



Citizen Participation in the Regional Energy Strategy: Conditions for Social Acceptance

Aniek Derksen

**Master thesis in completion of the Master European Spatial & Environmental Planning
Radboud University
Nijmegen School of Management**

May 2021

Colophon

Title: Citizen Participation in the Regional Energy Strategy: Conditions for Social Acceptance

Author: Aniek Derksen

Student number: S4790553

Submission date: 26th of May 2021

University: Radboud University, Nijmegen School of Management

Supervisor: Arnoud Lagendijk

Internship: Province of Utrecht

Supervisor: Eginhard Rot and Wijnand Jonkers



PROVINCIE  UTRECHT



Radboud Universiteit Nijmegen

Preface

My master thesis is the completion of my master's degree in Spatial Planning at the Radboud University Nijmegen, specializing in European Spatial and Environmental Planning. The thesis is about citizen participation in the Regional Energy Strategy and is carried out by order of the province of Utrecht. The past two years as a student have fuelled my interest in the involvement of citizens in the energy transition, and particularly in the Regional Energy Strategy. The Regional Energy Strategy describes the possibilities for solar and wind energy in the Netherlands. I have read many news articles about social opposition against windmills. This made me curious about how people are involved in the process of finding locations for windmills and solar fields.

I would like to thank several people who were important during the research and writing process. Firstly, I would like to thank my supervisor at the Radboud University, Arnoud Lagendijk. His feedback helped me to be critical about my work and stimulated me to think about his viewpoints and remarks. He answered all my questions, and our conversations were really helpful. He had his own online office where we discussed my work and questions. Moreover, it was nice that Arnoud Lagendijk gave positive feedback which helped me to keep confidence in the writing process.

Secondly, I want to thank my colleagues of the province of Utrecht. Particularly, my colleagues Eginhard Rot, Ruben van der Belt, and Wijnand Jonkers. In the first month of the internship, I had much contact with Ruben van der Belt. He had much knowledge, was helpful, and involved me in many activities. Since the end of December 2020, I had much contact with Wijnand Jonkers, who is the successor of Ruben. He helped me to develop a digital infographic about the results and he was always willing to listen to my questions and to discuss my findings. His knowledge had an added value for the research. Eginhard Rot was involved in the whole writing process and helped me with specifying the research. His questions and feedback supported the research. We had good contact and he was always interested in the progress of my research. It felt really good that the colleagues of the province of Utrecht appreciated my work and gave me so many opportunities. It was really interesting to be part of the province of Utrecht for seven months and I enjoyed the internship. I also want to thank my colleagues who work for the municipalities of the Kromme Rijn area. From September 2020 until March 2021, I worked closely with Jelger Takken, Wieneke Wolthuis, and Marjolijn van Someren to organize citizen participation for the Regional Energy Strategy. They supported me and gave me many opportunities to contribute to organizing citizen participation for the RES. I enjoyed working together and I learned a lot from these people.

Then, I want to thank Bianca Wesseling for developing a digital infographic about my findings from the interviews. She helped me to structure all the collected data in a clear infographic. It was nice to work together, and I am proud of the final product.

Finally, I would like to thank all the interviewees from the municipalities of the Energy Regions Amersfoort, Foodvalley, and U16. I liked the interesting conversations and it felt really good that the interviewees were all positive and interested in the research.

Enjoy reading!

Aniek Derksen

Summary

'Citizen participation leads to positive things if you do it in the right way. It is the task of the municipality to organize it properly.'

Municipality of Vijfheerenlanden, 2020 [11;38]

To implement the goals of the Paris Agreement, the Dutch Government presented an instrument, the Regional Energy Strategy (RES). The Netherlands is divided into 30 energy regions and each region is responsible to develop a RES. According to NP-RES (2019), social acceptance and support are necessary to implement the RES, and therefore energy regions are obliged to involve citizens and stakeholders in the RES-process. From the start of the RES-process at the end of 2019 until April 2021, energy regions and municipalities organized citizen participation for the RES. It is the question which conditions of this process influence social acceptance of the RES. This study focused on the local citizen participation processes in the Energy Region U16. The research has been conducted by order of the province of Utrecht, who wanted to gain insight into the local citizen participation processes for the RES. The research aimed to contribute to the knowledge about which conditions of the citizen participation process for the RES influence social acceptance of the RES. Moreover, this study aimed to explore the dilemmas municipalities face in the participation process for the RES. The central question in this research was: *'How do municipalities in the Energy Region U16 organize local citizen participation processes for the RES, and which conditions influence social acceptance of the RES?'*

The research had a case study design and used several qualitative methods to collect the data of this research, namely participant observation, interviews, and document analysis. In total 27 people were interviewed, particularly employees from the municipalities which belong to the province of Utrecht. The data from the interviews were supplemented with observations during the participation process of the Kromme Rijn area and an analysis of several published participation reports.

