

# Living in the shadow of the solar park

Analysing the community and stakeholder engagement of the realisation of the solar park located in Wanneperveen, The Netherlands



Name: Leonie Heidema

Student number: S4398270

Bachelor: Human Geography and Planning

Supervisor: Philippe Hanna

Date: June 16, 2023

## Abstract

This research analyses how community and stakeholder involvement was incorporated into the development of the Wanneperveen solar park in the Netherlands as part of local efforts to meet the Paris Agreement's climate targets. The study explores, through qualitative research, how the local community and stakeholders perceive the public engagement in the project. Furthermore, it investigated the community suggestions to improve public participation. According to the findings, local people, Dorpsbelang, a local interest group, and other stakeholders have conflicting views on public participation. These views may be due to poor communication and different perceptions. Locals advocate for early community involvement, more transparency, and a more proactive role for the municipality in facilitating stakeholder engagement.

# Table of Contents

<b>1 Introduction</b>	<b>3</b>
1.1 Background	3
1.2 Relevance	4
1.3 Research questions	4
<b>2 Theoretical Framework</b>	<b>4</b>
2.1 Stakeholder engagement	4
2.2 Public participation	5
2.3 Conceptual model	7
<b>3 Hypotheses</b>	<b>7</b>
<b>4 Methodology</b>	<b>7</b>
4.1 Research method	7
4.2 Data collection	8
4.3 Data Analysis	9
4.4 Ethical considerations	10
<b>5. Results</b>	<b>10</b>
5.1 The course of the project	10
5.2 Stakeholder relations	12
5.3 Public participation	13
5.3.1 Participation perceived by local community	13
5.3.2 Public participation Dorpsbelang	14
5.3.3 Public Participation Powerfield	15
5.3.4 Public participation municipality of Steenwijkerland	16
5.4 Suggestions by the local community	16
<b>6 Conclusion/Discussion</b>	<b>17</b>
<b>References</b>	<b>19</b>
<b>Appendix A: Interview guide</b>	<b>22</b>
<b>Appendix B: Consent form</b>	<b>27</b>

# 1 Introduction

## 1.1 Background

Attention to climate change and the production of sustainable energy has significantly increased in recent years. The 2015 Paris Climate Agreement established specific objectives for the future, such as a 55 percent reduction in emissions within the European Union by 2030 and achieving climate neutrality by 2050 (Peuchen et al., 2019). In order to achieve these goals at national level, specific plans must be created at the regional level with the participation of citizens, social organisations, and businesses (Peuchen et al., 2019).

At the regional level, the "Regionale Energie Strategie" (RES) acts as a tool to support these strategies. The RES, which is divided into 30 regions, encourages regional collaboration between city councils, provincial councils, water boards, social partners, network operators, the business community, and local communities. With a goal year of 2030 and, if required, 2050, each area has its own RES paper outlining sustainable options for energy generation, heat transfer, and energy infrastructure.

The municipality of Steenwijkerland is part of the RES region West-Overijssel. The policy on solar panels that applies to the municipality of Steenwijkerland is called 'Beleidskader Ruimte voor zonnepanelen op (Steenwijker)land'. This policy describes regulations on solar panels, covers issues like an area fund and describes where and how solar panels on land are possible. However, this policy does not address participation (Gemeente Steenwijkerland, 2019).

Within the municipality of Steenwijkerland, a plan for a solar park located in the village of Wanneperveen, has emerged (Figure 1). This solar park will be 44 hectares with a capacity of 28 MWp (Powerfield, n.d.). The project is led by the company PowerField and is located on agricultural land whereby the land is rented for the upcoming 25 years. The location of the solar park is now on the edge of the village where hardly anyone lives and borders on a Natura 2000 area. An overview of the course of the project is given in Figure 6 (Section 5.1).

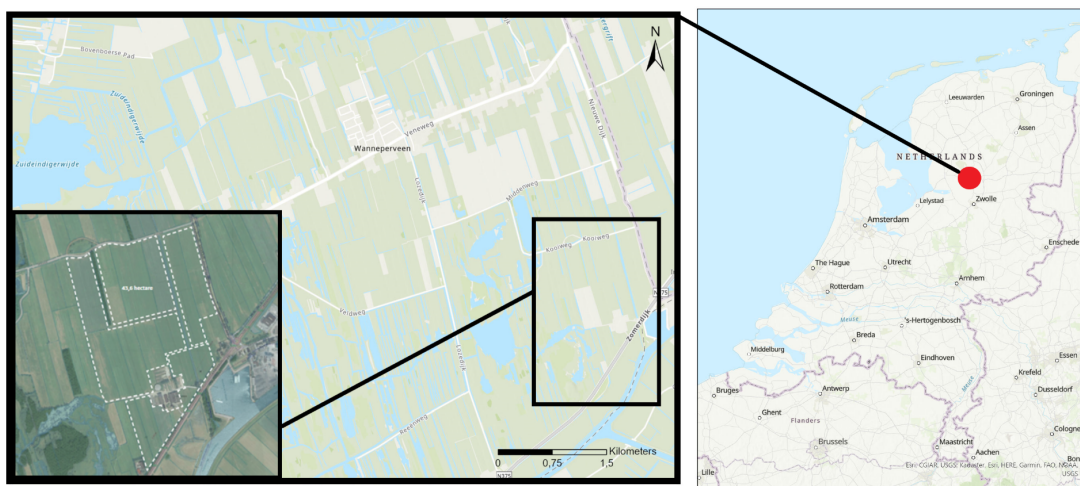


Figure 1: the location of the Solar Park in Wanneperveen

## 1.2 Relevance

More renewable energy projects will arise in the near future as a result of the Paris agreement. Acceptability of projects by the stakeholders and local community is key, therefore including their interests and perspectives in the decision-making processes is of high importance. However, the stakeholders and the local community are often not included in these processes. They are informed about the plans at a later stage, which could lead to resistance among the stakeholders and local communities. This case study focuses on the perception of public participation and stakeholder engagement processes in the decision-making process of the arrival of the solar park in Wanneperveen, The Netherlands and will contribute to the understanding of the implementation of renewable energy projects in Europe. The success factors and bottlenecks of this study regarding public participation can be used in the future for the realisation of similar renewable energy projects.

## 1.3 Research questions

The aim of this research is to gain insight into the consideration of community and stakeholder engagement during the realisation of the solar park in Wanneperveen. The different stakeholders relations and the course of the project will be mapped, the community perception of public participation within the process, the suggestions on the participation processes by the local community are considered and the factors related to project acceptability will be analysed. The main research question is as follows: How was community and stakeholder engagement managed during the realisation of the solar park in Wanneperveen?

The sub questions are as follows:

- What is the course of the project and how do the stakeholders relate to each other?
- How does the local community and the stakeholders perceive public participation within the planning and decision-making process?
- How can the local community's recommendations be used to enhance public participation in an effective manner?

