Local energy innovators

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BEING A BETTER NEIGHBOR: A VALUE-BASED PERSPECTIVE ON NEGOTIATING ACCEPTABILITY OF LOCALLY-OWNED WIND PROJECTS

Abstract

We pose that instead of problematizing negative attitudes of local stakeholders, such as citizens and NGOs, wind energy implementers should be more focused on scrutinizing the acceptability of their projects. The emphasis in this study is on the potential for representation of local stakeholders' values in the project design, including amongst others business model and placement. Informed by value sensitive design literature, we analyzed two contrasting, locally-owned wind projects in the Dutch province of Groningen: the implementation of mini-turbines in a national landscape and a large-scale multi MW wind project in an industrialized area close to a World Heritage nature reserve. The study analyses how the respective farmer-developers and other local stakeholders attempted to resolve or ameliorate inter- and intra-value conflicts regarding livability, economy, landscape, and nature. The value conflicts turned out to be fruitful to identifying key issues and creating more widely shared value conceptualizations and design priorities. Hence, from this study it can be concluded that value conflict can be productive if carefully unpacked and managed. Uneven power distribution among stakeholders in the planning process, overcoming incommensurability of perspectives, and creating intersubjectivity remain challenges.

Keywords: value sensitive design; wind energy; local energy; social acceptance; acceptability.

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3.1. Introduction

In many European countries' energy policies, wind energy is an important means for realizing a transition to a sustainable energy system. However, frequently a main bottleneck to smooth implementation of wind energy is the lack of support of local stakeholders—such as local resident communities, landscape organizations, and environmental NGOs. This resistance has been described as a lack of social acceptance of a project [1] and has been much researched for over a decade. A synthesis of this work can be found in several reviews with varying focuses (e.g., geographic [2], community-ownership [3], and planning guidelines [4]) and in reviews of social acceptance of renewable energy technologies more generally (such as [5]).

Framing a lack of social acceptance as a problem invites problematization of resistance by local stakeholders to wind energy projects. Yet, instead of problematizing lack of acceptance, the wind energy projects themselves could be scrutinized. Project developers could ask themselves the question of whether they are behaving like a good neighbor: Do I design my project mindful of the other users of this area? Is the project acceptable to them, and if not, can I alter the design of my project to improve this?

In this paper it is argued that project developers should pay more attention to whether and in what way a wind project is desirable in a certain local context. A focus on the fit of a wind project with the values and interests of the local stakeholders shifts the stress from acceptance of a project design to acceptability of the very plans that need to be accepted by the impacted stakeholders.

This difference could be described as the difference between social acceptance and acceptability. Taebi characterizes social acceptance as the acceptation or mere toleration of a new technology, while he describes acceptability as a reflection on a new technology that takes into account the issues that emerge from its introduction [6]. Hence, by focusing on acceptability, the normative dimension concerned with the acceptability of the wind project to its local environment becomes central, and so do the value perspectives of and conflicts between the stakeholders in this environment. Thus, it brings in a more local, and therefore territorial, focus[7], stresses ex ante acceptability instead of ex post acceptance of a development [8], and goes beyond recommending process participation by putting inclusion of key values of local stakeholders at center stage [9].

Key within the acceptability perspective is the desirability of the process and outcome for all local stakeholders [10–12]. Gross has shown how that acceptability is influenced by

a combination of the perceived fairness of the process and the outcomes, as well as the favorability of the outcomes[12]. Hence, even if the process and outcomes are perceived to be legitimate, a lack of favorability of the outcomes of a project can make it unacceptable to local stakeholders.

We pose that resistance due to perceived unfavourability of outcome should no longer be dismissed as selfish not-in-my-backyard motives [10], but as an impetus to look at wind energy implementation more holistically, take the local context into consideration [11], and strive for better alignment between wind projects and their implementation environment [13].

Such alignment between the interests of turbine developers and other local stakeholders could lead to the design of more desirable, and so more acceptable, wind projects. In line with Oosterlaken, we hypothesize that designing locally desirable wind projects could speed up implementation in a morally acceptable way, and could thereby foster long-term support for wind farms [9]. Therefore, we are interested in analyzing how acceptability can be realized through a process of embedding outcome-related values of local stakeholders in the design of a wind project.

Previous research looking at responses to wind projects from a value point of view has described the values involved in wind energy development [14], theoretically explored the merit of value sensitivity [9], empirically analyzed the values represented in the physical and institutional design of offshore wind [15], and looked into the situatedness of value conflicts of onshore wind [16]. However, to our knowledge, no previous empirical research has put the focus explicitly on design attempts to make wind projects more sensitive to the values of local stakeholders and improve their acceptability, while a focus on design may have unused potential and could be a welcome addition to participative planning strategies.

Hence, we are specifically interested in which mechanisms exist to embed local values in wind energy projects, and how value sensitivity can affect the acceptability of locally-owned wind projects and reduce value conflicts. Therefore, our central question is:

How can wind projects be made sensitive to the values of local stakeholders by integrating them in project design?

To answer this question, we use concepts from Value Sensitive Design as a heuristic framework, which can be used to analyze a design for values, value conflicts, and trade-offs between

values [17]. A strength of VSD is that it responds to the need for moving beyond conceptual accounts of values and towards the development of practical applications informing energy and planning practices [17].

An interesting contribution to the development of VSD itself is that we do not exclusively focus on how the values in the design of a technology affect its development [18], but we go broader and look at how values of local stakeholders are affected by design choices in the whole project development process, including, for instance, the placement and business model. Thereby, we expand the range of application to the design of wind projects.

Apart from this theoretical contribution, we also want to contribute to planning praxis by showing what a value-based approach can mean for wind energy development. The potential of a value-based approach for wind energy planning will be illustrated by a comparative case study of two farmer-owned wind projects of varying scales to contrast the opportunities of design for acceptability in different types of planning processes. The farmer-developers, to varying degrees, try and are pressured to be better neighbors to the other stakeholders within the area and make their projects more desirable.

Because of the central focus on farmer-ownership, we can contribute more insight into the relation between local ownership and acceptability. In the community energy literature, which predominantly foregrounds projects of citizens' collectives, this relation has been described as potentially positive but not uncomplicated [18,19]. Through this research, we can explore whether the same holds true for farmer-owned projects.

The remainder of the paper has the following structure: Section 3.2 introduces the value-based perspective inspired by value-sensitive design literature and outlines the conceptual framework used for the analysis of the empirical findings. Subsequently, Section 3.3 gives an overview of the case study methodology and introduces the two farmer-owned case study projects. Then Section 3.4 contains the results and gives an overview of the value perspectives of the stakeholders in the case studies and the ways in which they tried to negotiate the inclusion of their values in the project design. Finally, Section 3.5 concludes the paper by discussing five observations regarding how wind projects can be made more value sensitive and a reflection on the influence of local ownership on acceptability.