The results show that Multi-level and Collaborative Governance characterize the RES-process. Every municipality in the Energy Region U16 is responsible for organizing citizen participation for the RES. This means that the local level gained much power in the RES-process which is one important element of Multi-level Governance. On top of that, multiple governmental authorities (the Dutch Government, the province of Utrecht, the Energy Region U16, and the local government) are involved in the RES-process and face the process from their perspective. As a consequence, weak central policy and differentiated perspectives characterize the RES-process. Next, almost all municipalities had the same participation goals in the same phases of the RES-process. In the first phase towards the Draft-RES, municipalities had low ambitions regarding citizen participation and focused on informing inhabitants. In the phase towards RES 1.0, municipalities had higher ambitions and focused on consulting, advising, and co-producing. It is possible to conclude that the RES-process started with much abstractness and ended with more concrete ideas about possibilities for solar fields and windmills. Then, Collaborative Governance refers to the collaborative process between the local government and the local community. In other words, it points at the way the local community is involved in the RES-process. There are many similarities between the organized participation processes for the RES. Municipalities organized open participation activities, used multiple communication tools, and invited lay stakeholders and technical experts to get an inclusive group of people. Digital communication tools played an important role in the participation processes for the RES, because through this way municipalities were able to reach an expanded group of people in a short time. All municipalities used different communication tools to inform and invite citizens and stakeholders in the RES-process. However, reaching an inclusive group of people was challenging for all municipalities. Next, municipalities used the same digital participation methods (mostly digital

surveys, digital sessions, and webinars) to organize the dialogue, whereby some municipalities distinguished themselves by organizing work ateliers in small groups. Due to COVID-19 and time pressure on the process, most municipalities were forced to organize digital participation. There are many intensity differences between the organized participation activities because some municipalities organized more than five participation activities while others organized just two participation activities. During the dialogue, municipalities tried to find the right balance between the interests of the participants and collaborated with technical experts and lay stakeholders. Then, the findings show that participants had an administrative and societal impact by participating in the RES-process. The administrative impact was reached because municipalities tried to process all opinions and ideas into a report which can be used by the local council to determine the RES. The societal impact was reached because people were more empowered by participating in the RES-process. Lastly, all municipalities put much attention to process transparency and clear ground rules. Municipalities published the outcomes of the participation processes online and tried to set clear frameworks for participants. However, municipalities experienced issues to limit the number of participants and organizing sufficient time to deliberate.

Municipalities differ in several things, and these differences had an impact on the organized participation processes for the RES. Municipalities differ in capacity, leadership qualities, landscapes (urban/rural), technical and legal possibilities, past experiences in the energy transition and participation, and local councils. These differences affect regional collaboration between the municipalities.

Based on the findings, this research indicated which conditions of the citizen participation process influence social acceptance of the RES. This can be described in three types of conditions. Firstly, there are some conditions related to the Multi-level Governance framework of the RES-process. Through weak central policy and differentiated perspectives on the RES, there were some coordinative problems. The differences between municipalities caused some tensions between the municipalities which influenced regional collaboration. This made the RES-process more complex and sometimes not understandable for inhabitants. Secondly, there are some conditions related to the collaborative process between the local government and the local community. Municipalities often did not reach an inclusive group of people because there is still a large group of people who do not see the urgency of the problem. Then municipalities tried to organize a dialogue but in many organized dialogues some crucial aspects were missing. Municipalities faced difficulties to organize an open discussion with sufficient time to deliberate. Furthermore, municipalities often did not reach a final consensus and experienced problems with building trust, shared understanding, and mutual respect. Participants criticized the information exchange and preferred more time to deliberate. Then, many participants are concerned about the democratic legitimacy of the RES and doubt if they have an impact on the final decision. Finally, there are some conditions that were not included in the literature review of this research. The findings show that social acceptance is influenced by the different identities of municipalities that are part of the regional collaboration. Respect, values, and feelings are important factors that influence social acceptance.

It would be good if municipalities try to be more open and transparent, organize more dialogue between proponents and opponents in small groups with much time to deliberate, and take time to raise awareness and understanding. From the perspective of the province of Utrecht, it would be good to bring the different municipalities of the Energy Region U16 together, to support municipalities with little capacity, and to help municipalities with raising awareness and understanding.

