affect the character of the area that is considered the primary attraction for tourists” (Wolsink 2012, p.1808). In a coastal setting, concerns about the effect of the project on aesthetics, socioeconomics of surrounding communities, tourism, fishing, wildlife and ecology contribute to inform acceptance toward specific projects (Wolsink 2012).

Despite the prevailing understanding that visual impact is inherently negative, it depends on the individual perception of actors to evaluate this impact. It was shown that there might even be a perceived positive relationship between tourism and the wind energy sector (e.g. Frantál & Kučera 2009; Westerberg *et al.* 2013, 2015), for example in terms of energy tourism (e.g. Liu *et al.* 2016). Claims about the positive or negative effects through wind farms are frequently embedded in uncertainty, as often no credible evidence is present in prospect of a planned wind power construction (Rudolph, 2014). Uncertainties about the effect of a wind park are often translated to risks e.g. for employment in the tourism sector and thereby inform the generally negative acceptance towards these projects as outlined above.

2.3 Utilisation of Literature Review Information

As the literature review shows, issues of acceptance are often investigated in a broad REI context and specifically in terms of wind power installations on a local level. All of the above listed factors were found to influence acceptance. An overlap between factor

categories indicates that there is not one way to categorise them (e.g. personal characteristics and perceived side effects), but that depending on research orientation and aims of the study, categories can be revised and reconnected.

The concept of social acceptance (Wüstenhagen, Wolsink & Bürer, 2007) clusters factors of acceptance in three dimensions (socio-political, community and market acceptance), which compile a large share of the aforementioned acceptance factors. The concept provides the most comprehensive framework to analyse acceptance in a nuanced way and was therefore chosen as a core concept in this study. Because of this central role, the concept of social acceptance is revisited and explained in more detail in *subchapter 4.2*.

2.3.1 Research Gap

This subchapter addresses the last objective of the background chapter; the identification of a research gap.

It became apparent when studying literature on wind power acceptance that both, the broad investigation of acceptance in quantitative studies, as well as the nuanced analysis of acceptance in quantitative studies are valuable. It became also apparent however that most research on acceptance of wind parks relies on *either* qualitative *or* quantitative methods. A trend is observable that quantitative investigations of opinions and perceptions outweighs the qualitative research in the field (Rudolph, 2014; de Sousa & Kastenholtz 2015). Quantitative strategies often rely on questionnaires and econometric analyses. Even though, these methods are often constrained by geographical scope, they comprise a larger sample population and allow for a certain degree generalization (cf. Bryman, 2012). Still, they do not allow for the same in-depth investigation as would be required for the highly contextual assessment of acceptance (cf. McLaren Loring 2007; Waldo 2012).

In contrast, qualitative approaches pay adequate respect to the complexity of the issue and provide a deeper understanding of acceptance (cf. Bryman 2012, p.13). To achieve this, mostly case studies are conducted in combination with interviews to derive underlying factors that contribute to acceptance in areas near wind power projects (cf. Heiskanen et al., 2007). This thesis tries to combine advantages of both strategies by using a mixed methods approach.

Another gap is the limited research on coastal wind parks, as most previous studies concentrated on the acceptance of onshore installations. With the emergence of more coastal projects, the trend tends towards investigating these in more detail (Haggett 2011). While the relation of tourism and acceptance of offshore wind energy has been subject to previous research, few employed a mixed methods research design (e.g. Devine-Wright and Howes, 2010; Firestone, Bates and Knapp, 2015). Nevertheless, to the researchers knowledge, only one previous study employed a quan-qual approach to investigate particularly place attachment and attitudes towards offshore wind energy developments from recreationists' perspectives (Brownlee *et al.*, 2015). The present thesis deviates from this approach. By opening up the scope of acceptance research to investigate the most pressing factors contributing to acceptance (or the lack of it) through a quantitative content analysis of attitude survey responses in the project region, and uses the derived dominant contributors to acceptance of this population to guide the selection of key-factors to acceptance an investigate them in greater detail.

Furthermore, most research is conducted post project implementation, which limits the direct applicability of the research results to the project itself. By investigating the ongoing Vesterhav Syd project, this study explores a wind park that is still in planning.

Without claiming that this study can effectively contribute to resolve the controversy surrounding the project, it provides a snapshot of people's acceptance that can help to understand underlying factors of acceptance. The mixed methods research design is introduced hereafter in *chapter 3*.

3 Research Design

To overcome the identified gaps in previous research, this section lays out the research procedure to explain in which way the thesis addresses the research aims and questions. The basic approach to this study is a sequential mixed methods design (Tashakkori and Teddlie, 2016). Breaking the terminology of mixed methods down, they are frequently referred to as a combination of quantitative and qualitative research methods (Bryman, 2012). They are used sequentially, because, the results of the quantitative data analysis forms the stepping-stone for consecutive qualitative research (Tashakkori and Teddlie, 2016).

Several rationales underlie the decision to utilise a mixed methods research approach for this study. Bryman (2012) suggest 16 empirically derived reasons to employ multiple methods in research projects. Eight of these reasons were found to be potentially relevant for this study as well. They were therefore used to justify the application of a mixed methods approach. The first reason is to *offset* the disadvantages that two research approaches have. The underlying rationale is that by combining the advantages of different approaches, the disadvantages can be mitigated (cf. Bryman 2012, p.633). The reason of *completeness* refers to the supposition that by combining different methods, a more comprehensive account of the concept of social acceptance, when investigating the Vesterhav Syd case, is gained. By means of *explanation*, the qualitative method is used to clarify the results of the quantitative phase further (ibid.). In addition, the application of two methods increases the *credibility* of this study as the quantitative phase gives focus to the study and provides countable relevance that is later investigated in detail in the qualitative phase (ibid.). An additional argument for the application of mixed methods is that it provides a useful *context* to this thesis. While the qualitative research provides a contextual understanding coupled with broad relationships among findings, the quantitative results provide a framework for the investigation of these elements (ibid.). Moreover, qualitative data provides a means of *illustration* for the quantitative findings that is also connected to the reason of *completeness* and *explanation* (ibid.). As a second but last reason, mixed methods provide an added *utility of improving the usefulness of findings*. The first, general (quantitative) impression is deepened through the qualitative phase, so that issues of concern as identified during the qualitative phase gain more relevance in application (ibid.). Lastly, the reason of *enhancement* broadly refers to making more of the quantitative findings by gathering additional data qualitatively (ibid.). The eight reasons justify the application of mixed methods research mostly through this general enhancement of previous findings, but place different emphasis on the way in which this enhancement is achieved. The rationales are revisited in the discussion chapter 11 to assess how the quantitative results relate to the qualitative results and whether it was adequate for this study to employ a mixed methods design.

3.1 Research Aims and Research Questions

The first aim of this study is to gain an overview of the varying acceptance towards the Vesterhav Syd project as expressed by residents and the reasons that underlie these perceptions. Based on these findings, the second aim is to analyse the social acceptance in greater depth. For clarification, the process steps of this research are depicted in *Figure 1.* below and are supplemented through research questions to meet the two aims respectively.

As indicated above, the research process is split into two dependent research phases. These are the exploratory phase and the explanatory phase. Each phase constitutes

specific methods and corresponds to respective research questions and aims. In the exploratory phase, the responses to survey questions, asking respondents about their attitudes regarding the Vesterhav Syd construction in their local area, are analysed to uncover response patterns to aggregate the attitudes into themes and categories. A theme is a broad level of aggregation that comprises several categories. In this analysis two themes exist: attitudes and the reasons that underlie these. This first phase uses a quantitative content analysis as a method. By analysing 148 interview responses, this step quantifies the distribution of dominant attitudes and reasons in the project area. As the analysis revealed, the anticipated effect of the project on tourism plays a pivotal role in this case. Therefore, the research project should be seen to converge towards this issue. Keeping this in mind, facilitates the understanding of tourism as being a dominant category of reasons that provides the ground for the subsequent phase. To operationalise the results for the second research step, they are therefore related to the concept of social acceptance (Wüstenhagen, Wolsink & Bürer, 2007). The concept provides a framework to analyse the interviews in the second phase in greater depth.

In the second phase (explanatory phase), a qualitative content analysis is used as a method. The concept of social acceptance guides the analysis of semi-structured interviews in a group of people working in the tourism sector in the project area. The aim is to gain a deeper understanding of the dominant factors that inform social acceptance in this group. Seven people working in the tourism sector were interviewed for this purpose. The group as well as the contributors under further investigation were derived from the explanatory (quantitative) phase because they proved to be most

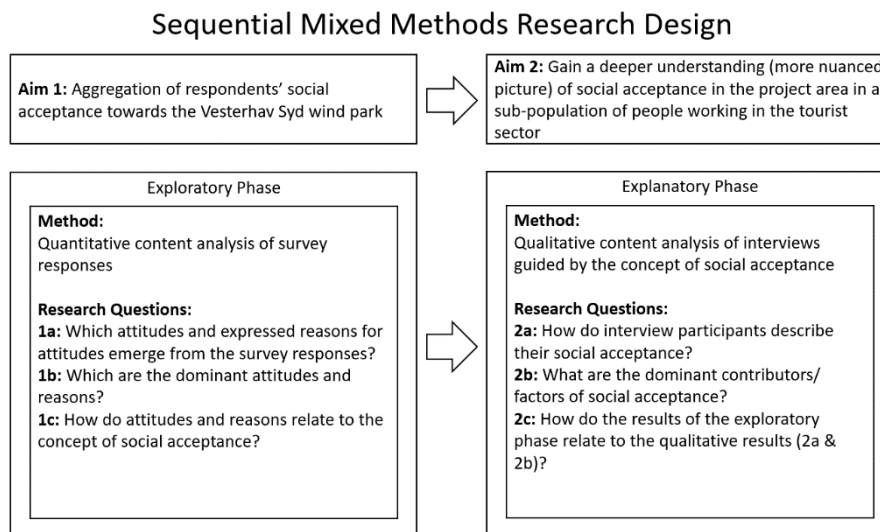


Figure 1. Research Design Vesterhav Syd Case Study

relevant contributors to acceptance. Concerns about decreasing tourist numbers could have been investigated from the perspective of the visitors in the region, as well as from people working in the sector. It was decided to investigate the latter, because this has not been attempted in a similar study design before, but can reveal insights about the perception of people living and working in the region.

The two phases, their aims, research questions and methods are elaborated in more detail in *chapter 6* for the exploratory phase and *chapter 9* for the explanatory research phase. The concept of social acceptance is elaborated further in *chapter 4* hereafter.

4 Concepts of Acceptance

After having introduced the aims and research questions, it is important to explain the concept of *social* acceptance in more detail, because it is the core concept in this study. It was chosen because it provides to the researcher's knowledge, the most comprehensive framework to analyse various acceptance factors regarding renewable energy projects. Social acceptance is presented in this chapter and not in the background section, to enhance the understanding for the subsequent analyses.

4.1 Attitudes and Acceptance

The first part of the thesis (exploratory/ quantitative phase) deals with the analysis of survey responses to identify categories of social acceptance for an in-depth analysis. The survey however, does not ask questions specifically about the social acceptance towards the Vesterhav Syd project, but about people's *attitudes* towards it. Therefore, the attitude responses are used as a proxy for the social acceptance of the respondents. As Jobert, Laborgne and Mimler (2007) suggest, identifying attitudes of the public is an often-used approach to identify social acceptance. Substituting attitude responses for social acceptance is pursued in several studies without explicitly deriving a causal link between the two (e.g. Meyerhoff, Ohl and Hartje, 2010; Langer *et al.*, 2016). On the other hand, to the researcher's knowledge, there is no theory that links social acceptance to attitudes either. Therefore, in the first part of this study, attitudes are used to find factors contributing to social acceptance.

4.2 Social Acceptance

Acceptance is a broad concept that has been defined in various ways, which often lack clarity and precision (Wüstenhagen, Wolsink & Bürer, 2007, p. 2684). In this thesis, acceptance is therefore understood as agreeing or rejecting the process and/ or outcome of wind power installations broadly. The opposite of full acceptance would therefore be a lack of acceptance (cf. Wüstenhagen, Wolsink & Bürer, 2007). Acceptance is thereby understood as a continuum rather than a binary attitude. On an imaginary scale of unconditional acceptance to complete rejection (lack of acceptance), a person can hold any one position at a given point in time (Wolsink, 2007b).

In relation to this basic understanding of acceptance, *social* acceptance is the core concept in this thesis. The interpretation of social acceptance is derived from Wüstenhagen, Wolsink & Bürer (2007). While stressing a lack of clarity also of this concept in their research, Wüstenhagen, Wolsink & Bürer (2007) do not offer a clear definition social acceptance themselves. Wolsink, (2012, p. 1785) later on describes social acceptance as "the degree of which a phenomenon (e.g., wind power implementation) is taken by relevant social actors, based on the degree how the phenomenon is (dis-)liked by these actors". It is best understood by investigating the different components (dimensions in Wüstenhagen, Wolsink & Bürer's terminology). Wüstenhagen, Wolsink & Bürer (2007) conceptualized social acceptance by differentiating between three dimensions: socio-political acceptance, community acceptance and market acceptance. While separating between these dimensions, their interdependence needs to be highlighted, as they affect one another and constitute a unique constellation of influencing (or contributory) factors that vary from case to case. Three factors underlie each dimension.

The concept of social acceptance provides a more nuanced lens for investigating acceptance than the general acceptance concept. It comprises many of the factors that inform acceptance in one model. It furthermore provides a structured way of perceiving the factors that influence social acceptance as well as a vocabulary to refer to when analysing the Vesterhav Syd case. Because of their interdependence and their importance for this study, the dimensions and factors that underlie the concept are briefly described hereafter.

4.2.1 Socio-political Acceptance and Market Acceptance

Socio-political acceptance describes social acceptance on a wide-ranging, general level (Wüstenhagen, Wolsink & Bürer, 2007). Influencing factors are the general acceptance of wind energy and policies, but also the technology acceptance by the public. Socio-political acceptance furthermore comprises the acceptance by key stakeholders and policy actors. Regarding policies for example, the institutionalisation of collaborative decision-making and financial support systems are antecedents to socio-political acceptance. As Denmark's long lasting tradition from the early 1970th and many existing wind projects in Denmark suggest, socio-political acceptance in terms of broad wind power acceptance is generally high in this country (Breum, 2015). In addition, social acceptance also depends on *market acceptance*, which is the way in which renewable energy projects are adopted by the market (Wolsink, 2012). The interaction between individuals adopting the technology and their environment guides this process (Wüstenhagen, Wolsink & Bürer, 2007).

The second dimension, *market acceptance*, concerns the role of consumers as being either actively involved in the implementation of wind energy generation through e.g. initiatives and investments, or passively by choosing green energy for their households without directly being involved in financing its generation (Wüstenhagen, Wolsink & Bürer, 2007). Broadening the dimension of market acceptance, the afore-mentioned acceptance by investors can be emphasised which exceeds local co-ownership schemes up to company or state-led investments (Wolsink, 2012). Intra-firm acceptance is another factor that influences market acceptance. It focuses on the acceptance of energy providers (e.g. Vattenfall and E.On) or technology manufacturers (e.g. General Electrics (GE), Siemens and Vestas) to become more involved with renewable energies. This in turn is affected by the socio-political acceptance that can provide incentives for active involvement in new technologies, but also by the existence of capital and energy infrastructure, such as transmission lines (Wüstenhagen, Wolsink & Bürer, 2007; Wolsink, 2012).

4.2.2 Community Social Acceptance

Community social acceptance is the dimension that unfolds on a local level involving the acceptance of siting decisions of new installations by local actors (predominantly local authorities and residents) (Wüstenhagen, Wolsink & Bürer, 2007). Factors that shape community acceptance are: distributional justice, procedural justice and trust. They provide guidance to analyse social acceptance on a community level for different renewable energy projects.

A common misconception of community acceptance is to attribute it to a "Not in my backyard" (NIMBY) attitude (Cronin *et al.*, 2015), which implies the general support, but local rejection of wind power installations because of their close proximity to actors (Bosley and Bosley, 1988). Nowadays, NIMBY is frequently regarded as an insufficient label, because it does not contribute to a better understanding of what might lead to negative perceptions towards wind power projects (Cronin *et al.*, 2015). This thesis seeks

to look beyond the NIMBY label, which makes community acceptance particularly important. Community acceptance is therefore described in more detail hereafter. First, the concept of distributional justice is laid out and later specified in terms of distributional justice and procedural justice. Subsequently, the issues of trust and fairness are addressed.

Distributional Justice

Wüstenhagen, Wolsink & Bürer (2007, p. 2688) describe distributional justice as the perception of the impartial distribution of outcomes which can be positive or negative. It departs in Kuehns (2000, p.10684) understanding of outcomes as “public goods” or “burdens”. An example can be the perception of residents in proximity to a new construction, which will affect the experience of nature in the area and thereby might reduce their property value (negative outcome). Alternatively, it is also positively perceivable as it provides job opportunities in construction and maintenance of the installations and the prospect of affordable green energy. This way-off between perceived costs and benefits characterises distributional justice. Closely related to distributional justice is justice in terms of the procedure that was applied to reach a decision on a new wind park installation, which is captured by the procedural justice factor.

Procedural Justice

Procedural justice addresses the question of whether or not a decision-making process is fair and gives all relevant actors an opportunity to participate. This definition departs in Manasters’ (1995, p.23) understanding of procedural justice as being concerned with the process by which decisions are made when actors in a society aim for different goals. Similar to distributional justice, also the perception of procedural justice is highly context dependent. “Important elements in procedural justice include the right of participation, access to information, and lack of bias on part of the decision maker” (Gross, 2007, p. 2729). In application, procedural justice evaluates the perception of procedures on a spectrum from strict top-down to highly participatory and collaborative decision-making.

To assess procedural justice, six principles were formulated by Maguire & Lind (2003, p.134) and flow into the analysis of the current case. The procedural justice principles include the unrestricted participation in processes, the capacity to voice opinions in an unrestricted way, respectful behaviour towards the participants, access to sufficient information, the neutrality of decision-making entities, as well as that decisions respond to information and can be altered if new information arise (Maguire and Lind, 2003, p. 134; Gross, 2007, p. 2730). Gross (2007) furthermore establishes a link of these principles to the fairness of a decision process, indicating that the more these principles are respected, the higher the perceived fairness of a process will be. This also affects the trust for the responsible institution (Lind and Tyler, 1988 from Gross, 2007, p.2730). Fairness as well as-trust are two further concepts that require definition in light of community acceptance.

Trust

Wüstenhagen, Wolsink & Bürer (2007) define trust as the question of whether the “local community trusts the information and intentions of the investors and actors from outside the community” (Wüstenhagen, Wolsink & Bürer, 2007, p. 2688). They draw on the work of Huijts, Midden and Meijnders (2007), who relate trust to social community acceptance through the condensed perspectives and information available to them. Since

not everyone can form a thought-through opinion by searching, choosing and handling all available information on a new wind power project, they have to trust others regarding provision of information and its quality (Huijts, Midden and Meijnders, 2007, p. 2780). Consequently, actions based on trust are substitutes for actions based on full knowledge (Luhmann, 1979). If there is no trust in the information the involved parties provide, there is no trust in the parties directly involved in a project (government, municipality, industry), or their representation through the media (Huijts, Midden and Meijnders, 2007). If there is no trust in either of these actors regarding the representation of public interests, distributional justice, or the protection of affected locals, it influences people's willingness to accept new information. Furthermore, trust issues then reduce the willingness to participate in decision processes and eventually reduces the inclination to legitimize a new project (Huijts, Midden and Meijnders, 2007). Stern and Baird (2015) reconceptualise trust for the assessment and application in collaborative natural resource management. Their four forms of trust are dispositional trust, rational trust, affinitive trust and procedural trust (Stern and Baird, 2015).

Dispositional trust defines the "general tendency or predisposition of an individual to trust or distrust another entity in a particular context" (Stern and Baird, 2015, p. 122). The antecedent of this trust type lies in the cultural context of a person, the cues they receive from their surroundings and their history or personal characteristic tendencies towards trust. An example can be that an actor is generally trusting because of traditionally strong ties and long-lasting relationships to other members of the community.

Rational trust departs in the "calculation of the perceived utility of the expected outcome of placing one's trust into another entity" (Huijts, Midden and Meijnders, 2007, p. 122). Its antecedents are the assessment of information about previous performance and the evaluation of assumed outcomes (Stern and Baird, 2015).

Affinitive trust springs in assumptions about shared values, positive experience, or identity. Intuition characterises this trust type. If a trustee is initially evaluated as being trustworthy without the rational evaluation of previous actions or competences, but e.g. under the anticipation that an involved actor represents the same value disposition regarding environmental protection than the trustor does, a high degree of affinitive trust might be assumed.