3.2. A value-based perspective

A strand of literature that is helpful to analyze what and whose values are involved in the design of a wind project and can provide pointers on how to create a broader representation of local stakeholders' values is value sensitive design (VSD). VSD literature assumes that a design, whether it is about placement, business, or the design of a technology itself, is not value-neutral. It supposes that several alternatives for design decisions exist, which have to be compared and assessed on how well they resemble the values of different stakeholders [9]. VSD does not rank or compare values in a normative way, but it assumes that broad value inclusion contributes to understanding and improving decision-making by articulating and comparing the way values are taken into account.

When it comes to the methodology, VSD is in principle a proactive approach to systematically including values in design [9]; the full methodology includes a tripartite approach involving conceptual, technical, and empirical investigations [18]. We will describe the approach and explain how we adapted it to fit our purposes.

The first phase is the conceptual phase, during which it is determined which values are relevant, how they should be understood, and which trade-offs between conflicting values are acceptable. In our research, the choices about trade-offs are made via the planning process by the provincial and local government. Hence, our conceptual phase will only cover identification of relevant values and operationalization. The second phase is the technical phase that assesses how technological properties affect values and looks at how design can support relevant values. The empirical phase looks at the perception of the users and other stakeholders and assesses their perception of which values are embedded in the design and which are not. As this research does not focus on the design process of a technology but of projects using existing technologies, we introduce the technologies in the case description but apart from that, skip the second step and fully focus on the empirical dimension. We choose to do so as we are interested in the negotiation of value inclusion during local implementation of the wind technologies.

Our empirical analysis focuses on the values the wind projects represent and impact according to the stakeholders. This includes values ascribed to the technology, such as profitability or efficiency, but also and especially the situated values impacted by its implementation in the specific local context, such as landscape values. By constructing stakeholders' value perspectives, we can identify value conflicts in the empirical phase of

this project. We then analyze how value inclusion is negotiated in the cases. Finally, we use the insights from this analysis to formulate suggestions on the usefulness of value inclusive planning. Hence, we use VSD as a heuristic frame to do an ex post analysis of value conflict, negotiation, and inclusion to reach recommendations about using it proactively during project development of wind energy projects.

As part of the conceptual phase, we will now go into more detail about how values can be understood when it comes to designing wind energy implementation processes. According to Feather, values are in essence "general beliefs that people hold about desirable and undesirable modes of conduct and end states of existence" [20] (p 130). This can be concretized to what people consider as important to their lives. This understanding is broader than the conceptualization of values in philosophy as moral values governing right and wrong, and extents to concepts that can be associated with desirability, such as natural and economic value. Examples of values in the context of onshore wind energy are profitability of the project and the aesthetic quality of the landscape of which a project becomes part.

During the design process of a wind project, different stakeholders can have a different understanding of what a value means. They may find spatial quality important, but operationalize it differently. Values can, therefore, be split up into two levels, using a distinction that has been made by Rawls [22], which differentiates between the concept of a value and the conception of a value. The concept, on the one hand, is the general idea of a value, such as livability or inclusivity. The conception, on the other hand, is a specific interpretation or understanding of the meaning of that value. One stakeholder might consider the implementation process of a turbine project inclusive when other local parties have been consulted, while another may consider a project inclusive only if it enables ownership of the neighboring community. When two different values conflict at a conceptual level, this is called an inter-value conflict, and when two conceptions conflict, it is called an intra-value conflict. When looking for value conflicts, planners and developers should be sensitive to both types during the design process.

By synthesizing literature reviews of values in wind energy projects [4], [7], [23], [24], we made an overview of values relevant to the outcome dimension of the implementation of wind energy projects. We operationalized these categories and gave examples of values that fall under these categories (see table 3.1).

Table 3.1: Value categories.

Value categories	
Livability	Values related to quality of living in the direct surroundings of the technology, which can comprise, e.g., safety, noise, flicker and other visual impact.
Economic	Monetary value related to financial benefit or loss, e.g., affordability, productivity, reliability, touristic value of the area, property and land values, profitability of ownership, community benefit scheme, financial participation, and local job creation turbine industry.
Landscape	Value of the attachment or emotional bond that people develop with a place and its specific visual characteristics, e.g., cultural heritage value and visual beauty.
Nature	The value of ecosystems, e.g., value of plants, animals, and other elements of the ecosystem.

During the empirical phase, the value categories from table 3.1 are used as sensitizing concepts to reconstruct the value perspectives of the stakeholders involved in the case studies. By comparing and contrasting stakeholder value perspectives, we analyzed if conflicts occurred at inter- or intra-value level. We then analyzed which procedural mechanisms have been used to attempt to ameliorate these value conflicts and better integrate values of local stakeholders. Hence, we chose to exclude procedural values such as inclusivity and transparency, but instead included the procedural aspect of project development by carefully analyzing how the design is negotiated.

3.3. Case study methodology

3.3.1. Case study design

To answer our research question, we made use of a case study design, which allows for in-depth analysis of a contemporary phenomenon in a real-life context [25]. It allowed us to research value conflicts that came up in specific projects and analyze the ways in which these were dealt with.

The main case selection criteria were the presence of value conflicts among local stakeholders and variation in scale of the studied wind projects. We wanted to represent the two very contrasting types of wind energy development that are possible in the Dutch province of Groningen: small-scale < 15 m turbines for local use and large-scale concentration areas to minimize spatial impact. Both types of wind turbines have very different planning procedures: the first a notice to the municipal government followed by a spatial quality check and the

second an extensive planning process including securing a location and permit application (requiring, among other things, a feasibility assessment and environmental assessment).

Secondly, we selected two locally-owned projects, which we deemed interesting as the developers of these projects are not only figurative neighbors, but also have a local connection beyond the project as residents of the area. Just like community energy initiatives [26], farmers or farmers collectives can be more receptive to the need for place-based renewable energy integration. Furthermore, much less research looks into the response to locally but not community-owned projects [3].

Based on these criteria, we selected wind park Oostpolder and the implementation of E.A.Z. mini-turbines in Middag-Humsterland.

3.3.1.1. Wind park Oostpolder

As an introduction to this case, we give some further information about the proposed project and the area.

Project Oostpolder

In 2015, a group of farmers started the development of a jointly owned windfarm situated on their lands in the Oostpolder (see figure 3.1). Their plan is to install approximately 60 MW of wind energy. Thirteen 4.65 MW Enercon turbines with a hub height of 155 m and a rotor diameter of 136 m will provide this capacity [27]. The project is part of an extension of the wind capacity in the Eems Harbor concentration area. The total extension would mean an addition of 170 MW to the already operational 276 MW [28]. Recently, the project has gotten a green light to start construction, and the planning is that it will be operational in 2021.

The farmers work without a professional developer, which is a special situation. Even though the farmers were limited to commercially available largescale turbines, they could decide upon the project design, instead of the conventional way where a professional developer or company dominates the process and decisions.

After the basic design of the project was made, a sounding board was established in September 2016 on the recommendation of local governments to involve the community and other local stakeholders in the development process of this wind park and a second nearby park. This sounding board consists of local governments (province of Groningen and municipality Eemsmond), an environmental NGO (Natuur en Milieufederatie Groningen, NMFG), and representatives of the residents and farmers of Oostpolder.

