THE INFLUENCE OF CITIZEN PARTICIPATION IN THE DECISION-MAKING PROCESSES OF ONSHORE WIND FARMS

A multiple-case study of four onshore wind projects in the Netherlands

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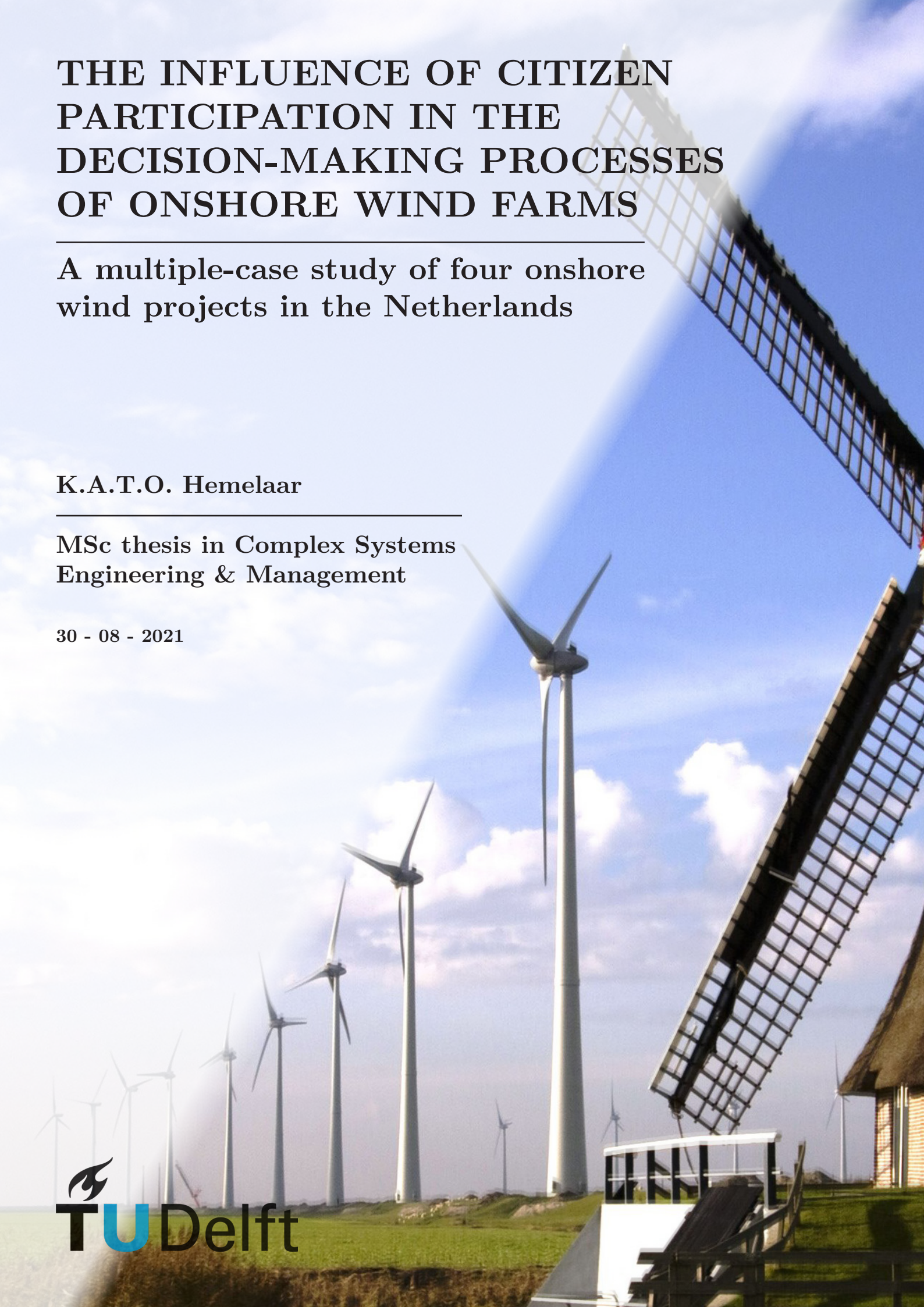

TU Delft

THE INFLUENCE OF CITIZEN PARTICIPATION IN THE DECISION-MAKING PROCESSES OF ONSHORE WIND FARMS

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EXECUTIVE SUMMARY

Onshore wind farms play an important role in realizing the 2030 climate targets. According to the Climate Agreement, onshore energy production should be increased to 35 TWh by 2030. This means that up to 600 additional wind turbines should be developed, which is a challenging task. The development of onshore wind farms often meets the resistance of local residents. This opposition can, inter alia, result in project delays or cancellations. Citizen participation is a widely discussed manner to prevent and deal with local opposition. In this thesis, exploratory qualitative analysis is conducted to address the following research question: *How does citizen participation influence decision-making processes of four selected Dutch onshore wind farms?*

The present research focuses on the interaction between the most important actors within the participation process: local residents, the government, and the wind farm initiators. A multiple-case study is conducted to analyse the decision-making processes and to answer the main research question. Four Dutch cases are analysed; Jaap Rodenburg II, Nij Hiddum-Houw, Windplanblauw and Wind Farm Moerdijk. First, each case was studied separately by conducting four within case studies. Afterwards, the analyses have been compared in a cross-case study. The theoretical framework, Teisman's Rounds Model and Contextual Interaction Theory (CIT), were used to code qualitative data in a thematic analysis. The data is collected by conducting semi-structured interviews conducted and studying policy documents. This way, citizen participation, decision-making processes, and the actors' roles could be described meticulously.

The findings of the analyses are presented in the Rounds Model and the CIT. The Rounds Model is used to graphically represent the decision-making processes and the role of the actors. Since the Rounds Model pays little attention to contextual factors and governance levels affecting the decision-making process, the CIT contributes to the Rounds Model. As mentioned before, the CIT and the Rounds Model functioned as a theoretical framework to conduct the cross-case study. The Rounds model facilitated a comparison of the four participation and decision-making processes. The rounds model has provided information about the interrelation of the decisions made, the relation between actors, the intensity of the participation rounds and the most influential moments at a glance. The CIT is used to study the most important participation rounds more in-depth and provided information about governance and other contextual factors influencing those events. The combination of the two models led to a broad understanding of the decision-making processes and an in-depth insight into the factors of influence.

The analyses have shown that citizen participation is used to equally distribute benefits and burdens of winds farms, reduce nuisance, convince the responsible authority that the interests of local residents are considered, improve the wind farm design, and reduce local opposition. Multiple forms of citizen participation are found in the decision-making processes: wind

farm cooperatives and associations, options for financial investment, community funds, design workshops, surveys about the wind farm layout, working groups and advisory boards. In all of the cases studies, local opposition led to a more intensive citizen participation process. The different forms of participation, as described above, have led to the re-location of wind turbines, a reduction of the turbine height, additional nuisance reducing measures, additional financial benefits and once even to a totally new wind farm layout.

Several factors were discerned to stimulate the decision-making process. Especially co-ownership, representativeness of the participating local residents and early engagement have improved the citizen participation process. Additionally, a stringent policy and an independent party to advise local residents during the participation process can facilitate efficient decision-making. Therefore, it is recommended to 1) the initiators and the responsible authority to immediately start the citizen participation process, 2) actively invite local residents of all surrounding districts to the participation process, 3) provide local residents with an option for co-ownership, 4) the municipalities and provinces to define clear participation in policy documents on before, and 5) to ensure local residents have an independent advisor during the participation process.

Lastly, several subjects for further research are identified. First of all, it would be interesting to combine or compare the findings of the four cases with findings from other studies developed by different parties. Here, additional knowledge can be collected that can be used to investigate potential influencing factors further as identified here; the influence of the responsible authority and the room for negotiation. Above all, it should be studied how to ensure a representation of local residents and how to interest local residents to participate in an early stage. And, how will participation influence the decision-making process in the new situation: where the Climate Agreement, the RES and the new Environment and Planning Act are guiding.

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CONTENTS

1 INTRODUCTION

Since 1750, greenhouse gasses (GHGs) in the atmosphere have risen due to human activities [1]. Consequently, global temperatures are rising. In reaction, the Paris Agreement was established in 2016, whereby the Netherlands and 194 other countries set the goal of limiting global warming to a maximum temperature rise of two degrees Celsius [2]. Based on this agreement, the Netherlands has set national climate goals in the Dutch Climate Agreement. The Climate Agreement is established in collaboration between the national government, decentralised authorities, the business community and civic organisations. The energy transition can only succeed when these parties work together since they need to complement each other in terms of resources, powers and expertise. Together, they hope to achieve a 49% reduction in CO_2 emissions by 2030 compared with 1990 levels [2]. In addition to the goals set in the Climate Agreement, further effort is needed to achieve the 2030 climate targets, including doubling the rate of decline of emissions [3]. The 2030 Climate Agreement focuses on emissions reduction by the electricity sector, primarily by increasing the percentage of renewable electricity sources [3]. Currently, biomass, hydropower, wind, and solar power are mature technologies used worldwide to produce electricity. Nuclear power is not mentioned as a strategy to meet the 2030 climate targets because the development of new forms of nuclear energy and the construction of nuclear power plants is not rapid enough. However, nuclear power can contribute to the 2050 goals [4]. Hydropower is not suitable for the Dutch flat landscape, and biomass is disputed as a renewable electricity source because it still emits CO_2 and its intensive agricultural nature . Therefore, the emphasis is on the large-scale generation of solar and wind energy. These are proven techniques with significant potential to accelerate the energy transition cost-effectively [5]. Both offshore and onshore wind energy are more efficient at energy production since one modern onshore wind turbine generates the same amount of electricity as eleven to fifteen hectares of solar panels [5]. Given the Dutch landscape and climate goals, this study will focus on the development of onshore wind energy.

1.1 CHALLENGES OF ONSHORE WIND DEVELOPMENT

One of the Dutch Climate Agreement goals is to increase the onshore energy production to 35 TWh by 2030, which means that up to 600 additional onshore wind turbines are necessary [5]. However, this can be a challenging undertaking. The installation of wind turbines changes the Dutch landscape, which often causes negative attitudes among local residents towards the energy projects, particularly wind farms. Over the past decade, the increas-

ingly negative attitudes towards onshore wind energy have been concerning. This is particularly due to the rise in other alternatives to onshore wind energy such as solar, offshore and nuclear energy [3]. When onshore wind projects are met with resistance by local residents, delays or cancellations can be the result [6; 7]. Only recently, in June 2021, the Council of State decided that more research should be conducted to increase a Dutch wind farm in Dijlfzijl due to a lack of environmental research. As a result of this ruling, 20 to 25 wind projects are expected to experience delays [8]. Even though research shows that the vast majority of people are aware of the importance of sustainable energy, many projects still face opposition by some specific residents living in the vicinity of the project [9; 10]. This local opposition challenges onshore wind development, such as rising implementation costs, implementation risks, and local conflicts. In turn, these challenges could lead to more demanding regulations, reducing the attractiveness of onshore wind project development [11]. Opposition on a local scale is widely explained using the *Not In My Back Yard* (NIMBY) effect, which states that "people have positive attitudes toward something (e.g. wind power) until they are actually confronted with it, at which point they oppose it for selfish reasons" (Wolsink, 2007, p.2699) [12][10] [13]. In the case of onshore wind projects, the NIMBY effect would result from inconveniences associated with wind turbines. For example, local residents are worried about visual pollution of the landscape and the effect it has on the value of their houses. Other concerns include the shadow flicker of the moving blades, which has been known to disturb local residents who experience it. This flickering effect is similar to switching the daylight constantly on and off. To protect residents from this disturbance, the Dutch law maximizes the flickering to twenty minutes a day for at most seventeen days a year [14]. Another concern is the nuisance of the wind turbine. The noise is caused by the rotation of the blades and the rotation of the nacelle when it shifts towards a direction where the blades catch more wind. The noise depends on the size of the wind turbine, which is often referred to as tip height: the hub height plus the length of the blade. Dutch legislation also limits the maximum loudness of wind energy noise, 47 dB by daytime and 41 dB by night [15]. Also, the high-frequency sound is a concern, the sound itself is not the issue, but the concern is that it may damage your health. Additionally, turbines higher than 150 metres require safety lights for aviation security so that the turbines are visible from below [16].

However, more and more empirical studies have recently criticised NIMBY by stating that NIMBY alone is not enough to explain local opposition [6; 17]. Other explanations have been used to explain the local opposition to onshore wind and other renewable energy projects, such as socio-psychological aspects and trust and perceived fairness [18; 13; 19]. Additionally, public participation is seen as a manner to come to local acceptance [10]. In reaction to this finding, the 'Dutch Wind Energy Association' (NWEA) has established a Code of Conduct, where the most important citizen participation guidelines are described [20]. The Dutch government partially adopted these requirements for consulting and involving local communities in their own policy and legislation [20]. In citizen participation, a distinction can be made by legal and non-statutory measures. Legal measures are captured in statutory and non-statutory measures are described in the Code of Conduct, and the

Climate Agreement.

The new Environment and Planning Act states that the inclusion of local residents is a necessity for project initiators, i.e. the onshore wind project developers, to obtain the required permits to launch a project. In the current law, these restrictions are not decisive for the fruition of a project. The initiator is responsible for conducting the necessary research and preparations to apply for the required permits in the statutory procedure. Additionally, minimum requirements concerning shadow flicker and noise pollution are stated by law and statutory procedures such as the authorisation process. Extra commitments elaborated upon in the Climate Agreement and the code of conduct are about citizen involvement. As extra non-statutory measures, the Code of Conduct of the NWEA is leading. The essence of the code of conduct is that the local community is involved in wind projects at the earliest possible stage. Also, the Dutch government had taken non-statutory measures to come to a better distribution of costs and benefits by incorporating the 'Regional Energy Strategy'(RES) in the Climate Agreement of 2019. In the RES, the wind farm planning shifts from a top-down to a more bottom-up approach [20]. The spatial assimilation of energy projects such as wind farms then shifted to thirty designated regions. Identifying search areas for wind farms shifts from national government and Provinces to more local governmental bodies. Each region determines the best way to generate renewable electricity within their district by making a plan to achieve the climate target of their region [5]. Each region has a different strategy; some regions subdivide the targets per municipality, and others tackle the planning provincial or regional. Public participation and local ownership are important aspects of the RES to increase local support of energy projects, i.e. onshore wind projects.

Despite all measures, citizens and local councils appeared to have not been sufficiently involved [21]. This is evident from an analysis of all plans of the RES regions by the Netherlands 'Planbureau voor de Leefomgeving' [21]. Moreover still, the proposed search areas of onshore wind citizens and result in local opposition. Also, these measures only provide guidelines, but their interpretation and implementation differ in each project. Therefore it is another interesting question how the new role of citizen participation will be organised to have the desired effect on the development of the onshore wind project and its decision-making process.

1.2 CITIZEN PARTICIPATION

Research points out that citizen participation can be key to establishing social acceptance of projects and can improve the quality and effectiveness of decision-making [22; 23; 24; 25; 6; 26; 27; 28; 29]. As O'Fairchellaigh (2010) states: "Public participation is designed essentially to ensure that all relevant information, including input from those affected, is available so that the decision-maker can make the most informed and well-considered decision" (p. 21) [30]. This study will examine citizen participation, as it is a useful method to create public support for onshore wind projects.

In this research, the definition of citizen participation by the International

Association for Impact Assessment (2006, p.1) is used. It is defined as: " the involvement of individuals and groups that are positively or negatively affected by, or interested in, a proposed project, program, plan or policy that is subject to a decision-making process" [31]. This definition can refer to multiple forms and levels of participation. In this study, a distinction is made between two forms of participation, process participation and financial participation, which together make citizen participation. The levels of participation defined in the 'IAP2 Spectrum of Public Participation' are used: inform, consult, involve, collaborate and empower [32].

In Dutch onshore wind projects, the responsibility to organise citizen participation is divided between project initiator and governmental parties and the willingness of stakeholders to cooperate [33; 34; 35; 36; 37]. The responsibility to participate is of the citizens themselves. They can decide to what extent they will participate and whether or not to oppose the project. The public participation process is different for each onshore wind project, as is the role division between initiators and governmental parties [34; 35; 36]. Public participation in wind energy projects involves many parties of interest, local residents and environmental organisations and aviation or marine institutions. However, existing research has been conducted on public participation, and many scholars agree that the resistance of local residents is most influential [3; 38; 27; 39; 9; 40]. The opposition of local residents often leads to project delays or cancellations. This makes the resistance of local residents one of the biggest threats in the realisation of onshore wind farms [3; 38; 27; 39; 9; 40]. Therefore, this thesis will solely focus on the public participation of local residents.

1.3 RESEARCH SCOPE

Regarding citizen participation, only the participation of local residents in onshore wind projects is studied as organised by the initiator and government. The involvement of other interest groups is out of scope. Participation can be imposed by law, or it can be expressed as non-statutory measures. This study has chosen to focus on non-statutory participation as this has more variety since it is not defined by law, but it is different for each case. Non-statutory measures are guidelines that are open for interpretation and can be implemented in multiple ways. Here, a special interest contrasts citizen engagement between different projects and the resulting impact on the decision-making process.

Another distinction is made between two forms of participation, process participation and financial participation. Both forms are considered and further explained in section 2.4. Also, five different levels of participation are considered in this study: inform, consult, involve, collaborate and empower.

1.4 SOCIETAL RELEVANCE

The Netherlands set highly ambitious climate targets for 2030. However, the realisation of onshore wind projects in the Netherlands is getting more chal-

lenging, mainly due to the increasing resistance of local residents. Agterbosch (2010) states that social acceptance is a fundamental challenge for wind projects and is an "important constraining factor in achieving the wind power targets in several countries, such as the UK, the Netherlands and France" [41]. Pasqualetti (2002, p. 169) also highlights the importance of public participation by stating that "the success of wind power depends on how well the wind industry learns to include the public in decisions" [42]. By studying the effect of citizen participation on the decision-making process, effective forms of participation can be identified. This can increase local support for wind projects and improve the quality and effectiveness of the decision-making process. An improved participation process can reduce the potential consequences of local opposition, such as long-term judicial procedures resulting in the delay or cancellation of the issuance of required project permits [43; 39; 20; 44; 29; 30; 38; 27; 35; 36; 45].

Besides its contribution to meet the climate targets, this study also aims to ensure a decision-making process where different interests are balanced to the best of their ability [30]. Also, there are economic incentives for efficient wind farm development. Project delays and judicial procedures result in additional costs. Additionally, is the government raising citizen participation standards in onshore wind energy projects. An example is the establishment of the RES whereby wind project developers need to set the ambition to ensure local ownership of 50%, as is stated in the Climate Agreement [4]. The influence of the local community will increase, but how this will happen is not definite yet. Therefore, lessons and recommendations about citizen participation could be useful for policymakers and wind project initiators.

This thesis will explore the influence of citizen participation on the decision-making process through contextual and multiple case analyses of the projects. Lessons on citizen participation can be learnt and can be used to improve the participation process. This is relevant for several reasons:

- This could increase the time and cost-efficiency of onshore wind decision-making processes
- This could increase the acceptance of local residents for onshore wind projects
- This could provide relevant lessons for government and project initiators for realizing onshore wind energy projects, especially in a changing environment where the RES is implemented.

1.5 COSEM RELEVANCE

The Master's program in Complex Systems Engineering and Management at the Delft University of Technology primarily focuses on analysing and solving complex issues in socio-technical systems. This study analyses citizen participation within the decision-making process of onshore wind farms. Hereby the technical environment, regulations, different interests of actors and human behaviour are taken into account. The technical requirements of wind energy influence the decision-making process, for example, the height

of the turbines and the distance to households. Existing regulations imposed by the government also influences this. Additionally, the different participants of the decision-making process have contrasting concerns. Therefore, multiple perspectives need to be considered. Improving the design of the decision-making process is the core objective while also examining external factors such as legal and economic aspects. This is evidently a CoSEM study, as a technological process is set in a multi-actor and complex environment where public and private stakeholders with different perspectives on onshore wind farms are involved.

1.6 SCIENTIFIC RELEVANCE AND RESEARCH GAP

A considerable body of knowledge exists regarding citizen participation in onshore wind projects, particularly among local residents [46; 22; 23; 24; 47; 48; 6; 26; 49; 50]. The relationship between citizen participation and public acceptance has been researched in several countries, such as Switzerland and the Netherlands [6; 38]. Additionally, the influence of participation on decision-making from a legal perspective in the Netherlands has been researched [25]. The willingness of the public to engage in different levels of the decision-making process has been discussed in the literature. In these studies, the factors that influence the decision to participate are emphasized [6; 26; 17]. There is also a particular subset of the literature regarding financial participation for local residents and ownership of the local community of the wind farm [26; 51; 52]. Further, there is also a body of research about the barriers wind energy projects faces and the role of perceived fairness by local residents in the decision-making process [28; 53; 54; 26; 55]. A more generalised study was conducted in the UK concerning the current practice of community engagement in wind projects, whereby comparisons were made between countries, providing further context to public participation in wind projects [56; 57].

Although public participation in wind projects has been widely studied; there are still gaps in the literature looking at the effect and impact of citizen participation on the decision-making process. Furthermore, in-depth case studies that also consider the role of the Dutch government and initiators are limited. The rationale for this study is in line with Lucas Geerts' (2020) Master's thesis [58]. It is an exploratory study looking at the influence of citizen participation on the decision-making process of Dutch onshore wind farms. His thesis provides a case study analysis and findings that describe the current use of citizen participation in onshore wind projects within the Netherlands and how it affects the decision-making process. This thesis complements his research by studying different cases with an extended focus on project-specific and governance factors [58]. This study also addresses the RES, the 2030 climate targets and the distinction between statutory and non-statutory participation. Therefore, the lessons learned from current practice will facilitate the upcoming role of citizen participation in wind projects.

1.7 RESEARCH QUESTIONS

From the challenges as discussed above, the following research question has been formulated:

How does citizen participation influence decision-making processes of four selected Dutch onshore wind projects?

1. What is the role of citizen participation in decision-making processes of onshore wind farms?
2. What contextual factors affect citizen participation in onshore wind development?
3. When comparing the four cases, what do the citizen participation and the decision-making processes of the four onshore wind cases look like?
4. When comparing the four cases, how do the contextual factors influence the decision-making process?
5. What lessons and recommendations on citizen participation can be identified and applied to the decision-making process?

1.8 OUTLINE OF THE REPORT

In this chapter, an introduction is provided where valuable context to Dutch onshore wind farm development and the citizen participation process is given. Chapter 2 reviews relevant literature specific to citizen participation in onshore wind projects. The purpose of this chapter is to place the decision-making process of wind development projects in context. Chapter 3presents the theoretical basis of this study. Together, these chapters position the study and influence the construction of the research questions. Chapter 4 outlines the study methodology. Chapters 5, 6, 7 and 8 present the findings from the within-case analysis; each chapter represents one case. Chapter 9 discusses the findings of the cross-case analysis. Chapter 10 discusses the overall study conclusions, the implications of the findings, and the study's limitations.

2 CITIZEN PARTICIPATION IN DECISION-MAKING PROCESSES

This chapter reviews the literature on citizen participation in the decision-making process of onshore wind development projects. This literature study will present in-depth insights into the importance of citizen participation, its role in decision-making, and the involved actors. Also, factors influencing citizen participation are identified. The first two sub-questions are addressed with this information: the role of citizen participation in the decision-making process is explained, and the factors influencing participation are listed in this chapter.

2.1 THE IMPORTANCE OF CITIZEN PARTICIPATION

In research, the terms public participation or citizen participation are often interchangeably, as is done in this study [46; 59]. This topic is widely discussed, particularly in the fields of policymaking, urban planning, impact assessments and the acceptance of renewable energy technologies [46; 22; 23; 24; 47; 48; 6; 26; 49; 50]. Citizen participation is defined as a "group of procedures designed to consult, involve and inform the public to allow those affected by a decision to have an input into that decision" (p. 6) [49]. Research shows that citizen participation has great potential to improve the outcome of decision-making processes and the acceptance of wind energy projects [24; 25; 6; 26; 27; 28; 29]. In energy projects, citizen participation is important because it allows local residents to react and raise objections about specifics of onshore wind farm projects. They may object to, for example, technical characteristics, environmental impacts, societal impacts and economic impacts that wind farms have on the surroundings [27]. The environmental impacts may include how the wind farm could influence the environment such as wildlife, whereas societal impacts concern the well-being of humans [27]. Economic impacts may be reflected by the effect of wind farms on income, electricity prices and the value of houses [27]. Other reasons local residents may object to wind farms and, therefore, delay the decision-making process is if there are conflicts about what constitutes a fair distribution of the benefits and the challenges of wind projects [53; 54; 41]. This can be arranged by financial participation or shared ownership. Goodman (2018) states that financial participation positively affects the support of local energy projects, including onshore wind projects [26; 51; 52]. Two forms of citizen participation can be distinguished: process participation and financial participation [60]. Process participation is the involvement of stakeholders in developing strategies within the decision-making process of a project. Financial participation is about investing in or financially benefiting from a wind project [60]. This can be expressed in multiple formats;

co-ownership, financial investment, a fund for the local community or a local resident scheme.

2.2 CITIZEN PARTICIPATION IN THE DECISION-MAKING PROCESS

According to the 'Dutch Wind Energy Association' (NWEA), five project phases can be identified to explain the process towards an operational wind farm, as is shown in figure 2.1: policy-making, permit granting, contracting, construction and operation [37]. In reality, the transition between these phases is not so sequential but much more fluid. The first two phases together are 'wind farm development'. Wind farm development begins with a climate target and transitions to an investment decision about a clearly defined wind project [37; 61]. Hereafter, the role of public participation and the interaction between initiators, residents, and government significantly decreases. Therefore, this research focus on citizen participation within decision-making processes of wind farm development is studied. However, also citizen participation resulting from the policy-making and permit granting phases is considered. This decision-making process can be long and complex, and all statutory decisions are subject to citizen participation [25]. Two kinds of citizen participation moments are identified: the statutory and the non-statutory measures. The statutory procedure consists of several legal steps with fixed moments of participation. The non-statutory measures are all other participation moments, not arranged by law but stimulated by the Climate Agreement and the RES.

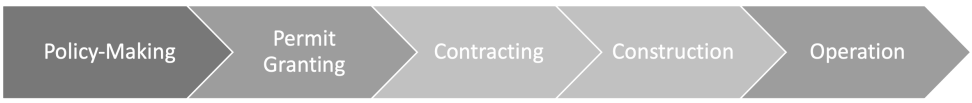

Figure 2.1: Phases of the development process according to the NWEA [37]

2.2.1 Statutory Participation

The policy-making phase starts with an onshore wind target and ends when the wind farm location and initiator are identified. In this stage, the government identifies search areas. This is often done in comprehensive planning documents. The spatial policy framework for studying a proposed location for developing a wind farm is presented in structural visions at the national and provincial levels [3]. Municipalities may also draw up an integral structural concept for wind energy. This procedure will change with the advent of the RES, as explained in the previous section. The initiator conducts an exploratory technological and political analysis to determine whether there is enough confidence in the initiative to start the wind project [62; 63]. If the project looks promising, landowners are contacted, and letters of intent are signed. When the landowners agreed and the letters of intent are signed, the responsible authority of the government is approached. The responsible au-

thority refers to the governmental body in charge. The responsible authority differs per project, depending on the project size. This could be the national government, the province or the municipality. How this is determined is explained in section 2.3.1.

Before a definite location and wind farm layout can be chosen, the project's impact needs to be studied. First, the concept 'Notitie Reikwijdte en Detailniveau' (NRD) is written, a self-interpreted translation is 'Scope and Detail Level Note'. In the NRD, the scope of the study on the environmental impact (EIA) is explained. It indicates the start of the regional planning procedure, and it is an application assessed by the responsible authority. In the NRD, the nature and objectives of the projects plans, the considered alternatives and the necessary environmental impact assessments (EIA) are explained [33]. Subsequently, the NRD is open for a consultation for six weeks after the responsible authority responds to reactions given and enacts the NRD. The EIA can be performed after it is determined what studies need to be conducted. The IAIA defines an EIA as "the process of identifying, predicting, evaluating and mitigating the biophysical, social, and other relevant effects of development proposals before major decisions being taken and commitments made" [64]. This assessment consists of two stages: screening and scoping. During the screening, the impact of different project layouts is researched. Afterwards, the findings are scoped by selecting a preferred layout. Another environmental impact of the preferred layout is studied more in-depth. After the EIA is performed, it is also six weeks open for consultation [33]. 'Open for consultation' means that everybody interested in the wind farm can send a reaction to the responsible authority on the performed EIA published online. Afterwards, the responsible authority reviews and answers these reactions. This can result in further instructions for the wind farm initiators, such as conducting an extra study.

When the EIA is in order, the initiators write a concept planning permit in consultation with relevant advisers and governmental bodies. The municipality must determine the wind farm location planologically, and they should adjust the zoning plan. Additionally, the initiators should apply for the required permits [33]. Depending on the project specifics, several permits can be required, such as a water permit, nature conservation, and flora and fauna act. However, a planning permit issued by the responsible authority is always required. This permit is also six weeks open for consultation, and the reactions are considered when deciding whether or not to issue the permit. Usually, the decision has to be made within six months. When the corresponding governmental bodies issue all required permits, an appeal period of six weeks follows. Here, all parties of interest that also reacted when the permits were open for consultation have the possibility to appeal. Within six months, the Council of State decides whether grounds for appeal are well-founded and issued appeals.

2.2.2 Non-Statutory Participation

Akerboom (2018) states that wind farm development, policy-making and the permit phase can be referred to as 'wind farm planning' [25]. The first part

of planning concerns design choices, and the second part is about obtaining the right permits [25]. The location of the wind farm is the first important decision that is made. As explained above previously, locations were often decided by identifying search areas in governmental planning documents. How this is done differs per governmental body, but the planning documents are open for consultation. The location setting changed with the advent of the RES, where non-statutory measures might be included in defining wind farm locations [65]. Design workshops can do this, but there is no fixed format [65]. When location is determined, it is in every country mandatory to inform local residents about the start of the project [57]. This can be done by information letters, (social) media, or publications in the local newsletter [57]. A communication and participation plan needs to be developed to make agreements about profit distributions, nuisance regulations, and the wind farm layout. Currently, this is not obligatory by law, but this will change with the new Environment and Planning Act, which is expected to be active in January 2022. The importance of involving citizens in developing a participation strategy is widely acknowledged [25; 49]. Whether and how this is done, again, differs per project [25]. An important part of the participation process is designing the wind farm layout. The number of turbines, their height and their exact location should be decided [25]. The ability to address concerns about the nuisance of the wind turbines is an important aspect of these conversations [3; 66; 11; 57]. In some cases, the local residents have influence in these decisions and in others, the local residents have no role besides what is stated by law. Local residents can be involved by design workshops or consulted in other ways, such as questionnaires or advisory boards. It is considered important to consider the opinions and concerns of local residents and to gain consensus before moving on to the permit phase [62]. Lastly, in the Netherlands, financial participation should be established. Previously this was not required by law, but financial participation is currently incorporated in the Climate Agreement and the RES. Financial participation takes the form of a community fund, investment opportunities or even co-ownership [60].

2.2.3 Moments of participation

In this research, the decision-making stages are defined regarding citizen participation. In doing so, the phases as identified by Akerboom (2018), Andersson Elffers Felix (2016) and the NWEA (2021) are combined with the stages for citizen participation as presented by Geerts (2020) [58; 62; 25; 37]. This thesis identifies and uses the following stages of decision-making: policy formulation, identifying the design specifications and the outcome. In the first stage, policy formation, the wind targets are translated into a more specific project where the responsible governmental authority decides the search area, project requirements, and initiator. The design specification stage starts when the initiators are linked to a project until the permits are applied for. In the outcome, opponents can object to the granted permits.

2.3 ACTORS IN PUBLIC PARTICIPATION OF ONSHORE WIND FARMS

Relevant literature points out the most important actors in the decision-making processes of onshore wind projects. In this thesis, three stakeholders are studied: the government, local residents and onshore wind project initiators.

2.3.1 Governmental bodies

In the Netherlands, the national government, provinces and municipalities are responsible for achieving the national, regional and local climate goals. Meeting national and local onshore wind targets is one of their objectives. The governmental agency responsible for meeting such targets depends on the size of the proposed wind farm, hereafter referred to as the responsible authority. The governmental agency is responsible for issuing the planning permit. However, an independent position towards specific wind initiatives is expected [62]. The national government is the responsible authority for all procedures concerning wind farms with a minimum capacity of 100 MW [33]. The "Rijkscoordinatieregeling" (RCR) is applicable for these wind farms, which can be translated as a 'National Coordination Regulation'. In the RCR, the national government is responsible, and the project is considered of national importance. The national government has the power to make spatial decisions. The provinces are in charge of smaller farms, between 5 to 100 MW, which can be delegated to municipalities if this causes no project delays. The municipalities are the responsible authorities for wind farms with a capacity under 5MW [33; 67]. This means that the municipality's role can vary from a leading role to a more advisory role in representing their inhabitants [33]. In reality, however, municipalities are seldom overruled. Locations of the wind farms used to be decided from the top down, but this changed with the advent of the RES. The spatial assimilation of energy projects, such as wind farms, has shifted to thirty designated regions, determining the best way to generate renewable electricity within their district [5]. The RES indicates the locations in a particular region where new wind farms can be built in the coming years. The RES is Incorporated in the spatial policies of governments, such as a structural or environmental vision. The thirty RES' need to finish their strategy to contribute to the 2030 climate goals in July 2021. Here, search areas for wind and solar projects are presented, the limitations of the areas, the size of the energy projects and guidelines for citizen participation. Hereafter, initiators can react to these potential projects by the municipalities or provinces in question. It is presumed that more wind projects will be constructed after the first version of the RES, RES 1.0, in July 2021 [5]. However, in the local approach, the RES wields, a lot of resistance from local residents occurs, especially against onshore wind. This complicates the regions to present strategies with ambitious onshore wind plans.