## 2 Theoretical Framework

### 2.1 Stakeholder engagement

By setting up renewable energy projects, a variety of stakeholders are involved, which makes the planning issue a complex issue. The OECD defines stakeholders as follows: “Any interested and/or affected party, including institutions and organisations, whether governmental or non-governmental, from civil society, academia, the media, or the private sector” (OECD, 2022, p.13). The definition given of the concept citizen by the OECD: “Individuals, regardless of their age, gender, sexual orientation, religious, and political affiliations. The term is meant in the larger sense of ‘an inhabitant of a particular place’, which can be in reference to a village, town, city, region, state, or country depending on the context. It is not meant in the more restrictive sense of ‘a legally recognised national of a state’. In this larger sense, it is equivalent of people” (OECD, 2022, p.13).

These concepts can then be connected to the engagement, which makes engagement include: “all the ways in which stakeholders (including citizens) can be involved in the policy cycle and in service design and delivery” (OECD, 2022, p.13). Thus, stakeholder engagement includes all stakeholders including the local community.

## 2.2 Public participation

Support by the local population is crucial within renewable energy projects. According to van den Berg and Tempels (2022) there are a number of factors that play a role in the level of acceptance of the local citizen. First of all, the developer's motivations and desire in supporting public benefits play a significant role. Second, the history and context of the area, which determines the predicted negative impacts are crucial. Lastly, the extent of community engagement plays a key role, influencing the particular community benefits given.

Stakeholder engagement encompasses a broader concept in which all stakeholders are taken into consideration. When focussing on the local community engagement within planning issues, the concept stakeholder engagement could be narrowed down to public participation or community engagement.

The IAP2 (2015), and Vanclay et al. (2015) argue that these concepts are interconnected and that these concepts can be used interchangeably as will be done in this study. Public participation is defined as follows: “Public participation is a process that involves the public in problem solving or decision-making and uses public input to make decisions. It includes all aspects of identifying problems and opportunities, developing alternatives and making decisions. It uses tools and techniques that are common to a number of dispute resolution and communication fields.” (IAP2, 2010, p.10).

The IAP2, International Association of Public Participation, designed a spectrum of participation to illustrate different levels of impact on decision-making, which is presented in Figure 2. Per level the promise to the public as well as the public participation role is specified. The lowest level of engagement is to inform, in which there is virtually no participation as the citizens are merely provided with information and have no influence on the decision. The community will only be updated on information. Conversely, the highest level of impact on the decision is empower, where the public is the main decision maker and is actually leading the process.

		INCREASING IMPACT ON THE DECISION				
		INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
PUBLIC PARTICIPATION GOAL		To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
PROMISE TO THE PUBLIC		We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.

Figure 2: spectrum of public participation (IAP2, 2014)



Understanding and trust are central to public participation (Mulder, 2012; Stober et al., 2021). It is crucial that the community is adequately informed about their role in the decision-making process to ensure shared expectations (Mulder, 2012). Insufficient regulation of participation can lead to negative effects such as delays in the project and social unrest. By involving local citizens in the decision-making and development of the project from the start allows for sufficient time for community adaptation to the new project and allows for their input on new ideas. Furthermore, it is vital to maintain citizen involvement in the project by providing them with opportunities to benefit from the project (Mulder, 2012). Figure 3 presents five different stages of the decision cycle and outlines the potential role of citizens. This figure gives a clear representation of the way citizens can be involved throughout the whole decision-making process. By involving citizens at a later stage, valuable opportunities for feedback and collaboration could be missed out by the project developer.



Figure 3: five different stages of the decision cycle and the potential role of citizen participation, (OECD, 2022)

The concept of social licence to operate (SLO) “refers to a more implicit form of agreement between a company and local stakeholders” (Raufflet et al., 2013, p2223-2224). Having a strong licence to operate means that there is community support of the project, so that protest of the local community will be avoided. Possible protest by locals and/or other stakeholders could lead to delay or even premature closure of projects (Vanclay and Hanna, 2019). To achieve a strong SLO, it is important that the (executing) company prioritises transparency, respects the community, tries to limit damage, builds and maintains positive relationships and actively engage and collaborate with the local population, in which mutual trust is crucial (Vanclay et al., 2015). Companies should strive for a strong SLO, since the risks of delays and other project-related risks are minimised by a strong SLO. This also safeguards a company's reputation in emergency situations (Yates and Horvath, 2013). It is essential to not only focus on the legal aspects of the project, but also incorporate SLO to achieve project acceptability of the involved stakeholders and local communities.

## 2.3 Conceptual model

Figure 4 shows the conceptual model of this research. This study will focus on stakeholder engagement in which the participation initiatives as well as the participation processes impact the SLO.

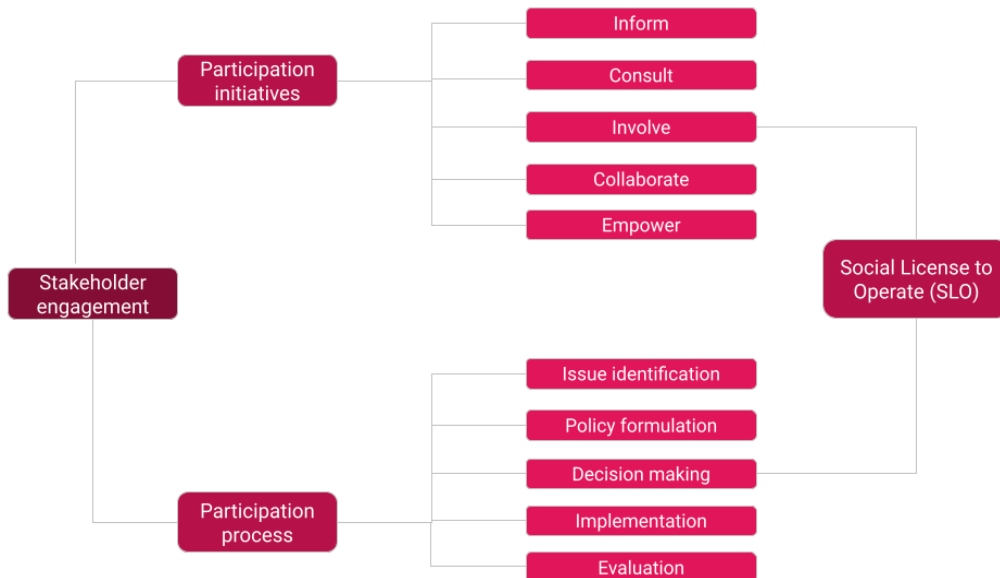


Figure 4: conceptual model of project acceptability of the solar park in Wanneperveen (Author, 2023)

## 3 Hypotheses

It is expected that the perception of public participation by the local community and stakeholders is impacted by their level of involvement and the extent to which their opinions and recommendations are taken into account in the decision-making. The expectation is that the perceptions on the engagement will therefore differ between the citizens, the initiating company and the municipality. Additionally, it is expected that the local community wants to participate earlier and more actively in the decision-making process, since they are often informed at a later stage in the decision-making process. This desire to increase engagement suggests that the village fund can positively influence project acceptability.