Figure 3.1: Impression of the current landscape in the Oostpolder [29].

Concentration area Eems harbor

When it comes to concentration area, Eems Harbor, where the project is implemented, a first important characteristic is the proximity to the Wadden Sea, a UNESCO world heritage as well as a Natura 2000 area (part of EU nature protection regulation). This area has specific landscape qualities and houses protected species that are affected by wind turbines. Especially its birds and bats can become victims of the wind turbines due to the moving rotor blades.

A second characteristic of the area is the Eems Harbor, a storage and transshipment sea port. Energy production is an important industry in the Eems Harbor. Gas fired power plants, a coal fired power plant, and 90 wind turbines are generating approximately a third of all Dutch energy [30] (see figure 3.1). Moreover, Google is building a data center for approximately 100,000 servers in the region, and new transmission towers are constructed for the transportation of the generated electricity. Furthermore, a helicopter port is planned in the Eems Harbor to facilitate the transport of employees to (future) offshore windfarms. Altogether, the inhabitants of the sparsely populated Eems Harbor area have endured many impactful spatial developments, and new developments are still contributing. Therefore, creating alignment between project Oostpolder and the values of local stakeholders was central to the farmers in avoiding being yet another negative development in the area.

3.3.1.2. E.A.Z. turbines in Middag-Humsterland

As an introduction to this case, we will introduce the type of wind technology proposed and the characteristics of the case study area.

E.A.Z.-12 turbine

The small-scale wind technology that has been implemented in the case study area is the 15 kW E.A.Z.-12 turbine, the product of the company E.A.Z., which is specifically designed to fit the values of its users and other local stakeholders in the Groningen landscape. From its start in the stables at the farm of the parents of one of the founders to an own production hall, the product has been by and large developed and produced in the province of Groningen with the specificities of that area in mind.

To make their product more aesthetically pleasing, E.A.Z. designed their turbine together with a landscape architect, a father of one of the founders. They consciously gave their turbine a friendlier and more natural appearance, so it could blend in with the rural landscape of their first market, the province of Groningen. They gave the turbine wooden rotor blades (6 m), a tail vane, and a thin tall green mast (15 m) (see figure 3.2).

The company is still improving its product based on feedback from users and other stakeholders who experience the turbines' effects. For instance, based on user feedback, they have reduced the noise of the blades. Furthermore, E.A.Z. is in close cooperation with Libau (the provincial committee for quality of the built environment) about the placement of the turbines and even tours with them through the landscape to discuss where they see or do not see fit for mini-turbines. Libau has also done some recommendations concerning the design of the turbine to make it less obtrusive, such as the reduction of the size of the tail vane.

Figure 3.2: A Groningen farm with two E.A.Z. turbines, up close and from a distance (pictures author's own).

Middag-Humsterland

Wind energy implementation is a sensitive and controversial issue in Middag-Humsterland. Even though the E.A.Z. developers took the characteristics of the Groningen landscape into consideration, some stakeholders feel turbines inevitably detract from the beauty of the landscape.

The Groningen region Middag-Humsterland is a so-called National Landscape. A Dutch National Landscape is a cultural landscape with rare mix of characteristics. Middag-Humsterland got its cultural heritage status due to its wide views over the meadows and characteristic villagescapes. Reminiscent of the past influence of the sea on the landscape, the farmland north of the Dutch city of Groningen is embossed by mounds, dikes, and salt marshes. This area is considered to be the oldest cultivated landscape in Europe, with a history dating back to the early Iron Age. It is mainly valued for its openness, quietness, organically shaped landscaped elements, and the presence of cultural heritage.

The status National Landscape dates back from the 2004 Land Use Memorandum Space (*in Dutch: Nota Ruimte*), in which the Dutch national government assigned 20 areas the status National Landscape to help safeguard and strengthen their core qualities [31]. However, today the status National Landscape is not accompanied by a special landscape conservation policy. Since the national government stopped its support in 2012, no special landscape policy has been made for Middag-Humsterland. Yet a foundation has been recently founded to change this and facilitate cooperation between the municipality Westerkwartier, the Province of Groningen, and some private initiatives.

3.3.2. Data collection and analysis

The data for the case studies consist of online available newspaper articles in Dutch newspapers including the local ones (via LexisNexis), policy documents, council notes, online news on websites, and face-to-face and phone interviews that are carried out with the main stakeholders in both cases. In total, six semi-structured interviews have been carried out for the E.A.Z. turbines in the Middag-Humsterland case and 12 for the Oostpolder case. The difference in the number of interviews is related to the different number of stakeholders involved (see table 3.2).

The interview transcripts and the digitally retrieved documents have been thematically coded to elicit value perspectives with the concepts from table 3.2.

Table 3.2: Overview of interviewees.

Case 1: E.A.Z. in Middag-Humsterland	Case 2: Windpark Oostpolder
Interviewed actors: 1. Representative of E.A.Z. 2. Farmer using E.A.Z.-12 3. Two residents critical of E.A.Z. 4. Alderman of municipality Zuidhorn 5. Representative of Libau 6. Representative of farmers' representative body LTO	Interviewed actors: 1. Province of Groningen (2x) 2. Municipality Eemsmond 3. Four residents of Oudeschip 4. One of the farmer-developers 5. Two companies active in the Eems Harbor region 6. Three different NGOs which are active nature protection organizations in the Wadden Sea region

3.4. Results

In this section, we present the results of the case studies. We show how and what values were included in the development process of the studied wind projects in Middag-Humsterland and the Oostpolder. For each case, we first discuss the value perspectives of the local stakeholders, and then the procedural mechanisms through which values were integrated, or not, in the design of the projects.

3.4.1. Case 1: Wind park Oostpolder

3.4.1.1. Value perspectives

The local stakeholders involved in the value deliberation about improving the desirability of the Oostpolder project are the farmer-developers, the residents of the neighboring village, a few environmental NGOs, and the provincial government. The value perspectives of the local stakeholders are displayed in table 3.3.

Table 3.3: Value perspectives stakeholders.

Stakeholder: Farmer-developers
Liveability values: When developing the plans for the wind farm, two alternative designs to deal with the noise (*quietness*) the residents experience were made. The first construction plan, where new turbines would be added to existing turbines, leads to a higher noise emission, but due to legislation there is no need for mitigation, because including the noise of existing wind turbines in the noise impact calculation is not a legal obligation. In the second construction plan, some older turbines would be replaced by newer ones with higher capacity. Here, the noise level is lower in practice, but might exceed the legally permitted level for nine houses, because the impact from all the new turbines needs to be included in the assessment. Therefore, mitigation measures might be necessary.
Economic values: The farmers value the *profitability* of the project, but also want to have some extent of *economic distributive justice*. A community benefit fund of 1050 EUR/MW/year is installed by the farmers to enable the community to profit financially from the wind park. Depending on the actual annual production, they will receive money for approximately 200 MW wind energy capacity, resulting in about € 210,000 annually for the 179 households in the region.

