Social acceptance of offshore wind energy

The role of procedural justice and trust for social acceptance of offshore wind projects on the Northeastern coast in the US

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With that – I hope you enjoy the read!

Abstract

Replacing fossil fuels with renewable energy sources, such as offshore wind, is crucial to mitigating climate change. The ambitious federal targets on offshore wind set by the United States's (US) Biden Administration will, however, increasingly impact the 129 million citizens living within local communities in coastal regions. Achieving social acceptance is therefore critical to reaching the US's aspirations for offshore wind and replacing fossil-fuelled electricity production. Since time is of the essence, this thesis explores how wind developers perceive and work with social acceptance, involve local communities in their planning processes (procedural justice) and build trust. Through a qualitative multiple-case study involving 11 interviews with liaisons from three developers with a presence on the Northeast coast of the US, this thesis provides nuanced and valuable insights into social acceptance of offshore wind.

The findings indicate that developers perceive social acceptance of offshore wind as a scale ranging from opposition to acceptance and support. The studied developers' work with social acceptance entails educating the local community and ensuring factually-centred conversations on offshore wind. Early and often community involvement, two-way communication streams, informal interactions and collaboration among developers are important to achieve social acceptance. The developers acknowledge the importance of timely community involvement in achieving social acceptance. However, involving the community in the planning process is a balancing act weighing commercial interests, timely development of the offshore wind project and ensuring that involvement is targeted at those it matters for. Local communities have access to the developers' planning processes, but not through procedurally just types of involvement. Building trust with the local community is deemed critical for social acceptance. It is primarily perceived as sequentially built, initiating with trust in the liaisons and ending with trust in the offshore wind project. Discussed from a theoretical perspective, however, the findings suggest that the sequence of trust-building may benefit from being further tested. In conclusion, this thesis contributes with theoretical contributions and practical implications of social acceptance, procedural justice, and trust in the context of offshore wind on the Northeast coast of the US.

Keywords: Offshore wind energy, social acceptance, procedural justice, trust, US

Executive Summary

Background and research questions

In an effort to mitigate climate change, more than 130 governments recently agreed to set a target of tripling the global capacity of renewable energy by 2030 at the United Nation's 28th Conference of the Parties in Dubai (UNFCCC, 2023). As the world's second-largest emitter of greenhouse gas emissions, the United States (US) play a significant role in achieving this target (Bates & Firestone, 2015; Climate Watch, 2020; Global Carbon Atlas, 2021). However, within the continuum of renewable energy sources, the US currently falls short of offshore wind (OW) energy capacity. The Biden Administration has set ambitious federal targets of 30 gigawatts OW capacity by 2030 and 100% carbon pollution-free electricity by 2035 (White House, 2021, 2024). With a current 242 megawatts installed OW capacity and six years left to reach the OW target, time is of the essence.

At the speed and volume required to achieve the 2030 OW target and beyond, millions of US citizens in coastal regions will be impacted by OW in the near future. Recent news reports indicate, however, that social acceptance of OW on the Northeast coast of the US, the current frontier for OW development in the country, cannot be taken for granted (Selig, 2023; Shankman, 2024). The latest example is former President and Presidential candidate Donald Trump, promising to halt OW if he regains office in November 2024 (Milman, 2024). Advancing the social acceptance of OW now, is therefore, critical.

In this thesis, social acceptance refers to the acceptance by local community stakeholders of an OW project. There exist several factors of social acceptance, of which the two interconnected factors procedural justice and trust, are in focus. The two factors interconnect in the planning process of an OW project. Procedural justice refers to a local community's access to meaningful involvement in the planning process of an OW project, and trust is the belief that the wind developer (WD) acts in the best interest of the local community. The core focus is specifically on the types of involvement the WDs deploy when involving the local communities in the planning process of their OW projects, as well as how trust is built. This thesis sets out to answer the following three research questions (RQ) on social acceptance, procedural justice and trust:

RQ1: In what ways do wind developers with presence on the Northeast coast of the US perceive and work with social acceptance within the context of their offshore wind projects?

RQ2: What are these wind developers' perspectives on the importance of local community involvement in the planning process of their offshore wind projects to achieve social acceptance, and do they provide access to their planning processes through procedurally just types of involvement?

RQ3: How do these wind developers perceive the importance of building trust with local communities to achieve social acceptance of their offshore wind projects, and in what way do they believe trust is built?

Theoretical and methodological framework

To adequately answer the RQs, this thesis is, at its core, guided by an in-depth literature review on social acceptance, procedural justice and trust related to wind energy and OW projects, more specifically. The literature review establishes the foundation for answering RQ1, 2 and 3. Two theoretical frameworks are deployed to further guide the data collection process and analysis on RQ2 and RQ3. On procedural justice, it is the "Ladder of Citizen Participation" (LCP) by Arnstein (1969) and on trust, it is the "Chain of Trust" (COT) by Dwyer & Bidwell (2019).

Through the LCP and the COT framework, this thesis defines and operationalises what constitutes access to a WD's planning process through procedurally just types of involvement (RQ2) and how trust is built with a local community (RQ3).

This thesis is exploratory (RQ1, 2, 3) and evaluate (RQ2) and follows an abductive approach to theory development. The abductive approach allows testing the LCP and the COT frameworks and welcomes relevant emerging themes outside the initial theoretical lens. Following a qualitative method, this thesis applies semi-structured interviews with 11 different types of liaisons employed across three WDs and thus works directly with the local communities. As such, this thesis follows a multiple-case strategy with a strong emphasis on cross-case comparisons to provide an in-depth and nuanced analysis and answer to the three RQs. Following a word-by-word approach, the 11 interviews are transcribed and further analysed through a qualitative content analysis supporting the abductive theory development approach.

Main findings

The findings of the three RQs represent the most significant part of this thesis and are thus rich in detail. As such, the following paragraphs provide a high-level answer to RQs 1, 2 and 3.

In response to RQ1, WDs perceive social acceptance as a scale ranging from opposition to acceptance and support. Social acceptance itself is perceived as a local community passively accepting an OW project. Social acceptance is thus distinct from social support, which the WDs describe as a vocal expression of backing their OW projects. From the liaisons' perspectives, working with social acceptance revolves around educating the local community on OW and establishing factually-centred conversations instead of trying to convince them. Early and often involvement, a two-way communication stream, informal and formal interactions, cross-collaboration among WDs, politically bipartisan work, and the awareness of different types of communities are deemed important when working to achieve social acceptance.

On RQ2, WDs believe that involving the local community in the planning process of their OW projects is important to achieve social acceptance. Appropriately timing the involvement is particularly important since early involvement increases the flexibility of potential modifications within the planning process. While the WDs perceive the responsibility of involving the local communities to be shared, they suggest that a significant part of the responsibility is on the shoulders of the public authorities governing the planning process. Despite the importance of local community involvement, the WDs see it as a balancing act that entails trade-offs related to their commercial success, their ability to deliver upon promises of betterment, timely development of their OW projects and ensuring that involvement is targeted at those it matters for. Regarding procedural justice, the findings indicate that Projects A, B and C offer access to their planning processes by providing information and consulting their local communities for advice. Despite all three WDs having created partnerships with the local communities, they lack organised structures that ensure the sharing of decision-making responsibilities per the LCP framework. Moreover, the WDs see delegating decision-making power to the local communities as unfeasible. Consequently, the three WDs do not provide access to their planning processes through procedurally just types of involvement.

In response to RQ3, WDs perceive building trust as critical to achieving social acceptance of their OW projects. From the liaisons' perspectives, trust relates to the WDs being honest with the local communities throughout the planning process. Trust is also the ability to understand the local community's situation and ensure that debates on OW are factual rather than emotional. Regarding building trust, the WDs largely agree with separating trust into four different nodes and the sequential process of building trust as per the COT framework. Building trust thus starts with the liaison, the WD, the planning process and ultimately, the OW project.

However, through a theoretical discussion of the findings, they indicate that trust in the planning process might need to be split into separate nodes of trust to highlight the potential difference between the local community's trust in the actions taken by the WDs vis-à-vis the public authorities during the planning process. Additionally, the findings indicate that trust in the OW project depends on the prior nodes of trust in the liaisons and WDs. This suggests a potential need for rethinking the sequence of the COT.

Concluding remarks

Social acceptance is critical to the US's aspirations of increasing its OW capacity, replacing fossilfuelled electricity production, and ultimately mitigating climate change. Since time is of the essence, there is a need to understand how to advance social acceptance of OW. While social support of OW is preferred from the perspective of timely reducing greenhouse gas emissions, it seems challenging, if not impossible, to achieve across the millions of US citizens living in a highly politicised and divided environment on the topic of OW. In a collaborative attempt to speed up the pace of the renewable energy transition, this thesis explores the phenomenon of social acceptance and its underlying interconnected factors of procedural justice and trust. These are interconnected in the planning process of OW projects and are deemed by research to be critical to achieving social acceptance (Dwyer & Bidwell, 2019; Firestone et al., 2020; Jami & Walsh, 2017; Rand & Hoen, 2017). An in-depth literature review and a theoretical framework on procedural justice and trust, respectively, guide this thesis and, as such, provide a theoretical contribution to the research field. Practical implications are also raised, in particular on the ways in which WDs work with social acceptance, how they involve the local communities in their planning processes and how they perceive building trust. Further research is needed to understand the interconnectedness of procedural justice and trust in the planning process, as this may have positive implications for the development of OW.

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Abbreviations

BIWF – Block Island Wind Farm

BOEM – Bureau of Ocean Energy Management

COT - Chain of trust

GW - Gigawatts

JV – Joint Venture

LCP - Ladder of Citizen Participation

OW - Offshore wind

WD – Wind developer

 $WE-Wind\ energy$

1 Introduction

1.1 Problem definition

One cornerstone towards mitigating the climatic phenomena of global warming is to replace the use of fossil fuels with renewable energy. At the United Nations' 28th Conference of the Parties in Dubai, more than 130 governments agreed to set a target of tripling the global capacity of renewable energy by 2030, reaching a minimum of 11,000 gigawatts (GW) (IEA, 2024; UNFCCC, 2023). As the world's second-largest emitter of greenhouse gas emissions, the United States (US) can significantly mitigate global warming and lead by example (Bates & Firestone, 2015; Climate Watch, 2020; Global Carbon Atlas, 2021). Within the continuum of renewable energy technologies, the US, however, is behind on offshore wind (OW) energy capacity in contrast to other major economies such as China and the European Union (IEA, 2024; IRENA, 2019).

The speed of the global OW build-out towards 2050 is expected at an impressive 11.5% compounded annual growth rate (IRENA, 2019). By 2040, the technology will provide between 3-6% of the global electricity supply and, therefore, is a significant renewable energy source to replace fossil fuels (IEA, 2019). Mirroring the expected speed of the global OW transition, the US Biden Administration aims to produce 100% carbon pollution-free electricity by 2035, with specific targets on OW capacity of 30 GW by 2030 and 100 GW by 2050 (Musial et al., 2023; White House, 2021, 2024). Reaching the 2030 target alone will deliver clean electricity to more than 10 million households and avoid 78 million metric tons of CO₂ emissions (White House, 2021).

To support this build-out of OW, the US federal government has introduced financial support mechanisms such as production and investment tax credits for wind energy (WE) projects that benefit both state governments and wind developers (WD) (DOE, 2024). As of the second quarter of 2024, the US had a capacity of 242 megawatts OW, or 0.8% of the 30 GW target (Oceantic Network, 2024). While this is a significant increase from the 42 megawatts at the end of 2023, 30 of these megawatts stem from eight years ago when the first commercial OW project in the US, the Block Island Wind Farm (BIWF), launched outside Rhode Island in 2016 (Schlossberg, 2016). Since the launch of the BIWF, several US OW projects have been cancelled or postponed due to either financial uncertainty, supply chain issues or social opposition (Ambrose, 2023; Seelye, 2017; Vakil et al., 2024). On the latter, in light of increasing federal and state-level OW targets, recent news reports across different recognised outlets describe increasing social opposition to OW on the US Northeast coast, allegedly backed by the fossil fuel industry (Milman, 2024; Selig, 2023; Shankman, 2024). Former President and current Presidential candidate for the November 2024 elections, Donald Trump, emphasised during a political rally in New Jersey in May 2024 that if he regains the White House, he will immediately halt US OW projects (Milman, 2024). With less than six years left to reach a challenged 2030 target of 30 GW OW and 100% carbon pollution-free electricity by 2035, time is of the essence.

In addition to financial and supply-chain factors, a successful build-out also depends on whether local communities accept the build-out of OW (Klain et al., 2017). As highlighted in recent news reports, social acceptance of OW on the Northeast coast of the US cannot be taken for granted (Milman, 2024; Selig, 2023; Shankman, 2024). In a broader context, 40% of the US population

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¹ 3% in a Stated Policies Scenario, which is based upon a detailed review of the current policies in place and is thus to be understood as a conservative estimate (IEA, 2023). 6% in a Sustainable Development Scenario, which is more optimistic, assuming that the speed of policy efforts and energy technology innovation happens at least as fast as it has ever done before (IEA, 2020).

lives in coastal regions (NOAA, 2024). At the expected speed and volume required to achieve the 2030 OW target and beyond, an increasing share of the 40% of citizens, equivalent to 129 million, living in coastal regions will be directly or indirectly affected (Rand & Hoen, 2017). From a long-term perspective towards the 2050 target of 100 GW OW, finding project sites that do not impact local communities and citizens is nearly impossible (Jadhav & Varoli, 2023). Achieving social acceptance of OW in the Northeast US and elsewhere minimises the obstacles WDs face during the planning, construction and operating phase and ensures a swifter replacement of fossil-fuelled energy production (Jami & Walsh, 2017).

The specific challenge of achieving social acceptance of WE is, for the first time, highlighted in the early 1980s in a Swedish context (Carlman, 1982, 1984; Wüstenhagen et al., 2007). In a North American context, social acceptance of WE emerged in the late 1980s and, to this day, continues to be well-researched (Rand & Hoen, 2017). Social acceptance can be perceived to cover market acceptance, socio-political acceptance and community acceptance (Wüstenhagen et al., 2007). This thesis solely focuses on the latter and is inspired by Wüstenhagen et al. (2007), who refer to social acceptance as the acceptance of an OW project by the stakeholders within a local community, such as citizens. Social acceptance is often confused with the phenomenon of Not In My Back Yard (NIMBY) (Rand & Hoen, 2017). Firestone et al. (2012a) argue that while NIMBYism is an easily applicable and thus attractive explanation to social opposition, including within the academic sphere, its effect on social acceptance is not proven with empirically founded evidence. Today, however, social scientists within the field of social acceptance largely agree that NIMBYism is too simplistic in explaining the multifaceted set of factors that affect social acceptance of a WE project (Devine-Wright, 2005; Firestone et al., 2012a; Petrova, 2013; Rand & Hoen, 2017; Wolsink, 2007).

Based on 30 years of research, Rand & Hoen's (2017) meta-study summarises the six overarching factors of social acceptance: (1) socioeconomic aspects, (2) sound annoyance and health risk perceptions, (3) visual/landscape aspects, annoyance, and place attachment, (4) environmental concerns and attitude, (5) distance from turbines, and (6) perceptions of planning process, fairness, and trust. The latter factor is selected as the focus of this thesis and covers two interconnected factors of social acceptance, namely procedural justice and trust. These two factors are by researchers found to be highly important to achieving social acceptance of OW projects (Firestone et al., 2020). Procedural justice refers to a local community's access to meaningful involvement in the planning process of an OW project. Trust is perceived as the local community's belief that the WD's intention of constructing and operating an OW project is in the best interest of the local community. The interconnectedness of the two factors and their importance for social acceptance are specifically found within the planning process of an OW project (Dwyer & Bidwell, 2019; Firestone et al., 2020). Through exploring these interconnected factors of social acceptance, the core focus is specifically on the types of involvement the WDs deploy when involving the local communities in the planning process of their OW projects and how trust is built.

Despite ongoing research on the importance of procedural justice and trust for social acceptance, several research gaps remain. First, to further accelerate the social acceptance of WE, additional research is needed on when and how to best focus on procedural justice and trust in the planning process (Rand & Hoen, 2017). This thesis's analysis addresses this gap. Second, a large share of the current literature on social acceptance of WE does not apply or further develop existing theoretical frameworks (Bessette & Crawford, 2022; Rand & Hoen, 2017). This thesis addresses this by applying a theoretical framework for respectively procedural justice and trust that both guide the data collection process and analysis. Third, as the US OW industry is at an early stage of development, the timing is ideal to document various approaches to local community involvement and compare these (Bidwell, 2016; Bingaman et al., 2023). To

that point, the existing literature has, to a minimal degree, focused on how specifically WDs operating off the Northeastern coast in the US on OW projects perceive and work with social acceptance, procedural justice and trust. Deploying a multiple-case study of three WDs and their three OW projects within this geographical region addresses this gap. While this thesis is a relatively small study, Bidwell (2016) and Firestone et al. (2018) argue that even small studies can provide viable pathways for large-scale changes.

1.2 Aim and research questions

This thesis has three overarching aims. The first aim is to understand how WDs with presence on the Northeast coast of the US perceive and work with social acceptance of their OW projects within local communities. The second aim is to determine whether these WDs believe involving local communities in the planning process is important to achieve social acceptance and whether they provide access to their planning processes through procedurally just types of involvement. The last aim of the thesis is to establish whether these WDs believe building trust with local communities is important to achieve social acceptance and how they believe trust is then built in the first place.

An initial literature review and two theoretical frameworks related to procedural justice and trust provide a robust understanding of social acceptance, procedural justice and trust in the context of OW. Guided by this foundation, interviews with representatives of the three WDs are then used to provide an in-depth analysis to achieve the three aims of this thesis. To successfully achieve these, the following three research questions (RQ) guide this thesis:

RQ1: In what ways do wind developers with presence on the Northeast coast of the US perceive and work with social acceptance within the context of their offshore wind projects?

RQ2: What are these wind developers' perspectives on the importance of local community involvement in the planning process of their offshore wind projects to achieve social acceptance, and do they provide access to their planning processes through procedurally just types of involvement?

RQ3: How do these wind developers perceive the importance of building trust with local communities to achieve social acceptance of their offshore wind projects, and in what way do they believe trust is built?

1.3 Scope and delimitations

This thesis focuses on social acceptance of OW projects on the Northeast coast of the US from the perspective of WDs. Despite being a nascent industry, this region of the US represents the frontier of OW development, which is primarily governed by the Bureau of Ocean Energy Management (BOEM). BOEM is the federal government authority in charge of the planning process and has the mandate to issue lease areas and the right to develop renewable energy projects in federal waters (BOEM, 2024). Figure 1-1 below illustrates the four-stage planning process of OW development in the US: planning and analysis, leasing, site assessment, and construction and operations. As also indicated by Figure 1-1, the planning process for OW projects is extensive, and it may take up to 11 years before an OW project produces electricity to the grid (Knee & Williams, 2021).