However, according to Bröring (2014, 2017), the role of different governmental layers is not so clear as stated above [34; 35]. The national govern-

ment, province, and municipality roles differ per project, leading to misunderstandings among the initiators and residents [34; 35; 36; 68]. Sometimes, municipalities can feel insignificant or even left out when important decisions are made [35] and this can be at the expense of the support of local governments. Geerts (2020) acknowledges this by stating that the attitudes among the different governmental agencies differs and can affect the decision-making process [58]. Wolsink (2007) stresses that it is important to gain the acceptance of the local government [10]. Broring (2014, 2017) criticises the role of the national government in onshore wind projects [34; 35] and goes on to say that national government appears to have little interest in the division of costs and the benefits with the municipalities and local residents [3]. It can be unclear whether the national government acts out of self-interest or as an intermediary in the process [62]. Additionally, the division of roles between the different governmental agencies, the government and initiators can be unclear [36; 35; 68].

2.3.2 The Initiator(s)

The development of a wind farm is initiated by a third party, whether at the government's invitation or not [20]. The initiator of the wind project could be anybody, but often, energy companies or cooperatives initiate a wind farm. The initiator is the project developer and has a financial interest in the realisation of the wind project [34]. The developer is responsible for overseeing the entire project, including conducting the required investigations, e.g. concerning the natural and environmental values [33]. The initiator needs to obtain all necessary permits, authorisations and, importantly, signed agreements of landowners. Furthermore, the project developer is responsible for process participation of the wind farm project and needs to give substance to its form [57].

Types of wind farms can vary from small scale projects initiated by the local community to large-scale projects initiated by a large energy company. When wind project developers are aware of plans for wind turbines, they start looking for the best location within the desired area and seek to engage in a contract with landowners. During the exploration phase of a potential project, the initiator works with the responsible authority to involve local residents and other stakeholders who may experience some of the consequences of living near a wind farm [20]. Research has been conducted to identify how the local community's reaction differs based on the type of initiator. Stadelmann-Steffen et al. (2021) state in their study that citizens prefer to work with a public developer rather than a private party [6]. Additionally, they find it almost irrelevant whether the initiator is local as long as it is not foreign [6]. Along similar lines, Leiren et al. (2020) found that wind farms owned by local stakeholders tend to enjoy residents' trust more than wind farms owned by larger commercial initiators [27]. PBL (2019) found that the company size of the initiator does matter and speaks of the so-called 'big wolf effect', where large developers are seen as less trustworthy and profit disproportionately from the project [3]. This implies that large international energy companies are trusted less by local residents than small local energy

cooperatives. Due to the scope of this study, the differences between large and small initiators are not further explored.

2.3.3 Local Residents

Local residents are considered residents living around any planned wind farm and are affected by the project. Currently, citizen participation is not required in Dutch legislation, only stimulated. But from 2022 onwards, new Dutch legislation requires an action plan of how local residents will be involved when applying for an 'omgevingsvergunning', translated as planning permit [25; 57]. Exactly who is considered a local resident depends on each project. For example, all residents within a contour of ten times the tip height are identified as stakeholders. Another reference point is the noise level determined by the number of decibels. After approximately 900 metres, residents are outside any noise zone. However, visual pollution involves a larger contour[20]. Local residents are never one distinct group and are unique, e.g. due to the distance of their residence from the wind farm, available resources, beliefs, and social status [69]. Local residents can have various roles in the decision-making process[26]. These roles and their influence have different consequences on the level of acceptance of wind projects [70]. Local residents can be categorised as active and passive citizens during the development of a wind farm [20]. Within actively involved citizens, Geerts (2020) distinguishes participating and activist citizens [58]. Active citizens can participate in the decision-making process at different levels. Their role varies from responding to a consultation session, such as a questionnaire, to representing the interests of the other local residents by participating in an advisory board [20; 57]. The exact format of the board is project-specific. The same goes for the manner the board members are selected [58]. Actually, the fourth type of local resident can be distinguished. This is where the local residents and the initiator come together. Local communities, community projects can also develop wind projects. Here, local residents also function as initiators. The interest of local residents is divided between financial incentives and as little nuisance and landscape pollution as possible. Local residents who are also (partially) wind farm owners do not oppose the wind farm. They legally do not experience hinder as stated by the 'National Institute of Public Health and the Environment' (RIVM). A side note is that there is a difference between co-ownership and financial participation. Ownership implies that you are co-owner of the wind farm through an association or cooperative. Financial participation implies one carries financial risk by buying certificates, shares or obligations of the wind farm.

2.4 FACTORS INFLUENCING PARTICIPATION

In what manner the participation is set up depends on the decisions that need to be made [25]. Also, Rowe & Frewer (2000) state that the most appropriate form of participation depends on situation-specific characteristics

and the type of decisions made [49]. Multiple factors play a role in the format, such as the moment of inclusion, the level of inclusion, and the local residents included. Rowe & Frewer (2000) distinguished acceptance criteria, and process criteria, where process criteria are related to the situation-specific characteristics of the procedure and process criteria refer to the participation process itself [49]. This means that the contextual setting and the participation process's characteristics must be studied to evaluate a process. The same distinction is made to determine factors of the decision-making process in onshore wind farm development: contextual factors and process characteristics are defined. The contextual factors are known before the real 'participation process' starts, and process characteristics provide information about the process after the start of the participation process.

As previously discussed, context is an important factor of citizen participation in the decision-making process. External factors such as the location and the size of the wind farm influence the attitudes of local residents [6; 26; 17; 10]. Leiren (2020) refers to these as technical characteristics; size and distance are important to the residents near wind farms [27]. The larger the turbines, the larger the local opposition, the closer to the residents the larger nuisance. Also, the impact the wind farm has on the landscape is important. This differs per type of landscape. Furthermore, the actors involved influence the participation process: the type of initiators, local residents and governmental parties. Was the initiator a 'local energy cooperative' or a large energy company or a combination? In section 2.3.2 is found this can be of influence. Additionally, different governmental bodies can have different strategies and have different distances to the local community. The national government is further away from the local residents than the municipality. How is the decision made to include specific actors? Which local residents are included in the decision-making process, and how were they chosen? A lot of research has been conducted on who is eligible for the participation process. Dietz and Stern (2008) refer to this aspect as the breadth of the participation [29]. Burton (2004 p. 194) states that "everyone affected by a decision" must be able to participate [71]. But, because 'the public' and 'local residents' are not homogeneous entities, different people bring different opinions and expectations [46]. Therefore, it is impossible to satisfy all parties involved, which can lead to frustrations, potentially resulting in delays[46]. Therefore, in onshore wind projects, often a group of local representatives represents the voice of the local residents. This means that these local representatives need to represent the interests of their constituency, i.e. the local residents.

Also, the participation approach is considered of great importance, particularly at the moment of inclusion and at the level of participation. Even though there is the desire to start the participation process on time [57] the earlier the stage, the less accurate information there is on the wind project. Noe (2019) identified this as the 'participation paradox' [72]. A high level of participation is associated with a higher level of acceptance and faster implementation of the wind park [6]. Five levels of participation: inform, consult, involve, collaborate and empower [32]. When the residents are informed, the public has enough information to understand the situation. When they are

consulted, however, also feedback of the public is obtained and when they are involved local residents are involved throughout the process to ensure their concerns are addressed [32]. In collaboration, the public is seen as a partner and involved in each aspect of decision-making. Local residents are empowered when the final decision is in their hands [32]. The higher the level of participation, the higher the impact on the decision. Firestone (2017) indicates that social acceptance is often higher if citizens are under the impression that they influenced the decision-making process and their worries are taken seriously [28]. Aitken (2016) states that when the participation process is only limited to information provision about the wind project, this then means that initiators still enjoy most power, and the public might feel unheard [56; 51].

Furthermore, the role the participating parties should be clearly defined so that the responsibilities of the local government, initiators and local residents are unambiguous [10; 34; 35]. Besides this, it is also interesting to discuss the different roles between national government, province and the municipality [34; 35]. Furthermore, it is important to know which governmental body established which onshore wind targets. Lastly, decisions from the past can influence the current process, for example events that lead to old grudges. Therefore, it is important to know what important events and decisions might influence the participation process.

An important part of the process is understanding how the actors involved perceive the process. Trust between the actors is considered relevant. Kuzemko et al. (2016) find that a lack of trust between the actors leads to dissatisfaction and the possibility of one actor having more power than the others [55]. An important aspect is the transparency of the process, how parties perceive they have access to information and to what extent they have the ability to address topics of their interest. All parties should have the feeling that they are taken seriously and are being listened to. Therefore, it helps if all participating parties have the perception that they can influence the decision-making process by influencing the output of the process[53; 54; 41]. Lastly, the participants should have the perception that the benefits and the challenges are fairly distributed [53; 54; 41].

The characteristics of influence as found in the literature are summarized below. The factors are divided into contextual factors and process characteristics. The contextual factors are decisions that have been made before the start of the participation process formally starts. So the contextual factors provide information about the initial situation, but after the process starts, the characteristics can change.

1. Contextual Factors
    - Windfarm plans: size and location of the wind farm
    - Actors included in the process: local residents, type of initiator and type of governmental bodies
    - The participation format: moment and manner of inclusion
    - The role responsibilities divided between the actors involved

- Local wind energy ambitions: climate targets, social guidelines, and requirements
- Previous decisions and events

2. Process Characteristics
    - Trust
    - Perceived fairness
    - Transparency of the process
    - Perceived influence on the outcome

2.5 CONCLUSION

In this chapter, a literature review is conducted to research participation in the decision-making process in Dutch onshore wind farms. The first two sub-questions are addressed: the role of citizen participation in decision-making explained and presented what contextual factors affect citizen participation. It is found that citizen participation plays a vital part in the decision-making process of onshore wind farms, mostly during the policy-making and the permit granting phase. The initiator and the government are responsible for the organisation of citizen participation. Two kinds of participation are observed: statutory and non-statutory participation. Statutory participation is mandatory participation as stated by law, and non-statutory participation is not legally required and is open for interpretation. Non-statutory differs per project, while statutory consultation has a similar format in each project.

Participation can be influenced by external factors and by the process itself. A distinction is made between contextual factors and process characteristics. Several factors have been found. The most important contextual factors found in the literature include the wind farm plans, the actors involved and their responsibilities, the participation format, the wind targets, previous decisions, and other influence events. Process characteristics are trust, perceived fairness, transparency of the process, and participation's perceived influence.

In the next chapter, these findings are visually presented in a theoretical framework: the Rounds Model and the Contextual Interaction Theory. The framework is used to structurally present the decision-making process, participation process and the factors of influences during the case study analysis.

3 THEORETICAL FRAMEWORK

In this chapter, a theoretical framework is constructed that enables explanations and analyses of the decision-making processes of onshore wind farms. First, Teisman's Rounds Model is clarified. The model is used as a framework to analyse decision-making processes. The rounds model enables the visual representation of the interaction between important actors and their decisions within the decision-making process. Since the Rounds Model pays little attention to the governance and contexts of the processes, the Contextual Interaction Theory (CIT) is included. The CIT provides a framework to consider the governance and other contextual factors of decision-making processes. The uses of both frameworks are explained, supported by visual presentations of the Rounds Model and the Contextual Interaction Theory applied to this research.

3.1 TEISMAN'S ROUNDS MODEL

Prof. Geert Teisman developed the 'Rounds Model' to explain how to analyse the decision-making process's complexities [73]. In his article 'Models for research into decision-making processes: on phases, streams and decision-making rounds', he presents three conceptual models to analyse complex decision-making processes. The phase, streams, and rounds models are compared by applying them to the same case [68].

The phase model of Mintzberg et al. (1976) is based on the assumption that decision-making processes exist within fixed phases. Here, a single important actor is the central decision-maker in the process. In the phase model, decision-making consists of generic steps that include formation, adoption and implementation [74]. Kingston's and Turber's (1984) streams model is not focused on one dominant actor. The model assumes that three streams run simultaneously in parallel in the decision-making process: problems, solutions and participants [75]. The dynamics within these streams can lead to important policy changes when a 'policy window' occurs as the three streams come together [75]. Even though the streams model is considered effective, it is hard to apply when no clear focal actor can be identified. Teisman (2000) introduces his own rounds model as a third conceptual model, enabling a more simplistic analysis of complex decision-making processes [76]. What sets the rounds model apart is its focus on multiple actors and their interactions [76]. In the rounds model, interaction drives progress in the decision-making process where all of the participating actors bring problems and solutions together [76]. Hence, it is assumed that policies and other solutions are not restricted to a single actor and at a single moment of adop-

tion. The beginning and the ending of a decision round are determined by actors or participants identifying the problems and the preferred solutions [76]. The actors involved and the key events changing the definition of problems and solutions characterise the rounds [77]. In conclusion, the Rounds Model focuses on the role of events, groups of actors, changes in course, and the personal involvement of the actors during a long transition period. The differences between the three models are visually presented in 3.1.

	PHASE MODEL	STREAM MODEL	ROUNDS MODEL
CRITERIA FOR THE SEPARATION OF STRANDS OF ACTIVITIES	Stages a focal organisation goes through	Different concurrent streams of problems, solutions, and politics	Rows of decisions taken by actors, creating rounds through interactions
CHARACTERISATION OF DECISION-MAKING	Sequence of formation, adoption, and implementation	Coincidental or organised links between streams	Interaction between decision taken by various actors
ASSUMPTIONS ABOUT THE NATURE OF THE PROCESS	One moment of policy adoption holds sway over other decisions and guides the process	A simultaneous stream of problems, solutions, and politics, linked more or less at random	Decisions that conclude a round and initiate a new round, without fixing its progress
ASSUMPTIONS ABOUT THE CONTENT OF THE PROCESS	A focal actor adopts a dominant definition of the problem solution, creating governmental policy	Dynamics within and links between streams determine major policy changes	Interdependent actors take decisions, separately or jointly, leading to governance policies

Figure 3.1: Comparison of Phase, Stream and Rounds model, Teisman (2000, p. 946) [76]

3.1.1 Suitability of the Rounds Model

As shown in the figure 3.1 presented above, the three models are compared based on four aspects: the separation of the strands of activities, the characterisation of decision-making, assumptions about the nature of the process and assumptions about the content of the process [76]. Firstly, in onshore wind energy project decision-making processes, generic phases can be identified. However, the phase transition is much more fluid in reality. Besides that, are decisions project dependent. Also, no clear focal actor can be identified because the main decision-making power is divided between multiple government agencies and the project initiator. In this process, no standard format exists, and, instead, the focus is on the interaction between government, development and the residents. The third aspect involves the nature of onshore wind decision making processes. The absence of fixed progress characterises this. There is no one clear moment of policy adoption shaping the process. In wind farms' decision-making processes, decisions are not necessarily binding and could be altered in future rounds. Lastly, interdependent actors in onshore wind energy project decision-making processes

are initiators, local residents, and governmental agencies. Although power is not distributed equally, all parties have their own role in the decision-making process.

The rounds model is considered most suitable to analyse the effect of public participation on the complex decision-making process of onshore wind development. Teisman (2000, p. 949) stresses this by stating that the rounds model "offers a way to reconstruct a basically unlimited complexity of events that can be combined into a decision-making process". This suits the many moments of interaction, the various actors involved and the interdependent moments of decision-making that characterize the decision-making process towards the onshore wind farm. Also, in line with the rounds model, the focus of this study is on public participation and the interaction between government, initiator and local citizens. The interaction between the different actors is a vital part of the rounds model, in contrast to the phase and stream models [76].

A side note of analysing the decision-making model is that it can be a selective process [68]. Assumptions have to be made to translate empirical data into usable information. Furthermore, not all empirical data can be considered. Instead, only important events of the decision-making process will be analysed. This, therefore, makes the data and associated analysis of decision-making not entirely representative of the complex reality. However, simplifications are inevitable to make the analysis feasible, also when another model be used. Therefore, the rounds model is used to analyse the decision-making process of onshore wind farms.

3.1.2 Use of the Rounds Model

As discussed in the previous section, the rounds model is used to understand and explain the decision-making process of onshore wind farms. The rounds model is a heuristic tool to present the interaction of participants in the decision-making process in a visually and comprehensive manner. In this section, the decision-making process of a 'general' Dutch onshore wind project is presented. It considers the decisions are taken, which actors participate when and the mutual influences, with a special interest in the citizen participation. The rounds model is used to describe the decision-making process of the cases in a structured way.

The findings of the literature study about the decision-making process and the participating actors, as described in the previous chapter2.2 and 2.3, have been used to create a rounds model for a 'standardized' decision-making process of Dutch onshore wind projects. The result is presented below in figure 3.2. From the government, the responsible authority and a higher governmental body are involved in the decision-making process, i.e. the province or national government. Also, the initiators and local residents are included in the rounds model, as is the Council State. An action committee is not included. Even though an action committee is often included in a decision-making process, it is assumed that it is not part of a standardized

process. As discussed, three decision-making rounds describe the citizen participation process 2.2 defined as policy formulation, design specification, and outcome. Within these stages, different interaction decisions are made. Each round is characterised by an important decision that can lead to a new round. The decisions that include citizen participation are coloured. Here, a distinction is made between participation within the legal process, coloured green, and the non-statutory measures coloured grey. When there are too many important decision-making moments for a clear model, only the most influential moments are visually presented in the rounds model. Arrows represent the mutual influence of decisions, and feedback loops are used to visualise re-design processes to identify non-linearity. A plus flags the intensity of the rounds, or a minus sign, where a plus stands for high intensity and a minus represents low intensity. Here the intensity means how many residents are involved, how high the emotions rise and how much influence they have. Lastly are the most influential moments red outlined. Flagging the intensity, the feedback loops and the most influential moments is only done during the case analysis starting in chapter 5.

When looking at the rounds model, consideration is given to the CO_2 emission reduction goals at the beginning of the policy formulation stage. The local government translates these into a climate policy where search area, project size and participation requirements are set. Currently, policy-making is not a citizen-participation intensive process, but this will change with the advent of the RES. When the design is more specific, initiators can establish a project plan that the responsible authority will approve. Then, the process participation starts, the non-statutory measures. The non-statutory process participation is different in each project, and it is impossible to represent a standardized approach. Only the legal process has a standard procedure, even though it is dependent on the size and the permits required for a project. Therefore, only statutory participation is presented in this visualisation.

If the project initiators consider the project as feasible, they establish a preliminary project plan. If this plan complies with the governmental policy, this is approved. Afterwards, the NRD starts, which indicates the start of the planning process. In the NRD, the research plan is published, which is open for consultation. When the NRD is agreed upon, the EIA can start. Based on these results, the initiators determine the wind farm layout in dialogue with the responsible authority and, sometimes, with local residents. When the specifics such as location, heights, and amount of turbines are agreed upon, they are incorporated in the permit applications. These are also open for consultation. When the permits are approved, opponents have the chance to object to this decision. When all permits are granted, the local residents have six weeks the option for appeal. The permits are officially granted when the Council State takes the final decision. Then the initiators take the final investment decision, and after the wind farm is built, the financial participation as agreed upon in the process participation takes place.
Below, a list of decisions are presented and visually displayed in the rounds model of Fig 3.2 to show a 'standardized' decision-making process of Dutch

onshore wind projects. Mostly, the focus is on statutory participation, as there is no 'standardized process' for non-statutory participation.

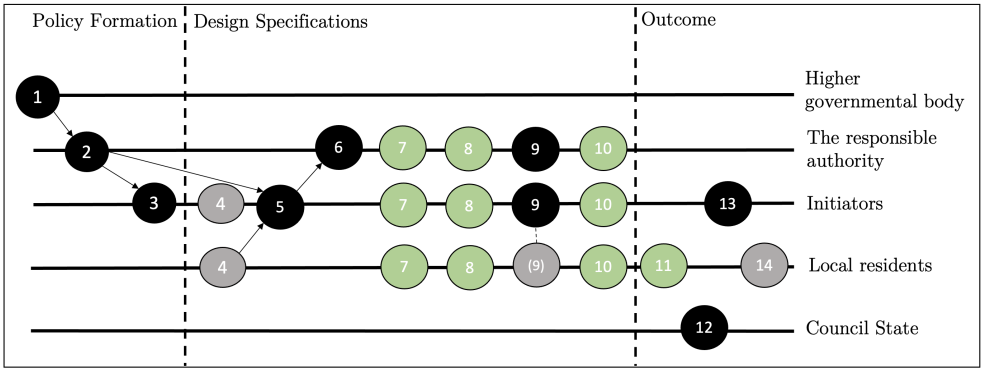

Figure 3.2: An established rounds model presenting a general decision-making process of onshore wind projects

1. Onshore Wind targets are set: new capacity installed and regulation concerning onshore wind projects. Regulation can concern topics such as the maximum height of turbines, regional requirements for citizen participation, and existing turbines' removal.
2. Local Wind power policy: decided upon a search area, project size and citizen participation requirements.
3. Initiators decide upon its intention to develop the wind farm.
4. The process participation process starts.
5. Initiators establish a preliminary project plan, including a citizen participation plan
6. The responsible authority approves a preliminary project plan by checking if the project plan complies with the policy. The agreements are adopted in an anterior agreement.
7. The proposed NRD is published; it is six weeks open for consultation. Then the responsible authority takes a final decision.
8. The proposed EIA is published. It is six weeks open for consultation. Then the responsible authority takes a final decision.
9. Agreements are made in process participation, concerning preferred layout and financial participation.
10. The initiator writes the planning permit applications in consultation with the responsible authority and others if necessary. This is six weeks open for consultation. If everything is correct, the responsible authority takes a draft decision.
11. Local residents have the option for appeal.
12. The Council State takes a final decision.

13. The initiators take the final investment decision (FID).
14. Financial participation takes place.

3.2 CONTEXTUAL INTERACTION THEORY

The rounds model provides an excellent framework to present the decision-making processes of the cases comprehensively. The rounds model, however, pays little attention to the policy and governance context. To also include contextual factors that influence the decision-making process, the Contextual Interaction Theory (CIT) is included to analyse the cases. Bressers' (1983) Contextual Interaction Theory (CIT) provides a framework for evaluating complex policy implementations while considering that these implementations are influenced by context and actor interactions [78; 79; 80; 81]. The CIT can be used for multiple purposes [78]:

1. Ex-ante: Predicting the effectiveness of a policy given a context;
2. Ex-ante: Compare predicted effectiveness of a policy for varying instruments and contexts;
3. Ex-ante: Analyse the sensitivity of predictions for different policy instruments or contexts;
4. Ex Post: Explain the degree of effectiveness resulting from context and policy characteristics;
5. Ex post: Focus on evaluation studies on the specific impact of policy characteristics and conditions critical to theory, but little information exists.

The figure below, 3.3, presents the policy implementation from the perspective of the CIT. Bressers (2007) assumes that an interaction process transforms inputs to outputs [78]. Unlike the figure suggests, more than two actors can be involved in the interaction process.

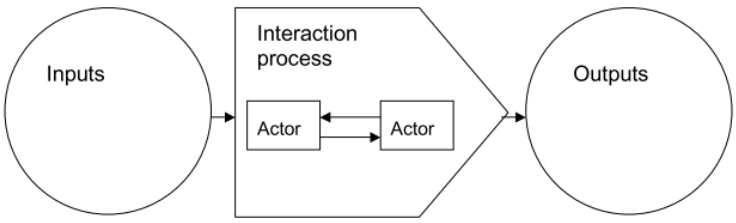

Figure 3.3: Link Interaction Model In- and Output [78]

The CIT has several main assumptions. First, the policy implementation process is an interactive process determined by the actors' characteristics: motives, cognition, capacity, and power [80]. Motives are based on actors'

values, objectives and understanding what drives their actions in the interaction process. Secondly, the cognition of the actors is the information they believe to be true, which can be influenced by interactions with other actors and filter frames. Capacity and power can take the form of legal and institutional power but also can be resources such as time, capital and expertise [81]. It is important to consider all three characteristics such that valuable information is not lost. The three characteristics that determine the interaction process can also influence each other. Additionally, the characteristics change over time due to varying experiences, policy instruments and three contextual factors [81]. These contextual factors are shown in figure 3.4 and include the wider, structural, and specific contexts [78].

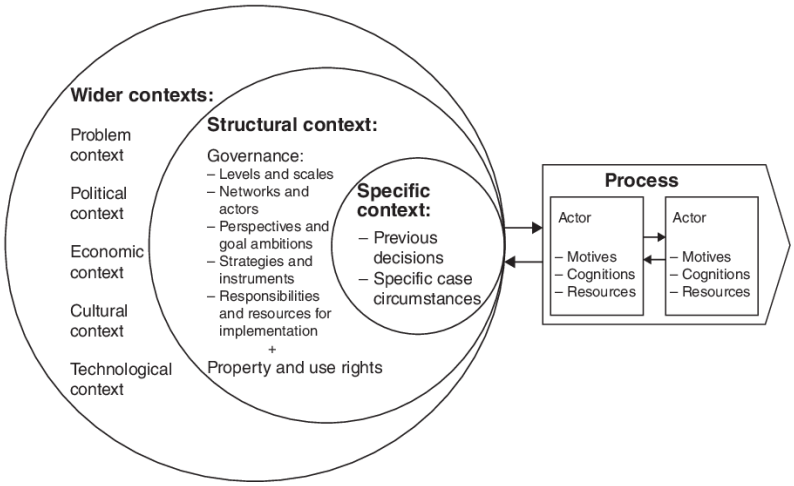

Figure 3.4: Contextual factors for actor characteristics [78]

The case-specific context mainly consists of previous decisions and other specific circumstances such as geographical location [81]. These are influenced by the structural context, which includes use and property rights and governance elements [81]. Lastly, a wider context surrounds the structural context. This layer influences the policy implementation process indirectly. However, when for example, sudden disasters take place, they can still be of direct influence [82]. The wider contexts described the problem, political, economic, cultural and technological aspects. To clarify the scope of the structural context more extensively, Bressers and Kuks (2003) have defined "five multiplicity aspects of governance". These five aspects and their corresponding research questions are the following [83]:

1. Multiple levels of governance. Which levels of governance dominate the policy discussion? What is the accepted role of government at various scales? Which other organizations are influential in the governance activities on these levels? Who decides or influences such issues? How is the interaction between various levels of governance organized?

2. Multiple actors in the policy network. How open is the policy arena? Open to whom and where, precisely? What role do experts play? How do the various governmental and other organizations relate to each other?

3. A multiplicity of problem definitions and other policy beliefs. What are the dominant maps of reality? To what degree do the actors accept uncertainty? Is the policy problem regarded as something individuals must deal with, or is it a problem for society in a collective sense? Where coordination is required with other fields of policy, what are the links accepted by the actors?

4. Multiple instruments in the policy strategy. Which instruments belong to the relevant strategy or strategies? What are the target groups of the policy instruments, and what is the timing of their application? What are the characteristics of these instruments?

5. Multiple responsibilities and resources for implementation. Which organizations (including government ones) are responsible for implementing the arrangements? What is the repertoire of standard reactions to challenges known to these organizations? What authorities and other resources are made available to these organizations by the policy? With what restrictions?

To provide a clear understanding of the CIT, the most relevant assumptions of the CIT are summarised below [78]:

- Policy implementation processes are seen as actor interaction processes.
- The influence of the contextual factors on the interaction process is caused by the factors' influence on the actor characteristics: motivation, cognition, and capacity & power.
- All three actor characteristics need to be included, and they can influence each other.
- The characteristics can change during the process, influenced by previous decisions or other case-specific factors (specific context) and by the governance regime and use- and property rights (structural context).
- Around the structural context, there is another layer of economic, political, technological, socio-cultural and problem contexts.

3.2.1 Suitability of the CIT

The CIT is considered a suitable framework to analyse the influence of citizen participation on the decision-making process of onshore wind farms. Decision-making processes are complex and dynamic. They relate to many policies and (groups of) actors and have a long time horizon. Bressers and de Boer (2011) state that the CIT is suitable to study processes with these two characteristics [81]. The CIT assumes that the decision-making process and citizen participation, in essence, is an interaction process between government, local residents and the project initiator. The interaction process eventually results in agreements concerning the wind farm. The actor characteristics and the context of the projects are of great importance. Understanding the context is essential for analysing onshore wind farms because

every wind project is unique, as is stated in section 2.4. This way, project-specific factors such as the previous decisions concerning the wind farm location, technological specifications, and the project's governance are guaranteed to be included in the analysis.

3.2.2 Use of the CIT

The CIT can be used in many different ways. For this study, the added value of the CIT is that it complements the rounds model. The CIT provides a framework to include the governance context, as the contextual influence is absent in the rounds model. While the rounds model only focuses on the different rounds and actors within the decision-making process, the CIT can be used to analyse the context of the most influential events within the citizen participation process. The rounds model is used to identify important citizen participation events. The CIT provides a suitable framework to research the potential influence of contextual factors on the decision-making process. In this study, the CIT is used as a conceptual lens rather than as a theory. It provides the opportunity to identify contextual factors of influence and link them to the decision-making rounds. The interaction between actors and the play of the game is presented. The wider context is out of scope in this research since this is assumed to be identical for each case; all cases are Dutch onshore wind projects. Additionally, the CIT emphasises the importance of the interaction between actors and their characteristics. These characteristics can offer a structure for the case analysis and emphasise important interaction aspects within the play of the game. Therefore the actors and their characteristics are separately mentioned for each case. In section 2.4, process characteristics of the participation process in onshore wind projects are retrieved from literature. Due to the relevance of these process characteristics, they are also included to analyse the interaction process, even though the CIT does not specifically mention them. These process characteristics are studied in addition to the actor characteristics:

- Trust
- Perceived fairness
- Transparency of the process
- Perceived influence on the outcome

Also, contextual factors that are assumed to influence the participation process are studied in section 2.4. These factors are slightly adjusted to place them in the CIT:

Structural Context

- Windfarm plans: size and location [height, number of turbines, type of landscape and distance from local residents].
- Role distribution within governmental bodies.
- Actors included in the process and how they got involved: local residents, type of initiator and type of governmental bodies.

- The role distribution between actors: government, initiator and local residents.
- The participation format: moment and manner of inclusion.

Specific Context

- Local wind energy ambitions: climate targets, search areas, social guidelines.
- Previous decisions and events.

The distinction between different contextual layers is not of great importance in this study. Here, only the structural context and specific context are considered. All aspects mentioned above differ per project. However, the factors within the specific context are the project specifications (e.g. specific circumstances) and the history embedded in the specific location (from previous decisions) and potentially other events that could influence the decision-making process. The wind farm plans and previous decisions are placed in a specific context. The other factors are placed in the structural context. The levels and scales describe what governmental layers are part of the project. Which actors are involved in the participation process and assigned belongs at 'networks and actors'. The onshore wind targets set by the local government and how other parties perceive them are placed within the project's perspectives, goals, and ambitions. The responsibility of each actor involved -local residents, project initiator and governmental bodies- is categorised under responsibilities and resources for implementation. The property and use rights of the wind farms are not specifically mentioned, as they are incorporated in 'actors involved' and in the 'moment and level of inclusion'.
All of these factors influence the decision-making process through the characteristics of the participating actors; motivation, cognitions and capacity and power. It is assumed that the process factors as described in section 2.4 are embedded in the interaction process. The process factors are studied by analysing the interaction process: trust, transparency, perceived fairness, and influence on the outcome. The actor characteristics, the interaction between those characteristics, and the actors' dynamic are most important when studying the interaction process. The contextual factors are independent variables in this study. Only factors that are expected to influence the actor characteristics are considered in this analysis. The conceptual lens is shown in figure 3.5.

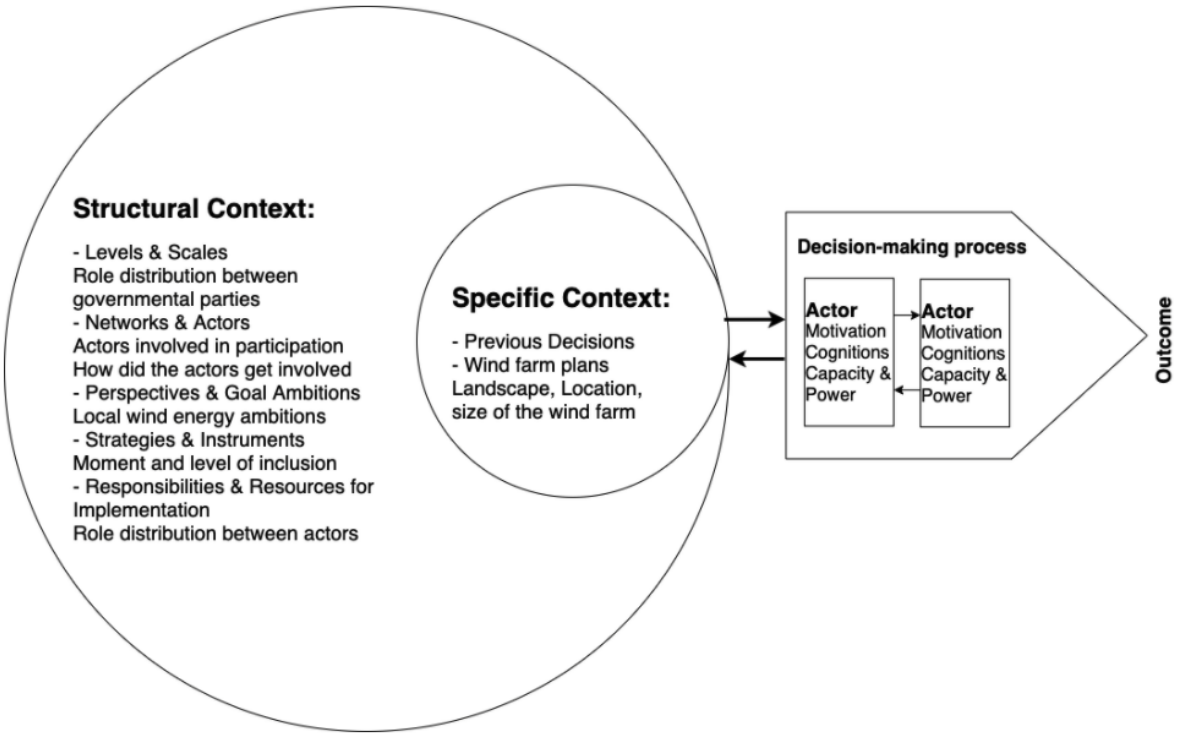

Figure 3.5: Conceptual lens applied in this study

3.3 CONCLUSION

In this section, the theoretical framework is explained. The theoretical framework consists of the Rounds Model and the Contextual Interaction Theory. The Rounds Model is used to visualise the role of participation in the decision-making process of onshore wind farms. This way, it is shown when citizen participation occurs within the decision-making process, what actors are involved in what decisions and the interaction between the events. The rounds model is used as a theoretical framework to analyze the third sub-question:*When comparing the four cases, what do the citizen participation and the decision-making processes of the four onshore wind cases look like?* The Rounds Model, however, does not consider the governance and context of the processes. Therefore, the CIT provides an important addition to the rounds model. Important citizen participation rounds, as identified by the rounds model, are further studies using the CIT. The CIT analyses contextual factors by placing them within predefined governance layers. The contextual factors of influence, as obtained in chapter 2, are presented in the CIT. Thus, the CIT is used to answer the fourth research question: *When comparing the four cases, how do the contextual factors influence the decision-making process?* Together, the Rounds Model and the CIT provide a comprehensive framework to study the decision-making processes of onshore wind projects.