Procedural trust defines the trust in decision-making processes that compensates to some extent to the lack of other types of trust. If a process is perceived legitimate and transparent and its procedures are clear and binding, it raises confidence towards the behaviour of others (Stern and Baird, 2015).

Fairness is connecting to the notions of trust. While it is often used interchangeably with justice, the two concepts differ in certain aspects (Gross, 2007). While justice describes a concept that is fundamental to the proper operation of society as a whole, fairness constitutes an expected standard of interaction within society on a smaller scale (Gross, 2007). An example is that procedural justice is often assessed in terms of fairness, such as a fair procedure of decision-making and that concerns were dealt with fairly (Maguire and Lind, 2003). Thereby, it is less important which participation techniques are used, but that any decision process should be fair, which can be a subjective perception. Justice in contrast may not only comprise individual decision-making processes, but is a societal concept. Fairness in this regard is therefore an indicator of procedural justice. But it is also often used as an indicator for distributional justice.

5 Danish Wind Power Legislation and the Vesterhav Syd Case

The following section introduces the legislative framework for offshore as well as near shore projects in Denmark with special focus on public engagement opportunities and their implementation. It is important to lay out this baseline information to be able to compare the existing legal framework to the interview partners' perception of the planning process in the Vesterhav Syd case.

5.1 Legal Background and Decision-Making

For offshore and nearshore wind parks, the Renewable Energy Act (RE Act) sets the structure to allow the use of Danish waters to construct and operate wind farms and grant permits for these installations (Anker and Jørgensen, 2015; Bech-Bruun, 2015). The RE Act furthermore stipulates rules on environmental impact assessments (EIA) including public consultation requirements as well as schemes for the compensation for negative effects of wind installations (RE-schemes). The RE Act has been adopted (among other goals) for an increase in near shore energy by 350 MW by 2020 (following capacity reduction of the 2014 Growth Agreement). The present description takes this aim as a point of references and points out important requirement and process steps that led to the planned construction of the Vesterhav Syd wind park.

5.1.1 Basic legal Background for nearshore Projects

The RE Act distinguishes two basic types of projects: projects subject to tender and projects subject to open door procedure. The Vesterhav Syd project was subject to tendering. In a tender process, companies are invited by the Danish state to submit offers to construct and operate a wind park installation for which the winner is selected by the criterion of the lowest price for energy generation (Energistyrelsen and Naturstyrelsen 2015). Even though there is no official designation scheme to select potential tender areas, the Minister for Energy, Supply and Climate usually designates the sites for tender.



Figure 2. Locations of the six nearshore wind turbine project areas (Energinet.dk 2015a, p.3). Map used with permission of Energinet.dk.

In an initial report (Havmølleudvalget, 2012), 16 potential sites for new coastal wind parks were preselected. Eight offers were deemed “cost-efficient” and after consultation with the relevant municipalities, six potential nearshore sites remained for tender. *Figure 2* presents the six potential sites. The preselected sites are located at least four kilometer away from the coast (Energinet.dk 2015a).

The RE act sets permit requirements that have to be fulfilled to advance the tender process. The Energy agency issues these permits starting with a preliminary investigation permit (RE Act Sec. 22). Subsequently, responsibility lies with Energinet.dk, the Danish operator and developer of transmission systems, who carries out preliminary investigations, including EIAs for the preselected sites, which form part of a preliminary investigation report (RE Act Sec.25) that is also subject to approval by the Energy Agency. As of May 2017, it is prescribed that relevant information about project planning shall be made available to the public and relevant local authorities and associations prior to commencement. Furthermore, an eight-week commenting period is set for coastal wind power projects (RE Act and Executive Order 68/2012 see Ram et al. 2017). After approval of the preliminary investigation report, the tender can commence, but leaves room for subsequent EIAs once project details are clarified through the offers made by the tender companies. An establishment permit is then established (RE Act Sec.25) conditional on the impacts identified in the EIAs. Finally, an operation permit (RE Act Sec.29) can be issued to the company that wins the tender, which is conditional on the investigation and establishment permit.

5.1.2 Compensation Schemes applicable to Nearshore Projects

Besides environmental and social concerns that are investigated during EIA processes including public consultation, the RE Act also provides three compensation schemes that should help to mitigate public concerns regarding new wind parks; the value-loss scheme, the co-ownership scheme and the green scheme (community benefit scheme). The first two are applicable to the tender process as described above.

The Value-loss Scheme

Under the value-loss scheme, project proponents have to compensate property owners that suffer a loss of property value higher than one percent. Eligible are affected areas in a distance of up to six times the total heights of the closest wind turbine to be constructed. Within eight weeks after the establishment permit is issued, a public meeting is to be held. After the public meeting, property owners can claim compensation with Energinet.dk within another eight weeks. Compensation may then be issued between the developer and the property owner directly, or after an assessment by the Danish Valuation Authority (Danish Parliament, 2008, part 2, secs. 1-12).

The Co-ownership Scheme

The co-ownership scheme mandates that 20 percent of the ownership shares of a wind park have to be offered to local residents with a permanent residency in the municipality. First, residents within a 4.5 km radius receive a preferential right to purchase up to 50 shares per person. If not all shares are sold to this group, all residents of the municipality closest to the project site have the option to purchase shares (Danish Parliament 2008, part 2, secs. 13-17). The green scheme (community benefit scheme) is not applicable to tendered projects.

5.1.3 Public Consultation in Practice

In 2012, the Danish Energy Agency initiated a screening for potential nearshore sites including consultations with key stakeholders and visualisation reports. During a comment period of eight weeks in the summer of 2012, Energinet.dk received a total of 190 written responses (Energistyrelsen, 2017). Following these steps, the potential sites were reduced to six in November 2012 and followed by pre-investigations and EIA screenings in early 2013. Information about this, as well as subsequent meetings was available on websites of the planning agencies (Energistyrelsen, Energinet.dk and Naturstyrelsen), the municipality and published in the regional newspaper, the Ringkøbing-Skjern Dagblad. Additionally, residents within a 5km radius to the project site were informed by letter prior to the first meeting.

The EIA began in 2014 with a scoping phase (idea phase). A citizen meeting took place in Ringkøbing at which actors could suggest topics on which specific focus should be laid in the EIA, following a four-week period of written consultation. It is important to note that this first meeting was held even though the planning entities were not required to do so. The abovementioned changes in the planning process were not active yet during the time of the hearing so that this citizen meeting represents an extra effort of public involvement.

As part of the EIA, a second citizen meeting was conducted and the environmental effects found during the assessment process presented for debate. The meeting was held in May 2015 in Ringkøbing and also attended by representatives of Energinet.dk and the Danish Energy Agency. Subsequently eight weeks for public commenting on the EIA statements were given to the public. During this period, the Energy Agency received a total of 88 written comments, of which seven from authorities and municipalities, three from organisations and other stakeholders and 78 from citizens (Energistyrelsen, 2017). A majority of the contributions was concerned with the visual impact of the installations and the resulting impacts on tourism and recreation. Frequently mentioned were also the loss of property values (mainly by summerhouse owners), impact on employment and issues regarding the cable installations (ibid.). Many of the respondents additionally envision a relocation of the park further out to sea (ibid.). Furthermore, several commentators voiced concern about an inadequate decision-making process (ibid.).

Regarding a potential impact by the wind park on property value and tourism, the EIA concludes that no loss in property value or tourist numbers is to be expected. The EIA even refers to a potential for increasing tourist numbers given the opportunity for energy tourism by referring to the popularity of the three existing wind turbines at the beach of Hvide Sande and the wind park Horns Rev 1 approximately 60km south of the Vesterhav Syd location (Energinet.dk 2015b, p.186).

These two consultations conclude the direct public involvement of citizens for the Vesterhav Syd project. The tender commenced until September 2016, when Vattenfall won the bidding process, offering the lowest price of 0.475 DKK per kWh at the Vesterhav Nord and Syd sites. It followed the issuing of the preliminary investigation permit and the establishment permit in December 2016. Up to four weeks after the establishment permit has been issued, the public was allowed to object against the project to the Energy Appeals Board. Until the end of the appeal period, several appeals have been submitted to the board and are still being evaluated (Energistyrelsen, 2017).

To conclude this chapter, it can be summarised that from a legal perspective the options for public involvement in the Vesterhav Syd project are met according to the legal requirements. Information about the project has been supplied through the newspaper, on official websites and also by letter. Consultation was arranged through meetings and

the options of written inquiries. It is furthermore provided for involvement through the co-ownership and value-loss scheme. All of these options of involvement are present in the planning process, but whether they are sufficient to enhance acceptance depends on the perception of the involved public as will be analysed further in the explanatory phase of this study.

5.2 Vesterhav Syd Case Description

This chapter introduces the Vesterhav Syd project to provide a better understanding of the case. To clarify the project and the controversies that arose around it, the project planning is linked to the background information on Danish legislation presented in *subchapter 5.1* above. Furthermore, the geographical characteristics and the employment situation in relation to the wind power industry and the tourism sector are outlined, because they are significant for the analyses later on.

The Vesterhav Syd project is planned to be located at the west coast of the island of Jutland, Denmark. Specifically, the project is planned to be located between 4.2km and 10km away from the coast, and thereby fulfils the requirements to be at least 4km offshore. 20 wind mills with a tip-heights of 189m are envisioned for the wind park. The project contract prescribes the start of the operation of the wind park at the end of 2020 with an overall capacity of approximately 170MW, corresponding to the energy consumption of 170.000 Danish households annually (Vattenfall 2017). The latest information about the project progress is the finalized seabed exploration for constructing the foundation of the turbines in September 2017 (Vattenfall 2017).

The areas to be most affected visually by the project are the towns along the coastal strip Holmsland Klit between Søndervig in the north and Hvide Sande in the south. Furthermore, the transmission cables from the wind park will be connected to a transformer station 2km east of Søndervig and affect the area during the construction. The municipality in which those towns are located is the Ringkøbing-Skjern municipality (RKSK) with 56.500 permanent residents (Ringkøbing-Skjern Kommune 2017a).

On its website, the municipality describes itself as “rich in nature”, with it being the “source of good life and to create growth in the area” (Ringkøbing-Skjern Kommune 2017a). Therefore, RKSK’s 29 city councils adopted the municipalities’ vision of “Nature’s Kingdom”. The municipality is Denmark’s fourth largest tourist destination (after the cities of Copenhagen, Aarhus and Aalborg) as measured by tourism-based sales (*ibid.*). It attracts especially German and Danish tourists and offers “beautiful nature, the authentic culture and many experiences” (Ringkøbing-Skjern Kommune 2017b). The RKSK is therefore Denmark’s major tourist destination, attracting visitors because of the nature experience it offers, compared to the leading city destinations. At the same time, the wind power industry is an important economic pillar in the region, employing about 2500 people and more people being indirectly connected to the industry through family members, or secondary employment (Vindmøllerindustrien, 2016; Ram *et al.*, 2017). This dependence on both tourism, as well as the wind power industry, raises concerns regarding the effect the Vesterhav Syd project will have on the region. Especially concerns about the visibility and the disturbance of the perception of nature are issues of importance in this context.

The controversy around the wind park is fuelled further by the approximately 10.000 Danish summerhouse owners in the region (Statistikbanken 2017), as well as the summerhouse organisations, as they fear a loss in property value and less tourists. While

these actor groups are known to be outspoken and active in opposing the wind park construction close to the coast, the opinions of other tourism branches appear to fade in light of their active opposition. Interestingly, the EIA reports an anticipated low impact on tourism in the region and also the project proponent Vattenfall highlights the opportunities for wind industry related tourism compared to the negative effects the wind park might have (Vattenfall 2017). Attempts have been made to capture tourists' perceptions on the planned construction to gain more clarity, but to little effect, as the reliability of such research was questioned (e.g. Stopvesterhavsyd 2017).

With this background information on wind power planning in Denmark and the RKSJ municipality, it is now turned to the quantitative analysis of survey responses of local citizens.

6 Quantitative Content Analysis

This chapter aims to introduce the method of quantitative content analysis and its application in the first research step of this thesis. First, quantitative content analysis is introduced on a theoretical level. Thereafter, its application on the survey data of the Vesterhav Syd project is described. The results of this research step are then presented and lastly discussed in relation to the research questions 1a, b and c. *Table 2.* depicts the aim and research questions extracted from the process design to provide an overview for the focus of this chapter.

Table 2. Overview of research aim and research questions in the exploratory phase

Aim	Aggregation of respondents' social acceptance towards the Vesterhav Syd wind park
Method	Quantitative content analysis of survey responses
Research Questions	1a: Which attitudes and expressed reasons for attitudes emerge from the survey responses? 1b: Which are the dominant attitudes and reasons? 1c: How do attitudes and reasons relate to the concept of social acceptance?

Quantitative “content analysis is an approach to the analysis of documents and texts that seeks to quantify content in terms of predetermined categories and in a systematic and replicable manner” (Bryman, 2012, p. 290). To relate this definition to the research project, it is deemed necessary to deconstruct it and elaborate on certain key terms.

Being systematic in once analysis is a key characteristic in quantitative content analysis that is accompanied by the quality of objectivity. Objectivity refers to establishing clear and transparent rules for the creation of categories/ themes. Objectivity to the analysis is achieved by defining rules for the coding process that allows the reader to follow the steps that were taken in order to aggregate the survey data. The systematic character is accredited for by applying the defined procedures in a consistent way, which should account for the replicability of the analysis results.

Objectivity and systematic data handling are furthermore important to achieve coder reliability (Bryman 2012, p.299; Tashakkori & Teddlie 2016, pp.382–383), which also links back to the reproducibility of consistent results. The numerical representation of the aggregated data is referred to as quantification (Tashakkori & Teddlie 2016, pp.382–383). This study expresses the attitudes and reasons for attitudes in terms of frequency distribution, so how often which category was used by the respondents.

The creation of categories in this study is achieved through coding of thematic patterns of survey responses that are based on the specific expression of key formulations as conveyed by utterances used by the survey participants. Only when these utterances appear in a response, it can be used for the creation of categories. This emphasis is important to make since this analysis is concerned with the apparent content (words and formulations) of the survey and not the latent content that is the interpreted/ deduced meaning of content. Themes are in this regard to be understood as the broadest level of analysis (Patton, 2002). Categories represent a more focused level of analysis under the theme level. A theme comprises several categories as subunits. The categories and the sequence of process steps that were taken are commonly specified in a coding manual (Bryman, 2012, p. 299). The coding manual for this analysis is presented in *chapter 6.2* below.

6.1 Quantitative Content Analysis Applied

The first step in the research process was the analysis of survey responses. The used data was generously provided by a third party under the premise that it was treated confidentially. The analysis is based on the responses to an open-ended survey phrase of n=148 people living in the vicinity of the Vesterhav Syd project area. The que to which the responses are analysed is:

“You are welcome to clarify what you mean about the possibility of coastal offshore wind in your local area.”
(Confidential Source 2017)

First, the responses were translated from Danish to English using the researchers own knowledge of the Danish language as well as online translation applications. Thereafter, the responses were coded manually using the NVivo Pro 11 software. For coding, an inductive approach was pursued with the aim of identifying dominant attitudes towards the Vesterhav Syd wind power project throughout the responses, involving revision and iteration of the attitude themes as they emerged.

To pursue these goals strategically and objectively, the analysis was guided by a five step approach (Krippenhoff 2004 see Tashakkori & Teddlie 2016, p.383). (1) First, the content was unitized (ibid.). This initial step describes the identification of the content to be analysed. For this study, all individual survey responses were used. (2) Sampling involves the selection of the study population. For this study, all cases (N=148) were chosen (Krippenhoff 2004 see Tashakkori & Teddlie 2016, p.383). (3) A reducing step refers to the reduction of the content through coding and quantitative analysis. These steps are elucidated further in *chapter 6.2* below. The general aim was to reduce the attitude responses to a discrete number of mutually exclusive categories by defining them, coding them and summarizing them numerically (ibid.). (4) Thereafter, the counts of the reduced content were connected to the “research question and the context, within which the material is located” (ibid.). This step is referred to as inferring (ibid.) and is presented in *chapter 7* below. (5) Lastly, the results are presented in written form in this study. This process step is described as narrating (ibid.). While the sampling process was explained above, the reducing step in terms of coding is explained hereafter.

6.2 Coding Schedule and Coding Manual

A coding manual lists instructions on theme construction, which categories they comprise, what these categories indicate and according to which criteria the codes were applied (Bryman, 2012, p. 299). The themes under investigation are the attitudes expressed by the respondents and the reasons they express for these attitudes. The categories of attitudes are mutually exclusive. Yet, often several reasons for each respective attitude category were expressed, so that several discrete reason categories can underlie an individual attitude. This means that each respondent can only express one specific attitude, e.g. a conditional acceptance, but that multiple reasons can underlie this attitude. For example, respondents report two reasons for a negative attitude: concerns about the visual impact of the installation, but also about the impact on the fishing industry.

Table 3 depicts the themes, categories and code explanations. Attitudes and reasons are the two themes in this analysis and are shown in the first column. Each theme can comprise multiple categories as depicted in the second column.

Table 3. Coding schedule and coding manual exploratory phase

Theme	Categories	Code Manual
Attitudes	Positive	
	Negative general	The respondent expresses a negative attitude towards wind power in general without explicitly referring to the Vesterhav Syd project and its impacts on the local area.
	Negative specific	The respondent explicitly expresses a negative attitude towards the Vesterhav Syd wind power project specifically as proposed at the time of the survey and <i>does not</i> explicitly mention/ propose alternatives to the project.
	Conditional	The respondent a conditional acceptance by expressing a specific negative attitude towards the Vesterhav Syd wind power project at the time of the survey <i>and</i> explicitly mentions (a) certain condition(s) under which his/her attitude would be more positive.
	Neutral	The respondent explicitly expresses a neutral attitude towards the Vesterhav Syd wind power project.
	Unsure	The attitude of the respondent does not explicitly state a positive/(specific) negative/conditional or neutral attitude, or the response was unreadable/ incomplete.
Reasons	Impairment of nature	The respondent expresses general concerns regarding the impairment of nature without specifying how nature might be impaired in her/his perception (e.g. visually or auditively).
	Visual impairment	The respondent explicitly expresses concerns that the project might have a negative effect on the visual perception of the area.
	Auditive impairment	The respondent explicitly expresses concerns that the project might cause noise.
	Affects tourism	The respondent explicitly expresses concerns that the project might affect tourism in the area negatively.
	Affects property value	The respondent explicitly expresses concerns that the project might affect property values in the area negatively.
	Affects wildlife	The respondent explicitly expresses concerns that the project might affect wildlife in the area negatively.
	Politics	The respondent expresses political procedures as a reason for her/his attitude towards the project.
	Affects fishery	The respondent explicitly expresses concerns that the project might affect fishery in the area negatively.
	Affects surfing	The respondent explicitly expresses concerns that the project might affect fishery in the area negatively.

The process of creating the coding themes and categories in the coding manual shall cover the whole range of responses (Bryman, 2012). When coding, it appeared that most respondents, besides articulating an attitude, also name reasons to support these. These impressions were used to derive two broad themes of attitudes and expressed reasons for these attitudes. The attitude theme has further been subdivided into categories of negative, negative specific, conditional, neutral and unsure attitudes. Correspondingly, the attitude reasons have also been subdivided into discrete categories: impairment of nature, visual impairment, auditive impairment, affects tourism, affects property value, affects wildlife, politics, affects fishery, and affects surfing.

Chapter 7, presents the results of the content analysis.