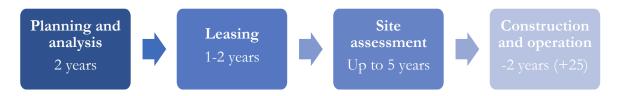


Figure 1-1. The planning process of offshore wind in the US

Source: Adapted from Knee & Williams (2021)

The role of WDs initiates from the first phase, planning and analysis, where BOEM requests information regarding the WDs' demand for bidding on a potential lease area (Gill et al., 2022). The three OW projects of this thesis are at different stages of development. Projects A and B operate, and Project C is in the leasing phase. The map below in Figure 1-2 is to provide a sense of the geographical boundary for this thesis. However, the three WDs and their three OW projects are anonymised. Therefore, Figure 1-2 places the wind turbines figuratively.



Figure 1-2. Map of the Northeastern coast of the US

Source: Adapted from Feber (2021b) and Flaticon (2024)

11 interviewees represent the WDs of the three OW projects and establish the dataset that provides an answer to the three RQs of this thesis. The interviewees are strategically selected as all are employed as liaisons at the WDs. A liaison acts as a mediator between a WD and the local community affected by an OW project. On a daily basis, the 11 liaisons work with local communities on aspects related to social acceptance of OW. Their role and experience enable them to provide insightful answers through semi-structured interviews on their perceptions of working with social acceptance and the importance of WDs involving the local community in the planning process of their OW projects and building trust. A qualitative content analysis supports the multiple-case study design and enables an in-depth comparison of within and between the three OW projects.

1.4 Ethical considerations

This thesis's research design has been reviewed against the criteria for research requiring an ethics board review at Lund University and has been found not to require a statement from the ethics committee. This thesis has not received any funding, nor have any external parties influenced the data gathering, analysis or subsequent conclusion. Anonymity is a critical aspect of researching social acceptance of OW in the US. Both because it is a highly politicised topic and because the 11 liaisons' work with local communities is often built upon a confidential relationship. The 11 interviewees have, therefore, agreed to participate in an anonymised capacity. All sensitive data, i.e., list of interviewees, interview recordings and transcripts, are safely stored in a locked file.

Regarding the use of external images, this thesis follows the relevant copyright holders' guidelines. For the image on the front page by Raw (2021), this thesis follows the guidelines of Unsplash.com: Unsplash visuals are made to be used freely. Our license reflects that. All images can be downloaded and used for free. Commercial and non-commercial purposes No permission needed (though attribution is appreciated!)' (Unsplash, 2024). For Figure 1-2, this thesis have inserted an image by (Feher, 2021b) with permission according to terms and conditions of use 'All the maps are protected by copyright. They are free for any use, even commercial, in the following conditions: The exact URL where the original map comes from must be mentioned (with a clickable and visible link in case of web based use). The number of used maps is limited to 5 (five) for a publication (Web, DVD, book...)' (Feher, 2021a). Furthermore, Figure 1-2 also consists of three figurative wind turbines by Flaticon (2024) with permission according to their license policy Flaticon license: Free for personal and commercial use with attribution. Insert the attribution line close to where you're using the image. If it's not possible, place it in the credits section.' (Flaticon, 2024).

1.5 Audience

This thesis targets a broad audience of those interested in phasing out fossil fuels and replacing their usage with renewable energy sources, including, but not limited to, OW. Moreover, it is relevant for those who work with social acceptance in any shape or form in the transition to renewable energy. This thesis is, therefore, relevant for WDs, local communities, public authorities, policymakers, think tanks, private sector businesses, and, of course, researchers within this field. As this thesis is a multiple-case study, the findings may also provide relevant insights for other coastal regions in the US and globally that host or will host OW projects.

1.6 Thesis structure

Chapter 1 introduces the importance of achieving social acceptance of OW to phase out and replace fossil fuels with renewable energy and, ultimately, mitigate climate change. The chapter highlights existing research gaps within the field of social acceptance of WE and presents three overarching RQs that focus on social acceptance and the interconnected factors hereof, namely procedural justice and trust. Chapter 1 ends by presenting the scope and delimitations, ethical considerations and the primary audience of this thesis.

Chapter 2 presents an in-depth literature review on social acceptance, procedural justice and trust, highlighting their connection. As a foundation for the data collection process, analysis and answer of the RQs, the literature review provides background, definition and operationalisation of social acceptance, procedural justice and trust. Chapter 2 furthermore presents the theoretical framework related to procedural justice and trust, that guides the data collection process and analysis.

Chapter 3 explains the methodological choices related to research approach, design, data analysis and the inherent limitations of these choices. As such, it provides an important overview of the multiple-case study, the 11 interviewees and how their interviews are analysed.

Chapter 4 answers the three overarching RQs on social acceptance, procedural justice and trust.

Chapter 5 provides a discussion and reflection on the findings' theoretical contributions and practical implications. Chapter 5 also presents the theoretical limitations of the findings.

Last, chapter 6 re-iterates the importance of achieving social acceptance, followed by an overarching conclusion to the three RQs. Chapter 6 ends by highlighting potential pathways for future research.

2 Literature review

The following chapter initiates in section 2.1 by introducing and defining social acceptance. Subsections 2.1.1 and 2.1.2 introduce and define procedural justice and trust. Based on this understanding, section 2.2 presents the theoretical framework of this thesis on procedural justice and trust. Procedural justice is framed through Arnstein's (1969) "Ladder of Citizen Participation" in sub-section 2.2.1 and trust through Dwyer & Bidwell's (2019) "Chain of Trust" in sub-section 2.2.2. Chapter 2 ends by describing how the literature review and theoretical framework guide the analysis and answers to the three RQs and ultimately highlight the relevant research gaps that this thesis addresses.

2.1 Previous literature on social acceptance

The term social acceptance is used widely within the energy sector, including discussions around nuclear power siting, locating nuclear waste, and installations of hydropower plants (Wüstenhagen et al., 2007). In the research sphere of WE, Carlman (1982) is recognised as the first scholar to define the specific challenge of social acceptance and marks a move away from previously used terminology such as non-technical factors (Wüstenhagen et al., 2007). After Carlman (1984) published their initial findings on the constraints of social acceptance of WE development in a Swedish context, other academics followed suit, such as Wolsink (1987), focusing on WE in the Netherlands, Bosley & Bosley (1988) in California, and Thayer (1988) in the US in general (Wüstenhagen et al., 2007). While the term gained momentum, Wüstenhagen et al. (2007) describe how the 1990s largely disregarded concerns related to social acceptance due to generally high levels of public support for renewable energy sources. With ambitious targets in a short time frame, the OW build-out in the US will ultimately lead to an increasing share of the population in coastal regions being directly impacted (Rand & Hoen, 2017; White House, 2021). The importance of achieving social acceptance now seems, therefore, more relevant than ever.

Defining social acceptance

The extensive literature on social acceptance of WE illustrates that the exact wording of this phenomenon differs. Fournis & Fortin (2017) depict how social acceptance is described by researchers as both social acceptability, societal acceptance, and public acceptance. The authors specifically distinguish between social "acceptability" being '... the interplay between society and technology', and social "acceptance" being '... the specific results of a peculiar evaluation of a single wind project...' (Fournis & Fortin, 2017, p. 14). Acknowledging this distinction, social acceptance remains the most applicable term in the context of this thesis. While a majority of researchers discuss social acceptance, they often deal with its inverse: unacceptability (Fournis & Fortin, 2017) or social opposition, which the latter is defined as when a local community is against the siting of a specific WE project (Rand & Hoen, 2017). Having established social acceptance as the key term for this thesis, the following paragraphs establish a definition hereof.

Following Figure 2-1 below, Wüstenhagen et al. (2007) perceive social acceptance of renewable energy projects through a three-dimensional framework. The framework consists of market acceptance, socio-political acceptance, and community acceptance. The overall social acceptance of a renewable energy project is dependent on a set of different actors within each dimension. As argued by Sovacool (2009), these dimensions are, in practice, however, also likely to affect each other, i.e., a local community's acceptance of a WE project can also lead to increased acceptance by the local policymakers and market actors, and vice-versa.



Figure 2-1. The triangle of social acceptance of renewable energy projects

Source: Adapted from Wüstenhagen et al. (2007)

As this thesis aims to investigate how WDs perceive and work with social acceptance of their OW projects within local communities, the focus is solely on Wüstenhagen et al.'s (2007) dimension of community acceptance. To establish a foundation for answering this thesis RQ1, inspired by Wüstenhagen et al. (2007), this thesis thus defines social acceptance as the acceptance of an OW project by the stakeholders within a local community, such as citizens. Wüstenhagen et al. (2007) argue that community acceptance, i.e., social acceptance, is dependent on three factors: distributional- and procedural justice and trust. Only procedural justice and trust are considered because of their interconnectedness for achieving social acceptance of OW projects and to answer this thesis's RQs 2 and 3 (Dwyer & Bidwell, 2019; Firestone et al., 2020). Sub-sections 2.1.1 and 2.1.2 define and elaborate upon procedural justice and trust, respectively.

Distinguishing between social acceptance and support of offshore wind

Similar to the ambiguous use of social acceptance, multiple researchers highlight how "acceptance" is often interchangeably used with "support" (Batel et al., 2013; Bessette & Crawford, 2022; Dwyer & Bidwell, 2019; Jami & Walsh, 2017; Petrova, 2013; Rand & Hoen, 2017). Batel et al. (2013) argue that social acceptance is a local community passively tolerating the siting of a specific low-carbon energy project. In contrast, the authors see social support as a local community actively backing such a project. McCauley et al. (2019) echo this distinction and find in their research that achieving social acceptance is the main goal within the energy sector. McCauley et al. (2019) argue this goal inherently positions the local communities as passive actors rather than active in the planning processes of renewable energy projects. In a study on the first commercial OW project in the US, the BIWF, Dwyer & Bidwell (2019) find that some citizens are not only accepting but also supporting the planning process of the BIWF. This finding supports Petrova's (2013) argument that "support" is a more active approach for a local community to not only be accepting but rather engage with the specific energy facility.

To ensure the long-term sustainability of renewable energy technologies, Batel et al. (2013) argue that the local communities must actively support them. To that point, Barr (2003) emphasises the risk of using social acceptance and support interchangeably. Because if social acceptance is mistaken for support, the specific project might be contested in the future. In light of these findings, this thesis acknowledges the distinction between social acceptance and social support

and, in the context of this thesis, defines the latter as a local community actively backing an OW project.

2.1.1 Procedural justice

The concept of procedural justice stems from an overarching framework within social sciences known as energy justice (Jenkins et al., 2016; McCauley et al., 2019; Sovacool & Dworkin, 2015). Among other factors, such as distributional justice, achieving a just energy system is argued to require procedural justice. The exact understanding of procedural justice varies across the literature and the specific context in which it is used (Jenkins et al., 2016; McCauley et al., 2019; Sovaçool & Dworkin, 2015). At its core, however, procedural justice revolves around decisionmaking processes, which in the context of this thesis are the *planning* processes of OW projects (Manaster, 1995 as cited in Gross, 2007). Drawing inspiration from Sovacool & Dworkin's (2015) widely cited work on energy justice, this thesis defines procedural justice as a local community's access to meaningful involvement in the planning process of an OW project. The existing literature within this area often focuses on the perceived procedural justice of planning processes (Bates & Firestone, 2015; Dwyer & Bidwell, 2019; Firestone et al., 2020; Gross, 2007; Hall et al., 2013; Rand & Hoen, 2017). This thesis acknowledges this approach and similarly argues that meaningful, and thus procedurally just, involvement depends on the perspective of those involved - the local communities. As this thesis takes the perspective of WDs, it consequently focuses on the types of involvement that are theoretically considered by Arnstein (1969) to provide access to procedurally just involvement in the planning processes. Accordingly, Arnstein's (1969) theoretical framework on the Ladder of Citizen Participation proposes different types of involvement that are further elaborated upon in sub-section 2.2.1. This thesis uses "involvement" instead of "participation" to describe the interaction between the WDs and local communities. Involvement emphasises that it is the WDs that involve their respective local communities in the planning processes of their OW projects and not vice-versa. To guide this thesis and adequately answer RQ2, sub-section 2.2.1 on the LCP framework operationalises what types of involvement that do and do not provide access to procedurally just involvement for a local community in the planning process of an OW project.

Procedural justice and social acceptance

The relevance of procedural justice to advance social acceptance of WE is well-researched. In a case study on WE in Australia, Gross (2007) finds that perceived procedural justice influences the degree to which a community believe that the outcome of a WE project is legitimate and, ultimately, their acceptance hereof. Other researchers such as Petrova (2013, 2016), Bidwell (2015), and Dwyer & Bidwell (2019) have since then found a similar connection between procedural justice and social acceptance. Particularly noteworthy is Professor Jeremy Firestone from the University of Delaware, who has performed multiple quantitative studies on the correlation between the two. Across time and different cases, particularly in the US, Firestone et al. (2012b), Firestone et al. (2018), Hoen et al. (2019), and Firestone et al. (2020) find that a community's influence on the planning process and its outcome is a statistically significant factor of a planning process being perceived as fair and whether a WE project ultimately experiences social acceptance/support or opposition. Firestone et al. (2020) and Dwyer & Bidwell (2019) emphasise that the local community during the BIWF project had appreciated the planning process itself leading up to the OW project. Furthermore, Firestone et al. (2020) find that procedural justice is deemed more important than any other factors of social acceptance. While this may sound like a silver bullet to achieve social acceptance, Jami & Walsh (2017) highlight that WDs and public authorities must always create tailor-made plans for local community involvement to ensure its relevance for the specific local context.

Successful community involvement is highly dependent on correctly timing the involvement of the local community in the planning process (Bates & Firestone, 2015; Firestone et al., 2018; Jami & Walsh, 2017; Petrova, 2013, 2016). While the geography of a WE project can entail differences in the planning process, it is fair to assume that WE projects generally consist of four periods in which WDs and public authorities can involve the local community. These are (1) pre-proposal, where the local community can be involved in the siting process; (2) announcement, when the WD has won a leasing contract and is to communicate its plans; (3) community input, when a WD has the opportunity to use community liaisons and through that gather feedback on project planning and construction, and (4) ongoing dialogue/regular information, which covers the long-term duration of a WE project with regular communication on any relevant developments (Hall et al., 2013). From a timing perspective, Corscadden et al. (2012) find that early-stage involvement, with a high level of communication, is both preferred by local communities and has the potential to reduce their social opposition. This is a particularly important point, as Jami & Walsh (2017) furthermore suggest that individuals often receive information regarding WE through various sources, essentially increasing the risk of misinformation and social opposition. To allow for input from the local community through both formal and informal interactions, the type of involvement should follow a two-way communication stream between the WD and the local community (Bingaman et al., 2023; Dwyer & Bidwell, 2019; Hall & Lazarus, 2015). If not, the involvement runs the risk of becoming an '... empty ritual of participation...' (Arnstein, 1969, p. 216).

2.1.2 Trust

Trust is a familiar concept in many contexts and is broadly recognised as something that is slowly built yet quickly lost (Slovic, 1993). Trust is also a well-described phenomenon in the literature on social acceptance of WE (Devine-Wright, 2008; Dwyer & Bidwell, 2019; Firestone et al., 2020; Wolsink, 2007; Wüstenhagen et al., 2007), but despite that, only a few researchers clearly define and operationalise it. Of this group of researchers, Dwyer & Bidwell (2019) and Petrova (2016) provide two rather similar definitions of trust. Dwyer & Bidwell (2019) suggest that trust is '... a belief that individuals or institutions are able and obliged to act in the interest of the public.' (Dwyer & Bidwell, 2019, p. 168), while Petrova (2016) proposes that trust is '... a belief or feeling that a person or an organization will act in one's best interest.' (Petrova, 2016, p. 589). Both definitions highlight that trust is the idea of believing that others act in your best interest. Huijts et al. (2007), as cited in Wüstenhagen et al. (2007), operationalise trust as the local community trusting '... the information and the intentions of the investors and actors from outside the community.' (Huijts et al., 2007 as cited in Wüstenhagen et al., 2007, p. 2685). In the context of this thesis, trust is defined as the local community's belief that the WD's intention of constructing and operating an OW project is in the best interest of the local community. This thesis, however, focuses on the importance of building trust for social acceptance and in what ways WDs believe trust is built with the local communities. Hence, to guide and adequately answer RQ3, this thesis uses Dwyer & Bidwell's (2019) theoretical framework on the Chain of Trust to operationalise how trust is built in sub-section 2.2.2.

Trust and social acceptance

The importance of trust is well-established across different branches of social sciences. Within sociological and political sciences, Webler & Renn (1995), as cited in Hall et al. (2013), find that the public's trust is often limited in institutions and that this further limits the public's trust in the planning process they govern. Within energy policy, Wüstenhagen et al. (2007) find that trust in investors is both a key challenge, but also a necessity to achieve social acceptance of a renewable energy project. Within environmental policy, planning, and management research, Firestone et al. (2012b) and Rand & Hoen (2017) argue that social acceptance of WE is affected by both the local community's perception of procedural justice and trust in the WDs.

Additionally, Bingaman et al. (2023) propose that information ought to come from trusted institutions for them to build, maintain, or repair trust towards local communities. Firestone et al. (2020) specifically find in their research on the BIWF project that trust in the state government is a primary enabler for both increased perceptions of procedural justice as well as overall social acceptance and support of the BIWF project.

As part of building trust, both Hall et al. (2013) and Dwyer & Bidwell (2019) highlight the importance of WDs employing community liaisons or "local champions", who often are from the specific area of the respective WE project and whose role is to build the trust between the local communities and the WDs. Dwyer & Bidwell (2019) further highlight the importance of informal actions in building trust with the local community. These are defined as '... activities not mandated by policy and conducted outside formal hearings or comment periods.' and are, for example, WDs meeting one-on-one with members of the local community (Dwyer & Bidwell, 2019, p. 168). From their study on the BIWF project, Dwyer & Bidwell (2019) find that informal actions helped to build trust with the local community and increased social acceptance hereof. While trust is empirically found to be an important factor of social acceptance, Aitken (2010) raises a relevant point of reflection on the purpose of building trust towards local communities. The author argues that trust shall not be built with the sole purpose of securing less opposition to WE projects to maximise the build-out hereof. Instead, building trust is to ensure that the local community's unique knowledge of the area is incorporated into the planning process of the WE project (Aitken, 2010).