## 4 Methodology

### 4.1 Research method

This research will employ qualitative research methods. Qualitative research was chosen, since a dialogue is needed in order to understand the perceptions of the various stakeholders. The use of qualitative research is considered suitable since it facilitates the investigation of experiences and interpretations, both of which are essential for comprehending the complexity of the planning issue. In-depth interviews have been selected, so that the participants' perception on the public participation in the planning and the decision-making process, the stakeholder relations and the participants' perception on how to enhance the public participation can be captured by the researcher.



## 4.2 Data collection

As mentioned earlier, the data has been collected via in-depth interviews. Semi-structured interviews have been conducted, to gain comprehensive insight into the participants' perceptions. Follow-up and understanding questions have been asked in order to get a complete understanding of the participants' perception on the planning situation. The interview guides used in this research are attached in Appendix A. Each stakeholder will count with a tailor-made interview guide to account for the specific interests and roles of the stakeholders. The interviewed stakeholders are: Powerfield, the municipality of Steenwijkerland, Natuurmonumenten and Dorpsbelang Wanneperveen. Additionally, 3 local citizens of Wanneperveen have been interviewed about their personal experiences and perceptions of the construction of the solar park. An overview of the interviewees is given in Table 1.

<b>Label</b>	<b>Interviewee</b>	<b>Their role</b>
I-1	Powerfield	The company Powerfield is the owner of the solar park and the project initiator.
I-2	Municipality Steenwijkerland	The solar park is located in the Municipality of Steenwijkerland and the municipality has its own regulations about renewable energy projects.
I-3	Natuurmonumenten	Natuurmonumenten, the Dutch nature protection organisation, are 'owners' of the nature area located around the solar park and can inform about the possible environmental impacts.
I-4	Dorpsbelang Wanneperveen	Dorpsbelang is the representative of the inhabitants of Wanneperveen. They try to reach a consensus with Powerfield and the municipality.
I-5/I-6	3 inhabitants of Wanneperveen (2 interviews including one with a couple and one with an individual)	The inhabitants of Wanneperveen can inform about their perceptions about the participation processes within the decision-making process and can give suggestions on how to improve the public participation.

*Table 1: overview of the participants*

Although there are other stakeholders involved in the project, this study concentrated on the key stakeholders mentioned in Table 1 since they are crucial in the public participation process. The main stakeholder is Powerfield, as it serves as the primary stakeholder.

### 4.3 Data Analysis

The in-depth interviews have been recorded and transcribed afterwards. The data is analysed in an effective way by using a code scheme and relevant sentences and quotes were assigned to a specific code, resulting in a clear overview of the data by using the Atlas.ti software. This enabled the extraction of significant insights and made it possible to draw conclusions based on the data analysis. Combining inductive and deductive coding methods resulted in the development of the code tree shown in Figure 5, which ensured a thorough code scheme for the analysis of the interview data.

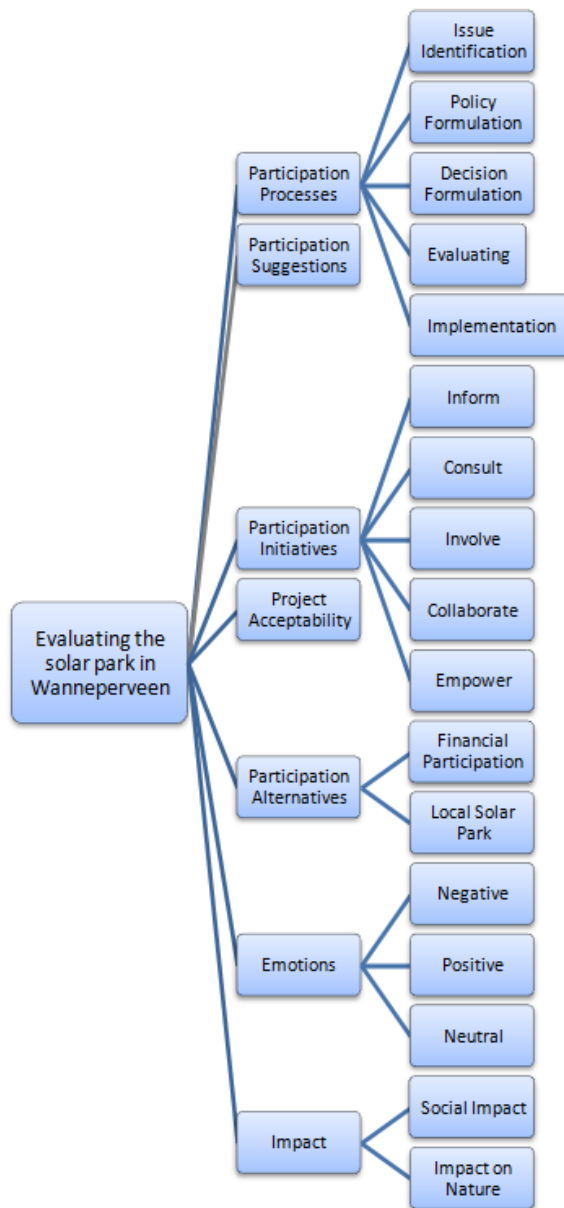


Figure 5: code tree for analysis of the interviews (Author, 2023)

## 4.4 Ethical considerations

Prior to conducting the interviews, a consent form has been handed out to the interviewees (Appendix B). In this consent form the purpose of the research, data analysing and storage and the rights of the participant has been outlined. Additionally, the participants were asked for their consent for recording the interviews. This had several purposes, including being able to confirm the statements of the participants and minimise the risk of misinterpretation. Recordings were also used to generate an accurate transcript of the interview.

## 5. Results

### 5.1 The course of the project

Before delving into the stakeholder relations, an overview of the course of the project is given on the basis of important events. This is presented in Figure 6.