7 Results Quantitative Content Analysis

The attitude categories of the wind park spread as followed and are rounded to the third digit: positive (14.2%), negative (33.1%) and conditional (43.2%). The remaining 9.5% attribute to responses that were incomplete or unidentifiable (unsure 8.1%) and clearly stated neutral attitudes (1.4%). The amount of purely positive responses accounts to 14.2% of the overall responses. A positive attitude is expressed when the respondent supports the construction and does not voice any concerns against it. Three examples below illustrate this category:

“Offshore wind turbines” (coastal ditto) are Denmark's best alternative to renewable energy for the country as a whole, also economically in the long term.”
(Survey respondent #1)

“It will provide jobs to our area.”
(Survey respondent #2)

“I think it's the right solution! We are big supporters of wind turbines, as we think they are both beautiful and efficient producers of cheap, alternative energy.”
(Survey respondent #3)

Conversely, the majority of respondents voiced concerns against the construction itself (71.6%), or wind power technology in general (4.7%). The respondents rejecting wind power in general, do not mention location specific concerns regarding the planned installation, but generally voice concerns regarding wind power. Some examples may illustrate this attitude category:

“Coastal wind turbines are completely meaningless/ senseless. They destroy the landscape, are expensive and harmful to the environment. They are filled with flammable liquids, oil and chemicals and pollute the water. Nobody knows what will happen to the old blades. Wind turbines are retro-technology boosters. They emit noise and vibrations and damage landscapes, animals and people and also the country's economy.”
(Survey Respondent #4)

“We have, in my estimation basically the wind turbines we need for an overall sustainable energy supply. Windmills seems to me to have become a 'religion'. It is a rather expensive form of energy, and the overall 'environmental impact' is not respected. They affect people, not just by noise, but with the continuous rotary motion. I experience stress impact from these turbines. --- There are many alternatives and a lot of them are much better. Energy prices 'must' be taken into account for our existence. Wind power is too expensive and too unstable to a society like ours.”
(Survey Respondent #5)

“Wind power” (is a) “pure disaster economic, as long as politician are oil-addicted and dependent on subsidies- 37 billion of burning oil-gas coal. We give free electricity to the Germans and our mills will get money to stand still here in West Jutland -pure quack-quack. We have created an energy policy for the nature and not for the financial politics. Hypocrisy. What the hell are we going to do with wind turbines that are not allowed to produce and which cost billions. Stopping offshore wind turbines cost society 10 billion in their lifetime. We have enough energy, “(and) “are not using it-why should we build more

turbines???"

(Survey Respondent #6)

In contrast, responses of survey participants that raise specific concerns are more ambiguous. While 28.4% of the overall negative responses offer location specific reasons for their attitude when rejecting the project idea, 43.2% name disadvantages of the current project plan, but additionally offer alterations to it. The latter respondent group is therefore categorised to have a “conditional” negative attitude. Some examples for these two groups may help to illustrate the difference. Focusing on the specific negative attitudes first, responses were for example:

“Badevej is filled with locals as well as tourists who every night go down to the North Sea to enjoy the sunset. It must not be destroyed.”

(Survey Respondent #7)

“It is simply a disaster for the area - nature experiences, the open sea and peace will be totally destroyed. For me it is incomprehensible that in this way they wish to destroy an area with such unique natural values. And it is obviously more incomprehensible because it will have a massively negative effect on the main source of income in the area, namely tourism.”

(Survey Respondent #8)

“We have three wind turbines in the port of Hvide Sande. They look pretty good, because there are no more. I am under no circumstances interested in placing coastal offshore wind turbines that will totally destroy that great and FREE view of the sea.”

(Survey Respondent #9)

Comparing the responses to those that offer an alternative to the current proposition of the wind park provides an insight into the “conditional” attitude group:

“The decision is very bad. Offshore wind turbines are ok, but they need to be further out to sea. Tourism is a major asset on the west coast, and should therefore be carefully implemented into the plans. Wind turbines destroy an otherwise beautiful area.”

(Survey Respondent #10)

“There are many wind turbines on land already. The ocean is the last unspoiled area and it would be a shame to destroy this unspoiled nature. In addition, the area is one the most visited in the country in terms of tourists, and therefore other areas must be found where the turbines will be” (of) “minor annoyance.”

(Survey Respondent #11)

“It will not bother me having some standing out in the water so long as they are far enough out that we can't hear them, so I don't see how it could bother someone.”

(Survey respondent #12)

These last two attitudes are of particular interest because they contribute the largest share to the overall responses (71.6%) and additionally offer insight into the reasons people provide to reject the idea of a coastal wind park in the Ringkøbing Fjord, or under which circumstances they would accept it. The reasons for such attitudes are explored further in the next section. *Figure 3* offers an overview of the reasons mentioned for the attitudes

of the 106 respondents who show either a conditionally negative attitude (64), or a specific negative attitude (42).

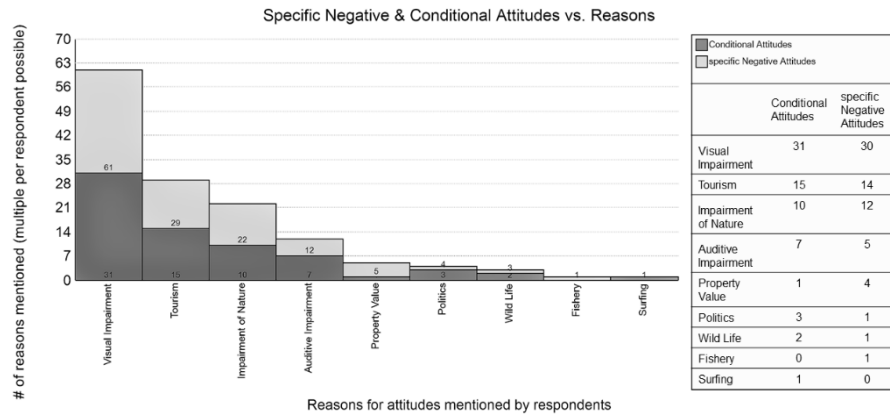


Figure 3. Frequency distribution of reasons for specific negative and conditional attitudes

The columns in Figure 3 show the number of specific reasons separated into conditional attitudes and specific negative attitudes. The cumulative amount of expressed reasons for an attitude is displayed on top of each column. As an example, the first column to the left indicates that of a total of 61 (44.2%) times “visual impairment” is mentioned as a reason, 31 attribute to respondents indicating an overall conditional attitude, while the remaining 30 account to the group of people with specific negative attitudes.

The second highest amount of reasons mentioned is that tourism is perceived to be affected by the new construction with a total of 29 (21%) times it was mentioned within the two groups. Tourism is mentioned more often than the general impairment of nature and auditive impairment (column three and four) mentioned 22 (15.9%) and 12 (8.7%) times, respectively.

The remaining five categories of reasons were infrequently mentioned: The fear of losing property value (5 times mentioned/ 3.6%), dissatisfaction with the political process (4 times mentioned/ 2.9%), concerns about wild life (3 times mentioned/ 2.2%), a negative impact on the fishing industry in the area (1 time mentioned/ 0.1%), and a negative effect on surfing (1 time mentioned/ 0.1%).

8 Discussion Quantitative Content Analysis

This section applies the results obtained through the content analysis of the survey data as part of the exploratory phase to the corresponding research questions 1a, b and c, respectively.

1a: Which attitudes and expressed reasons for attitudes emerge from the survey responses?

Distinct patterns emerge when analysing the survey data that form a theme of expressed attitudes. The attitude theme could further be subdivided into categories. Attitudes could be separated into negative, conditional and positive attitudes. Negative and conditional attitudes constitute the majority of responses and could further be divided into general negative, specific negative and conditional negative attitudes. A clear pattern emerged that most respondents (43.2%) express a conditionally negative attitude. 28.4% report a specific negative attitude. Only 14.2% support the idea of a wind park unconditionally (positive attitude) and only 4.7% reject wind power in general.

These results highlight the importance to go beyond an assessment of the general attitude towards wind power in the Vesterhav Syd project area, because most respondent reject the idea based on specific reasons linked to the location, or would accept it under certain conditions. Therefore, the “gap” between generally positive attitude of wind power compared to location specific, regional negative attitudes becomes apparent. While it could be argued that these results are not surprising given the formulation of the survey to specifically elaborate on the idea of a wind park in the respondents’ local area, the diversity of responses allows for a differentiation of attitudes, because also concerns regarding wind power in general were raised.

1b: Which are the dominant attitudes and reasons?

Focusing on the conditional and negative specific attitudes identified under research question 1a, 138 reasons were mentioned to underlie the two attitude categories. Corresponding to the expressed attitudes, a theme emerged that comprises nine different categories of reasons. 61 times (44,2%) the reason of visual impairment was given for a conditional or negative specific attitude. 29 (21%) times a fear of losing tourists in the RSK region was mentioned. These two dominant reasons were frequently expressed together.

While no inference of a causal relationship between visual impairment and a fear of losing tourists can be drawn from the analysis, the results suggest a relationship between the two categories. The connection between visual impairment and tourism is emphasized in several other studies (e.g. Devine-Wright & Howes 2010; Gibbons 2015; Ladenburg 2008) and therefore worth further investigation. With a fear of losing tourism being the second most dominant category, it will form the focus for the explanatory (qualitative) phase of this study. Tourism gives this phase a focus, which is also important in light of the effect it might have on the whole region and exemplifies perceived conflicting land uses which were previously found to be important in relation to coastal wind parks (e.g. Toke, Breukers and Wolsink, 2008; de Sousa and Kastenholz, 2015; Süsner and Kannen, 2017).

These results indicate that project specific attitudes tend to be largely negative. The reasons for these attitudes can mostly be explained through location specific concerns regarding the effect Vesterhav Syd will have on the area mainly in terms of the way it will impair the perception of the pristine nature visually and in general. While these factors have been investigated frequently, the fear of declining tourism has been investigated less frequently, but plays an important role in the RSK municipality.

Therefore, tourism businesses will be a focus for the qualitative confirmatory analysis later in this thesis. To investigate this crucial aspect of the Vesterhav Syd case, it was decided to analyse the perception of people working in the tourism sector further. This group of people belongs to a sub-population in the region, anticipated to contribute to gain a deeper understanding about social acceptance. This group was mainly chosen, because they perceived to be most directly affected by the project, as the quantitative analysis revealed.

1c: How do attitudes and reasons relate to the concept of social acceptance?

While the quantification of the reasons mentioned by the survey respondents sheds light on the attitudes they display, it is still important for the further analysis to match the reasons to Wüstenhagen, Wolsink & Bürer's (2007) concept of social acceptance. It provides for a thematic focus for the qualitative analysis, which allows for a more in-depth analysis according to identified dominant issues of community social acceptance.

Most of the reasons mentioned by the respondents expressing a conditional or specific negative attitude coincide within the dimension of community acceptance because of their local specificity. Community acceptance is the dimension concerned with social acceptance in a regional context. Therefore, mentioned reasons like visual impairment of the pristine nature in the region, together with the general impairment of the way nature is perceived and the impacts on tourism, property value, surfing and fishery, potentially impact the RKSK municipality. They can be related to the factors of place dependency in place attachment (cf. *subchapter 2.1*). In its combination, the mentioned reasons for attitudes form contextual factors unique to the fjord area.

Matching these localised reasons to the dimensions of community acceptance (distributional justice, procedural justice and trust) they are best described as issues of distributional justice. That is, the specific negative and conditionally negative attitudes are indicators for low community acceptance in terms of costs and benefits. Since costs, as expressed by the reasons mentioned, outweigh the perceived benefits, respondents are against the construction. For example, perceived benefits in terms of potential employment, regional infrastructure development etc. are perceived to be outweighed by costs in terms of the (visual) impairment of nature, and declining tourist numbers.

The conditionally negative attitude perspective gives an outlook on how the unequal distribution of costs and benefits could be changed to, by providing insight into how people would be willing to accept the installation more willingly, e.g. by positioning the wind park further out at sea, or finding a new place outside the proposed area. The only reason that does not match the category distributional justice are the general concerns about politics. This reason corresponds with issues of procedural justice, where the respondents do not agree with the decision-making process that supports the use of wind energy, because of the subsidies for its generation, but also siting decision that brought the plan to their area in the first place. Furthermore, it can only be assumed that issues of trust and procedural justice contribute further to people's attitudes towards the wind park and thereby to its acceptance, because the respondents did not express attitudes that match these dimensions of social acceptance.

Since most attitudes expressed in the survey responses can be assigned to the dimension of community social acceptance in general and more specifically to issues of distributional justice, community social acceptance can be identified as the dominant dimensions according to Wüstenhagen, Wolsink & Bürer's (2007) concept of social acceptance. To investigate this further, is part of the qualitative analysis hereafter.

9 Qualitative Content Analysis

This chapter presents the explanatory phase of this thesis, in which acceptance is investigated in greater detail. First, the focus of this phase is elaborated and related to sampling considerations in *subchapter 0*. Thereafter, the sampling procedure is described in *subchapter 9.2* and the interview set up in *subchapter 9.3* (including the interview guide in *subchapter 9.3.1*). Subsequently, the analysis strategy in terms of theoretical reading and abductive reasoning are presented in *subchapter 9.4*.

People working in the tourism sector were chosen for this qualitative analysis, because the quantitative analysis revealed a strong concern about a negative impact on tourism in the RKSK municipality through the Vesterhav Syd wind park. Nevertheless, the individuals that were surveyed for the quantitative part of this research could not be contacted due to anonymity reasons, and no connection to anyone affiliated with potential interviewees existed, so that new interview participants (IPs) had to be selected. In the end, seven people working in tourism-affiliated jobs were found to conduct semi-structured interviews. Where the first part of this study was dominated by its exploratory character, this part shall elucidate the previous findings by “adding depth, detail, and meaning...” to them (M. Q. Patton, 2002, p. 193). This chapter highlights the interviewee’s points of view to account for greater depth and a richer account of their acceptance towards the wind park. *Figure 4* below, depicts the focus that was derived through the quantitative content analysis in the exploratory phase when related to the concept of social acceptance. To account for this, the qualitative interview provides an adequate method (Bryman 2012, p.470).

Exploratory Phase:

Overview of Research Aim and corresponding Research Questions

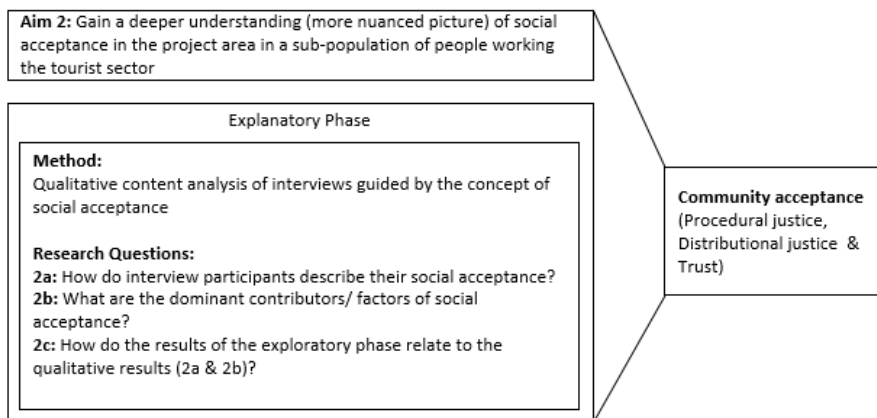


Figure 4. Overview of research aim and corresponding research questions in the explanatory phase. Focus of the qualitative analysis in relation to the concept of social acceptance (cf. Wüstenhagen, Wolsink & Bürer, 2007) and the research questions 2a, b and c.

9.1 Focus and Sampling Considerations

By focusing on “information-rich cases”, purposeful sampling was attempted for this research phase (Patton, 2002). Patton (2002 p.242) describes that a sampling strategy has to be selected that besides being purposeful, also accounts for the available resources, research questions to be answered and constraints that are faced. This subchapter serves to justify the sampling strategy according to these criteria. Furthermore, Patton (2002 pp.230-247) outlines a range of purposeful sampling strategies.

To add on to the quantitative findings, it is interesting to analyse the group of people who are likely to be directly affected by declining tourist numbers, i.e. companies and individuals who specialise in providing tourist services and accommodation. Therefore, “tourism businesses” comprise the group for this analysis. In this way, tourism businesses provide critical cases that are likely to “yield the most information and have the greatest impact on the development of knowledge” (cf. Patton, 2002 p.236). Along these lines, the sampling pursues a critical case sampling strategy. This group is also selected because they are likely to provide rich examples of the acceptance phenomenon (Patton, 2002 p.234), while not being too unusual for the area, since tourism constitutes a large share to the employment sector in the region. Following this line of argumentation, the focus on tourism businesses provides cases of importance for the region and is therefore additionally valuable to investigate (cf. Patton, 2002 p.234). At the same time, the sampling strategy can also be described as being homogenous, because people working in tourism businesses can be regarded to be part of a particular subgroup within the RKS municipality.

Besides the empirical logic of choosing this group for interviews, the decision was also informed by considerations that are more practical, as resources constrain the scope of a study (e.g. Patton, 2002; Bryman, 2012). Especially time and financial resources were also decisive for this sample selection.

9.2 Sampling in Practice

Informed by the theoretical considerations of selecting appropriate participants for the qualitative analysis of this study, this chapter describes the process of contacting suitable tourism businesses in practice. Sampling commenced by searching tourism businesses in the close proximity to the proposed wind park location. The EIA provides a visualization of three potential impact zones according to the anticipated visual impact the Vesterhav Syd wind park has on the region. This map was used to confine the search area and is depicted in Figure 5 below.



Figure 5. The location of the offshore wind farm and the borders of the immediate and intermediate zone (Energinet.dk 2015b, p.31). Map used with permission of Energinet.dk.

Tourism websites were searched online to identify accommodations (hotels, hostels, B&B's, summerhouse rentals and campsites), outdoor activity providers water sports businesses) and culture facilities (museums, culture centres, visitor information centres). Businesses within the highest anticipated visual impact zone were contacted first, then the middle zone and lastly business in the zone with no anticipated visual impact according to the EIA. This approach was chosen, because people working in close proximity to the wind park are anticipated to be most affected and therefore might express a stronger opinion as a reflection of social acceptance about the wind park construction, than those further away and thus less affected by the construction. The next section outlines how contact to these businesses was established.

Gaining access to potential IPs can be a tedious endeavour of frustration and setbacks (Cook and Crang, 2007). Since individuals that were surveyed for the quantitative part of my research could not be contacted due to anonymity reasons, and no connection to anyone affiliated with potential interviewees existed, access had to be obtained independently. Following Cook and Crang's (2007) suggestions, an email was drafted for this purpose with information about the researcher, on the planned research, the researchers' University affiliation and information about the confidentiality of

participation, as well as a timeframe in which interviews were intended to be conducted. It was also highlighted that the specific person was chosen as a potential interview partner, because of their expertise and experience working in a tourism related business. Furthermore, it was indicated in the email that the contacted persons would be called within a week after sending the email to ask about their availability for an interview personally (cf. Bryman, 2012).

Each email was formulated to personally address either the owner/ manager of the business, or in case of larger business the person responsible for press relations. In this way 52 businesses were contacted. Three agreed to an interview right away. After calling people personally, another five agreed to an interview. It was also asked for additional contacts that might be interested in sharing their experience. Unfortunately, all contacts attained through this snowballing method (Patton, 2002 pp. 237), were not available for an interview.

At the end of the contact period (end of May 2017), interviews with eight people were scheduled between the 12th and the 15th of June. The IPs spread over all potential visual impact zones identified in the EIA. Four were located in the near zone, two in the middle zone and one outside of it, but still within the municipality of the project. One participant was spontaneously unavailable at the scheduled meeting time and could not be contacted for an alternative meeting date. Therefore, the qualitative analysis is based on seven interviews.

9.3 Interview Setup

The choice of the interview method to be used depends on the question that is investigated (e.g. M Q Patton, 2002; Kvale and Brinkmann, 2008; Bryman, 2012). In this case, the semi-structured interview was chosen, because it is predicted to provide a better insight into the interview partner's perspectives compared to a structured interview (Flick, 2006). At the same time, the semi-structured interview allows for enough focus to address the specific issues of acceptance, without going on tangents as would likely be the case in an unstructured approach (Bryman, 2012). Kvale and Brinkmann (2008, p.3) term an interview seeking to retrieve reports of an interview partner's personal perspectives to deduce the meaning of the pronounced occurrences, a "semi-structured life world interview" (ibid.).

The interviews took place at the respective IPs workplaces. This set-up was deliberately chosen, because it allows for a certain degree of comfort for the IPs to be interviewed at a familiar location. This setup proved furthermore beneficial, because throughout the interview, the participants were often pointing out things or referring to objects that could be observed through the windows of their known locations and thereby helped to illustrate their narratives.

Regarding the caveats of these interview set-ups, not all locations allowed for completely private interviews with the participants. While for three interviews separate rooms were available and could therefore be conducted without interruption, in four cases infrequent interruption of the interviews took place through customers, employees or co-workers. Furthermore, language was an issue during the interviews. Communication to the participants also prior to the interviews took place in English. During the interview meetings, while conversing about the ambitions behind this research, but also about the researchers' background etc., it turned out that three of the seven IPs are fluent in German and therefore suggested to conduct the interview in German rather than English. These interviews were ad-hoc conducted in German.

9.3.1 Interview Guide

The interview guide was developed according to the community dimension of social acceptance to capture, what was analysed to be important during the quantitative phase of this study. The interview guide lists a set of questions according to the issues that need to be explored (cf. Patton, 2002 p.343). The community dimension can therefore be regarded as a “sensitizing concept” (Patton, 2002 p.348). A sensitizing concept provides an anchor point around which precise questions regarding issues of distributional justice, procedural justice and trust can be investigated. The difficulty is to bridge across concept oriented questions, while enabling enough space for the IPs to explore themes without being too suggestive and restrictive (Patton, 2002 p.348). To pursue this general goal, open-ended questions have been formulated according to the dimension of community social acceptance. Table 5 in the Appendix depicts how the pre-formulated questions (column 1) relate to the general topic area of the Vesterhav Syd project (column 2) and the dimensions of the sensitizing concept.