The purpose of section 2.1 is to provide a review of the most relevant literature on social acceptance, procedural justice and trust and underscore the importance of the two interconnected factors in achieving social acceptance of OW projects. On that note, section 2.2 presents this thesis's theoretical framework related to procedural justice and trust, respectively, and ends by highlighting relevant research gaps within this field and how this thesis addresses these.

2.2 Theoretical framework on procedural justice and trust

As highlighted throughout the preceding section 2.1, the theoretical framework is based upon procedural justice and trust through Arnstein's (1969) Ladder of Citizen Participation and Dwyer & Bidwell's (2019) Chain of Trust, respectively. This section operationalises these two factors of social acceptance through their respective theoretical frameworks and illustrates how they are interconnected factors of social acceptance.

2.2.1 The Ladder of Citizen Participation

Involving the local community in the planning process of infrastructure projects is a well-studied area. Despite the focus on citizen participation and not involvement, Arnstein's (1969) Ladder of Citizen Participation (LCP) remains one of the most acknowledged and cited theoretical frameworks within the field of involvement in planning processes (Bidwell, 2016; Jami & Walsh, 2017). The LCP thus guides this thesis's analysis on procedural justice. The following subsection describes the LCP framework in detail and provides an operationalisation of what types of involvement that do and do not provide access to procedurally just involvement for a local community in the planning process of an OW project.

In practice, many governments, including the US, require mandatory public involvement in planning processes, however, there is evidence suggesting that the ultimate decisions are only influenced to a limited extent (Bidwell, 2016; Innes & Booher, 2004). To that point, Arnstein (1969) makes it very clear that 'There is a critical difference between going through the empty ritual of participation and having the real power needed to affect the outcome of the process.' (Arnstein, 1969, p. 216).

Emphasising the LCP framework's relevance, researchers within the academic strand of social acceptance of WE have used it before. Jami & Walsh (2017) apply a modified version of the LCP framework to assess the types of involvement that local communities experience in the planning processes of multiple WE projects in Ontario, Canada. Bidwell (2016) further establishes the relevance of the LCP framework to assess the overarching level of involvement of local communities in the planning process of renewable energy projects. Arnstein's (1969) LCP framework is thus deemed to be highly relevant for guiding this thesis's analysis on procedural justice and particularly in answering the second part of RQ2.

As common for a theoretical framework, Arnstein (1969) purposely includes simplifying assumptions to increase the LCP's comprehensibility and applicability. The LCP framework makes two noteworthy simplifications. First, it simplifies the real world by dividing those involved in the planning process into two groups: the "powerholders" and the "have-nots". While these groups are not directly defined, Arnstein (1969) suggests that the have-nots are often minority groups within society, whereas the powerholders can be assumed to be politicians in power, wealthy and large corporations, influential interest groups, and so forth. This thesis acknowledges the inherent power dynamics in planning processes and, in that sense, sees the WDs as the powerholders of involving the local community in the planning processes of their OW projects. Nevertheless, there is no reason to believe that the local communities in the context of this thesis specifically or solely represent minority groups, and thus, it refrains from using these terms. The second assumption is that Arnstein (1969) simplifies the number of types of involvement and acknowledges that hundreds of different types exist. To enhance the LCP framework's ability to guide this thesis' analysis on procedural justice, the framework is slightly modified and draws inspiration from Jami & Walsh's (2017) approach, however, in a manner distinct from theirs.

Following Figure 2-2 below, the LCP framework proposes that there exist two overarching levels of involvement within a planning process: degrees of tokenism and degrees of citizen power. Each level consists of two specific types of involvement. Degrees of tokenism are when WDs provide information to the local community or consult it for advice. Degrees of citizen power cover the creation of partnerships between WDs and the local community and the delegation of decision-making power from the WD to the local community.

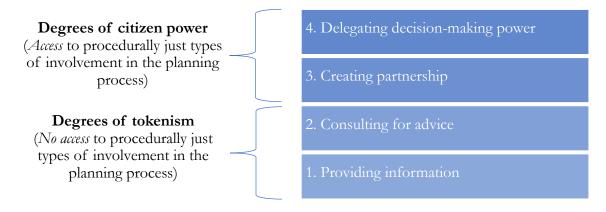


Figure 2-2. A Ladder of Citizen Participation

Source: Adapted from Arnstein (1969)

Degrees of tokenism

Degrees of tokenism allow the local community to '... hear and to have a voice' in the planning process (Arnstein, 1969, p. 217). In that sense, this level of involvement and the two underlying

types, providing information and consulting for advice, provide access to the planning process. However, they are not procedurally just types of involvement since, at this level, the WDs do not aim to change the status quo - the trajectory - of their OW project's planning process. Consequently, at degrees of tokenism, the local community lacks the power to ensure that their opinions are implemented in practice (Arnstein, 1969). A local community's access to the planning process is thus operationalised through the types of providing information and consulting for advice. According to Arnstein (1969), providing the local community with information entails communicating what their responsibilities are in the planning process. However, if done through one-way communication streams from the WDs to the local community or too late in the planning process, the local community has limited opportunity to have their opinions truly heard and implemented. One-way communication is seen through the use of communication tools such as flyers and news media, as well as through physical interactions and meetings between the WD and the local community (Arnstein, 1969). Consulting the community for advice is seen as a step up on the ladder of involvement in the planning process. However, if not combined with other types of involvement, it offers little assurance that the advice provided by the local community is implemented in practice. This may result in the community having '... participated in participation' and the WDs obtaining a sense of successful involvement (Arnstein, 1969, p. 219).

Degrees of citizen power

Degrees of citizen power allow the local community to '... negotiate and engage in trade-offs with [WDs, and to] obtain the majority of decision-making... power'in the planning process (Arnstein, 1969, p. 217). Following Arnstein's (1969) line of thought, local communities wish to not only have their voices heard but also partially or directly influence parts of the planning process. Degrees of citizen power thus provide access to procedurally just types of involvement in the planning process, which are operationalised through the types of creating partnerships and delegating decision-making power. From Arnstein's (1969) perspective, the creation of partnerships between WDs and their local community aids the redistribution of power by potentially establishing room for negotiation. Partnerships often agree to share planning and decisionmaking responsibilities through organisational structures such as planning committees and boards, which often leads to trade-offs for the parties involved (Arnstein, 1969). Delegating decision-making power is the highest type of involvement in the planning process and may result from negotiations between WDs and their local communities. At this type, the local community has a high chance of having their opinions implemented. In practice, decisionmaking power may, for example, be the local community obtaining legal rights to veto decisions made by the WD (Arnstein, 1969).

2.2.2 The Chain of Trust

The following sub-section expands upon Dwyer & Bidwell's (2019) theoretical framework related to trust. The inspiration for the Chain of Trust (COT) framework stems from Eltham et al.'s (2008) findings on the importance of trust for social acceptance of WE in Cornwall, UK. Here, Eltham et al. (2008) find that social opposition to WE is often caused by distrust in the planning process as well as in the intentions of the WDs. The authors, therefore, suggest that building trust with the local community starts with building trust in the WDs themselves, and only after will the local community be willing to trust the planning process. Based on Eltham et al.'s (2008) findings and theoretical suggestions, Dwyer & Bidwell (2019) uncover a similar pattern in their research on the BIWF project from which they developed the COT framework. As seen in Figure 2-3 below, the visual purpose of a "chain" is to illustrate how trust is built sequentially, at least in the case of BIWF, and that it can lead to achieving social acceptance, marked by the red dashed line in Figure 2-3. However, Dwyer & Bidwell (2019) emphasise that despite following the COT, social acceptance is not a given. The authors specifically find that

those who did not accept BIWF often lost their trust at an early stage of the planning process (Dwyer & Bidwell, 2019). Building the COT is estimated to take several years, and Dwyer & Bidwell (2019) suggest that the COT is built '... via nodes [the boxes, edited] and that nodes can only be linked [the arrows between the boxes, edited] once trust has been established in the previous node.' (Dwyer & Bidwell, 2019, p. 168).



Figure 2-3. The Chain of Trust

Source: Adapted from Dwyer & Bidwell (2019)

To enhance the COT framework's ability to guide the analysis on trust, the framework is slightly modified. As such, trust begins with the liaisons employed at the WD that act as mediators between the WD and the local community. Next, it is the local community's trust in the WD as an organisation. This is followed by their trust in the planning process of the WD's OW project and, lastly, the local community's trust in the OW project. Each of these nodes, except the last on acceptance, is operationalised to ensure a proper analysis of how trust is built for the studied OW projects. For the first node, building trust in the liaison is operationalised to require them to be from or in some way connected to the respective local community. For the second node, trust in the WD is dependent on its ability to meet the local community's expectations, namely that they work in their best interest (Dwyer & Bidwell, 2019). Operationalised in this context, building trust in the WD requires it to involve the local community early and often in the planning process and clearly emphasise what part of the planning process the WD is responsible for (Dwyer & Bidwell, 2019). Regarding early and often involvement, this thesis deems early involvement to be before a WD wins a tender for a lease area. This thesis has not been able to find a specific threshold for what often involvement constitutes.

For the third node, trust in the planning process is dependent on the WD's ability to ensure access to meaningful, and thereby procedurally just, involvement for the local community as defined in sub-section 2.1.1 on procedural justice (Dwyer & Bidwell, 2019). Operationalised in this thesis, building trust in the planning process requires the WD to provide genuine opportunities for the local community to provide input and to ensure that the local community's input is implemented in the OW project (Dwyer & Bidwell, 2019). With trust established in the WD and the planning process, the link is established to the remaining node, namely trust in the OW project. Dwyer & Bidwell (2019) find that it is easier to establish trust in the outcome compared to the first two nodes in the COT, with the primary reason being that the WD at this point has proven that it can be trusted and that the planning process has been meaningful. Operationalised in the context of this thesis, building trust in the OW project requires the WD to first create a common sense of ownership with the local community so that they believe the WD works in their best interest and second to allow the local community the opportunity for continuous revision and input beyond the OW projects planning process.

Guided by the literature review, the LCP and the COT framework, this thesis sets out to answer three RQs. Guided by the literature review, RQ1 focuses on the ways in which the studied WDs perceive and work with social acceptance within the context of their OW projects. Guided by the LCP framework, RQ2 explores what the three WDs' perspectives are on the importance of local community involvement in the planning process of their OW projects to achieve social

acceptance and whether they provide access to their planning processes through procedurally just types of involvement. Last, the COT framework guides RQ3 on how the studied WDs perceive the importance of building trust with local communities to achieve social acceptance of their OW projects and in what ways they believe trust is built. Providing answers to the three RQs addresses the research gaps highlighted in section 1.1 on problem definition that emerged from the literature review. First, answering the RQs allows for a strong application of existing theoretical frameworks to guide both the data collection process and analysis (Bessette & Crawford, 2022; Rand & Hoen, 2017). Second, they have an emphasis on social acceptance by focusing on procedural justice and trust in the planning process, which is relevant for both the WE industry and academia (Rand & Hoen, 2017). Third, the RQs address different approaches represented by three WDs during a timing that is ideal due to the nascency of the OW industry in the US (Bidwell, 2016; Bingaman et al., 2023)

3 Methodological framework

The following chapter describes the methodological choices for this thesis. Section 3.1 presents the abductive research approach taken to theory development. Section 3.2 describes the research design that covers a qualitative method approach through 11 interviews set within a multiple-case study of three OW projects. Section 3.3 elaborates on the data analysis process of the 11 interviewees before section 3.4 briefly highlights the methodological limitations of this thesis.

3.1 Research approach to theory development

Providing in-depth and nuanced answers to the RQs requires the application of a theoretical lens. Saunders et al. (2023) present three common approaches to do so: deduction, induction, and abduction. Deduction entails testing theoretical frameworks up against the collected data and, from that, either falsifying or verifying the initial framework. Conversely, induction focuses on generating theoretical frameworks, starting with data collection and, from that, deriving themes around a specific phenomenon, such as the social acceptance of OW in the US, to develop a theory. Abduction is a mix of deduction and induction and uses existing theoretical frameworks to identify patterns and interpret data while also allowing for further iterations through the data analysis (Saunders et al., 2023). This thesis follows the abductive approach for two reasons. First, the theoretical framework presented in section 2.2 is a fundamental element of the data collection process and analysis and guides the answers to RQ2 and RQ3. Second, the research design also allows for exploring additional themes that emerge from the analysis, resulting in theoretical contributions and practical implications, as presented in section 5.1 of the discussion.

3.2 Research design

Establishing the purpose of research is the first building block of the research design. Saunders et al. (2023) argue that the purpose is dependent on the nature of the RQs, which in turn reflects the overarching aim of the research. RQs can either be descriptive, exploratory, explanatory, evaluative or a combination thereof (Saunders et al., 2023). The nature of this thesis is both exploratory and evaluative. Exploratory because it seeks to answer RQ1, RQ2 and RQ3. RQ1 on how WDs perceive and work with social acceptance. RQ2 on how WDs perceive the importance of involving the local community in the planning process. RQ3 on how WDs perceive the importance of building trust and in what way this unfolds in practice. It is evaluative because it seeks to answer the second part of RQ2 on whether WDs provide access to their planning processes through procedurally just types of involvement.

3.2.1 Research methodology

A research design follows either a qualitative, quantitative or mixed-method approach. The deciding factor is the type of data that is collected (Saunders et al., 2023). This thesis collects data through interviews in the format of audio recordings and, therefore, uses qualitative methods (Saunders et al., 2023). As no other qualitative methods are used to collect data, such as focus groups or observations, a qualitative mono-method approach is applied. Saunders et al. (2023) emphasise that this approach is well-suited for exploratory research. Moreover, this thesis's abductive approach to theory development is an appropriate fit with qualitative methods because it allows for moving back and forth between deductively testing a theoretical framework while also inductively exploring additional themes that emerge from the data (Saunders et al., 2023).

3.2.2 Research strategy

An appropriate research strategy ensures consistency throughout the research design and a sufficient answer to the RQs. Saunders et al. (2023) present multiple research strategies such as

experiments, surveys, grounded theory, and case studies, of which this thesis pursues the latter. To create a successful case study, it is necessary to determine the outer boundary of the case and narrow down the specific unit(s) of analysis (Flyvberg, 2011). As defined in section 1.3 on scope and delimitations, the Northeast coast of the US acts as a geographical boundary. The US is strategically selected because of the limited time left to reach federal targets of 30 GW OW capacity by 2030 and 100 GW by 2050, and 100% carbon pollution-free electricity by 2035 (White House, 2021, 2024). The Northeastern region is specifically selected because of it represents the frontier of planned and operating OW capacity (Musial et al., 2023). From a timing perspective, this thesis is a cross-sectional study, providing insights into how WDs currently perceive and work with social acceptance of OW and the underlying factors of procedural justice and trust.

This thesis more specifically follows a multiple-case study strategy. This provides in-depth and nuanced answers to the three RQs and highlights both differences and similarities within and between the three OW projects (Yin, 2018). If similar findings appear across cases, Yin (2018) argues that this increases the robustness and generalisability of the research and can have theoretical implications. Deploying a multiple-case study strategy thus supports this thesis's abductive approach to theory development (Yin, 2018). In practice, outreach was made to multiple WDs within this geographical boundary. However, some declined to participate to avoid risking further attention and social opposition to their OW project. The specific selection of three OW projects emerged throughout the data collection process.

3.2.3 Data collection method and sampling

The following section on data collection method and sampling provides insight into how the literature review and the interviews are conducted. Both provide the foundation to answer the three overarching RQs on social acceptance, procedural justice and trust.

Literature review

The literature review in chapter 2 follows a narrative approach by comprehensively reviewing existing knowledge and theoretical frameworks within the social acceptance of WE, as well as the underlying factors of procedural justice and trust. Critically reflecting upon the literature establishes a robust foundation and identifies both what is known and research gaps (Bryman, 2016). The literature review takes its starting point in Rand & Hoen's (2017) meta-study on the social acceptance of WE in North America. Using the snowball sampling technique, both by skimming their bibliography and through the online software tool "connectedpapers.com", several other relevant articles are identified. Additional research papers are found through two databases of academic papers, Scopus and Google Scholar, using key terms such as "social acceptance" + "wind energy" + "offshore wind energy" + "USA" + "procedural justice" + "trust". As the literature review progresses, articles concerning procedural justice and trust are specifically narrowed down and reviewed. In total, more than 40 articles pertaining to social acceptance, procedural justice, and trust make up the foundation for this thesis literature review and support answering the three RQs.

Interviews

As described in sub-section 3.2.1 on research methodology, interviews are used as a qualitative data collection method. Saunders et al. (2023) differentiate between structured, unstructured, and semi-structured interviews. Structured interviews often use a set of identical questions to collect comparable data from each interviewee. In contrast, the unstructured interview is informal and normally used to explore a specific phenomenon with few predetermined questions. Combining these two approaches results in semi-structured interviews, which this thesis applies. A semi-structured interview allows for the researcher to follow predetermined yet

open-ended questions that can assist in answering the RQs. More specifically, thematic format semi-structured interviews, guided by the literature review and theoretical framework, are used to deploy a consistent approach. This includes using a predetermined set of questions to steer the direction of the interviews and to ensure their relevance for the RQs (Saunders et al., 2023).

Purposive sampling is used to select the interviewees to make sure they are relevant (Saunders et al., 2023). The key selection criterion is that their professional role must include direct contact with the respective local community of the OW project. This ensures comparability across interviews. Interview outreach is thus targeted at professionals employed at WDs as a liaison, i.e., a mediator between the WD and the local community. To increase comparability across the three cases and the generalisability of the findings, this thesis aims to reach a similar representation of different types of liaisons within each WD. All interviewees' email addresses are publicly available through the OW projects' and WDs' respective websites or through publicly available communication from relevant federal or state-level authorities. When appropriate, the snowball sampling technique is also used at the end of an interview by requesting additional interviews with relevant colleagues of the interviewee.

As Table 3-1 below illustrates, 11 interviews are conducted across the three OW projects. The OW projects are denoted as Projects A, B, and C. The 11 interviewees are distributed evenly across the three projects and enumerated according to the place in the sequence of interviews. Project A represents two fisheries and one community liaison. B represents two fisheries liaisons, one marine affairs-, and one external affairs liaison. C represents two fisheries and one community liaison, as well as one external affairs liaison. The similarity within each case is relatively high and allows for a valuable comparison. Each OW project is owned by a Joint Venture (JV) between two companies. These are denoted as A JV, B JV and C JV and thus represent a total of six companies. The interviews are conducted via Zoom and last between 27 and 76 minutes. As a prerequisite for the analysis, all interviewees accepted that their interview would be recorded. This was both highlighted in the e-mail invitation and reinsured at the beginning of the interviewees, their WDs and respective OW projects are anonymised to respect their privacy and to allow for a greater sharing of details (Hall et al., 2013).