Table of content

Colophon	2
Preface	3
Summary	4
1. Introduction to the research	8
1.1. Research problem statement	8
1.2. Research aim	9
1.3. Research question	10
1.4. Scientific and Societal Relevance	11
1.5. Thesis outline	12
2. Context and background	13
3. Theoretical framework	17
3.1. Energy transition	17
3.2. Governance	17
3.2.1. Multi-level Governance	17
3.2.2. Collaborative Governance	18
3.3. Social acceptance	23
3.4. Actors	25
3.5. Conceptual framework	27
4. Methodology	28
4.1. Research strategy	28
4.1.1. Qualitative research	28
4.1.2. Case study	28
4.2. Research philosophy	29
4.2.1. Interpretivism	29
4.2.2. Pragmatism	30
4.3. Research methods: data collection, data analysis, and operationalization	30
4.3.1. Data collection	31
4.3.2. Operationalization	37
4.3.3. Data analysis	39
4.4. Reliability and validity	40
4.4.1. Reliability	40
4.4.2. Validity	40
5. Data analysis	41
5.1. Actors and differences	41

5.2. Multi-level Governance	53
5.3. Collaborative Governance	54
5.4. Institutional design	64
5.5. Social acceptance	65
6. Conclusion	71
7. Discussion.....	80
7.1. Reflection	80
7.2. Policy advice	82
7.3. Recommendations for further research	85
8. References.....	86
9. Appendixes.....	95
Appendix 1: Interview guide	95

1. Introduction to the research

This chapter outlines an introduction to this research. It starts by explaining the problem indication on which this research is based. Then, this chapter addresses the research aim and the research questions. The next section describes the societal and scientific relevance of the research. The last section provides a reading guide for this research.

1.1. Research problem statement

On the 28th of June 2019, the Dutch cabinet published the 'Climate Agreement'. This document is the Dutch elaboration of the international agreements which were made in Paris 2015. One of the agreements is CO2 reduction: in 2030 they would like to reduce the CO2 emissions by 49% relative to 1990. The national goal is to produce 35 TWh before 2030. To implement the goals of the Paris Agreement, Dutch administrations presented an instrument: The Regional Energy Strategy (RES). According to the National Program Regional Energy Strategy (NP-RES), it is important to focus on the regional level to achieve the energy goals. Therefore, the Netherlands is divided into 30 energy regions. Each region has to develop a supported RES. An energy region is a new Regional Governance Structure that contributes to achieving the Dutch energy transition. Jointly supported choices for energy transition policy can be achieved by collaboration between several stakeholders in the region, the inhabitants, energy companies, and governmental organizations (NP-RES, 2019). On the one hand, the RES is a process. It is a way to organize long-term cooperation between all regional parties. On the other hand, the Regional Energy Strategy is a product. The RES has to give insight into (NP-RES, 2019):

- The possibilities for a regional production of renewable energy and savings.
- The possibilities translated to concrete places in the living environment, projects, and planning.
- Coordination regarding the heat sources.
- The consequences for the storage- and energy infrastructure.
- The realized projects and plans.

NP-RES (2019) argues that social acceptance and support of the RES-process and RES-product are important conditions to implement the RES in society (Figure 1). There are several important reasons for this. Firstly, the possibilities for the production of renewable energy have to be translated into concrete places and plans. However, space in the Netherlands is scarce. Many functions, challenges, and interests ask for space (NP-RES, 2019). Therefore, choices in the RES have to be made in conjunction with the interests of included stakeholders. Secondly, the choices in the RES influence the life of all people in the Netherlands. The choices in the RES have a direct influence on the living environment of inhabitants. For this reason, social acceptance and support are necessary to implement the RES in the Netherlands. However, Wolsink (2012) mentions that ongoing problems with the deployment of renewable energy have shown that implementation is largely

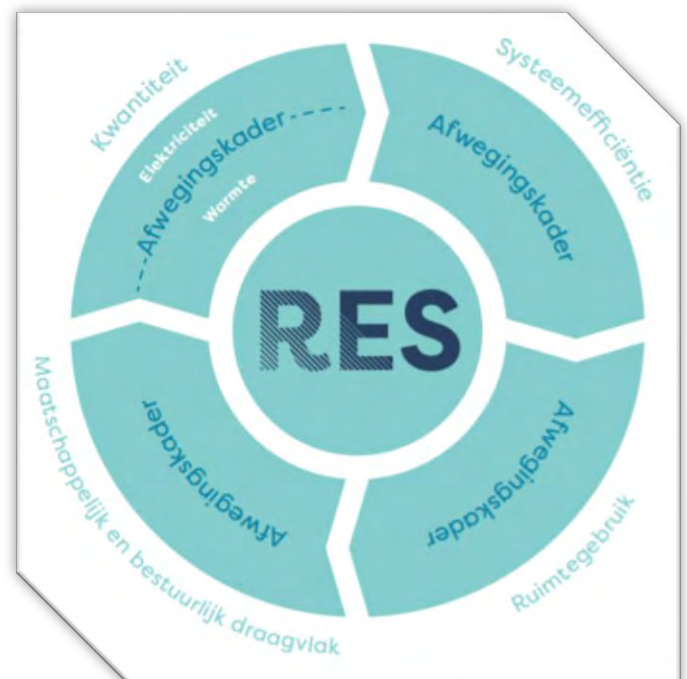


Figure 1: Four important elements of the RES (NP RES, 2019)