The Interview guide was developed to comprise four main question types: background questions, experience and behaviour questions, opinion and value questions and knowledge questions. Initial background questions help to relate respondents to one another. The respondent categorizes herself/himself freely which allows an insight into their contextual setting (cf. Patton, 2002 p.351). Experience and behaviour questions aim to investigate what the respondent has done and experienced; The respondent is nudged to give a descriptive account of his experience (cf. Patton, 2002 pp. 350). Opinion questions take this description on a level of evaluation of the experienced phenomena, by asking about their opinions. Finally, knowledge questions make inquiries about factual information the respondent holds (Patton, 2002 p.350).

The questions were sequenced, to first, gather some basic background information about the respondent, which will likely be expanded on his/her own account throughout the interview. Knowledge questions provided a starting point for further inquiries about the person’s opinion about certain processes, such as the planning steps in the wind park construction. Important at the end of each interview were the closing questions and recapitulations of the stated accounts. They helped to clarify issues and often added a new dimension to the interview that was previously not accounted for.

Lastly, it is important to highlight that several experience questions ask about events in the process steps that are several years in the past. Often, recalling this information ad hoc is difficult for the interview partner. As a facilitation tool, an interactive timeline was introduced to the interview. At the beginning of the interview, it was announced that a timeline will be drawn based on the information the interview partner provides about the Vesterhav Syd process case. As the interview progresses, the timeline is expanded and events and information that were important to the participant, are added to it either by the participant, or the interviewer. Besides facilitating memory recollection, this tool furthermore allows to locate events in a temporal perspective. Additionally, the graphic representation helps to return to events and inquire on them at a later point in time during the interviews.

9.4 Analysis Strategy

The transcribed material was analysed through a thematic analysis (Bryman, 2012, pp. 578–581). The thematic analysis of the interviews was guided by the sensitizing concepts of community social acceptance. Hence, the analysis can be described as theoretical reading exercise (Kvale and Brinkmann, 2008, pp. 235–240). The dimension of community acceptance can be regarded as a theme for this purpose. The relation of

common word patterns to constitute categories, sub-themes and finally themes are similar to the quantitative content analytical approach taken for the survey data in *chapter 6*.

After the theoretical reading, according to the sub-themes of distributional justice, procedural justice and trust, steps were pursued that follow a more inductive approach to qualitative data analysis. To elucidate the researchers understanding of theoretical reading and abduction, they are described in the two following subchapters.

9.4.1 Theoretical Reading

A thematic analysis is often an essential part of a qualitative analysis that does not constitute defined process steps (Bryman, 2012, p.578). It was pursued in this study by searching for repetition of utterances throughout the interview that constitute a pattern that can be described as a category. By means of the sensitizing concept, these general categories were predefined as theory-guided themes that relate categories to the research focus. For example, the issue of distributional justice can be regarded as a sub-theme for the purpose of this research. It proliferates further into different categories according to Wüstenhagen, Wolsink & Burer's (2007) triangle of social acceptance. This process of interpreting verbal accounts through the lens of a theoretical position is what Kvale & Brinkmann (2008, p.235) describe as "theoretically informed reading of interviews" or in short, theoretical reading. The overall aim of the theoretical reading in a qualitative analysis is to condense data according to predefined, smaller and aggregated components (Creswell, 2013).

While this condensation of data according to predefined themes offers a structured way for qualitative analyses, it comes with disadvantages: By applying predefined themes to an interview record, the researcher faces the risk of zoning out other phenomena that might emerge without this theoretical constraint. For example, by applying the concepts of community social acceptance to the data, patterns of distribution justice, procedural justice and trust are likely to dominate the analysis. To counteract this caveat, it is crucial not to overemphasize pre-defined themes. The way it was approached here is that the concept of social acceptance informed the construction of the interview guide and the questions and ques posed to the IPs are therefore guided by these theoretical considerations. Nonetheless, the interview set-up allowed for enough openness to let the participant explore other phenomena (Kvale and Brinkmann, 2008) freely within the structure of the interview guide, so that a space was created to let other themes emerge generically. This manifested in the interview in a way that opinion questions break the structure of the pre-defined themes, such as: If you could change the project outcome, how would it look like so that you were more satisfied with it?

9.4.2 Abductive Reasoning

Each interview is analysed to uncover how the factors of procedural justice, distributional justice and trust form community social acceptance specifically from the IPs perspectives. This approach can be termed as abductive reasoning (Bryman, 2012, p. 401). Based on the conceptual point of departure (community social acceptance), the perspectives of the people under study are sought to be explained, without losing the connection to people's worldview (ibid.). While this approach is largely inductive in its process steps, abduction emphasises the importance of the IP's own understanding of the world (ibid.). Nonetheless, since not all nuances of the participants' worldviews might be captured through this theory-guided approach, an inductive procedure is followed in which the data is reinvestigated without theory-guided restrictions to discover new patterns within and across interviews (Kvale and Brinkmann, 2008, p. 239).

Therefore, the overall approach to qualitatively analysing the interviews is considered to be abductive with an added inductive component (Mayring, 2000).

10 Results Qualitative Content Analysis

This chapter analyses the interview data obtained during the field work in the Vesterhav Syd project area in depth. The results are presented according to the sensitizing concept of social acceptance and its factor groups of distributional justice, procedural justice and trust. Thereafter uncaptured contextual factors revealed through the analysis are presented.

10.1 Participants' Backgrounds

Opening questions were posed to the seven IPs to get to know the participant's background, their occupation and their affiliation with, as well as their perception of the RKSK region. Especially for the discussion of the analysis results, this information will help to relate the statements to the participant's perception of themselves and the region of West-Jutland. For this analysis the opening questions furthermore facilitate the entree into the thematic question categories and aim at building trust between the interviewer (I) and the IP (Cook and Crang, 2007).

It shall be noted that due to anonymity reasons, the IPs utterances are randomised and not referred to specifically throughout the analysis. The general form IP is used for all IPs. While it restricts the possibility for the reader to draw conclusions from the IP to specific utterances, it could not be ruled out that IPs know each other and that in a close community as RKSK the voiced utterances might affect the relationships between the IPs. Therefore, all participants are presented in a generalized form as IPs.

The IPs cover a range of occupations in the tourism sector. One IP holds a leading role in the tourism organisations in the area while working in a different occupational field in his main job. One IP pursues an IT-related job in the educational sector, while running a bed and breakfast. Two other IPs work in the same occupational fields where they offer water sports activities, while running a shop to sell the necessary equipment for these. Another IP is a pensioner that works as a volunteer in a cultural institution. The sixth IP works in a hotel, while the seventh IP manages a hostel also offering sports activities. The IPs therefore provide a cross section of a variety of occupational fields in the area.

The time the IP's have spent in the RKSK-region varies. The majority of participants has been working in the area between 3 and 18 years in tourism-related activities. Also, the time the people have been living in the area varies from 3 to 30 years, with one participant reporting that he was born in the region.

Furthermore, asking the participants about the region of RKSK in general revealed valuable insights. The general perception is that the area provides a "raw" and "unspoiled" landscape in which you can experience the elements of water and wind in a unique and untamed way. One participant draws a vivid picture of the area as a rough environment and links it to the culture and temperaments that local people developed here:

IP: It's rough here ... and you can say that the local people here are rough as well. At first when you meet them, but when you get to know them they are not really that rough. They are actually very nice people, but it takes a while before you figure that out.

(Verbatim 1. Confidential Interview, June 2017)

Living in the fjord area means being close to nature in one of its purest forms, highlighted by the combination of the confined fjord area and the open North Sea in close proximity.

It is a free space with the nature in your backyard. In general, participant emphasize the undisturbed view, which is characteristic for this part of Jutland.

Turning to the theory-guided analysis of the interview data, first the distributional justice results are reported. Excerpts of verbatim are used to exemplify the relation to the analysis sub-themes.

10.2 Distributional Justice

The perception of the impartial distribution of outcomes as public goods and burdens (Kuehn, 2000) constitutes a major share of the IPs responses. Overall, distributional justice contributes dominantly to community social acceptance also in this qualitative analysis. First, the perceptions of outcomes for the country as a whole are presented. Thereafter, perceived costs and benefits for the region are presented as the focal point of this analysis to shaping community social acceptance among the interviewed participants. Finally, desired improvements as expressed by the IPs are presented.

10.2.1 Outcome (Costs and Benefits) for the Country

Linking the data obtained during the interview back to Denmark's overall ambition to achieve a higher share of wind energy, the IPs express an awareness that the Vesterhav Syd wind park is planned to foster an increase in renewable energy provision. This outcome is generally regarded as positive, since all IPs see the need to rely on sustainable energy in the future.

IP: It's obvious to everyone that we can't go on burning oil and coal and we need to move on to another form of energy and wind power is perfect here. And by setting the example we might be able to get other countries to do the same.

(*Verbatim 2. Confidential Interview, June 2017*)

Nevertheless, the way that this goal is pursued brings disadvantages that are perceived not to affect all parts of Denmark, but to be concentrated at the RKSK region. On a regional level, the opinions on public benefits and burdens diverge between the participants and shed light on the degree of social acceptance in the community dimension.

10.2.2 Outcome (Costs and Benefits) for the RKSK Region

Many utterances can be traced back to issues of outcome distribution, which the participants anticipate the project to bring to their region in terms of unequal costs and benefits. These distributional justice factors can be aggregated to the anticipated effect on tourism and the effect on regional employment and economy. How these factors are perceived varies among the IPs. The perceived outcomes are burdens to some, while others perceive them to be a benefit.

Investigating the utterances of the three participants who are concerned about the construction first, all employ a narrative that links the perception of the planned wind park to issues of visual intrusion. This impaired perception of nature expressed by these participants is anticipated to have a negative effect on the number of tourists that visit the whole region, but most importantly the towns in closest proximity to it; Søndervig and Hvide Sande.

IP: Well, I know very many, of whom I know that they won't come anymore. ... Who have been coming for ages, because they come specifically so that they can walk on the dunes and watch out on the ocean and there is nothing standing in the proximity.
(*Verbatim 3. Confidential Interview, June 2017*)

These IPs express that the tourists, who they think come for the raw and unspoiled nature, will not visit RKSK in the future, because Vesterhav Syd will disfigure the landscape.

IP: We know from the tourist that come here that they come because it is a fabulous nature, a nature who hasn't been destroyed by people; it has not been spoiled if you know what I mean. And the tourist and the media, who ... are all very concerned and they think it's ... you are going to spoil the nature, you are going to spoil the view. There is a lot of places to go as a tourist, and I am afraid they will choose them. Some of them.
(*Verbatim 4. Confidential Interview, June 2017*)

As a result, the IPs report that the important economic pillar of tourism will be weakened, employment in the tourism sector will drop and a destabilised municipal economy will remain. This regional negative causal chain, results in the desire of these participants to change the position of the wind park. This changed position is envisioned to be less intrusive on the perception of nature and thereby avoids negative effects on tourism and the regional economy as a whole.

IP: And they could have been placed one further step outside, and I think the opponents here don't understand, why we don't put them in the same place (as an add-on to an existing coastal wind park further south) and then keep other places free instead of putting them anywhere.
(*Verbatim 5. Confidential Interview, June 2017*)

Other negative side effects are reported to be a reduced value of property, which appears to be of dominant concern mostly for summerhouse owners. The perception of this group however cannot be captured in this analysis, since none of the IPs reported to own a summerhouse in the region.

While those participants who report an overall low social acceptance for the project highlight regional cost over benefits, it is important to note that they express awareness over the positive outcome for the region, but that these benefits will not compensate for the negative effect of losing tourism income. There is a consent that the construction might help to create jobs in the Hvide Sande harbour, since the harbour will be a hub for delivering material during the construction phase and serve as a point of departure for vessels servicing the turbines. Further jobs might be created, if the turbine supplier was selected to be Vestas. The company is a major employer in the region and it is therefore hoped that the contracts are assigned to this company.

Nonetheless, employment in the harbour as well as employment through servicing are uncertain factors in the view of the IPs. There is only a restricted amount of jobs to be gained in the harbour, which will likely not compensate for the anticipated loss in income through the expected drop in tourist numbers.

IP: As I see it, this is all happening, because in HS you can get about 35 new jobs on the harbour and that's the main... the people who is for this, their main argument is that it's for the 35 new jobs at the harbour. ...
As I have told, we have 2800 who is working full-time RKSK kommun (in tourism). And

I think it is simple Mathematics, if only for example two percent of the tourists are choosing another place and they want the raw nature -if you know what I mean- then we will very fast lose 200, 300 jobs.

(*Verbatim 6. Confidential Interview, June 2017*)

Uncertainty is also expressed in relation to the turbine supply and maintenance contracts, since it is unsure whether Vestas is going to be involved, or other companies get the contract in the end.

IP: ... not all aspects are examined, but only, ya, that it gives jobs, because it is anticipated that Vestas gets the contract (for turbine supply), which is uncertain.

(*Verbatim 7. Confidential Interview, June 2017*)

Generally, uncertainty in many aspects appears to influence the perception of outcomes in terms of costs and benefits, as the IPs reflect upon it during the interviews:

IP: I fear the tourists will stay away, but we don't know, because none of the sides has made any investigation.

(*Verbatim 8. Confidential Interview, June 2017*)

As these perceptions of IPs show, a high degree of uncertainty is involved in the predictions that are made regarding the negative outcome for the region and particularly in terms of employment. How costs and benefits will be distributed, and whether costs will outweigh benefits of vice versa, depends on the individual judgement of the IPs. Their predictions are often informed by previous knowledge about negative cases.

IP: I have friends, who previously came to another place (for vacation), and when they built there, they came here.

(*Verbatim 9. Confidential Interview, June 2017*)

Since this uncertainty is not captured by the sensitising concept of social acceptance, it will be revisited later in *subchapter 10.5*. At this point, it was important to introduce it already to create a link to distributional justice.

Turning away from the perception of costs outweighing benefits, there are interesting differences in the perceptions of outcome, as became clear through the four IPs, who show a higher level of social acceptance for the project. The IPs supporting the wind park express a different perception regarding the impact on tourism. They do not express similar concerns about visual intrusion through the project and the resulting negative effects on visitors and thereby the local employment and economy. They rather see the wind park as an opportunity to strengthen tourism in the region. These perceptions are highlighted by the opinions that the wind park will not diminish the amount of visitor, but increase it. Therefore, they see a prospect in a strengthened tourism sector and economy through Vesterhav Syd. An investigation of the individual utterances clarifies these perceptions. For the IPs in favour of the wind park, wind turbines can for example be used as a marketing tool to promote the region as a frontrunner in the sustainable utilisation of wind energy.

IP: ... my general opinion is that it is not bad for the area. Instead of saying: ah, everything is bad, and the view is going to be bad, then embrace it, we need to promote the area, we

already have so many wind mill, we need to promote Denmark to be like the leader in this area. And you can come and you can see it for yourself, you have wind mills everywhere. (Verbatim 10. Confidential Interview, June 2017)

The image of a sustainable region is an increasing issue that also concerns the tourists that visit the RKSK region. In the IP's perception, this image resonates with the increasing environmental awareness that their visitors express.

IP: But I think that when, and please don't be offended, but when a German "Hausfrau" (housewife) decides where to go on holiday, usually, or earlier, they would be rather conservative, but nowadays it's my experience that there is not much different between a German "Hausfrau" and a Danish "Hausfrau". ... I think it would be just about the same ... and they'll try to get organic vegetables ... and real milk and try to get whatever they can for their children. So I think the fact that we don't ... want to use Uranium and nuclear power, we'd like to cut back on burning oil and coal and like to get a lot more of wind turbine, solar panel, whatever we can ..., the more we could get of that, that would be great.

(Verbatim 11. Confidential Interview, June 2017)

The IPs also express concrete ideas for projects that might help to support this green image by relating it to their own experiences. One participant reflects on a previous cooperation between Vestas and the local water sports businesses, where Vestas sponsored water sport events, because of the shared dependency on wind and sees potential for future cooperation, which might help to attract visitors.

IP: Vestas, they were sponsoring, because they could also see a good idea in promotion through water sport, because they are depending on wind, and we are depending on wind and ah, we want the environment and they are making it clean by producing power without oil and coal. ... And maybe we can get them to sponsor us again.

(Verbatim 12. Confidential Interview, June 2017)

The IPs also reflect on the experience of having visited one of the existing offshore wind turbines in a neighbouring municipality, where a boat took a group of people out to a wind turbine and they were allowed to climb up and enjoy the view. Yet another IP reflects on previous events where people were allowed to ascend one of the three turbines that are already placed at the beach in Hvide Sande, which was a major attraction.

IP: They are doing like a day, when they show everything we have and the biggest event they had was that open wind mill. That you could actually go to this massive big wind mills. You get dressed for it and you can actually go to the top of it and see how it works inside and you can look up from it and see the view and everything. And it is huge as promotion for the area then, so and that in combination with the fact that you want to promote green energy, we want to move away from coal and oil. I think it is a good signal to send.

(Verbatim 13. Confidential Interview, June 2017)

To conclude this section on perceived regional outcome effect, the utterances above exemplify the different perceptions the IP's hold regarding the costs and benefits the Vesterhav Syd project might bring to the region and allows a deeper insight into the underlying factors that shape social acceptance from a distributional justice perspective.

The respondents who show a low social acceptance are likely to emphasise negative outcome effects (burdens) for the region, while the respondents who report a higher level of acceptance highlight positive outcome effects (benefits).

10.2.3 Outcome (Costs and Benefits) on the Interview Participants

When analysing community social acceptance, it was deemed important to capture the perceived effect it will have on people's personal lives contrasting to the perceived effect the project will have on the region and the country.

Three IPs mention a direct influence on their everyday lives, regarding e.g. their changing perception of nature. One of these participants mentions that a clear view on the ocean, undisturbed by the wind turbines is preferable. Two IPs mention that the wind park would affect them indirectly through the anticipated loss in tourist numbers in relation to the changed view out to the ocean. In comparison, three participants do not think the project will influence them personally at all. Only one participant mentions that it might have a positive outcome, because the person is interested in purchasing shares for the wind turbines, while other participants do not consider the opportunity to buy shares of the wind park.

As a side note, which will gain importance when investigating the uncaptured themes emerging during the interviews later on in this chapter, one participant expresses annoyance because of feeling to be caught in between the supporting and opposing groups. While the projects itself would have no effect on this person, the social and occupational networks this IP supports comprises both supporters and opponents, which makes the situation difficult to accommodate everybody. While the topic is of major concern for these groups, the person finds it difficult to remain neutral and not take sides, which otherwise might harm the relationships to friends and neighbours.

Overall, it appears that the IPs, are only marginally concerned about the effect on their personal lives. Most concerns about personal effects are expressed by the IPs showing a lower acceptance and mostly in connection to the anticipated reduced number of tourists. None of the participants mentions a direct effect for the personal business they are affiliated with, but are concerned about the effect on tourism in the whole region.

10.2.4 Desired Improvements of Outcomes

Resonating with the previous findings, the IPs support mixed ideas regarding possible alterations to the final project outcome, e.g. layout of the wind park, its position, turbine heights, etc. The three IPs who are least in favour of the project highlight their desire to have the wind park constructed further out, independent of other design issues.

IP: Yah, and now it is going to be constructed, and I hope that they decide that the things (turbines) are made actually further out.

(Verbatim 14. Confidential Interview, June 2017)

One participant would like to have the project not implemented in the area at all, but have it rather moved to a completely different region, preferably with existing turbines. The remaining four participants who show a higher acceptance would not change the planned project outcome.

Therefore, the outcome appears to be linked to the overall social acceptance towards the wind park, where the IPs expressing a higher social acceptance in the previous themes, do not express desired alterations compared to IPs with a lower level of acceptance. Overall desired alterations to the layout are independent of design criteria, turbine heights or layout, but concern the relocation of the project in general.

10.3 Procedural Justice

Procedural justice as defined by Maguire & Lind (2003) comprises four sub-themes: (1) perceived information provision, (2) participation and expressing opinions, (3) perceived influence of opinion and (4) desired improvements of the process. They clarify the ways in which the participants perceive the planning process of Vesterhav Syd. The planning process for this understanding involves all steps from the public announcement of the tender to the current stage prior to construction start, in which the public was able to be involved in the project.