In the following chapter, the theoretical framework is placed in the methodology of this study. The research methods are explained, where the use of the theoretical chapter is further elaborated upon. The next chapter explains what methods are used to answer the research questions.

4 RESEARCH METHODS

The goal of this chapter is to review the research approach and associated methodologies used in this study. The chapter opens with an outline of the study's main goals, presents the rationale for the use of qualitative research methodology, examines the case study method, and finally, ends with a discussion about the methods utilised for data analysis.

4.1 RESEARCH AIM

This thesis aims to explore the influence of citizen participation on the decision-making process of Dutch onshore wind farms. By understanding context and analysing multiple projects, lessons on citizen participation can be examined, which can, therefore, be used to improve the participation process. As such, the study's main research question is the following:*How does citizen participation influence decision-making processes of four selected Dutch onshore wind projects?*

Given the goals of this study, a qualitative approach was utilised. Qualitative methods are the best approach for this study because it examines the different meanings, experiences and interactions that individuals have and places them within specific context [84; 85; 86] The main benefit of using qualitative methods is its capacity to consider the complexities of each situation and, when analysed, results in in-depth information needed to explore, understand and explain phenomena.

4.2 MULTIPLE-CASE STUDY METHODOLOGY

The research questions above are answered using the multiple-case study methodology. A case study is defined as "an in-depth, multifaceted investigation, using qualitative research methods, of a single social phenomenon. The study is conducted in great detail and often relies on the use of several data sources" (Feagin et al., 1991, p.2) [87]. Yin (1993) states that describing a case study enables one to research a phenomenon within its contexts, even where the boundary between the aspect and its context is unambiguous [88]. The benefits of using a case study approach are that it presents comprehensive information and generates a rich picture of a particular phenomenon [89]. The critique of utilising this method can come from some users not going in-depth enough into the phenomenon under study. According to Yin (2003), there are three types of case studies [90]:

- Exploratory: the case study is used to define questions and hypotheses – or to test out a research procedure – for a further piece of research, such as a large-scale survey.
- Descriptive: the case study is used to describe a particular phenomenon within its context. It can be used to expand on a particular theme unearthed by a survey.
- Explanatory: the case study explores cause-effect relationships and/or how events happen.

The present study explores the effect of citizen participation on the decision-making process of wind farm development, an exploratory analysis is conducted. Additionally, the different findings are compared and reflected upon in a cross-case analysis.

The decision-making process of four wind projects will be the focus of the case study in this thesis. A case study can bring the complexity of the processes to light while considering the context and the perspectives of the different parties involved in this research [91; 87]. This makes case study methodology a suitable method to examine detailed information about the influence of public participation on the decision-making process in onshore wind farms.
In this study, a multiple-case design was used, and four cases were analysed. First, each case is analysed in a within case study. Then, the differences and similarities are studied in a cross-case study to discover similarities and (causal) patterns . This number, four, was chosen because it will enable in-depth comparisons between the cases, as too many cases will be at the expense of this valuable depth. To ensure the details and the complexity of the cases are considered, a qualitative study is conducted. Additionally, due to the number of cases analysed, a statistical or more quantitative analysis is impossible.

4.3 CASE SELECTION

Multiple aspects of a phenomenon are considered when designing a case study. Firstly, all of the wind farm projects under consideration are onshore and developed by one initiator, Vattenfall Nederland. Secondly, other requirements are established to situate the study within the wider context and also to be able to focus on the structural and specific contexts, as explained with the use of Contextual Interaction Theory, discussed in section 3.2. Therefore:

- The decision-making process should involve local citizens. Otherwise, the participation of residents cannot be researched. Especially because this study focuses on the interactions between the initiator, government and local residents.
- The planning permit for the wind farm should be granted. In other words: the formal procedures are all completed. This ensures that the

cases can be fully compared and based on the outcomes of the decision-making process. This does not imply that the construction of the wind farm also needs to be finished. It should be noted, however, that this results in a selection bias. By only selecting projects that already have legal and administrative permission, other less successful projects are neglected.

- The 'closure' of the decision-making process of the wind farm should not be too long ago. This is important because policy changes over time. Therefore, the shorter the time span of the decision-making processes is, the more similar the policies will be, enabling better comparisons between the cases. Additionally, selecting older cases can complicate the collection of valid data for two reasons: the chance of talking to relevant parties is decreased, and the details of the process can become less accurate over time as people's memories fade. Here, the chosen time limit is that all permits should be granted within the last four years.

The criteria as presented above were used in case selection. Accordingly, five cases published on the Vattenfall website are found to be suitable for the analysis [92]. These cases are: Jaap Rodenburg II, Windcluster Klaverspoor, Nij Hiddum-Houw, Windplanblauw, and Moerdijk. The number was brought down to four, as explained in the previous section 4.2. To conduct a cross-case analysis and measure the influence of citizen participation on the decision-making process, the projects should also differ in other aspects. Based on the literature review and the application of the Contextual Interaction Theory as presented in section 3.2.2, several case-specific characteristics were identified during a review of all the cases (before data collection and analysis). The five cases that satisfy the criteria are presented in Figure 8.3, where several characteristics are described:

- The actors involved in the decision-making process, such as the governmental agencies involved and the competent authority responsible for the wind farm. The province is the responsible agency in most cases because most wind farms are between 5 and 100 MW [33]. However, in practice, it can be passed on to the municipality if either the province or the municipality prefer. This study will further research the government's role and identify the influence of the government and scales as described by the CIT. Additionally, the initiators will be identified. Is Vattenfall the only initiator, or is the wind farm developed in partnership with others? Which local residents are included in the process. Lastly, are there other parties part of the decision-making process?

- The wind farm plans, including the size and location of the wind farm. The size can be measured in the amount of Mega Watt (MW), height and the number of turbines. Mega Watts is considered a suitable unit because it combines information concerning the amount and the height of the turbines. Additionally, the size of the wind farm is influenced by the landscape and location of the project area. In the literature, the landscape has a major influence on the citizens' reactions to a proposed wind farm. Furthermore, it is a specific criterion of the contex-

tual framework discussed previously. The landscape is often used for agricultural purposes, but it can also be next to a highway, replacing old wind farms or have other specific characteristics.

- The local situation such as historical events that concern onshore wind sensitive matters and wind energy targets.
- The format of citizen engagement is important when looking at the influence of participation on the decision-making process. What format was used initially? How are local residents selected to participate in the process? The most important questions are: who, when and how?
- Notable decision-making events and significant outcomes concerning the local community are important for case selection. Studying the influence of participation on the decision-making process would provide important insights into any decisions made. This study will not define the success or duration of the process because this can create a subjective, distorted picture. The duration of the decision-making process depends on many variables and is therefore not of interest to define. To deal with this complexity, the decision-making processes are considered based on the outcome concerning participation and by taking into account other events that are one of a kind while looking at the other cases.

The four cases must have different characteristics to enable comparison in a cross-case analysis. However, the differences should not be too large for comparison. Wind cluster Klaverpolder was not included in this case study because of the complexity the 'cluster structure' entails. Klaverpolder is one of the five clusters within Wind Farm Energy A16. The fact that is one wind project with five different initiators and several municipalities results in a complex actor structure within the decision-making process, that is different to compare with the other projects shown in Fig 8.3. Therefore, Wind Cluster Klaverpolder is not considered, and the cases studied are Moerdijk, Jaap Rodenburg II, Nij Hiddum-Houw and Windplanblauw, represented in the Figure below 4.2. These wind projects each have interesting characteristics, as is presented in Figure 8.3. Windplanblauw is interesting due to its size; the national coordination regulation is applicable since the wind farm is larger than 100MW. Additionally, the project is characterised by local ownership and because citizen participation started early. Furthermore, because of the variation in landscape, Windfarm Moerdijk was included. Of the five cases, it is the only wind farm without a co-initiator, and it was not built on the agricultural ground. The Nij Hiddum-Houw wind farm was selected because an advisory board made up of the local community was established, and the approval of the provincial council was uncertain until the very last moment. The Province of Friesland was the competent authority here. In the case of Jaap Rodenburg II, the municipality was in control despite the size of the wind farm. The local community was actively engaged in the wind farm development and owned 20% of the wind farm, which was unique when the wind farm was developed. The four cases as selected all full fill the requirements and vary.

	Actors involved	Planned wind farm [location, landscape, size]	Local situation [previous events, climate targets]	The format of citizen engagement	Exploratory: Interesting decision-making outcomes concerning participation
Windcluster Klaverpolder (2015-2020)	The actor composition here is more of a complex story, since this wind farm is actually a cluster within a larger wind farm. The cluster is developed by Vattenfall and Goede Buren. The province was competent authority, when actually the State would be in charge of the total wind farm since its size is 100 MW.	This wind cluster is part of a larger wind farm located besides highway A16 and the train rails. This cluster consists of 9 turbines of 210 meter high (50MW). The total wind farm, Energy A16, is 100 MW and consists of 28 turbines.	West Brabant made an offer to the province of Noord-Brabant to generate 200 MW of wind energy, of which 100 MW along the A16 in four municipalities: Breda, Drimmelen, Moerdijk and Zundert. The cluster Klaverpolder is located in Drimmelen and Moerdijk.	The local community was involved in discussing the number and locations of the wind turbines, already in an early stage. Eleven options were identified studied, then the preferred alternative was determined.	Remarkable of this decision-making process was the prominent role of the government. They assumed responsibility for a large part of the development process.
Nij Hiddum-Houw (2016-2020)	The province is the competent authority. Vattenfall is project initiator together with Gooyum-Houw, a cooperation of about 45 (mainly) local parties.	Located near the Afsluitdijk in Friesland. 9 turbines of 188 metres (42MW) replace 16 "outdated" turbines.	Friesland had an onshore wind target of 530,5 MW in 2020, which was agreed upon in 2017 in the 'Structuurvisie Wind Op Land'.	An advisory board with representatives of the local community was involved in the decision-making process.	Final verdict of was uncertain and last negotiations needed to be made. A Community Agreement was a requirement to establish the wind farm. One strong action committee opposed the wind farm.
Windplanblauw (2015-2020)	The State is competent authority, and the initiators are Vattenfall and SwifterwinT bv, the latter is a merge of three local wind cooperation's that already owned turbines in the area.	74 older wind turbines are replaced by 61 larger turbines (250 MW) in the Northwest of Flevoland. The tip-height is 213 meters.	Flevoland has described its target in its 'Regioplan Windenergie'. The goal was to halve the number of existing turbines and to double their energy generated.	Early start of citizen participation, in conversation with the 'village council'. An advisory board was set up. All residents of the project area are co-owner of the wind farm.	Adjustment of wind turbine formation. Not only the landowners but also the residents of the project area are co-owners, more than 150 owners.
Moerdijk (2014-2017)	The Municipality requested to be competent authority instead of the province. Vattenfall is the only initiator here.	On an industrial area in North Brabant, next to a river. The wind farm is planned to contain 7 turbines of 180 metres (25 MW).	"Notitie Windenergie Municipality Moerdijk 2013-2030" states that 470,5 MW onshore wind should be realized before 2030.	Benefits for the community were established in collaboration with the village council of the nearest village.	Help with the development of a solar park is agreed upon, while first the agreements would be according to Code of Conduct of the NWEA.
Jaap Rodenburg II (2015-2018)	Here the Municipality acted as competent authority instead of the province. The project is initiated by Vattenfall and Almeerse wind.	10 turbines of Jaap Rodenburg II (150m height & 36 MW) replaced Jaap Rodenburg, a 10 turbined (100m) windfarm located in Almere, Jaap Rodenburg was on 1500 meters from the nearest residences.	Almere has a different status within Flevoland and has its own ambitions. Therefore, the provincial climate targets are irrelevant in this situation. Almere aims to be climate neutral in 2022.	Local community mainly involved through Almeerse wind and the municipality by co-designing.	The participation process needed to be 'restarted'. Also, a local cooperation Almeerse Wind is co-owner of 2 wind turbines.

Figure 4.1: Potential cases to study, satisfying all requirements

Figure 4.2: The four selected cases pictured on the Dutch map

4.3.1 Applicability of Theory to Case Selection and Criteria

Given that the present study seeks to understand the participation process, the criteria presented above supports this by placing participant interactions at the forefront while considering the context. This study draws on the Rounds Model (see section 3.1.2) to explain how the decision-making process works, the types of involvement of each of the actors, and their forms of interactions. The rounds model highlights that there is not one important actor, nor is there a fixed process for making decisions. Instead, the focus is on the events, the actors, and the various decisions made during the decision-making process.
Similarly, the role of the Contextual Interaction Theory (see section 3.2.2) in this study is important because it provides a lens through which to view the study. CIT emphasises the importance of policy structure and governance when exploring factors that influence the decision-making processes in these selected cases. Therefore, the criteria for case selection for this study must consider contexts, such as government policies, climate goals, wind farm size and location, and local citizens' concerns, as demonstrated in Figure 3.5. The CIT complements the rounds model in that it also looks at interactions between different actors but goes further and emphasises the context surrounding these interactions in the decision-making process.

4.4 DATA COLLECTION

4.4.1 Desk Research

A literature review was conducted whereby relevant case documents were studied. Data collection started with collecting important documents relevant to the cases. These documents consisted of minutes of meetings with advisory councils, governmental representatives and initiators. Also, their agreements, governmental reports and reviews of permit applications were examined. Furthermore, documents pertaining to meetings with local residents, action committees and initiators were of interest.

4.4.2 Semi-Structured interviews

Semi-structured interviews with the actors as described in section 2.3 were conducted. Three types of interviews can be used for conducting the interviews: structured, semi-structured and unstructured [93]. In contrast to structured interviews, which have set pre-determined interview questions (close-ended), semi-structured interviews are developed with some pre-determined questions but also include open-ended questions. Semi-structured interviews enable open-ended, in-depth answers while adhering to a light structure [94]. Semi-structured interviews were chosen as the most suitable method because they allowed the research questions to be explored while allowing the interviewees to add any other insights into the citizen participation process. Semi-structured interviews allow the possibility to rephrase questions and investigate other areas, leading to new and potentially important data [93]. It is important not to exclude important findings that have not explicitly been identified in the interview protocol. Semi-structured interviews enable flexibility in the data collection process by allowing the interviewees to elaborate on their responses, leading to more important data being generated. With this, new issues can be raised, and perceptions and motives can be determined [94]. Conducting semi-structured interviews also has several limitations. For example, the interviews can be time-consuming, and the success of an interview depends on the willingness of the interviewees to cooperate [94].

Interview protocol

This study examines the public participation aspect of the decision-making process in onshore wind farm development. In order to examine these processes effectively, the Rounds Model and CIT were used as organising tools for data collection and analysis; the interview guide can be located in Appendix A. The Rounds Model focuses on the decision-making rounds and the actor characteristics, while the CIT emphasises the context surrounding these processes. The interview topic guide, therefore, was designed to elicit such information. The interview guide included questions about important moments in the decision-making process and citizen participation, taking the Rounds Model into account. Also, questions about the actor characteristics are included motives, perceptions and resources. The importance of

CIT in the interview topic guide can be seen in questions designed to elicit information about the contextual factors as described in 3.5.

Interviewees

In this study, the chance of one-sided and biased information was reduced by analysing the cases from different perspectives. When selecting interviewees, the viewpoints of the governmental parties, the local residents and the initiators were considered. This has been done in order to form a representative, widespread understanding of the decision-making processes. Thus, the ability to do so depended on the willingness of the interviewees to cooperate fully. This risk was mitigated because this study was in cooperation with Vattenfall. Vattenfall has connections to governmental and local representatives, and their own employees are willing to participate. Complexity is introduced because the groups of actors are not uniform. As described in 2.3.1 there is not one clear governmental party included in the decision-making process. The Municipality and the Province, and in some cases even the national government, have their own level of involvement in the process. To retrieve relevant information about all governmental layers within a realistic time frame, the official in charge or an external party appointed by the government of each project was interviewed. This strategy is chosen because interviewing all governmental bodies for each project would be too time-consuming.

The same is done in order to retrieve representative viewpoints from the local residents. Even though, as indicated in subsection 2.3.3 , three groups of local residents are identified -passive, participating and opposing- , one representative from each group was interviewed. Here, the preference was to interview a participating resident, if possible. These residents have the most knowledge of the decision-making process and citizen participation and also represent the other residents. Therefore, it was assumed that those residents were in contact with the other, passive or opposing, local citizens. This implies that they have the most information on the overall perspectives of the residents in their community. If no citizens were willing to be interviewed, the independent chairman or the citizen advisor would be the next interview option because of the close insight on the local residents. In order to include the perspective of the initiator, project developers were interviewed. The number of developers and governmental parties interviewed also depended on when project managers became involved in the project. A stakeholder manager was also interviewed for each case to ensure that an accurate picture of citizen participation was captured. Interviews were conducted for each case until the saturation point was reached and no new valuable data was gained.

This strategy led to the interviews conducted in Figure 4.3 presented below. In the case of Moerdijk, no one from the city council of Klundert could be interviewed. The government appointed an independent facilitator to establish added value for the community. Therefore, this party worked in close cooperation with the government and the local community and was used

	Project Developer Perspective	Participation Perspective	Governmental Perspective	Local Resident Perspective
Moerdijk	Project Developer Vattenfall	Stakeholder Manager Vattenfall	Independent Representative appointed by the government	Independent Representative from the government
Jaap Rodenburg	Project Developer Vattenfall	Board Member Almeerse Wind	Independent Representative appointed by the government	Board member of Almeerse wind and Local Resident
Nij Hiddum-Houw	2 Project Developers Vattenfall	Stakeholder Manager Vattenfall	Responsible Official from Province	Independent chairman of Advisory Board
Windplanblauw	Project Developer Vattenfall	Board Member SwifterwinT Project Manager Wind Unie		Member of the village committee

Figure 4.3: All interviews conducted

to represent both voices. In case of windfarm Jaap Rodenburg II, the inclusion of local residents was led by the board of Almeerse wind, which was comprised of local residents at the time. For this reason, the board member that was interviewed provided information about stakeholder management and the perspective of local residents. In the case of Nij Hiddum-Houw, the independent chairman of the advisory board was interviewed to give the perspectives of local residents. For Windplanblauw, no actor from the government was interviewed. To ensure that different perspectives were brought to light, the project leader employed at Windunie was interviewed. Windunie is a consultancy that specialises in developing and operating locally-owned renewable energy projects together with local entrepreneurs, citizens' initiatives, landowners, energy communities and people living in the vicinity of project sites. No representative of the government was interviewed. Therefore all three other parties have been asked about their experience and perception of the governmental parties to collect the required information.
Since this study is conducted in cooperation with Vattenfall, it was possible to obtain contact information from local residents and other experts in the field. The interview participants are selected in advance, the project developers, stakeholder managers, governmental representatives and local residents are recruited by telephone and e-mail. In total, 15 interviews are conducted through Microsoft Teams. The interviews were recorded and lasted approximately 70 minutes on average. The privacy guidelines and the research aim was shown to the respondents beforehand. These interviews were conducted after all participants gave informed consent. The interviews were recorded and immediately deleted after the participants approved the transcription. The transcripts are stored in the OneDrive of TU Delft and will be transmitted to the data centre of TBM-TU Delft. The anonymity of participants is guaranteed; no names of the interviewees are presented in this thesis. Only job functions and roles can be mentioned for substantive reasons.

4.5 ANALYSIS

Data analysis involved conducting literature studies, within-case analysis and cross-case analysis. The research method is explained for each method: desk study, within-case study and cross-case study.

4.5.1 Desk Study

RQ1: What is the role of participation in decision-making processes of onshore wind farms?

RQ2: What contextual factors affect citizen participation in onshore wind development?

The first two sub-questions presented above were answered by conducting a desk study. The role of participation in the decision-making process is answered by researching three aspects of onshore wind projects: its decision-making process, its citizen participation process, and the involved actors. First, research is conducted on a 'standardised' decision-making process. The most important procedural decision-making moments are mapped. Subsequently, policy documents and case studies are searched for moments where local residents could be included. Lastly, the role of actors in the decision-making processes is explained. In order to visually represent the information, a 'standardised decision-making process' is represented in Teisman's Rounds Model, as explained in section 3.1 [76]. An image analogous to his own model is used. The Figure shows how the most important actors are involved in the decision-making and participation events, presented over time. Here, important decision-making moments, participation moments, and the actors' roles are presented in one Figure.
The second sub-question is answered by an extensive literature study on the influence of external factors that influence citizen participation and the decision-making process of onshore wind farms. The factors of influence that are most broadly supported are visually presented in the CIT as explained in 3.2. Here the factors found are placed within the different contextual layers of the CIT and visually represented in the conceptual model of Hans Bressers [78].

4.5.2 Case Study Analysis

RQ3: When comparing the four cases, what do the citizen participation and the decision-making processes of the four onshore wind cases look like?

RQ4: When comparing the four cases, how do the contextual factors influence the decision-making process?

RQ5: What lessons and recommendations on citizen participation can be identified and applied to the decision-making process?

The case study methodology answers the last three sub-questions. The goals of the study and literature review assisted with generating the interview questions. Once the interviews were complete, they were transcribed and analysed. Qualitative data analysis for this study was a recursive process

whereby the interview transcripts were re-read several times, and initial themes were generated based on previously discussed criteria. The qualitative data is coded based on the Rounds Model, the CIT and the factors as presented in chapter 3. This study employed thematic analysis to analyse the interview data. This was done to properly understand the data and discover different themes and insights within and across the cases. Given that the study aims to provide understanding into the decision-making process in wind farm development, thematic analytic methods were best suited as they would allow for analysis to be conducted at deeper levels within and between the cases [95]. Examination of the interview data with the thematic analysis method allowed for the identification of themes, which provided this necessary understanding into decision-making and the participation process. Because the interview topic guide was designed by taking the Rounds Model and CIT into account, the themes generated from the interview data also considered these theories.
Given the substantial amount of data generated and the need to compare and contrast large amounts of data across the cases and within individual cases, the Framework Method was used to assist with the organisation of the data [96]. When the initial themes were developed, the file was exported to Microsoft Excel, which then generated a matrix-type spreadsheet that consisted of the initial themes generated from reading through the transcript.

Within Case Study

In the within case study, the first part of sub-questions two and three are answered. To compare the decision-making process and the contextual factors of influence, first, a general case description is presented in chronological order, and the actors of the decision-making process are mentioned. For the case description, also the contextual factors of the CIT are addressed. The actor section also discusses the actor characteristics as presented in the Rounds Model. Subsequently, the important decision-making events are visually presented in the rounds model format. For the sake of clarity, only the most influential moments are visually presented in the rounds model. Subsequently, the most important participation events are worked out in the CIT format.
Sub-question three is answered using Teisman's rounds model. The rounds model provides a comprehensive manner to compare the decision-making and participation processes of the four cases. How the important decision-making events influence each other is presented with arrows. Red backwards arrows present Non-linear feedback loops. Furthermore are the most influential moments red outlined. Intensive decision-making moments are marked with a plus sign, and low-intensity events are marked with a minus sign (-). This way, most influential moments, moments causing a 'setback' and events with notable high or low intensity can be identified at a glance. Among the broad themes generated from the data, to generate information on the processes to establish a rounds model were:

- The actors involved
  - Interaction between the involved actors
  - The tasks of the actors
- Important decision-making moments
- Important participation moments

Sub-question four is answered by using the CIT. As presented in the CIT, the contextual layers are specified for the important moments in the decision-making and citizen participation processes of the onshore wind projects. The CIT is used to investigate further the most important citizen participation events that result from the rounds model in sub-question 3. The most influential events per case are presented in a table, where the contextual factors are described for each occurrence. To ensure that the right information is collected, the following themes are added to the thematic framework generated:

- Actor characteristics of all actors involved
  - Motives
  - Cognition's
  - Resources and power
- Local wind policies
- Moment and level of participation
- Previous events
- Specific circumstances
  - Landscape
  - Location
  - Wind farm size

Cross Case Analysis

The cross-case analysis compares the four cases based on the case descriptions and the factors based on the Rounds Model and the CIT, as shown above in the previous section 4.5.2. During analysis, the rounds model helped understand how decisions were made and highlighted the important roles that citizens played in the process. Further, by utilising CIT, the context of these interactions is forefronted during analysis and also contributed to the generation of themes. In the cross-case analysis, the findings of the cases are compared to observe similarities and (causal) patterns. Subsequently, lessons and recommendations are identified. The most important factors of influence per case are compared, and their outcomes are studied. A table is generated to present how the most influential factors affect the four decision-making processes. Based on these findings, recommendations for citizen participation are generated, and sub-question five is answered.

4.5.3 Validation

After combining all interviews and (policy) documents into four comprehensive case descriptions, they are validated by the stakeholder manager of Vattenfall, who had been involved in all of the four cases. The same applies to the findings and conclusions. One responsibility of the stakeholder manager is to gain insight into the stakeholders and their interests. Therefore he has a thorough understanding of the whole scope of the decision-making process and, in particular, the participation process, which makes him a reliable source for validation. To avoid a one-sided view, all findings are additionally validated by an independent expert from the sector Onshore Wind, employed at The Dutch Wind Energy Association (NWEA). The NWEA is the official speaker for ministries and other organisations on various subjects related to wind energy, including citizen participation. The NWEA maintains contact with national and regional authorities and politicians, policymakers, scientists, knowledge institutes, and other social and environmental organisations in the Netherlands. This means that the NWEA has a complete overview of the playing field of citizen participation and the decision-making process in the Dutch onshore wind sector. Therefore, this makes a knowledge expert working at NWEA suitable for validating the findings of this study. Once the study has been validated, the findings of this study are discussed, and the final conclusion is presented.

4.6 CONCLUSION

In the present research, a multiple-case study is conducted to answer the research question *How does citizen participation influence decision-making processes of four selected Dutch onshore wind projects?* Four cases are selected based on criteria resulting from a literature review, the Rounds Model and the CIT. These cases are: Moerdijk, Nij Hiddum-Houw, Windplanblauw and Jaap Rodenburg II. First, a within-case study is conducted for each case based on the criteria presented in section 4.5.2. Afterwards, the findings are compared in a cross-case study, based on the same criteria and other factors identified in the within-case study. Data is collected by studying (policy documents) and, most importantly, by conducting semi-structured interviews. In total, fifteen interviews are conducted representing four parties per project: a governmental body, a stakeholder manager, a local resident and a project developer. In the end, the findings from both the within- and the cross-case studies are validated by the involved stakeholder manager of Vattenfall and an independent expert of the NWEA.

In the chapters 5 to 8, all four cases are individually analysed in the manner described in this chapter (section 4.5.2). All cases are examined in a similar way to retrieve information about the citizen participation and decision-making processes and the factors influencing these. The next chapter presents the first within case study, the case of Windplanblauw.

5 CASE 1: WINDPLANBLAUW

Windplanblauw is a wind farm located in Flevoland, a province within the Netherlands. The wind farm is developed by SwifterwinT and Vattenfall and replaces 74 turbines with 61 larger ones. The total capacity of Winplanblauw is estimated at 250 MW. The wind farm is being currently constructed and is estimated to be operational in 2023.

5.1 GENERAL CASE DESCRIPTION

5.1.1 The Start of the Project

The ambition of the province of Flevoland was to have a total capacity of 1390,5 MW of onshore wind energy installed before 2020 [97]. More than a quarter of all Dutch wind energy was located in Flevoland. In 2006, the province decided to scale up and replace the existing turbines in order to protect the landscape against small-scale scattered wind projects. Because of this, the province had announced a pause on developing new turbines until it was time to replace and scale up the existing wind farms and solitary turbines. In 2009, the wind farm, Irene Vorrink in the Flevopolder, had been in existence for 20 years [98]. During this time, Vattenfall was exploring the possibility of replacing the turbines, which was the first trigger towards Windplanblauw. The proposed new wind farm would be near wind farm Irene Vorrink, near the IJsselmeerdijk in Flevoland. Because the proposed wind farm was going to be larger than 100 MW, Vattenfall applied for a National Coordination Regulation. The national coordination regulation implies that the national government is the responsible authority. The Ministry of Infrastructure and the Environment and the Ministry of Economic Affairs are involved in the regulatory process by coordinating the decision-making processes and enabling the simultaneous preparation of all permits. On March 22, 2011, the Ministry of Infrastructure and Environment and Ministry of Economic Affairs, Agriculture and Innovation agreed to Vattenfalls application. These ministries also had a political meeting with the province and the municipalities of Dronten and Lelystad, the proposed new wind farm site. This meeting resulted in an action plan complete with guidelines for Vattenfall's windfarm development proposal. In 2012, Vattenfall organised several design workshops on behalf of the municipalities, the province and the ministry. The main purpose of these design workshops was to collect input from the relevant stakeholders, including Swifterbant, the village closest to the proposed site for the new wind farm. These workshops produced valuable input for the wind farm layout; further details about the design workshops are described in section 5.4. Happening around the same

time, residents just outside Swifterbant reached out to provincial officials to propose that the landowners in this area are the only interlocutors concerning wind energy projects. A few landowners subsequently became involved in the development of the provincial wind policy.

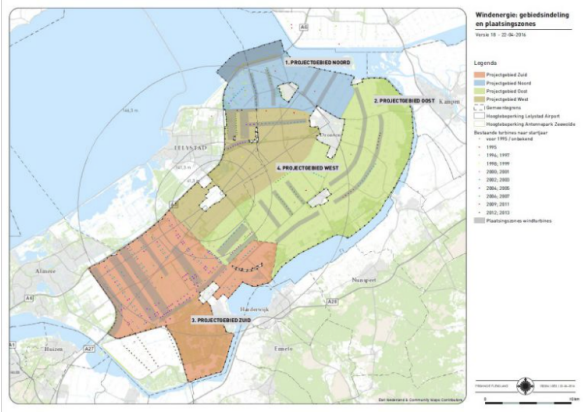

Figure 5.1: The regions as defined in 'Regioplan Windenergie'

In 2015, the onshore wind policy started to take shape; this policy is called 'Regioplan Windenergie'. The plan was to divide southern and eastern Flevoland into four regions where project locations had already been decided, as shown by the lines in Figure 5.1. The plan also stipulates that there should only be one project per district. Wind plans can only be established once existing turbines are removed and by placing the new turbines in a straight line. In the northern region of Flevoland, the blue area, as shown in Figure 5.1, four market players were present, Vattenfall and three local wind associations: Ketelmeerzoom, Natuurstroomgroep and Association Wind farm Rivierduin. The local associations usually consist of landowners who already own wind turbines or want to develop wind energy. When the final wind policy of Flevoland, 'Regioplan Windenergie', was published in July 2016, it hardly differed from the draft of the first policy presented in 2015. The main goals of the policy were similar to the policy of 2006: up-scaling and replacing wind farms. In the new policy, required participation guidelines were established, such as financial participation, process participation, and a community fund. The contribution to the community fund would amount to €1050 per MW, and this allowance could be used for initiatives that contributed to the local community. As previously stated, there could only be one wind project per region, which should replace existing wind turbines. The four market players of the blue region realised that it would be in their best interest to cooperate with each other and decided to develop a wind project. To establish this collaboration, the three local wind associations merged and then became a private company, SwifterwinT. Due to past events, the merger was a complex process that took an entire year to finalise. This is because, in the past, landowners were the ones who initially developed wind turbines. These landowners made deals to share the profits with their six closest neighbours. The result was that these landowners financially benefitted, and the landowners without the turbines were left out and, therefore, were resentful of this. As a result, the relationship between landowners with wind turbine owners and

the landowners without turbines became strained. Those without turbines felt that they were left out of the benefits of wind initiatives long enough.

Once the merger was complete after a year, both parties (turbine owners and non-turbine owners) agreed upon the 'Outline Agreements' (in Dutch: Afspraken op Hoofdlijnen). In this agreement, the provincial government declared that all residents within the project area, whether turbine owners or not, had the opportunity to be a certificate holder of SwifterwinT. Between 90-95% of the residents took this opportunity and (more than 150) became members of SwifterwinT, therefore, co-owners of the wind project. On October 7th 2016, a letter of intent to develop Windplanblauw was signed by the Ministry of Economic Affairs, the Ministry of Infrastructure and the Environment, the Province of Flevoland; the Municipality of Dronten; the Municipality of Lelystad; SwifterwinT; and Vattenfall. This letter of intent outlined the details of a large-scale wind farm of over 200 MW. When it became clear how many co-owners would be involved, the province of Flevoland agreed to increase the wind farm's planned capacity and create enough market incentives. Since the profits would be shared between Vattenfall and over 150 residents of the project area, the project will be of considerable size.

5.1.2 Determining Participation Guidelines

The letter of intent stated that SwifterwinT should be assigned the task of facilitating the citizen participation process, mainly because they were familiar with the project area and its local residents. In 2016, three years after the design workshops (mentioned in the previous section), Vattenfall and the State organised a stakeholder session to update the wind plans. There were also additional stakeholder meetings, open conferences and 'noise tours to existing turbines. The national government, Vattenfall and SwifterwinT, also established an advisory board. The Swifterbant village council at the time decided not to participate in this advisory board and, instead, sent a delegate from Dronten, a city further away from the wind farm in Swifterbant. A village council is a group of residents of Swifterbant who are committed to the village by organising events and can represent Swifterbant at the municipality. A representative of Dronten and other interest groups, such as agricultural organisations, environmental organisations and shipping associations, were present to represent their interest and lend their expertise to the new wind farm project. In November 2016, the NRD was established to mark the start of the spatial planning procedure, and the plans for the wind farm and the approach to the EIA were presented. For the project to proceed, SwifterwinT needed to honour its financial commitment and make its first investment into the project. The residents who committed to SwifterwinT and the wind farm had to sign a contract. The members of SwifterwinT then decided to go into business with cooperative WindUnie, which would advise SwifterwinT during the development of the wind farm.