determined by broad social acceptance issues. The already existing resistance against renewable energy projects makes it even more important to give attention to social acceptance (Wolsink, 2012). Curtin et al. (2019) have pointed at citizen participation as a potential lever to increase social acceptance for the RES. Citizen participation contributes to realizing social acceptance for the choices which have to be made in the RES (Curtin et al., 2019). NP-RES (2019) acknowledged the importance of involving citizens and stakeholders in the RES-process and emphasized that citizen participation improves the quality of the RES because inhabitants, societal organizations, and market parties have local and regional knowledge. Therefore, NP-RES (2019) obliges the energy regions to give content to citizen participation in the RES-process. The RES product describes to what extent and how inhabitants, societal organizations, and market parties are involved in the process. The guidelines of NP-RES (2019) determine that the Dutch municipalities are responsible for the involvement of citizens in the RES-process. Municipalities have to coordinate their citizen participation process.

So, within the Regional Governance Structure of the RES, the local government has more tasks and responsibilities concerning the implementation of climate policy (Vringer, De Vries & Visser, 2021). These tasks include the involvement of citizens and stakeholders in the RES-process to achieve a supportive RES. Vringer et al. (2021) argued that it is unclear whether the Dutch local governments have enough governing capacity to fulfill the task of organizing citizen participation for the RES and thus can formulate and implement new policies successfully. Furthermore, there is still less empirical evidence about how the Dutch municipalities included citizens and stakeholders in the RES-process. Lastly, it is not yet investigated to what extent citizen participation in the RES-process influences social acceptance of the RES. Wolsink (2012) and Flacke & Boer (2017) mentioned that there is strong opposition from individual citizens towards renewable energy policy. Therefore, it is important to investigate which conditions of the citizen participation process influence social acceptance of the RES.

This research investigates how local citizen participation processes in the Regional Governance Structure of the RES are organized by focusing on one of the energy regions in the Netherlands: U16. The focus in this is on which conditions of the participation process in the Regional Governance Structure of the RES influence social acceptance of the RES.

1.2. Research aim

The research aim can be divided into two parts. Firstly, the research has some practical aims. The research is carried out by order of the province of Utrecht. In the province of Utrecht, there are three energy regions: Amersfoort, Foodvalley, and U16 (Figure 2). Each energy region develops a RES. The province of Utrecht wants to contribute actively to the development and implementation of the RES and wants to support municipalities in organizing citizen participation for the RES. The province stimulates knowledge sharing, participation, cooperation, and collaboration (Provincie Utrecht, 2019). To support municipalities in this process it is important to get insight into the organized participation processes and the related issues. Moreover, the Provincial States of the province desire to get an overview of the participation processes for the RES in the province of Utrecht. The involvement of citizens and stakeholders is an important requirement for the Provincial States to implement the RES. Therefore, this research aims to get insight into the organized participation

processes for the RES in the province of Utrecht and the related issues. This means that this research contributes to the active role of the province of Utrecht in the Dutch energy transition.



Figure 2: Energy Regions in the province of Utrecht: Amersfoort, Foodvalley, U16 (Provincie Utrecht, 2020)

Then, this research has some theoretical aims. The RES has gained much attention as an instrument to achieve the goals of the Climate Agreement. NP-RES (2019) emphasized the importance of involving citizens in the RES-process to get a supported and accepted RES. Several studies have shown that citizen participation, access to information, and trustworthiness of decision-makers are important factors affecting social acceptance (Petrova, 2016; Brody, 2006). Folke et al. (2005) also mentioned that social acceptance is one of the central elements of policy development and implementation. Therefore, the participation of citizens in the energy transition gained interests in the policy domain and the academic world. This research aims to contribute to the theory about which conditions in local citizen participation processes influence social acceptance of the process and outcomes. Moreover, citizen participation for the RES raises questions about the governing capacity of the Regional Governance design and the municipalities to organize citizen participation (Vringer et al., 2021). Therefore, this research aims to get insight into the governing capacity of both the Energy Region U16 and the involved municipalities to organize citizen participation for the RES.

1.3. Research question

The following research question is central in this research:

‘How do municipalities in the Energy Region U16 organize local citizen participation processes for the RES, and which conditions influence social acceptance of the RES?’

This question is divided into several sub-questions:

1. How do municipalities involve citizens in the RES-process?
2. How can the local citizen participation processes be described, given the ambitions of the municipalities?

3. What is the influence of the governance structure of the RES-process on the local citizen participation processes?
4. Which conditions of the citizen participation process influence social acceptance of the process and outcomes?