Table 3-1. List of interviewees

Wind developer Joint Venture (A, B, C)	Offshore wind project (A, B, C)	Interviewee number (1-11) and focus area	Date and (place) of interview	Duration of interview (minutes: seconds)
AJV	A	1: Fisheries liaison	27.02.2024 (Zoom)	76:28
B JV	В	2: Fisheries liaison	27.02.2024 (Zoom)	40:35
BJV	В	3: Fisheries liaison	29.02.2024 (Zoom)	37:58
A JV	A	4: Community liaison	04.03.2024 (Zoom)	27:46
C JV	С	5: Community liaison	06.03.2024 (Zoom)	27:39
В ЈУ	В	6: Marine affairs liaison	07.03.2024 (Zoom)	51:06

CJV	С	7: Fisheries liaison	08.03.2024 (Zoom)	66:13
CJV	С	8: External affairs liaison	11.03.2024 (Zoom)	40:52
BJV	В	9: External affairs liaison	12.03.2024 (Zoom)	56:52
CJV	С	10: Fisheries liaison	14.03.2024 (Zoom)	55:56
A JV	A	11: Fisheries liaison	19.03.2024 (Zoom)	52:56

Source: Author's work

As presented in Appendix 1, all interviews follow an interview guide consisting of six overarching themes. In short, these themes cover the three RQs and originally stem from the literature review and theoretical framework. Additional themes are included to allow for the emergence of relevant themes for this thesis that are not captured by the literature review or theoretical frameworks. With the themes, a list of core questions and relevant follow-up questions ensures adequate guidance of the interviews that enables cross-comparisons between the interviewees and their OW projects so that they fall within the scope of the RQs on social acceptance, procedural justice and trust.

To facilitate the interview process and ensure the interviewees fully comprehend the questions, two figures related to the LCP and COT framework are used as prompts (see Appendix 2). The figures are simplified versions of their respective theoretical framework and are illustrated in a way that does not affect the interviewees' responses. For the LCP framework, the two overarching levels of involvement, degrees of tokenism and citizen power, are not included to avoid influencing the interviewees into thinking that some types of involvement are better than others. For the COT framework, the links between the different nodes of trust are removed to minimise the influence on the interviewees to see a sequential pattern, as the theory indicates.

3.3 Data analysis

To increase the reliability of the findings, following a word-by-word transcription approach through the online software "Podium" prepares the interview data for further analysis. To enable comparison across the interview data, the transcripts are then coded following a qualitative content analysis. This type of analysis entails setting up pre-established codes that stem from the literature review and theoretical framework to guide the analysis. However, new codes can and are expected to emerge (Bryman, 2016). The qualitative content analysis supports this thesis's abductive approach to theory development as it allows for moving back and forth between theoretical operationalisation, data collection, analysis and findings.

As depicted in Appendix 3, the coding manual is structured by the three RQs on social acceptance, procedural justice and trust. Each RQ is supported by a set of codes and sub-codes that have a clear description of when to be applied. The codes are derived from both the literature review and the theoretical framework on LCP and COT, allowing for continuous modification and new themes to emerge (Bryman, 2016). While coding, reiterations are made to arrive at an optimal set of codes that appropriately reflect the findings.

To increase the validity of the analysis, four analytical criteria are applied for each interview. Applying criteria in the analysis will provide a context for the specific responses by the interviewees and ensure in-depth nuances and reflections with the aim of heightening the quality of the analysis. The four analytical criteria are presented in summary Table 3-2 below. The first analytical criterion is the interviewee's professional role. Their specific role determines the type

of community that the interviewee primarily works and interacts with, e.g., the fishing community and onshore community (citizens), leading to valuable nuances. The second criterion is the OW project's stage in the planning process. Whether an OW project has yet to start construction or is already operating is assumed to have an impact on how the interviewees perceive social acceptance, how the local community is involved in the planning process, and how trust is built. The third criterion is whether the interviewees have a pre-established connection or knowledge of the respective community that they work with. According to the literature review and COT framework, hiring locally trusted liaisons is emphasised as important for building trust and achieving social acceptance (Dwyer & Bidwell, 2019; Hall et al., 2013). The last criterion is on the estimated years of relevant experience related to working with social acceptance of OW. Through the interviewes and the professional network platform LinkedIn, estimates are provided for each of the 11 interviewees. This criterion increases the relevance of the interviewees' responses and may also provide depth to their perspectives. This criterion is, however, not to be understood as an estimation of correctness in the answers provided by the interviewees.

Table 3-2. Summary of the analytical criteria used for the analysis

Criteria 1	Criteria 2	Criteria 3	Criteria 4
The professional role of the interviewee	The OW project's stage in the planning process	Pre-established connection or knowledge of the respective community	Estimated years of relevant experience
A1: Fisheries liaison A4: Community liaison A11: Fisheries liaison	A: Operation	A1: Yes A4: No A11: Yes	A1: 6 A4: 4 A11: 2
B2: Fisheries liaison B3: Fisheries liaison B6: Marine affairs liaison B9: External affairs liaison	B: Operation	B2: Yes B3: Yes B6: Yes B9: Yes	B2: 7 B3: 5 B6: 21 B9: 11
C5: Community liaison C7: Fisheries liaison C8: External affairs liaison C10: Fisheries liaison	C: Leasing awarded	C5: Yes C7: Yes C8: Yes C10: Yes	C5: 2 C7: 2 C8: 2 C10: 2

Source: Author's work

Following this path for data analysis provides robust findings. The multiple-case study strategy allows for assessing these findings, drawing on both similarities and differences to answer the three RQs (Bryman, 2016).

3.4 Methodological limitations

This thesis has made methodological choices that, in turn, potentially limit its findings. The 11 liaisons that are interviewed act as representatives of their respective WD at which they are employed and the OW project they work on. Choosing to only collect data from liaisons excludes potentially relevant perspectives from their colleagues within the WD. However, the strong focus on liaisons ensures that the findings are relevant to social acceptance and

strengthens the understanding of this specific role within a WD. Furthermore, the 11 interviewees represent different types of focuses that bring forth important nuances.

Using additional data collection methods, such as secondary data through newspaper articles or company reports from WDs, can increase the validity and reliability of the findings. This additional data can heighten the level of detail and, to some degree, scrutinise the responses provided by the interviewees. This thesis, however, chooses to use interviews as the sole data collection method for the primary reason of ensuring the anonymity of interviewees. The 11 liaisons operate within a politically tense field and rest their daily work upon confidential relationships with the local communities. Using publicly available data will, therefore, directly strip them of their anonymity.

An overarching methodological limitation to this thesis is the fact that interviews are conducted from abroad. Being on the ground at the locations of each OW project and potentially understanding the perspectives of the local communities as well could have increased the relevance of this thesis. Nevertheless, through thorough background research on each OW project and an extensive literature review on the topic of social acceptance of WE and OW, specifically in the US, the virtual interviews represent an efficient data collection method.

4 Findings and analysis

The following chapter presents an in-depth analysis of the findings from this multiple-case study. It thus covers the findings from 11 interviewees across the three OW projects, A, B and C. The chapter follows a structure according to this thesis's three RQs. However, section 4.1 begins with a brief recap of the three OW projects, the 11 interviewees and the analytical criteria presented in section 3.3. Guided by the literature review, section 4.2 answers RQ1 on in what ways the studied WDs perceive and work with social acceptance within the context of their OW projects. Guided by the LCP framework, section 4.3 answers RQ2 on what the three WDs' perspective is on the importance of local community involvement in the planning process of their OW projects to achieve social acceptance and whether they provide access to their planning processes through procedurally just types of involvement. Last, guided by the COT framework, section 4.4 answers RQ3 on how the studied WDs perceive the importance of building trust with local communities to achieve social acceptance of their OW projects and in what ways they believe trust is built. Each section ends with a table summarising the main findings and answers to the RQs.

4.1 Case descriptions

Common for all three cases is their location on the US Northeast coast, representing the frontier of OW development in the US. Summarised in Table 3-2 within section 3.3 on data analysis are the following descriptions of the analytical criteria applied for this analysis. The 11 interviewees are distributed evenly across the three projects: Project A represents three interviewees in total: A1 and A11 are fisheries liaisons, and A4 is a community liaison focusing on citizens and elected officials. Project B represents four interviewees: B2 and B3 are fisheries liaisons, B6 is a marine affairs liaison, and B9 is an external affairs liaison focusing on citizens, local organisations and elected officials. Project C represents four interviewees: C7 and C10 are fisheries liaisons, C5 is a community liaison focusing on citizens and local organisations, and C8 is an external affairs liaison focusing on citizens and elected officials. Regarding the scope of the fisheries- and marine affairs liaisons, their focus area covers both commercial and recreational fishermen.

What partially sets the three projects apart is that Projects A and B operate, i.e., they produce electricity for the grid. In contrast, Project C is at an earlier stage of the planning process and is yet to begin construction. Apart from their focus areas, all interviewees except A4 have a preestablished connection or knowledge of the respective community they work with. Furthermore, the 11 interviewees have, on average, an estimated 5.8 years of relevant experience related to social acceptance of OW. This average is, however, based on representatives with experience ranging from two to 21 years. In essence, this multiple-case study encapsulates both apparent similarities and differences on a project level and between the 11 interviewees. The following sections aim to provide an in-depth analysis with comparative elements that reflect the abovementioned analytical criteria when relevant.

4.2 Social acceptance

Social acceptance is the acceptance of an OW project by the stakeholders within a local community, such as citizens. Guided by the literature review, this section answers RQ1 on in what ways the three WDs perceive and work with social acceptance within the context of their OW projects.

4.2.1 Perceived views on social acceptance

This sub-section describes how the three OW projects perceive social acceptance as a phenomenon that covers a scale of different attitudes towards OW and separates itself from social support.

A scale of social acceptance

A local community's social acceptance of an OW project is, by the three WDs, not seen as a binary phenomenon where a community is either accepting or not accepting an OW project. Instead, A, B and C JV perceive the phenomenon as a scale ranging from social opposition to passive acceptance and extending to vocal support of OW. With that said, following the findings from the literature review, a majority of the interviewees across projects A, B, and C perceive social acceptance as a unique term that covers a local community passively accepting to live with an OW project but not proactively supporting it.

Both fisheries liaisons A11 and B3 describe that the fishermen that accept projects A and B are perceived to focus on adapting to the OW projects' existence and work around it in the best way possible. Marine affairs liaison B6 further emphasises this and describes how a change in the nature of the conversation with the fishing community over the past years has gone from pure opposition towards fishermen to now requesting more information on how they can be involved in the planning process, monitoring and surveying of marine animals, and thus adapt to the presence of Project B. Fisheries liaison B2 explicitly argues that those that passively accept OW – both citizens and fishermen – is the most critical group for WDs to be attentive to, since there is a risk of them becoming opposers due to misinformation of OW, such as how it results in increased whale deaths, spreading through social media platforms.

On the scale of social acceptance, both fisheries liaisons from Project A describe that there are those fishermen who are opposed to OW no matter what, those who do not support OW but still wish to be involved and diversify their income through, for example, renting out their vessels for offshore operations, and a last group that accepts and wants to represent the fishing community at the table with the WDs. The two fisheries liaisons, B2 and B3, perceive a similar scale, ranging from fishermen directly opposing, to not caring, to passively accepting and those supporting OW. Project C's fisheries liaisons C7 and C10 present a more nuanced perception of social acceptance. While representative C10 sees it as a community passively accepting OW, C7 sees social acceptance as when people accept an OW project because they are heard in the planning process, which aligns with Wüstenhagen et al.'s (2007) framework on social acceptance, within which local community acceptance requires procedurally just planning processes.

Social support

Social support is across all three WDs understood as something separate from acceptance and occurs when the local community vocally expresses a positive viewpoint towards OW. A11 describes the social supporters within the fishing community as those who highlight how climate change affects marine species through increasingly warmer ocean temperatures and thus vocally support a renewable energy transition. These findings suggest that the risk of using social acceptance and support interchangeably, as pointed out in the literature review, initially by Barr (2003) and later by Batel et al. (2013), might not continue to be a challenge within the studied WDs.

Fisheries liaisons across all projects and marine affairs liaison B6 argue that the fishermen supporting OW are not willing to express their support publicly. This finding is interesting in light of fisheries and external affairs liaisons B2 and B9's argument that, in general, those who support OW outnumber those who oppose it by two to three times and that the majority of the local communities accept Project B. These figures presented by B2 and B9 are anecdotal and should be understood in the context of Project B successfully operating. From Project A's perspective, A1 describes how, despite having successfully worked and collaborated with individual fishermen and fishermen associations for more than six years, they are still unwilling to publicly support Project A because it would make them look like they support OW. Fisheries

liaison C7 provides the same argument and explains that while there may not be many supporters of OW within the fishing community, those that do support it feel like they cannot voice it 'because they will be socially ostracised' (C7, 08.03.2024). This point of view is raised across all three OW projects and may reflect reality to some extent. However, the point of fishermen not being able to voice their support would benefit from being further explored from the fishermen's perspective to increase or decrease the robustness of this finding.

4.2.2 Working with social acceptance

This sub-section delves into how WDs work with the social acceptance of their OW projects. The findings result in multiple themes that both echo the literature review and emerge as new relevant themes. The themes are early and often involvement, a two-way communication stream, informal and formal interactions, the role of fisheries liaisons, cross-collaboration amongst WDs, OW as a political divider and last, how there is a noteworthy difference in working with diverse types of communities within one OW project.

Early and often involvement

Both representatives of projects B and C describe that working to achieve social acceptance of OW projects requires early and often involvement of the local community in the planning process. As an indication of early involvement, fisheries liaison B2 states that their outreach began several years before winning the lease, and community liaison C5 describes that for Project C, involvement began one and a half years before winning the lease. For C5 and external affairs liaison C8, early and often involvement is to educate the broader local community and elected officials on how OW functions. The key focus in this setting is to establish what facts are and what misinformation is. In this regard, C8 sees themselves as a resource that is constantly available to the community, intending to ensure that those who accept OW do not turn into opposers by, for example, debunking false narratives such as the correlation between whale deaths and OW instalments. B2 also highlights that the purpose of early and often involvement is to spread a factual truth about OW before misinformation spreads rapidly. B2 describes how B JV would use locally trusted and respected organisations to carry the message to the local community. While Project A does not mention early and often involvement, the findings from Projects B and C underscore the findings from the literature review by Corscadden et al. (2012) and Jami & Walsh (2017) on the importance of providing information at an early stage of the planning process to avoid misinformation and increase social acceptance WE.

A two-way communication stream

Working with a local community's social acceptance requires extensive communicative efforts. All three projects explain how a two-way communication stream between A, B and C IV and their respective communities are critical to social acceptance, as also indicated by Bingaman et al. (2023), Dwyer & Bidwell (2019) and Hall & Lazarus (2015) in the literature review. Fisheries liaison C7 defines this two-way communication stream as being a shared understanding of a confidential information exchange, which ensures that the fishermen are comfortable with sharing information that can be helpful for the planning process and development of Project C. The type of information is, for example, highly technical knowledge of how the ocean's currents distribute the sand bottom differently over time, which can affect the stability of the OW farm's foundation. With this information, C7 can pass along the knowledge internally at C JV to the OW engineers so they can potentially include the fishermen's knowledge. Fisheries liaison B3 also stresses that the purpose of a two-way communication stream is to ensure all parties are updated on what is going on and to bring back information to B JV and incorporate it to the greatest extent possible. B3 highlights that one reason for doing this is to minimise material damage to fishing gear and the risk of social opposition when B JV performs geotechnical surveys in areas where multiple fishing vessels are operating. Fisheries liaisons A1 and A11

describe how they use fishermen's representatives to improve the two-way communication stream between A JV and the fishing community. These representatives are both individuals as well as fishermen associations and represent different types of fisheries, which allows for a better understanding of what is going on at the fishing docks regarding Project A. Interacting, listening and being attentive are the key ingredients for successful communication with local communities across all three projects. Community liaison A4 highlights that overcommunication is sometimes required to ensure that the community understands every step A JV takes, thus minimising potential complaints.

Informal and formal interactions

Echoing the findings of the BIWF project by Dwyer & Bidwell (2019), liaisons across all three OW projects use informal actions to interact with the local communities. Marine affairs liaison B6 describes how WDs interact with the fishermen by visiting the fishing docks and engaging in informal conversations over a cup of coffee in the fishermen's boats. The purpose is to understand how they are coping with Project B and provide them with the necessary information or answers when possible. B6 emphasises that it is not feasible to meet all concerns and sometimes becomes 'more or less [a] negotiation' (B6, 07.03.2024). One example by B6 is how commercial fishermen wanted to change the OW turbines' lighting and marking regime to navigate the OW farm more easily. The lighting and marking regime was adapted entirely due to a conversation between B JV and the commercial fishing community. Fisheries liaisons C7 and C10 also describe the importance of interacting with the fishermen at the fishing docks. In addition, C7 describes how informal text messaging also occurs with the fishing community to stay updated on how they are doing. The liaisons' contact information is always available to the local community online so that they can reach out if necessary. In addition to informal interactions, fisheries liaison A11 describes how the fisheries liaison team participates in and initiates formal public events visited by relevant stakeholders. Community liaison A4 highlights that in the years up to the construction of Project A, the community liaisons team made sure that people were able to enjoy food and drinks at these types of public events so that they could stay for as long as they needed to enhance their understanding of Project A and OW in general.

The role of a fisheries liaison

An emerging theme from the analysis is how fisheries liaisons across all projects described the purpose of their role when working with social acceptance. Fisheries liaisons C10 and A1 see themselves as the go-to person between the fishing community and their respective WDs. They aim to ensure their WDs realise the importance of the fishing community accepting Projects C and A. For A1, specifically, it means that they constantly need to justify the implementation of initiatives that support the involvement of the fishing community in the planning process. A1 describes that A JV is generally very understanding and supportive of many initiatives, which creates trust in the organisation. A1 describes another aspect of being a fisheries liaison. When first joining A IV, it led to critical comments from A1's pre-established network in the local fishing community. Many fishermen were critical of A1 working for OW, to which A1 would reply, 'would you rather have me that understands what is happening, or somebody that has no idea?' (A1, 27.02.2024). The fishermen quickly agreed with A1, highlighting the importance of hiring liaisons connected to the local community. Hall et al. (2013) and Dwyer & Bidwell (2019) highlight the same point on the importance of locally known liaisons in the literature review. Fisheries liaisons C10 and B3 highlight yet another aspect of their role. They wish to emphasise that their role is not to be a salesperson whose goal is to convince the fishing community to like and support OW. Instead, it is about establishing facts about the respective project and OW technology and providing it in a sensible manner to ensure that seafood- and renewable energy production can co-exist offshore.