The NRD was disclosed for democratic consultation, and, following this, the EIA (EIA) was conducted by Vattenfall, WindUnie and SwifterwinT in November 2017 and determined the preferred layout. Afterwards, an open consultation event for local residents was organised. The project was met

with some resistance among some of the residents of Swifterbant, and an opposition group arose, 'the windbrekers'. In particular, there were objections to the locations of the turbines that were placed in the forest next to Swifterbant, Swifterforest. Additionally, some of the attendees did not understand where this wind farm layout came from. Only one representative of Dronten was on the advisory board, and this person was not in close contact with the inhabitants of Swifterbant. Also, more than four years had passed since the first design workshops had taken place in 2012. In 2017, the village council Swifterbant changed its board and became more involved with the project initiators. Once this happened, agreements were made concerning extra-statutory measures. The new board of the village council reached out to the initiators to discuss these measures. Following this, Vattenfall and SwifterwinT established a working group to establish a plan to upgrade the forest by maintaining the forest. The participating parties were: the village council, the Dutch governmental forestry organization 'Staatsbosbeheer' and the Dutch Institute for Nature Education and Sustainability 'IVN'. All members of this working group favoured using the contribution to invest in a more well-maintained Swifterforest. Regardless, did the municipality of Dronten summon to relocate the turbines outside Swifterforest. Subsequently, it was decided to move the turbines 80 meters outside the forest. Once the wind farm layout was adjusted and agreed upon, the village council applied for the requisite permits. In 2018, only a handful of appeals were filed by the dissenting group, the 'Windbrekers', and the village council. Shortly thereafter, the Council of State declared that all appeals were inadmissible and, subsequently, all permits were granted. The final wind farm layout is presented in Figure 5.2 below.

In the spring of 2019, Vattenfall and SwifterwinT started the 'Vrienden van Windplanblauw', which has more than 200 members. Here, citizens can become involved with Windplanplanblauw, for example, by joining wind excursions or thinking along about several topics. In August and November of 2019, two workshops were organised for "Vrienden van Windplanblauw" to construct a financial participation scheme. This resulted in the decision to organise the first round of participation for the nearest residents before the final investment decision (FID) was made. The practice is not very common since there are risks involved. Also, the return of financial participation is increased compared to governmental standards. In addition to the community fund imposed by the province, Vattenfall and SwifterwinT established another fund exclusively for the residents of Swifterbant. The latter was initiated by the wind farm initiators and ASR, a Dutch insurance company with a special focus on sustainability.

5.2 ACTORS

5.2.1 Initiators

In the development of Windplanblauw, two initiators are identified: SwifterwinT and Vattenfall. The initiators are responsible for the development of the project. Vattenfall was involved in an earlier stage, where it took respon-

The f

Figure 5.2: Final layout of Windplanblauw

sibility for stakeholder engagement during the design workshops. Vattenfall was also involved in the negotiations leading to the establishment of SwifterwinT since the result was a cooperation of the three local cooperatives but also the cooperation of Vattefnfall and Swifterwint. Additionally, it was also in Vattenfall's interest that SwifterwinT agree to be a co-initiator. On the other hand, SwifterwinT had a personal interest in the Swifterbant's local community and, therefore, needed to ensure that the interests of all community members were served. The members of SwifterwinT are part of the Swifterbant community. They lived in the same village and shared all the resources with those who did not own land inside the project area.

Vattenfall and SwifterwinT had a good partnership. Both parties trusted each other and were satisfied with how the roles were divided. Vattenfall has more expertise in the development of wind farms. SwifterwinT solved that matter by hiring WindUnie, an external advisor specialising in supporting local cooperatives in developing wind farms. Both initiators have financial motives. One board member of SwifterwinT stated that by having financial advantages, an incentive is created for Vattenfall to remain connected to Swifterbant. Whereas Vattenfall has power due to the wind farm Irene Vorrink, on the other hand, members of SwifterwinT also have turbines on the project location. All turbines needed to be decommissioned to build Windplanblauw, which applies to the turbines owned by the members of SwifterwinT. Together, SwifterwinT and Vattenfall conducted all relevant research and applied for the required permits for the wind farm development .

5.2.2 The Governmental Parties

The different governmental bodies have different roles within the project. All three are part of a working group that the Ministry set up and leads. The national government is said to be the driving force of the project. The Ministry of Economic Affairs appoints a project leader as the main decision-maker

and ensures a smooth permit application process. One of the developers stated that the project leader was "excellent. He was able to take decisions". The national government is responsible for coordinating the permit application and decision-making processes and also decides what requirements the wind farm must meet. The province has a more prominent role in the earlier stages of the project, in establishing a location for the wind farm and developing the project guidelines, as presented in 'Regioplan Windenergie'. The role of the municipalities is more focused on the citizens; the municipality acts on the concerns of local residents. Interesting is that, when the wind farm plans came through, the municipality felt that they could not exert influence, and the decisions had been made higher up. Nonetheless, did the municipality decide to replace the turbines outside the forest. Although the three governmental bodies issue different permits, their goals are similar: to meet the climate targets set by the government. Additionally, removing the cluttered turbines creates the opportunity to establish a better-looking landscape and the government, especially the local politicians, wants to ensure that the citizens are pleased with the outcome.

5.2.3 Local Community Swifterbant

Swifterbant has an inner and an outer area. The outer area is comprised of residents within the provincial search area and the (potential) certificate holders of SwifterwinT. The inner area includes the villagers without the right to purchase SwifterwinT certificates, hereafter referred to as Swifterbant. The distance between the turbines and the residents in the outer area starts at 300 meters, and the distance between the turbines and the residents in the inner area is around 1100 meters. Because the residents of the inner area of Swifterbant are far away from the proposed turbines, the governmental bodies decided that they could not become certificate holders of SwifterwinT. Later on, the initiators started 'Vrienden van Windplanblauw' which included the villagers of inner Swifterbant. This way, all residents, whether certificate holders or not, could be part of the wind farm development project by participating in substantive working sessions and related activities.

Swifterbant's village council organised events and projects for its residents. In case of Windplanblauw, the main task of the village council was to represent the interests of residents of Swifterbant. Initially, the village council did not want to be part of the advisory board. This changed with the advent of a new board in 2017: the new board made agreements about noise nuisance from the Switferbos turbines. Also, they provided the local residents with information about the progress of the wind farm. Their main aim was to enhance the livability of the village. Swifterbant participated in the wind farm development by taking part in the first design workshop, the advisory board and the second design workshop (replacing the turbines outside Swifterforest). For the first design workshop and on the advisory board, only one representative was present. Both representatives were not in close contact with the residents of Swifterbant. The village Council of Swifterbant was also very busy with other projects at that time and was understaffed.

Upon reflection, the village council of Swifterbant felt that they had no influence in the decision-making process and were being kept in the dark regarding crucial information about the project. A village council member stated: "at the moment we could have had power, we were not provided by the information to use that power". From this quote, it was evident that the village council did not see the process as being transparent and that they felt that all of the important decisions were made before they were aware of what was happening. According to the village council, the province and the project initiators did not inform them sufficiently. For example, the requirement from the province that the wind farm layout should be linear meant that the wind farm was going to be closer to Swifterbant. By deciding this, the village council felt mistreated: "Now the wind turbine and the plan itself were considered first, and only afterwards the residents. It should have been the other way around". After the decision-making process was completed, the opposing group 'de Windbrekers' arose. These opponents created much tension within the community, especially when the first round of financial participation took place, which resulted in a division between participating and opposing residents of the inner area of Swifterbant. The inhabitants of the inner area who could participate in the financial participation did not want to mention this to other residents at first. As a result, a division within the village was created, and the wind farm became an avoided subject. When one participating resident spoke his mind in the end, the topic was discussed, and the atmosphere became less tense.

5.3 THE DECISION-MAKING PROCESS

In this section, the decision-making process is visually presented in the Rounds model. The most important decision-making moments towards Windplanblauw are presented below. Note that, for reasons of clarity, not all events are shown in the figure. Only (the numbers of) the most influential moments are presented.

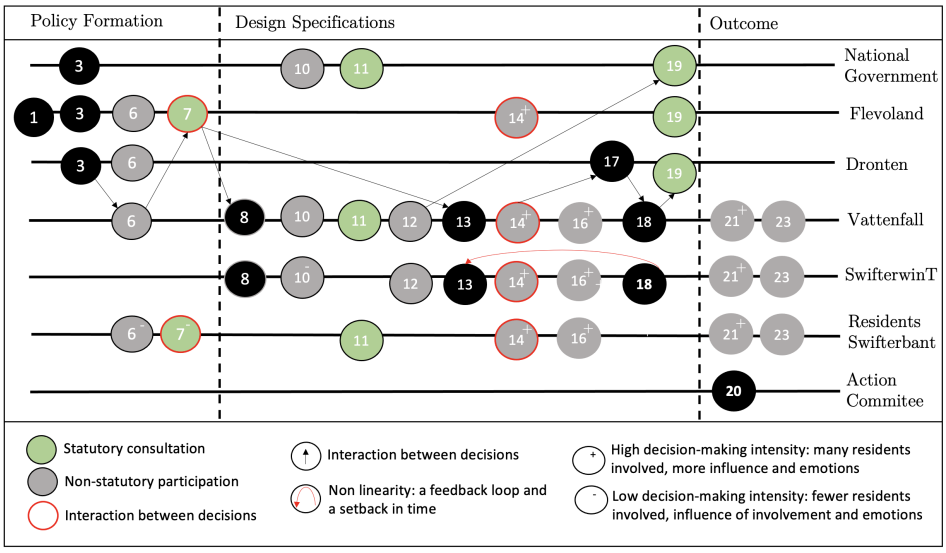

Figure 5.3: Rounds Model of Windplanblauw

1. The Province of Flevoland defined its onshore wind strategy: upscaling and remediation (2006)
2. RCR application of Vattenfall (22 March 2011).
3. Municipalities Dronten and Lelystad, the Province of Flevoland, and the Ministry of Infrastructure and Environment made an action plan, Vattenfall was asked to organise a design workshop (2011).
4. Municipality of Dronten published its Onshore wind strategy "Dronten maakt ruimte voor wind" (February 2012).
5. A group of landowners requested the province to be only interlocutors concerning wind energy projects (2012).
6. Vattenfall organized three sessions of design workshops with stakeholders (2012/2013).
7. The Province of Flevoland created the concept of the wind plan of Region Flevoland (2015), which was published and approved in 2016.
8. Vattenfall and the three local wind cooperatives, Ketelmeerzoom, Natuurstroomgroep and Vereniging Windpark Rivierduin, formulated an agreement about their collaboration the project plan (March 2016).
9. Letter of intent, signed by the Ministry of Economic Affairs, the Ministry of Infrastructure and the Environment, the Province of Flevoland, the Municipality of Dronten, the Municipality of Lelystad, SwifterwinT and Vattenfall (October 2016).
10. An advisory board was established by SwifterwinT and Vattenfall, guided by the national government. Swifterbant did not want to participate and sent a representative of Dronten.
11. 'Notitie Rijkweidte Detailniveau' was established by the initiators; here, the outcome of the design workshop was used. The guidelines for the environmental assessments were presented (9 November 2016). Notitie Rijkwweidte Detailniveau was approved by the State (April 2017).
12. The first financing round in preparation for the MER and SwifterwinT BV was founded. More than 150 landowners, inhabitants of the outer area of Swifterbant, acquired certificates (June 2017).
13. Vattenfall and SwifterwinT decided upon the preferred layout (End of 2017).
14. There was a town hall meeting to discuss the preferred layout in SwifterbanT, there was much resistance among villagers (6 December 2017).
15. Village Council and Municipality of Dronten objected to the four turbines in the forest (June 2018). 800 citizens signed a petition, and forty-five viewpoints were handed in.

16. Vattenfall and SwifterwinT established a working group with the village council, the Dutch governmental forestry organization 'Staatsbosbeheer' and the Dutch Institute for Nature Education and Sustainability 'IVN'. Together, they established a plan to upgrade and preserve Swifterforest with the financial contribution resulting from the remuneration of the turbines on the forest land (July 2018).

17. The municipality of Dronten suggested that the wind turbines be placed outside the forest (August 2018).

18. The initiators decided to change the preferred layout and move the turbines 80 metres outside the forest (September 2018).

19. All permits are issued (October 2018).

20. Action Committee, the 'Windbrekers' was set up (2018).

21. 'Vrienden van Windplanblauw' is set up by the initiators, and two workshops took place to give substance to the financial participation scheme (Spring 2019).

22. Council of State declares the appeals unfounded and therefore was rejected (6 November 2019).

23. First round of financial participation for inhabitants of Swifterbant took place. SwifterwinT organized this participation round, and early financial participation was difficult to establish (October 2020).

5.4 CITIZEN PARTICIPATION

In the rounds model presented in the previous section, Figure 5.3, the most important rounds where citizen participation took place are identified. These rounds are highlighted in this section to answer the following question: What is the current practice of citizen participation designed by the government and wind farm initiator in the development of the four onshore wind cases? In the case of Windplanblauw, the nearest local residents are also the landowners. However, only the residents of the inner area of Swifterebant are considered as local residents. Four main decision-making rounds of public participation can be distinguished:

1. The Design Workshops
   The citizen participation process started with the design workshops in 2012 and 2013, where stakeholders were involved in designing the wind farm layout. Parties of interest were identified by asking the first relevant stakeholder, a local environmental organisation, "Who else should be involved?". This process was repeated until no new parties could be identified. Together, the identified stakeholders met and discussed options for the wind farm project. The central question in the design workshop was 'what is the best location within the indicated search area to set up a new wind farm?'. Various wind farm setups were considered during this discussion. Here, Vattenfall did

three co-creation sessions with three different groups of stakeholders. A representative of the local citizens of Swifterbant was present during the first design workshop. The output of this first workshop was used during the second design workshop, and the output of the second was used for the third design workshop. The design workshops were converging; in the end, two layouts had negative advice. In the design workshops, the potential position of Swifterbant has been acknowledged as well as the importance of early involvement. The representative of Swifterbant supported the wind farm but thought it important to ensure a fair distribution of benefits and burdens. As a result of the design workshops, one of the layout options was ruled out due to a lack of acceptance. The outcome of the design workshop served as input to the Flevolands 'Regioplan Windenergie', and therefore as input for the location as identified by the province. The province of Flevoland adopted the advice when setting the wind farm location.

2. Establishment of SwifterwinT
   Establishing Swifterwint began in 2015 when the three cooperatives and Vattenfall decided to work together to establish a project plan. Soon, all four parties agreed that for efficient cooperation, it was better to unite the three cooperatives into one cooperative: SwifterwinT. As explained before, a distinction could be made between the residents of the inner area and those of the outer area. The decision was made that everybody could participate, as this did not happen in the past. Disadvantages and benefits were previously divided in an unequal way, which led to disputes between neighbors. This tension was still tangible, which made the negotiations even more sensitive. The most important outcomes of the negotiations were:
   - Everybody within the project area can participate
   - All participating parties are equal, regardless of distance from the turbines or the amount of land owned
   - Nobody should have to lose out

   SwifterwinT was officially created in 2017 as a response to the first investment that SwifterwinT needed to make. Here, all residents within the project area, as defined by the province, had the ability to buy certificates. Almost all residents made use of this option which resulted in over 150 members of SwifterwinT.

3. The Advisory Board
   Together with the government, Vattenfall and SwifterwinT set up an advisory board. The purpose of this board was to provide insight into all the interests and bring together knowledge. In the beginning, the village council of Swifterbant did not want to participate in this advisory board and, instead, sent a resident of Dronten as a representative. Other interest groups were also present. Alternative sites for the wind farm location were studied. The outcome of this advisory board was a preferred layout. After this, the advisory board was dissolved. When the village council changed its board membership, they became open to engaging in the citizen participation process.

Another side story within the advisory board is that a local interest group, IJsselmeer, was indirectly included in the advisory board through their partner organisation. During the process, their partnership ended, and the interest group was lost out of sight. At first, they had conflicting viewpoints, but later an agreement was made concerning research in the EIA, and the interest group did not appeal and was satisfied with the results.

4. Working Group 'Swifterforest'
   On December 6th 2017, the initiators of Windplanblauw organised one of the many town hall meetings for the inhabitants of Swifterbant. Approximately 100 residents attended this open meeting. This was shortly after the preferred layout was presented. The residents did not understand where the preferred layout came from and was concerned that they were excluded from important negotiations. Further, much outrage resulted from the two turbines placed in the forest next to Swifterbant, Swifterforest. The village council reached out to the government about the turbines in the forest and the initiators set up a working group as a result. Staatsbosbeheer, IVN and the village council established an action plan to use the contribution that Staatsbosbeheer would receive if the turbines would be placed on their land to preserve and maintain Swifterforest. Staatsbosbeheer was in favour of the plan because, in the past, it hardly received any subsidies to maintain the forest. The financial contribution of the wind farm could be used to make Swifterforest a more pleasant space for the residents of Swifterbant. As time passed, the plan gained the support of the village council. However, the municipality decided that the turbines should be moved outside of the forest. Even though the municipality had no legal power, the initiators decided to relocate the turbines.

5. Early Financial Investment
   Swifterwint and Vattenfall organised an early option for local residents to participate before the construction phase started financially. Therefore, residents would experience the financial benefits of the project before the drawbacks. Swifterbant had the first option to participate while Dronten and Lelystad were next in line. The return on investment for local residents was set at 7%, and many residents of Swifterbant invested. This resulted in a division between the residents of Swifterbant, and there was tension between the opponents of the wind farm and the local residents who had decided to invest in the wind farm.

	Structural Context					Specific Context		
Windplanblauw	Governmental bodies involved	Initiators involved	Residents of Swifterbant Involved	Local wind policies	Moment and level of inclusion	Previous Events	Specific Circumstances	Outcome
Design Workshops	State, province and municipalities stated in their action plan that citizen participation is critical and asked Vattenfall to implement the design workshop.	Vattenfall thought of the design workshop. After the government agreed, they hired an external party to lead the workshops.	One representative from the village council Swifterbant presented the first of the three meetings.	Unofficial governmental action plan: Search area with four existing wind farms, agricultural landscape, large wind farm of approximately 200 MW.	Before the wind farm plans were specified, stakeholders are involved in the process. Involve.	Conflicts concerning distribution joys and burdens in Flevoland.	Three meetings were organised, in each workshop different stakeholders attended. Each workshop further specified the search area.	The outcome was that two siting areas were considered less suitable, inter alia due to little support of Municipality Urk.
Establishment of SwifterwinT	The province was not involved in the process but was responsible for the collaboration by creating the policy.	Three cooperatives wanted to come to one cooperative: SwifterwinT. Vattenfall was involved in the establishment of SwifterwinT by assisting the negotiation.	Residents within the project area had the option to 'join' SwifterwinT in June 2017. They had the choice to go from resident to co-owner.	The government stated in 'Regioplan Windenergie' that only one project should be established. No collaboration would mean no project. Residents of the project area could become co-owner.	Before the start of the wind farm planning, the landowners have the option for co-ownership. Collaborate & co-ownership.	Disagreement between landowners and neighbours in previous wind farms: conflicts concerning distribution joys and burdens.	To establish a good partnership, all parties agreed that the three cooperatives should unite. Several meetings took place for over a year. A lot of old grudges caused sensitive negotiation.	90-95% of the landowners became member of SwifterwinT. They all got equal chances, without 'haves' had to endure financial deterioration. They also agreed not to oppose the wind farm and to take care about the other residents.
The Advisory Board	A representative of the Ministry assisted the establishment of the advisory board. The province was present in the board meetings.	Initiators created the 'participation plan' and started the advisory board. An independent chair leads the sessions.	One local resident of Dronten is a part of the advisory board, representing Swifterbant.	The region plan emphasized the importance of participation and communication during project.	Consultation sessions between January 2017 and the determination of the preferred layout. Involve.	In the NRD the initiators decided to set up an advisory board.	Five consultation sessions, until the preferred layout was chosen. Then the advisory board was dissolved.	The outcome is a preferred layout where the interests of the participating stakeholders are considered.
Working Group 'Swifterforest'	The municipality was actively opposing the wind turbines in the Swifterforest. The governmental decision power was at provincial, national level.	The initiators organise the working group with three parties of interest: the village council, Staatsbosbeheer and IVN.	The village council was part of the working group in order to think of a plan to 'fix up' the forest.	The region plan emphasized the importance of participation and communication during project.	After the preferred layout was presented, a working group was established to co-create an action plan for the Swifterforest. Collaborate.	The preferred layout was presented at the townhall meeting. Two turbines located in the Swifterforest met opposition from local residents. The village council reached out to the initiators.	Staatsbosbeheer and IVN wanted the turbines to be placed in the forest, in order to receive a contribution to use for Swifterforest. As the working sessions went on, the parties started to agree.	An agreement was established. However, the municipality decided to ask the initiators to remove the turbines away from the forest, by handing in a viewpoint. In the end, the turbines were re-located.
Early Financial Investment	Province established the wind farm requirements to include the option for financial participation.	The early financial participation round is provided by SwifterwinT.	Residents from Swifterbant had the first possibility to financially participate.	Financial participation is one of the requirements presented in 'Regioplan Windenergie'.	The moment of inclusion was before the construction of the wind farm would start. Level is sharing of benefits. Financial participation: investment.	Disagreement between landowners and neighbours in previous wind farms.	Dividend of 7% is determined before the start of the building of the wind farm.	Residents from Swifterbant financially participated. This led to a tension between local residents financially participating and the opponents.

Figure 5.4: Contextual factors in the participation process deduced from the CIT

5.5 FACTORS OF INFLUENCE

Based on participation and the decision-making process as presented above, there are several interesting things to note. First was the surprise the residents of Swifterwint felt when the wind farm layout was presented. A few possible causes of the surprise were identified. First of all, one of the project managers stated that they did not "organise their own opposition". This implied that Swifterbant was *not represented properly* on the advisory board and during the design workshops. Only one representative of the local community was on the advisory board. Furthermore, the plans to be developed in the design workshop were still vague, particularly in the workshop that the Swifterbant representative attended. Here, the participation paradox, as explained in 2.4, could be an explanation closely related to *the moment of inclusion*.The plans being vague could have resulted in little awareness among the local community. Time could also have been a factor when the preferred layout was publicised; four years had passed since the design workshop. It could have been that the wind farm development fell into oblivion in the community. As seen here and with other projects, it was a challenge *keeping residents involved* in the process.

Additionally, some residents were not satisfied with the presented layout once the decision-making process was complete. A possible explanation for this could be that the preferred layout was already determined during the town hall meeting, which took place before the design workshop. *The consultation took place when the decision had formally been made*. The residents, therefore, did not view the experience as transparent and felt that they were given information too late. Especially regarding *the size of the and location of the turbines* in the forest, as this was considered important information. Another cause of discontent could be that the province decided upon the wind farm location in the 'Regioplan Windenergie', where a handful of people had only attended the consultation sessions. The exact provincial participation process was unknown, and only four people used the consultation of 'Regioplan Windenergie'. It is more complicated involving residents in provincial politics than in local politics, especially when the plans are vaguer in the beginning and citizens are not aware of all the details. The *governmental level in which the decision-making process takes place* could be a factor of influence. Another consequence is that when the process participation starts, *the most significant decisions have already been made*. Some local residents felt that they did not have the knowledge to use their power when they could. Local residents could have befitted from external expertise. An *independent advisor* could have assisted them to do so, as SwifterwinT hired WindUnie.

Another striking finding is the conditions of the financial participation, the upgraded community fund and the replacement of the turbines away from the forest. A lot has been done to respond to the community's concerns. This may be because one of the initiators, SwifterwinT, is also part of the community Swifterbant. The *wind association has a personal interest in maintaining a pleasant relationship with the local residents*. The landowners also *learned from previous experiences* due to past disputes that arose because of unfair distributions of the benefits and drawbacks. However, for this particular project, the equal division of the benefits and drawbacks were considered when Swifter-

winT was established. All residents of the project area could participate, and the other residents of Swifterbant outside the project area have a large yield on financial participation. However, financial participation resulted in tensions within communities: a few opponents publicly disapprove of financial participation while others (sometimes secretly)invested. Some parties assume that participation equals acceptance, while the investing parties do not always agree on this statement.

5.6 CONCLUSION

In this section, the citizen participation and the decision-making process of Windplanblauw are presented, and the factors influencing the decision-making are discussed. Citizen participation took place in multiple ways: design workshops in an early stage, an advisory board deciding on a preferred layout, a working group and financial participation. Because of disagreement among some of the residents during the town hall meeting, the final agreement was that the turbines would be placed outside Swifterforest. This had a significant influence on the final wind farm layout. Additionally, all residents within the project area had equal rights to purchase certificates of the wind farm, which is uncommon in the wind sector. This resulted in zero appeals from the residents within the project area.

Factors that influence the participation and thus the decision-making process are (1) representation of the local residents, (2) moment of inclusion, (3) the extent to which decisions have already been taken in previous policies, (4) an independent advisor assisting local residents, and (5) the type of initiator and its previous experience. In this case, the most influence was caused by the representation of the local residents and the moment of inclusion. If the advisory board had represented the citizens of Swifterbant more accurately or that the citizens were consulted about the preferred layout earlier, it would have been evident that the location of the turbines in the forest was not the desired outcome. Co-ownership of the turbines was also of great importance, as it prevented legal appeals and opposition from the residents of the project area. Lastly, the point in time when the wind farm location was decided is of great relevance, as that is the moment citizens have the most influence. In this case, only four citizens were engaged when the project area was determined.

In the next chapter, the second case is studied: Wind Farm Moerdijk. This wind farm is located in an industrial area in the south of the Netherlands. part of

6 CASE 2: MOERDIJK WIND FARM

Moerdijk Wind Farm is located in an industrial area in the port of Moerdijk, a municipality in the province of North Brabant. The wind farm consists of 7 wind turbines with a tip height of 180 metres. Together, these turbines bring the installed capacity of the wind farm to 25 MW. The wind farm construction has ended in January 2021 and will be operational at the end of the year.

6.1 GENERAL CASE DESCRIPTION

6.1.1 The Start of the Project

In 1999, Vattenfall was considering developing a wind farm in the industrial area of Moerdijk, a municipality located in the province Noord-Brabant in the Netherlands. In 2004, Vattenfall made an agreement with the Port of Moerdijk and established 'Masterplan Windfarm Moerdijk'. After an extensive study, the west of the industrial area was identified as a suitable location for the wind farm. However, the landowner of this preferred location, Shell, did not want to cooperate. Subsequently, further research on possible locations was conducted, and from 2011 until 2014, the east side of the industrial area was identified as a potential location. However, this did not seem feasible as the space was not large enough. In 2014, the land initially preferred for the wind farm location changed ownership, and Vattenfall was now able to consider the west side of the industrial area.

At the time this was happening, the local wind policies were being shaped. On the 9th of June in 2011, a multi-annual plan was published: 'Structuurvisie Gemeente Moerdijk 2030'. In this document, a wind farm in the Port of Moerdijk already was included. In 2011, all municipalities within the district of West-Brabant presented their planned contributions to the onshore wind targets. This was in response to the provincial targets, where the province of Noord-Brabant committed to contributing 470.5 MW onshore wind energy in 2020. This policy was shaped in January 2014 and included the proposed wind farm as well as in the 'Notitie Windenergie Gemeente Moerdijk 2013-2030', where all the wind plans of Moerdijk were presented [99]. This policy document included guidelines for community and citizen engagement: the stakeholder engagement process should be transparent, the project should contribute to the local community, projects should be developed while considering multiple aspects, and the projects should raise the awareness of citizens' own capabilities of contributing to a better environment. In 2014, including these social conditions in a policy were rather new, and the guidelines regarding participation were not legally binding.

Also, on 14th January 2014, the municipality agreed to Vattenfall's request to cooperate and to start the procedure of establishing a zoning plan for Moerdijk Wind Farm. This was the start of the next attempt at developing the Moerdijk Wind Farm, fifteen years after the first attempt in 1999. This was because Shell did not want to cooperate with the wind farm and due to the lack of suitable alternative locations.

The municipality held discussions with Vattenfall about establishing guidelines concerning participation and set the requirement that companies within the industrial area be involved early. Vattenfall complied, did the relevant research and held discussions with industrial companies in the area. The companies in the area were listed but, due to a mistake, one was omitted. This same company later raised objections against the wind farm, highlighting the importance of early participation. When this process was set in motion, the council of the municipality agreed on the potential project.

Figure 6.1: The wind farm location with respect to Klundert

6.1.2 Determining Participation Guidelines

After the 'NRD' was established and in July 2015, a town hall meeting in Klundert was organised, and all residents were invited by letter. Klundert is the closest city to the industrial area in municipality Moerdijk, around 1200 metres from the proposed wind farm. Klundert is a titled 'city' due to its historical value; however, it has the characteristics of a village with around 5000 residents. The figure above demonstrates the position of Klundert with respect to the proposed wind farm. On March 10th, 2016, the preferred layout of the wind farm was presented during a city council meeting. Later that month, the EIA and the planning permit were open for consultation. This resulted in 227 viewpoints, whereof 218 were a joint response from the local residents and a petition with 1000 signatures in opposition to the wind farm [100]. Given these reactions, the municipality decided to postpone the final decision on the wind farm. Around the same time, a resident of the municipality Moerdijk reached out to the municipality. He lived close to a wind farm and expressed that there appeared to be no benefits for the local community, which should not be the case. Therefore, he suggested that the municipality would reconsider this by ensuring the local community receives benefits from the wind farm. In response, the municipality Moerdijk hired an external party to develop the social guidelines as presented in the 'Notitie Windenergie Gemeente Moerdijk 2013-2030'.

Four Council members were named to the council committee responsible for identifying and implementing the social guidelines. At the same time, the intensity of the participation process for local residents was increasing. The village council of Klundert, 'Stadstafel Klundert', was approached and asked to function as an advisory board. During the participation process, there were multiple rounds of citizen consultations, two open information events for the residents of Klundert and two meetings with the city council. In the end, Vattenfall and the municipality identified two possible ways that the local community could benefit from the new wind farm. Two different heights of turbines were presented, and the higher of the two would have preferred benefits, as explained in section 6.4. The residents of Klundert were consulted about these options through a survey. In January 2017, the municipality still could not decide about the wind farm, so the province's governor intervened and met with the municipal council. He stated that the province would take over if the municipality did not decide on building the wind farm. The municipality realised they would lose all control if the province would take over. They were unsure if they could provide the village with financial benefits as offered by Vattenfall. To prevent that from happening, the municipality decided upon the turbine height in February 2017, and the corresponding social guidelines were accepted, based on a previous agreement between Vattenfall and the municipality. The municipality adopted the zoning plan and provided a planning permit. The residents of Klundert accepted the social guidelines and the corresponding benefits: a solar farm and a community fund for the residents of Klundert. The community fund is generated from the profits of the wind farm and can be used for community projects within Klundert. This is an extra fund on top of another fund for the whole municipality of Moerdijk. This acceptance extended as far as carnival as some citizens dressed up as turbines. This event is seen as the termination of the decision-making process as defined in this study. All agreements are made, and the implementation process was ready to begin.

6.2 ACTORS

6.2.1 Initiators

Vattenfall is the only initiator of the project, and its biggest ambition is to develop the wind farm. In 1999, Vattenfall started to explore development options for this wind farm, and in 2004, an agreement was made with the Port of Moerdijk to construct a wind farm. This agreement gave Vattenfall the exclusive right to construct the wind farm. Vattenfall received authorisation to develop the wind farm in 2011 when the municipality agreed that it could be built in the industrial area. The municipality and Vattenfall developed the social guidelines together. However, if Vattenfall declined to develop the social guidelines for participation, it still had the legal power to develop the wind farm. Participation is not a legal reason for the government to decline the permits for a wind farm.

6.2.2 The Governmental Parties

The province agreed to onshore wind targets set by the national authority, and the municipality committed to the onshore wind ambitions set by the province. Achieving both of these targets is a goal of the governmental parties. Although the province is in charge of wind farms above 5MW, the municipality wanted to be the responsible authority. As such, the province granted the municipality this authority. In Klundert, the municipality works closely with its residents and want to keep them satisfied. One of the project developers stated that "the municipality councilors meet their voters at the bakery, which influences them. They can be afraid to make a decision." This close relationship is more evident in the municipality than in the province. The municipality also established a 'council committee', which has the specific purpose of fulfilling the social guidelines and hiring an external professional to reach an anterior agreement.
As seen in this case, the province has the ability to overrule the municipality if the municipality does not provide the permit for the wind farm. This, therefore, made the municipality feel powerless, knowing that the province can intervene and go against their wishes. The external consultant hired by the government said: "the City Council felt it like a form of blackmail."

6.2.3 Local Community Klundert

The village of Klundert is one of the seven villages within the municipality of Moerdijk. Klundert has around 5000 residents and is approximately 1200 metres from the proposed wind farm. Klundert has a village council that discusses issues regarding improvements to the livability of Klundert. The residents of Klundert, especially the village council, are in close contact with its municipal politicians, and as a result, they are often successful in getting projects completed. In Wind Farm Moerdijk, not all of the residents favoured the wind farm mainly because they were not convinced that there would be any benefits for the local community. The residents have the power to oppose the wind farm in the formal participation round by approaching the municipality directly or by going to the press. Additionally, the local residents stand together, which makes them a powerful entity.

6.3 THE DECISION-MAKING PROCESS

The decision-making process is visually represented in Figure 6.2 and starts when the land ownership in the preferred location changes. The Agreement with the Port of Moerdijk was already made, and the west side of the industrial area was selected as the most suitable location. Note that only (the numbers of) the most influential moments are presented in the figure.