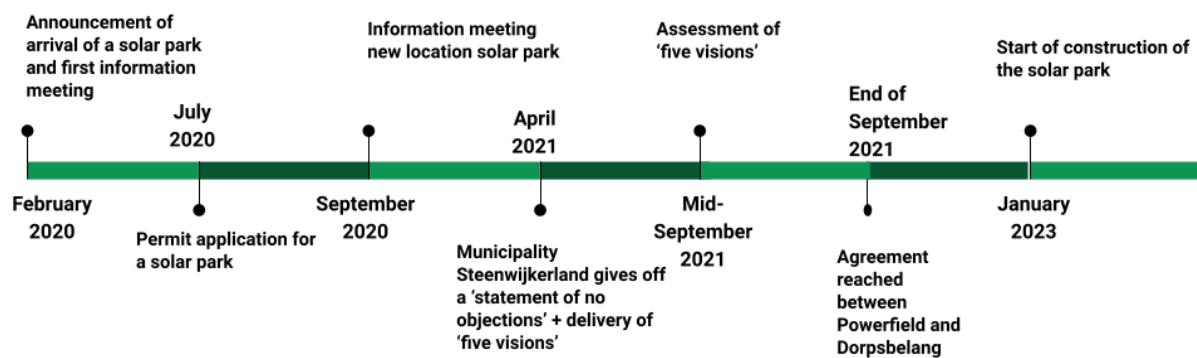


Figure 6: timeline of the construction of the solar park in Wanneperveen (Author, 2023)

In February 2020, Powerfield announced the arrival of a 67 hectares solar park located at the Veneweg in Wanneperveen (location 1), which is situated between Wanneperveen and Giethoorn in the middle of a Natura 2000 area on agricultural land next to a biking lane. An information meeting was organised, on which many citizens expressed their dissatisfaction with the proposed location. Consequently, the owner of the land decided to not subrent his agricultural land, because of the strong opposition (Heppenhuys, 2020; I-1, 2023; I-2, 2023; I-4, 2023)

After this evening, the initiator also indicated the lack of support for location 1. During the same evening, a resident proposed an alternative location, leading to the selection of the current location, location 2 (I-1, 2023).

In July 2020, the initiator applied for a permit for a solar park at location 2. The new location is again on agricultural land and consists of 47 hectares (Powerfield, n.d.). This location is next to a nature area. However, 'Natuurmonumenten' expressed a preference for a solar park over agricultural farmland. They highlighted the potential for increased biodiversity through landscape design and planting, so that insects benefit from this. In addition, the use of slurry, which is a fertiliser made of cow manure, prevents its negative impact on the water system and the surrounding nature reserve (I-3, 2023).

In September the same year, an information meeting was held by the initiator to inform the citizens of Wanneperveen and surrounding area about the revised plans. Again, many citizens of Wanneperveen expressed their discontent (I-4, 2023; I-5, 2023; I-6, 2023). A resident indicated that he had the feeling that the brainstorming phase was already over during this evening and felt no opportunity provided to discuss whether the solar park should be built at all, as the focus was solely on the design of the park.

Dorpsbelang Wanneperveen conducted a survey in which the local citizens could indicate whether they agree or disagree with the arrival of the solar park. 460 citizens of Wanneperveen filled in the survey of which 85% are against the arrival of the solar park (Drost, 2021). Although the results of the survey were recognised by the municipality, they thought the quality was insufficient (I-2, 2023; I-4, 2023; I-5, 2023).

In April 2021 the municipality of Steenwijkerland handed off a statement of no objections for the arrival of the solar park at location 2. After this statement, the municipality received five visions including one from Dorpsbelang Wanneperveen and some others derived from local citizens of Wanneperveen. In this, they expressed their dissatisfaction of the decision-making process, feeling that their opinion did not matter (Heppenhuis, 2021).

However, the municipality indicated they hardly heard any opposition from the local residents of the village itself for the second location, apart from Dorpsbelang's representation, while many residents were against the arrival of the park and even several residents indicated that they themselves have had contact with the municipality. The municipality highlighted that the entire village was not against the solar park. After handing over the results, the municipality indicated that the survey is very limited since it only concerns one question: whether residents were in favour or against the solar park (I-2, 2023; I-4, 2023). The lack of clear guidelines, made the inhabitants of the village feel ignored, and feel that their voice against it is being brushed aside (I-5, 2023). As a result, Dorpsbelang distributed a new survey, including additional questions on participation as well and this one was personally delivered to the municipality by Dorpsbelang (I-4, 2023).

Prior to the permit being officially handed out, work activities started around the designated area. Dorpsbelang immediately contacted Steenwijkerland and they were told that this concerned work for the waterboard. However, it was later revealed that they were constructing energy cables for the solar park. Partly because of this, Dorpsbelang did not feel taken seriously (Drost, 2021b; I-4, 2023).

The council opted to approve the permission for the solar park despite Dorpsbelang's numerous concerns. In response, Dorpsbelang decided to get the most out of it in terms of finances. Mid-September 2021, Steenwijkerland reviewed all the visions and reaffirmed their decision to issue a permit for the arrival of the solar park (Meppeler Courant, 2021). Subsequently, discussion took place between the initiator and Dorpsbelang, in which Dorpsbelang, despite their opposition, still wanted to get the best out of it for the interest of the villagers. After a number of conversations they came to an agreement in which the initiator raised the amount of money for the village fund from 410.000 to 746.000 euro. This money is intended for various associations and projects: five public buildings in Wanneperveen will get solar panels installed on their roofs provided by the initiator. And solar panels will become available at purchase price for the local residents of Wanneperveen (Aardema, 2023; I-2, 2023; I-4, 2023). In January/February 2023 the construction of the solar park began and is expected to be completed in July 2023 (I-4, 2023).

## 5.2 Stakeholder relations

In order to understand the public participation of this process it is essential to get a clear overview of the interrelationships among the different stakeholders involved. This is presented in Figure 7.

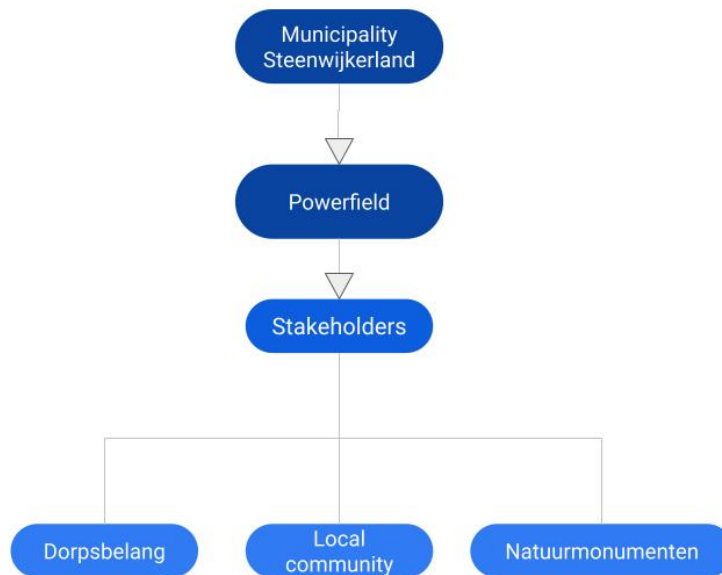


Figure 7: Overview of the stakeholders relations (Author, 2023)

Powerfield must follow the policy, ‘Zon op land’, drawn up by the municipality of Steenwijkerland. Furthermore, the municipality of Steenwijkerland emphasises the initiator's task in engaging the local community for participation (I-2, 2023).