10.3.1 Information Provision during the Process

The respondents remember at least roughly, when they first heard about the project. After follow up questions, most could narrow in on a time between 2015 and 2013, when they first heard about its initiation, mostly in the regional newspaper (Dagbladet Ringkøbing-Skjern).

Generally, the Ringkøbing-Skjern Dagblad appears to be the major source of information provision, which is frequently mentioned throughout the interviews. Some people rely dominantly on the newspaper to be updated about projects such as Vesterhav Syd. Ringkøbing-Skjern Dagbladet covers from news reports on the process planning, all kinds of issues around the case, including frequent letters to the editors in which locals express their opinion, but also announcements of public meetings (dagbladetringkjern.dk, 2017). For some IPs this describes a bottleneck in informing people about the process development that has been highlighted by one of the IPs in the following way:

IP: ... I buy the paper every day and I read it and it was very..., no one knew that it would be a possibility and someone was working on it but it was really, really, you couldn't find it. And then, it was all of a sudden.

(Verbatim 15. Confidential Interview with IP, June 2017)

When information is obtained dominantly through one information channel, such as the newspaper, it can raise the question of why information is provided in this particular way. It can raise suspicions about the motives of the planning entities, to intentionally keep information provision to a legal minimum not to raise too much attention and thereby prevent opposition. Conversely, it might be interpreted that the planning entities found the information to be sufficient and did not consider its perceived limited availability. Whether or not this process of information provision happens deliberately or not has been elaborated on by a participant:

IP: ... I read the paper every day. ... I don't know, I did not see it (announcements for any public hearing). It would be wrong for me to say that they did not do it, but we could not find it. We were sleeping. ... Maybe it was tactic and they let us sleep. They did not wake us up anyhow.

(Verbatim 16. Confidential Interview, June 2017)

The thought of information availability and the newspaper to be its most important medium can be extended to the geographical limitations that it brings with it. The issue of the newspaper as a focal medium to stay informed about the process progress and its exclusiveness in only reaching permanent residents of the RKSK region and poses a problem:

IP: This (the newspaper) was the only medium. And this is also what many summerhouse owners criticize. They don't have the newspaper because they live somewhere else. And they did not get informed. Because afterwards we also thought a bit: Well, yes, you write it in a paper and that's that. Yes, ... because everybody reads it *here*. *Here indeed*, but I know many people, who live at the east coast and have summerhouses (in the fjord region), who are similarly affected.

(*Verbatim 17*. Confidential Interview, June 2017).

Issues of distributional justice in terms of following the planning process and progress of the project in this analysis are connected to the medium through which it has been obtained. Generally, it appears that the more information channels are tapped, the less it affects procedural justice issues to form social acceptance. While the IPs who report a lack of information availability rely on the newspaper as a main source of information, the participants who employ different or multiple sources did not report this issue to be similarly influential. Other participants collected their information from a wider range of channels and do not raise the same concerns. They obtained information through a combination of online sources (newspaper, government websites, social media).

10.3.2 Participation and expressing Opinion

Turning away from information provision about the process to the question of once information is available, is it possible to raise concerns? This question addresses Maguire & Lind's (2003) distributional justice element of full participation in the process (cf. *subchapter 4.2.2*).

Voicing concerns can take on various forms. For example, official requests to planning authorities can be made during the public hearing period, it can be participated in public meetings or mobilized informally in local support or opposition groups. These opportunities of expressing opinion have been taken by three of the respondents. These IPs reported to have attended an official information meeting by the planning authorities. Two of these people also used the opportunity to influence the decision in internal tourist organisations, where polls were held whether to support the project, or not. The four remaining IPs did not participate in any official meetings or expressed their opinion in other ways to the planning entities (Government, Energy Agency, Environmental Agency, Energinet.dk and Vattenfall) due to various reasons. But why did people decide to participate or not? Investigating this question sheds light on people's motives, how they perceive the project to affect them and also on contextual factors that influence participation and thereby reveal further insight into procedural justice elements. Therefore, the responses to this question are analysed in more detail.

Of the three IPs who participated in a public meeting, one reported to have attended out of curiosity to obtain shares in the wind park. One did not mention why he was there, and one attended only the second meeting, because he felt bad not having attended the previous one:

IP: Well, I, I to be honest, I felt bad that I did not attend the first meeting (soft laughing)... because, mhm, well because it is, it turned out to be a big issue for some ah, for some ah, tourism businesses, so I felt I need, I should attend the meeting, so I did, ... the second meeting.

(*Verbatim 18*. Confidential Interview, June 2017)

Of the four people who did not attend any official meeting, one said that he was not interested because there were too many emotions involved in the discussion, one

reported to be lacking the time to do so. A third one reported that it was not his fight to carry out and a last IP reported not to have participated, because of trying to remain neutral. This is an example verbatim of the last IP:

IP: I did not want to (attend any meeting), because I am in the middle. We are a hotel and we have to embrace everyone. So I would like to embrace (name of company association) and like to embrace (person opposing the project) and (summerhouse association) and Denmark.

(*Verbatim 19*. Confidential Interview, June 2017)

It can be concluded that most IPs were aware of opportunities to express their opinion, whereas only few made use of them and the reasons for participation (or absence) vary.

Turning away from participation, the next question of importance is whether people who were aware of the chance to participate in the process perceive it to be inclusive so that they think they had the chance to voice opinion in the settings of the consultation period, public hearings, and later on in the appeals to object the project.

The consent is that during the two public hearings, the resonance was high at first so that many people attended and people could ask questions and voice their opinion as microphones were passed around for participants to express themselves. In this regard, the chance of raising concerns was given in the perception of the attendees. But having the opportunity to express opinion and being actually heard do not necessarily go hand in hand (Senecah, 2004). Therefore, it is now turned to how the IPs perceive voiced opinions to resonate in the Vesterhav Syd project planning. So, whether or not opinions can change the process.

10.3.3 Perceived Influence of Opinions

The IPs express reservation about the influence that expressed opinions can have on the process, mainly because they think that it is a national political decision that has been made by the central government and they effectively cannot influence.

IP: You can voice your opinion but in the end it's like talking to a wall. It's a political decision. Maybe objections can postpone the construction, but in the end, it will happen.

(*Verbatim 20*. Confidential Interview, June 2017)

The general consent is that opinions can be expressed, but that they do not have influence on changing the project plan.

IP: ... Whoever got the contract will stick to it, because a lot of money has been spent already.

(*Verbatim 21*, Confidential Interview, June 2017)

These perceptions reveal that despite the provision for public involvement e.g. throughout the EIA phases (idea phase, public hearing phase, and appeal phase), the IPs think that their opinion is not taken into account sufficiently.

10.3.4 Desired Improvements of the Process

Besides the aforementioned desire of IPs regarding transparency and an improved information provision, other desired improvements circle around a better involvement in the decision-making process. Even though some IPs would desire this change, they also express awareness about the complications regarding a higher level of involvement. The

awareness appears to be high regarding democratic decision-making, and that representatives both in the national as well as regional parliament are elected in order to represent public interests, so that not everybody should have to be engaged in planning processes such as Vesterhav Syd individually. A higher degree of involvement would result in more inefficient processes, were results might never be achieved, because of the manifold interests and magnitude of people involved in it.

IP: Influence is good, but not always, when different interests are involved. It has been decided politically. Maybe it was enough, because if we can all participate in decisions, nothing remains. So, it is not good, but necessary.
(*Verbatim 22*. Confidential Interview, June 2017)

Also, the varying interest are highlighted in light of the advantages and disadvantages of the current planning process.

IP: Local people need to be informed better. Not only locals, but also summer house owners from further away should be involved.
(*Verbatim 23*. Confidential Interview, June 2017)

Since there are inevitable varying interest involved regarding Vesterhav Syd, it is frequently mentioned that communication between the government and the affected public should be improved. The thought of improved communication is not limited to an improved communication between proponents and citizens, but also among the citizen groups that are affected by it and express different opinions. This suggestion for an improved process s beyond the proponent's responsibility of information provision and reveals an awareness that decision-making processes also of large energy infrastructure projects could be influenced by changing the interaction among the affected actors. This is emphasised by the expressed notions of an overly emotional process that hampered an open discourse within the affected population. It is reported that the high level of emotion expressed, especially by affected summer house owners prevented fruitful discussion and led to discursive closure restricting the outcome in the eyes of the opponents to either placing the wind mills further out, or to no construction in the local area at all.

While the notions of communication and emotion were expressed in relation to desired improvements of the process, they gain further importance as contextual content themes that stretch through the interview data. Therefore, they are revisited in *subchapter 10.5*.

In conclusion, procedural justice issues particularly in regards of information provision, participation and the opportunity to voice opinion, together with the influence these opinions have on shaping the process, are factors that contribute to the perception of limited procedural justice. Particularly information provision appears to be a main area of concern. Asking about desired improvements revealed that more information should be made available on various news channels. While the opportunity to voice opinion and the extent, to which these opinions can change the process are also factors that concern the IPs, awareness is high that even though the process is not ideal in its current form, changes might worsen it further.

10.4 Trust

It is now turned to the analysis of the sub-themes of trust (dispositional, rational and affinitive trust, procedural trust, fairness). Analysing the social acceptance of trust based

on the interviews, imparted limited clarity into the IPs perception of trust in its sub-themes. While the sub-theme of rational trust enhanced comprehension of these factors, problems arose when attempting to analyse the sub-theme of dispositional trust, affinitive trust, procedural trust and fairness.

Rational trust revealed clarity about the involved parties' perceptions based on previous experiences with other involved actors and how they trust other parties based on their previous actions. Distrust of the government was frequently mentioned. At the same time, this level of limited rational trust, was generally not expressed to be an area of concern by those IPs who mentioned it. To them, it is a known fact that lobbying efforts and agenda setting are part of the political process on different levels of decision-making and thereby affects their trust.

IP: As soon as it has something to do with money, then (trust) is not so big. Well, I successively think there is a bit too much lobbying in it. ... As soon as you heard the politicians, who sold their property for wind turbines and so on. ... Yes, one knows that for example ... that someone who holds many shares of Vestas, or many shares in the (Hvide Sande) harbour has something to do with it.

(*Verbatim 24. Confidential Interview, June 2017*)

In general, these procedures are considered to be known and common by those participants who elaborate on it further.

IP: But in politics, it is like that, I am very sober with it. And if I could profit from that, I would probably do it as well. One must not be naïve about it. If there was an advantage for me, an opportunity, a niche, then I did it as well. The interpretation of law is still allowed.

(*Verbatim 25. Confidential Interview, June 2017*)

While it was feasible to ask respondents about their rational trust, it did not feel appropriate to ask the respondents about their dispositional trust (predisposed, individual level of trust towards people and parties in general) in the interview setting. Those questions felt too personal given that the IPs were met for the first time in person during the interview. This might have had an impact on the openness and trust towards the researcher and the questions that were subsequently asked. It was therefore refrained from asking those questions.

In relation to the complications the investigation of dispositional trust posed, also the analysis of affinitive trust and procedural trust proved problematic. Affinitive trust for example, as the trust towards involved parties independent of previous interaction, solemnly based on e.g. perceived shared values, posed a caveat in the analysis. Since all actors had previous knowledge about the performance of the involved parties based on previous experience, this trust type overlapped largely with the rational trust type and could therefore not be analysed independently. This can be explained through the interconnectedness of actors in the region and their close occupational and social networks, which are explained in more detail in sub-chapter 10.5 below.

Like this overlap of affinitive and rational trust in this study, also procedural trust and fairness are concepts that from the researcher's perspective overlap widely with procedural justice factors as previously analysed in sub-chapter 10.3.

To summarise the analysis according to the sensitising concept of community social acceptance overall, this dimension revealed important perceived contributors to social acceptance. Therefore, the choice of this dimension for the explanatory phase appears to

be appropriate to gain a deeper insight into social acceptance for the sub-population of people engaged with the tourism sector in the RKSJ region.

While the caveats of addressing trust issues during the interviews are largely a discussion of the reasons for this, it was important to lay them out in the result section to explain why they revealed only limited insight into the trust factors.

To conclude this concept-guided qualitative analysis according to community social acceptance, it can be summarised that the perception of distributional justice issues dominates from the IPs perspective. Many utterances can be traced back to the impression of an unequal distribution of benefits and burdens, especially by the three IPs, who show a low social acceptance regarding Vesterhav Syd and express a concern about reduced tourism. In contrast, IPs who are more in favour of the project perceive no unequal distribution of outcomes, as they barely report any negative effects, but think about the project as a chance in terms of more tourism and regional development. However, uncertainty appears to be interwoven with these perceptions.

Procedural justice issues were of less concern compared to distributional justice. While the IPs frequently express shortcomings of the process, it was deemed more important for acceptance that opponents to the projects were self-caused late in their involvement and missed the chance of influence. Nevertheless, desired improvement for the process are mostly related to better information provision and communication between planning entities and the public, but also among the involved actors.

Finally, trust, in terms of rational trust towards the involved parties was found to influence the level of social acceptance, besides caveats in the analysis of the other trust types and fairness. With these results in mind, it is now turned to factors that contribute to acceptance, but were uncaptured by the sensitising concept of community acceptance.

10.5 Factors that influence Acceptance not captured by the Community Dimension of Social Acceptance

When analysing content qualitatively in terms of a thematic analysis as pursued here, the sensitizing concept of community social acceptance could not capture all content that contributes to shaping the interviewees perception of the wind park. To also include this content, the thematic analysis has been supplemented through two additional steps. First, the sensitising concept was broadened to also include Wüstenhagen, Wolsink & Bürer's (2007) other dimensions of social acceptance (socio-economic and market acceptance). Since this also left extracts from the interviews uncaptured which are deemed necessary for a better understanding of social acceptance, thereafter, an open coding process was pursued in which no sensitizing concept has been used, allowing themes to emerge that were previously not captured. Following this process, more clarity about the IPs perception in relation to Vesterhav Syd could be imparted. Particularly uncertainty appears to be of importance from the IPs' perspectives. The results are presented in this subchapter, beginning with the previously unconsidered dimensions of social acceptance (socio-economic and market acceptance).

Socio-economic and market acceptance facilitated the understanding of social acceptance in the interview to a limited extent. Only the dimension of socio-economic acceptance revealed further insight into the IPs acceptance. This dimension only marginally contributed to gain a deeper insight, because they were only mentioned by one participant, and are also not the persons' major concern, as it was mentioned once as a side note with issues of community acceptance dominating the overall analysis. This participant reflects on the general supply of wind energy in Denmark and voices concerns about the inefficiency of overproduction. Specifically, the IP critically reflects on the

fact that wind energy poses the problem of generating more electricity than can be used at particularly windy times, which leads to giving away this surplus electricity to neighbouring countries, or even having to pay for getting rid of the surplus. This expresses a concern regarding the utilisation of wind energy in general, which is best captured by the dimension of socio-economic acceptance.

IP: Well, I generally think wind turbines are good. The energy they produce comes from the wind, which is also the only thing, which is a bit bad, because they only function when the wind is there and then they produce, whether one can use it, or not. And as long as the electricity can't be stored properly, we don't need so many wind turbines. It has to be connected somehow. Because in Denmark, it often occurs that wind turbines produce more electricity than is needed in Denmark, and the electricity is then given away to Germany, or Sweden.

(*Verbatim 26. Confidential Interview, June 2017*)

Yet, there are other utterances that are more frequently mentioned in relation to dimensions of social acceptance, but not captured by the concept itself and therefore appear to be of importance to the IPs expression of social acceptance. To shed more light on these utterances as well and their relation to social acceptance, the analysis was opened up to a more inductive content analytical approach.

The themes that emerged through this approach reveal several themes. As mentioned in the previous chapter, uncertainty appears to play an important part in the perception of Vesterhav Syd. Furthermore, the social and occupational networks are tight in RSKS and are interconnected with the perception of outcome costs and benefits (cf. *subchapter 10.2.2*). Additionally, the way the affected groups react to information and how they try to influence the process are frequently mentioned points of concern (information handling and influence). As a last important point to understand particularly the dynamics in project opposition better, it turned out that two opponent group that were not represented by the IPs, but frequently mentioned during interviews, play pivotal roles in the process and development of the discourse on the Vesterhav Syd project: the summerhouse owners and the summer house companies (pivotal actors).

Uncertainty, social and occupational network, information handling and influence as well as pivotal actors are presented in more detail now. Investigating uncertainty first, it has previously been stated that it is important for the perception of the wind park and thereby for the assessment of it to be favourable, or not. To trace uncertainty back, it can be seen to ground in the ambiguity of the outcome of the project (Rudolph, 2014). As the respondents express certainty about the wind park construction, the wind park is a fixed object for them. On the other hand, the effects this wind park will have on tourism is ambiguous. Some people see it positively, others negatively, as reflected in their social acceptance. This ambiguity leads to uncertainty, because at this point it can only be assumed which effect Vesterhav Syd will have in terms of tourism and employment in the sector. To address this uncertainty was expressed by IPs.

IP: No one knows what's happening and that's the crazy thing about it. In theory, we could get more tourist, because they want to see them, they want to sail out to them, you know, make an adventure out there, but we don't know it. ... They are just gambling. ... Yeah, because no one has checked it, no one has asked the Germans, no one has asked the tourists at all... And then again why? We have a lot of places, where we can set these wind mills, a lot of places in DK. And I think it's strange that you dare to gamble with the most visited place on the west coast.

(Verbatim 27. Confidential Interview, June 2017)

Particularly more reliable information about the effect on tourism was requested as a desired improvement to the process. How this might be achieved will be part of the conclusion section, in which also recommendations for an improved process are derived from this analysis in *chapter 12*.

Looking at the theme of the social and occupational networks next, it captures the unique setting in which the controversies around the wind park unfold. The RKSK region displays an interconnectedness among its inhabitants that grounds in tight social network in the region as well as the two major employment sectors; tourism and the wind industry. In connection, the social networks and the employment sectors, contribute to shape the interactions among the affected population, which in turn affects the public expression of opinion regarding the Vesterhav Syd project. It is important to mention these relationships, because they shed light on why several IPs remained passive in supporting or opposing the project, even though most of them express a clear opinion when being asked about their acceptance of the wind park.

During the interviews, the dependence of the region on both, the wind power industry and the tourism sector was often emphasised. The problem is that the IPs who show a lower level of acceptance perceive these two sectors to be competing in light of the Vesterhav Syd wind park; if the construction commences as planned, the wind industry is favoured, which would in their perception result in a negative impact on tourism. Conversely, tourism would be favoured if the construction was aborted, with an anticipated negative effect on the wind industry sector. While these perceptions became clear during the interviews, the situation becomes more complex when considering that the opposing and supporting actors in the project can be part of the same social networks. In a tight community as in this case, opponents of the wind park working in the tourism sector, can be friends or neighbours of supporters working in the wind industry. It was stated during the interview that these people decided not to be more engaged in the discourse around Vesterhav Syd, because they would not want it to affect the relationships they have, giving the Vesterhav Syd a further level of complexity.

Another point, which was frequently made, is that people who oppose the construction were too late in the process to voice their concerns and influence the decision of the wind parks location (information handling and influence). While some participants reflect on their own inactivity as a self-caused problem, others blame authorities or the project proponent for an opaque process and a lack of information provision. Some IP's go as far as calling the upraise of opposition that could be experienced "stubbornness and stupidity".

IP: I think it is stubbornness and stupidity. ... No honestly, I think it is the leaders are simply, they are simply, it's so important to them that these turbines are cancelled that they don't want to negotiate anything in it, but in some, ah, in a situation, where we have lost our ability to negotiate. And this is just, ah, stupid.

(Verbatim 28. Confidential Interview, June 2017)

The heated discourse is also explained by the IPs to be driven by emotion, which prevents the communication and is seen as important in shaping the expressed acceptance of people.

IP: I think people they react very much on emotion instead of looking at the facts and a lot of people are afraid of change. And they want to stick to what they know and everything

new and different is something that they see as a threat, whereas very often it turns out to be the opposite. And especially with regards to this wind mill park offshore, I think there is a lot of emotion. More than facts.

(Verbatim 29. Confidential Interview, June 2017)

Lastly, there are two groups of actors in which the abovementioned points are combined and which play a pivotal role in the controversy around Vesterhav Syd. The summerhouse owners and the summer house organisations, are spearheading the efforts to change the location. They express their opinions on various channels and are highly vocal in expressing their objections about the wind park.

IP: It has mainly been the owners of summerhouses nearby the coast that are afraid that the prices in their house are going to go down.

(Verbatim 30. Confidential Interview, June 2017)

This also reflects in the amount of claims that were made to the appeal board in order to receive compensation for reduced property value.

IP: Normally, they don't get that many complaints. It's a very huge amount they complained about. And I can guarantee you 99% of all of them have a summer house out there.