1.4. Scientific and Societal Relevance

Scientific relevance

Over the past 20 years, citizen participation has become a keystone of many different sectors of policy and decision making, encompassing the environment and sustainable development, science and technology, spatial planning, and more recently climate change (Devine-Wright, 2011). Empirical analysis has shown that the way how citizens are engaged in the process is important to achieve acceptance of the process. However, there is little research on what constitutes effective citizen participation (Berner & Morse, 2011). There is a great deal of speculation about the advantages, and disadvantages, of direct participation, but few statements can be made about when and how to include the public in the deliberative process (Callahan, 2007). Empirical evidence is needed to demonstrate the value of including citizens in the deliberative process (Callahan, 2007). This research contributes to the knowledge on effective citizen participation by focusing on the practical level.

Whether some studies focused on the effects of public participation on the acceptability of renewable energy projects in the Netherlands (Liu et al., 2019), this research focuses on the effects of citizen public participation on the acceptability of the RES. Due to the new character of the Regional Governance Structure of the RES, there is a knowledge gap of the governing capacity of this regional governance design to achieve social acceptance for the RES (Hoppe & Miedema, 2020). Moreover, there is no in-depth information about the inter-municipal issues in this regional governance design (Hoppe & Miedema, 2020). This research contributes to these knowledge gaps.

Finally, the Dutch municipalities play an important role in the RES-process. They are responsible to involve citizens and stakeholders in the RES-process. However, there is not much knowledge about the governing capacity of the municipalities to organize citizen participation for the RES. A study by Vringer et al. (2021) focused on the relationship between policy performance and governing capacity of municipalities in the energy transition, but no research has been conducted on the governing capacity of municipalities and energy regions to organize citizen participation for the energy transition.

Societal relevance

The societal relevance of this research can be split up into two parts. Firstly, this research gives insight into when and how the public is included in the RES-process by the municipalities. This helps the researcher to highlight the challenges and good practices. This information can be used by municipalities to learn from each other. This information will support municipalities to organize citizen participation in the next phases of the RES-process. On top of that, social acceptance of the process and outcomes of the Regional Energy Strategy can be achieved by citizen participation (NP RES, 2019; Curtin et al., 2019). This research focuses on which conditions of the citizen participation process influence social acceptance of the RES. Multiple governing authorities, such as the energy region, the province of Utrecht, and municipalities, can use this information to get an understanding of how social acceptance of the process and outcomes of the Regional Energy Strategy can be achieved.

Secondly, the societal relevance lies in the fact that the research contributes to the active role of the province of Utrecht in the Regional Energy Strategies. The province wants to support and facilitate municipalities in the coordination of the citizen participation process of the Regional Energy Strategy. This research gives the province of Utrecht knowledge about the current situation of the local citizen participation process and about the challenges municipalities face in this process. With this knowledge, the province of Utrecht can support municipalities in different ways:

- The province advise municipalities on how and when to involve the public in the -process.
- The province can also stimulate collaboration and cooperation between municipalities. This can be useful if municipalities are in the same phase in the citizen participation process.
- The province can share examples of citizen participation strategies and partnerships.

1.5. Thesis outline

Chapter 2 discusses the context of this research. This chapter focuses on the geographical context of the research and describes some relevant background information. Chapter 3 is the theoretical framework. This chapter introduces the relevant theories on Multi-level Governance, Collaborative Governance, citizen participation, and social acceptance. This chapter also focuses on the conceptual framework. The next chapter discusses the research methodology and the operationalization of concepts. Chapter 5 details the findings of the research. Chapter 6 contains the conclusions of this research, followed by a discussion in chapter 7. The discussion is followed by the reference list and the appendixes.

2. Context and background

This chapter details the context and the background information of this research. This chapter describes the geographical context of this research and some relevant background information of the RES.

Context: Energy Region U16

As the introduction makes clear, the Netherlands is divided into 30 energy regions. The province of Utrecht is involved in three energy regions: Amersfoort, Foodvalley, and U16. This research focuses on one of the energy regions: U16 (Figure 3). The Energy Region U16 consists of 16 municipalities (Figure 4 and Table 1), four regional Water Board Authorities, and the province of Utrecht. The four regional Water Board Authorities are: De Stichtse Rijnlanden; Amstel, Gooi en Vecht; Vallei en Veluwe; Rivierenland.



Figure 3: Geographical context Region U16



Figure 4: Municipalities Energy Region U16 (NPRES, 2019)

Table 1 shows the involved municipalities.