Stakeholder: Residents

Liveability values: Residents living nearby the wind park are concerned about the nuisance due to noise and shade, and the nuisance from the flashing air traffic warning lights (*quietness* and general *tranquillity*). The nuisance due to noise and shading is restricted to the legally permitted amounts. The government will not give permits to a project developer if the windfarm would exceed the legally permitted amount of noise and shade. The residents are still worried, especially about the amount and effects of noise from the wind turbines, because the noise and shading are calculated by using models and not field measurements. Finally, flashing lights on top of the wind turbines are perceived as very annoying by the residents.

Economic values: Many residents still prefer a higher extent of compensation than the community benefits, and especially a buy-out arrangement for their devaluated properties (*loss of property value*) is seen as the solution to escape from all the unwanted negative effects of the economic developments and the earthquakes in the region. The provincial and municipal government do not support this solution, as it would be a very costly measure and would create a precedent for other similar communities.

Stakeholder: Environmental NGOs

Nature values: The production of wind energy in the Eems Harbor is perceived by nature organisations as a development compromising nature values, especially protected bird and bat species.

Landscape values: The lighting, and more broadly the visibility of the wind turbines and their landscape impact, is also an important subject for the NGOs, as they are close to the Wadden Sea. The construction of current wind turbines in the harbor area of the Eems Harbor itself is acceptable to the NGOs, but they feel the *openness* and *wideness* of the Wadden Sea as a Natura 2000 area should be protected. Additionally, the spatial development strategy of the national government includes the objective to protect the Wadden Sea as a nature area and to retain the *openness* of the landscape. Therefore, the NGOs would like to make clear agreements about areas in which the construction of wind turbines is permitted and areas which should be kept free from wind turbines.

Stakeholder: Province

Nature values: The Province protects the *nature values* in the Eems Harbor region, as it enforces the relevant nature protection regulation, especially protected *bird* and *bat* species.

The values that are threatened to be compromised in the Oostpolder are nature, economic, and livability values. Landscape values play less of a role here, because the landscape of the Oostpolder is already highly industrialized, and stakeholders are accustomed to the sight of wind turbines and other economic activities with a large visual impact.

Looking at inter-value conflicts, the *economic profitability* of the wind project for the farmer developers is at conflict with the nearby residents' *quietness* and general *tranquility* and the *property value* of the houses. Furthermore, the *economic profitability* of the wind

park for the farmer-developers is also in conflict with the value of the presence of protected *birds* and *bats* in the Wadden Sea region, represented by the environmental NGOs and the Province.

When it comes to intra-value conflicts, most prominent in the case study is the conflict about what *economic distributional justice* entails. The farmers are willing to provide a community benefit fund to ameliorate adverse economic effects such as loss of property value and other negative effects, but the residents feel that this is not sufficient compensation and would prefer to be compensated through a buy-out arrangement offered by the government.

3.4.1.2. Value deliberation

This section discusses how stakeholders attempted to have their values better represented in the design of the wind project in the Oostpolder.

Sounding board

An important mechanism for the farmer-developers in identifying and integrating values of local stakeholders has been the sounding board that has been installed by the Province. Through monthly meetings of the sounding board, the farmers are trying to create transparency and representation of the relevant stakeholders. They indicate that it is important to avoid distrust by the community and to take the input from the community seriously. They perceive good communication and adequate information provision as necessary to avoid both unexpected decisions for the community and opposition. However, the residents expected that they could actively collaborate from the beginning of the development processes, but this did not happen until the plans for placement were already in the stage of finalization. Furthermore, some of the residents indicated that, to their knowledge, none of the agreements or decisions made during the sounding board meetings are formally put on paper, and they doubt their influence. Additionally, a lack of clarity remained regarding the steps in the development trajectory, so residents did not know what to expect after a certain decision was made.

The involvement of the municipality, Province, and the NGO NMFG facilitated the communication within the sounding board, as they could act as intermediaries between the farmers and the residents during value deliberation. Especially, progress could be made towards ameliorating the intra-value conflict about the conception of *economic distributional justice*. A financial construction has been developed within the sounding board to increase the economic benefit for the community near the turbine. First, it was planned to use all the projected

earnings from the community benefit as an investment, so the community can cooperatively own two of the turbines in the park. Unused capacity from the provincial repowering policy of the Province provides the legal opportunity for this. As not many owners of older wind turbines wanted to participate in Oostpolder, it has been decided by the Province that the residents of Oudeschip should have an opportunity to invest in the wind park and become co-owners. However, despite facilitation of such a construction by the NGO NMFG, this was too ambitious for the energy cooperative Oudeschip formed in 2018, and therefore a compromise has been decided upon. The cooperative gets 10% of the profits of the Oostpolder: 80% for distribution over the households and 20% to invest in projects.

One-on-one discussions

One-on-one discussions were used to reduce the inter-value conflict between the *economic profitability* of the project and the deterioration of *tranquility* for the residents in Oudeschip. The farmers of Oostpolder visited the owners of the houses that were in the area where the noise of the turbines would exceed legal limits and had consultations with these owners to investigate if additional compensation could result in approval for replacing some of the existing turbines during the extension to increase capacity. Additional compensations can be found in insulation of the houses, additional monetary compensation, or maybe even a buy-out arrangement. Residents agreed to additional measures (the exact extent of the measures is unknown to the authors). An example of the additional measures is reducing the nuisance from the air traffic warning lights on top of the wind turbines. The lights of windfarm Oostpolder will be constantly burning instead of flashing, which attracts less attention. The farmers of Oostpolder also requested the wind turbine suppliers to investigate the usage of lamps with narrow beams of light, which are less visible from the ground.

Another design change resulting from the agreement between the farmer-developers and the respective residents is that the zoning plan of some houses has to be changed from residential property to business property of the windfarm. This step is necessary to receive the permits for the wind farm, because the legally allowed amount of noise for conventional residential houses is exceeded.

Enforcing legal authority

The measures the Province takes to enforce the Natura 2000 legislation to protect the *nature value of the presence of protected birds and bats* are based on the total of all the activities in

the Eems Harbor region, not only the Oostpolder project. The protection measures that are taken by the Province are the declaration of a mandatory standstill provision during moments with many migratory birds or bats passing the wind turbines and the construction of a bird nesting island co-financed by the companies in the Eems Harbor.

These measures were adopted relatively easily, as the Province has the authority to protect nature values and can also ask for a financial contribution of the companies in the Eems Harbor, as their economic activities affect these values. For the companies involved, it is a trade-off: they are given the opportunity to operate in the area if they contribute to the conservation of its nature.

3.4.1.3. Case conclusion

The case of wind park Oostpolder shows that the opportunities to influence the design of a larger wind park can be rather constrained, even in this project where initiators are looking for a dialogue with other stakeholders. One reason is the inequality between the developer and the other local stakeholders. Furthermore, in general, the local governments have no legal instruments, such as the repowering policy, to enforce resident participation.
However, at the same time, the case shows that when an effort is made to involve residents in the design process, this can result in modest changes to the design of the project, such as the modifications to air traffic lighting and larger financial compensation.