*“We have always consciously said the initiator is on lead for participation, which should coordinate with the local community and say how do you see this and how do we work it into a nice plan...” (I-2,2023).*

Consequently, Powerfield is in contact with a variety of stakeholders, promotes diverse consultations and facilitates the exchange of ideas, such as discussion in the field of landscape integration (I-1, 2023). Simultaneously, the Municipality of Steenwijkerland is involved in discussions with various stakeholders, deciding that Powerfield should be present at these meetings, to keep the process as transparent and the lines short (I-2, 2023).

## 5.3 Public participation

There are many factors influencing stakeholder and community engagement. A high level of stakeholder and community engagement can enhance the quality of the project, limit the resistance and impact the project acceptability, in which community support is key (Bahadorestani et al., 2020). This could be obtained by effective and transparent communication. In analysing the public participation perceptions within this project, the viewpoints of the local community, Dorpsbelang, Powerfield and the municipality of Steenwijkerland will be examined.

### 5.3.1 Participation perceived by local community

First, the perception of the local community is examined in this section. Prior to the information meeting for location 2, residents living in close proximity to the solar park were contacted by the initiator and these locals expressed their support for the project (I-6, 2023; I-1, 2023). However, the local community living in the village feels limited or no involvement in the decision-making process. Information meetings were organised for the entire village, but citizens perceived their participation as minimal, since they were allowed to contribute to an existing plan. The first location was cancelled due to insufficient support, even so the residents were dissatisfied with the second location either. The local inhabitant reflects on the information evening, by describing it as not really participatory:

*“I quite believe that people have tried to involve the population from A to Z in the story, but you do get the idea as a population that the plans are already settled at A.” (I-5, 2023).*

By applying the spectrum of public participation (Figure 2) to the local communities' feelings, the level of participation could be best described as inform. The goal of this level is to provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions. Their promise to the public is to keep them informed.

This is reflected in the perception of the residents of Wanneperveen, since they feel unheard by both the municipality and the initiator. They participated in a survey, but these results were not given serious consideration by the municipality (I-4, 2023; I-5, 2023). Furthermore, there are different opinions regarding the 746,000 euros of which the village fund will consist of. Some citizens perceive it as a bribe to get the solar park there, while others view it as a great opportunity for sustainability in the village, since public buildings in the village will benefit from this. Managing the village fund is challenging since it involves the money of the whole village and everyone wants a say in its allocation (I-4, 2023). Another local expressed a preference for a solar park rather than a wind park and endorsed the solar park proposals as a method to meet sustainability goals (I-6, 2023).

Many residents also indicate their support for the phenomenon of sustainable energy. They would like to participate in discussion about new forms of sustainable energy and how they can contribute themselves via solar panels on their own roof, for example. Their dissatisfaction is mainly due to the chosen location, because the solar park is located on a piece of land in the middle of nature.

*“It is the entrance to Weerribben Wieden National Park and the first thing you see is a solar park.” (I-5, 2023).*



Almost all residents would prefer to see the solar panels in a different location. Options that are proposed by the residents are along the highway or in a noise barrier, in any case not on a piece of land located in the middle of nature.

Examining the decision-making process by using figure 3, it becomes clear that the local community was excluded from step 1,2 and 3. In step 3, citizens collectively decide on the solution, but the solution was already made in this project. The solar park will be implemented and the citizens were included in the cycle at step 4, which is the implementation of the project. By excluding citizens on the previous steps, citizens feel excluded from the entire decision-making process, resulting in strong opposition and discontentment. The lack of transparency and meaningful dialogue in this decision-making process leads to a weak SLO.

### 5.3.2 Public participation Dorpsbelang

Dorpsbelang indicates that it was approached by the initiator and not by the municipality (I-4, 2023). In addition, they acknowledge that the initiator has consistently been open and honest about the progress of the project and has always acted in accordance with the policy ‘Zon op land’.

*“They (the initiating company) have always done everything openly and honestly towards us. They said to us: the municipality has indicated that there is the possibility and we are just going to do that and we are just requesting that.” (I-4, 2023).*

According to Dorpsbelang, they encountered a lack of guidance from the municipality throughout the entire process and did not feel heard by the municipality, citing several reasons for that.

First, Dorpsbelang conducted surveys. After submitting it to the municipality the survey turned out to be of not sufficient quality according to the municipality, since it solely contains a yes/no question. Subsequently, Dorpsbelang conducted a second survey in COVID-19 restrictions, door-to-door, incorporating various questions, including those focused on possible participation in the park and delivered the results personally to the municipality.

Secondly, Dorpsbelang and several residents of Wanneperveen have submitted a vision against the construction of the Zonnepark and Dorpsbelang visited various parties to convey their vision on the project, however the council voted on the arrival of the park, with the majority, 5 members in favour and 3 against, in favour of the construction of the park (Gemeente Steenwijkerland, 2021).

Third, energy cables for the solar park were installed before the permit of the park had been obtained. The municipality was not honest with Dorpsbelang about the construction of energy cables. Dorpsbelang discovered this on their own and therefore felt excluded from the project. From their point of view, the municipality is not transparent to all parties.

*“I am very angry about that because they lied about that, and they said no there is no energy cable coming through (...) then I just went there and asked what are you guys installing and then they said yes power cables for that solar park.” (I-4, 2023)*

Fourth, after conversations between the initiator and Dorpsbelang, a consensus was reached in which Dorpsbelang will receive, among other things, a village fund, which is funded by the initiator. The municipality has expressed the desire to decide where this money is spent. However, Dorpsbelang disagrees with this since they consider it as a fund of the village itself. Although the municipality

stated that the initiator is on lead with participation, the municipality wants control over the village fund which seems contradictory.

The municipality's primary focus is on the legal side of the process, but it is crucial to focus on a strong SLO as well. Currently, from the point of view of Dorpsbelang, there is a lack of transparency, trust, room for dialogue within the process, which can be seen as lack of communication from the different stakeholders towards Dorpsbelang. This indicates a weak SLO, which can lead to protests and the accompanying delays and risks associated with the project. This has in turn, a negative impact on the implementing party, which in this case concerns both the municipality and the initiator. To establish a strong SLO, it is essential that the municipality as well as the initiator allow the process to be open and transparent, prioritising dialogue between the different stakeholders, including the local community.

### 5.3.3 Public Participation Powerfield

As previously mentioned, the municipality of Steenwijkerland has indicated that the initiator is responsible for the participation. The initiator organised information evenings for this project, with the aim to explain the project plan to the residents. Prior to this information evening, contact had already been established with the landowners and the municipality and the local population was informed about the plans during this information evening. The initiator also indicates that now and in the past, they have attempted various approaches to engage the local population in different projects, with the initiator self-stating that they find this process challenging.

*“Let me put it this way, you can never do it right the first time. No not at all.” (I-1, 2023).*

This statement emphasises that, regardless of the approach taken for initial contact with the locals, the initiating company, perceiving to never do it right according to the locals, since the arrival of a solar park always comes as a surprise and it often scares people. The initiator indicates insufficient support for location 1, so a resident suggested searching for a location outside the village. During that information meeting, it was experienced that a significant number of people were in opposition, but there were also people who expressed agreement with the plans.