Municipalities of the U16			
Bunnik		Oude Water	

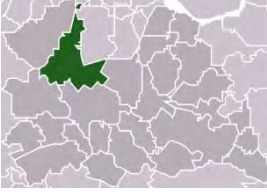
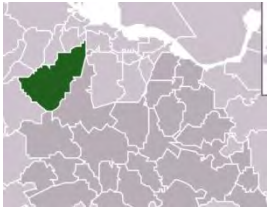
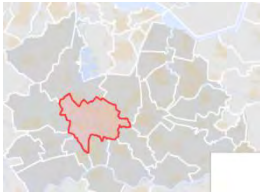
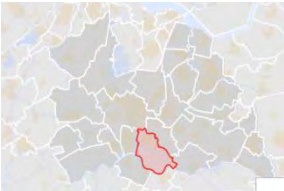
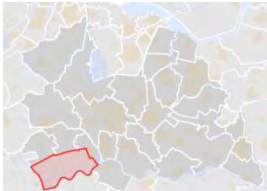
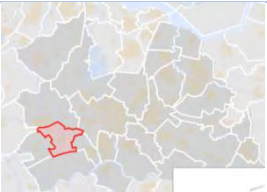
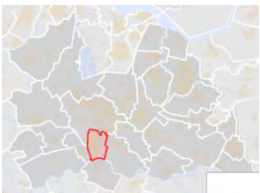
De Bilt		Stichtse Vecht	
De Ronde Venen		Utrecht	
Houten		Utrechtse Heuvelrug	
IJsselstein		Vijfheerenlanden	
Lopik		Wijk bij Duurstede	
Montfoort		Woerden	
Nieuwegein		Zeist	

Table 1: Municipalities Energy Region U16

Regional collaboration in the region U16

According to NP-RES (2019), coordination by the regional level is important to achieve national goals and agreements. For example, agreements about the realization of a solar park in one municipality influence neighboring municipalities. Therefore, governmental authorities, companies, experts, and civil society have to collaborate on the regional level. In the development of the RES, each region has to find a balance between the quantity of electricity and heat (1), the use of space (2), political and societal support (3), and the energy system efficiency (4) (Figure 1). The local level has much responsibility to achieve political and societal support for the RES. Therefore, all local governments have to involve citizens and stakeholders in the RES-process.

Planning RES-process

It is important to know the general planning process of the RES because this influences the organized citizen participation processes. The citizen participation trajectories, the processing of the results in the Regional Energy Strategy, and the coordination between municipalities and the region have to fit in the planning process of the RES. Figure 5 elaborates on the planning of the RES-process with some important deadlines. This planning process is set by the NP-RES and is effective for all energy regions. On the first of October 2020, the Energy Region U16 presented its Draft-RES to the NP-RES. The Draft RES is determined by the Provincial Executive, the colleges of B&W of each municipality, and the Water Board Authorities. There were some requirements regarding citizen participation in the Draft-RES. One requirement was the description of how citizens, social organizations, and market parties were involved in the RES-process. Another requirement was a description of which signals there are regarding social support of the Regional Energy Strategy.

The deadline to present the RES 1.0 to NP-RES is on the first of July 2021. However, the Energy Region U16 requested an extension until the first of October 2021 (Breet, 2021a). This means that the Energy Region U16 has a different time path than the other energy regions. In RES 1.0, there are the same requirements regarding citizen participation and social acceptance as in the Draft-RES. On top of that, the RES 1.0 must include an overview of the agreements about the involvement of societal organizations in the implementation of the RES.

On the first of March 2023, the Energy Region U16 has to present the RES 2.0. The RES-trajectory is until 2030. The RES will be updated in a cycle of 2 years. The RES 2.0 is a further elaboration and a revision of the RES 1.0.

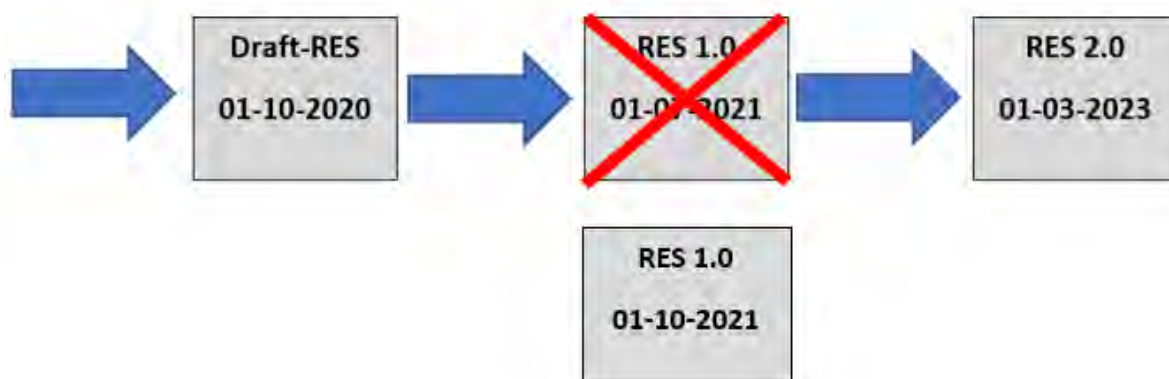


Figure 5: Planning RES-process

The planning process shows that there are different phases in the RES-process. The first phase includes the start of the RES (October 2019) until the implementation of the Draft-RES (October 2020). The next phase is from the Draft-RES (October 2021) to RES 1.0 (July 2021). The last phase is from RES 1.0 to RES 2.0. This research is carried out in the period from the Draft-RES to RES 1.0. This means that the findings of this research include all organized participation activities until RES 1.0. Most participation activities took place in this period. Because of that, it was possible to get insight into the organized participation processes. However, it is important to remark that the RES-process is an ongoing process and continued after the end of the research period. Therefore, this research did not include all organized participation activities.