Cross-collaboration amongst wind developers

A second theme emerging amongst fisheries liaisons A11, C7 and C10 and marine affairs liaison B6 is the cross-collaboration between WDs on this liaison level. C10 notes that while WDs compete with each other, they collaborate on a fisheries/maritime level. C7 describes how there, in the geographical area of Project C, exists an informal working group amongst the WDs that meets bi-weekly with a core aim to share learnings and avoid stakeholder fatigue. The latter is emphasised as highly important since it concerns fishermen who often travel regionally and across lease areas. This results in multiple WDs repeatedly reaching out to the same fishermen and risking fatigue. As B2, B6, C7 and C10 mention, the commercial fishermen on the Northeast coast are often individual businesspeople and, therefore, need tailor-made outreach for it to succeed. B6 mentions, just like C7, that B JV collaborates with other WDs to coordinate and adopt best practices around building trust with the fishing community, among other factors of social acceptance. B6 emphasises a collegial relationship across the WDs. From B6's perspective, it is helpful that B JV's competitors have good relationships and trust with the commercial fishing community. One example of cross-collaboration is how certain WDs have agreed upon a uniform layout of OW farms so that fishermen can navigate through them more easily. All also describes this form of collaboration and sees it as a place where the fisheries liaisons can learn from each other. All argues that a more regional approach is critical to developing trust in the WDs, specifically on the scientific level, regarding survey design. All WDs have, for example, agreed upon a survey design for Highly Migratory Specifies, but this should also include trawl, ventless traps and larval surveys.

The cross-collaboration amongst WDs is relevant since several liaisons describe how local communities often paint the OW industry with a broad brush. B6 describes that if one WD does something that upsets the fishing community, frequently, all WDs receive the blame for it. Fisheries liaisons A1 and A11 also describe that the fishing industry at large sees WDs as one big entity and that every time something negative happens with the fishing community, all WDs are grouped together and equally targeted. Similarly, community liaison C5 describes that the actions of other WDs have a trickledown effect, ultimately affecting everyone in the industry. In this light, a regional approach and increased collaboration between the WDs operating on the US Northeast coast seem like a logical approach to improve their industry's trust with the local communities.

Offshore wind as a political divider

A third theme emerging from the analysis is the political context in the US. Both external affairs liaison B9 and fisheries liaison B2 describe that the local onshore community of Project B is politically very engaged and lives within an area with high real estate values. As B2 expresses, '... if you can do it there and you can do it right, you can do it anywhere in the world.' (B2, 27.02.2024). B2 continues and explains that the planning process of Project B has closely followed the local election cycle. Each local election was a choice between a candidate supporting or opposing Project B – almost like a local referendum. In this context, B9 argues it is best if you, as a WD, can remain bipartisan, meaning you must have both Democratic and Republican allies. B9, however, describes that this is becoming increasingly difficult in the US. Similarly, external affairs- and community liaisons C8 and C5 highlight that Project C aims to collaborate with Democrats and Republicans to achieve social acceptance. However, OW has become a politically sensitive debate in the US. C8 suggests that while it is not everyone, a large part of the Republican party has taken up a mantle of being opposed to OW. C5 echoes this perception and suggests that social opposition is often seen as politically motivated and originates within right-wing conservatives. From C8's perspective, such a political movement has not existed in a long time, which indicates a relative force behind it. These findings are particularly relevant in light of the upcoming presidential election in November 2024 between Republican nominee and former President Donald Trump and the current Democratic president, Joe Biden. Whether it is Trump or Biden who regains the Presidency, it could further advance or slow down WDs' work in achieving social acceptance of OW. Emphasising the latter, Donald Trump promised to halt OW in the state of New Jersey in May 2024 if he is to return as President (Milman, 2024). Despite this thesis's focus on the acceptance of local communities, these findings highlight the relevance of Wüstenhagen et al.'s (2007) dimension on socio-political acceptance, illustrated in Figure 2-1 in section 2.1, and the inherent connection between these dimensions, i.e., that the acceptance of policymakers also affect the local communities (Sovacool, 2009).

Working with different communities

As a last theme emerging from the analysis, Project A's two fisheries liaisons question the extent to which working with social acceptance is the same across all types of local communities. At highlights that A JV tends to put all types of communities into the same box but argues that the impact differs. More specifically, A1 argues that the commercial fishing community is the most impacted stakeholder by OW since it must operate and co-exist with the OW project for its entire lifespan. Highlighting a relevant nuance even within the broader fishing community, A11 mentions that recreational fishermen often experience that OW turbines creating artificial reefs that improve species' number and richness. Following the same logic as A1, A11 argues that onshore communities, such as small business owners and citizens, only experience short-term annoyance related to, for example, road work and instalments of electricity cabling. In light of these findings, it is important to emphasise that A1 and A11 represent the fishing community and their interests. Furthermore, this was not brought up by Projects B or C, making it an isolated finding from Project A. While the robustness of the finding remains weak, it is nevertheless a valid point brought up by the two fisheries liaisons that could be worthy of future research.

4.2.3 Key findings for research question 1 on social acceptance

Table 4-1 below provides an in-depth breakdown of RQ1 in the left-hand column and a detailed answer to RQ1 in the right-hand column.

Table 4-1. Summary of the findings for RO1

Breakdown of RQ1	RQ1: In what ways do wind developers with presence on the Northeast coast of the US perceive and work with social acceptance within the context of their offshore wind projects?
Perception of social acceptance	Social acceptance is perceived as a scale ranging from opposition to acceptance and support. Social acceptance itself is perceived as a local community passively accepting an OW project, whereas support is vocally expressed. In the fishing community, those who support OW are not seen as willing to express it vocally because of pressure within this community.
Working with social acceptance	Working with social acceptance as a fisheries liaison is not about convincing the local community that OW is the best but educating and establishing a factually based conversation around the technology. Working with social acceptance requires early and often involvement, a two-way communication stream and informal and formal interactions with the local community. All projects describe the existence of cross-collaboration among WDs on a fisheries/marine affairs level to enhance learning, focus on regional efforts, and achieve social acceptance through that. Projects B and C highlight that working with OW is a politically explosive topic, making bipartisan work with Democrats and Republicans difficult. Project A highlights that in working with social

acceptance, WDs should be aware that different communities are affected differently, emphasising that fishermen have to live with OW projects for their entire lifetime, whereas onshore communities are argued to be temporarily disturbed.

Source: Author's work.

4.3 Procedural justice

Procedural justice is a local community's access to meaningful involvement in the planning process of an OW project. Sub-section 2.2.1 operationalises what types of involvement are meaningful and thus procedurally just, according to the LCP framework. Guided by the LCP framework, this section answers RQ2 on what the three WDs' perspective is on the importance of local community involvement in the planning process of their OW projects to achieve social acceptance and whether they provide access to their planning processes through procedurally just types of involvement.

4.3.1 Importance of local community involvement

All representatives from the three OW projects see the importance of involving the local community. However, this sub-section explains that timing is an important aspect of involving the local community and that involvement in itself is a balancing act for the WDs.

Local community involvement is a matter of timing

All interviewees across the three WDs express that involving the local community in the planning process of their OW projects is important to achieve social acceptance. The importance of appropriately timing involvement, however, is highlighted as critical. At Project C, fisheries liaison C7 emphasises the importance of involving the large number of citizens on the US northeast coast that are and will be affected by OW projects. Similarly, community liaison A4 describes that even though people do not always have specific ideas or concerns, they appreciate being included and informed and given the theoretical possibility of weighing in if they want to. Fisheries liaison A11 denotes that involvement is about bringing the fishermen to the table and providing them with the opportunity to partake in the planning process and ensure that they are the ones that reap the socio-economic benefits of Project A, such as getting the jobs that follow.

While marine affairs liaison B6 agrees that community involvement is important, they do not deem it paramount to achieve social acceptance of Project B. With 21 years of experience within social acceptance of OW, B6 highlights the importance of appropriately timing involvement. By the time a WD wins a leasing area, B6 argues that many important decisions are already made by federal and state authorities. B6 furthermore describes that the level of involvement the public authorities provide is often minimal. While fisheries liaison A1 shares B6's reflections on the role of the public authorities, they also argue that it is – in the case of Project A – partially up to A JV to lift the responsibility of appropriately involving the local community in the planning process. At describes that if A JV had hired fisheries liaisons earlier in the planning process, several additional opportunities for involvement would have occurred. Fisheries liaisons C10, A11 and B3 echo that the sooner the local community is involved, the better since time allows for flexibility to modify the planning process. B3 describes that everything is set in stone at a certain point during the planning process, marking the point when the level of community involvement decreases. Both A1 and C10 mention that despite not having won the leasing areas yet, they have already hired fisheries liaisons for upcoming OW projects in California. Hiring liaisons this early in the planning process indicates a clear learning curve for WDs regarding the importance of appropriately timing involvement and an acknowledgement that early involvement results in a higher degree of flexibility to modify the OW projects in collaboration with the local communities.

These findings support the work by Hall et al. (2013), as presented in the literature review, on how different opportunities exist along the planning process for appropriately timing local community involvement. In light of that, B3 argues that WDs should only involve the local community when it is important. B3's perspective encompasses Arnstein's (1969) point, as presented in sub-section 2.1.1 on procedural justice, that the planning process risks becoming an empty ritual of involvement.

Local community involvement is a balancing act

Despite acknowledging the importance of involving the local community, community- and fisheries liaisons C5 and C10 and fisheries- and external affairs liaisons B2 and B9 see involvement as a balancing act. C5 stresses the balance between having to sustain Project C as a commercially viable OW project vis-à-vis involving the community and potentially risking the economic success of Project C. C5 echoes Bidwell's (2016) point that despite potential aspirations of delegating decision-making power, it seems unrealistic to expect that highly competitive WDs put the fate of their OW projects in the hands of the local community. C10 focuses on the balancing act between, on the one hand, promising improvements for the local community, because of their request of increased involvement in the planning process, while on the other hand risking to fail upon delivering on these promises due to external factors such as unstable supply chains or inflation. Moreover, B2 argues that there are limits to how much, or rather how many, should be involved, 'you do not want every stakeholder in the world to comment on everything you are doing, because that ultimately hurts the greater stakeholder' (B2, 27.02.2024). B2's statement refers to the risk of delaying OW projects and slowing down the phase-out of fossil fuels. B9 points to a fourth balancing act that also touches upon the importance of timing involvement, as described in the paragraphs above. Many aspects of the planning process relevant to the local community are often argued to stretch several months and years into the future before they are pertinent. From B9's perspective, this can seem intangible for many citizens who focus on daily living. Timing the involvement presents itself as a balancing act on its own and emphasises the inherent complexity. This emerging theme indicates that while local community involvement is important, WDs are also aware of its potential trade-offs, including securing the commercial success of OW projects, risking the ability to deliver upon promises, developing the OW project in time, and securing targeted involvement at those it matters for and when it matters.

4.3.2 Access to procedurally just types of involvement in the planning process

This sub-section analyses how the three OW projects involve their respective local communities. It is guided by the LCP framework through both degrees of tokenism and citizen power and their underlying types of involvement: providing information, consulting for advice, creating partnerships and delegating decision-making power.

Degrees of tokenism

Providing information

The three OW projects provide information through two-way communication streams and are aware of the importance of early involvement. In that sense, the WDs avoid the pitfalls highlighted by the LCP framework, namely that if information is solely provided through one-way communication streams or too late in the planning process, the local community is not able to have their opinions heard and implemented (Arnstein, 1969).

In practice, community- and fisheries liaisons A4 and A11 describe that the focus was primarily centred on providing information about Project A to the community at the beginning. Through a two-way communication stream, fisheries liaisons A1 and A11 describe that they provide information to enhance the understanding of the fishing community's position vis-à-vis Project A and whether the local community is opposing, accepting or supporting. Similarly, all representatives of Project B argue that providing information is particularly important at the beginning of the planning process to ensure that all parties are up to date and to avoid damaging the fishermen's gear. Fisheries liaisons B2 and B3 both emphasise that, at times, providing information is all that is needed to address the local communities' concerns. External affairs-community and fisheries liaisons C5, C8 and C10 describe that their focus is also on sharing information about Project C with the local community due to its early stage in the planning process. As described in sub-section 4.2.2 on early and often involvement, the underlying reason why the studied WDs provide information as a type of involvement is to educate about their OW projects and attempt to maintain a factual debate before misinformation potentially spreads.

Consulting the local community for advice

Regarding consulting the community for advice, representatives from all three OW projects describe in detail that they consult their local communities for advice throughout different phases of their respective planning processes. Consulting for advice is a step up on the LCP, but if not combined with other types of involvement, there is little assurance that the local community's advice is implemented in practice (Arnstein, 1969). This may result in the community having just '... participated in participation' and the WDs obtaining a false sense of impactful involvement (Arnstein, 1969, p. 219).

To that, representatives from Project B see consulting the community for advice as a more relevant type of involvement for later stages of the planning process. Fisheries liaison B3 describes how Project B consulted the local community for advice when it, during the construction phase, had to run the subsea electricity cable to make landfall. As marine affairs liaison B6 also exemplifies in sub-section 4.2.2 on informal and formal interactions, B JV consulted the commercial fishermen regarding the lighting and marking regime of the OW turbines to facilitate clear pathways for navigation and fishing activities. Project B ended up applying the changes according to the fishermen's suggestions. In that sense, the local community of Project B did not just was not involved just for the sake of involvement (Arnstein, 1969). All interviewees from C IV, except fisheries liaison C7, describe that Project C is currently not consulting the community for advice. Similar to Project B, it is deemed more appropriate for later stages of the planning process. However, C7 describes that they consult the fishing community for advice on, for example, placement of export cable routes, how they can incorporate the fishermen's towing direction of trawl and dredge into the project design, and when it is the best time of the year to conduct certain types of survey work. A potential explanation for the difference in perception is that the fishing community is affected by Project C at an earlier stage than the onshore community and thus consulted before. Being the only liaison to highlight this type of involvement, there is a risk of the advice C7 receives not being implemented in practice. If not organised throughout project C, it may unintentionally become involvement just for the sake of involvement (Arnstein, 1969).

In contrast to Projects B and C, the representatives of Project A do not mention the relevance of only consulting the local community for advice during the later stages of the planning process. Instead, fisheries liaisons A1 and A11 describe that much of their relationship with the fishing community revolves around consulting them for advice. A11 describes how providing information in the first place through formal and informal actions spills into a dialogue, which

again spills into questions of interest from the fishing community. The conversation then moves to consulting them for advice to address their concerns better. As with C7, A11's relatively informal way of consulting the community for advice offers little assurance to the local community of their advice being implemented if not combined with other types of involvement (Arnstein, 1969).

Degrees of citizen power

Creating partnerships

External affairs liaison B9 stresses that the process of consulting the community for advice allowed B JV to figure out which partnerships are most meaningful for Project B. Of specific partnerships, B2 describes how these often consist of negotiating a deal, in which the local community would receive funding for a particular purpose. In exchange, B JV would gain acceptance to install critical infrastructure, such as the land-fall cable from Project B, which connects it to the grid. B6's example of consulting the fishermen on the lighting and marking regime of the OW turbines is also described to create room for negotiation between B JV and the commercial fishermen. B2 and B6's descriptions of partnerships are closely connected to Arnstein's (1969) framework on how partnerships can enable a redistribution of power within the planning process through negotiations. Nevertheless, in Project B's examples, these negotiations are not described as arising based on formal structures such as joint planning committees between B JV and the local community. Ultimately, because of a seeming lack of structured organisation, there is no assurance that these negotiations will continue within other partnerships between B JV and the local community (Arnstein, 1969).

At Project A, fisheries liaison A1 describes informal partnerships on seafood donations and more formal ones in which A JV has developed a programme for fishermen to obtain a specific operator permit to assist Project A at sea with their vessels. For the latter, A JV assists the fishermen with paperwork and pays for their licenses once they obtain them. A1 describes that while the fishermen attempted to negotiate their salary levels for their services, the room for negotiation was limited due to budget constraints. With no room for negotiation, Project A's partnerships do not establish an opportunity for redistribution of power within the planning process through these partnerships (Arnstein, 1969).

Representatives from Project C also describe the emergence of partnerships. Like Project A, external affairs liaison C8 describes that Project C has created partnerships with the onshore community around seafood donation programmes. C8 furthermore suggests, in contrast to external affairs liaison B9, that in the planning process, these partnerships come before consulting the community for advice because they create a foundation to interact further. Fisheries liaison C7 highlights an additional partnership with selected local fishermen who assist with research and monitoring activities. While these partnerships from Project C are not mentioned to result in any negotiations between C JV and the local community, fisheries liaison C10 mention that C JV is establishing different support schemes that target local fishermen. Whether these schemes lead to more organised ways of redistributing power within the partnerships between Project C and the local community remains to be seen. Based on the findings from Projects A and B, this, however, seems unlikely.

Delegating decision-making power

Through delegating decision-making power, the local community has, in theory, a high chance of having their suggestions and concerns addressed and implemented in the planning process. However, of the 11 interviewees from the three WDs, none of them see this type of involvement as feasible for their OW projects.

As briefly touched upon in sub-section 4.3.1 on local community involvement as a balancing act, community liaison C5 believes that the commercial nature of OW projects does not allow for delegating decision-making power. C5's colleagues, external affairs- and fisheries liaisons C8 and C10 echo OW projects' commercial sensitivity. C8 specifically argues that for C JV to make the right decisions and achieve social acceptance, it must excel in providing information, consulting for advice and creating partnerships. For Project B, fisheries liaisons B2 and B3 entirely discard the possibility of delegating decision-making power, arguing that B JV cannot leave the responsibility of Project B's success in the hands of the local community. Marine affairs liaison B6 underscores the commercial point raised by C5 and does not foresee that the local community will ever make any decisions that can impact how Project B operates. At Project A, fisheries liaisons A1 and A11 describe how they filter all suggestions and concerns from the fishing community, and then 'it is the higher-ups in our company saying yes or no and us pleading a good case to making these changes' (A11, 19.03.2024).