(Verbatim 31. Confidential Interview, June 2017)

In comparison to the expressions, the IPs made about their own social acceptance, summerhouse owners and in extension the summerhouse rental companies appear to perceive the wind park more negatively, because they expect a large negative effect for them through the wind park construction.

To conclude this section on factors uncaptured by the community dimension of social acceptance specifically, and the concept of social acceptance generally, the general application of the broader concept of social acceptance in terms of socio-political and market acceptance revealed only marginally more insight into the acceptance of the IPs. In contrast to this, uncertainty about the outcome of the project appears to be an important contributory factor to acceptance. The strong social networks in the RKSK region also contribute to the expression of opinion and add a contextual element to this case. Furthermore, summerhouse owners, who were not the focus of this study, appear to play a crucial role in the opposition against the wind park.

In the next chapter, the results of this explanatory phase are revisited and discussed by returning to the research questions 2a,b and c. Afterwards, the results of both, the exploratory and explanatory phase of this study are discussed, before finally a conclusion is presented.

11 Discussion of Qualitative Content Analysis

To individually discuss the results gained in the qualitative (explanatory) phase, the research questions of this phase are revisited.

2a: How do interview participants describe their social acceptance?

Without having previous knowledge about the concept of social acceptance, the participants describe their acceptance in their own words and from their own perspectives. The application of analytical abduction allows to relate their expressed worldviews to the specific dimension of community social acceptance (Bryman, 2012), which guided the interviews and analysis and revealed further insights into the factors that shape social acceptance for the sub-group of people working in the tourism sector in the Vesterhav Syd project area.

Four out of seven IPs express a high level of acceptance towards the project in its current form. This means that they do not desire to change the project with regards to technical details, such as turbine heights, and also accept the current location. The other three participants express a lower level of acceptance, which could also be investigated in greater depth through the qualitative analysis. Interestingly, whether IPs show a higher or lower level of acceptance cannot be related to the impact zones, according to which the participants were sampled (cf. *chapter 9.2*). IPs close to the planned wind park also expressed a high level of acceptance, while some people further away from the project are still express a low level of acceptance.

Overall, the focus on community acceptance captures the contributors to the whole concept of social acceptance well. While this thematic focus has been derived from a different study population (survey responses in exploratory phase), it proofed to capture the crucial contributory factors to social acceptance for this in-depth analysis as well. Even though the questions were formulated openly in order to avoid guiding the interview too much, the IPs accounts largely match the community dimension of social acceptance and its factors.

The analysis further revealed that a variety of factors in the community dimension of social acceptance shape the participants' perceptions and that these factors contribute differently to their level of social acceptance. During the interviews, the participants employed narratives that mostly matched with the factors under the community acceptance dimension. Even after the analysis was widened to also include the dimensions of socio-political and market acceptance, no greater account of people's perceptions could be derived.

The unguided analysis of the interview material revealed that the understanding of the community social acceptance dimension can be enhanced through additional, previously uncaptured, content. These other contextual contributors point out factors that help to understand the controversies that arose regarding Vesterhav Syd. Primarily uncertainty regarding the outcome of the project is expressed and affects the perception of the project to be positive or negative. In extension, this uncertainty has an influence on the perception of distributional justice as a factor within the community dimension.

Furthermore, key actors that dominate the discourse against the wind park construction could be confirmed to be summerhouse owners and the companies renting out their summerhouses. While none of the IPs reported to own a summerhouse, during all interviews, these actors were mentioned to be crucial for the negative representation of the project e.g. in the regional media.

In relation to these actors and the way people made use of the opportunity to be engaged in the process and shape the outcome, the reported frustration by the

participants, who oppose Vesterhav Syd could be traced back to self-afflicted reasons of inactivity, which reveal further insight into social acceptance on a community level; it was frequently reported that actors just waited too long to become active in the process and thereby did not make use of the chance to influence the project outcome.

With this overall impression of how the IPs express their social acceptance, it is now turned to identify the most dominant contributory factors of social acceptance as revealed by the qualitative analysis.

2b: What are the dominant contributors/ factors of social acceptance?

The most dominant contributors/ factors of social acceptance could be captured by the community dimension of this concept. Dominantly issues of distributional justice were highlighted during the interviews. These factors describe the perception of benefits to outweigh costs, for a high level of social acceptance, or vice versa for a low level. In comparison, issues of procedural justice were also mentioned to be of concern, but to less extent than issues of distributional justice. As it proved difficult to analyse trust and fairness as contributors to acceptance, it is difficult to judge the importance of these factors reliably. However, with this restriction in mind, trust was not frequently mentioned to be of major concern for the participants in this study. It is therefore focused on distribution justice and procedural justice elements.

In terms of distributional justice, the IPs mostly reflect about the effect the wind park will have on their region than on the country as a whole, or their individual lives. Those participants who highlight the benefits of the project focus mainly on the positive outcome of Vesterhav Syd. The IPs describe how the region can benefit from the wind park through more employment in harbour logistics and by servicing the turbines. Furthermore, the wind park is described as having a potential to strengthen the tourism sector. By drawing on their own experience, the participants describe situations in which wind power was previously used as a tool to promote the sustainability of regions and attract tourist by offering activities in relation to wind power. Therefore, from the perspective of these participants, the wind park seems to align with the current land use in terms of tourism activities.

In contrast, the respondents less in favour of Vesterhav Syd perceive the prospect of a wind park in their area as a threat, both to regional employment and tourist numbers. From their perspective, the few jobs gained by the project will not outweigh the jobs that are lost in tourism once the wind park is established. The main argument is that in an area of pristine beauty, visitors come specifically to experience the untouched nature and a wind park will inhibit this experience, so that tourists will stay away when it is build and inhibits the experience of nature. Asking about desired changes to the project, particularly this participant group envisions the wind park to be further out so that the perception of nature is not inhibited by the turbines' appearance.

Both supporters and opponents express uncertainty about the effect the wind park will have on their region, whereas this uncertainty appears to be less pronounced by the participants in favour of Vesterhav Syd. Either way, uncertainty about the outcome is frequently expressed, but there is also a clear desire to mediate this uncertainty e.g. through more reliable investigations of tourists' attitudes towards the project. Rudolph (2014, p.183) proposes that offshore wind farms represent "manufactured uncertainties which lead to ... uncertainty for and endangerment of the tourism industry". How uncertainty might be mediated in cases such as Vesterhav Syd without aborting the idea of coastal wind power in tourist region is explored in the conclusion *chapter 12*.

Turning away from distributional justice, issues of procedural justice concern the IPs in light of social acceptance, even though to a lesser extent than elements of distributional

justice. Uncertainty is a factor that links the two dimensions in the Vesterhav Syd example.

Regarding procedural justice, the IPs mostly express concern about limited information provision and their perceived limited ability to influence the process and decisions. Particularly limited information about concrete planning proceedings are criticised

(Verbatim 23. *Confidential Interview*, June 2017). The perceived limited availability of information is an issue predominantly for the participants who show a limited acceptance towards Vesterhav Syd. Generally, it appears that the more information channels are used to obtain information, the less the issue of information availability reflects in the emphasis on procedural justice inadequacies, so that those participants who employed multiple information sources generally express a higher level of social acceptance. With the growing importance of social media, people still appear to be informed about the process, even if information is not sought actively on the public channels (e.g. government and municipality websites).

The availability of information also affects the perception of being able to participate in decision-making and having an influence on the outcome. The less information is available to the participants, the lower the impression of having the opportunity to participate. The results confirm the assumption that clarity in the process substitutes to some extent for the ability to be actively involved in the decision-making.

Largely, the IPs report a high awareness about the perceived limited influence they can have on projects such as Vesterhav Syd, but often do not voice a large desire to change this. For example, the role of government electives as citizen representatives (on a national and regional level) is widely accepted, with a high consensus that more influence from individuals would lead to an overly complicated process and lead to less efficient decision-making.

Interestingly, few participants are aware of the role the regional government can play in granting permission to energy projects such as Vesterhav Syd. While most participants are under the impression that the municipality does not have a say in such issues, only few participants are aware of the decision-making power the municipality holds to designate sites and confirm project proposal. This is particularly interesting considering general information availability and knowledge the participants hold about political decision-making on a regional level as expressed by the IPs throughout the interviews (cf. *chapter 10.3*).

In relation to the political sphere, issues of trust are also worth discussing, despite their limited contribution to the assessment of social acceptance in this study.

Rational trust addresses an area of concern for the IPs that could be investigated based on the interview data and essentially reveals a limited trust towards the government. Lobbying and agenda setting appear to be important for the Vesterhav Syd case, where this issue gains particular complexity for this case, since often Vestas as the largest wind power company and important employer in the region, is frequently mentioned to be involved.

Similar to the high awareness and limited desire of people to be more involved in decision-making, awareness and acceptance are also high about the way politics are perceived to be a “game” involving lobbying and agenda setting. The IPs express a knowledge about the way they perceive politics to be functioning, but do not necessarily express the desire to change it.

To conclude this section about the dominant contributory factors to social acceptance under research question 2b, procedural justice with a high degree of uncertainty involves the IPs social acceptance most, followed by a restricted importance in terms of perceived

limited information provision and several contextual factors that were uncaptured by the sensitizing concept, but tie into the dimensions of social acceptance.

2c: How do the results of the exploratory phase relate to the qualitative results (2a & 2b)?

To answer this question, the eight rationales to undertake a mixed methods research from *chapter 3* are revisited, to see if these anticipated advantages compared to a single method research hold valid. Furthermore, to structure this discussion according to a known sequence shall facilitate its comprehension. Afterwards particularly important results are outlined and conceptualised. Five main points are presented. Based on this conceptualisation, recommendations for an improved coastal wind power planning process are derived, therefore point five transits to the conclusion chapter hereafter.

The first claimed rationale to use a mixed methods approach to this study was the offset of disadvantages by employing two methods. In relation to the results, this rational has been fulfilled. Where the quantitative content analysis provided a broad picture of acceptance, it could not provide for a more nuanced understanding of the expressed opinions. Therefore, the qualitative analysis provided a suitable tool to overcome this limitation, by looking at the acceptance of a specific actor group in more detail.

A second claim that was made and is that through the application of mixed methods, a growing consensus is reached, that acceptance is a complex concept that requires the consideration of many contributors. To gain an overview of these contributors, the analysis of survey data proofed to be useful to uncover that visual disturbance through the land park in connection with anticipated effect on tourism are issues of concern for many of the survey participants. A more complete answer was gained by focusing on these dominant factors informing acceptance during the second research phase.

Furthermore, it was attempted to achieve a higher level of credibility for the research results by using mixed methods. While the dominant concern of disturbed visual amenity and a negative effect on tourism through coastal wind power plants has been suggested by previous research (e.g. Arolsen & Juli 2016; Lilley et al. 2010; Westerberg et al. 2015) as well as the regional media, it was attempted to provide independently-obtained results for this research by analysing the concept of social acceptance bottom up as emergent from the data, without the presumption of important contributing factors. The results gain credibility, because the whole process from deriving a thematic focus and a population to investigate in more detail, followed by the in-depth analysis of their responses, was described transparently.

By undertaking a mixed methods approach, also contextual elements were provided to enhance the understanding of the case, which could not have been revealed to the same extent by employing a single method. As an example, the qualitative analysis revealed contextual elements such as the tight interconnectedness of inhabitants in the region (social context), or the pivotal role of the summerhouse owners and rental companies, which was not revealed by analysing the survey data alone.

In addition, the add-on through qualitative methods to quantitative methods provided a more vivid illustration of the acceptance factors under study. The interview verbatim provides examples of the complexity of social acceptance and how, despite the commonalities in the study population (e.g. better information provision and uncertainty), acceptance levels diverge e.g. in light of the perception of outcome effects to be beneficial, or detrimental for tourism and the region overall.

As a second but last rational to use a mixed methods approach, it was attempted to improve the utility of this research. Utility refers to the practical benefits gained through these findings. While the quantitative content analysis revealed conditional acceptance to be mostly dependent on the position of the wind park to be in close proximity to the

coast, the interviews revealed that this is actually a second-tier problem after uncertainty regarding the outcome effects of the wind park. Therefore, the mixed methods approach provided a deeper understanding of social acceptance, which can be of direct benefit for future research and the improvement of policy processes.

In conclusion, offset, completeness, credibility, context, illustration and utility, might be summed up under the rational of general enhancement (Bryman, 2012, p. 648) of a single method study. While this section highlighted the advantages of mixed methods, they are not a universally applicable approach to enhance all research. Besides the usefulness of mixed methods for this study, it should not be interpreted as general superiority of these approaches over single methods (Bryman 2012). While these rationales for the application of mixed methods outline their usefulness under research question 2c broadly, in application to this research, there are some specific points that are worth highlighting, when relating the quantitative and qualitative results to one-another:

1. This study acknowledges the “gap” between general acceptances of wind power compared to the specific acceptance of local projects and goes beyond this perception.
2. The general acceptance level (ratio) differs between the quantitative and qualitative results and hints at acceptance to be complex, also on a local level.
3. The connection between visual disturbance and tourism could be emphasised through the combination of two methods.
4. New contextual factors emerged (e.g. uncertainty, social and occupational networks, information handling, pivotal actors)
5. Based on both results, recommendations for an improved process could be derived.

1. As became apparent during the literature review, a large consensus exists that acceptance is a rather complex concept (e.g. Firestone et al. 2012). Acceptance towards wind power in general should not be confused with acceptance towards specific wind power projects (e.g. Wolsink, 2012). While this is still frequently undertaken in practice, the current study goes beyond this understanding. The recognition of this “gap” of general acceptance of wind power to the specific acceptance of the Vesterhav Syd project was reflected throughout the two phases of the research process. The importance of distinguishing between different levels of acceptance was accredited for already in the quantitative analysis to go beyond the “gap” of general support, by introducing the category of conditional acceptance. Conditional acceptance was used for those responses that express a positive attitude towards wind power in general, but reject the idea of a local project due to various reasons. By differentiating already in this phase between two levels of acceptance, the quantitative phase provides the foundation for the qualitative phase, in which the specific acceptance towards the Vesterhav Syd project was elucidated further.

2. When interviewing people working in the tourism sector, it is worth noting that the ratio of people expressing a particular level of acceptance as revealed through the quantitative content analysis is not reflected in the qualitative analysis. Of the seven IPs, only four show a conditional acceptance, while three express a positive acceptance of the planned wind park (42.8%). This is a considerable higher ratio of people accepting the installation than derived from the quantitative analysis (14.2%), especially when

considering that interviews were conducted among people who are affiliated with tourism and might therefore be expected to be less accepting. While there was no connection between the two sampling populations and therefore the results cannot be compared without restrictions, the results are still surprising.

Also, the effect of proximity to the planned construction did not affect acceptance negatively, which might have been assumed, given the overall low and conditional acceptance towards the wind park revealed in the quantitative analysis. Generally, this result indicates that other factors inform social acceptance more than proximity to the wind park, as is also emphasised by the dominant concern of distributional justice for the RKSK region and not for the IPs individually.

Nonetheless, the sample population for the quantitative analysis cannot be assumed to be representative and a comparison between the qualitative and quantitative analysis should be attempted only cautiously. It might for example be that people who are more positive about the wind park were also more positive about an interview invitation and thereby skewed the acceptance ratio. Another reason for biased results might be the fact that people working in the tourism industry know and reflect more about the benefits and burdens such projects will bring and thereby know about potentials e.g. in term of energy tourism than the average public. Therefore, the qualitative analysis results should be interpreted to draw a more nuanced, but independent picture of social acceptance than undertaken in the quantitative analysis.

3. A causal relationship between visual disturbance and a fear of losing tourists could be established by investigating the qualitative interviews. These two factors could not be correlated in the quantitative study, even though the results suggested a relationship. The interviews imparted clarity about this relationship, since for participants, the primary concern was not the visibility of the turbines, but the anticipated effect their visibility will have on tourism.

4. The understanding of social acceptance was particularly enhanced through the investigation of contextual elements, which were not part of the theory-guided analysis of social acceptance. In this relation, particularly uncertainty, social context, information provision and handling, as well as pivotal actors enhance the understanding of the case. While to some extent these contextual elements can be found to play a role in many conflicting wind power cases (cf. *chapter 2*), in its constellation and importance they are unique to the Vesterhav Syd setting. *Figure 6.* below shows how particularly the contextual element of uncertainty is interpreted to interact with Wüstenhagen, Wolsink & Bürer's (2007) dimension of distributional justice and procedural justice for the Vesterhav Syd case. In this interpretation, uncertainty as previously suggested to be important for the perception of wind parks (e.g. Rudolph 2014), holds a central position in this conceptualisation. From its central position, uncertainty has a major influence on the perception of distributional justice as depicted on the left side of *Figure 6.* The perception of outcomes in the survey population of this study expresses different ways of interpreting this uncertainty. While some participants highlight the positive aspects of the project, others express concerns regarding the effect the wind park will have for the RKSK region. Either way, the results suggest, that the interpretation of outcome effects is affected by the social context and personal experiences. Regarding this, the study confirms the importance of personal characteristics on an individual and a societal level

as outlined in *subchapter 2.1* (e.g. Aitken 2010a; Huijts et al. 2012; Waldo 2012; van der Horst 2007).

**Distributional and Procedural Justice Elements in Relation to Uncertainty and
derived Process Recommendations relevant to the Vesterhav Syd Case Study**

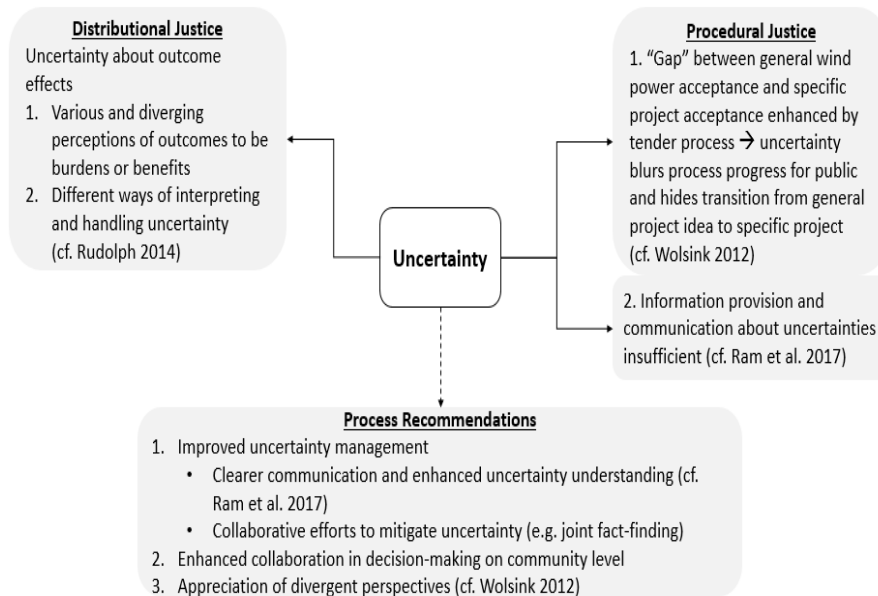


Figure 6. (Top left and right) Distributional and Procedural Justice Elements as informed by uncertainty based on the qualitative analysis in this thesis. (Bottom) Process recommendations as derived from the qualitative analysis.

Nevertheless, uncertainty also reflects in terms of procedural justice elements as depicted on the upper right-hand side of *Figure 6*. When looking at the way the tender process is designed, a crucial contributor to low social acceptance can be outlined when relating it to Wolsink’s (2012) understanding of the “gap” between broad wind power acceptance and local acceptance of a specific project. In light of a tender project, the problem of a transiting acceptance, from a general and high level to a local and low level, becomes evident. Tendering commenced in 2012 and involved several steps, where throughout the interviews the participants expressed that it was not evident to them when the transition from a vague project idea as one of six potential projects to a definite Vesterhav Syd project took place (cf. (*Verbatim 2*. Confidential Interview, June 2017);

(*Verbatim 15*. Confidential Interview with IP, June 2017); (*Verbatim 16*. Confidential Interview, June 2017). While the uncertainty of the current project status aligns with Wolsink’s (2012) understanding of the acceptance “gap”, the tender process left actors unsure, if and when the project idea will be executed to become a concrete project. This might also explain the inactivity of actors in the planning process (cf. (*Verbatim 3*. Confidential Interview, June 2017)). Finally, when the project was confirmed in 2016, it came as a surprise and some actors perceived to be too late in the process to change the outcome effectively. Ram et al. (2017, p.10) suggest that communicating uncertainty is often a difficult endeavour, but they also suggest a way to overcome these difficulties.