Institutional design RES

A regional partnership develops the RES. It is a joint product of all participating municipalities, Water Board Authorities, and the province (and societal, organization, network operators, and companies). Each of the involved parties has a decision-making power (NP-RES, 2019). Due to the arrival of the Energy Region U16, all actors are forced to collaborate to develop the RES and find harmony in the built environment and electricity production. Figure 6 shows how different involved actors take part in the development of the RES. In the development of the RES, the Rules (or directors of the people), Municipalities, Provinces, and Water Board authorities have a special position. They are the ones who decide about the RES.

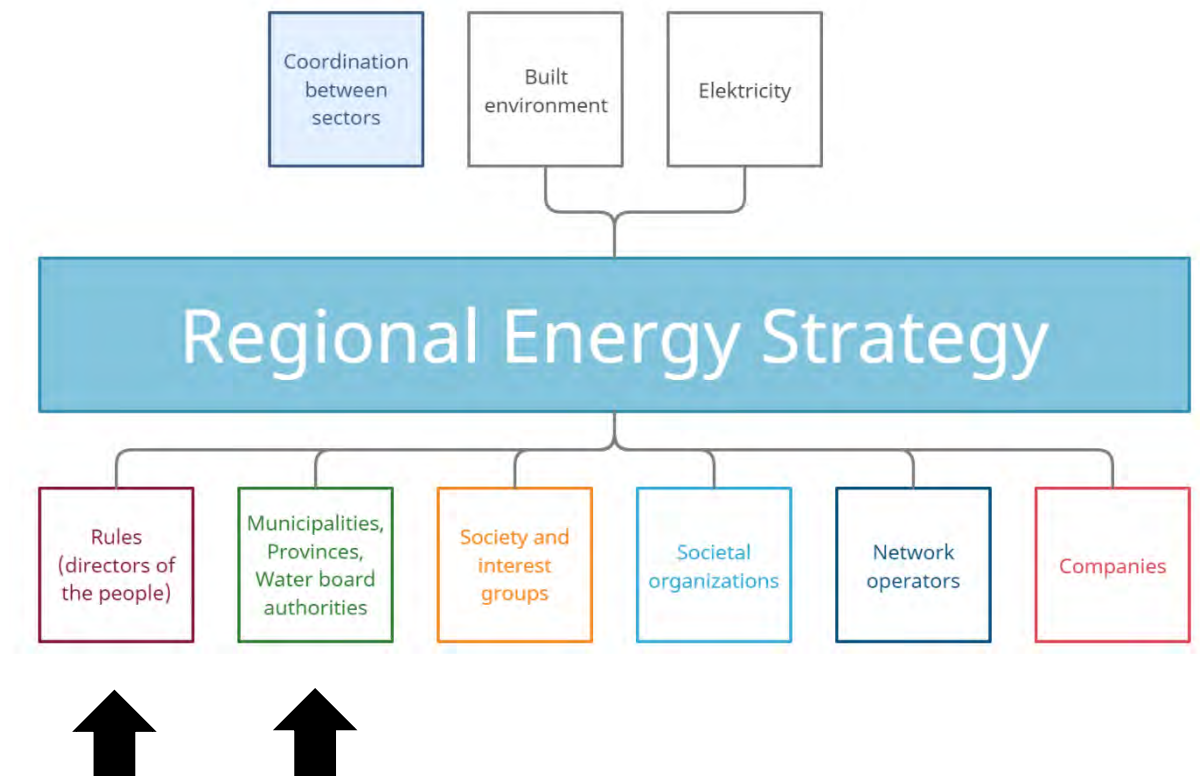


Figure 6: Institutional design of the RES

3. Theoretical framework

This chapter is an overview of the academic literature which is related to this research. This research is about several concepts: energy transition, governance, citizen participation, and social acceptance. This chapter elaborates on the theories about these concepts. This chapter starts with defining the energy transition. The next paragraph focuses on Multi-level and Collaborative Governance, including theories about citizen participation. The next paragraph focuses on the concept of social acceptance. The last part elaborates on the most important actors.