Furthermore, this case shows that the resolution of value conflicts is quite dependent on financial resources, and that design solutions through which a financial benefit can be realized for a limited cost can be implemented most easily.

Finally, the values that are enshrined in hard, legal norms, such as noise regulations and nature conservation, are easier to embed in the design than non-legal norms that resemble stakeholders' preferences.

3.4.2. Case 2: A small-scale wind solution in a National Landscape

3.4.2.1. Value perspectives

The local stakeholders involved in the value deliberation about the desirability of E.A.Z. turbines in Middag-Humsterland are the farmer-developers and their representative body LTO, residents concerned about the turbines, and Libau, the independent provincial committee for aesthetics of the built environment. E.A.Z. did not take an active role in the controversy. The value perspectives of the local stakeholders are shown in table 3.4.

Table 3.4: Value perspectives of stakeholders.

Stakeholder: Farmers and LTO
Landscape values: The farmers see the E.A.Z. turbines as a renewable energy (RE) technology with spatial quality that fits within the landscape. Due to their natural appearance, with wooden blades and a green mast, they can better blend in with the landscape (*similarity*). Furthermore, because of their mast size, which is comparable to a mature tree or a stable, they can be easily integrated with the other farm infrastructure (*proportionality*). Furthermore, spatial quality is defined relative to the alternative of largescale RE as well. A farmer poses that if the starting point is that RE should be produced as much as possible at the place of use (*locality*), no largescale landscape polluting infrastructure is needed to transport energy. Hence, spatial quality is not only associated with the particular look of the technology, but also assessed at system level. **Economic values**: E.A.Z. turbines are perceived as an *effective* way to provide renewable electricity. For an average farm in the region, one E.A.Z. turbine can provide all the electrical energy This means that the total yearly electrical energy demand can be produced with an E.A.Z. turbine; however, energy that is not used at the moment of production will be exported to the grid, and shortages will be bought back from the grid). Bigger farms need two or three. By owning a turbine (*ownership*), farmers save the costs of buying the electricity and the electricity tax over all generated power (*cost efficient*). The energy that they do not use at their farm is sold to an electricity supplier. Furthermore, wind energy is often cheaper than solar energy, because solar panels require a grid connection with a higher capacity, as they have a higher peak production. The network provider costs of such a bigger connection are higher. For wind energy, you do not need such a connection, because its production is more regular. However, many farmers who have an E.A.Z. turbine also produce solar energy, as these sources have a largely complimentary generation profile. Another economic reason why using renewable energy is interesting for farmers is because they have noticed that their consumers are increasingly critical as to whether their products are produced environmentally sustainably (*commercial advantage*). For them, therefore, having their own source of energy fits with the circular economy thinking they are already familiar with when it comes to efficient resource use. Using RE also results in a small sustainability bonus from their dairy cooperative (*profitability*). Finally, the LTO as representative of the farmers considers the region as an excellent location for the new small wind turbines. He feels that through a combination of wind and solar, the area could become the first energy neutral National Landscape of the Netherlands, and that an area can get no better regional marketing than to have the label of being a touristic attraction without CO_2 emissions (*tourism).*

Stakeholder: concerned residents
Landscape values: In terms of landscape values, the concerned residents feel that, despite its size and design, the E.A.Z. turbine is a disturbance in the *open, wide, organically shaped landscape* with its characteristic mounds, ditches, and dikes, and monumental villages (*cultural heritage*). A resident expresses it in the following way: "This National Landscape is unique in the province (*uniqueness*). The turbines, no matter how small, impair the appearance of the landscape and do not fit in the area" [32]. The "modern turbine" with its moving blades takes away from the clear view on the horizon. Another concerned resident stresses: "Formally, they are, with their hub height of 15 m, a little higher than the maximum height of a barn that is at maximum 14 m. However, in practice most stables and barns are around 8 m high"[33]. **Economic values**: Furthermore, the concerned residents deem the turbine to be an *ineffective* solution. A resident describes them as a "feel good subsidy turbine" [34] (*cost inefficient*) and another resident says that they are "very charming" and that it is a "nice company" selling the product, but that the production per turbine is too low (*effectiveness*) [35]. She would prefer taking care of renewable energy supply by investing jointly in a larger wind turbine or solar on roofs of houses and stables rather than acting independently and in a dispersed fashion (*efficiency*). Finally, they fear that E.A.Z. turbines also negatively affect the economic value of the area by leading to a reduction of tourists (*tourism*). They feel that Middag-Humsterland should focus more on monetizing the beauty of the landscape (*aesthetic quality*) than on wind energy. **Liveability values**: When it comes to liveability, the quality of the living environment, within the direct surroundings, it is mainly the sound of the E.A.Z turbines that concerns the residents, as it disturbs the *quietness*. They pose that it is not only the blades, but also the generator that makes quite some noise at low wind speeds.
Stakeholder: Libau
Landscape values: For the same reasons of similarity and proportionality as the farmers, Libau feels that the turbines have spatial quality. It recognises the energy transition will have a large spatial impact, and, consequently, only very exceptionally should an area be excluded. However, to safeguard the *cultural heritage value, uniqueness, quietness, openness, wideness,* and *organic shapes*, the organisation deemed it necessary to investigate the suitability of placement in Middag-Humsterland and create more detailed placement criteria for mini-turbines.

In this case study, economic, livability, and landscape values are at play. Nature values do not play a role here, because the E.A.Z. turbines do not affect the nature in the region.

Looking at inter-value conflict, the farmers' economic values *profitability* and *ownership* are perceived by concerned residents to threaten the livability value *quietness,* and the landscape values *cultural heritage value, uniqueness, quietness, openness, wideness,* and *organic shapes.*

The landscape aspect of the inter-value conflict is largely fed by intra-value conflict. The main intra-value conflict at stake is the interpretation of the norms similarity and proportionality.

While the farmers feel that the mini-turbines are proportional to other elements in the built environment of the farmscape, the concerned residents disagree and point out that the total height, including the blade length, is much higher than the stables and silos at the farms. Regarding similarity, the farmers feel that the turbine blends into the landscape due to the material choice and the size, which they compare to a large tree, whereas the concerned residents do not agree due to the movement of the blades and the modern look of the turbine.

Resultantly, the residents conceptualize *touristic value* as stemming from original landscape values that are diminished by the presence of E.A.Z. turbines, while the farmers feel that the mini-turbines strengthen the *touristic value* of the region by contributing to a change towards a *sustainable* agricultural landscape and can function at the farm as a *cost-efficient, own* energy source. Libau postponed judgement and recognizes both perspectives.

3.4.2.2. Value deliberation

This section discusses how stakeholders attempted to have their values better represented in the implementation process of wind energy in Middag-Humsterland. The deliberation mainly focused on whether the value of the landscape could be sufficiently conserved if E.A.Z. turbines would be implemented, and livability and economic values played a smaller role. The section outlays the different steps of the process by which it was decided if and under which conditions mini-turbines could have a place in the region.