Considering the spectrum of public participation (Figure 2), this level of participation could be compared to consult. At this level, the goal of participation is to obtain public feedback on analysis, alternatives and/or decisions. The project developer promises to keep the public informed, listen to and acknowledge concerns and aspirations and provide feedback on how public input influences the decision.

Furthermore, benefit sharing possibilities were arranged with Dorpsbelang. The initiator and Dorpsbelang considered various options, ranging from a village solar park, village fund, to making public buildings more sustainable. Ultimately, a consensus was reached whereby the initiator transfers 746,000 euros to a village fund, solar panels become available to the residents of Wanneperveen at the purchase price and a number of public buildings will get solar panels installed at the cost of Powerfield.

Additionally, Powerfield is engaged in conversations with Natuurmonumenten, which provides multiple suggestions for enhancing the area naturally. This could be done by implementing natural banks and by planting nectar-rich plants, to increase the biodiversity. Powerfield expressed satisfaction with the suggestion. However, there was no feedback provided by Powerfield regarding the implementation in practice of these measures (I-3, 2023).

### 5.3.4 Public participation municipality of Steenwijkerland

Steenwijkerland has indicated from the start that Powerfield is responsible for the participation process. They perceive a satisfactory participation process by Powerfield, noting that the initiator has approached more people than officially required. The description of participation that was given by the municipality is:

*“Participation is about how you involve someone in the plan so that you make the maximum possible for everyone. Then I consciously say maximum, because an initiator cannot do everything and a resident cannot demand everything and there must be a balance.” (I-2, 2023).*

However, their policy ‘Zon op land’, does not contain specific statements on public participation. Additionally, the municipality indicates that the residents themselves have not contacted the municipality, only Dorpsbelang has contacted them. However, several residents indicate that they have had contact with the municipality themselves. Furthermore, the municipality clarifies that Dorpsbelang, which is against the park, speaks on behalf of the entire village, while they have also spoken to individuals within Wanneperveen who are in favour of the solar park. In addition, the municipality indicated that the survey, which was conducted by the village interest, is not of high quality. Nevertheless, it has been delivered to the council. The establishment of a village fund is also part of the ‘Zon op land’ policy, which requires that the local area should benefit (financially) from the construction of a solar park.

### 5.4 Suggestions by the local community

One resident expressed the desire to develop a policy in which the municipality, together with various stakeholders and the local residents, explore the possibilities and solutions for the energy transition. They acknowledged that this process would take time. The resident also states that the participation of citizens can be experienced differently by the municipality and the citizens themselves, both aiming for the best outcome.

*“It is the age-old discussion, I think from top to bottom and from bottom to top, the municipalities are allowed to have a feeling; we have fully involved the village and that is a shared story and in the end a decision has to be made and yes yes then someone can disagree or they do while the village experiences it very differently.” (I-5, 2023)*

The residents would also like to be more involved in the project, suggesting the municipality take the lead in the participation process instead of the company, whereby the process also remains transparent and accessible to the locals (I-4, 2023). A local resident highlights this by stating that when the municipality will be on lead in the participation, the local community will be more included in the communication.

*“We, the parliament, the municipality should be leading in a process, because then you will also be fully included in the communication and there it cannot be the case that you are confronted with a story afterwards as it has happened now, because all council reports are in the newspaper that we receive every week, so if you are interested then you can join the conversation.” (I-5, 2023).*

Another suggestion made by a local citizen is to increase awareness among the local community about the RES goals the municipality has to reach. The resident suggested that the municipality can better inform the local communities about these goals and engage in meaningful discussions. This could be done by organising brainstorm sessions or discussions with local citizens, to search together for solutions (I-6, 2023).

Dorpsbelang indicated as well that they want to be involved in the project by the municipality instead of the initiator. Moreover, Dorpsbelang wants to be guided by the municipality through the whole process and not just at the end. They emphasised the importance of increased involvement and communication from the municipality.

*“Look, I had hoped from the beginning, if I had been the municipality, I would have guided it from the beginning” (I-4, 2023).*

The municipality of Steenwijkerland has acknowledged in the revised version of ‘Zon op land’, which is currently being circulated as a draft, the need for a clear description of the participation process that must be followed. This is an improvement on the current policy (I-2, 2023).

## 6 Conclusion/Discussion

This research aimed to investigate stakeholder and community engagement, with particular focus on the public participation perceived by the different stakeholders, during the implementation of the solar park in Wanneperveen. The various perspectives of the stakeholders differed significantly. From the perspective of the local community and Dorpsbelang, the public participation was considered weak, as they only felt included in the process via information meetings and felt excluded from the decision-making process. They experienced a lack of transparency attributed to the municipality. However, from the perspective of the municipality Steenwijkerland and the initiating company, the public participation was perceived as successful. This divergence in perceptions could be caused by poor cooperation and communication from the municipality of Steenwijkerland and the initiator on the one hand to the local community and Dorpsbelang on the other.

By linking this back to the spectrum of participation, the public participation could be enhanced by implementing an increasing impact on the decision by the local community. Instead of inform or consult, what happened in this case, the engagement of the local community could be improved through involve, collaborate or even empower. In this way, the locals’ perspectives on the project are considered by making the local community the final decision makers, with the municipality or initiator committing the implementation of the decisions made by the local community. The interviews also indicated that the local community desires to be involved in the whole process and seeks more openness and transparency of the process. The local community could be informed in an earlier stage about the climate goals the municipality has to reach, and open discussions could contribute to finding local solutions to achieve these goals. Furthermore, it is suggested by the local community that the municipality, rather than testing the policy, should play an active role in the project. This could be done by involving local residents and by actively guiding the project instead of handing the participation over to the initiating company in order to increase the public support.

The new Omgevingswet, which will go into force in 2024, grants businesses the option to choose how to involve stakeholders. Consequently, the same issue will persist, namely that the municipality is still not in charge of stakeholder participation, with the company making all final decisions regarding the engagement process. This poses a risk and conflicts with the recommendations

made by the local community. A future study is recommended on the potential risks associated with this new Omgevingswet.

Public support is highly important in order to complete the project in a successful manner. Public opinions can have both a positive as well as negative impact on the SLO. Improving the public participation process can have a positive impact on the SLO in which possible delays caused by protest are kept to a minimum as well as other risks related to the project which benefits the executing company (Yates and Horvath, 2013). Furthermore, other factors that contributed to the project acceptability include the increased natural value of the project area compared to the agricultural land and the establishment of the village fund. In this way, the village has the budget to set up sustainable projects. However, the amount of money made available for the village fund was significantly raised after protest by Dorpsbelang and the local community. This is also pointed out by a study of Vanclay and Hanna (2019), stating that community protest leads to better impact assessment and mitigation measures.