Community liaison A4 suggests that delegating decision-making power is not genuinely possible in the OW planning process in the US. Further developing upon this, A1 highlights that the relevance of delegating decision-making power only truly exists at the very early stages of the planning process, where the federal government authority, BOEM, is in charge. While A1 partially blames BOEM for the lack of delegating decision-making power, they also argue that the WD industry holds a responsibility. More specifically, A1 argues that WDs are rarely ready to come to the table with BOEM and other relevant public authorities years ahead of potentially winning a lease area. Once the lease areas are carved out, the process is thus often rushed, and the timing of the local community involvement is misplaced. The responsibility of WDs that A1 highlights provides a noteworthy self-reflection for the WDs and portrays a clear balancing act for them on when to get themselves involved with a local community that may be affected by an OW project that is not yet planned for nor built.

Access to the planning process, but not through procedurally just types of involvement

There are clear indications that all three projects both inform and consult their respective local communities for advice. By this, the three WDs ensure their local communities hear about and have a voice in their respective planning processes (Arnstein, 1969). These two types of involvement thus reach degrees of tokenism, as illustrated in Figure 2-2 within sub-section 2.2.1 on the LCP framework, and provide access to the planning process for the local communities of OW Projects A, B and C. Of particular interest are the contrasting findings within Project C, which is at an early stage of the planning process. Here, the findings indicate that only parts of the fishing community are consulted for advice. Consulting the community is described as more relevant later in the planning process by several other liaisons, including fisheries liaisons, from C JV. This difference in the timing of involvement between the two groups is an interesting finding, given how several liaisons across all three OW projects highlight the importance of appropriately timing involvement in sub-section 4.3.1 on the importance of local community involvement.

Regarding degrees of citizen power, the highest level of involvement in the LCP framework, all three OW projects describe how they have established partnerships with their local communities. However, Arnstein (1969) defines a partnership as one that leads to agreements on sharing planning and decision-making responsibilities through, for example, planning committees. Such structures enable the local community to get their suggestions and concerns addressed and implemented in practice (Arnstein, 1969). The partnerships described across the three OW projects are, however, seemingly based on informal actions and loose structures. For Project A, partnerships exist in the form of seafood donations and initiatives for fishermen to become a part of working for Project A. While the latter resulted in negotiations on the

fishermen's salaries, which ultimately failed, this did not arise from a structured and organised set-up (Arnstein, 1969). Project B similarly provided room for negotiation when they entered into a conversation with the fishing community regarding the lighting and marking regime of Project B's OW turbines or when they provided funding to the local community in exchange for their acceptance of the landfall of Project B's sub-sea electricity cable. Despite these two cases of negotiation that led to direct implementations in favour of the local communities, they do not stem from pre-established planning committees, nor did they result in such. Finally, Project C did not mention any partnerships within which any type of negotiation takes place. Yet, the findings from C JV indicate that an upcoming support scheme for the fishermen establishes a platform from which the fishermen might be able to negotiate and achieve specific outcomes. This is, however, yet to be seen and seems unlikely in light of the findings from Projects A and B. Regarding delegating decision-making power, all three OW projects clearly state that this is not a feasible option for a commercially driven WD. External affairs liaison C8 makes an interesting point that for the WDs to make the best decisions to achieve social acceptance of their OW projects, they must be able to provide information, consult for advice, and create adequate partnerships.

In sum, the findings across Projects A, B and C indicate that the three OW projects provide access to their planning processes for the local communities, however, not through procedurally just types of involvement. Providing information, consulting for advice, and the specific partnerships of Projects A, B, and C do not enable the local communities to negotiate in a structured and organised manner or to obtain the upper hand in the planning process. While the local communities across all three projects can hear and are heard throughout the planning processes, there is no assurance that the three WDs will change the status quo (Arnstein, 1969). Even less so due to how involvement is seen to create balancing acts and inherent trade-offs highlighted across all three WDs.

4.3.3 Key findings for research question 2 on procedural justice

Table 4-2Table 4-1 below provides an in-depth breakdown of RQ2 in the left-hand column and a detailed answer to RQ2 in the right-hand column.

Table 4-2. Summary of the findings for RO2

Breakdown of RQ2	RQ2: What are these wind developers' perspectives on the importance of local community involvement in the planning process of their offshore wind projects to achieve social acceptance, and do they provide access to their planning processes through procedurally just types of involvement?
Importance of local community involvement to achieve social acceptance	All three WDs believe that involving the local community is important to achieving social acceptance of their OW projects. To succeed, however, the timing of involvement is described as key. The earlier the local community is involved, the more flexibility is left for the planning process to be modified in collaboration with the local community. The responsibility of involving the local communities early on is particularly placed upon public authorities by the representatives of the three OW projects. However, Project C highlights that WDs have an important role to play, not least in terms of hiring liaisons at an even earlier stage. Furthermore, all three WDs see local community involvement as a balancing act that entails trade-offs related to their OW projects' commercial success, their ability to deliver upon promises of betterment, timely development of the OW project, and ensuring that involvement is targeted at those it matters for and when it matters.
Provide access to their	The findings indicate that Projects A, B and C provide access to their planning processes by providing information and consulting their local communities for advice. Despite all three

planning processes through procedurally just types of involvement. WDs having created partnerships with the local communities, these are assessed to not fulfil the requirements for a partnership according to the LCP framework. The reason is that the WDs' descriptions of their partnerships do not indicate that planning and decision-making responsibilities are shared through organised structures such as planning committees. Moreover, delegating decision-making power is deemed unfeasible across all three OW projects. Consequently, according to the LCP framework, the three WDs do not provide access to their planning processes through procedurally just types of involvement.

Source: Author's work.

4.4 Trust

Trust is the local community's belief that the WD's intention of constructing and operating an OW project is in the local community's best interest. Guided by the COT framework, this section answers RQ3 on how the three WDs perceive the importance of building trust with local communities to achieve social acceptance of their OW projects and in what ways they believe trust is built. Sub-section 2.2.2 operationalises how trust is built according to the COT framework.

4.4.1 The perceived meaning of trust and its importance for social acceptance

Trust connects to honesty for many of the representatives across the three WDs. All interviewees from A JV describe trust as providing honest answers to the local community's concerns and requests. Similarly, fisheries- and external affairs liaisons B2, B3 and B9 perceive trust as ensuring honesty towards the local community. Community liaisons A4 and B2 provide an additional perspective on trust, namely that it is about the ability of WDs to understand and respect the local community's culture and put themselves in their shoes. B2 exemplifies this ability by describing how Project B does not place public meetings for the fishermen late in the week because it would be disrespectful, as the fishermen would have worked more than 100 hours then. Marine affairs liaison B6 provides a different perspective on what trust is. To them, OW is an emotional topic for many fishermen who see OW as a risk towards their livelihood. In that context, B6 describes trust as the ability to have conversations with the fishermen based on facts and not emotions. For example, B JV has created a three-dimensional digital tool for the fishermen, which aims to enhance their spatial awareness when navigating at sea and between Project B's wind turbines rather than solely looking at the turbines' locations on a twodimensional map. Combining both perspectives of trust, fisheries liaison C7 describes trust as the ability to agree to disagree with the fishing community and have honest and civil conservation.

Regarding the importance of building trust for social acceptance, B6 describes it as key. The same goes for Projects A and C, where community liaison A4 sees it as highly important, and fisheries liaison A1 describes how they continuously push A JV to disclose as much information as possible to ensure honesty and transparency with the local community. All interviewees from C JV describe trust as highly important to achieve social acceptance and 'what it really is all about' (C10, 14.03.2024). More specifically, C10 believes that Project C has had some success in terms of social acceptance because all of C JV's liaisons have a pre-established trust with the fishing community. External affairs liaison C8 perceives trusts as 'everything' for social acceptance (C8, 11.03.2024) and emphasises the importance of working with and growing up with the elected officials connected to Project C. As described in sub-section 4.2.2 on a confidential two-way communication stream, fisheries liaison C7 emphasises that building trust with the fishing community increases the fishermen's willingness to share important information that would

otherwise be withheld, such as how the ocean's currents distribute the sand bottom differently over time, which in turn can affect the stability of the OW farm's foundation.

4.4.2 How trust is built and the importance of all nodes to achieve social acceptance

This sub-section follows the COT framework and assesses the way in which WDs believe the local community's trust is built with the liaisons, their WDs, the planning processes of their OW projects, and the OW projects themselves. In addition, the paragraph on the planning process highlights the interconnectedness between procedural justice and trust that emerged from the findings. Last, this sub-section addresses the importance of building trust in all nodes to achieve social acceptance before extracting whether maintaining trust over time is challenging.

Distinguishing between the four nodes of trust

Following the adapted COT framework, which was illustrated in a modified version during the interviews as a prompt (see Appendix 2), a clear majority of the interviewees from across the three OW projects agree there is a logic in distinguishing between the four different nodes of trust, namely the local community's trust in the interviewees themselves, their organisation, the planning process of their OW project and the OW project. All interviewees, except fisheries liaison B3, believe building trust follows this sequence. B3 argues that building trust is not necessarily a linear process but rather trust being built simultaneously across all four nodes.

The liaison

As the initial step in building trust with the local community, multiple representatives across all three OW projects describe how having a pre-established network with the respective local communities helps build trust with them. As described in sub-section 4.2.2 on the role of fisheries liaisons, A1, and now also A11, describe how they both have a pre-established network within the local fishing community of Project A due to former jobs related to research in the maritime sphere. A1 highlights that because they have enhanced the opportunity for fishermen to work for Project A, they have further established trust with the fishing community. At Project B, fisheries liaison B2 is a former elected official, enabling them to become a "community influencer". B2's description of the role of a fisheries liaison supports the findings by Hall et al. (2013) and Dwyer & Bidwell (2019), who highlight the importance of WDs employing "local champions". These are often liaisons with a background from the specific area of a WE project.

As with A1 and A11, fisheries liaisons B3 and B6 have pre-existing relationships with large parts of the fishing community, and external affairs liaison B9 with elected officials and onshore communities. B6 further mentions that when B JV recruits new colleagues as marine affairs liaisons, they ensure that the candidates have previous experience with the commercial fishing industry to gain an in-depth understanding of the community. B9 notes that the best case is if you have someone from the local community who can say, *I grew up here'* (B9, 12.03.2024) and elevate the community's concerns to B JV's decision-makers. Echoed by all interviewees from C JV, fisheries liaison C10 describes building trust in the liaisons as more easily obtained because of their previous network and collaboration with their respective communities. C10 emphasises, in accordance with the COT framework, that it is important for WDs to consider this when hiring for liaison positions if they wish to build trust with the local community. External affairs liaison C8 describes how they came into the job with a pre-established trust within the community and now have to maintain it.

While these findings are robust and emphasise the relevance of the COT framework, one finding defies it. Community liaison A4 did not have a pre-established relationship with their

community, and A4 describes how their first challenge on the job was to admit that they were not from the local area where Project A made landfall. This finding is interesting, as both the literature review through Hall et al. (2013) and Dwyer & Bidwell (2019) and multiple interviewees across the three WDs strongly emphasise the importance of having a preestablished relationship with the respective local community. External affairs liaisons C8 and B9 specifically describe how they have both experienced community liaisons coming from outside a community and having to fight an uphill battle to gain trust in the first place and sometimes fail to do so.

The WD

Establishing trust in the WD is for fisheries- and marine affairs liaisons B3 and B6 about the fishing community believing that the development of Project B is done in a way that is in the community's best interest, which directly supports this thesis's definition of trust. The COT framework suggests three pathways for building trust with the local community: (1) hiring trusted community liaisons, (2) early and often involvement in the planning process, and (3) transparency regarding the WD's responsibility in the different parts of the planning process (Dwyer & Bidwell, 2019).

On the first path, representatives from all three projects describe how they believe that the trust established in themselves as a liaison translates directly into the second node of the local community also trusting the WD. One example emphasising this broadly mentioned viewpoint is fisheries liaison B2, who argues that building trust between B JV and the local community would be much harder had it not been for the locally trusted liaisons working for Project B. All liaisons from Project A and fisheries liaisons C7 and C10 emphasise the importance of the liaisons. They describe that C IV can build trust as an organisation through, for example, seafood donation initiatives. However, it is essentially a team effort by the fisheries liaison team that interacts with the fishermen and increases trust in C JV. On the second path, reviewing subsection 4.2.2 on working with social acceptance and 4.3.1 on the timing of involvement, it is clear that representatives of Project A, B and C believe that social acceptance requires early and often community involvement. B2 recalls that B JV began outreach several years before winning the lease for Project B, and community liaison C5 describes that Project C began involvement one and a half years before winning the lease. Fisheries liaison A1 also emphasises its importance and describes that if A JV had hired fisheries liaisons earlier on in the planning process of Project A, it would have secured more opportunities for community involvement.

The third pathway is communicating transparently about the WD's responsibility in the planning process, which is described across the three OW projects. Fisheries liaison C7 describes how C JV always presents a timeline of Project C's development to show where in the process they are and when the respective stakeholder can expect changes. Marine affairs liaison B6 exemplifies that Project B sends out a bi-weekly briefing to the fishing community via e-mail, which was an idea from the community. In this newsletter, the fishermen can see where Project B operates and avoid clashes at sea. A1 also sees the importance of communicating clearly about the planning process. They raise criticism against A JV for not properly responding to the fishermen's feedback and being unable to tell them why changes occur to the parts of the planning process that A JV is responsible for. As all three liaisons representing Project A suggest that the trust in themselves translates into trust in A JV, this latter finding provides a nuanced view, which follows the COT framework in that it suggests establishing trust in A JV requires working on more aspects than trust in the liaisons.

The planning process

The planning process of an OW project is where trust and procedural justice interconnect, and across all three OW projects, the 11 representatives emphasise this relationship. This paragraph will, therefore, explore the interconnectedness between the two factors before proceeding with an analysis of trust in the planning process.

Fisheries liaison C7 describes that the interconnectedness of procedural justice and trust can be considered a chicken and egg dilemma, i.e., whether trust- or involvement in the planning process comes first. C7 describes it as 'it's sort of difficult to think about where one begins and the other one ends' (C7, 08.03.2024). This dilemma is exemplified by community and fisheries liaisons C5, C10 and A11, who argue that if a local community is not involved in the planning process, they will not be able to trust it. In contrast, C7 suggests that as trust builds, the local community becomes more willing to be involved in the planning process. Marine affairs liaison B6 supports this point and argues that the more trust, the more community involvement will occur. External affairs liaison B9 echoes this viewpoint and highlights its relevance through an experience with a now cancelled OW project. The project that B9 refers to did not fail because of a lack of involvement but because the local community never trusted the planning process in the first place. Fisheries liaison A1 furthermore describes that if the local community does not trust that you, as a liaison or WD, are going to act upon their suggestions and implement these, the community will not see a point in being involved in the planning process and working with the WD and would 'go back into their corners and just sling mud or throw bombs at each other' (A1, 27.02.2024). Essentially, the representatives across all three OW projects see an apparent interconnectedness. However, the findings do not reveal a clear answer to whether trust- or involvement in the planning process comes first.

Regarding trust in the planning process, all 11 interviewees view it as the most challenging and complicated node in the COT. Following the COT framework, for a WD to build trust in this node, it requires (1) genuine opportunities for the local community to provide input and (2) ensuring the implementation of the local community's input.

Several interviewees emphasise the role of public authorities such as the federal agency BOEM and state-level authorities. Fisheries liaison B3 emphasises that trust in the planning process requires that the local community trusts that the process is fair. External affairs liaison B9, however, describes how US citizens, in general, have very low trust in the planning process of OW because it is, to a large extent, dominated by these public authorities. Marine affairs- and fisheries liaisons B6, B3, C7, A1 and A11 echo this and describe that the fishing community, in particular, has a low trust because, despite their participation in public hearings on upcoming OW projects, there is a perceived lack of results and implementation from these. The importance of implementation connects directly with the COT framework's second requirement for building trust in the planning process. Fisheries liaison C10 believes that while the public authorities want to involve the local community and establish trust, they often fail due to a lack of resources. Furthermore, C10 describes that BOEM is relatively new on the US northeast coast. In contrast, the federal authority has been present in the Gulf of Mexico for a long time due to offshore drilling after fossil fuels. C10 believes that while trust in BOEM is currently a weak link in trusting the planning process, it will improve over time as the local communities get to know it. A1 describes that right from the first day at A JV, they knew that a distrust in BOEM would occur because it had drawn up lease areas for OW projects in locations where fishermen had their licenses to fish revoked on environmental grounds.

These findings suggest that the parts of the planning process in which BOEM and state-level authorities are the primary drivers often fail to implement the local community's suggestions

despite providing the opportunity for them to deliver input. This finding, however, will need to be verified by future research focusing on the public authorities or the local communities.

Fisheries- and marine affairs liaisons A1 and B6 point out their responsibility, as a WD, in building or repairing the local community's trust in the planning process. B6 argues that B JV tries to assist BOEM in increasing the local community's trust in the planning process. However, due to the low trust in BOEM, B JV wishes to minimise their association with the federal authority because it risks hurting B JV's trust within the commercial fishing industry. While A1 also acknowledges the role of A JV, they argue that it has often failed to repair trust in the planning process, as it has failed to fully implement the fishing community's knowledge and suggestions into Project A.

The findings on the planning process carve up a clear divide between what BOEM and the respective state-level authority are responsible for vis-a-vis the WDs' responsibility. Fisheries liaison A11 believe that the fishermen's trust in the planning process varies depending on whether it is federal, state or WD-driven parts. Similarly, community liaison C5 argues that there is a difference between who is responsible for the planning and development phase, i.e., the public authorities, and the actual project, i.e., C JV. Fisheries liaison B3, therefore, believes that trust in the planning process ought to be split up into at least two parts. One focuses on the federal and state-driven parts, and the other focuses on the WDs when they have obtained a lease area and are increasingly in control of the planning process. These findings are interesting in light of the COT framework, which depicts the planning process as one combined node in its original form. These findings suggest, however, that future research that applies the COT framework may be well off if they separate the planning process into multiple nodes, and in the context of the US, one for BOEM, one for the state-level authority and one for the WD itself. This separation of the planning process node would ensure a higher granularity in assessing where issues with trust in the planning process occur and provide indications on how to address these. As such, a more holistic approach is needed to include the relevant perspectives of BOEM, the state-level authorities and the respective local communities.

As a final point, marine affairs liaison B6 argues that while trust in the planning process would be valuable to achieve social acceptance, Project B has successfully gone into operation despite a low trust in BOEM. Similarly, external affairs liaison B9 argues that even though there, in theory, might be a good planning process, because of the low trust in the federal government in the US, local communities will not necessarily trust the planning process in practice. Much like B6, B9 suggests focusing on the other nodes of trust. Similarly, fisheries liaison C7 believes it will be challenging to increase trust in the parts of the planning process primarily controlled by BOEM or state-level public authorities. For that reason, C7 believes that the core focus areas should be on how C JV interacts with the local community and how it addresses their concerns. These findings are to be understood in light of Project B's successful operation and, thus, less affected by trust in the planning process on the parts where BOEM and state-level authorities are in charge. Nevertheless, it provides a theoretically interesting perspective on the COT, questioning the practical possibility of even building trust in the planning process in a US context.