Awareness raising through local media

In the summer of 2016, a few villagers from Niehove, a mound village in the National Landscape Middag-Humsterland, read in the local newspaper about the announcement of four planned mini-turbines at farms. As their farmer-neighbors had not consulted them, and they felt confronted with a fait accompli, they expressed their concern in the local media and demanded the municipal council more clarity regarding the exact criteria for placement. The existing policy allowed for mini-turbines, but stated that intertwinement between characteristic landscape elements and turbines should be avoided. They doubted whether this would be possible at all in the National Landscape that was valued for its wideness and openness.

Agenda setting in the local political arena

At the next council meeting, the farmers and concerned residents were invited to present their arguments. After a short political swordplay, the mayor and aldermen of Zuidhorn, the

municipality responsible for the permits, decided to take about five months for deliberation. In the deliberation period, the municipality looked into the impact of the E.A.Z. turbines with Libau, the visualization department of the nearby University of Groningen, and a sounding board.

Sounding board

The municipality founded a sounding board to get input from different actors, and asked farmers, residents, and environmental and agricultural organizations to participate and a mediator to lead the process. E.A.Z. was requested to respect the societal discussion and not file new applications, which the company did. The sounding board was a good vehicle to facilitate an inclusive process. However, for concerned residents, it was hard to be informed about the ins and outs of the procedures. They feel that support from a professional adviser or an officer from the municipality would have been beneficial to level the playing field. Furthermore, within the sounding board, it was unclear how the advice to the local government would be constructed. The process evolved into preparing an advice by giving weight to the values of the majority, which led to a positive advice. This was not perceived to be fair by all stakeholders, as not all stakeholder groups were represented by an equal number of people.

Stakeholder consultation to inform decision-making in local political arena

At the end of the deliberative process, the municipal government held a consultative meeting where stakeholders could express their thoughts, a positive advice of the sounding board was presented, and a visualization of the landscape effects was shown. A week later, the council decided that the landscape impact was acceptable, as the majority agreed with the farmers' that the turbines were proportional and similar enough to the other landscape elements. Therefore, the policy remained supportive of mini-turbines.

However, as a result of the deliberative process, the council, advised by Libau, sharpened the design criteria that mini-turbine projects need to meet and installed a monitoring group. The new design criteria dictate that the mini-turbines should be placed at a spatially subordinate position and as a logical part of a farm to secure the values *cultural heritage value, uniqueness, quietness, openness, wideness,* and *organic shapes*. In short, this translated to concrete rules such as no placement of turbines in an open landscape, only as part of the building block (e.g., next to a stable).

Monitoring group

A monitoring group with local stakeholders (consisting of a representative of LTO, one of the concerned residents, a representative of a local energy working group, and some vacant seats) was installed by the municipality to evaluate the policy in a year's time.

When it comes to the implementation of the new placement criteria, the resident in the monitoring groups feels that the new stricter criteria are not followed rigorously enough. Furthermore, due to conflicting value perspectives and lack of trust because of an incident within the group, the monitoring group did not function well and has been terminated by its participants. Having or not having a mediator with no personal interest seemed to make a large difference between the sounding board and the monitoring group.

3.4.2.3. Case conclusion

This case indicates that value sensitivity during the design phase of the technology needs to go hand in hand with value sensitivity of the implementer. Even in the case of a supposedly landscape and environmentally friendly wind turbine, new alignments are required if it comes to a specific new context such as a national landscape. The lack of consultation led to a societal discussion, which resulted in a deliberative process steered by the municipal government.

Quickly, the full value deliberation centered on whether the mini-turbines were deemed acceptable in terms of their effect on the landscape values in the region. The other value conflicts were side-lined and tied to the outcome of the decision regarding impact on landscape values. The landscape effects were mainly assessed in terms of similarity and proportionality, which were differently conceptualized by the farmers and the concerned residents.

During the deliberation, process was worked towards enlarging the sense of intersubjectivity. A main vehicle in the deliberation process was the sounding board. Despite perception of lacking a level playing field, this arena offered a chance to build a more broadly shared conception of whether the turbines were similar and proportional to other landscape elements or not. This led to new, sharpened design criteria for spatial integration of mini-turbines. While this did not resolve disagreement fully, conflict still helped to incentivize processes that contributed to enlarging the intersubjectivity required for a more concrete planning policy.

3.5. Conclusions and discussion

We analyzed how a large-scale and a small-scale farmer-owned wind project were scrutinized by local residents and other stakeholders in the area. We used a value perspective to analyze perspectives of local stakeholders and conflicts. Here we present the conclusions to the research question of how wind projects can be made more sensitive to the values of local stakeholders by integrating these in project design.

We discuss our answer through five observations of how wind projects can be made more sensitive to the values of local stakeholders by integrating these in project design. These insights about negotiating acceptability through value sensitivity can also be used for implementation of other controversial energy technologies where developers, local owners or not, face potential opposition of the local stakeholders (e.g., largescale solar PV on fields or biogas).

Finally, we end the paper with a reflection on the influence of local ownership on the acceptability of the studied wind projects.

3.5.1. Levelling the playing field in participative environments

In these cases, negotiation of more value inclusive designs took place in various ways, such as through a sounding board, one-on-one stakeholder discussions, enforcement of legal authority, societal and political mobilization, stakeholder consultation, and a monitoring group. However, due to the difference in agency and power, co-design was only possible to some extent. In both cases, residents struggled with being informed about all procedures and with being seen as an equal stakeholder.

In a participative planning context such as a sounding board, the help of a neutral mediator [36], or even supportive intermediaries [37], can help. In the Oostpolder case, the NGO NMFG took on the support of the resident community in Oudeschip and facilitated the embedding of their values. In Middag-Humsterland, on the other hand, residents lacked a supportive intermediary that helped them voice their values and stated that such an intermediary could have helped them have a more equal standing.

3.5.2. Creating intersubjectivity

Protecting some values and integrating them in design is complicated by the degree of subjectivity involved, such as landscape values and certain livability values [16]. Some of

these values are very much individually, and sometimes elusively, conceptualized. Especially if values are hard or impossible to operationalize quantitively, some stakeholders could feel that the value is not sufficiently integrated in a design, whilst others may be satisfied based on the operationalization of the same qualitative criterium. Creating intersubjectivity through participative planning processes is important to create more widely shared value conceptualizations and enable embedding in design.

3.5.3. Overcoming incommensurability

Our two cases show that value sensitivity can make wind projects more acceptable to local stakeholders, as more of their values get embedded in the design through consultation and negotiation. However, value sensitivity is no panacea for acceptance of outcome. It has to be recognized that not all value conflicts in local wind energy projects can be solved through making design choices that align conflicting values for various reasons, e.g., political or financial. Especially when multiple values or norms are involved, there is not a single norm that can function as a standard to resolve conflicts or make trade-offs.

Furthermore, certain values or even conceptualizations of values are incommensurable. The pursuit of a certain value from the perspective of one or more stakeholders then inevitably comprises or limits the ability to pursue certain other values [38].