This research was conducted in the village where the researcher resides, which is both an advantage as well as a disadvantage. An advantage was that the local people were easy to contact and willing to participate in the interviews. However, a disadvantage could be that the researcher may have some preconception about the project. Efforts were made to distance one from these preconceptions.

Although statements were made about the entire population of Wanneperveen, there have only been two interviews conducted with local residents and Dorpsbelang. The power of the results could be enhanced by conducting additional interviews. However the number of interviews conducted was the maximum within the timeframe of the study.

## References

- Aardema, W. (2023). *Zonnepark verrijst aan Zomerdijk tussen Wanneperveen en Meppel*. [online] Steenwijker Courant. Available at: <https://steenwijkercourant.nl/steenwijkerland/Zonnepark-verrijst-aan-Zomerdijk-28227172.html> [Accessed 18 Mar. 2023].
- Bahadorestani, A., Naderpajouh, N. and Sadiq, R. (2020). Planning for sustainable stakeholder engagement based on the assessment of conflicting interests in projects. *Journal of Cleaner Production*, 242, p.118402. doi:<https://doi.org/10.1016/j.jclepro.2019.118402>.
- Drost, A. (2021a). *Uit een nieuwe enquête in Wanneperveen blijkt nogmaals: er is geen draagvlak voor een zonnepark. 'Ze praten vóór ons'*. [online] Steenwijker Courant. Available at: <https://steenwijkercourant.nl/steenwijkerland/Uit-een-nieuwe-enqu%C3%A4te-in-Wanneperveen-blijkt-nogmaals-er-is-geen-draagvlak-voor-een-zonnepark.-Ze-praten-v%C3%B3%C3%B3r-ons-26875876.html> [Accessed 18 Mar. 2023].
- Drost, A. (2021b). *Van Meppel tot Wanneperveen worden stroomkabels aangelegd, voor een zonnepark. Maar hoe zit het eigenlijk met de vergunning voor dat park? 'Aanleg kabels op eigen risico'*. [online] Steenwijker Courant. Available at: <https://steenwijkercourant.nl/steenwijkerland/Van-Meppel-tot-Wanneperveen-woorden-stroomkabels-aangelegd-voor-een-zonnepark.-Maar-hoe-zit-het-eigenlijk-met-de-vergunning-voor-dat-park-Aanleg-kabels-op-eigen-risico-26904581.html> [Accessed 18 Mar. 2023].
- Gemeente Steenwijkerland (2019). *Beleidskader Ruimte voor zonnepanelen op (Steenwijker)land*.
- Gemeente Steenwijkerland (2021). *Raadsvergadering*. [online] Royalcast.com. Available at: <https://channel.royalcast.com/steenwijkerland/#> [Accessed 5 Jun. 2023].
- Heppenhuis, M. (2020). *Boer Dingstee trekt stekker uit zonnepark Wanneperveen na weerstand uit dorp: 'Geen goed gevoel hierbij'*. [online] de Stentor. Available at: <https://www.destentor.nl/kop-van-overijssel/boer-dingstee-trekt-stekker-uit-zonnepark-wanneperveen-na-weerstand-uit-dorp-geen-goed-gevoel-hierbij~a258884b/> [Accessed 18 Mar. 2023].



Heppenhuis, M. (2021). *Dorpsbelang kwaad omdat gemeente toch zonnepark wil in Wanneperveen: 'Het wordt gewoon doorgedrukt'*. [online] de Stentor. Available at: <https://www.destentor.nl/kop-van-overijssel/dorpsbelang-kwaad-omdat-gemeente-toch-zonnepark-wil-in-wanneperveen-het-wordt-gewoon-doorgedrukt~af43db29/> [Accessed 18 Mar. 2023].

International Association for Public Participation (IAP2) (2014). *IAP2's Public Participation Spectrum*. [online] Available at: [https://iap2.org.au/wp-content/uploads/2019/07/IAP2\\_Public\\_Participation\\_Spectrum.pdf](https://iap2.org.au/wp-content/uploads/2019/07/IAP2_Public_Participation_Spectrum.pdf) [Accessed 12 Mar. 2023].

International Association for Public Participation (IAP2) (2015). *Quality Assurance Standard For Community and Stakeholder Engagement*.

Meppeler Courant (2021). *Politiek buigt zich opnieuw over plan zonnepark bij Wanneperveen; College wijst bezwaren af*. [online] Meppeler Courant. Available at: <https://meppelercourant.nl/regio/Politiek-buigt-zich-opnieuw-over-plan-zonnepark-bij-Wanneperveen-College-wijst-bezwaren-af-27039544.html> [Accessed 18 Mar. 2023].

Mulder, K. (2012). Community participation in deciding on local renewable energy projects. *20th European Round Table on Sustainable Consumption and Production Graz, Austria*. doi:<https://doi.org/10.3217/978-3-85125-842-4-42>.

Natuurmonumenten (n.d.). *Waar we voor staan*. [online] Natuurmonumenten. Available at: <https://www.natuurmonumenten.nl/waar-we-voor-staan> [Accessed 25 Mar. 2023].

OECD (2022), OECD Guidelines for Citizen Participation Processes, OECD Public Governance Reviews, OECD Publishing, Paris, <https://doi.org/10.1787/f765caf6-en>

Peuchen, R., Gamboa Palacios, S. and Dreijerink, L. (2019). *Public support and public participation in land based photovoltaic solar parks in the Netherlands*.

Powerfield (2021). *proces en deelname Zonnepark Zomerdijk Wanneperveen*.

Powerfield (n.d.). *Zonnepark Wanneperveen*. [online] PowerField. Available at: <https://www.powerfield.nl/locatie/zonnepark-wanneperveen/> [Accessed 18 Mar. 2023].

Raufflet, E., Baba, S., Perras, C. and Delannon, N. (2013). Social License. *Encyclopedia of Corporate Social Responsibility*, [online] pp.2223–2230.  
doi:[https://doi.org/10.1007/978-3-642-28036-8\\_77](https://doi.org/10.1007/978-3-642-28036-8_77).

RES (n.d.). *Wat is de Regionale Energie Strategie (RES)?* [online] Nationaal Programma Regionale Energie Strategie. Available at:  
<https://www.regionale-energiestrategie.nl/vragen/vragen+-+algemeen+res/1275417.aspx>  
[Accessed 5 Mar. 2023].

Stober, D., Suškevičs, M., Eiter, S., Müller, S., Martinát, S. and Buchecker, M. (2021). What is the quality of participatory renewable energy planning in Europe? A comparative analysis of innovative practices in 25 projects. *Energy Research & Social Science*, 71, p.101804.  
doi:<https://doi.org/10.1016/j.erss.2020.101804>.

Vanclay, F., Esteves, A. M., Aucamp, I., & Franks, D. (2015). *Social Impact Assessment: Guidance for assessing and managing the social impacts of projects*. Fargo ND: International Association for Impact Assessment.