The OW project

According to Dwyer & Bidwell's (2019) findings on the COT, trust in the OW project requires the WD to establish a sense of co-ownership with the local community and the possibility for them to provide input throughout the lifetime of the OW project. However, the authors also find that WDs believe that pre-established trust in themselves can be enough to secure trust in the OW project (Dwyer & Bidwell, 2019).

This thesis's findings emphasise the latter point. However, none of the 11 interviewees across the three projects mention the importance of the two requirements suggested by the COT framework. Community, fisheries- and marine affairs liaisons A4, A1, A11 and B6 all highlight that trust in the OW project depends on the trust in the prior nodes. More specifically, B6 believes that trust in Project B goes back to whether there is trust in the marine affairs team and B JV as an organisation and is, therefore, not seen as an essential node in the trust continuum. A1, A4 and A11 also believe that trust in the liaisons, followed by trust in the WDs, translates into trust in the OW project. Dwyer & Bidwell (2019) argue that the reason for this may be that WDs have, at this point in the COT, demonstrated that they deserve to be trusted. A second factor of trust in the OW project arises as an emergent theme. External affairs- and fisheries liaisons C8, B3 and B2 describe the relevance of time, where C8 argues that the local community will come to accept Project C once it is in operation. B3 highlights that if the turbines fall down two days later, it has all been for nothing. B2 makes a similar point, trust in Project B depends on time. This perspective suggests that the WDs believe that trust in the OW project also depends on time.

Is trust in all nodes needed to achieve social acceptance?

The COT framework suggests that if a WD establishes trust throughout all nodes, a local community may ultimately accept or even support an OW project (Dwyer & Bidwell, 2019). When asked whether the representatives from the WDs agreed with this point, their response is nuanced. All interviewees from C JV believe that trust within all four nodes is important to achieve social acceptance of Project C. Community liaison C5 describes that this is especially because of the nascency of the OW industry in the US, where local communities are yet to understand and ultimately build trust with the technology. Community liaison A4 makes a similar point about the fact that the OW industry is nascent in the US and is, as such, required to prove a lot in order to obtain trust from the local communities. Both A4 and fisheries liaison A11, therefore, believe that trust in all four nodes is needed to achieve social acceptance. The representatives of Project B provide a more nuanced answer. Fisheries liaison B3 believe trust is needed at some level within all nodes to achieve social acceptance. In contrast, as highlighted in the paragraph above on trust in the planning process, fisheries- and external affairs liaisons B6 and B9 highlight that social acceptance of Project B has been achieved even without complete trust in the planning process, but solely in the other three nodes. If correct, this finding has theoretical implications for the COT framework. However, this thesis cannot assess whether Project B has achieved social acceptance. To do so requires in-depth data gathering and analysis from the local community's perspective.

Maintaining trust over time – a challenge or not?

As the representative of onshore community liaisons of Project A, A4 does not believe that maintaining trust will become a challenge throughout the lifetime of Project A. In contrast, A1 and A11, both fisheries liaisons, describe a risk of losing trust in Project A if A JV fails to fulfil the promises made to the fishing community. Their opinion indicates a clear contrast between the two types of local communities. It reemphasises A1's argument delivered in sub-section 4.2.2 on working with different communities, that the onshore community is disturbed for a relatively shorter period of time compared to the fishermen. A1 and A11, therefore, believe that maintaining trust will not only become a challenge but is an important part of the operations and maintenance phase.

Project B highlights the same contrast between the onshore- and fishing communities. External affairs liaison B9 believes that maintaining trust will not become a challenge during the operation and maintenance phase due to hard work throughout the planning process. Coherent with A1 and A11, marine affairs liaison B6 argues that maintaining trust is and always will be a challenge, emphasising that 'trust is hard to build, and it is easy to lose' (B6, 07.03.2024) as also found in the

literature review. Fisheries liaison B2 also believes that it will become a challenge because of the anti-OW movement in the US, spreading misinformation about OW online, such as how it kills whales. Fisheries liaison B3 emphasises that maintaining trust depends on factors such as the political divide in the US, where some political parties do not support OW. B3 argues that despite Project B working as intended, the people opposing OW will always disregard it as a good thing. In essence, B3 states that maintaining trust depends on 'the ability to refute disinformation' (B3, 29.02.2024).

In contrast to the two other projects, Project C is at an early stage of the planning process. Hence, the question presented itself as hypothetical for interviewees from C IV. While all interviewees deem it important to work to maintain trust continuously, there is a nuance to whether it will become a challenge or not. Fisheries liaison C7 believes that maintaining trust is a challenge in the long run and will depend on whether C JV follows through on its commitments to the local community, which directly aligns with A1 and A11's points. A concrete example is that C JV promises to continuously involve the fishermen in monitoring and research programmes at sea. However, this is potentially at risk because federal authorities are increasing commercial fishing vessels' health and safety standards. In practice, these fishermen would need additional training and certificates to continue their involvement in the research programmes. Fisheries liaison C10 believes that maintaining trust is a challenge but does not expect it to be as challenging as obtaining trust in the first place. Following A4 and B9, external affairs liaison C8 does not foresee that maintaining trust will become challenging if C IV continues to be honest and transparent towards the local community and elected officials. A4, B9 and C8's perspectives are interesting, as they highlight a potential difference between maintaining trust with a diverse group of community members, such as fishermen, citizens and elected officials.

4.4.3 Key findings for research question 3 on trust

Table 4-3 below provides an in-depth breakdown of RQ3 in the left-hand column and a detailed answer to RQ3 in the right-hand column.

Table 4-3. Summary of the findings for RO3

Breakdown of RQ3	RQ3: How do these wind developers perceive the importance of building trust with local communities to achieve social acceptance of their offshore wind projects, and in what way do they believe trust is built?
Importance of building trust to achieve social acceptance	The three WDs perceive building trust as key to achieving social acceptance of their OW projects. The perception of trust centres around being honest with the local community throughout all aspects of the planning process. Trust is also the ability to understand and respect the local community's position and ways of working. For two liaisons, trust is furthermore about having a factual debate with the fishing community and not letting emotions control the conversation.

In what way trust is believed to be built All interviewees agree on distinguishing between the four nodes of trust as presented by the COT framework. All but one interviewee describe it as a sequential process, initiating with trust in the liaison, then the WD, followed by the planning process, and last in the OW project. However, the findings on trust in the planning process and OW project suggests relevance of rethinking the nodes and sequence of the COT.

Trust in the liaison: All but one of the liaisons interviewed have a pre-established connection or network within the respective local community they work with. According to the literature review, the COT framework, and the interviewees themselves, this is the key to building trust in the liaisons. As Hall et al. (2013) argue, WDs should aim to employ local champions.

Trust in the WD: The COT framework presents three pathways to obtain trust in the WD: (1) hiring trusted community liaisons, (2) early and often involvement in the planning process, and (3) transparency regarding the WD's responsibility in the different parts of the planning process. All three pathways are described and acknowledged across the three WDs. In particular, the first pathway, trust in the liaisons themselves, is highlighted by several interviewees as the basis for trust in the WD overall.

Trust in the planning process: All interviewees across the three OW projects view trust in the planning process as the COT's most challenging and complicated node. There is a general understanding that in the US, citizens have low trust in federal and state-level authorities, particularly the fishing community on the northeast coast. The fishing community's low trust arguably stems from the minimal implementation of their suggestions and concerns, which directly supports the COT framework's point of the importance of implementation to build trust in the planning process. Furthermore, the findings suggest that future research that applies the COT framework may be well off by dividing the node on the planning process into distinct parts. This is to highlight the potential difference between the local community's trust in the actions taken by the WDs vis-à-vis public authorities during the planning process.

Trust in the OW project: None of the representatives across the three OW projects touches upon the COT framework's factors for establishing trust in the OW project, i.e., (1) create a common sense of ownership with the local community, and (2) allows for the opportunity for continuous revision and input beyond the planning process. Instead, the findings indicate that building trust in this part of the COT depends on the initial trust built with liaisons and the WD. Additionally, Projects B and C describe that time will reveal whether there is trust in their OW projects. This indicates a potential need for rethinking the sequence of the COT.

Importance of building trust in all nodes to achieve social acceptance and the challenge of maintaining trust over time While the COT framework suggests that trust within all nodes can lead to social acceptance of an OW project, the responses are nuanced across the WDs. Projects C and A believe this is indeed needed, whereas Project B argues that trust in the planning process is less required, emphasising their success despite low trust in federal and state authorities.

Whether maintaining trust over time is a challenge is divided between liaisons focusing on the onshore and fishing community. The community and external affairs liaisons do not believe it will become a challenge. In contrast, the fisheries liaisons see it as something that must be worked on continuously to be maintained,

manifesting that 'trust is hard to build and it is easy to lose' (B6, 07.03.2024). This
interesting finding highlights the importance of distinguishing between the type of
community with which a WD interacts.

Source: Author's work

5 Discussion

The following chapter discusses the findings in section 5.1 in light of a reflection on theoretical contributions and practical implications. Section 5.2 discusses the theoretical choices' limitations and how they affect this thesis's findings.

5.1 Reflections on theoretical contributions and practical implications

Reflections on theoretical contributions

Within the literature on social acceptance of WE, few researchers use theoretical frameworks to guide their data collection process (Bessette & Crawford, 2022; Rand & Hoen, 2017). Furthermore, an extended focus on when and how to best focus on procedural justice and trust in the planning process is relevant for both the WE industry and academia to achieve social acceptance (Rand & Hoen, 2017). This thesis addresses these gaps by applying Arnstein's (1969) LCP framework on procedural justice and Dwyer & Bidwell's (2019) COT framework on trust for the data collection and analysis. Doing so results in multiple theoretical contributions that are worth noticing for future research.

The Ladder of Citizen Participation

The LCP framework plays a significant role in answering the second part of RQ2, which concerns whether the WDs provide access to their planning processes through procedurally just types of involvement. Like Jami & Walsh (2017), this thesis finds that all three WDs provide access to their planning processes by ensuring information and consulting the communities for advice. The WDs, however, restricted to these types of involvement, do not provide access to their planning processes through procedurally just types of involvement, i.e., partnerships or delegation of decision-making power. Delegating decision-making power is perceived as a balancing act for all three WDs due to their inherent commercial nature. As Bidwell (2016) describes, *It may be unrealistic to expect private developers or their investors to put their fate in the hands of the public...* (Bidwell, 2016, p. 3). Combined with findings by Jami & Walsh (2017), this thesis's findings emphasise the applicability and relevance of the LCP framework and thus act as a theoretical contribution.

A second theoretical contribution is the LCP framework's use and definition of partnerships. This thesis finds a high discrepancy between what WDs believe to be partnerships and what partnerships entail, according to Arnstein (1969). All three OW projects highlight partnerships as informal actions such as donation programmes to the local community or collaboration with fishermen regarding the minor design details of the OW turbines. According to the LCP framework, however, partnerships require local community members to be able to organise themselves in joint planning committees with the WDs and, from that, create a position to negotiate with them. In the context of the fishing community on the Northeast coast, several fisheries liaisons describe that it consists of individual businesspeople competing against each other and, thus, has little room for organisation. An updated terminology on partnerships could benefit future researchers' ability to test whether the WDs create a platform for joint negotiations with the local communities.

The Chain of Trust

The COT framework plays a crucial role in assessing how WDs believe trust is built, as part of this thesis' RQ3. A core theoretical contribution is that this thesis's findings support Dwyer & Bidwell's (2019) suggestions as to how trust is built. Both in terms of reconfirming the different nodes of trust and the sequential flow of the COT. As the three studied OW projects are in the

same geographical context as the BIWF project, from which the COT framework is developed, the findings contribute to an increased generalisability of how trust is built for OW in the northeast US.

A second theoretical contribution arises from the node on trust in the planning process. Here, trust depends on the WD's ability to offer opportunities for the local community to provide input and ensure that these are ultimately implemented (Dwyer & Bidwell, 2019). The findings, however, indicate that this is a challenging process due to the split in responsibility of the planning process between federal and state-level authorities on the one hand and WDs on the other. While Dwyer & Bidwell (2019) find a similar split in the BIWF project, they do not include it as an underlying factor of trust in the planning process. In contrast, this thesis's findings, including those from RQ2, suggest that future researchers might better assess trust in the planning process if they split up the node. Splitting up this node would emphasise the difference between a local community trusting the process under federal and state-level authorities versus the WDs. Following this logic, future research may aim to rethink the sequence of the COT. To clarify, early involvement is critical to address community concerns, and the federal government, through BOEM, is responsible for the planning process from the beginning. From a timing perspective, building trust in the earliest parts of the planning process, therefore, evidently begins before the WDs enter the picture, hire liaisons and involve the local community. Rethinking the sequence of the COT framework could have positive strategic implications for both federal and state-level authorities and WDs and strengthen their work on building trust to achieve social acceptance of OW.

A last theoretical contribution from the findings emerges from the last node of the COT framework, trust in the OW project. None of the three OW projects highlight the points that the COT framework describes as a requirement to establishing trust in this last node. Whereas Dwyer & Bidwell (2019) operationalise trust in the OW project as a WD's ability to establish a shared sense of ownership and allow for continuous revision and input from the local community, the findings illustrate that WDs at large perceive trust in the OW project to be dependent on trust in the liaisons and the WD. From the WDs' perspective, this suggests that the sequence towards achieving social acceptance might not be linear and connects to rethinking the COT framework's sequence. Further research will provide important practical implications for those working with social acceptance.

The interconnectedness between procedural justice and trust

As demonstrated throughout the findings in the literature review and analysis, procedural justice and trust are two highly interconnected factors of social acceptance (Dwyer & Bidwell, 2019; Rand & Hoen, 2017). As a theoretical contribution, this thesis visualises their interconnectedness in Figure 5-1 below, guided by the LCP and COT framework.

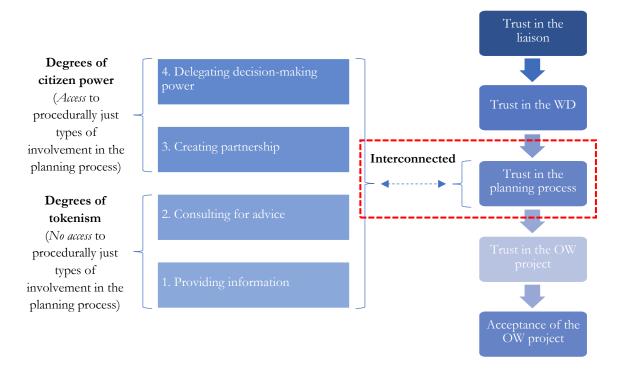


Figure 5-1. Interconnected factors of social acceptance

Source: Adapted from Arnstein (1969) and Dwyer & Bidwell (2019)

The red-dashed box in Figure 5-1 above highlights a two-pointed arrow that illustrates the interconnectedness between procedural justice and trust but also presents a chicken and egg dilemma. This dilemma arises when the findings of the three OW projects are compared. While some representatives believe that a local community will not trust the planning process if they are not involved, others argue that trust must first be built for the local community to be involved willingly. This thesis furthermore asked whether the specific type of involvement affects the local community's trust in the planning process. However, none of the interviewees describe or argue that a specific type of involvement builds trust in the planning process. While these are significant findings, further testing the interconnected relationship between procedural justice and trust in the planning processes of OW projects may have important implications for both the types of involvement WDs apply and how they build trust in their planning processes.

Reflections on practical implications

With the relative nascency of the US OW industry, the timing is ideal to explore the various approaches that WDs have to local community involvement and compare these (Bidwell, 2016; Bingaman et al., 2023). Through answering RQ1 on how the three WDs perceive and work with social acceptance, this thesis provides significant practical insights for the WD industry and academia.

The findings support several themes highlighted by the literature as relevant to achieving social acceptance. First, there is an important distinction between social acceptance, a passive way of accepting an OW project, and social support, which requires active backing, often expressed vocally (Batel et al., 2013; McCauley et al., 2019; Petrova, 2013). Second, early and often involvement is critical to avoid misinformation about OW (Corscadden et al., 2012; Jami & Walsh, 2017). Third, a two-way communication stream facilitates improved involvement (Bingaman et al., 2023; Dwyer & Bidwell, 2019; Hall & Lazarus, 2015), and last, informal actions

constitute a significant part of the daily work of liaisons to enhance trust and achieve social acceptance (Dwyer & Bidwell, 2019).

The analysis, however, also brings forth emergent themes. First, representatives from all three OW projects describe an informal collaboration between the WDs on a fisheries- and marine affairs level. The collaboration aims to share learnings among the liaisons, avoid stakeholder fatigue among the fishing community and establish best practices on a regional level. This finding is particularly relevant, as the analysis furthermore suggests that the fishing community often perceives WDs as one large entity, and thus, risk affecting the trust and reputation of each other. For WDs pursuing OW projects on the US Northeast coast, these findings can have important practical implications for their work on building trust and achieving social acceptance. A second practical implication that emerges from the findings is that OW in the US is a politically dividing topic. The current Democratic President Joe Bid, who has set ambitious targets for OW, and former President and Republican nominee for the November 2024 Presidential elections, Donald Trump, who promises to halt OW if re-elected, clearly exemplifies the divide (Milman, 2024; White House, 2021). In practice, the next Presidential election will most likely have direct consequences. Both financially for the WDs planning, constructing or operating US-based OW projects, and particularly for the general social acceptance of OW across coastal communities, regions and states in the US.

Although only mentioned by one interviewee, a third practical implication for WDs is how there might be a significant difference in working with social acceptance within different types of local communities. The finding suggests that fishermen require more attention beyond the planning process, in contrast to onshore communities. This finding is, however, somehow supported by all three OW projects in that several fisheries liaisons believe that maintaining trust with the fishing community is a challenge beyond the planning process. This is in contrast to those liaisons working with the onshore communities who do not see maintaining trust as a challenge beyond the planning process. Despite its importance, local community involvement is seen as a balancing act for the studied WDs and represents the last practical implication for WDs. A balance consisting of potential trade-offs related to securing commercial success of OW projects vis-à-vis delegating decision-making power, making promises of betterment for the local community while risking the ability to deliver upon these due to unforeseen macroeconomic forces, and attempting only to involve those it truly matters for and when it matters. As these trade-offs are not expressed as geographically connected to the Northeast coast, they seem to represent a broader set of practical implications for WDs operating in the sphere of OW in general.