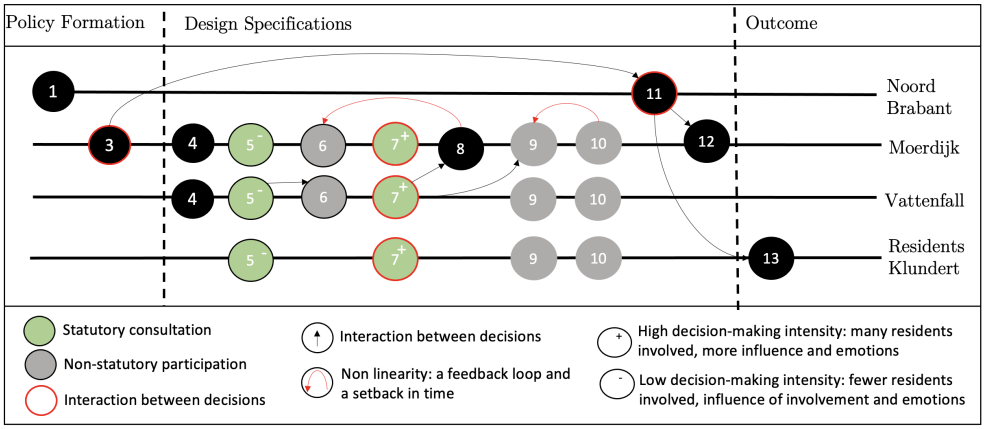

Figure 6.2: Rounds Model of Wind Farm Moerdijk

1. The province of Noord-Brabant committed to contributing 470,5 MW of onshore wind power (31 January 2013).

2. All municipalities within the energy region of West-Brabant presented their planned contributions to the onshore wind targets. Moerdijk agreed to their bid of 80-140 MW additional onshore wind capacity, the wind farm on the industrial land was already included in this bid (7 February 2013).

3. 'Notitie Windenergie Gemeente Moerdijk 2013-2030' is established: the industrial area is mentioned as the proposed area, and the aim for social guidelines are outlined. In total, 13 viewpoints are handed in (16 January 2014).

4. The municipality agreed to Vattenfall's request to cooperate and to start the process of establishing a zoning plan for Moerdijk Wind Farm (14 January 2014).

5. Vattenfall established the NRD and held it open for consultations (9 July – 2 September 2015). The NRD was approved by the Municipality on 5 November 2015.

6. Vattenfall chose their preferred layout and presented it at the council meeting on 10 March 2016.

7. The zoning plan and the environmental impact assessment are established and open for consultation (31 March 2016). Two hundred and twenty-seven viewpoints were handed in, and 1000 people signed a petition opposing the wind farm.

8. The municipality decided to postpone the decision and research which turbine height would be best suited for Klundert (October 2016).

9. The municipality established a 'Council Committee' which had responsibility for implementing the participation guidelines. In consultation with the village council of Klundert, the committee and Vattenfall decided upon two options: the turbines would have a tip height of 186

metres with better options for financial participation or a tip height of 150 metres with less advantage for the local community (October - December 2016).

10. A survey was distributed to the citizens of Klundert (December 2016); 833 out of 4400 residents (a response rate of 19%) aged 18 years and older responded, and 56% of the votes were against the wind farm (December 2016).
11. When the municipality was reluctant to decide, the province indicated that they would assume control of the project if the municipality does not act on time (January 2017).
12. The province approved the zoning plan on 12 January 2017, with a turbine height of 180 metres along with the package of benefits for the local community that would be provided by the 186-metre turbines. These advantages include a solar farm and a community fund for all residents in Klundert.
13. A foundation of Klunderts village council appealed the decision of the municipality to grant a permit for construction of the wind farm.
14. The Council of State declared the appeals unfounded and were, therefore, rejected (2 May 2018).

6.4 CITIZEN PARTICIPATION

The most important decision-making rounds are discussed further elaborated in this section.

1. The viewpoints and petition of residents from Klundert
   After Vattenfall presented their preferred layout, the environmental impact assessments and the zoning plan were open for consultation. The village council organised a joint viewpoint, signed by 218 residents. Also, a petition against the wind farm was set up and supported by 1000 residents. The municipality did not ignore these are numbers, and they decided to postpone the final verdict on the wind farm. However, in such a small community, acquiring signatures could give a distorted image of what is happening in reality. When people have even a small connection, they are more inclined to sign a petition when they are asked. Therefore, it was hard to say how many residents were actually against the wind farm.
2. Implementing the participation guidelines
   After opposition from the residents of Klundert, the municipality appointed four council members in charge of researching the options for the social guidelines. The social guidelines as defined in the policy the municipality in 'Notitie Windeergie Gemeente Moerdijk 2013-2030', are the following:
   - The projects should increase the awareness of contributing to the energy transition.

- Preferably, projects should be developed based on a common approach on government, entrepreneurs, education, research and environment.
- The project rests on the principle that part of the benefits gained is bestowed directly to the community.
- Any communication with the local community should be transparent.

These guidelines were quite vague, as it was not specified how this should be done. Therefore a specification of the guidelines was required to implement them. In consultation with the village council, Vattenfall and the municipality had many discussions regarding establishing a beneficial arrangement for the local community. The residents of Klundert were represented by the four councillors and sometimes the village council. From the discussions, it appeared that the benefits for the community depended on the height of the turbines. Higher turbines have higher profits, and higher profits mean increased financial incentives for the community of Klundert. Vattenfall and the municipality decided upon two options: a wind farm with low turbines of 150 metres tip height or a wind farm with turbines of 186 metres tip height. With the high-turbine wind farm, a solar park would be built for the residents of Klundert, which would translate to a 250€ discount on the annual energy bill for all residents. Additionally, a community fund was established for Klundert separately and Moerdijk as a whole.

3. The Survey
   A survey was distributed to all 4400 adults living in Klundert to decide which wind farm option would be preferred by the residents. Three options were presented on this survey: no turbines, 150m turbines, 186m turbines with higher financial benefits. The survey was completed by approximately 20% of the residents. More than half of the respondents (56%) opted against the wind farm. However, not having a wind farm was not an option because the municipality already included wind farm development as part of its policy to meet climate targets. Because of its policy commitment, the municipality had no grounds to reject the wind farm. Therefore, the province had the ability to overrule the municipality if they decided not to issue the planning permit for the wind farm. The votes for the other two wind farm layouts were almost divided equally, but the 150m turbine option had slightly more votes. The municipality had a decision to make: they could not select the winning option, which was not to develop a wind farm. The second most popular option (150m turbine) had little financial perks, with a tiny majority of the votes over the 186m turbine. Meanwhile, representing some of the unsatisfied residents, a member of the village council stated that ”the majority of citizens are against the wind farm and, thus, the only correct thing the municipality must do was stop the project”.

	Structural Context					Specific Context		
Moerdijk	Governmental bodies involved	Initiators involved	Residents of Klundert Involved	Local wind policies	Moment and level of inclusion	Previous Events	Specific Circumstances	Outcome
The viewpoints and petition of residents from Klundert	The task of the municipality is to answer to the viewpoints provided by the residents of Klundert.	Vattenfall has published the environmental impact assessment and the zoning plan and organized a meeting to present the preferred layout	Residents of the village council collected signatures for petition against the wind farm and organized a joint viewpoint of 218 residents	The local wind policies of Moerdijk, 'Notitie Windenergie Gemeente Moerdijk 2013-2030', stated that: the Industrial Area of Moerdijk is a suitable location for wind turbines, and social guidelines are desired when establishing the wind farm.	Participation according to the administrative law: 6 weeks the option of participation after the concept MER and the conceptual zoning plan were published. Consult.	Vattenfall published the preferred layout of the wind farm. Another wind farm is located in Moerdijk, and residents have been experiencing burdens and no benefit.	The municipality in Klundert is close to its residents and the village council. The municipality has stated the importance of social guidelines, but they were not implemented in the project yet. The NWEA guidelines had been adopted.	The municipality decided to postpone the decision and first specify how to implement the social guidelines as written in the 'Notitie Windenergie Gemeente Moerdijk 2013-2030'.
Implementing the Participation Guidelines	The municipality had appointed four 'Council Members' to lead this project. The aim of the municipality is to generate the best circumstances for the residents of Klundert.	Vattenfall took part in the specification process of the social guidelines. The question was: What benefits are possible depending on the height of the turbines?	The village council of Klundert represented the residents of Klundert in these meetings. The residents wanted the lowest turbines with the highest benefits.	Here, 'Notitie Windenergie Gemeente Moerdijk 2013-2030', was the starting point. The social guidelines as described in the policy were vague: transparency and benefits for the local community were desired.	The village council of Klundert was included in the negotiations. This took place after the preferred layout, EIA, and the zoning plan were presented. Involve.	Many viewpoints and a petition were sent to the municipality. A local resident contacted the municipality to ask to implement the social guidelines for wind farms.	Vattenfall, the municipality and the village council together discussed topics such as the social (financial) guidelines, but also topics such as shadow flickering, noise, lighting.	The outcome were two options, depending on the size of the turbines. If the turbines would be 186 meters: 1. A solar farm for all residents of Klundert would be developed 2. A wind fund for Klundert 3. A wind fund for Moerdijk
The Survey	The municipality decided in cooperation with Vattenfall and the village council to set out questionnaires. The municipality send the forms to the residents of Klundert and collected the responses.	Vattenfall consulted the municipality in creating the questionnaire.	833 out of 4400 residents responded to the questionnaire.	Here also was reacted to the social guidelines of the policy 'Notitie Windenergie Gemeente Moerdijk 2013-2030'.	All local residents are consulted, before the municipality decides on the planning permit. Consult.	The municipality, Vattenfall and the village council establishes two options. Many viewpoints and a petition were sent to the municipality.	In the questionnaire, three alternatives are presented: low turbines with low financial advantages, high turbines with high financial advantages or no turbines at all.	Most residents voted against the wind farm (56%). The other votes were slightly in favour of the low turbines. The municipality did not know what to do with this outcome: no turbines was no option, low turbines had low financial advantage and high turbines had the least votes.
The Warning of the Province	The municipality still could not decide due to a small difference in votes and a large difference in benefits. The province needed the wind farm to meet its climate target.	Vattenfall had no role here.	A few members of the village council of Klundert expressed to be against the wind farm and that the only wise thing for the municipality could be to stop the wind farm.	The province agreed to the national authority to realize a wind target of 470,5 MW in 2020.	The residents were not actively included. The local residents of Klundert were protesting in the background, for example through social media.	The municipality decided to postpone the decision to provide the permit for the wind farm. Questionnaires were responded to by local residents.	The wind project as described in the zoning plan complied with the local wind policies made by the municipality. The province stated that they province would take over if the municipality would not approve the wind farm, regardless of its height.	The municipality decided to approve the wind turbines of 180 meters, six meters lower than the original option, but with the same set of financial benefits as 186 meters would have. The municipality feared that if the province would take over, no benefits were guaranteed.

Figure 6.3: Contextual factors in the participation process deduced from the CIT

4. The Warning of the Province
   The municipality still was not able to decide because of the debatable results of the survey. The province went to the municipality because the province needed to meet their 2020 wind targets as agreed upon with the national authority. It said that the province would take over the project if the municipality did not decide promptly. This made the municipality insecure about the financial benefits they just agreed upon with Vattenfall. If the province would have taken over the project, there would be a chance the financial advantages would disappear. Not wanting to lose the potential benefits, the municipality decided to choose turbines of 180 metres high, six metres lower than the original deal, with the financial benefits corresponding to the 186-metres turbines. The municipality did this to meet the local residents with a height reduction, while Vattenfall was still willing to contribute the agreed-upon financial benefits.

6.5 FACTORS OF INFLUENCE

There are several interesting aspects to note in the decision-making process of Moerdijk Windfarm. First, the fact that the wind farm is located in an industrial area was not a guarantee for local support. The residents of Klundert had many viewpoints about the EIA and the zoning plan. These viewpoints were handed in jointly, and 1000 residents signed the petition. It is not known how these signatures were collected and how broadly supported the viewpoints were. *A village atmosphere* makes it more difficult to measure the real opinion of the residents. Additionally, it is hard to know how well a village council represents a village. The village council existed before the wind farm was built, indicating the residents' above-average commitment to the village. It may be harder to say no to your neighbors, which could influence many of the submitted viewpoints. Another aspect of the village atmosphere in Klundert is that the *municipality is close to the local residents*. This resulted in the municipality's decision to postpone the final verdict of the wind farm. The municipality's close working relationship with the local residents, combined with *the previous experience with the unequal distribution of the benefits and disadvantages of existing wind farms* made local residents reach out to the municipality out of concern. This was another reason why the municipality postponed the decision. The municipality already established social guidelines but had not yet implemented them. This gave local residents the option to co-create and, therefore, influence these guidelines. The other side is that when guidelines are clear, it is easier for the municipality to decide because the decision would have already been made when establishing the policy. Having *clear guidelines* can influence the speed at which the municipality decides about the wind farm.

the social guidelines needed to be established through a collaborative effort between a special named committee of the municipality, Vattenfall and the village council. Perhaps if the *moment of inclusion* was earlier, before the preferred layout was presented and the permit applied for, the process might not have been postponed. The survey also complicated the situation: an op-

tion against the wind farm was added even though not having a wind farm was not possible, per the provincial and municipality climate targets. Most votes were for an *unrealistic option*, and this did not provide any guidance to the municipality on how to proceed. The mandated wind farm was due to the *adopted policy*. Industrial Area Moerdijk was the preferred location for the wind farm, and the energy that has been generated since 2011 was included in the calculations for the climate targets. That means that in 2011, the municipality already had decided the wind farm would be built on the designated location. Towards the definition of the policy, 32 reactions came in response to the conceptual policy.

6.6 CONCLUSION

In case of wind farm Moerdijk, the focus of citizen participation was on implementing the participation guidelines. In consultation with local residents, the municipality and Vattenfall developed a policy of community benefits. This was, however, the result of the protest by the village council of Klundert and other opposing residents. This opposition to the wind farm led to better benefits for the community. The influence of the survey was negligible, but this was the result of an unrealistic set of options. Without the residents' activism, the wind farm would be less beneficial for the local residents and would have been conforming to the code of conduct established by the NWEA. The factor that had the most influence, in this case, was the community spirit among the villagers of Klundert; it most likely had a positive effect on the strength of the opposition, and on the way, the municipality reacted to this. This is especially so since the municipality works very closely with the residents in comparison to the province. The decision that the wind farm would be constructed was actually made in 2011 when the municipality Moerdijk incorporated the industrial area as a wind farm location in their multi-annual plan. As the location was already included in the municipal policy, this implies that if a higher governmental office, i.e., the Province of Noord-Brabant, wanted the wind farm built, this would happen. Lastly, the clarity of the policy was of importance. Because the municipality had not specified details of the social guidelines, it was harder for the municipality to make a final decision on the turbine height. It took some time to implement the social guidelines and the municipality still had a hard time deciding.

In the following chapter, the third within case study is conducted. The wind farm studied, Jaap Rodenburg II, is a wind farm in the city of Almere that replaced Jaap Rodenburg (I).

7 CASE 3: JAAP RODENBURG II

Wind Farm Jaap Rodenburg II is located in Almere, a city in the province of Flevoland. It is a re-powering project, where 10 wind turbines from the year 2000 are replaced by 10 turbines with a tip height of 150 metres. The wind farm has an increased capacity of 38 MW. The wind farm is operational since this year, 2021.

7.1 GENERAL CASE DESCRIPTION

7.1.1 The Start of the Project

Almere is one of the two large cities within the province Flevoland (constructed in 1986), a relatively new province within the Netherlands. Pampus is a district in Almere where wind farm Jaap Rodenburg was located. In the same area where Jaap Rodenburg was located, the municipality of Almere had plans to develop a new residential area after the wind farm would be decommissioned. Around this area, three existing residential areas were located as shown in figure 7.1 below; one of these areas is Noorderplassen West (hereafter: NPW). NW is a relatively new area where from 2010 onward, housing projects were organised. Newly built residences or plots are advertised under the project names 'forested living' or 'I build my house in the forest'. In this manner, the residential area continued to grow.

In 2014, Filmwijk, a residential neighbourhood within Almere, set the target to be carbon-neutral. One local resident involved in the working group 'Filmwijk energie neutraal' calculated that two modern wind turbines would be sufficient to provide their district with enough renewable energy. At the same time, wind farm Jaap Rodenburg I was reaching its maturity. Jaap Rodenburg consisted of ten wind turbines with a tip height of 100 metres and a total capacity of 16.5 MW. When the resident from the Filmwijk found out that wind farm Jaap Rodenburg I was reaching its maturity, he decided to reach out to Vattenfall to see whether it was possible to replace the wind farm altogether. The replacement of Jaap Rodenburg seemed feasible until the municipality decided to postpone plans, at least until 2035, to build a new residential area on the location of Jaap Rodenburg. In February 2015, the same resident of Filmwijk and Vattenfall came together and produced a declaration of intent to replace wind farm Jaap Rodenburg. To do so, the local residents formally established themselves into a cooperative: Cooperative Vereniging Almeerse Wind (hereafter: Almeerse Wind). Almeerse Wind would own two turbines, and Vattenfall the eight remaining wind turbines.

Simultaneously, Almere developed their wind policy in 2015: 'Energy Werkt!'. Almere was not explicitly included in the regional plan of its

province, Flevoland, so that it could set its own policy. The purpose of this program was to become climate neutral in 2022 and to implement its contributions to the energy transition as agreed upon in the Coalition Agreement 'The Power of the City' Almere 2014-2018'. In this policy, the goal was set to be a carbon-neutral neighbourhood by 2022. The strategy's focus was not on wind energy, but it stated that new wind projects were possible. These projects should originate from local initiatives. Another condition was that a minimum distance of 1500 metres must be kept between the residences and the wind farm, and the height of the turbines must not exceed 150 metres. Under these conditions, the municipality agreed to the development of Jaap Rodenburg II. The province agreed to let the municipality be the responsible authority. On the fourth of July in 2021, the construction of wind farm Jaap Rodenburg II was terminated, and the wind farm is now operational.

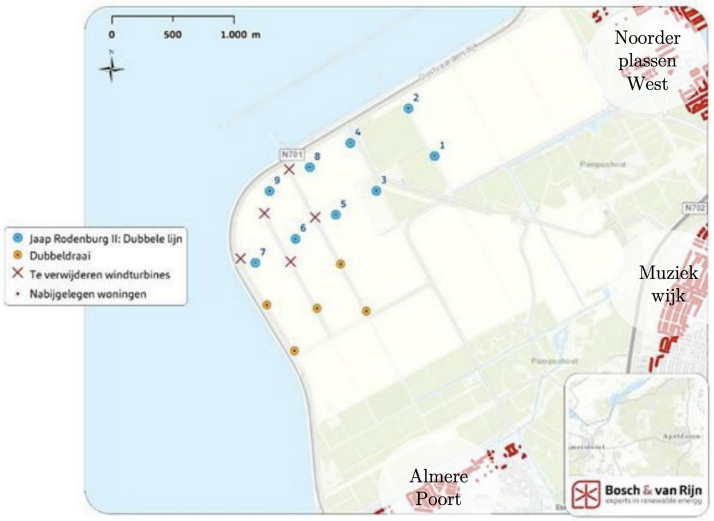

Figure 7.1: Location of the first layout draft of wind farm Jaap Rodenburg II, as determined in March 2016, with respect to the three surrounding residential areas [101]

7.1.2 Determining Participation Guidelines

In cooperation with the municipality, Almeerse Wind and Vattenfall set up three different potential wind farm layouts. All three designs took the new residential area into account, as there was uncertainty about when it would be developed. The municipality was in charge of the participation process and made the layout information available in a popular public area of the neighbourhood, frequented by many residents. Subsequently, the local residents of the project area could go online to vote for their preferred layout, as was announced in the local newspaper. In total, 70 out of approximately 4400 residents participated in this part of the consultation. These residents voted randomly as a response to a website presented in a local newspaper and are not selected as a representative sample. Based on these votes and the recommendations of the initiators, the municipality adopted the preferred layout as presented in the image above 7.1.

The municipality hired an external consultancy agency to arrange the participation process. Just after establishing the preferred layout, the project manager of the consultancy changed. When the new project manager was employed, an information meeting was organised to present the wind farm layout in April 2017. This resulted in much resistance, especially by a group of residents of the NPW city district. In general, they were against the wind farm, and some assumed that wind farm Jaap Rodenburg I would never be replaced. The project manager and the initiators decided that the design phase should be revised. The alderman agreed with this after he noted the resistance of the local residents himself.

Information meetings, wind excursions and visual representation meetings were organised where all local residents could participate. Wind excursions are tours that visit similar existing wind farms so that the local residents of the wind farm have an idea about the height and the noise of the wind turbines. The decision was made to investigate the interests of the residents of NPW further since they were the biggest opponents of the wind farm, and an advisory board was created with some of these residents. Design sessions were organised where the opposing residents together designed an alternative design for the wind farm. This was a form of co-creation. However, representatives of only one of the three city districts made the design, so the layout should also be consulted with the two other districts. For this design, a larger project was made available, as explained in section 7.4. After these events, the city council agreed to host another participation round to include the perspectives of the local residents. Using a survey, four potential layouts for the wind farm were considered: an optimisation of the layout designed by residents of NPW (the first preferred layout) and three layouts designed by the initiators. The residents were made aware of the survey by letters that were distributed within the three neighbourhoods. This resulted in 1000 responses, and based on the feedback; the city council selected the wind farm layout as presented in figure 7.2.

However, a group of NPW residents was still not in favour of replacing the wind farm. They requested a special conversation between the City Council and the residents, but the City Council disagreed with their opposition. The residents lived over two kilometres away from the planned wind farm, so the city Council was not convinced of their justified interest. In January 2018, the initiators applied for the required permits granted in March and September 2018 by the province and the municipality. The Council of State declared the one legal appeal they received unfounded because the distance of that resident was too far away from the wind farm to experience any nuisance: it was inadmissible because the objector was not considered a (direct) party of interest.

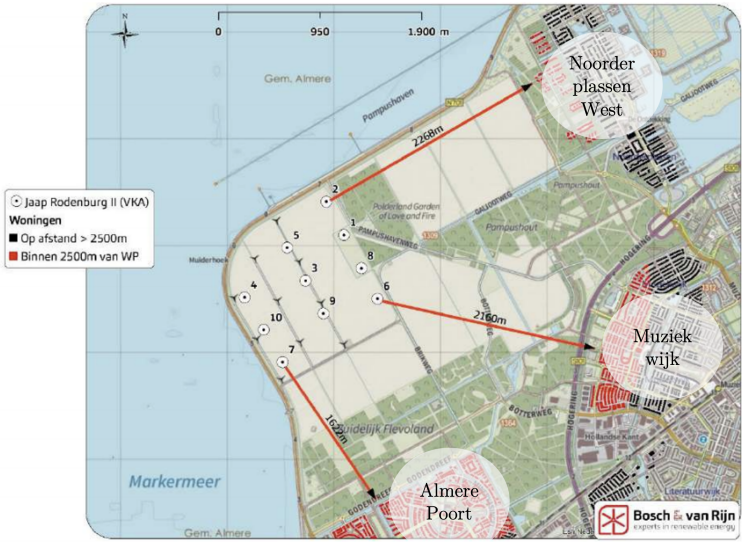

Figure 7.2: Location of wind farm Jaap Rodenburg II, as determined in October 2017, with respect to the three surrounding residential areas [101]

7.2 ACTORS

7.2.1 Initiators

The two initiators are Vattenfall and Almeerse wind. Almeerse Wind is an energy cooperative set up by the residents of the Filmwijk, particularly the one resident mentioned before, a residential area in the city centre of Almere. The Filmwijk is about seven kilometres away from the wind farm location. All residents of Almere were eligible to join the cooperative by becoming members or by becoming co-owners of the wind farm. Almeerse Wind had no profit motive, and they wanted to serve as an example to motivate other residents of Almere to contribute to a fossil-free world. Since Almeerse Wind could not immediately make capital intensive investments, Vattenfall agreed to finance the project. In their role division, both initiators agreed that the main responsibility of citizen participation would belong to Almeerse Wind because of its makeup of local residents. The municipality also had strong ideas about involving the local community. One of the board members of Almeerse Wind believed that solely the municipality decided what the citizen participation process had to look like. The municipality stated that although the local group might not have the right expertise to be in charge of the public participation, they have the closest working relationship with the local community and, therefore, may be best suited to lead the participation process.
It was decided that Almeerse Wind would have ownership of two turbines, and Vattenfall would own the other eight. Additionally, Vattenfall had the capital and the expertise to develop the wind farm. The involvement of Almeerse Wind was also essential, as the municipality's policy 'Energie

Werkt!' stated that local ownership was one of the requirements to develop a wind farm.

7.2.2 The Governmental Parties

Although the municipality was not included in Flevolands 'Regioplan Windenergie", Almere had its own approach. Almere wrote its own wind policy and wanted to be responsible for the development of Jaap Rodenburg II. The province agreed to the municipality being in charge of the participation process and then issued the planning permit. The province, however, still had to issue an environmental permit. The municipality and the province decided to coordinate both procedures and work together to answer the viewpoints that arose during the formal participation rounds.

The municipality hired an external project manager who was in charge of managing the stakeholders. The municipality had a prominent role in the participation process, especially after the start of the second participation round. From that point, the municipality started to take more responsibility for the participation process, as the first round had failed. The wind farm layout was designed from a theoretical point of view, that a new city district would be built there instead of taking into account the current neighbourhood layout.

Together with the initiators, the municipality decided to organise a second participation round that included design workshops and a survey intended to involve the local community. The municipality's main aim was to realise their ambition: "Energie Werkt!". Within this policy, wind farm Jaap Rodenburg II was the most important project since it would represent considerable progress towards the renewable energy target.

7.2.3 Local Residents of Jaap Rodenburg II

Filmwijk, where the initiators of the farm live, is located kilometres away from the wind farm. As previously stated, three neighbourhoods surround the wind farms: NPW, the Muziekwijk and Almere Poort. In the first design, NPW is located 1400 metres from the wind farm. In the second layout, this is increased to 2300 metres. The distance from the wind farm to the Muziekwijk had been decreased. The wind farm had been replaced around 700 metres to their advantage, thus away from their district. Still, the group of residents from NPW had the loudest voice in the wind farm opposition. This is because some of the residents of NPW only recently bought the 'forest plots', plots that should be surrounded by nature, under the assumption that the wind farm would be decommissioned. Additionally, several opponents of the wind farm state about Almeerse Wind: "if you want wind turbines, built them in your own backyard". The opposing residents from NPW feel that if a local cooperative wants to own a wind farm, it should be close to their own residences. When the opposing residents found out about the wind farm, trust in the initiators and the municipality was eroded. In the end, however, only one local resident of NPW appealed. The Council of State eventually rejected the legal appeal.

7.3 THE DECISION-MAKING PROCESS

The decision-making process of Jaap Rodenburg II is presented in Figure 7.3. Only (the numbers of) the most influential moments are shown to ensure the figure is comprehensible.

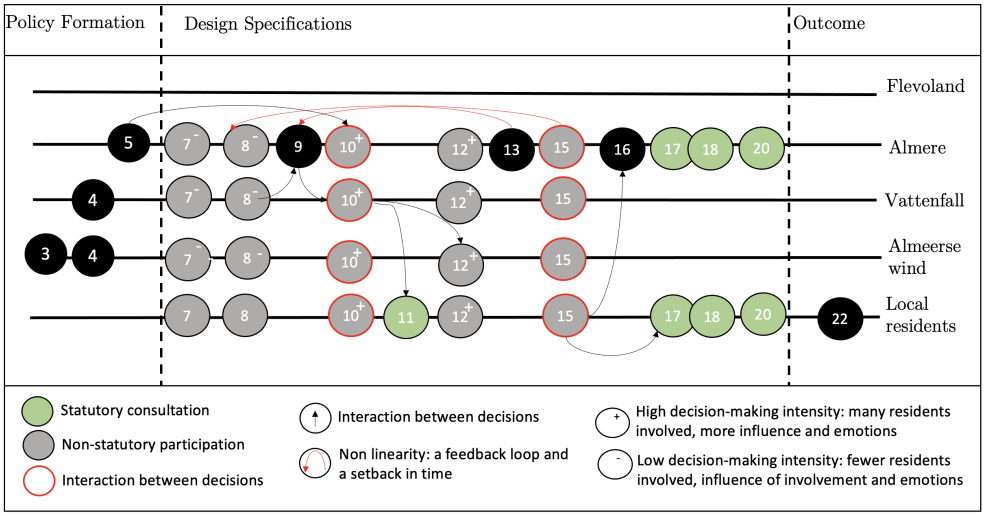

Figure 7.3: Rounds Model of Jaap Rodenburg II

1. The Filmwijk in Almere set the target to become carbon neutral by 2022 (2014).
2. A citizen involved with the working group of the Filmwijk found out that Windfarm Jaap Rodenburg needed to be replaced shortly and decided to contact its developer, Vattenfall, with the intention of developing the new wind farm together.
3. 'Coöeratieve Vereniging Almeerse Wind U.A.' was formally established on February 16, initiated by the local resident of the Filmwijk as mentioned in the previous event (2015).
4. Vattenfall and Almeerse Wind signed a declaration of intent to replace wind farm Jaap Rodenburg I together (April 2015).
5. The municipality of Almere published the policy document: 'Energie Werkt'. Here, the target is set to be carbon neutral by 2022. Wind energy is not the main strategy, but new projects are possible if they are a local initiative (24 September 2015).
6. The initiator's project plan outlined three alternative wind farm layouts (February 16, 2016).
7. Three wind farm layouts are presented at a stand on an information market where new building projects are presented (May 2016).
8. The layout consultation is presented to residents in the local newspaper. The first consultation round is organised by the municipality. The residents could vote online for one of the three established layouts. There were 70 reactions to this consultation round (May-June 2016).

9. The municipality's College Council determined the preferred layout based upon the input of the initiators and the input of the residents (26 January 2017).

10. A information meeting was organised to present the preferred layout. In this meeting, there was much resistance towards the proposed layout, and many residents were unaware of the replacement of Jaap Rodenburg (18 April 2017).

11. The residents of NWP started a petition that stated that the two turbines closest to NPW should be moved away from the neighbourhood. This petition was signed by 650 people (April 2017).

12. Design workshops are organised for the residents of NPW, and one new layout for Jaap Rodenburg II is introduced, in addition to the previous three from the initiator. Based on these design workshops, the initiators presented four layouts. These designs vary from 9 to 11 wind turbines (April-May-June 2017).

13. The municipality officially agreed to an additional consultation round, where a larger project development was made available (June 6, 2017).

14. A meeting for all three neighbourhoods is organised to discuss and optimise the design layouts. One of the layouts is adjusted, and the second consultation round is announced (27 June 2017).

15. The second survey is published: five alternatives are presented to the three residential areas. There were 1000 reactions to the survey (July-August 2017). The results of the surveys are described in the next section, 7.4.

16. Based on the consultation with the residents and the initiators, the City Council decided upon the preferred layout once again: a 10 turbine layout was chosen (October 2017). The tip height of the turbines was 150 metres and was already determined in the municipal policy.

17. In November, residents of NPW requested a citizens consultation to discuss the wind farm. The City Council stated that the wind turbines were situated too far away from their residences (23 November 2017).

18. From October 13 until November 23, the EIA was open for participation (2017).

19. The initiators applied for the required permits (January 2018).

20. The planning permit was open for participation from April 12 until May 23. This resulted in 22 viewpoints, whereof 20 out of 22 were from residents of NPW. On September 27, the municipality issued the permit (2018).

21. The environmental permit was issued by the province (September 2018).

22. The Council of States declared the appeal unfounded (11 February 2015).

7.4 CITIZEN PARTICIPATION

The most important decision-making rounds are:

1. First Consultation Round
   Before the first consultation round (survey) took place in May 2016, the municipality and the project initiators designed three different wind farm layouts. In establishing these designs, several aspects were considered, including the policies of the municipality. Also, Almere had some requirements for wind farms in their own policy 'Energie Werkt!'. Wind farms should be located 1500 metres away from the local residents and could not exceed a height of 150 metres. Also, the existing turbines needed to be replaced before the new turbines were built. Because Vattenfall could not decommission enough turbines to have a profitable business case, five of the turbines of Jaap Rodenburg had to overlap with the new turbines of Jaap Rodenburg II for five years. Additionally, the wind farm should not get in the way of the policy plans to build a new city district in that area. When the municipality would start developing this plan was unclear.
   Taking these plans into account, three wind farm layouts were established by Vattenfall and the municipality. To involve the local residents, these layouts were presented in an information market for new building projects in one of the neighbourhoods, Almere Poort. Wind farm Jaap Rodenburg had its own stand where visitors could look for information. Afterwards, the online consultation round was announced in the local newspaper, and a link was provided where local residents could vote on their preferred layout. Less than 70 residents responded to the consultation.
   The City Council noticed there were not many votes. However, it was assumed that it was because the wind farm was located was relatively far away from the nearest residents, approximately 1400 metres. Therefore, the City Council made a decision based on this assumption and these responses. The municipality decided that the layout with the most votes and the favourite of the wind farm initiators, as shown in Figure 7.1 , was the preferred layout.

2. Presenting the Preferred Alternative
   As previously mentioned, the externally hired consultancy agency changed its project manager. The new project manager was not satisfied that only 70 residents responded to the consultation. Therefore, another meeting was organised to present the preferred alternative to the local community.
   From this meeting, it appeared that a group of local residents assumed that Jaap Rodenburg would be decommissioned once its economic lifetime ended. Besides this, the residents from NPW were upset about turbines 1 and 2 in figure 7.1.
   Based on this uneasiness and opposition, the municipality decided to restart the participation process. At first, the City Council was not in favour. However, after he was made aware of the resistance by opposing residents, he agreed to restart the participation process. Further,

several citizens expressed concerns about the design choices for the wind farm layout, but the municipality could not answer them, which made the citizens even more uneasy.