Vanclay and Hanna (2019). Conceptualizing Company Response to Community Protest: Principles to Achieve a Social License to Operate. *Land*, 8(6), p.101.  
doi:<https://doi.org/10.3390/land8060101>.

van den Berg, K. and Tempels, B. (2022). The role of community benefits in community acceptance of multifunctional solar farms in the Netherlands. *Land Use Policy*, 122, p.106344. doi:<https://doi.org/10.1016/j.landusepol.2022.106344>.

Yates, B. and Horvath, C. (2013). *Social License to Operate: How to Get It, and How to Keep It*.

## Appendix A: Interview guide

### Interview guide Powerfield

Welcome:

Introducing yourself

Explain where the research is about

Ask for a short introduction of the participant

Discuss the recording

Role of the stakeholder:

- How did you get involved in this project?
- What was your role during the solar park project?
- From which point were you involved in the project?
- Why did you choose this location?
- How did the collaboration go with the other stakeholders?
- Did you encounter any problems during the project?
- If yes, what kind of problems?

Public participation

- How was public participation considered?
- What was the opinion of the local community?
- How did you get aware of these public opinions?
- How did you involve them? And in what phase was this?
- What input by the local community did you consider?
  
- If there is a project like this again, what would you do differently?

Project questions

- I've found some information about the rise of the groundwater level resulting in the lands no longer suitable for agriculture. What will be the effect of the groundwater rise on the solar park?
- After the agreement with Dorpsbelang the amount of money available for the village fund went up, public buildings will get solar panels and solar panels available for the purchase price (kostprijs) for the inhabitants. How does this work/ How is this arranged?

Conclusion

- Do you have any questions for me?
- How did you experience this interview and do you have any suggestions or feedback for me?
- Thank you for participating in this interview.

## Interview guide municipality of Steenwijkerland

Welcome:

Introducing yourself

Explain where the research is about

Ask for a short introduction of the participant

Discuss the recording

Role of the stakeholder:

- How did you get involved in this project?
- What was your role during the solar park project?
- From which point were you involved in the project?
- How did the collaboration go with the other stakeholders?
- Did you encounter any problems during the project?
- If yes, what kind of problems?
- Steenwijkerland follows their own 'zonneladder' in which first the roofs of the houses will get solar panels and then solar parks on land will be built. Why has there been chosen in this case to first use land for solar panels instead of roofs? (Since the local community wants to have solar panels on their roofs instead of on this piece of land)
- What are the interests of the municipality Steenwijkerland of this solar park?

Public participation

- How was public participation considered?
- What was the opinion of the local community?
- How did you get aware of these public opinions?
- How did you involve them? And in what phase was this?
- What input by the local community did you consider?
  
- If there is a project like this again, what would you do differently?

Conclusion

- Do you have any questions for me?
- How did you experience this interview and do you have any suggestions or feedback for me?
- Thank you for participating in this interview.

## Interview guide Natuurmonumenten

Welcome:

Introducing yourself

Explain where the research is about

Ask for a short introduction of the participant

Discuss the recording

Role of the stakeholder:

- How did you get involved in this project?
- From which point were you involved in the project?
- What was your role during the solar park project?
- How did the collaboration go with the other stakeholders?
  
- How is nature impacted by the arrival of the solar park? (biodiversity, animals, nature)
- The solar park is in close proximity to the Natura 2000 area, does the solar park have an impact on this area as well?
- I read that there was a forest plot in the middle of the solar park area, of which Natuurmonumenten is the owner and that there were conversations going on about maybe moving this to another place, could you explain how this exactly works?
- The solar park is planned to be there for the upcoming 25 years, what impact does this have on the land/nature?
- Did you take part in conversations about the nature friendly banks?
- What is your opinion about the arrival of the solar park?

Conclusion

- Do you have any questions for me?
- How did you experience this interview and do you have any suggestions or feedback for me?
- Thank you for participating in this interview.

## Interview guide Dorpsbelang

Welcome:

Introducing yourself

Explain where the research is about

Ask for a short introduction of the participant

Discuss the recording

Role of the stakeholder:

- How did you get involved in this project?
- What was your role during the solar park project?
- From which point were you involved in the project?
- How did the collaboration go with the other stakeholders?
- Did you encounter any problems during the project?
- If yes, what kind of problems?

Public participation

- How was public participation considered?
- What was the opinion of the local community?
- How did you get aware of these public opinions?
- How did you involve them? And in what phase was this?
- What input by the local community did you consider?
- What were the main concerns of the local community?
- How would you describe the decision-making process?
  
- If there is a project like this again, what would you do differently?

Conclusion

- Do you have any questions for me?
- How did you experience this interview and do you have any suggestions or feedback for me?
- Thank you for participating in this interview.



## Interview guide local community

Welcome:

Introducing yourself

Explain where the research is about

Ask for a short introduction of the participant

Discuss the recording

### Public participation

- How would you describe the public participation in the project of the solar park?
- When did you get involved? And how?
- What do you think about the solar park? And why?
- Which problems do you encounter?
- Did you feel heard by the main stakeholders (Powerfield, Steenwijkerland)?
- How do you want to see the public participation in future projects like these?
- From which phase did you want to get involved and how?

### Reflection on the communication

- How were the impacts of the solar park communicated by the main stakeholders?
- Now the construction of the solar park has started and is almost finished. How did you experience these communicated impacts?
- What does the solar park look like? Do you have the same opinion about the solar park before it was built and after?

### Conclusion

- Do you have any questions for me?
- How did you experience this interview and do you have any suggestions or feedback for me?
- Thank you for participating in this interview.

## Appendix B: Consent form

Researcher: Leonie Heidema

Contact: [l.j.heidema@student.rug.nl](mailto:l.j.heidema@student.rug.nl)

Bachelor Thesis; Human Geography & Planning

Rijksuniversiteit Groningen

Topic: Analysing the community and stakeholder engagement of the realisation of the solar park in Wanneperveen, The Netherlands

Dear Sir/Madam,

First of all I would like to thank you for participating in this interview. This interview will contribute to better insights into the stakeholder/community engagement within the planning project, solar park in Wanneperveen. This letter will inform you about the ethical considerations of this interview.

There will be an audio recording of this interview, which will be transcribed. The transcript will be used to analyse the outcomes of the interview. If you would like to, you have the opportunity to check the transcript of our interview and correct it when necessary. After this research is finished, the audio will be deleted. The other data will be stored on a laptop which will be secured with a password. Furthermore, my thesis will be included in the archive of the university of Groningen.

By signing this agreement, I declare that:

- I have read and understood this letter.
- I understand that participation in this study is voluntary and I have the right to not answer specific questions.
- I understand that the information will be treated confidentially.
- I understand that the data resulting from the interview can be used for academic purposes and that it will be included in the RUG archive.

Participant signature: \_\_\_\_\_

Participant name: \_\_\_\_\_

Date: \_\_\_\_\_

Please answer the following question by circling “YES” or “NO”:

1. I agree that my interview will be recorded (audio). YES/NO