Therefore, a methodology giving guidance in resolving value conflicts would be helpful. Research which explores how to come to a prioritization of values is therefore a very fruitful avenue for further research. For instance, Van de Kaa et al. uses the best–worst method, in which users or decision makers decide on the most and least important value and compare the rest of the values to these reference values [39].

3.5.4. Creating a space for constructive conflict

Value conflicts between the stakeholders involved in local wind energy projects should not only be perceived as negative. Certainly, value conflicts require deliberation and can slow down or even stop projects that can contribute to sustainability. However, our cases show that value conflicts can also be productive. The ever-returning value conflict between landscape, economy, livability and nature values that accompanies the implementation of wind on land has created a market for alternative designs such as the small-scale E.A.Z. turbine and thereby expands the range of options for sustainable energy solutions. Furthermore, in both cases value conflicts led to design adjustments that made the wind project more aligned to local

values or created a wider shared intersubjectivity on value conceptualizations. Cuppen found constructive conflict can even be used as a design tool to facilitate diversity of perspectives and avoid consensus being reached before diverging viewpoints are fully explored and understood [40]. Thus, our value analysis showed that conflicts teach developers that it leads to overall better solutions to start from an awareness of the values of all stakeholders that have to deal with the planned development.

3.5.5. Making "neighbors" more integral to the planning process

The space for a supra-legal degree of value sensitivity that was carefully constructed in both cases is by no means a norm and very dependent on efforts of local stakeholders such as a local government or the residents. For instance, it is easier for a stakeholder such as the Province to protect nature values that are enshrined in regulations than it is for residents of Middag-Humsterland to protect the landscape values, as these are not protected by hard norms.

Policy more supportive of participation and representation of stakeholders other than the developer would boost the design of more value-inclusive energy projects. In the Netherlands, steps towards better inclusion of local stakeholders are currently being experimented with. In the Dutch climate agreement, the ambition is formulated to realize a national average of 50% local co-ownership by 2030 for large RE projects [41]. This facilitates inclusion of local stakeholders from the start of the project on. However, this is only a partial solution, as it focuses mainly on potential co-owners. Hence, procedural innovation is also required to include values of non-owners in the planning process. Figuring out how this can be achieved is currently high on the agenda within the development of regional energy strategies, where various local stakeholders are involved in the planning process and invited to contribute to area-based plans for renewable energy integration. Here, identification of values, and mapping and discussing value conflicts, could be a helpful tool to better include situatedness and place-specificity in renewable energy planning.

3.5.6. A reflection on the relation between local ownership and acceptability

We end this paper with a brief reflection on the influence of the local ownership component in the response to the studied farmer-owned wind projects. Generally, local ownership has been depicted as counteracting some of the objections to wind energy projects. Local owners could use their local network to reduce the scale of planning controversies [42]. Additionally, the contribution to local economic development through farmer income, and potentially also

community benefit, can in some cases generate support [43].

However, in the studied locally-owned cases, conflict was still present. This can be partly explained by the observation that support is also affected by who benefits from local ownership, especially the extent to which the impacted community of place intersects with the community of interest that benefits from the development [3]. In the case of Middag-Humsterland and Oostpolder, the benefits only or mainly accrue to a few individuals within the community, which may limit acceptability.

Furthermore, and most importantly, our paper underlined that ownership is just one factor in acceptability. Values of local stakeholders are diverse and situated. What is acceptable is place-specific, e.g., past locally unwanted land uses such as in the Oostpolder case and the cultural heritage identity of Middag-Humsterland. Hence, our case studies confirm the importance of history, context, and geographic scale to favorability, and thereby, acceptability of outcome [3].

References

1. Wüstenhagen, R.; Wolsink, M.; Bürer, M.J. Social acceptance of renewable energy innovation: An introduction to the concept. *Energy Policy* **2007**, *35*, 2683–2691, doi:10.1016/j.enpol.2006.12.001.
2. Rand, J.; Hoen, B. Thirty years of North American wind energy acceptance research: What have we learned? *Energy Res. Soc. Sci.* **2017**, *29*, 135–148, doi:10.1016/j.erss.2017.05.019.
3. Baxter, J.; Walker, C.; Ellis, G.; Devine-Wright, P.; Adams, M.; Fullerton, R.S. Scale, history and justice in community wind energy: An empirical review. *Energy Res. Soc. Sci.* **2020**, *68*, 101532, doi:10.1016/j.erss.2020.101532.
4. Enevoldsen, P.; Sovacool, B.K. Examining the social acceptance of wind energy: Practical guidelines for onshore wind project development in France. *Renew. Sustain. Energy Rev.* **2016**, *53*, 178–184, doi:10.1016/j.rser.2015.08.041.
5. Batel, S. Research on the social acceptance of renewable energy technologies: Past, present and future. *Energy Res. Soc. Sci.* **2020**, *68*, 101544, doi:10.1016/j.erss.2020.101544.
6. Taebi, B. Bridging the Gap between Social Acceptance and Ethical Acceptability. *Risk Anal.* **2016**, *37*, 1817–1827, doi:10.1111/risa.12734.
7. Fournis, Y.; Fortin, M.-J. From social 'acceptance'to social 'acceptability'of wind energy projects: Towards a territorial perspective. *J. Environ. Plan. Manag*. **2017**, 60, 1–21.
8. Cowell, R.; Bristow, G.; Munday, M. Acceptance, acceptability and environmental justice: The role of community benefits in wind energy development. *J. Environ. Plan. Manag.* **2011**, *54*, 539–557, doi:10.1080/09640568.2010.521047.
9. Oosterlaken, I. Applying Value Sensitive Design (VSD) to Wind Turbines and Wind Parks: An Exploration. *Sci. Eng. Ethic* **2014**, *21*, 359–379, doi:10.1007/s11948-014-9536-x.
10. Wolsink, M. Wind power implementation: The nature of public attitudes: Equity and fairness instead of 'backyard motives'. *Renew. Sustain. Energy Rev.* **2007**, *11*, 1188–1207, doi:10.1016/j.rser.2005.10.005.
11. Liebe, U.; Bartczak, A.; Meyerhoff, J. A turbine is not only a turbine: The role of social context and fairness characteristics for the local acceptance of wind power. *Energy Policy* **2017**, *107*, 300–308, doi:10.1016/j.enpol.2017.04.043.
12. Gross, C. Community perspectives of wind energy in Australia: The application of a justice and community fairness framework to increase social acceptance. *Energy Policy* **2007**, *35*, 2727–2736, doi:10.1016/j.enpol.2006.12.013.
13. Van der Waal, E.C.; Van der Windt, H.J.; Van Oost, E.C.J. How Local Energy Initiatives Develop Technological Innovations: Growing an Actor Network. *Sustainability* **2018**, 10, 4577, doi: 10.3390/su10124577.
14. Borch, K. Mapping value perspectives on wind power projects: The case of the danish test centre for large wind turbines. *Energy Policy* **2018**, *123*, 251–258, doi:10.1016/j.enpol.2018.08.056.
15. Künneke, R.; Mehos, D.C.; Hillerbrand, R.; Hemmes, K. Understanding values embedded in offshore wind energy systems: Toward a purposeful institutional and technological design. *Environ. Sci. Policy* **2015**, *53*, 118–129, doi:10.1016/j.envsci.2015.06.013.
16. Frate, C.; Brannstrom, C.; De Morais, M.V.G.; Caldeira-Pires, A. Procedural and distributive justice inform subjectivity regarding wind power: A case from Rio Grande do Norte, Brazil. *Energy Policy* **2019**, *132*, 185–195, doi:10.1016/j.enpol.2019.05.027.
17. Mouter, N.; De Geest, A.; Doorn, N. A values-based approach to energy controversies: Value-sensitive design applied to the Groningen gas controversy in the Netherlands. *Energy Policy* **2018**, *122*, 639–648, doi:10.1016/j.enpol.2018.08.020.