3. Second Consultation Round
   For this second consultation round of the design and participation process, from April to August 2017, the municipality decided to increase the project area and not include the future housing project in the new wind farm design. The housing development would only come into play after the new wind farm became operational. Additionally, there would be no overlapping period where the old and the new turbines would be used simultaneously because Vattenfall could decommission additional turbines. Before the consultation sessions started, informal discussions were held with the local residents to gather their input on the new layout design. The residents of NPW who opposed the first wind farm layout formed themselves into an advisory board. This board also designed one of the new layouts, which would later be included in the second round of consultations.
   Letters were distributed to all 21,326 adults living in the three neighbourhoods, and a link to the survey was provided. Five layouts were presented in this survey:
   a) The first preferred layout that was presented in the first consultation round: Nine wind turbines in two lines.
   b) A modification of the first preferred layout: Nine wind turbines in a cluster.
   c) The layout that was designed by the NPW advisory board: Nine compact wind turbines in three lines.
   d) A layout designed by the initiators: 10 wind turbines in three lines.
   e) A layout designed by the initiators: 11 wind turbines in three lines.

   One thousand and eighteen residents responded to this second consultation, representing 5% of the total population, 3% of all residents of Almere Poort and the Muziekwijk (8621 and 8424 residents respectively) and 11% of the residents of NPW (481 residents). The layout with 10 turbines was the most popular. However, in NPW, their own designed layout with 9 wind turbines was ranked the highest, and the layout with 11 turbines was the most popular in the other two residential areas. After further consideration, the layout with 10 turbines in 3 lines was selected by the externally hired consultancy agency and the City Council. It represented the best compromise between all of the other layouts. All three residential areas, the municipality and the initiators agreed that this layout was better than the first one. In case of NPW, the distance to the turbines increased to 2300 metres from 1400 metres.

	Structural Context					Specific Context		
Jaap Rodenburg II	Governmental bodies involved	Initiators involved	Residents Involved	Local wind policies	Moment and level of inclusion	Previous Events	Specific Circumstances	Outcome
First Consultation round	The municipality was responsible for the process participation. The municipality organised the consultation round.	Vattenfall and Almeerse Wind were involved in the consultation round and in designing the three layouts.	All residents of the three surrounding areas were addressed in the local newspaper. Almere Poort, Muziekwijk Noord and NPW. Less than 70 residents out of 10000 responded.	"Energie Werkt!": states that wind farms could not be closer than 1500 metres from the nearest residents and cannot exceed a tip-height of 150 metres. And Almere had project plans to develop a new city district 'Almere Pampus'.	Residents had been consulted before the wind farm layout was determined, by a stand on an information market in Almere Poort, two publicizations in the local newspapers where a link to vote was provided. Consult.	Three layouts were established by the initiators and the municipality. These layouts are based on the local policy and the potential advent of a new city-district in Almere Pampus.	Three layout options are presented in an online questionnaire, the link could be found in a link presented in the local newspaper.	There were 70 votes concerning the three layouts. Based on these votes, the City Council choose the alternative with the most preferences.
Presenting the preferred alternative	The municipality had organised the information meeting where the preferred alternative would be presented one more time.	Vattenfall and Almeerse Wind supported the organisation and presented these meetings.	Both information meetings in Almere Poort and in NPW were organised. It was an open event, and all local residents were invited.	Not of influence in this situation.	A meeting to inform the local residents was organised after the wind farm layout was decided upon. Inform.	The consultation round had taken place and the preferred alternative had been chosen and approved by the municipality.	An information meeting is organised to present the layout. Here, some local residents were unaware of the wind farm plans and came with questions about the layout the municipality and the initiators found hard to answer.	The municipality decided to re-design the wind farm layout and to re-start the participation process. The layout would be established in consultation of local residents.
Second Consultation Round	The municipality has organised a second consultation round.	Vattenfall and Almeerse Wind were involved in the consultation round and had designed the five layouts.	The residents of Almere Poort, NPW and Muziekwijk are consulted for another participation round. Roughly five percent responded, 10018 out of 21326 residents.	The local wind policy "Energy Werkt!" states that the wind farms could not be closer than 1500 metres from the nearest residents and cannot exceed a tip-height of 150 metres.	Citizens of all three districts are invited for consultation. They can give their preference by an online questionnaire. Consult (Before: collaborate).	The project area had increased. Group of residents of NPW designed one wind farm layout that is included in the questionnaire.	Five layout options, varying from 9 to 11 turbines, are presented in an online questionnaire, the link and entry code could be found in letters distributed to all residents.	The wind farm with 10 turbines scored overall highest. The City Council choose this layout. The new layout was considered better by all parties: municipality, initiators and by all three surrounding neighbourhoods.
Citizens Consultation of NPW	The City Council was requested to have a conversation with the residents of NPW.	The initiators had no role in this round.	In total 50 signatures of residents of NPW were collected by a group of residents of NPW to request this consultation round.	Not of influence in this situation.	A self-initiated consult with the City Council to address their concerns after the participation round on the EIA closed.	Residents of NPW had purchased "forest lots" in the previous years. At the time, they were unaware of the replacement of Jaap Rodenburg.	A group of residents had collected 50 signatures to request the citizens consultation. The residents addressed their concerns.	The City Council decided the residents lived too far from the wind farm. The project development team had confidence about the permit application of the City Council. In the end, only one resident of NPW appealed on the issued permit.

Figure 7.4: Contextual factors in the participation process, deduced from the CIT

4. Citizens Consultation of NPW
   After the new wind farm layout was selected, there was still a group of opposing residents from NPW. Their main reason for opposing the new wind farm was that most of those residents recently purchased 'forest lots', which implied that they bought land in wooded areas. When the lots were purchased, no information about the replacement of Jaap Rodenburg had been provided even though it was already being re-designed. They felt that the municipality intentionally withheld information from them. They feared that the value of their properties would drop and that the wind farm would disrupt the natural environment.
   Seven residents of NPW asked for a citizens consultation with the City Council to discuss their concerns about Jaap Rodenburg II. To request such a meeting, 50 signatures had to be collected. The City Council responded that the residents lived too far away from the wind farm to take those concerns into account seriously. This was a large milestone in the development of Jaap Rodenburg II because this meant the City Council would most likely issue the planning permit.

7.5 FACTORS OF INFLUENCE

With regards to the replacement of Jaap Rodenburg, several factors influenced the decision-making process. First was the *intensity of inclusion*. Even though the local residents were involved in the process before the preferred layout was decided, many residents were unaware that this consulting event was happening. The ways in which the municipality and City Council tried to include the residents was not totally successful as the information market for new building projects and the local newspaper did not work. Because so few people were involved in this first consultation, there was much surprise when the preferred layout was presented during the second consultation. Although the residents were informed of the plans via invitations, it appeared as though not enough had been done to notify them because many residents were still unaware of the plan to re-develop Jaap Rodenburg I. Although the *moment of inclusion* was early in the development process, it may have been perceived as late by the local residents. This was especially true for the residents of NPW, who indicated that they felt that information was deliberately withheld when they were buying their forest lots. As a result, the project got off to a bad start. Another lesson that can be learned from this situation is that one should be suspicious when there is no opposition after a new wind project is announced. It is important to "organise your own resistance".

Citizen participation resulted in a better wind farm layout for all parties involved: the three residential areas, the initiators, and the municipality. Even though the design of NPW was not chosen, the input during the design meetings with local residents is considered. The input is used to adjust the proposed wind farm layouts before including them in the survey. With different interests and areas of expertise, each stakeholder can pay attention to different details and offer input in selected areas, leading to a better outcome for the project, i.e. wind farm layout that works for most stakeholders.

Additionally, *local cooperative* when co-developing the wind farm could be helpful. In this case, however, some residents of NPW stated that Almeerse Wind should "just put the wind farm in their own backyard". This dissatisfaction arose, in part, because the planned wind farm was situated far from the initiators. Additionally, Almeerse Wind was made up of approximately 300 members, all of whom would support the wind farm.

Also, this case proved that a certain level of *professionalism in civic participation* is useful. Experience showed how to cope with the emotions of local residents and how best to involve them. Therefore, good process management is critical. In this case, this is safeguarded by hiring an *external project manager*, an external consultant. One of the project managers stated that "an external force can act more independently, as they are less bothered by municipal officials and residents since they only have to deal with the same parties once."

7.6 CONCLUSION

As demonstrated above, citizen participation played a large role in the development of the wind farm. Opposition by local residents to the proposed layout during the first round of consultations resulted in a second round of consultations during the participation process. In this second round, the participation process included open discussions, co-designing events and surveys lead, which led to a whole new wind farm layout. Although citizen participation resulted in delays to the project, it also led to a better wind farm layout.

One of the factors that had the most influence was that some of the residents felt misled by the municipality when they were buying their forested lots; they felt that they were not given information about the planned wind farm. Additionally, the manner of inclusion was relevant. The methods used to inform the residents about the planned wind farm may not have been good enough, given that they resulted in low awareness of the project. This resulted in the local residents feeling like they were not informed and contributed to a bad start to the project. The type of participation that yielded the most success was the one that involved collaboration with all residents, including those who opposed. This resulted in all stakeholders agreeing on a preferred design.

In the next chapter, the last case is analysed: Nij Hiddum-Houw, a wind farm located in the province Friesland.

8 CASE 4: NIJ HIDDUM-HOUW

The Wind Farm Nij Hiddum-Houw is located near the Aflsluitdijk in Súdwest-Fryslân, in the province of Friesland. It replaces a ten-turbine wind farm from 1995, and six other turbines will also be decommissioned after Nij Hiddum-Houw is operational. An increased capacity of 36 MW will replace the capacity of the sixteen turbines (6MW). The wind farm's construction started this year, in 2021, and the farm is expected to be operational in 2022.

8.1 GENERAL CASE DESCRIPTION

8.1.1 The Start of the Project

In 2009, Vattenfall started to look into replacing wind farm Hiddum-Houw as it had almost reached maturity. Hiddum-Houw was a wind farm with ten turbines and a capacity of 42 MW, constructed in 1995. Hiddum-Houw was a wind farm located near Conwerd on the east side of the Afsluitdijk in the South-West of Friesland, a province in the north of the Netherlands. Vattenfall presented multiple project proposals to the province to replace Hiddum-Houw. The province reacted positively to the proposals. However, Vattenfall later had to modify the proposals, and the province then decided it wanted a larger wind farm. The local owners of six other existing wind turbines decided to merge to Gooyum-Houw B.V.: a private company existing from a partnership of 45 individuals and companies from the area. Vattenfall and Gooyum-Houw joined forces, and together they submitted another proposal with plans for a wind farm project. A letter of intent was signed, and in 2012, Vattenfall and Gooyum-Houw finished the project proposal. However, the province wanted to delay the start of the project because of other events happening simultaneously. Namely, Friesland had the conceptual wind policy open for participation in 2012. Three locations for wind energy were presented: one in the southwest of the province, one in the middle of Friesland and one on the lake in Friesland, the 'Ijsselmeer'. Two locations for this policy, within the Ijsselmeer and in the South-West of Friesland, were located within the same municipality: Súdwest-Fryslân. This policy, however, garnered more than 1200 responses expressing opposition of Frisian residents. In reaction to this, the province publicly changed the plans to the large wind farm on the Ijsselmeer and removed the plans for the onshore locations.

In the meantime, in September 2013, the national wind energy targets, as a part of the National Energy Agreement (NEA), were formally agreed upon. The NEA stated that the Netherlands should commit to producing 6000MW

of onshore energy capacity before 2020, whereof Friesland is responsible for 530.5 MW. Therefore, it became urgent that a wind policy is developed that supports and meets the national target. One interest group, 'Frylan foar de Wyn'(FFDW), wanted to protect the Ijsselmeer from wind turbines and proposed identifying alternative onshore wind farm locations. This group consisted of three organisations together that represented the interests of natural environment, initiators and local residents of wind farms: 'Platform Duurzaam Fryslân', the 'Friese Milieu Federatie' and 'Hou Fryslân Mooi' (HFM). The province told Vattenfall and Gooyum-Houw to wait on the recommendations from FFDW before moving forward with their project proposal.

When FFDW presented their findings in September 2014, 20 potential onshore wind farm locations were identified. This resulted in a division between the Frisian residents as some were either in favour of saving the Ijsselmeer from wind farms, or others wanted to spare the rural landscape and not have wind farms built in these areas. The province had until the end of the year to decide how to proceed with the wind farm project. On December 17 2014, the province decided to move forward with their original plan and grant permission to develop wind farms in the Ijsselmeer and in the South-West of Friesland, where Hiddum-Houw is located. As a result of this decision, many citizens protested in front of the provincial government building. The municipality of Súdwest-Fryslân expressed its opposition towards the development plan that would see two wind farms being built in their municipality. On the same location also another project proposal was located. After a year, in 2015, the province decided that Vattenfall and Gooyum-Houw could develop wind farm Nij Hiddum-Houw. Once this decision was finalised, HFM left FFDW and started opposition to the provincial wind policy.

8.1.2 Determining Participation Guidelines

After the provincial approval was granted in 2015, Vattenfall and Gooyum-Houw started developing the wind farm by initiating conversations with the local community. During this time, the municipality published a policy document stating that wind farms in Súdwest-Fryslân were undesirable, meaning that the municipality was against Nij Hiddum-Houw. The support that was identified in FFDW's initial research was based on the fact that the municipalities would have to take more ownership for their role in achieving the wind targets, not just Súdwest-Fryslân. The province created guidelines for the initiators to comply with, and these guidelines would ensure that the residents of Sudwest-Fryslân would benefit from the future wind farm. The province created a preliminary policy document that stated that a community advisory board to represent the local residents should be included in the development process. This policy document also stated that existing turbines should be replaced or removed for each wind turbine built. Further, the residents should benefit financially from the wind farm. The initiator should contribute to a community fund by donating 0.4 - 0.5 € per MWh, as stated in the Code of Conduct Onshore Wind by the NWEA [20]. This has

been decided after the initiative of FFDW.

The initiators set up a community advisory board known as OAR. This was done by inviting representatives from local communities. Also, a chair and an advisor were invited to have an independent party to lead the meeting and to advise the local residents. The appointment of a chair was delayed because the first person who was suggested was rejected. Some of the OAR members questioned the transparency of the process of selecting the chair because this person in the past had been active during the provincial executive when the wind policy was adopted. The second potential chair was found suitable and free from possible conflicts of interest. The overall goal was to develop the wind farm while taking the interests of the residents into account. As such, the first function of the OAR was to discuss the NRD, which was published around the same time the OAR was established. The OAR decided to assess the three wind farm layouts for consideration in the first round of the EIA: 18 small turbines, 11 semi-large turbines or nine large turbines. After the EIA was conducted, the province, the initiator and the OAR decided unanimously that the layout with nine large turbines would be best. The turbines had a tip height of 177 metres and a capacity of 4 MW each. After this decision was taken, HFM left the advisory board. They expressed their concern that the decision was made too quickly and saw no added value in them continuing to participate. The other parties assumed that HFM left the advisory group to have more time to oppose the wind farm actively. Without HFM, the OAR made decisions about non-statutory measures such as shadow-flickering, noise, lighting and financial advantages. These decisions were formalised and signed by the initiators, the chair of the OAR and the advisor representing the local residents. This advisor was also a board member of the association for Dutch local residents of wind turbines (NLVOW). This agreement was a prerequisite for initiating the wind farm development project, as stated in the preliminary policy document.

A small group still opposed the wind farm, including members of the action committee, HFM. Those residents protested against the wind farm's location while the province was discussing the approval of the project and permit applications. The provincial executive decided to hold another round of negotiations with the initiators because of two reasons. The first reason was a strong political opposition and a less stable coalition as it consisted of CDA VVD SP and the Fryske Nasjonale Partij (FNP). This is a mix of left-wing and right-wing parties. The second reason is the strong opposition posed by HFM. As a result, the height of the turbines was lowered, and the community fund was increased from 0.4 € per MWh to 0.6 € per MWh. The area fund is intended to also benefit local residents in a slightly larger radius around the wind farm, even if they do not have the means to participate financially. The fund supports projects that are realised in or near the Nij Hiddum-Houw Wind Farm within a radius of 6 kilometres. After two meetings, the province approved the wind farm. HFM appealed, but the Council State declared the appeal unfounded. Later, Jeroen Hoogendoorn made a documentary about this process, "Onderstroom". He is a local resident of Nij Hiddum-Houw and a member of HFM. This documentary monitors the formation of the Frisian wind policy from their perspective. It exposes their

view of the playing field between government, project developers and village communities.

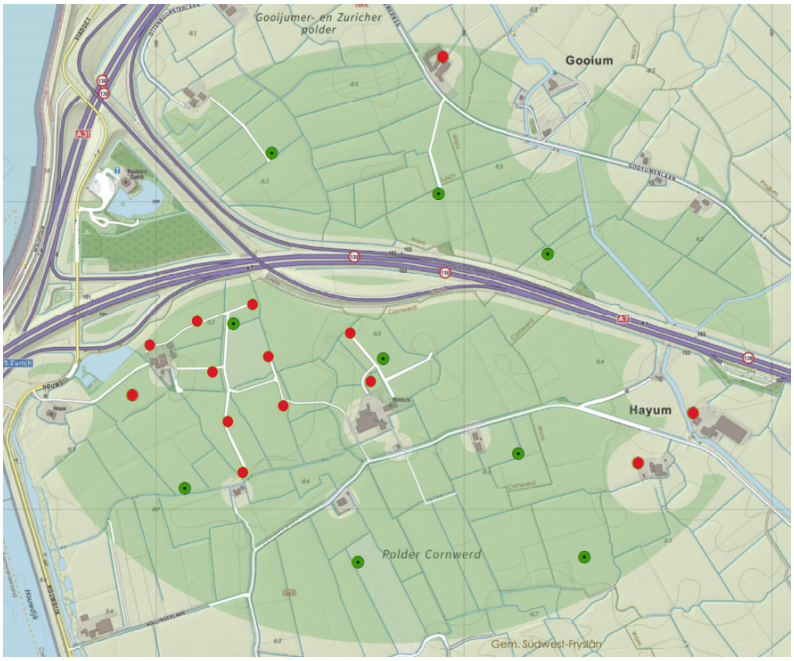

Figure 8.1: The wind farm layout of NHH, where the red turbines represent the to-be-replaced turbines and the green dots are NHH-turbines [102]

8.2 ACTORS

8.2.1 Initiators

In case of wind farm Nij Hiddum-Houw, the initiators had an advantage because they had already planned to replace Hiddum Houw. Both Gooyum-Houw and Vattenfall had financial incentives, and both had an important role in organising the citizen participation process. This was done in cooperation with the province. The municipality set the requirements for the initiators, and the initiators made the modifications suggested during the provincial meeting to obtain the province's approval.

8.2.2 The Governmental Parties

The province was the responsible authority for the wind farm. In this case, it is important to distinguish between two provincial parties: the provincial council (PS) and the executive council (GS). In 2014, the PS approved the proposal and finally gave the command to develop wind farm Nij Hiddum-Houw. The GS was responsible for the operational part of the development and had a prominent role in the wind farm's realisation and the citizen participation process. One of the province's main aims was to meet the target of producing 536,5 MW of onshore wind energy by 2020. However, the municipality of Súdwest-Fryslân did not share this motive and did not

favour the wind farm. Thus, they decided that their level of cooperation would be to speak on behalf of the residents, as they were closely connected with its citizens. However, the municipality of Súdwest-Fryslân still agreed to grant the required permits.

The province had difficulty getting this project started mainly because the citizens and the municipality were against the wind farm. But, the project needed to proceed because the province needed to meet the wind goals set by the government. Therefore, the province established a preliminary policy to ensure that the local community would benefit. In the end, two council meetings and an additional negotiation were necessary to decide in favour of Nij Hiddum-Houw.

8.2.3 Local Community

When the province proposed a wind farm in the Ijsselmeer, many residents wanted to protect this part of their environment and formed FFDW. In this interest group, wind energy experts and jurists were represented with knowledge of politics. They had the resources to confront the province with their concerns and their policy and then proposed to identify suitable locations themselves. One of the three interest groups, HFM, later left FFWD and opposed the provincial wind plans. HFM had the power to lobby with the political parties effectively. The wind farm Nij Hiddum-Houw is relatively close to its nearest residents compared to other wind farms, a few hundred meters from the closest property. These residents were involved in the OAR, as they have the most interest in participating. Residents living further away from the wind farm sometimes declined the invitation to participate in the advisory board because their interest was not as great. According to the chairman of the OAR, the main concern of most members of the OAR was to minimise nuisance. The financial benefits were considered less important. These concerns included the landscape, shadow flicker, high-frequency noise and lighting. However, the OAR had only consultative authority. It was up to the initiator and the province to make the final decision.

Overall, the OAR was satisfied with what they had accomplished. According to the independent chairman, they felt that they influenced the decisions, given that they could not stop the wind farm. It can be difficult to stand between a project and the local community. The advisory board did not feel supported by their community and the local politicians. They felt they had accomplished a lot, and they had put in a lot of time and effort, and in return, they received a lot of criticism. Some residents from the local community felt that the OAR 'helped' to build the wind farm instead of stopping it. The OAR, however, felt they had increased the conditions of the wind project since preventing the wind farm was not an option. In the end, the PS demanded a last set of changes, while the OAR was proud of the agreement they had made. The PS wanted extra-statutory agreements by reducing the height of the turbines and increasing the community fund.

8.3 THE DECISION-MAKING PROCESS

In Figure 8.2, the Rounds Model of Nij Hiddum-Houw is presented. Only the most influential moments are presented in the figure to ensure the Figure is comprehensible.

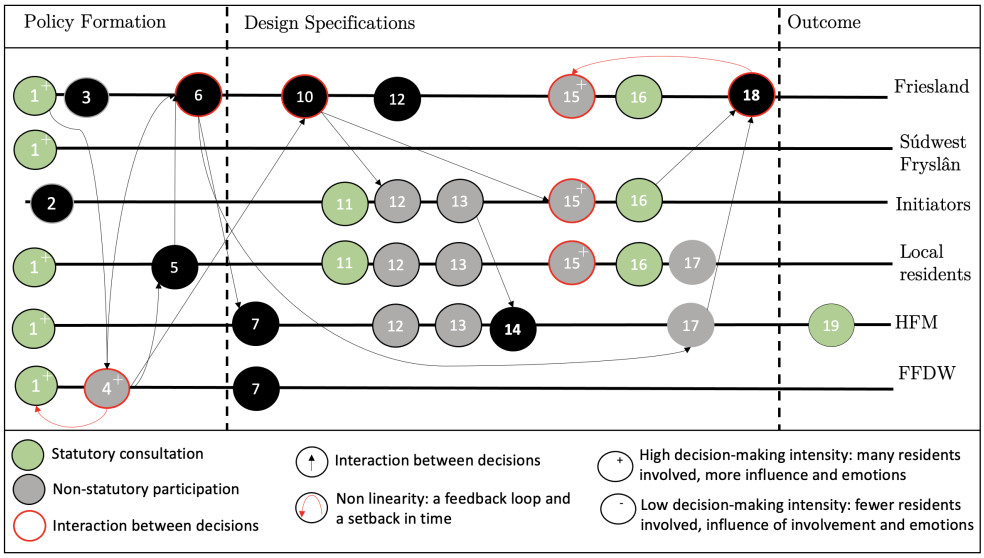

Figure 8.2: Rounds Model of Nij Hiddum-Houw

1. In August 2012, the province of Friesland proposed the concept of its wind energy policy: Ontwerp-Fryslân Windstreek 2012. Here, the province proposed three search areas for wind energy in Friesland: within the Ijsselmeer, in the southwest of Friesland and in the middle of Friesland. After this was open for consultation, there were 1200 opposing reactions to this policy and two additional petitions.

2. Vattenfall and Gooyum-Houw submitted a wind energy initiative to the province to replace wind farm Hiddum-Houw (2012/2013).

3. As a part of the National Energy Agreement, Friesland agreed to the target of producing 530.5 MW onshore wind before 2020 (2013).

4. To find suitable locations for onshore wind energy in Friesland, after removing the existing search areas from the former policy, a new search process was initiated by Fryslân Foar de Wyn (FFDW). They presented a report to the province with 20 recommendations for wind projects (September 2014).

5. The recommendations from FFDW were a controversial subject. Some residents did, and others did not, want to spread the wind turbines throughout the whole province (2014).

6. On December 17 2014, the Provincial Council decided to build one large wind farm on the Ijsselmeer and one onshore wind farm in the southwest of Friesland, as earlier described in its 2012 policy. This would be located in Hiddum-Houw.

7. 'Hou Friesland Mooi' proceeded alone to oppose the wind farm after disagreeing with the Provincial Council's decision on January 7, 2015.
8. Vattenfall and Gooyum-Houw start the wind farm development plans for Nij Hiddum-Houw and initiate the community engagement process (2015).
9. The municipality of Súdwest-Fryslân adopted a policy on wind energy that stated that new wind turbines in the municipality, including the location of wind farm Nij Hiddum-Houw, were either undesirable or out of the question (March 31 2016).
10. A preliminary policy document is established by the province stating that a Community Advisory Board should be established, that financial participation of 25% should be made available and that as many turbines as possible should be cleaned up (26 October 2016).
11. Vattenfall and Gooyum-Houw established the concept NRD, and it was open for consultation from January 16 until February 26 (2017).
12. The OAR was established (February 2017).
13. The initiators decided upon the preferred layout of the wind farm in consultation with the province and the OAR (May 10 2017).
14. The action committee, 'Hou Friesland Mooi', decided to leave the advisory board to focus solely on opposition to the wind farm (May 2017).
15. The OAR established an agreement concerning the wind farm layout, financial participation, shadow flickering, noise and lighting, known as the community agreement (30 May 2018).
16. The details of the EIA, the zoning plan and the planning permit were open for a legal consultation from November 10 to December 21 (2017).
17. Opposing residents protested at the wind farm location and the council hall. The province started a new round of negotiations with the initiators. The purpose of this round was to agree to better conditions for the residents (July 2018).
18. The province decided to accept the zoning plan with the adjustments made in the second negotiation round (July 18 in 2018).
19. The action committee, Hou Friesland Mooi, started legal procedures against the wind farm.
20. The Council State declared the appeals unfounded and were, therefore, rejected (January 29 2020).

8.4 CITIZEN PARTICIPATION

In this section, the events with the most influence on the citizen participation process are listed.

1. FFDW
   Three environmental organisations representing the interests of nature and the local environment in Fryslân disagreed with the conceptual policy of the province: 'Ontwerp-Fryslân Windstreek 2012'. They believed that wind turbines should not be placed in the Ijsselmeer as was decided in the conceptual policy of the province. Instead, wind turbines could better be spread across the province on the location where acceptance existed because people should financially participate. FFDW developed another approach to meet the wind targets of Friesland: they would collect wind on land initiatives and label based on the quality and local support of the initiative. The province granted permission, and FFDW started their project. FFDW also set the requirement that only initiatives with 25% financial participation would be considered, even though they did not have the legal power. In the end, they advised the province on the most successful onshore projects such that a wind farm in the Ijsselmeer would no longer be necessary. FFDW expected that around 20 initiatives would be submitted, but 72 project plans were handed in. After the projects were checked against the quality criteria, 34 initiatives remained and were presented to local residents of the potential project areas. The result was that FFDW submitted 20 high-potential onshore wind projects to the province; one was Nij Hiddum-Houw.
   This initiative by FFDW brought about a division of viewpoints in Friesland: 'Do not ruin the Frisian landscape by building all turbines on the rural landscape' and 'Do not place wind turbines within the Ijsselmeer'. On the day that the province would discuss the wind farm policy, a large protest took place in front of the provincial building.

2. The wind energy policy formation
   After FFDW provided their advice to the province, it was up to the PS to decide upon the final wind policy: 'Fryslân Windstreek 2012'. The province felt pressured because the topic had become very controversial, and the municipality of Súdwest-Fryslân even supported the protest at the provincial building. On December 17, 2014, the PS decided that the best way to meet its wind energy goals was to approve the development of two wind farms: one within the Ijsselmeer and one at the location of Nij Hiddum-Houw. Provincial elections were due to take place three months later, and there was a lot at stake for the provincial politicians. The PS made its decision based on two assumptions: that the Frisian residents wanted as little onshore wind as possible and that local support still existed for the search area.
   The policy decision of the PS evoked much opposition. The municipality of Súdwest-Fryslán felt unfairly treated because all wind farms would be placed in their municipality while no wind turbines would be built in other districts of Friesland. FFDW also felt frustrated because they realised that nothing was done with their research and recommendations. HFM then opposed all onshore wind farms if there would come wind turbines within the Ijsselmeer.

	Structural Context					Specific Context		
Nij Hiddum-Houw	Governmental bodies involved	Initiators involved	Residents of Friesland Involved	Local wind policies	Moment and level of inclusion	Previous Events	Specific Circumstances	Outcome
Fryslân foar de Wyn	The province gave FFDW approval to explore other high potential wind farm locations in Friesland.	All wind project initiators could hand in initiatives for wind projects within Friesland. 72 different projects were handed in.	FFDW is an initiative of Frisian interest groups, including HFM, and thus Frisian residents. The aim of FFDW was to keep the wind farms outside the Ijsselmeer.	Fryslân has committed to generate 530,5 MW of wind energy by 2020 and established conceptual policy in 2012 where 3 search areas are appointed, including one large wind farm in the Ijsselmeer.	FFDW is involved before the wind farm locations were set. FFDW had the task to make recommendations about promising wind farm locations. Collaborate.	The municipality published their conceptual policy where wind turbines would be placed in the Ijsselmeer.	FFDW collected onshore wind farm initiatives and ranked them based on quality and participation criteria. A minimum of 25% of financial participation was required.	20 onshore wind projects are recommended to the province, all containing 25% financial participation. As division within Friesland arose where half of the province preferred turbines at the Ijsselmeer and the others wanted to keep the lake clean.
The Wind Energy Policy Formation	The GS advised the PS about the recommendations of FFDW. The PS has the decision-making-authority.	Initiators do not take part in this round. The initiators can only lobby for their initiatives.	Residents of Friesland are protesting with banners at the province house.	The conceptual policy of 2012 was established, where three search areas were determined including one large wind farm in the Ijsselmeer.	FFDW had an advisory role before the decision-making took place. Collaborate.	FFDW had advised the province and the conceptual policy had been drafted in 2012. Also, a lot of opposition had taken place after this conceptual policy.	The province had to decide upon the wind farm locations of Friesland and make the conceptual policy definite. The meeting was on December 17 and the deadline was set at the end of the year.	The province decided to stick with their original plan, including the wind farm in the Ijsselmeer. HHFM was upset about this decision. HFM left HHFM and stated that they would oppose all onshore wind projects. The municipality of Sudwest-Fryslând felt treated unfair: all wind farms were located in their municipality.
The Agreement of the OAR	The GS had a facilitating role in the OAR and initiated the contractual agreement. The PS established policy concerning the OAR.	Both initiators were involved in the negotiations and made agreements with local residents.	Representative residents of surrounding villages were present in the OAR. Also, HFM wanted to be included and also joined the OAR. Before the establishment of the agreement HFM left the OAR to oppose the wind farm.	The preliminary policy document, established by the PS. This document stated that a community advisory board (OAR) should be established.	The OAR starting when the NRD was published for participation and one year later the agreement was made. Collaborate.	The establishment of the preliminary policy document. FFDW already encourage citizen participation in the selection of their initiative. The OAR was set-up.	The OAR negotiated about shadow flickering, lighting, noise, the layout and financial participation. During this process, also townhall meetings for the other residents were organised.	Eventually, an agreement was made where a majority of the OAR members felt good about. The OAR found that they had established a lot. However, outside the OAR still some residents were opposing the wind farm.
The Final Verdict	The PS decided upon the wind farm during two meetings. They were advised by the GS.	Initiators needed to go into a second negotiation round with the province.	Around 50 residents of Friesland were protesting in front of the province house.	The policy as decided upon in 2014, where Nij Hiddum-Houw was determined as search area. Also, the preliminary policy document, determined by the PS.	Citizen were not actively included in this round. Residents organized their own protest. -	The community agreement was already signed. HFM left OAR to oppose the wind farm. The preliminary policy document was established.	The PS had a hard time to decide about the initiators zoning plan and permit applications. Two meeting were necessary to conclude that the province accept when wants additional agreements are made.	The province enforces: lower wind turbines and a higher community fund. The PS approves the zoning plan and issues the required permit. The OAR members feel unappreciated.

Figure 8.3: Contextual factors in the participation process, deduced from the CIT

3. The Agreement of the OAR
   The OAR was made up of representatives from surrounding villages and other local interest groups. The representatives of the OAR were voted in by their communities. Thus, the communities decided together and who would represent them. The province hired an independent chairman and an independent advisor for the local residents. In the earlier stages of the process, the OAR had consultative authority regarding the wind farm layout. HFM subsequently left the OAR. Later on, the initiator collaborated with the OAR by negotiating the non-statutory measures. To make the agreements binding, the province wanted these agreements in a signed contract, known as the community agreement. Here, many important details were considered: the size of the wind turbines, shadow flicker, noise reduction and advanced lighting technology. Research on the consequences of high-frequency noise on human health was initiated. A smaller committee was formed to discuss the financial arrangements. The province already agreed upon financial participation of 25% and a community fund. The OAR has set up a working group to work out further the financial participation of the community fund, which is done in co-creation. The representatives of local residents were in a difficult position as they were in between the opposing residents on one side and in conversation with the initiator and the province on the other side.
   After a year of meetings and negotiations, the community agreement was finished. The ambience of the meetings was pleasant, and the meetings were transparent. Members of the OAR had the power to influence the meeting agenda. Because the OAR had an independent chair and an independent advisor, they were able to negotiate on an equal basis with the wind project developers. The role of the advisory board was mainly to advise. Only in case of shaping the financial participation and the community fund, co-creation was the level of participation. In the end, the OAR was proud of what they accomplished. They believed that they created favourable conditions for their communities, assuming the wind farm would be built. Outside of the OAR, there were still parties, such as HFM, opposing the wind farm.