5.2 Limitations

While social acceptance consists of three dimensions, this thesis focuses on social acceptance of OW within local communities (Wüstenhagen et al., 2007). Consequently, the findings provide a narrow insight by focusing on the perception and work with social acceptance related to onshore and fishing communities. This thesis could have provided a more holistic view of social acceptance by including the two remaining dimensions of socio-political acceptance (policymakers and the general public) and market acceptance (consumers, investors, intrafirms). Nevertheless, simplifying the phenomenon of social acceptance allows for a streamlined approach to the data collection process for relevant interviewees and essentially provides a more precise result. While relevant, including socio-political and market acceptance risks blurring the important details of the individual ways of working with social acceptance.

This thesis draws inspiration from Jami & Walsh (2017) and simplifies Arnstein's (1969) LCP framework on procedural justice. The simplification entails a deselection of degrees of "non-participation" level and specific types of involvement within degrees of tokenism and citizen

power. As a result, the data collection process and analysis restrict themselves to degrees of tokenism and citizen power with fewer nuances between the different types of involvement. While this potentially results in fewer details on the types of involvement and how the WDs work with these, Arnstein (1969) also recognises that the framework from the beginning simplifies reality and that many types of involvement overlap depending on the context. Degrees of non-participation are removed since it is legally required to involve local communities in planning processes in the US (Dwyer & Bidwell, 2019). Such deselection should not occur by default as other geographical contexts may operate under another legal framework that does not require local community involvement.

On trust, this thesis adds trust in liaisons as a separate node in the COT. This separation may have disproportionately increased the emphasis on the importance of the role of liaisons and their significance for building trust in the remaining nodes of the COT. However, adding this node on liaisons enhances the answer to RQ3 by extracting specific knowledge on the liaisons' perceptions of and ways of working with building trust and social acceptance.

6 Conclusion

In a world where mitigating climate change may not always seem to be on top of the global agenda, more than 130 governments recently agreed at the United Nation's 28th Conference of the Parties in Dubai to triple the global capacity of renewable energy by 2030 as a step towards phasing out and ultimately replacing fossil fuels (UNFCCC, 2023). OW is an important energy source in the continuum of renewable energy technologies (IEA, 2019). The US has set ambitious targets of 30 GW OW by 2030 (White House, 2021). However, with six years left to 2030 and less than 1% of the capacity installed, time is of the essence to advance social acceptance (Oceantic Network, 2024). While social support of OW would be preferred from the perspective of timely reducing greenhouse gas emissions, it seems challenging, if not impossible, to achieve across the millions of US citizens living in a highly politicised and divided environment on the topic of OW. In contrast to the Democratic President Joe Biden's OW targets, the former President and Presidential candidate, Donald Trump, has recently fuelled the social opposition to OW on the Northeast coast of the US, promising to halt the development (Milman, 2024; Selig, 2023; Shankman, 2024). With 40% of the US population living in coastal regions, the 2024 Presidential election is, therefore, likely to have direct implications for both the WDs with presence in the US as well as for the general social acceptance of OW across the coastal communities, regions and states of the US (NOAA, 2024).

In this context, this thesis aims to explore and understand the phenomenon of social acceptance of OW and the underlying factors of procedural justice and trust. This is done from the perspective of WDs with OW projects on the Northeast coast of the US. An initial literature review provides a comprehensive understanding of social acceptance, procedural justice and trust. Two theoretical frameworks, one for procedural justice and trust, respectively, guide the analysis to address the three overarching RQs of this thesis adequately:

RQ1: In what ways do wind developers with presence on the Northeast coast of the US perceive and work with social acceptance within the context of their offshore wind projects?

RQ2: What are these wind developers' perspectives on the importance of local community involvement in the planning process of their offshore wind projects to achieve social acceptance, and do they provide access to their planning processes through procedurally just types of involvement?

RQ3: How do these wind developers perceive the importance of building trust with local communities to achieve social acceptance of their offshore wind projects, and in what way do they believe trust is built?

Through interviews with 11 liaisons across three WDs and their respective OW projects, this thesis provides nuanced and insightful findings to the three RQs. In response to RQ1, WDs perceive social acceptance as a scale ranging from opposition to acceptance and support. Social acceptance itself is perceived as a local community passively accepting an OW project. Social acceptance is thus distinct from social support, which the WDs describe as a vocal expression of backing their OW projects. From the liaisons' perspectives, working with social acceptance revolves around educating the local community on OW and establishing factually-centred conversations instead of trying to convince them. Early and often involvement, a two-way communication stream, informal and formal interactions, cross-collaboration among WDs, politically bipartisan work, and the awareness of different types of communities are deemed important when working to achieve social acceptance.

On RQ2, WDs believe that involving the local community in the planning process of their OW projects is important to achieve social acceptance. Appropriately timing the involvement is

particularly important since early involvement increases the flexibility of potential modifications within the planning process. While the WDs perceive the responsibility of involving the local communities to be shared, they suggest that a significant part of the responsibility is on the shoulders of the public authorities governing the planning process. Despite the importance of local community involvement, the WDs see it as a balancing act that entails trade-offs related to their commercial success, their ability to deliver upon promises of betterment, timely development of their OW projects and ensuring that involvement is targeted at those it matters for. Regarding procedural justice, the findings indicate that Projects A, B and C offer access to their planning processes by providing information and consulting their local communities for advice. Despite all three WDs having created partnerships with the local communities, they lack organised structures that ensure the sharing of decision-making responsibilities per the LCP framework. Moreover, the WDs see delegating decision-making power to the local communities as unfeasible. Consequently, the three WDs do not provide access to their planning processes through procedurally just types of involvement.

In response to RQ3, WDs perceive building trust as critical to achieving social acceptance of their OW projects. From the liaisons' perspectives, trust relates to the WDs being honest with the local communities throughout the planning process. Trust is also the ability to understand the local community's situation and ensure that debates on OW are factual rather than emotional. Regarding building trust, the WDs largely agree with separating trust into four different nodes and the sequential process of building trust as per the COT framework. Building trust thus starts with the liaison, the WD, the planning process and ultimately, the OW project. However, through a theoretical discussion of the findings, they indicate that trust in the planning process might need to be split into separate nodes of trust to highlight the potential difference between the local community's trust in the actions taken by the WDs vis-à-vis the public authorities during the planning process. Additionally, the findings indicate that trust in the OW project depends on the prior nodes of trust in the liaisons and WDs. This suggests a potential need for rethinking the sequence of the COT.

These findings support existing literature and theories and suggest theoretical contributions and practical implications for future work on social acceptance, procedural justice and trust. As such, several pathways are laid out for future research in the following section to enhance the understanding of social acceptance of OW and ultimately support the renewable energy transition and mitigate climate change.

6.1 Future research

The theoretical discussion in section 5.1 on the COT framework suggests the possibility for future research to reevaluate the sequence of the framework. First, with a broadly recognised split in responsibility of the planning process between federal and state-level authorities and WDs, building trust in the early stages of the planning process may occur before building trust in the liaison and the WD. This rethinking of the COT framework can lead to significant theoretical contributions to building trust and achieving social acceptance. Second, the findings indicate that trust in the OW project primarily depends on building prior trust with liaisons and the WD rather than establishing a shared sense of ownership and opportunity for continuous revision, as proposed by Dwyer & Bidwell's (2019) findings. Future research can, therefore, delve into the question of whether trust is built sequentially or whether specific nodes are built at the same time.

On procedural justice and trust, the findings in the literature review and analysis emphasise their interconnectedness as factors of social acceptance. However, this thesis suggests a potential gap for future research to explore further if the specific type of involvement, and whether this is procedurally just, affects trust in the planning process. Further testing the interconnected

relationship between procedural justice and trust in the planning processes of OW projects may have important implications for both the types of involvement WDs apply and how they build trust in their planning processes. On a practical level, this thesis's findings suggest that future research can benefit from further exploring the informal collaborations between WDs on a regional level across fisheries- and marine affairs liaisons and its importance for achieving social acceptance. This research could provide critical insights on how to avoid stakeholder fatigue and thus potentially increase social acceptance among the fishing community.

7 Bibliography

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Appendices

Appendix 1 Interview guide

This interview guide is structure as (1) practical information regarding the interview, (2) opening remarks, (3) the overarching themes and their respective main questions and follow-up questions, and (4) closing remarks.

Date and time of interview: [...]

Name and title of interviewee: [...]

Organisation of interviewee: [...]

Offshore wind project: [...]

OPENING REMARKS

Thank you indeed for taking your time to participate in this interview today.

As a brief introduction to myself: My name is Bjarke, I am studying a MSc in Environmental Management and Policy at the University of Lund, Sweden. I invited you for this interview because I am researching social acceptance of OW in the US as part of my Master thesis, and I believe that it would be very interesting and important to get your perspective on this, with an outset in the [...] project.

Before starting our interview, I would like to highlight that your participation will be anonymised. I want to emphasise that only I will have access to any data retrieved from this interview and that I have ensured that it is securely stored in my OneDrive.

On that note, I would like to re-confirm that I am able to record this interview? (await answer and start recording if re-confirms).

Great, if you are cited directly, I will forward the citations for your approval.

Do you have any questions before we start?

Themes	Main questions	Follow-up questions
Introducing	To begin and gain some	What is your current role in the
the	background, could you please	organisation?
interviewee	introduce yourself in relation to	
and their role	your professional capacity?	
		How long have you worked within
		this field and on the [] project?

How the interviewee perceive and work with social acceptance within the context of their offshore wind project	In your role as [] on the [] project, in what ways do you work with social acceptance? Seen from your role, who are the local community, and how would you normally engage with them in relation to the [] project?	With your experience, would you differentiate between local community "acceptance" versus "support"? Why/why not?
How the interviewee perceive the importance of building trust with the local community to achieve social acceptance of their offshore wind project, and in what way they believe trust is built	On a daily basis, what does building "trust" with the local community mean to your work on the [] project? Does building trust require informal actions (i.e., not mandated by any policies and outside any hearing/comment periods)? [share screen "trust" image] Would you say there is logic in making a distinction between having to build trust between the local community and (1) yourself, (2) your organisation, (3) the planning process of the [] project, and (4) the offshore wind project? Why/why not? Beyond the planning process, is maintaining trust throughout the [] project a challenge? Why/why not?	Following this image, how would you say trust is built: sequentially, all at once, or a third way? How has it been built for the [] project? Is trust needed for all four aspects in order to achieve social acceptance?
How the interviewee perceives the importance of involving the local community in	In your experience, is involving the local community in the planning process important for achieving social acceptance of the [] project? Why/why not? [share screen "community involvement" image! Do you	When in the planning process of the [] project did you begin involving the local community? Following the "community involvement" image how would you
the planning process of their offshore wind project to achieve	involvement" image] Do you believe that there exist different types of involvement such as (1) providing information, (2) consulting the community for advice, (3) creating specific	involvement" image, how would you describe the local community's involvement in the [] project?

social acceptance, and whether they provide access to their planning process through procedurally just types of involvement	Is it important to communicate regarding what specific phases of the planning process and how the local community is involved? Why/why not?	Does the type of involvement vary across the different phases of the planning process [Planning & Analysis, Leasing, Site Assessment, Construction & Operation]? Why/why not?
Whether the interviewee believe that the type of involvement a local community experiences in a planning process affects the local community's trust in the planning process	Do you see "trust" and "community involvement" as interconnected factors in achieving social acceptance? How are they interconnected/why are they not? Is the local community's trust in the planning process dependent on the type of involvement they experience? (so how they are involved) why/why not?	
Other factors important for social acceptance	Has our conversation sparked any other factors of achieving social acceptance of the [] project that you would like to highlight?	

CLOSING REMARKS

I seem to have covered everything I need to ask but, is there anything else you would like to mention that we have not covered yet?

Thank you very much for your time and for sharing your insights with me on aspects of social acceptance.

As a last point, if you can think of anyone else I should talk to on this topic, such as [...], I would highly appreciate any help in extending an invitation for doing a similar interview with them.

Appendix 2 Interview prompts for trust and procedural justice

The following two figures were used as prompts for during all 11 interviews with the purpose of ensuring that the interviewees would fully comprehend the questions asked. The first prompt is used for the questions underneath the theme on "The role of trust in social acceptance", which is also clearly stated in the interview guide:

The local community's...

Trust in yourself

Trust in your organisation Trust in the planning process of the OW project

Trust in the OW project

Source: Author's work

The second prompt is used for the questions underneath the theme on "The role of local community involvement in social acceptance", which is also clearly stated in the interview guide:

Types of community involvement

Providing information

Consulting the community for advice

Creating specific partnerships

Delegating decisionmaking power

Source: Author's work

Appendix 3 Coding manual

Research questions	Codes	Sub-codes	Description of when to apply the codes
In what ways do wind developers	Perception of social acceptance		How the interviewee perceive what is meant with social acceptance in the context of OW
with presence on the Northeast	Working with social acceptance		How the interviewee work with social acceptance in the context of OW
coast of the US perceive and work with social	Social acceptance vis-a-vis social support	Social acceptance is different from social support	The interviewee sees a difference between social acceptance and social support in the context of OW
acceptance within the context of their offshore wind projects?		Social acceptance is similar to social support	The interviewee does not see a difference between social acceptance and social support in the context of OW
How do these wind developers	Understanding of trust		How the interviewee understands trust in the context of OW
perceive the importance of building trust with local	Perceived importance of building trust to achieve social acceptance	Building trust is important to achieve social acceptance	The interviewee sees the importance of huilding trust with the local community of the specific OW project to achieve social acceptance hereof
communities to achieve social acceptance of		Building trust is not important to achieve social acceptance	The interviewee does not see the importance of building trust with the local community of the specific OW project to achieve social acceptance hereof
their offshore wind projects, and in what way do they believe trust is built?	Informal actions	Use of informal actions to build trust	The interviewee uses informal actions to build trust with the local community. Informal actions mean actions that are not mandated by any policies from either the WD or a public authority
		No use of informal actions to build trust	The interviewee does not use informal actions to build trust with the local community. Informal actions mean actions that are not mandated by any policies from either the WD or a public authority
		Informal actions are important to build trust	The interviewee believes that using informal actions is important to build trust with the local community
		Informal actions are not important to build trust	The interviewee does not believe that using informal actions is important to build trust with the local community

	Logic in separating trust into four different nodes	There is logic in having trust in the liaison as a separate node	The interviewee believes that the local community's trust in the liaison (the interviewee themself) is a node of trust
		There is no logic in having trust in the liaison as a separate node	The interviewee does not believe that the local community's trust in the liaison (the interviewee themself) is a node of trust
		There is logic in having trust in the WD as a separate node	The interviewee believes that the local community's trust in the WD is a node of trust
		There is no logic in having trust in the WD as a separate node	The interviewee does not believe that the local community's trust in the WD is a node of trust
How trust is built		There is logic in having trust in the planning process of an OW project as a separate node	The interviewee believes that the local community's trust in the planning process of an OW project is a node of trust
		There is no logic in having trust in the planning process of an OW project as a separate node	The interviewee does not believe that the local community's trust in the planning process of an OW project is a node of trust
		There is logic in having trust in an OW project as a separate node	The interviewee believes that the local community's trust in an OW project is a node of trust
		There is logic in having trust in an OW project as a separate node	The interviewee does not believe that the local community's trust in an OW project is a node of trust
	How trust is built	Trust is built sequentially	The interviewee believes that trust is built sequentially (referring to the steps in the COT framework)
		Trust is built all at once	The interviewee believes that trust is built all at once (referring to the steps in the COT framework)
		Trust built another way	The interviewee believes that trust is built another way than what is referred to in the steps of the COT framework
	Importance of trust in all four nodes to achieve	Social acceptance requires trust in all four nodes	The interviewee believes that trust is needed in all four nodes of the COT framework to achieve social acceptance

	social acceptance of an OW project Maintaining trust beyond the planning process	Social acceptance does not require trust in all four nodes Maintaining trust is a challenge beyond the planning process Maintaining trust is not a challenge beyond the planning process	The interviewee does not believe that trust is needed in all four nodes of the COT framework to achieve social acceptance The interviewee believes that it will be/is challenging to maintain trust beyond the planning process, i.e., when in operation The interviewee does not believe that it will be/is challenging to maintain trust beyond the planning process, i.e., when in operation
What are these wind developers' perspectives on the importance of local community involvement in the planning process of their offshore wind projects to achieve social acceptance, and do they provide access to their planning processes through procedurally just types of involvement?	Importance of involving the local community in the planning process for social acceptance of an	Local community involvement in the planning process is important for social acceptance	The interviewee believes that involving the local community in the planning process is important for social acceptance
	OW project	Local community involvement in the planning process is not important for social acceptance	The interviewee does not believe that involving the local community in the planning process is important for social acceptance
	Types of local community involvement	There do exist different types of local community involvement	The interviewee believes that different types of local community involvement exists (referring to some of types from the LCP framework)
		There do not exist different types of local community involvement	The interviewee does not helieve that different types of local community involvement exists (referring to some of types from the LCP framework)
		Type of local community involvement in the interviewee's OW project	How the interviewee sees the types of local community involvement in their OW project.
	Type of local community involvement varies across the planning process	Type of local community involvement varies across the planning process	The interviewee believes that the type of involvement of the local community varies across the planning process of their OW project
		Type of local community involvement does not	The interviewee does not believe that the type of involvement of the local community varies across the planning process of their OW project

	Importance of communicating regarding what specific phase and how the local community is	vary across the planning process Communicating is important Communicating is not	The interviewee believes that it is important to communicate to the local community which specific phases of the planning process they are involved in, as well as the extent to which they are involved The interviewee does not believe that it is important
	involved	important	to communicate to the local community which specific phases of the planning process they are involved in, as well as the extent to which they are involved
Whether the interviewee believe that the type of	Trust and procedural justice as interconnected	Trust and procedural justice are interconnected factors	The interviewee believes that trust and procedural justice are interconnected factors of social acceptance
involvement a local community experiences in	factors of social acceptance	Trust and procedural justice are not interconnected factors	The interviewee does not believe that trust and procedural justice are interconnected factors of social acceptance
process affects community the local involved in to community's planning proces trust in the affects the local	The way a local community is involved in the planning process affects the local community's	The type of involvement in the planning process affects the trust in the planning process	The interviewee believes that the local community's trust towards the planning process is dependent on the type of involvement the local community experiences
process (not a RQ)	trust in it	The type of involvement in the planning process affects the trust in the planning process	The interviewee does not believe that the local community's trust towards the planning process is dependent on the type of involvement the local community experiences
Other factors of importance (not a RQ)		Other factors important for social acceptance	The interviewee believe that other factors are also relevant for social acceptance