18. Friedman, B.; Kahn, P.H.; Borning, A.; Huldtgren, A. Value Sensitive Design and Information Systems. In *Early Engagement and New Technologies: Opening Up the Laboratory*; Philosophy and Engineering: Reflections on Practice, Principles and Process; Springer: Berlin/Heidelberg, Germany, 2013; pp. 55–95. Available online: https://link.springer.com/chapter/10.1007/978-94-007-7844-3_4 (accessed on 22 October 2020).

19. Musall, F.D.; Kuik, O. Local acceptance of renewable energy—A case study from southeast Germany. *Energy Policy* **2011**, *39*, 3252–3260, doi:10.1016/j.enpol.2011.03.017.

20. Warren, C.R.; McFadyen, M. Does community ownership affect public attitudes to wind energy? A case study from south-west Scotland. *Land Use Policy* **2010**, *27*, 204–213, doi:10.1016/j.landusepol.2008.12.010.

21. Feather, N.T. Human Values and Their Relation to Justice. *J. Soc. Issues* **1994**, *50*, 129–151, doi:10.1111/j.1540-4560.1994.tb01201.x.

22. Rawls, J. *A Theory of Justice*; Harvard University Press: Cambridge, MA, USA, 1999.

23. Bidwell, D. The role of values in public beliefs and attitudes towards commercial wind energy. *Energy Policy* **2013**, *58*, 189–199, doi:10.1016/j.enpol.2013.03.010.

24. Jobert, A.; Laborgne, P.; Mimler, S. Local acceptance of wind energy: Factors of success identified in French and German case studies. *Energy Policy* **2007**, *35*, 2751–2760, doi:10.1016/j.enpol.2006.12.005.

25. Yin, K.R. *Case Study Research: Design and Methods*, 5th ed.; Sage: Thousand Oaks, CA, USA, 2013.

26. De Boer, J.; Zuidema, C.; Van Hoorn, A.; De Roo, G. The adaptation of Dutch energy policy to emerging area-based energy practices. *Energy Policy* **2018**, *117*, 142–150, doi:10.1016/j.enpol.2018.02.008.

27. Renewables Now. Wind Enercon to Supply Turbines for Dutch Oostpolder Onshore Wind Project. 2019. Available online: https://renewablesnow.com/news/enercon-to-supply-turbines-for-dutch-oostpolder-onshore-wind-project-670870/ (accessed on 17 March 2020).

28. Natuur & Milieu. Windpark Oostpolder—Windopland—Windopland. Available online: https://www.windopland.info/in-de-praktijk/windpark-oostpolder/ (accessed on 14 August 2019).

29. Innogy. Raad van State Geeft Groen Licht Voor Windpark Oostpolder. 2018. Available online: https://nieuws.innogynederland.nl/raad-van-state-geeft-groen-licht-voor-windpark-oostpolder/ (accessed on 17 March 2020).

30. NWEA. Eemshaven (Groningen Seaports). Available online: https://nwea.nl/lid/groningen-seaports-n-v/ (accessed on 28 August 2019).

31. Janssen, J.; Pieterse, N.; van den Broek, L. Nationale Landschappen: Beleidsdilemma's in de praktijk. 2017. Available online: https://www.pbl.nl/sites/default/files/cms/publicaties/Bevindingen_Nationale_landschappen_01.pdf (accessed on 5 August 2019).

32. Bijlsma, K. Strijd tegen molens in M.-Humsterland. *Dagblad van het Noorden*, 4 October 2017, p. 30.

33. Bijlsma, K. Heldere blik op de horizon verdwijnt. *Dagblad van het Noorden*, 4 January 2017, p. 24.

34. Streekkrant. Windmolenproblematiek in Niehove nog Niet Overgewaaid. 2018. Available online: http://destreekkrant.nu/2018/01/03/windmolenproblematiek-in-niehove-nog-niet-overgewaaid/ (accessed on 28 August 2019).

35. Bootsma, C. Kleine windturbines moeten Middag-Humsterland redden. *Dagblad van het Noorden*, 15 June 2017, p. 30.

36. Fast, S. Assessing public participation tools during wind energy siting. *J. Environ. Stud. Sci.* **2016**, *7*, 386–393, doi:10.1007/s13412-016-0419-0.

37. Hargreaves, T.; Hielscher, S.; Seyfang, G.; Smith, A. Grassroots innovations in community energy: The role of intermediaries in niche development. *Glob. Environ. Chang.* **2013**, *23*, 868–880, doi:10.1016/j.gloenvcha.2013.02.008.

38. De Graaf, G.; Paanakker, H. Good Governance: Performance Values and Procedural Values in Conflict. *Am. Rev. Public Adm.* **2015**, *45*, 635–652.

39. Van De Kaa, G.; Rezaei, J.; Taebi, B.; Van De Poel, I.; Kizhakenath, A. How to Weigh Values in Value Sensitive Design: A Best Worst Method Approach for the Case of Smart Metering. *Sci. Eng. Ethic* **2019**, *26*, 475–494, doi:10.1007/s11948-019-00105-3.

40. Cuppen, E. Diversity and constructive conflict in stakeholder dialogue: Considerations for design and methods. *Policy Sci.* **2011**, *45*, 23–46, doi:10.1007/s11077-011-9141-7.

41. Participatiecoalitie. Factsheet 50% Eigendom van de Lokale Omgeving: Wat Betekent het en hoe kun je het Bereiken? Available online: https://departicipatiecoalitie.nl/wp-content/uploads/2020/02/Factsheet-50-eigendom-van-de-lokale-omgeving-PC-maart-2020.pdf (accessed on 20 October 2020).

42. Toke, D.; Breukers, S.; Wolsink, M. Wind power deployment outcomes: How can we account for the differences? *Renew. Sustain. Energy Rev.* **2008**, *12*, 1129–1147, doi:10.1016/j.rser.2006.10.021.

43. Munday, M.; Bristow, G.; Cowell, R. Wind farms in rural areas: How far do community benefits from wind farms represent a local economic development opportunity? *J. Rural. Stud.* **2011**, *27*, 1–12, doi:10.1016/j.jrurstud.2010.08.00