4. The final Verdict
   Once the community agreement was signed and made public, the initiators could apply for the zoning plan and the permits. To approve the zoning plan and issue the planning permits, the province needed two Provincial Council meetings. During the first meeting, approximately 50 people expressed their opposition to the wind farm. Because of the protests and the strong lobbying by HFM, there was still unrest within the coalition of the PS. To assure the local residents that everything possible was being done to compensate them properly, the GS went into another round of negotiations with the initiators. The province asked for a reduction in the height of the turbines and a larger financial contribution to the community fund, from 40 to 60 cents per MWh. Once the initiators agreed to these terms, the PS approved the wind farm. The proposal from the initiators complied with all of the partic-

ipation requirements as described in the extensive preliminary policy document. One of the reasons for this is that the provincial coalition had a strong opposition to the wind farm, so they had to create a policy that was as detailed as possible to facilitate the decision-making process.
The province finally approved the wind farm in 2018, with some additional measures: the turbine's height was adjusted from 208 to 188 metres, and the financial contribution of the initiators to the community fund was increased. Even though these additional measures were to their advantage, the OAR was not pleased with this outcome. The OAR was proud of the agreement they made but did not feel recognised by the province. The additional measures that the province agreed to also showed that the province did not understand what the OAR considered important, namely reducing the nuisance from wind farm operations. The responsible provincial official stated that "according to the OAR, the government did not understand, it was not about the money." From the OAR's perspective, the community fund and the height of the turbines were not the most important aspects of the negotiation. The OAR also did not feel supported by other residents, as some stated that the OAR was "siding with the Province and the project initiators".

8.5 FACTORS OF INFLUENCE

An interesting observation can be made about the *role distribution of the governmental bodies*. The province was the responsible authority and had a difficult time giving a verdict on the wind farm. The most important reason was the *strong lobbying* by HFM that influenced the coalition. Two of the board members of HFM are also members of the Dutch association for local residents of wind turbines. There is also political and legal expertise within HFM. FFDW was one of the few interest groups that was already functional before the wind farm location was officially decided. FFDW took the initiative to search for other potential wind farm locations and make recommendations. Their research resulted in FFDW requesting 25% financial participation for the local community. Some of the social guidelines established by FFDW were directly taken over by the province in the 'preliminary policy document'.

In this case, a lot of attention was paid to the possible wind farm locations in Friesland, even before the policy was determined. This could have been the result of the work done by FFDW. Because the search area into potential wind farm locations was already discussed before the provincial policy was established, the opposition was also on a provincial level. The *moment of inclusion* meant that the opposition was not just local, but it was regional and, therefore, more wide scale. The other consequences of early involvement are hard to determine as the province decided to go along with their original plan. An explanation could be the *upcoming elections* and that they were pressed for time as they had only a few days until the deadline for a decision on the wind farm.

By the time the policy was finalised, it already was a sensitive case with increasing opposition. The municipality felt that they were *mistreated*: it was solely their responsibility to achieve all of the Frisian wind energy targets on their own. Also, HFM decided to continue its opposition, which led to more uncertainty surrounding the final verdict. When the development of wind farm Nij Hiddum-Houw started, there was already an *old grudge* that resulted from the policy formation. By establishing *detailed policies* in the preliminary policy document, the initiator was then clear about what to do for the project to be approved. The *persistent opposition* by HFM led to additional requirements for the benefit of the local residents. This was most likely a *political choice* from the province to show the local residents that their interests were considered important.

Lastly, the role of the OAR must not be forgotten. The OAR did establish a reduction of nuisance and financial benefits for the local community. The financial benefits were established in co-creation. The fund they received could be used for their own goals. The fact that the OAR had an *independent advisor* enabled the OAR members to have informed conversations about the wind project. This is important to be an equal interlocutor and to be able to use their power to realize their desired negotiation results.

8.6 CONCLUSION

In the case of Nij Hiddum-Houw, citizen participation had a prominent role and was an intensive part of the decision-making process. Even before the policy was determined by the province, the interest group, FFDW, was already involved in defining the search areas for potential wind farm locations. Citizen participation led to better conditions for the local community in the form of increased financial participation, a reduced height of wind turbines, no shadow flicker, better lighting and noise conditions.

One of the factors that most influenced this process were the recommendations by FFDW; they became part of the social guidelines used in the preliminary policy document. Secondly, did the influence the layout and all beneficial aspects as described above. Another factor with a large influence on the process was that the PS had a divided coalition with a strong opposition to the wind farm. This, in combination with the strong lobbying by HFM, resulted in a lot of insecurity and extra non-statutory measures. The preliminary policy document also contributed to the final verdict because it captured the shared political vision of the PS.

In the next chapter, the findings of all of the case studies are compared in the cross-case analysis. The decision-making processes, actors involved, most influential events and the participation formats are analysed. As a result, the factors of influence can be found by comparing the different cases.

9 CASE COMPARISON

In this chapter, the four cases are analysed in a cross-case analysis. The third and fourth research questions are answered: the decision-making processes, participation processes, and influences factors are compared. The results can be used to answer the last research question, to provide lessons and recommendations. First, the insights based on the Rounds Model are presented. Subsequently, the observations resulting from the CIT analysis are presented where factors of influence are identified. Afterwards, the interrelation between the retrieved factors is described. Then, a conclusion to the analysis is provided.

9.1 FINDINGS FROM USING THE ROUNDS MODEL

Research question three is answered in this section: *When comparing the four cases, what do the citizen participation and the decision-making processes of the four onshore wind cases look like?* This cross-case analysis was accomplished by applying the rounds model to the four case studies. As explained in 3.1.2, the rounds model provides insights into the important citizen participation moments, actors involved, influential moments and non-linearity of the process. This section presents the findings concerning actors, moments of participation, and the most influential events. The latter also includes non-linearity.

9.1.1 Actors

Several aspects stand out when looking at the actors involved in the decision-making process. Considering the actors in governmental roles, both the municipality and the province were included in the decision-making process in all cases. In Windplanblauw, the national authority was also involved because the wind farm was part of the RCR. In three of the cases, the province was the responsible authority, and in two of those cases, the responsibility was handed over to the municipality. In wind farm Jaap Rodenburg II, responsibility was handed over to the municipality because of the somewhat separate position of Almere within the provincial wind policy. While for wind farm Moerdijk, responsibility was handed over to the municipality because the municipality had a closer working relationship with its citizens and felt better able to represent their interests. Later, however, the province warned the municipality to take over if they did not issue a planning permit. The municipality of Súdwest Fryslân did not want to take the lead in their wind farm project. They stated they were not favouring the wind farm but were still prepared to cooperate by issuing the necessary permits. This

means that despite the policy stating the province is the responsible authority for wind projects from 5-100 MW, the municipality can be in charge if they want to.

In all four cases, local residents had some level of involvement. Regarding Windplanblauw and Nij Hiddum-Houw, local residents were and are still included in the membership of their advisory boards. Later on, the village council of Swifterbant was also included during the citizen participation process of Windplanblauw. Similarly, the existing village council of Klundert was consulted during wind farm Moerdijk. Additionally, where the residents of Klundert were surveyed. During the decision-making process of Jaap Rodenburg II, an opposing group of citizens was involved. Moerdijk also had a group of opposing residents, whereas Nij Hiddum-Houw had a self-appointed opposition action committee known as HFM.
Three of the four cases were developed in collaboration with a local party. Jaap Rodenburg II was developed in partnership with a local energy cooperative. Nij Hiddum-Houw and Blauw were developed with local associations of existing landowners, or in case of Windplanblauw residents within the project area. Moerdijk was solely initiated by Vattenfall. In all of the cases, at least one party legally appealed. Also, in all cases, the legal appeal is denied. In Jaap Rodenburg II and Nij Hiddum-Houw, and Moerdijk, the opponents were not considered relevant stakeholders as they lived too far away from the wind farm. The appeal regarding Windplanblauw was denied since the project was of national importance, which weights more heavily. From these cases, it seems that it is not easy to win an appeal when the Council of State considers the procedure of the government and initiator is performed according to the legal guidelines.

9.1.2 Level and Moment of Participation

It can be concluded that in all of the cases, non-statutory participation took place within the decision-making process. The start of the participation process was different in each case. Only regarding Nij Hiddum-Houw, there was an intensive participation process before the policy formation. In Windplanblauw and Jaap Rodenburg II (despite the members from Almeerse wind), few local residents were involved in the first stages of the decision making process, which the participation paradox can explain. The participation paradox is usually seen in the early stage of planning, whereby plans are often vaguer and, as a result, citizens feel less inclined to participate [72]. However, if the project plans are already confirmed or even often demarcated, citizens become more interested, but there is less room for negotiations and changes. For example, in the Moerdijk case, the citizens of Klundert were involved on a non-statutory basis after the layout was presented. In conclusion, where local residents are not involved early, non-statutory, this often leads to protest and a setback in the process.

Besides legal appeal and consultation in the statutory procedures, citizens had the most influence due to non-statutory participation. In Windplanblauw and Jaap Rodenburg II, citizens could participate in the process before the (first) layout was established. In Windplanblauw, this was done through

the involvement of an advisory board. In the case of Jaap Rodenburg II, this was done via two surveys. The first survey was publicly available and had a response rate below one per cent. The low level of citizen involvement indicated that few residents used the opportunity to participate in the process. In Moerdijk, a survey was also used for consultation on the preferred wind farm alternative. This was unsuccessful because of unusable results; as an unrealistic option, 'no wind farm' was added to the survey and was ranked highest (56%). The involvement of the advisory board in Nij Hiddum-Houw started after the NRD was established and is still functional. In Windplanblauw, the advisory board was part of the process before the NRD was established, and their involvement was terminated once the preferred layout was finalised. Local residents were kept involved by initiatives such as 'Vrienden van Windplanblauw' and the working committee 'Blauwwerkzaamheden'. Looking back is important that the participation is well considered. When a survey had a response rate far below one per cent (Moerdijk) or an unrealistic option was added to a survey (Jaap Rodenburg II), in case of Jaap Rodenburg II, this leads to a re-started participation process and in Moerdijk to unrest in the municipality.

9.1.3 Most Influential Events

In the rounds model, the most influential events are outlined red as shown in the figures 5.3, 6.2, 7.3 and 8.2. It is noteworthy that in three out of four cases, the policy formation and the presentation of the preferred alternative were influential moments. The latter was not the case for Nij Hiddum-Houw, possibly because there was a high level of citizen participation in the early stage of the decision-making process. Additionally, policy formation was not the only critical moment in case of Jaap Rodenburg II. The Almere municipality did not focus on wind energy in its policy, but a citizen initiated the plan to replace Jaap Rodenburg. In the other cases, the establishment of the policy is one of the most influential moments. In case of Nij Hiddum-Houw, the policy included specific details about citizen participation, whereas the policy of Moerdijk included a more definitive location but vague participation guidelines. Flevoland already decided on the layout of Windplanblauw and included the participation requirement in its policy. In the wind projects with vaguer a vaguer policy, Moerdijk and Jaap Rodenburg II, the participation process had exploratory characteristics, which resulted in more delay than when the policy was more detailed.

In all of the cases, non-linearity can be identified as there always was an indirect consequence of local residents. In Windplanblauw, this took place after the municipality decided to move the wind turbines away from the forest. However, this did not result in any delays. A similar occurrence happened in Moerdijk, where the municipality partially postponed its decision because it already planned to implement social guidelines and local opposition to the project. In case of Nij Hiddum-Houw, the decision to hold an extra round of negotiations was a political move due to the provincial coalition and the action committee. Regarding Jaap Rodenburg II, the initiators and the municipality decided to re-do the whole participation process be-

cause many residents opposed the wind farm after the intensity of the first participation round was too low. The non-linearity of Jaap Rodenburg II and Moerdijk resulted in project delays, which is in contrast to Windplanblauw and Nij Hiddum-Houw. As mentioned before, this has two reasons: it is due to the policy's stringency and the (lack of) implementation of the early participation process.

9.2 FINDINGS FROM THE CIT ANALYSIS

Contextual Interaction Theory (CIT) is used to answer the fourth research question: *When comparing the four cases, how do the contextual factors influence the decision-making process?* In this section, the contextual factors were retrieved from literature and are linked to the empirical findings from the analysis of the four cases. As explained in section 3.2.2, factors to analyse the decision-making processes are identified. These factors include previous events, wind farm plans, participation format, actors involved, role distribution, and participation format. Not all of the contextual factors that are described in 3.2.2 are considered to be influential in this analysis. No findings can be deduced from the size and location of the wind farm. For example, a local resident opposed the wind farm in one case even though they lived 7000 metres away from the turbines. In contrast, the residents who lived just a few hundred metres away from the wind farm did not raise any objections in other cases. This was also seen when considering the size of the wind farm, and therefore is the factor 'wind farm plans' not considered in the analysis. The analysis also showed that the distribution of roles between actors differed per project. During the participation process of Jaap Rodenburg II, the municipality had a prominent role, whereas the municipality did not play as big of a role in the Windplanblauw case. No differences have been found in these approaches; it seems insignificant who takes responsibility for citizen participation as long as the process is well executed. Therefore, the role division is not further elaborated upon.

Other factors stand out when comparing the four cases with each other. When applying the CIT, several factors of influence are identified: previous experience with wind farms, co-ownership, the stringency of the policy, unity of the political coalition, the moment of inclusion, representation of local residents and the expertise of the local residents engaged. The contextual factors identified by the use of CIT are researched, and additional factors of influence are found and listed below.

9.2.1 Previous Events

In each of the four cases, the decision-making process was influenced by events before the start of the process. It was noted that communities with previous experience with wind turbines had more of a positive outlook on the process, as seen with Windplanblauw and Moerdijk. In these instances, the unfair distribution of the advantages and disadvantages in previous

projects led to better construction in the current projects. This was especially the case with Windplanblauw, as all project area residents are co-owners of the wind farm. All landowners had an equal right to ownership, regardless of the location of the turbine and the size of their land. In the case of Moerdijk, the municipality hired an external party to implement the social guidelines after a resident of Moerdijk reached out to the municipality in response to an already existing wind farm.

In case of Nij Hiddum-Houw and Jaap Rodenburg II, previous events negatively influenced the decision-making process. The residents of NPW mistrusted the municipality because they felt that the municipality withheld information concerning the plans for the wind farm and, as a result, opposed its development. In case of Nij Hiddum Houw, the action committee, HFM, stated that as soon as the wind farm is built on the Ijsselmeer, it would oppose all onshore wind farms. Here, the opposition towards the wind farm was already in place. In conclusion, it can be stated that previous negative experiences with wind turbines result in lessons to improve the new wind farm. If 'old grudge' results from other previous happenings, this stimulates opposition because these previous events, *previous experience with wind farms* is selected as a factor of influence.

9.2.2 Local Wind Policy

The local wind policy has a strong influence on the development of the wind farm. The decision to build wind farms Moerdijk, Nij Hiddum-Houw and Windplanblauw were already included in policy documents. This can be done years before the wind farm is actually developed, which was the case in Moerdijk. Here, the decision to build the wind farm was already indicated in policy from 2011, and the decision-making process did not start until 2015. This implies that it was possible that the coalition responsible for developing the wind farm had not realised that a decision was made. Even though the municipality of Moerdijk had been unsure about the development of the wind farm, they felt they had no choice in this decision. Because if they decided to reject the wind farm, the province had the power to overrule them and take over as the responsible authority. From the cases, it can be concluded that if a wind project is already incorporated in policy, even though many years ago, it gives a higher governmental body the power to overrule the responsible authority when they do not want to develop the wind farm.

As mentioned before 9.1.3, another aspect to consider is the policy's stringency, which differed for each case. In the cases where the policy regarding the participation process had been most detailed, Windplanblauw and Nij Hiddum-Houw identified the least delay or non-linearity. A detailed policy can assist the responsible in making their final verdict. During the decision-making process, the municipality of Nij Hiddum-Houw and the province of Moerdijk found it difficult to make a final decision. However, in the province of Súdwest Fryslând succeeded without the interference of a higher body. A detailed policy gives the responsible authority guidance on how to manage its decision-making process.

9.2.3 Format of Citizen Engagement

Each case had different points at which its citizens became involved, and different involvement methods are applied in each. As stated before, Nij Hiddum-Houw was the only project with an intense citizen participation process before the policy formation. In the end, however, the results of this participation process were not taken over. After the location of Nij Hiddum-Houw was decided upon, also an advisory board was established before the EIA. As the advisory board was representative and well-informed, the preferred layout did not create unrest among residents outside the board. This stands out compared to the other three wind farms. In the case of Windplanblauw, during the policy formation phase, several meetings were organised for residents to gather input to determine search areas. However, there was little enthusiasm for this from the citizens; the reactions could be counted on one hand. Also, the design workshops of Windplanblauw were included in the policy formation phase, but only one local resident was present during the process. However, the local residents did not have the feeling that they were early involved. This can be linked to an insufficient representation during the design workshop, where only one resident was present at one of the three workshops, and a communication stop after the design workshops. The residents were updated almost four years later due to the time-consuming policy development. Also, in case of Jaap Rodenburg II and Moerdijk, the level of involvement in the first participation round was so low that most local residents did not feel included. The perception of most of the residents was that they were engaged only after the preferred layout was already confirmed. For both cases, After the layouts of Jaap Rodenburg and Moerdijk were published, a step back needed to be taken in the decision-making processes. Early participation without an intense representation still leads to the perception of not being involved and eventually is a setback in time. When early participation, i.e. before the preferred layout is established, is performed with a represented group of local residents, no setback in time is found, considering Nij Hiddum-Houw. The moment of inclusion is, therefore, considered a relevant factor of influence.

The level of participation is also considered relevant, an overview of the cases is shown in Figure 9.1 below. Windplanblauw is an example of a co-ownership success. Almost all of the 200 residents in the project area are co-owners of the wind farm—this resulted in zero appeals of the closest residents, which was different in the three other cases. Outside the Windplanblauw project area, in the inner area of Swifterbant, residents had the option to invest in the wind farm. Residents did use this option, but not all residents find that investing equals acceptance. In contrast, this can be interpreted differently by project management. Additionally, in the beginning, this leads to tension in the village between investors and opponents. Jaap Rodenburg II was also developed in collaboration with the local cooperation, Almeerse Wind. Almeerse Wind is a local entity where all residents can become members and, thus, co-owners of the two-turbine wind farm. Almeerse Wind was founded by a group of residents living in the city centre of Almere, about seven kilometres away from the wind farm. The establish-

ment of this cooperative entity increased the acceptance of the wind farm, as it had more than 300 members all over Almere. However, such an energy cooperative also has a downside. A few opponents of the wind farm stated that Almeerse Wind should build a wind farm near their own houses.

In the participation process of Moerdijk and Jaap Rodenburg II, a survey is used to identify the preferred layout. In the survey of Moerdijk, an unrealistic option made the result unusable, which lead to a few negative reactions of opponents of the wind farm. The first survey of Jaap Rodenburg had a response rate of less than one per cent. However, the second survey had a higher response rate (10%). The survey leads to a well-substantiated choice of layout and thus a better understanding of local residents. A well-performed survey can serve as a useful method to increase understanding, although a well-represented advisory board served the same goal in case of Nij Hiddum-Houw. Design workshops have been held in the participation process of Jaap Rodenburg II and Windplanblauw. Regarding the latter, local residents of Swifterbant were not represented. However, regarding other groups, the design workshop had shown potential. One proposed location was eliminated due to the design workshop. After the design workshop of Jaap Rodenburg II, a group of opponents had designed a layout. This design is proposed to the other local residents but had not been chosen. In the end, the design workshop did lead to the replacement of two turbines. During the layout design of Nij Hiddum-Houw, the layout is discussed in the advisory board and voted within the board meeting. After presenting the final layout of Nij Hiddum-Houw and (the second layout of) Jaap Rodenburg II, no substantive criticism of the layout was given.

9.2.4 Results of Citizen Engagement

In each case, citizen participation has visible consequences in the decision-making process. In Winplanblauw, two wind turbines are moved outside the forest after the preferred layout has been presented. In case of Moerdijk, do the residents from Klundert stimulate the government to implement the social guidelines as described in their policy. The village council of Klundert is involved in the process, which results in: a solar farm for the residents from Klundert, a six-meter height reduction of the turbines and an additional community fund for Klundert. When considering Nij Hiddum Houw, the OAR, Vattenfall and Gooyum – Houw B.V. agreed on, amongst others, a preferred layout, zero hours of shadow flicker, better noise regulation and specified the implementation of the community fund. In the end, the province also demanded an increase in the community fund and a reduction in height. In the decision-making process of Jaap Rodenburg II, the participation process is re-started after the comments of the local resident. This led to a whole other wind farm layout, but also to more turbines. In conclusion, in all cases, citizen participation influenced the decision-making process.

	Non- statutory participation	Result with respect to local residents
WINDPLAN-BLAUW	Early Design Workshops	One presented search area was eliminated due to a lack of resistance.
	Advisory board	First, the representativity of the advisory board could not incorporate the desired of the local resident. When the residents requested re-placement of two turbines, this was done. Later, the representativity issue was resolved and resulted in frequent and easy communication.
	Local Wind Association (B.V.)	Resulted in zero viewpoints and appeals of residents from the project area.
	Working Group	The working group was making compromises concerning the two turbines in the forest. Then, the municipality requested to move the turbines outside the forest. The outcome of the working group was not incorporated.
	Early financial investment options	Resulted in investing residents, and in a social division within the village.
	'Vrienden van Windplanblauw'	More than 200 residents are still involved in the wind farm, for example in setting up financial participation.
MOERDIJK	Working Group	The working group realized a height reduction of the wind farm and social guidelines: a solar farm and an additional community fund.
	Survey	Survey was not realistic, the option with most votes was out of option. The outcome of the survey is not incorporated.
JAAP RODENBURG II	Local Wind Cooperative	The local wind cooperative has 300 members, living in Almere, supporting the wind farm. Few opponents argued that the members of the cooperative should place the windfarm in "their own backyard".
	Survey 1	The results of survey 1 were initially incorporated, based on 70 votes.
	Design Workshops	One working group designed a wind farm layout to be placed in survey 2. Also, another optional layout for in the survey is adjusted after feedback.
	Survey 2	Five options are presented. Based on 1000 reactions (response rate of 6.5 %) the most popular layout is chosen.
NIJ HIDDUM-HOUW	Local Wind Association (B.V.)	The 45 local parties within association support the wind farm.
	FFDW	Twenty onshore wind projects are recommended to the government. This advice is not incorporated.
	Advisory Board (OAR)	The advisory board established a community agreement, stating zero hours of light flickering, noise reduction, community fund, reduced height of turbines.

Figure 9.1: Non-Statutory Participation and Corresponding Results per case

9.2.5 Local Residents Involved

Different groups of local residents were included in the four decision-making processes. Windplanblauw and Nij Hiddum-Houw started the participation process with an advisory board. Moerdijk and Jaap Rodenburg II did not have advisory boards to start with; local opposition changed this. When the advisory boards or the residents involved were not represented properly, this resulted in opposition and citizens feeling left out. This was not the case during Nij Hiddum-Houw, where the advisory board was well-represented. Altogether, this concludes that representation of the local residents is an important factor of influence. Furthermore, local residents must be supported by an external advisor with more expertise in the onshore wind energy sector. The board chair of the OAR of Nij Hiddum-Houw stated that it was valuable that the residents could consult an expert during the negotiations. At the beginning of Windplanblauw, the residents of the inner area of Swifterbant did not have the expertise, and one of the residents state that is the reason they could not use the power they had in an early stage. Therefore, an independent advisor is considered an important factor.

There are usually opposing residents in every project. A distinction can be made between action groups and opposing individuals. In case of wind farm Moerijk, the village council also had characteristics of an action committee. An action committee of Nij Hiddum-Houw, HFM, consisted of residents living more than seven kilometres from the wind farm and included a legal expert and two wind experts with political knowledge. It is noteworthy that HFM, still under the umbrella organisation of FFDW, received permission from the province to create an alternative policy. When the province did not implement the advice, HFM left FFDW and continued as an action committee, opposing all Frisian onshore wind farms. Due to its strong lobbying, HFM also destabilised the PS. The expertise of the action committee influenced the decision-making process; the other opposing residents did not have the same expertise.

The fact that some of the members of the action committee HFM lived relatively far away from the wind farm can be explained by other characteristics such as trust, perceived fairness, transparency and perceived influence. HFM felt mistreated and ignored by the province that had not considered their carefully compiled recommendations. The characteristics and their consequences can also be identified in the other cases. In Windplanblauw, a group of local residents perceived that the process was not as transparent as they would have liked, and they also protested against the turbines near the forest. In the case of Jaap Rodenburg II, the group of local residents with the strongest opposition felt misled by the government because they purchased their forest lots and then were told about the planned wind farm; they were not given information beforehand. Some residents from Klundert, in the Moerdijk case, felt mistreated by the government as they claimed that most of the residents were against the wind farm and were not being listened to.

Another factor of influence is the characteristics of the wind farm region where the local residents live. It is thought that, due to a strong community feeling, it is easier to collect signatures in small areas, such as Klundert, Swifterbant or NPW, than in large cities. It is more difficult to reject the

signature of your neighbour when he is collecting signatures at the supermarket when compared with a stranger. Therefore, it is more difficult to measure the actual opposition solely based on the petitions of NPW (signed by 600 citizens), Klundert (signed by 1000 citizens) and Swifterbant (signed by 800 citizens).

9.2.6 Governmental Body Involved

Several observations are made concerning the governmental bodies involved. First of all, the reactions to the objections made by the local community may depend on the competent authority. The municipality is likely more sensitive towards the local opposition since it directly concerns its voters. In the case of Moerdijk and Jaap Rodenburg II, the municipality was the competent authority. After the widely signed petitions and viewpoints, both municipalities agreed to re-start the participation process. Windplanblauw was part of the RCR, which stated that the national authority was a responsible entity but that the province and municipalities still had important roles. Dronten municipality handed in a request requesting the initiators to relocate the turbines outside of the forest, not the province or the state. When looking at Nij Hiddum-Houw, Sudwest Fryslan municipality formally cooperated with the wind farm but stated towards its residents they were against the wind farm. In all four cases, the municipality stood closest to its (local) residents and was more eager to compromise than higher governmental bodies.

Additionally, in case of Nij Hiddum-Houw, there was a strong political opposition within the PS, which complicated the decision-making process. A strong opposition combined with a divided coalition can negatively influence the decision-making process. Since the coalition is more susceptible to the opposition, they find it harder to agree.

	Windplanblauw	Moerdijk	Jaap Rodenburg II	Nij Hiddum-Houw
Experience with previous wind farms	Better distributions of joys and burdens, by co-ownership.	Better distributions of joys and burdens, by implementing social guidelines.	-	Better distributions of joys and burdens, by local ownership.
Stringency of policy	-	The municipality had a hard time to take a decision due to vague guidelines.	-	The province could take a decision due to clear guidelines.
Moment of inclusion	No proper representation of Swifterbant in early participation led to unrest after the preferred layout was presented.	No early participation led to unrest in Klundert after the preferred layout was presented.	No representation of NPW in early participation led to unrest after the preferred layout was presented.	Early inclusion of a representative advisory group prevented unpleasant surprises in a later stadium.
Co-ownership	Co-ownership of all residents within the project area led to no viewpoints and appeal of the closest residents.	-	Co-ownership increased acceptance but had no clear consequences on viewpoints of the local residents as they did not all joined the cooperative.	Co-ownership of 70 residents within the project area, resulted in no viewpoints and appeals of the 70 local residents.
Representation of the local residents	In the beginning, Swifterbant was not presented properly which led to unrest. When Swifterbant was presented, later, the preferred layout was adjusted to their desires.	When residents were not well-represented in the advisory board this led to unrest. When Klundert was presented, later, residents were well informed and financially compensated.	When residents were not well-represented in the first participation process, this led to unrest. When this was better in the second process, the preferred layout was completely altered better.	The local residents were well presented from the start. As a result, no changes to the layout had to be made and there were no unpleasant surprises.
Expertise Engaged Residents	-	-	-	Strong competences of HFM concerning politics, law and onshore wind destabilized the coalition of the province.
Unified coalition	-	-	-	A divided coalition and a strong opposition resulted in insecurity about the final verdict of the wind farm.
Independent Advisor	In the beginning, one resident of Swifterbant states that they could not use their power to a lack of knowledge.	-	-	In the OAR, an independent advisor facilitated a more equal negotiation.

Figure 9.2: Factors of Influence

9.3 INTERRELATION OF THE FACTORS

The factors found in this cross-case analysis are interrelated, as shown in figure 9.3. Since only four case studies are compared, no statistical argumentation can be given. The reason for these relationships are clear and follow from the case studies.

Co-ownership was recommended based on previous experiences on other wind farms and was shown to affect the decision-making process positively. Additionally, the early involvement of citizens makes the decision-making process more effective. Early involvement has a more significant impact on the process because the involved residents were also good representatives of their local community.

Also, political factors can be interrelated. A strong coalition has a positive influence on the decision-making process when those involved are decisive. When there is strong (political) opposition, a stringent policy can positively affect the decision-making process. A stringent policy facilitates decision-making by setting clear preliminary guidelines. Lastly, the more relevant expertise local residents involved in the decision-making have, the more they can influence the process for or against the project. Regarding Nij Hiddum-Houw, HFM destabilised the provincial coalition.

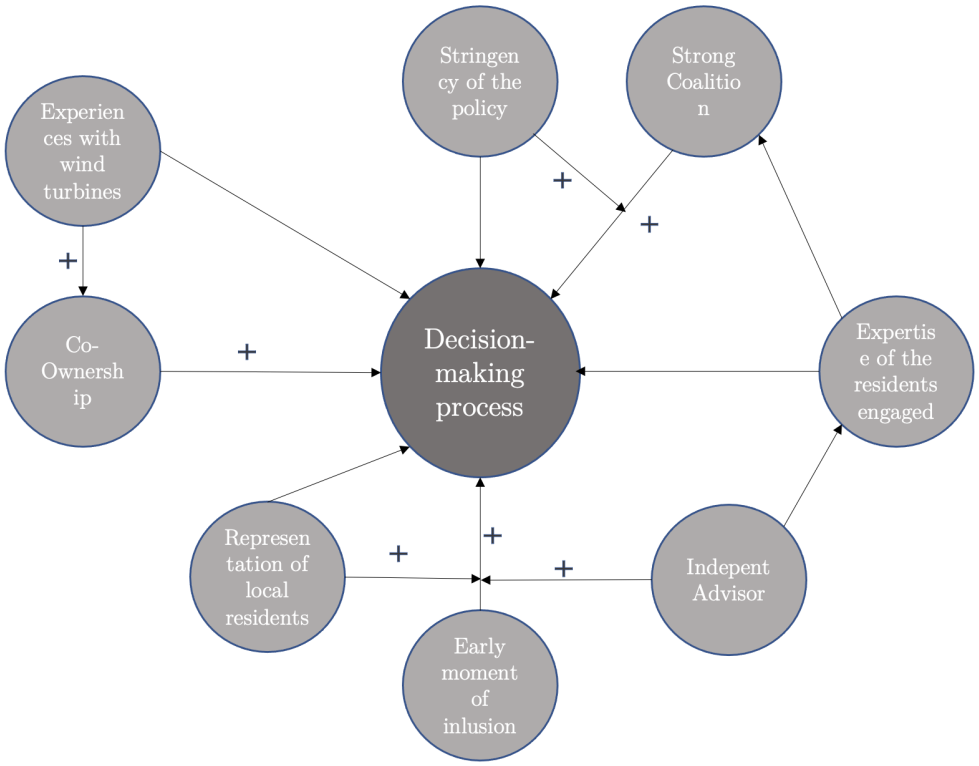

Figure 9.3: Interrelations of factors

9.4 VALIDATION OF THE ANALYSIS

In this section, the results of the validation interview will be discussed. An industry expert in participation in onshore wind energy reviewed the results. The experts recognise the results presented in the sections above, but three additional points are added to further nuance the outcome. First of all, the industry expert acknowledged that co-ownership could be a valuable tool used to create acceptance in wind farm projects. However, if it is not used correctly, it can also create a division between the residents who can be co-owner and the other residents living further away from the wind farm (and, thus, not co-owners). Although this was not the case for Windplanblauw, one should be careful when designing the co-ownership structure. Furthermore, having a detailed policy facilitates the decision-making process. However, a balance should be found between having a strict policy and ensuring enough freedom to keep the decision-making ongoing and prevent stagnation. Lastly, it should be stressed that good representation of the local residents is a shared responsibility. The initiators and the local residents are responsible for adequately representing the interests of the local residents in the participation process.
These new insights are used to explain the findings of this chapter in the conclusion, presented in the next chapter.

9.5 CONCLUSION

This chapter presents the findings that can answer the last sub-questions three and four: (1) the citizen participation and the decision making processes of the cases are compared, and (2) the contextual factors that influence the decision-making processes of the four cases are compared and identified. All four cases involve a legal appeal, and in all four cases, the appeal is denied. The two most influential moments are policy formation, and the presentation of the preferred layout for the potential wind farm is the most influential moment in the decision-making process. Secondly, non-linearity occurs as an indirect consequence of opposition by local residents. Often, this has a positive influence on the decision-making process. Citizen participation can lead to alterations of the wind farm layout, a reduction of nuisance and more financial benefits for the local residents. The implementation of financial participation and co-ownership should be well-considered because it can also cause tension or a feeling of injustice. Feeling mistreated or lacking trust in the government or initiator can stimulate opposition.

Several factors of influence have been identified as a result of the cross-case analysis. These factors influenced the decision-making process and also each other. First, when local residents know the previous experiences of wind farms during the development stages, they can better advocate for a more equitable distribution of the advantages and disadvantages of having a wind farm in or near their community. For example, co-ownership is stimulated in Windplanblauw, which in itself can positively influence the acceptance of the wind farm among local residents. However, the results of the validation interview indicated that a division between co-owning and

non-co-owning residents should be prevented. Furthermore, the moment of inclusion and the representation of the residents is important. Representation of local residents is the responsibility of the initiator as well as the residents themselves. So that local residents can use their power to the best of their ability, an external advisor should provide the necessary expertise. Political factors of influence are also identified, such as the stringency of the policy, the political coalition, and the strength of opposition affect the decision-making process. The policy should be balanced, clear and should provide adequate details about what should happen. And finally, the individuals comprising the opposition are relevant as their collective expertise affects their impact

The final discussion and conclusion of this thesis are presented in the next chapter. Here, the findings of the cross-case analysis are used to answer the research questions.

10 CONCLUSION & DISCUSSION

10.1 CONCLUSION

The challenges of onshore wind energy are explained in the introduction of this thesis, in chapter 1. Onshore wind farms are essential to meeting the Dutch climate targets but are increasingly facing local opposition. Citizen participation is becoming more important in preventing or addressing this opposition. The government also acknowledges this by giving citizen participation a more important role in wind policy development. To effectively utilise citizen participation, it is necessary to study *the effect of citizen participation on the decision-making process of onshore wind farms*. In this section, the answers to the main research question and the sub-questions are provided.