5. It is now turned to the lower-middle part of *Figure 6*, where suggestions for overcoming issues of uncertainties are presented and thereby address point five (recommendations for an improved process) as a result of this mixed methods study. By appreciating the contextual elements in combination with the social acceptance elements,

pathways to address IPs' key concerns can be derived. They can be beneficial for improving planning processes and the perception of outcomes. How this might be utilised is presented in the conclusion section below.

12 Conclusion

In continuation of the challenges outlined in the discussion section above, particularly in relation to uncertainty interwoven with distributional and procedural justice elements, this conclusion draws back on the three main contributing factor categories that inform social acceptance in the investigated population of people working in tourism businesses as presented in *Figure 6.* above. Based on this, three main points are suggested for an improved process:

- improved uncertainty management
- enhanced collaboration in decision-making on community level
- appreciation of divergent perspectives

Point five (process recommendations for an improved process) is addressed.

After presenting the three suggestions, the limitations of this study outlined, and further research recommendations are given later on in this chapter.

12.1 Improved Uncertainty Management

The perception of outcomes as well as the process through which the project is realised inform acceptance towards the Vesterhav Syd project and appear to be entangled with issues of uncertainty as was found in this study (Verbatim 27. Confidential *Interview*, June 2017). As shown above, these elements are captured by the dimensions of distributional and procedural justice (cf. Wüstenhagen, Wolsink & Bürer. 2007). Both, the perception of uncertainties regarding the process and uncertainties regarding the effects of the project outcome contribute to limited acceptance and can be improved to raise acceptance in the Vesterhav Syd case. While it can be difficult to communicate uncertainties without losing trust or legitimacy in the eye of the public, awareness about uncertainty is crucial (Ram *et al.*, 2017). When uncertainty of risks associated with wind power installations is known and expressed, also ways to mediate this uncertainty can be found (ibid.).

For process improvements and the management of uncertainties, Ram *et al.* (2017, pp.9) suggest clearer communication of uncertainties by developers and decision-making entities to promote and enhance citizens' understanding of the project as well as improved decision-making. This understanding aligns with the findings of this study, as participants articulated the need for unbiased and impartial information about the effect on tourism to address these uncertainties.

IP: ... they should send someone out like you and ask them questions, you don't have any interest in it, and it's not like you are going to be emotionally about it and start an argument. And that's just how... the impression I've been getting is that the persons that have been asked, it has not been a proper way of asking questions.

(Verbatim 32. Confidential Interview, June 2017)

A suggestion to improve uncertainty management can be the development of information appraisal methods (e.g. questionnaires) in collaboration with representatives of affected actor groups (e.g. summerhouse owners and rental companies, municipality, Vattenfall, tourism associations, harbour representatives, etc.) as a means of joint learning and fact-finding (cf. Daniels & Walker 2001). As previous attempts to capture tourists' attitudes towards the wind park were spearheaded by the summerhouse organisations and

therefore not considered legitimate by other actor groups (cf. Ram et al. 2017). A collaborative effort of information gathering might help to mitigate uncertainties of the effects the wind park brings to the RKSK municipality in the eyes of the local population. Conversely, uncertainty management efforts such as joint learning and fact-finding can be seen as just curing the symptoms of a fundamentally flawed process which gave rise to uncertainties. As identified in the discussion section above and revealed through the analysis, there are more fundamental flaws to the process of Vesterhav Syd, which are also likely to reoccur in similar planning situations. The once found to be most relevant in this thesis are depicted in *Figure 6*. (upper right-hand side) above.

It is turned to enhanced collaboration in decision-making on community a level.

12.2 Enhanced Collaboration in Decision-making on a Community Level

The tendering process makes it difficult for the public to follow the process and keep up to date on developments. The transition from a vague project idea to a definite project plan in a tendering process can be opaque to the public (cf. Wolsink 2012).

IP: If it was five places, then it's only going to be a 20% chance. ... That's actually a bit smart. Then if we knew from the beginning that they were going to put it out here, then we would be more aggressive. ...But actually, I think it was one of the things that made us sleep a bit, because it was actually not even a coin toss. ...Yeah, and then suddenly they go here and it is too late. ...I think it's a pretty good point.

(*Verbatim 33*. Confidential Interview, June 2017)

Also Ram et al. (2017, p.30) conclude with respect to the tender process that transparency was lacking from the start as they argue that: "... The very nature of the secret competition prevents any proactive community engagement by the (potential) developer" (Ram et al. 2017, p.25). This becomes evident e.g. in the perceived limited opportunity to voice opinion or through the fact that the developer, Vattenfall, was first confirmed four years into the tender process and after all assessments for all sites were already carried out.

While it might be beneficial to overthink the current planning policies as a whole, two recommendations shall be given by respecting the current legislation:

First, the process could be changed in the future to the alternative of the open door procedure. As mentioned in *subchapter 5.1*, the open door procedure is an alternative to the tender procedure, which requires more initiative from the developer (Ram et al. 2017), so that more interaction between the developer and the affected public can take place from the beginning on. As a second alternative, it might be an option to work in the given tender process, but generally improve collaboration on a community level (Wolsink 2012, Ram et al. 2017). The legal framework provides opportunities for improved communication and collaboration, which is currently only met to a minimum (Ram et al. 2017). While a proactive approach was attempted by the planning entities in offering an initial public hearing without being required to do so (cf. *subchapter 5.1*), this might not be sufficient for the public. As the qualitative analysis revealed, more reliable information on the effect of the project outcome is needed (*Verbatim 27*. Confidential Interview, June 2017), but not necessarily more influence in decision-making is requested

(*Verbatim 22*. Confidential Interview, June 2017). This thought extends to the generally requested better information provision as expressed by some IPs (e.g. *Verbatim 23*. Confidential Interview, June 2017).

Currently, the newspaper is the major medium of information provision for most of the IPs, but as the few IPs who also obtain their information on other channels show, the more media are employed, the higher the awareness of the process and thereby acceptance (cf. *subchapter 10.3.1*). As stated earlier in *subchapter 4.2.2*, Stern & Baird (2015) reflect on procedural trust and legitimacy that it is not necessarily the active involvement in a process that informs trust and thereby social acceptance, but the perception of clear and transparent process together with the perceived representation of public interests that are important.

Therefore, in relation to the expressed shortcomings of the Vesterhav Syd planning process in this analysis, and informed by the academic literature, information provision, clear communication of uncertainties and early engagement of communities is crucial for the social acceptance of individual wind power projects. One way to approach this might be the employment of various media channels and the inclusion of social media to spread information continuously from process beginning on. Particularly in the Vesterhav Syd case, a better communication and identification of affected property owners (especially summerhouse owners) might have prevented the perceived lack of transparency and perceived excluding effect through limited information provisions (cf. Ram et al. 2017).

To open up this section about recommendations for an improved process to general recommendations to enhance acceptance of (coastal) wind power projects, it is advised that developers and policy makers shall accept and embrace the diversity of opinions the public expresses on a local level (Devine-Wright 2011; Ram et al. 2017; Wolsink 2012).

12.3 Appreciation of divergent Perspectives

People's acceptance regarding individual wind power projects varies greatly as it is vested in contextual factors, such as place attachment and personal characteristics on an individual and societal level (Langer *et al.*, 2016). This was proven through the differing statements survey respondents as well as the IPs made. Yet, these individual and diverging perspectives need to be acknowledged in order to raise acceptance for projects such as Vesterhav Syd, but are still frequently ignored.

In this regard, Wolsink (2012, p.1815) makes an important point when relating subjectivity of opinion particularly to the community dimension of acceptance, where place attachment is an essential contributor: "there is a persistent preference for efforts to try to avoid the far-reaching subjectivity of the *eye of the beholder*". Wolsink (2012, p.1815) constitutes further that particularly the nuances of place attachment are crucial to knowledge in order to increase community acceptance: "the most significant aspect of ... community acceptance is the fit to the identity of the landscape in the eyes of the community members".

The particular importance of place attachment also for this study is confirmed through the qualitative analysis, where place attachment in terms of place dependency (cf. Rudolph 2014) plays a vital role for the evaluation of outcome effects for the region. What makes the understanding of acceptance in terms of place attachment particularly complex is that wind power cases such as Vesterhav Syd provide for competing land uses (e.g. tourism vs. wind power). While still the negative aspects of visual impacts of coastal wind parks especially for tourism are highlighted, this perception of competition in land use needs to be challenged (cf. Wolsink 2012). It is important to explore the opportunities for co-development of tourism and wind power further, while considering differing public perceptions. Some people in the tourism sector recognise this potential, as the participants showing a higher level of acceptance during their interviews express.

As other studies show (de Sousa and Kastenholz, 2015; Liu *et al.*, 2016), different land uses can be aligned to gain a beneficial outcome for the community.

Despite their differences, the recommendations made above fall under the umbrella of generally applicable improvement in terms of a collaborative process. Therefore, collaborative process designs according to Daniels and Walker (2001) are presented in the following chapter.

12.4 Collaborative Process Design

A report about the merits of collaboration could make up a whole thesis (and much more), but it shall here be discussed at least briefly, because it captures the essence of the suggested improvements outlined above and furthermore bears the potential to address acceptance issues on a community level for other controversial or conflicting cases. To utilise collaborative potentials, it is thereby drawn on a presentation of its key aspects as summarized by Daniels & Walker (2001). They present eight aspects of collaboration, which are depicted in *Table 4.* in the left column. The right column presents the connection to the mentioned improvements presented previously.

Table 4. *Eight aspects of collaboration based upon Daniels and Walker (2001, p.63) and the connection to potential improvements derived from the qualitative analysis (own made). Aspects are used with permission of the authors.*

Aspects of collaboration based upon Daniels and Walker (2001 p.63)	Connection to potential improvements according to the qualitative analysis (own made)
1. It is less competitive and more accepting of additional parties in the process because they are viewed more as potential contributors than as potential competitors.	Appreciation of diverging perspectives to find a mutually accepted solution.
2. It is based on joint learning and fact-finding; information is not used in a competitively strategic manner.	Uncertainty management and enhanced legitimacy of information.
3. It allows underlying value differences to be explored, and there is the potential for joint values to emerge.	Appreciation of diverging perspectives.
4. It resembles principled negotiation, since the focus is on interests rather than positions.	
5. allocates the responsibility for implementation across as many participants in the process as the situation warrants.	Enhanced opportunity for inclusiveness and participation.
6. Its conclusions are generated by participants through an interactive, iterative, and reflexive process. Consequently, it is less deterministic and linear.	Enhanced legitimacy and acceptance of planning process and outcome elements.
7. It is an ongoing process; the participants do not meet just once to discuss a difference and then disperse. However, collaborations may have a limited life span if the issues that brought the participants together are resolved.	Option for continued participation.
8. It has the potential to build individual and community capacity in such areas as conflict management, leadership, decision-making, and communication.	Potential to build capacity to address similar issues collaboratively in the future.

While research suggests that collaborative approaches can be an adequate way to improve planning processes, their applicability and feasibility should be discussed in relation to the results gained from the qualitative analysis in this study. Respondents suggest that too much involvement would not be desirable, because it would hamper decision-making. However, as depicted in *Table 4*, in the right column e.g. under point five, the *opportunity* to participate should be given, even when it is eventually not taken, as it can enhance the perception of processes to be just and therefore more acceptable in

terms of distributional justice (cf. Dimitropoulos and Kontoleon, 2009; Maguire and Lind, 2003). This poses a minor limitation in this case, but should not diminish the potential value of collaborative processes, also because in a small and specific population sample as in this study, results cannot be generalized.

12.5 Caveats of this Study

It is important to point out some limitations of this study, as well as to draw its boundaries in terms of generalization and applicability of its results. First, problems that emerged throughout the study process as a whole are discussed. Thereafter, specific caveats of the study design are pointed out.

Due to several reasons, this project proofed to require more time than was anticipated in the beginning. Among others, it started out with the ambition to overcome the (still) prevailing paradigmatic divide between quantitative and qualitative research and their respective epistemological and ontological concerns. Coming from a “natural science” background, but during graduate studies increasingly appreciating the value of “social science”, it was envisioned to bring the two research strands together and thereby advance the researchers own learning. This ambition led to an extended research process. Both approaches taken in this study were new to him, so that extensive theoretical reading proceeded the laborious analyses. While it was attempted to provide a shorter thesis, especially the qualitative data proofed to be so rich that in order to acknowledge this, together with the contextual complexity of the case, the results and discussion chapters expanded. The researcher was carried through the process by the importance, acceptance issues hold from the perspective of the interview participants. Further simplification of this complexity seemed inadequate. This complexity furthermore necessitated the expansion of the analysis to look beyond the concept of social acceptance, but added on to the volume of this thesis, which leads to the question of appropriateness in using the concept of social acceptance.

The concept of social acceptance and particularly the dimension of community acceptance proofed valuable to capture important contributors to acceptance in this thesis. However, as the unguided analysis without the aid of the sensitising concept of social acceptance revealed, there are important contextual contributors to acceptance that can be related to the concept, but are not necessarily captured by it. Therefore, the application of social acceptance is advised to be seen as a valuable guideline, which despite its merits is also no silver-bullet to analyse issues of acceptance in wind power cases. While it gives good guidance, it is the researchers responsibility to go between and beyond its dimensions to extract also other relevant contributors to acceptance.

It shall also be referred back to the notion that despite commonalities between many wind power cases, they all vary in contextual elements (e.g. uncertainty, social and occupational networks, pivotal actors, information processing) that are important to capture for an adequate assessment of the situation and therefore an improved process (cf. Wolsink 2012, Devine-Wright 2010). Departing from this understanding of unique cases, it is understandable that the results presented in this thesis should be seen to hold valid only in relation to the people that were interviewed for this study. In addition, no generalisation claims can be made for the attitudes expressed by the survey population (n=148) and the IPs (n=7). These restrictions extend further to the representativeness of the quantitative to the qualitative data. Ideally, a larger sample for the quantitative analysis should have been obtained. Furthermore, it would have been beneficial, to obtain a subsample from this larger sample for the qualitative analysis. This was not

available due to data constraints. To obtain a large sample independently would have exceeded the boundaries of this thesis. Despite these limitations, the results align with recent scientific literature in the field, and therefore suggest relevance e.g. in terms of the importance of factors such as uncertainty, place attachment and place dependency and the perception of unequally distributed costs and benefits (e.g. Wolsink 2012; Devine-Wright & Howes 2010; Bell et al. 2013).

Looking specifically at the interviews that were conducted, some caveats can be pointed out. The fact that they were carried out in English poses a limitation in that not all nuances of acceptance have likely been captured, which the respondents could perhaps have articulated differently, if talking in their mother language (Cook and Crang, 2007; Kvale and Brinkmann, 2008). Furthermore, the fact that three of the seven interviews were conducted in German has an impact on the quality and comparability of the verbatim data.

Another design limitation was that the interview guide as developed to capture also factors of trust, failed to reveal their contribution to social acceptance to a large extent, because of which the results might be biased. Since these were the first interviews conducted by the researcher, it was hard to anticipate this outcome, even after consultation with experienced researchers and having studied relevant literature.

What furthermore might have had a limiting effect on the expression of the IPs opinions during the interviews, but could hardly been anticipated prior to the fieldwork, was the social context in the municipality. While IPs articulated this to affect the open expression of opinion in the region, it did not appear to restrict their voiced opinion during the interviews, which either way, cannot be guaranteed. To enable openness of responses and anonymity, confidentiality of the participants identity was obtained throughout this thesis.

12.6 Research Contribution

With the above-mentioned limitations in mind, it is to hope that this study made a contribution to emphasise the importance of a more nuanced understanding of acceptance. Further research on especially the facet-rich concept of social acceptance is imperative to inform policy implementation and mediate contradictions not only between coastal wind power and tourism, but between wind power and other land-use forms.

Specifically, it is hoped to contribute to research on local (community) acceptance of wind power installations in coastal settings from affected actors' perspectives. It confirmed previous research that acceptance on a local level contributes dominantly to controversies of coastal wind park implementation. In analysing acceptance bottom-up in a mixed methods approach, this study is the first to trace back acceptance empirically from a broad investigation of acceptance to its fine nuances in a case study. In doing so, it could be confirmed that manifold factors form acceptance on a community level and that these factors are highly context depended. It aligns with previous findings, by showing that dominantly the perception of outcome effects and the perception of planning steps in wind park projects contributes to acceptance on a local level.

In investigating perceived outcome effects and process elements in more detail, it could be shown that uncertainties play a crucial role in acceptance formation. Through the demonstration that an improved management of these uncertainties might lead to higher local acceptance and therefore to improved project implementation, this study is one of few to have investigated this phenomenon. Because of this, the present thesis shows a pathway to further research that can contribute to inform planning processes and thereby help to advance a less conflicted transition towards renewable energies.

12.7 Future Research

For the future, it is important to advance studies to investigate acceptance on a local level further. While acceptance has proven to be a contextual concept, further case studies on acceptance might help to confirm essential contributors, such as uncertainty and place attachment. When more data on single cases is collected it provides a strong argument for improvements in policy planning for renewable energies. In addition to studies and trials in the field of learning and collaboration in community wind park planning, more research on acceptance in transitional countries needs to be advance. As the issue of renewable energy transition will gain more importance in the future, research also needs to be proliferated to other renewable energy technologies, such as solar or water power to investigate conflicting land-use plans in light of social acceptance in detail.

Acknowledgements

I would like to express my gratitude to my supervisors, Lotten Westberg and Jens Emborg, for their patient guidance, continued support and encouragement, as well their constructive criticism throughout the thesis process. You helped me to learn many things that will benefit me in the future.

Furthermore, I would like to thank the company that generously provided the survey data for this research. My gratitude also goes to Energinet.dk for their advice on the planning process in the Vesterhav Syd case. My grateful thanks are also extended to the interview participants, who dedicated their time to provide invaluable insights into their perceptions of the project. Thank you for the hospitality and openness to share your opinions with me.

Additional thanks go to Henrik Meilby and Christian Gamborg for their advice in developing a research design, as well as Steve Daniels and Gregg Walker for being a source of inspiration and allowing me to relate my recommendations to their unmatched work on collaboration.

My gratitude also goes to my friends and colleagues for their patience, advice and inspiration. Special thanks go to my family, who encouraged me to pursue these studies and supported me in more ways than can be listed here.

Finally, I would like to thank J. for being the best companion imaginable. Thank you for enduring my mood swings and guiding me through this intensive time while staying positive about things. I am grateful to have you by my side. Quantum mechanics.

References

- Aitken, M. (2010a) *A three-dimensional view of public participation in Scottish land-use planning: Empowerment or social control?*, *Planning Theory*, 9(3), pp. 248–264. doi: 10.1177/1473095210366193.
- Aitken, M. (2010b) *Why we still don't understand the social aspects of wind power: A critique of key assumptions within the literature*, *Energy Policy*. Elsevier, 38(4), pp. 1834–1841. doi: 10.1016/j.enpol.2009.11.060.
- Anker, H. T. and Jørgensen, M. L. (2015) *Mapping of the legal framework for siting of wind turbines – Denmark*. (IFRO Report 239 Mapping) Frederiksberg: University of Copenhagen (IFRO). Available at: <http://forskning.ku.dk/find-en-forsker/?pure=da/publications/mapping-of-the-legal-framework-for-siting-of-wind-turbines--denmark%28128175f4-b471-42ea-a4ee-4fcad5238a34%29.html> [2017-05-28].
- Bech-Bruun (2015), *CMS Guide to offshore wind in Northern Europe The Netherlands, CMS Guide to offshore wind in Northern Europe*, pp. 1–30. Available at: <https://eguides.cmslegal.com/offshore> [2017-05-23]
- Bell, D., Gray, T., Haggett, C. and Swaffield, J. (2013) *Re-visiting the “social gap”: public opinion and relations of power in the local politics of wind energy*, *Environmental Politics*, 22(1), pp. 115–135. doi: 10.1080/09644016.2013.755793.
- Bidwell, D. (2017), *Ocean beliefs and support for an offshore wind energy project, Ocean and Coastal Management*. Elsevier Ltd, 146, pp. 99–108. doi: 10.1016/j.ocecoaman.2017.06.012.
- Bosley, P. and Bosley, K. (1988) *Public acceptability of California's wind energy developments: three studies*, *Wind Engineering*, 12(5), pp. 311–318.
- Breukers, S. and Wolsink, M. (2007) *Wind power implementation in changing institutional landscapes: An international comparison*, *Energy Policy*, 35(5), pp. 2737–2750. doi: 10.1016/j.enpol.2006.12.004.
- Breum, H. (2015) *The Danish Energy Model*, Danish Energy Agency. Available at: www.ens.dk/en [2017-05-13]
- Brownlee, M. T. J., Hallo, J. C., Jodice, L. W., Moore, D. D., Powell, R. B. and Wright, B. A. (2015) *Place attachment and marine recreationists' attitudes toward offshore wind energy development*, *Journal of Leisure Research*, 47(2), pp. 263–284.
- Bryman, A. (2012) *Social Research Methods*. 4th ed. Oxford: Oxford University Press.
- Cook and Crang (2007) *Doing Ethnographies*. 1st ed. London: Sage Publications.
- Cronin, T, Ram, B, Gannon, J, Clausen, N-E, Thuesen, C, Maslesa, E, Kreye, M & Geraldi, J (2015) *Public acceptance of wind farm development: Developer practices and review of scientific literature: Wind2050 WP3 Deliverable 1*. DTU Wind Energy. DTU Wind Energy E, no. 0051. Available at: <http://orbit.dtu.dk/en/publications/public-acceptance-of-wind-farm-development-developer-practices-and-review-of-scientific-literature%28c319ceac-8faf-496e-9f31-c4c02382488f%29.html> [2017-06-07]
- Daniels, S.E. and G.B. Walker. 2001. *Working through environmental conflict: The Collaborative Learning Approach*. Westport CT: Praeger Publishers.
- Danish Parliament (2008) *Promotion of Renewable Energy Act*. Copenhagen. (Act no. 1392).