WHAT IS THE ROLE OF PARTICIPATION IN THE DECISION-MAKING PROCESSES OF ONSHORE WIND FARMS?

Citizen participation plays an important role in the decision-making process of onshore wind farms, unlike other non-energy construction projects. Citizen participation is much-debated to improve the outcome of the decision-making process, increase the acceptance of wind energy projects, reduce the delay and cancellations of projects, and assure the government that the citizens are considered in the wind projects. Additionally, citizen participation results in a better distribution of benefits and burdens by creating financial benefits for local residents or giving citizens decision-making power through (co-)ownership. Furthermore, involving residents in decision-making can prevent nuisance and reduce the wind farm's influence on the landscape and living environment.

There are two possible ways of citizen participation: pro and contra wind projects. Pro-wind farm participation can be through energy cooperatives and contra through action committees. The focus of citizen participation is during the policy-making and permit-granting phases. In the present study, three different stages of participation are identified: policy formulation, identification of the design specifications and the outcome. In the policy formation stage, citizens can assist the government in identifying suitable wind projects to meet the wind energy targets. In the current situation, this seldom happens. More often, residents participate in the second stage, contributing to specific project plans, such as the wind farm's layout and financial participation. The results of the participation process are presented in the outcome stage; here, the appeals made and financial participation agreements are arranged. Three different actors are involved in the participation process: project initiators, the government and local residents. Environmental organisations are also included, but these were not the focus of the present study. The specific governmental authority responsible for

issuing the planning permit and taking part in the decision-making process, whether national, provincial and/or municipal, depends on the size of the wind farm and is referred to as the 'responsible authority.

Two kinds of participation take place in the decision-making process: statutory and non-statutory participation. Statutory participation is determined by the law and, therefore, mostly the same in each project. Once the important project documents are established, the conceptual versions are open to the public for consultation for a period of six weeks. The local residents can share their views on these documents with the responsible governmental body. These documents are NRD, EIA, the zoning plan and permit applications. After six weeks, the government responds to these viewpoints, and the documents are modified (or not) by the initiator. After these steps have been taken, there is an option for anyone to appeal to the Council of State legally. In contrast, non-statutory participation is different for each project. The guidelines for non-statutory participation are presented in the Code of Conduct of the NWEA and are established in collaboration with other prominent organisations within the onshore wind sector. The government later included participation guidelines in the Climate Agreement, as seen in the RES. These guidelines are based on the Code of Conduct.

Non-statutory participation allows local residents to be involved during location determination, defining the participation strategy, deciding the wind farm layout, and during the set-up of financial participation. Citizens can be involved in different levels: inform, consult, involve, collaborate and empower. Where inform represents the least intensive level and empower implies that citizens have full decision-making power. The responsible authority and the initiator both organise the non-statutory participation process, which has no fixed format. Participation within these levels can take various shapes. Residents can be engaged through information meetings, financial participation, advisory boards, surveys, design workshops, working groups and co-creation. In practice, this leads to adjusting the wind farm layouts, reducing the height of wind turbines, and extra nuisance-reducing measures. Also, the benefits and the burdens are distributed more evenly by establishing compensation measures such as community funds, investment possibilities, or even co-ownership. Local residents can have various roles in the participation process: passive onlookers, active during development consultations, participate financially or mount an opposition to the wind farm. Objections and legal appeals are common in wind projects. This occurs in nearly all wind projects. In the current situation, information meetings and advisory boards are used most widely. However, the playing field is changing due to the Climate Agreement, RES and the new Environment and Planning Act, where co-ownership should be the norm.

WHAT CONTEXTUAL FACTORS AFFECT CITIZEN PARTICIPATION IN ONSHORE WIND DEVELOPMENT?

Contextual factors that are widely known to affect citizen participation are the wind farm plans, the actors involved and their responsibilities, the participation format, the wind targets, previous decisions and other influential events. The wind farm plans include the size and location of the wind farm. Larger turbines or turbines closer to local residents are stated to influence

the attitude of local residents negatively. Additionally, the perceived influence on the landscape influences the reactions of local residents. The actors involved can also affect the citizen participation process. Which local residents are included and how and why they were involved can influence the participation process. This depends on their motives, resources and representation for the local community. A good representation is stated to be critical to ensure the interests of local residents are considered. Resources represent the expertise of the residents involved and financial resources and time. The same goes for the initiator and the governmental bodies involved. Important aspects to consider include, are they experienced in developing wind farms, can they be overruled, and how are their intentions perceived amongst each other and the local residents? An experienced party has more experience when involving local residents. However, an experienced party is often a large company that can be associated with purely financial motives. The participation format is also considered relevant, specifically, the time and level of inclusion. As previously stated, the earlier the citizens are involved, the better. However, the project is still vague in an early stage, and citizens are less inclined to participate. Local residents want to be involved when a project is more specific when most decisions have already been made. Concerning the level of inclusion, it is important not only to inform local residents but also to engage them. As stated in the previous paragraph, this can be done in many ways, such as setting up an advisory board or a survey. Two other location-specific factors are found: local wind policies and previous events. Local wind policies provide information about the goals and guidelines set by the local government, such as climate targets, search areas and whether or not to implement social guidelines. Each wind policy differs in terms of the level of detail and subjects. In the current situation, there are no legal requirements for citizen participation and thus no legal grounds to reject a wind farm when citizen participation is not in order. This, however, will also change when the Environmental and Planning Act come into force at the beginning of 2022. Also, previous events are of influence, particularly if there was a negative outcome. Wind projects are often replaced, reaching their economic maturity after approximately twenty years. When this is the case, previous experiences concerning wind farms can influence the citizen participation process. Also, other happenings can be of influence, for example, when an old grudge has affected the confidence in (local) politics. In this case, the characteristics of the participation process are influenced. These characteristics also affect the citizen participation process. These characteristics include trust, perceived fairness, transparency of the process, and participation's perceived influence. When local residents perceive the participation process as unfair, this has a negative influence on the process. The empirical findings, the factors identified in the four cases' analysis, are explained in the paragraph below: *When comparing the four cases, which factors influence the decision-making process?*

WHEN COMPARING THE FOUR CASES, WHAT DO THE CITIZEN PARTICIPATION AND THE DECISION-MAKING PROCESSES OF THE FOUR ONSHORE WIND CASES LOOK LIKE?

In each case that was examined, citizen participation played an important

role in the decision-making process. Citizen participation was used to come to a better wind farm design, minimize the number of objections of the local community, and ensure the governmental bodies the local community's interests are considered. There are several similarities of the citizen participation process in the four projects. First of all, in all cases, the local government/or the provincial government are involved. In two cases, the local government, the municipality, took over the responsibility of the province. Secondly, at least one local resident legally appealed the wind farm in each case, and all appeals are denied. Also, in each project, a specific group of local residents is involved in the decision-making process, leading to an alteration of nuisance-reducing measures. In each project, a community fund is established, and local residents had the option to invest financially. Furthermore, citizen participation had affected the outcome of the decision-making process in each of the four cases, which led to an alteration of the layout and a reduction of the turbine height. However, the cases also have differences in terms of actors involved, the time and level of participation and influential decision-making events.

BLAUW	**MOERDIJK**	**JAAP RODENBURG II**	**NIJ HIDDUM HOUW**
Local Wind Association existing from 150 local residents (B.V.)	Working Group	Local Wind Cooperative	Local Wind Association existing from 45 land and turbines owners (B.V.)
Early Design Workshops	Survey	Survey 1	FFDW
Advisory board	Community solar farm developed by local party	Design Workshops	Advisory Board (OAR)
Working Group to re-locate wind turbines		Survey 2	Working group financial participation
Early financial investment			
'Vrienden van Windplanblauw'			

Figure 10.1: Moments of Non-statutory Participation in the four cases

The forms of participation are shown in Figure 10.1. The (first) surveys in Jaap Rodenburg II and Moerdijk resulted in non-linearity and delay. The surveys were not usable due to a lack of responses in Jaap Rodenburg II and an unrealistic option in Moerdijk. In both cases, the local residents had the feeling they were involved too late. The early participation process was of low intensity. Early participation is important to prevent local residents from feeling overwhelmed because decisions concerning the wind farm have already been taken. In each case, the feeling of being overwhelmed led to opposition. In cases where citizen participation started early, the level of citizen

participation was usually low. This finding supports the participation paradox, already been outlined in existing literature in section 2.4. In the case of a high level of citizen participation at an early stage, Nij Hiddum-Houw, the local residents were less shocked when the preferred layout was presented. In the three other cases, there was more disagreement when the preferred layouts were presented. Along with the policy formation, the publication of the preferred alternative can be considered one of the most crucial moments of the participation process. Nevertheless, citizen participation did not have a prominent role during the policy formation, except in Nij Hiddum-Houw. Policies established years earlier are influential because they affect most decisions during the decision-making process.
In each project, opposition and negotiations led to alterations of the (outcome) of the decision-making process. Additional non-statutory measures, besides the measures described in the Code of Conduct of the NWEA [20], resulting from negotiations between local residents, the project initiators and the governmental bodies involved are:

- Windplanblauw: Local ownership of the largest part of the wind farm, the re-location of two wind turbines out of the forest.
- Moerdijk: An additional community fund and a community solar farm reduce turbine height.
- Jaap Rodenburg II: Local ownership of two out of ten turbines, a restart of the participation process and a whole other wind farm layout.
- Nij-Hiddum Houw: Additional measures concerning noise and shadow flickering, height reduction, and increased community fund.

In the end, it can be concluded that in all cases, citizen participation combined with the opposition of local residents led to alterations of the wind farm plans. The wind farm layout of Jaap Rodenburg II was completely redone and led to a better design for all parties. The opposition, and citizen participation, can lead to a better wind farm design. It is also concluded that early, high-intensity citizen participation can decrease opposition, but early citizen participation is difficult to organize.

WHEN COMPARING THE FOUR CASES, WHICH FACTORS INFLUENCE THE DECISION-MAKING PROCESS?

After analysing the four cases, several factors of influence are identified. In case of Moerdijk and Windplanblauw, previous experience with wind farms led to a better distribution of the associated benefits and drawbacks. In the past, local residents of previous wind farms experienced this unfair distribution. Therefore, in later wind farm projects, the government and local residents used these experiences to make benefits and drawbacks more equitable. In the case of Windplanblauw, this led to the formation of the association SwifterwinT, which all residents in the project area owned. Co-ownership contributed to the wind farm being more accepted among residents. With the Windplanblauw project, there were no objections or appeals from local residents from the project area. It should be noted; when wind

farms decide to offer the option to residents to become co-owners, it is important that residents who do not receive this offer do not feel mistreated. Because not everyone can enter such an agreement, there is a risk of creating a division between co-owners and other residents (non-co-owners). To solve this, an open cooperative could be established that all residents can join, like Almeerse Wind. Investment options offer the chance to increase acceptance. The closer the investors are, the greater the acceptance.

Furthermore, as stated in the previous paragraph, the moment of inclusion and the representation of local residents is important. These factors can prevent local residents from being overwhelmed and enable their viewpoints to be incorporated when there is still room for input. This is a challenging task, as residents are less interested in participating at the beginning of a project, and not all residents want to participate in an advisory board. This can be a time-consuming and ungrateful task. The OAR of Nij Hiddum-Houw was sometimes accused of taking the side of the government and project initiator. It is also difficult to include opposing residents because they are afraid they cannot be engaged in the decision-making and oppose the wind farm at the same time. Also, the expertise of the residents involved is of influence. Residents with knowledge of the wind sector can have more influence. Therefore an independent advisor should represent local residents to have an equal negotiation position. Political factors also affect the decision-making process. The stricter and more comprehensive the policy, the easier it is for the responsible authorities to decide. The policy should not be too detailed because it must not be at the expense of flexibility and the input from local residents, politicians and project initiators. The coalition of the responsible authority also influences the decision-making process. When the coalition is strong, decision-making is easier. A divided coalition combined with a strong opposition can complicate the decision-making process. These factors were identified in case of Nij Hiddum-Houw, where a strict and comprehensive policy facilitated decision-making because it left less room for political negotiations within a divided coalition.

WHAT LESSONS AND RECOMMENDATIONS ON CITIZEN PARTICIPATION CAN BE IDENTIFIED AND APPLIED TO THE DECISION-MAKING PROCESS?

When making recommendations, it is important to remember that future onshore wind projects will have a different procedure due to the new Environmental and Planning Act, the Climate Agreement and the RES. Local ownership and involving citizens in determining search areas will play a more important role in the policy. Bearing this in mind, several recommendations are made for policy-makers and project developers of onshore wind projects.

The first aspect is the moment of inclusion of local residents. This is mentioned in all conducted interviews, and the case study analysis confirms its importance. Early involvement of local residents is important to reduce opposition at a later stage. For policy-makers, it is recommended to make citizen participation a vital part of determining search areas. This will already change with the advent of the RES, where search areas are determined on a local scale. The responsible party within the RES region should invite

residents of all villages and city districts for the best possible approximation of a representative group of residents. For wind farm developers, it is recommended to inform the local residents as soon as the search area is determined and to organise a design workshop where local residents of all city districts are approached for participation. This way, local residents can be involved by influencing the design specifications and the citizen participation process. It is also advised to make sure an external advisor assists local residents. This way, local residents can use their decision-making power to the best of their ability. Also, when the participation process is started, it should be communicated with local residents that a good representation is also their own responsibility. They must act in the best interests of the whole community. In several interviews, it was stated that one should 'organise its own opposition'. According to governmental project leaders and wind farm developers, this can be used to check the representation of the local residents. When there is no opposition, the project initiators and the responsible authority should inform the local residents once more by distributing door-to-door folders

Another lesson learned in this study is about the success of co-ownership. When involving the landowners of projects as equal partners of the wind farm developer, the local community feels more connected to the wind farm. Co-ownership increases the acceptance for and local support of the wind farm. In current policy, a co-ownership of 50% is already aimed for. It is advised that the responsible authority of the wind farm, mostly the province, involves the closest living residents in an early stage to think about a structure to organize this. For future policy, the recommendation is made to implement a co-ownership structure where all local residents have the ability to become owners. This way, nobody feels mistreated because some residents cannot be co-owners. For policymakers and project initiators involved, it is advised to advertise an equal ownership distribution between residents, regardless of the size of their individual plots and their precise locations relative to the wind turbines. This prevents disputed between the residents. When the distance from the residents to the turbines has a high relative difference, a contour structure is suggested. This way, the closest residents can receive a (slightly) higher share. When the sense of injustice is prevented, co-ownership is a valuable tool to increase the acceptance of the wind farm.

The last recommendation concluded from the case study is the stringency of the policy. Due to a lack of experience or opposition from the local community, the province or the municipality sometimes find it difficult to make final decisions regarding the development of onshore wind farms. Developing a clear and well-detailed policy is recommended to ensure a more efficient and smoothly run process. This should be considered when formulating wind farm requirements at the beginning of the project. A balance should be found between a strong and elaborate policy, as there should be no room for misinterpretation. On the other hand, when a policy is too strict, it could take the energy out of the process and make a tailor-made approach impossible. Nevertheless, it is easier to arrive at a final decision when the responsible authority finds a balanced way to clearly express the important criteria for the onshore wind farms' decision-making and citizen

participation processes. Therefore, it is recommended that municipality's and provinces describe citizen participation criteria in advance. This way, the project initiator knows what is expected of them, and the decision-making process is facilitated. For example, a minimum amount of financial participation or co-ownership can be stated in policy documents without elaborating on the exact implementation method. If all parties fulfil their agreements, it is easier for the Council of State to handle the legal appeals. When all agreements are kept, the Council of State has no grounds to approve the appeals. In conclusion, managing expectations can help the government with its decision-making, while the guidelines simultaneously assist the initiator in developing the project.

HOW DOES CITIZEN PARTICIPATION INFLUENCE DECISION-MAKING PROCESSES OF FOUR SELECTED DUTCH ONSHORE WIND PROJECTS?

Considering all sub-questions that were answered above, the conclusion can be made that citizen participation influences the decision-making process in multiple manners. Citizen participation is used to 1) distribute the benefits and the burdens more equally, 2) reduce nuisance, 3) convince the responsible authority that the interests of local residents are considered, 4) improve the wind farm design, and 5) prevent and reduce local opposition. Citizen participation is important because governmental parties consider local acceptance to be critical in permitting wind farms to be developed. When the government is uncertain about the local acceptance, the final verdict is also uncertain and can be delayed.

In statutory consultations, important documents or decisions are open to the public for consultation for six weeks where citizens can submit their questions and express their views. When these viewpoints are not considered, local residents can legally appeal the permit issuance. When there are many viewpoints regarding a particular item or a petition is handed in, the decision-making process can be delayed. This often happens after presenting the preferred layout because local residents feel overwhelmed. In all cases, these (opposing) reactions led to an additional round of non-statutory participation, in the case of Moerdijk and Jaap Rodenburg II, a delay in the decision-making process. Such a setback can be prevented by early non-statutory participation when also considering other factors of influence. It can be quite complex to involve local residents early in the process. Citizen participation tends to become more intensive as wind projects take shape. It takes much effort to involve citizens in the policy formulation phase, as citizens are less interested in a project when the plans are still vague. Furthermore, local residents must be well-represented. This is also difficult in practice because being active in citizen participation can be unpopular among residents. Additionally, opponents can be afraid to 'cooperate' with the wind farm because they fear that they are unable to protest the wind farm by participating. Often, did opposing residents chose to object to the wind project solely. Another important aspect is that local residents must have the required expertise to have an equal negotiation position. When local residents do not have this expertise, they cannot use their power when they still have the most influence: at the start of the decision-making process. An independent advisor can be appointed to advise residents during

the citizen participation process.

From the cases studied, it became clear that political factors can also influence participation and decision-making. It can be difficult for the responsible authority to issue a planning permit for a wind farm opposed by residents and thus their voters. Wind energy is a controversial issue, and it is even more complex to come to a consensus when the political coalition consists of divergent political parties. A strong coalition or a detailed participation policy facilitates the decision-making, but there should also be enough flexibility to 'customize' the participation process.

In the cases analysed, several forms of citizen participation are identified: local wind cooperatives or associations, financial investment options, community funds, design workshops, wind farm layout surveys, working groups and advisory boards. The consultation and involvement of citizens have resulted in the re-location of wind turbines, a reduction of the turbine height, additional nuisance reducing measures, additional financial benefits and even a totally new wind farm layout. Co-ownership in the form of a local wind farm association of cooperative has shown to increase a wind farms acceptance. It is more effective if the closest residents are members of the cooperative from the very start and when nobody feels mistreated by not being allowed to join the association or cooperative.

The analyses of the case studies have shown that citizen participation can lead to a better quality of the decision-making process, the design of the wind farm and the distribution of the benefits and burdens. However, the current study also pointed out that designing and implementing a citizen participation process is complex. A good process design, process management and the right participation incentives are essential to finding the right balance for a good participation process. This is not easy and therefore requires much attention.

10.2 ACADEMIC DISCUSSION

This study's contribution to existing scientific literature is that it provides in-depth insight into the role of citizen participation in the decision-making process of wind farm projects. Also, the overall landscape of wind farm development in the Netherlands is studied, with special respect to contextual factors and the actors' roles. Additionally, the interrelationship of statutory and non-statutory participation within the decision-making process is investigated, which has not been seen in other studies. The lessons and recommendations provided in the present study can be used in future Dutch onshore wind projects to improve citizen participation and decision-making. Also, time and costs for the initiator and the government can be saved, and the chance increases that projects will come to fruition. This will bring the Netherlands closer to meeting the wind energy targets as set in the Climate Agreement.

The present study has shown that citizen participation can improve the quality of the wind farm development plans and lead to a better distribution of benefits and burdens. This confirms the previous findings of Haggett

(2009), Akerboom (2018), Stadelmann-Steffen (2021), Wolsink (2007) and Firestone (2017) [24; 25; 6; 26; 27; 28; 29]. In the present study, it is shown that local opposition can cause improvement. This is in line with the findings of Cuppen et al. (2020), who state that conflicts in energy projects can be of added value because "a conflict shows the limitations of the formal path to take into account emerging, relevant public concerns and values" [103]. This case study has proved that point, as criticism of local residents has led to a fairer distribution of burdens and benefits, a better participation process and even a better wind farm layout. A downside of these conflicts is, however, that it can result in non-linearity of the process. Non-linearity does not per definition delay. When the (participation) process is executed properly, extra time is considered to implement feedback from local residents. When this is not the case, non-linearity can cause delay. Non-linearity also results in delay when criticism of local residents concerns the process itself, which implies it is vital to involve local residents in establishing a participation plan.

The present study has identified the relevance of early participation, as also mentioned by Wolsink (2007) and Stadelmann-Steffens (2021), as well as its complexity [26; 6]. Even when local residents are involved in the process, they can still feel that they were involved too late. This was the case in Jaap Rodenburg II and Windplanblauw due to a lack of representativeness of the local community. This finding is in line with the participation paradox of Noe (2019) [72]. Nevertheless, this study also shows that the participation paradox does not have to be the case. When residents are aware of the location determination of wind farms in the policy-making stage, citizens are likely to participate. They are less overwhelmed when the wind farm development process starts. This study finds that is not only difficult to engage citizen in an early stage; it is in any case difficult to involve citizen. Opponents feel that it is either engage or oppose, while in reality, this is not so black-and-white.

The 'NIMBY' principle is perceived as too simplistic in this study, complementing the findings of Wolsink (2006) [17]. Local ownership can resolve NIMBY by fairly distributing the benefits between all local residents. Even though Goodman (2018) states that financial participation can greatly influence establishing acceptance, this study points out that it is not enough [52]. This study finds that different perceptions about financial investment exists. Local residents state that financial participation does not equal acceptance, as some project developers do believe. From co-ownership, several issues arise: 1) How to distribute the benefits, 2) who can join the initiative and 3) the gains should be large enough to incentivise residents. The latter is only possible when the wind farm has a great capacity and consists of many turbines. The three complexities specify the findings of Maas et al. (2020), who identified a lack of trust as a challenge [57]. They also stated in their research that few studies about co-ownership had been conducted. The present study contributes to the literature by studying the consequences of co-ownership. The present study points out that the nearest residents must be co-owners. Also, equal ownership opportunities should be provided between these residents, regardless of the exact distance to the wind farm and the amount of land you own. Additionally, the present study has identified the most-used

forms of participation, their results and factors of influence, based on four in-depth cases studies that have not been studied and compared before.

Another contribution of this paper is that it is the first research to combine CIT with the rounds model [76; 83]. The rounds model was used to make a structured visual representation of the analysis of the decision-making processes of the four cases. The rounds model is a valuable tool because it reduces the complexity of the process and visually presents the roles of the various actors [76]. This way, it is a useful method to facilitate the case comparison. Teisman himself did only use the rounds model to explain the theory behind the model but did not use it by applying the framework to a specific case. In this thesis, the rounds model is applied to the four cases, which highlight interesting details. During the case analysis, it was noted that the rounds model did not display non-linearity. Also, initially, it was not possible to distinguish the more significant moments from less significant events. These issues are addressed by implementing three aspects in the rounds model: important moments are marked, a feedback loop presents non-linearity, and the level of the engagement of the residents is indicated. Although the rounds model is useful, it does not take into account the impact of external factors. Therefore, the CIT was used to identify contextual factors of influence [83]. However, a shortcoming of the CIT is that the focus is on contextual factors and actor characteristics, but less on other aspects of the process, such as; trust, perceived fairness, transparency of the process, and perceived influence on the outcome. These aspects have been described per actor in the actor section of each case description, in chapter 5 to 8.

10.3 COSEM RELEVANCE

In the present study, the complexity of the socio-technical decision-making processes of onshore wind farms becomes evident. It is for this reason that these decision-making processes mostly take many years. A variety of perspectives show the multi-disciplinary nature of wind projects and their corresponding issues. The wind farm should be economically and technologically feasible, comply with the existing policies, and consider stakeholders such as local residents and environmental organisations. These four aspects bring along contrasting interests and dilemmas, so that trade-offs need to be made.

These dilemmas concern a variety of actors and have a clear multi-actor component. At least a governmental body, project initiator and group of local residents are involved in each process. In the studied cases, the actor playing field is often even more complex since multiple governmental bodies, initiators, and 'groups' of local residents are involved in the decision-making process. Therefore, the study concerns values from both private and public domains and is as relevant for governmental bodies as for project initiators.

The technological aspect is most prominent in this study when discussing the wind farm location, height and mitigating nuisance measures. Technology affects the height of the turbines, the potential location and the potential compromises the initiator can offer the local residents. Therefore, technology affects the decision-making process. In the present study, the design of the decision-making process is optimized systematically. Qualitative data is

coded to identify the differences and similarities of the cases. In conclusion, the high level of complexity, the multi-actor network, the involvement of public and private parties, and the economic and technological components make this thesis very suited for a CoSEM research.

10.4 LIMITATIONS OF THE RESEARCH

This thesis is subject to several limitations due to the research method, the research scope and other practicalities. The limitations resulting from the scope are considered first. One limitation is that only projects developed by Vattenfall are studied. Therefore, the differences between various initiators could not be researched. Also, the four studied projects are all successful, which means that the permits of all projects are granted, and the project is (being) developed. Therefore, no conclusions can be drawn about the differences between 'successful and cancelled projects. Another selection bias is that all cases took place around the same time. The results of the cases only relate to the playing field and policies between 2015 and 2020. The timing of the cases, the project initiator, and the study of only 'successful projects could possibly influence the findings of the analysis, but not the reliability of the findings. Additionally, the decision-making process of the cases started already several years before the present study. This means that the policies, regulations, and current affairs are not likely to be the same. The RES changes the participation process of onshore wind farms, and besides that, the standards for participation are set higher every year. Nonetheless, the lessons learned from these cases can be useful for future cases.

Practical impediments affected the number of cases and the interviewees included in this study. Due to time constraints, it was only possible to analyse four cases with limited interviewees while acknowledging that more cases and more respondents would have provided more information. Additionally, local residents were not interviewed for all the cases. To compensate for this, interviews with stakeholders close to the local residents (during the citizen participation process) were conducted. Additionally, it was difficult to capture the perceptions of the actors. Local residents are not one entity, and each resident has their own views on the situation. This added to the complication of developing a cohesive statement about their perceptions. This was not only the case for local residents but also when interviewing other stakeholders. Each interviewee shared their own version of the decision-making and participation process. For each case, one storyline with different perspectives was created, which was then verified by looking at policy documents and final checking with the interviewees. Nonetheless, the possibility exists that conversations with the interviewees are slightly biased by their own perceptions. Interviews with an onshore wind expert and Vattenfall's responsible stakeholder manager were conducted to check the validity. In the present study, a shared truth was sought, and according to the independent onshore wind participation expert, this truth has been found. Nevertheless, this study, being qualitative in nature, examined the participants' stories and subjective interpretations of events. This is one of

the limitations of conducting a qualitative exploratory case study based on interviews.

10.5 SUGGESTIONS FOR FURTHER RESEARCH

Several promising areas for further research are noted. This study did not examine the acceptance process of the local residents since this is very subjective and difficult to ascertain from one interview. Future research could focus on wind projects from the perspective of local residents, as this would help gain further understanding of the reasons for opposing, accepting, and supporting wind farms. It could be interesting to identify how many citizens are truly opposed to the wind farm, who signed the petitions and why. This could provide valuable insights into the actual perceptions of the local residents. While this study looked at successfully developed wind farms, a suggestion for further research could be examining projects that were not executed, either because they were shut down in the preliminary phase or after the procedural start. Following this, cases from a different wind farm developer should also be studied, as Vattenfall has no cancelled projects after the procedures were already set into motion. In this case, only Vattenfall cases were studied, which implies a selection bias. It would be interesting to study projects from other initiators, as the variation in the approach taken by other developers could lead to new insights. Another aspect of further research on case selection is that 'Windpark Klaverpolder' was not studied due to its complexity, as this wind farm is a cluster within a larger cluster. The actor responsibilities are arranged differently, and the citizen participation process was organised for the whole wind cluster. Future research would be interesting to address various aspects of this case. Insights can be provided about the division of responsibilities when the wind project actually is an umbrella project. Lastly, valuable lessons could be learned about early participation, as performed in this project.

Several potential factors of influence are identified in this study that is worthy of further research. For example, the influence of the residents of the action committee or whether or not there is room for compromise in the acceptance of the wind farms. It would be interesting to test whether the acceptance of the wind farm would increase when there is more room for negotiation instead of a 'better outcome. Also, the influence of the provincial coalition of the competent authority should be studied more in-depth, including looking at what a strong provincial opposition to the decision-making process would look like? Does it always lead to hesitation, or was that only the in case of Nij Hiddum-Houw? As this is an exploratory study; it would be relevant to transform these observations into recommendations more elaborate than is done in the present study. For example, how should early involvement be manifested, or what is the best way to ensure representation of local residents. It could be possible to conduct a case study with more cases so that further qualitative research can be conducted to generate more information concerning causal relationships. Above all, it is important to study the influence of participation when the new policies are in place. The present study studies cases that have started years ago, be-

fore the RES and the new Environment and Planning Act. Many changes and possible improvements have already been implemented, and it would be interesting to study those changes and identify improvements for the new policy.

10.6 RECOMMENDATIONS FOR POLICY-MAKERS AND PROJECT DEVELOPERS

The main lessons learned are presented earlier in the chapter, in section 10.1, in the paragraph: *What lessons and recommendations on citizen participation can be identified and applied to the decision-making process?*

In conclusion, it is important to involve local residents since it has several important roles: it assists politicians with their decision-making; it increases the quality of the decisions made; it increases the likelihood that the project will be accepted; it ensures the benefits and drawbacks associated with onshore wind farms are distributed more evenly. To shape the participation process as best as possible, several recommendations were made and are addressed in section 10.1:

- RES policymakers are advised to pursue the participation of residents actively.
- For project initiators and the responsible authority of the wind farm, it is recommended to immediately start the citizen participation process when the wind farm location is determined. A well representative advisory board is recommended.
- Municipalities and provinces, project initiators and the responsible party within the RES should actively invite residents of all surrounding villages and city districts.
- The organization of co-ownership is recommended. The responsible authority and/or the project initiator should involve the closest residents early to determine a co-ownership structure. An open structure is recommended. An equal ownership distribution is advised, where the size of the land and the exact distance from the turbines do not lead to high earnings differences.
- Policymakers, the municipalities and the provinces are advised to define broad participation criteria when writing policy clearly. Not too strict; otherwise, the approach can no longer be situation-specific. This facilitates decision-making and provides clear expectations to the project initiator.
- Project initiators and the responsible authority should ensure local residents are assisted by an external advisor.

These recommendations can assist policy-makers and wind project initiators in developing more onshore wind farms, meeting climate targets, and evenly distributing the benefits and drawbacks of wind farms.

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A | INTERVIEW PROTOCOL

Introductie:
In dit onderzoek wordt de invloed van burgerparticipatie op het besluitvormingsproces van wind op land projecten binnen Nederland bestudeerd. Het doel van het interview is het vergaren van kennis over het besluitvormingsproces van specifieke wind-op-land projecten, in dit geval windpark Nij Hiddum-Houw/ Moerdijk/ Windplanblauw/ Jaap Rodenburg II. Met deze kennis kan beter inzicht worden verworven in de planning, implementatie en de rol van burgerparticipatie in deze projecten en kunnen aanbevelingen worden gedaan om dit te verbeteren. Door deel te nemen aan dit interview draagt u bij aan case specifieke dataverzameling op het gebied van burgerparticipatie en bijbehorende besluitvormingsprocessen. Door het aanvullen van bestaande kennis aan te vullen met deze case studies, wordt er meer en diepgaander onderzoek mogelijk gemaakt.

Dit interview bestaat uit de volgende onderdelen: algemene introductie, actoren, besluitvormingsproces en burgerparticipatie.

Het interview duurt naar verwachting 60 minuten.

Vragen:
Onderdeel A: Algemeen
1. Wat is uw mening over de aanleg van het windpark?
2. Hoe bent u betrokken bij het windpark?
3. Op welk moment bent u betrokken geraakt bij de ontwikkeling van het windpark?
4. Wat is het belang van de betrokkenheid van uw organisatie bij het windpark?

Onderdeel B: Actoren
5. Wie zijn volgens u de belangrijkste betrokken actoren?
6. Hoe zou u de interactie tussen omwonenden en de overheid beschrijven vanuit uw perspectief?
7. Hoe zou u de interactie tussen omwonenden en Vattenfall beschrijven vanuit uw perspectief?
8. Hoe zou u de interactie tussen Vattenfall en de overheid beschrijven vanuit uw perspectief?

Onderdeel C: Het besluitvormingsproces
9. Hoe zag het besluitvormingsproces eruit tot de totstandkoming van de vergunningsaanvraag voor het windpark?
10. Hoe lang heeft het besluitvormingsproces geduurd?

11. Wat waren volgens u de belangrijkste besluitvormingsmomenten?
12. Welke manieren had u om invloed uit te oefenen en heeft u die gebruikt?
13. Hoe open was het besluitvormingsproces?
14. Hoe heeft de rol van omwonenden bijgedragen aan de kwaliteit van het besluitvormingsproces?

Onderdeel D: Burgerparticipatie
15. Welke omschrijving zou u geven aan het ideale besluitvormingsproces?
16. Welke rol speelt burgerparticipatie hierin?
17. Hoe verhoudt zich dat tot het besluitvormingsproces zoals het zich heeft afgespeeld in dit project?
18. Hoe intensief heeft u het burgerparticipatieproces ervaren en waarom vindt u dat? Graag aangeven op een schaal van 1 tot 10, waar 1 is zeer beknopt en 10 staat voor zeer intensief

Tot slot
19. Weet u eventueel nog andere waardevolle informatie of personen die relevant zijn om te spreken?

Dank voor uw tijd en aandacht!
Er zal vertrouwelijk met de verzamelde gegevens om worden gaan.

Mocht u nog vragen hebben, neem dan contact op met Kato Hemelaar

COLOPHON

This MSc thesis, *The influence of citizen participation in the decision-making processes of onshore wind farms*, was typeset using LaTeX. The document layout was generated using the arsclassica package by Lorenzo Pantieri.