- Devine-Wright, P. (2005a) *Beyond NIMBYism: Towards an integrated framework for understanding public perceptions of wind energy*. Wind Energy, 8(2), pp. 125–139. doi: 10.1002/we.124.
- Devine-Wright, P. (2005b) *Local aspects of UK renewable energy development: exploring public beliefs and policy implications*. Local Environment, 10(1), pp. 57–69. doi: 10.1080/1354983042000309315.
- Devine-Wright, P. (2007) *Reconsidering public acceptance of renewable energy technologies: a critical review*. Delivering a Low Carbon Electricity System: Technologies, Economics and Policy.
- Devine-Wright, P. (2011) *Place attachment and public acceptance of renewable energy: A tidal energy case study*, Journal of Environmental Psychology. Elsevier Ltd, 31(4), pp. 336–343. doi: 10.1016/j.jenvp.2011.07.001.
- Devine-Wright, P. and Howes, Y. (2010) *Disruption to place attachment and the protection of restorative environments: A wind energy case study*, Journal of Environmental Psychology. Elsevier Ltd, 30(3), pp. 271–280. doi: 10.1016/j.jenvp.2010.01.008.
- Dimitropoulos, A. and Kontoleon, A. (2009) *Assessing the determinants of local acceptability of wind-farm investment: A choice experiment in the Greek Aegean Islands*, Energy Policy, 37(5), pp. 1842–1854. doi: 10.1016/j.enpol.2009.01.002.
- Eltham, D. C., Harrison, G. P. and Allen, S. J. (2008) *Change in public attitudes towards a Cornish wind farm: Implications for planning*, Energy Policy, 36(1), pp. 23–33. doi: 10.1016/j.enpol.2007.09.010.
- Energinet.dk (2015a) *Vesterhav Syd Offshore Wind Farm Environmental Statement Part 0: Non-Technical Summary*. Fredericia: Energinet.dk. Available at: https://ens.dk/sites/ens.dk/files/Vindenergi/vhs_part_0_eia_english_final.pdf. [2017-05-13]
- Energinet.dk (2015b) *Vesterhav syd havmøllepark VVM-redegørelse og miljørapport Del 3: Miljøforhold på land*. Fredericia: Energinet.dk. Available at: naturstyrelsen.dk/media/136740/vvm-del-0-ikke-teknisk-resume_vesterhav-syd_april-2015.pdf. [2017-05-13]
- Energistyrelsen (2017) *Om udbud af de kystnære havvindmølleparker i Danmark*. Available at: <https://ens.dk/ansvarsomraader/vindenergi/udbud-paa-havvindmoelleomraadet/om-udbud-af-de-kystnaere#accordion1-option> [2017-07-25]
- Firestone, J., Bates, A. and Knapp, L. A. (2015) *See me, Feel me, Touch me, Heal me: Wind turbines, culture, landscapes, and sound impressions*, Land Use Policy. Elsevier Ltd, 46, pp. 241–249. doi: 10.1016/j.landusepol.2015.02.015.
- Firestone, J., Kempton, W., Lilley, M. B. and Samoteskul, K. (2012) *Public acceptance of offshore wind power across regions and through time*, Journal of Environmental Planning and Management, 55(10), pp. 1369–1386. doi: 10.1080/09640568.2012.682782.
- Flick, U. (2006) *An Introduction to Qualitative Research*. 3rd ed. London: SAGE Publications.
- Frantál, B. and Kučera, P. (2009) *Impacts of the operation of Wind turbines as perceived by residents in concerned areas*, Moravian Geographical Reports, 17(2), pp. 35–45.

- Gibbons, S. (2015), *Gone with the wind: Valuing the visual impacts of wind turbines through house prices*, Journal of Environmental Economics and Management. Elsevier, 72, pp. 177–196. doi: 10.1016/j.jeem.2015.04.006.
- Graham, J. B., Stephenson, J. R. and Smith, I. J. (2009) *Public perceptions of wind energy developments: Case studies from New Zealand*, Energy Policy. Elsevier, 37(9), pp. 3348–3357. doi: 10.1016/j.enpol.2008.12.035.
- Gross, C. (2007) *Community perspectives of wind energy in Australia: The application of a justice and community fairness framework to increase social acceptance*, Energy Policy, 35(5), pp. 2727–2736. doi: 10.1016/j.enpol.2006.12.013.
- Haggett, C. (2011) *Understanding public responses to offshore wind power*, Energy Policy. Elsevier, 39(2), pp. 503–510. doi: 10.1016/j.enpol.2010.10.014.
- van der Horst, D. (2007) *NIMBY or not? Exploring the relevance of location and the politics of voiced opinions in renewable energy siting controversies*, Energy Policy, 35(5), pp. 2705–2714. doi: 10.1016/j.enpol.2006.12.012.
- Hübner, G. and Hahn, C. (2013) *Akzeptanz des Stromnetzausbaus in Schleswig-Holstein: Abschlussbericht zum Forschungsprojekt*. Halle (Saale): Institut für Psychologie der Martin-Luther-Universität Halle-Wittenberg.
- Hübner, G. and Pohl, J. (2010) *Akzeptanz und Umweltverträglichkeit der Hinderniskennzeichnung von Windenergieanlagen*, Abschlussbericht zum BMU-Forschungsvorhaben (FKZ: 03MAP134). Halle (Saale): Institut für Psychologie der Martin-Luther-Universität Halle-Wittenberg.
- Huijts, N. M. A., Midden, C. J. H. and Meijnders, A. L. (2007) *Social acceptance of carbon dioxide storage*, Energy Policy, 35(5), pp. 2780–2789. doi: 10.1016/j.enpol.2006.12.007.
- Huijts, N. M. A., Molin, E. J. E. and Steg, L. (2012) *Psychological factors influencing sustainable energy technology acceptance: A review-based comprehensive framework*, Renewable and Sustainable Energy Reviews. Elsevier Ltd, 16(1), pp. 525–531. doi: 10.1016/j.rser.2011.08.018.
- Jobert, A., Laborgne, P. and Mimler, S. (2007) *Local acceptance of wind energy: Factors of success identified in French and German case studies*, Energy Policy, 35(5), pp. 2751–2760. doi: 10.1016/j.enpol.2006.12.005.
- Jones, C. R. and Eiser, J. R. (2009) *Identifying predictors of attitudes towards local onshore wind development with reference to an English case study*, Energy Policy. Elsevier, 37(11), pp. 4604–4614. doi: 10.1016/j.enpol.2009.06.015.
- Jones, C. R. and Richard Eiser, J. (2010) *Understanding “local” opposition to wind development in the UK: How big is a backyard?*, Energy Policy. Elsevier, 38(6), pp. 3106–3117. doi: 10.1016/j.enpol.2010.01.051.
- Kaldellis, J. K., Kapsali, M., Kaldelli, E. and Katsanou, E. (2013) *Comparing recent views of public attitude on wind energy, photovoltaic and small hydro applications*, Renewable Energy. Elsevier Ltd, 52, pp. 197–208. doi: 10.1016/j.renene.2012.10.045.
- Kvale, S. and Brinkmann, S. (2008) *InterViews: Learning the Craft of Qualitative Research Interviewing*. 2nd ed. London: SAGE Publications.
- Ladenburg, J. (2008) *Attitudes towards on-land and offshore wind power development in Denmark; choice of development strategy*, Renewable Energy, 33(1), pp. 111–118. doi: 10.1016/j.renene.2007.01.011.

- Ladenburg, J. and Dubgaard, A. (2007) *Willingness to pay for reduced visual disamenities from offshore wind farms in Denmark*, Energy Policy, 35(8), pp. 4059–4071. doi: 10.1016/j.enpol.2007.01.023.
- Ladenburg, J., Termansen, M. and Hasler, B. (2013) *Assessing acceptability of two onshore wind power development schemes: A test of viewshed effects and the cumulative effects of wind turbines*, Energy. Elsevier Ltd, 54, pp. 45–54. doi: 10.1016/j.energy.2013.02.021.
- Langer, K., Decker, T., Roosen, J. and Menrad, K. (2016) *A qualitative analysis to understand the acceptance of wind energy in Bavaria*, Renewable and Sustainable Energy Reviews. Elsevier, 64, pp. 248–259. doi: 10.1016/j.rser.2016.05.084.
- Lilley, M. B., Firestone, J. and Kempton, W. (2010) *The effect of wind power installations on coastal tourism*, Energies, 3(1), pp. 1–22. doi: 10.3390/en3010001.
- Liu, D., Upchurch, R. S., Curtis, C. and Lusby, C. (2016) *Chinese domestic tourist perceptions of wind farms experiences*, Journal of Sustainable Tourism. Taylor & Francis, 24(11), pp. 1569–1583. doi: 10.1080/09669582.2016.1158826.
- Luhmann, N. (1979) *Trust and power : two works*. Chichester; New York: Wiley.
- Maguire, L. A. and Lind, E. A. (2003) *Public participation in environmental decisions: stakeholders, authorities and procedural justice*, International Journal of Global Environmental Issues, 3(2), pp. 133–148. doi: 10.1504/IJGENVI.2003.003861.
- Mayring, P. (2000) *Qualitative Content Analysis*, Forum Qualitative Research, 1(2), p. 10. doi: 10.1016/S1479-3709(07)11003-7.
- McLaren Loring, J. (2007) *Wind energy planning in England, Wales and Denmark: Factors influencing project success*, Energy Policy, 35(4), pp. 2648–2660. doi: 10.1016/j.enpol.2006.10.008.
- Meyer, N. I. (1995) *Danish wind power development*, Energy for Sustainable Development. International Energy Initiative, Inc., 2(1), pp. 18–25. doi: 10.1016/S0973-0826(08)60108-8.
- Meyerhoff, J., Ohl, C. and Hartje, V. (2010) *Landscape externalities from onshore wind power*, Energy Policy, 38(1), pp. 82–92. doi: 10.1016/j.enpol.2009.08.055.
- Möller, B., Hong, L., Lonsing, R. and Hvelplund, F. (2012) *Evaluation of offshore wind resources by scale of development*, Energy. Elsevier Ltd, 48(1), pp. 314–322. doi: 10.1016/j.energy.2012.01.029.
- Papageorgiou, M. (2016) *Coastal and marine tourism: A challenging factor in Marine Spatial Planning, Ocean and Coastal Management*. Elsevier Ltd, 129, pp. 44–48. doi: 10.1016/j.ocecoaman.2016.05.006.
- Patton, M. Q. (2002) *Qualitative Research & Evaluation Methods*. 3rd ed. Thousand Oaks, CA: SAGE Publications.
- Ram, B., Anker, H. T., Clausen, N.-E. and Lund Nielsen, T. R. (2017) *Public Engagement in Danish Nearshore Wind Projects in Law and Practice*. (4615 DSF Wind2050). Roskilde: Danish Technical University. Available at: www.wind2050.dk/-/media/Sites/Wind2050/publikationer/Near-shore-cases-project-report_12-May_FINAL.ashx?la=da. [2017-06-11]
- Ringkøbing-Skjern Kommune (2017a) *Fakten om kommunen*. Available at: <https://www.rksk.dk/om-kommunen/fakta-om-kommunen> [2017-08-12]
- Ringkøbing-Skjern Kommune (2017b) *Turist i kommunen*. Available at: <https://www.rksk.dk/om-kommunen/turist-i-kommunen> [2017-08-12]

- Rudolph, D. (2014) *The Resurgent Conflict Between Offshore Wind Farms and Tourism: Underlying Storylines*, Scottish Geographical Journal. Taylor & Francis, 130(3), pp. 168–187. doi: 10.1080/14702541.2014.914239.
- Senecah S (2004) *The trinity of voice: the role of practical theory in planning and evaluating the effectiveness of environmental participatory processes*. In: Depoe SP, Delicath JW, Elsenbeer
- Statistikbanken (2017) *Boliger efter beboertype og tid*. Available at: <http://www.statistikbanken.dk/BOL104> [2017-08-12].
- Stopvesterhavsyd (2017) *Projektet*. Available at: <http://www.stopvesterhavsyd.dk/projektet/> [2017-07-12]
- Soma, K. and Haggett, C. (2015) *Enhancing social acceptance in marine governance in Europe, Ocean and Coastal Management*. Elsevier Ltd, 117, pp. 61–69. doi: 10.1016/j.ocecoaman.2015.11.001.
- de Sousa, A. J. G. and Kastenholz, E. (2015) *Wind farms and the rural tourism experience – problem or possible productive integration? The views of visitors and residents of a Portuguese village*. Journal of Sustainable Tourism. Taylor & Francis, 23(8–9), pp. 1236–1256. doi: 10.1080/09669582.2015.1008499.
- Stern, M. J. and Baird, T. D. (2015) *Trust ecology and the resilience of natural resource management institutions*, Ecology and Society, 20(2), p. 14. doi: 10.5751/ES-07248-200214.
- Süsser, D. and Kannen, A. (2017) “Renewables? Yes, please!”: *perceptions and assessment of community transition induced by renewable-energy projects in North Frisia*, Sustainability Science, 12(4), pp. 563–578. doi: 10.1007/s11625-017-0433-5.
- Swofford, J. and Slattey, M. (2010) *Public attitudes of wind energy in Texas: Local communities in close proximity to wind farms and their effect on decision-making*, Energy Policy. Elsevier, 38(5), pp. 2508–2519. doi: 10.1016/j.enpol.2009.12.046.
- Tashakkori, A. and Teddlie, C. (2016) *Sage handbook of mixed methods in social & behavioral research*. 2nd ed. Thousand Oaks, CA: Sage Publication Inc.
- Toke, D., Breukers, S. and Wolsink, M. (2008) *Wind power deployment outcomes: How can we account for the differences?*, Renewable and Sustainable Energy Reviews, 12(4), pp. 1129–1147. doi: 10.1016/j.rser.2006.10.021.
- Vattenfall (2017) *Om Vesterhav Syd*. Available at: <https://corporate.vattenfall.dk/vores-vindmoller-i-danmark/vindprojekter/vesterhav-syd/om-vesterhav-syd/>. [2017-09-18]
- Vindmøllerindustrien (2016) *Regional Branchestatistik For Vindmøllerindustrien*. Available at: http://www.windpower.org/da/aktuelt/aktuelt_i_vindmoelleindustrien/news_q3_2016/ny_regional_branchestatistik_fordeler_beskaeftigelsen_rundt_i_landet.html [2017-05-17].
- Waldo, Å. (2012) *Offshore wind power in Sweden-A qualitative analysis of attitudes with particular focus on opponents*, Energy Policy, 41, pp. 692–702. doi: 10.1016/j.enpol.2011.11.033.
- Walter, G. and Gutscher, H. (2010) *Public acceptance of wind energy and bioenergy projects in the framework of distributive and procedural justice theories : Insights from Germany , Austria and Switzerland*. Available at: www.advisoryhouse.co.uk/UserData/Publication_00685_00.pdf? Zürich: Advisory House and University Zürich.

- Westerberg, V., Jacobsen, J. B. and Lifran, R. (2013) *The case for offshore wind farms, artificial reefs and sustainable tourism in the French mediterranean*, Tourism Management. Elsevier Ltd, 34, pp. 172–183. doi: 10.1016/j.tourman.2012.04.008.
- Westerberg, V., Jacobsen, J. B. and Lifran, R. (2015) *Offshore wind farms in Southern Europe - Determining tourist preference and social acceptance*, Energy Research and Social Science. Elsevier Ltd, 10, pp. 165–179. doi: 10.1016/j.erss.2015.07.005.
- Wolsink, M. (2000) *Wind power and the NIMBY-myth: Institutional capacity and the limited significance of public support*, Renewable Energy, 21(1), pp. 49–64. doi: 10.1016/S0960-1481(99)00130-5.
- Wolsink, M. (2007a) *Planning of renewables schemes: Deliberative and fair decision-making on landscape issues instead of reproachful accusations of non-cooperation*, Energy Policy, 35(5), pp. 2692–2704. doi: 10.1016/j.enpol.2006.12.002.
- Wolsink, M. (2007b) *Wind power implementation: The nature of public attitudes: Equity and fairness instead of “backyard motives”*, Renewable and Sustainable Energy Reviews, 11(6), pp. 1188–1207. doi: 10.1016/j.rser.2005.10.005.
- Wolsink, M. (2012) *Wind Power: basic challenge concerning social acceptance*, in Kreuer (ed.) Springer Science & Business Media. New York, NY, pp. 12218–12254. doi: 10.1007/978-1-4419-0851-3.
- Wüstenhagen, R., Wolsink, M. and Bürer, M. J. (2007) *Social acceptance of renewable energy innovation: An introduction to the concept*, Energy Policy, 35(5), pp. 2683–2691. doi: 10.1016/j.enpol.2006.12.001.

Appendix

Table 5. *Interview guide qualitative semi-structured interview on tourism businesses Vesterhav Syd*

Formulated Questions	Question area	Community Social Acceptance Themes
Please tell me something about your work. (What? Since when?)	Introduction	Context
When did you first hear about the project? (start timeline) Why did you agree to talk with me today? How did you hear about the project, by whom? Do you know who initiated the project? Who is involved? What was your reaction when you first heard about the project?	Process (beginnings)	Procedural Justice
What steps in the planning process can you recall? Any events, information you received? (build up on timeline) How have you been following the planning process? In what stage is the project at the moment?	Process (progress)	Procedural Justice
How did you get information on the process? What information was provided? Was the information sufficient for you to improve your understanding of the project? Did you actively seek more information? What do you think about the quality of information that is available?	Process (Information)	Distributional Justice

Formulated Questions	Question area	Community Social Acceptance Themes
Did you know about any meetings that were held/ are going to be held?	Process (Information)	Procedural Justice
Did you participate in any of these? Why? Why not?		
If you attended a meeting, please describe what you remember about it.	Process, elements, logistics	Procedural Justice
How was the setup? Who attended? How was the atmosphere? How did you feel? Did you have the chance to express your thoughts adequately? Do you think people's contributions were taken into consideration? I.e. can have an effect on the project?		
Evaluation: Please try to sum up the process. What would you improve if you had the chance? What did you like/ did not you like about it?		
What would be your suggestions to improve the process?		
Why do you think the project was initiated?	Outcomes	Distributional Justice
What are the outcomes of the project? For the country, for the Ringkøbing Skjern region?		
How does the project affect you?		
Please elaborate on what you like/ dislike about the wind park as it is planned to be constructed.		
At what point did you realize that there would be negative aspects about the project?		
Can you recall a certain point at which you changed your mind on the project?		
Please summarize your attitude towards the outcomes (benefits and burdens) of the project as a whole?		
If you could change the project outcome, how would it look like so that you were more satisfied with it?		
Who is involved in the project?	Actors	Dispositional Trust
Dispositional: Do you think you are a generally trusting person or generally more sceptical?		
Rational: What do you know about the parties involved in the process? When you got to know who was going to be involved, what did you think? Did your opinion towards them change from when you heard about the project?		Rational Trust
Affinitive: Tell me about your interests when it comes to the wind park construction. What are your values or concerns regarding the project?		
Do you think you and the people responsible for the park (planning entities and companies) share similar interests? values and concerns?		
Procedural: see procedural justice		Affinitive Trust
Towards the end of our interview I would like to summarize some of the main points that were raised. Please correct me if I say something inaccurate: ...	Overarching	All
If you had the power to decide about the project –any aspect of it- may it be planning, participation, information, the involved actors, or the outcome, what would you like to change?		