3.1. Energy transition

In the first place, it is necessary to give attention to the definition of the energy transition. The RES is an instrument to achieve the energy transition in the Netherlands. The energy transition can be seen as a challenge for science, policy, and society (Loorbach, 2010). Energy systems can be characterized as socio-technical systems (Kern & Smith, 2008). Transitions have been described as social transformation processes in which such systems change structurally over an extended period (Rotmans et al., 2001). Recent publications have pointed out some of the difficulties in moving towards a sustainable energy system in the Netherlands (Kern & Smith, 2008). Societal challenges, such as the energy transition, are characterized as being complex, highly interrelated, and subject to uncertainties, and unfold their impacts over long time horizons (Rauschmayer, Bauler & Schäpke, 2014). Solving complex societal challenges, such as the energy transition, requires a fundamental change in the structures, cultures, and practices of societal systems to become (more) sustainable (Rauschmayer et al., 2014). It cannot be assumed that social change processes can be managed. Loorbach (2010) suggests that a societal change can be achieved by a process of learning by doing. Different actors from society are seen as key elements of this process (Loorbach, 2010). Collaboration and interaction between different stakeholders who are involved in the energy transition are important to solve this complex societal challenge. This research focuses on the governance of the energy transition by focusing on the multi-level character of the RES design and the participation of citizens and stakeholders.

3.2. Governance

In the past decade, several new forms of governance have emerged on the world stage, driven in part by the weaknesses and failures of traditional forms of regulation (Haufler, 2003). The term governance refers to a non-hierarchical mode of governing, where non-state actors participate in the formulation and implementation of public policy (Mayntz, 2003). Two types of governance characterize the Regional Governance Structure of the RES: Multi-level Governance and Collaborative Governance.

3.2.1. Multi-level Governance

The introduction shows that there are several scales involved in the process of the RES. Firstly, the RES is an instrument that is introduced to achieve the goals of the Climate Agreement and is related to the *national level*. The NP-RES is a national organization that supports all the energy regions in the Netherlands. Secondly, the *province of Utrecht* is involved in three energy regions: Amersfoort, Foodvalley, and U16. The province stimulates cooperation, collaboration, and participation between the energy regions, but also supports municipalities to collaborate (Provincie Utrecht, 2019). Then, the *regional scale* plays an important role. This research focuses on one of the energy regions of the

Netherlands, the U16. The Energy Region U16 has to develop a RES. Finally, the Energy Region U16 consists of 16 *municipalities* that are collaborating and with their *inhabitants and stakeholders* to develop the RES. This means that many scales are involved in the process of the development of the RES. Therefore, the literature on Multi-level Governance is related to this research. Multi-Level Governance (MLG) has been defined as '*political structures and processes that transgress the borders of administrative jurisdictions, aiming to cope with interdependencies in societal development and political decision-making which exist among territorial units*' (Benz, 2006, p.95).

Multi-level Governance implies a change in the processes of interaction between different political actors, in such a way that policy networks have a position of their own, regardless of the state (Eckerberg & Joas, 2004). The position of local and regional level actors has been strengthened, as actors independent of national governments (Eckerberg & Joas, 2004). According to Pierre (2000), there is a simultaneous movement of political power up to trans-national levels of government and down to local communities, but in a coordinated manner. This is called vertical Multi-level Governance. In this type of Multi-level Governance, the local government is gaining in power, including more political influence within the nation-state (Eckerberg & Joas, 2004). Vertical Multi-level Governance is related to the process of the RES. In the RES-process, regional and local scales are gaining more power in a coordinated manner. The task to develop a RES is commissioned by and coordinated from the national scale. The development and implementation are the responsibility of regional and local levels. Municipalities are forced to collaborate with the other involved municipalities in the energy region, and they are responsible to organize citizen participation for the RES. Municipalities have to build collaborative relations on regional and local levels.

Multi-level Governance distinguishes itself by the existence of some form of coordinated interaction between various government levels in the scope of a specific policy domain (Hooghe, 2001). Multi-level Governance is most likely to emerge in situations where the multi-level character of a policy problem is explicitly recognized (Hooghe, 2001). Scholten (2014) mentions three characteristics of Multi-level Governance. Firstly, differentiated perspectives on the problem indicate Multi-level Governance, with national as well as local aspects. Secondly, depoliticization and technical orientation characterize Multi-level Governance. It mostly involves technocratic modes of cooperation between governments to develop a joint approach towards a commonly felt policy problem (Rosenau, 2004). Finally, weak central policy coordination structures typify Multi-level Governance. The institutional policy structure is fragmented across various levels, requiring specific forums for interaction and cooperation. There is strategic interaction between government levels to achieve policy opportunities that cannot be realized on another level (Scholten, 2014).

Now the definition and characteristics of Multi-level Governance are clear. This research explores the governance framework of the RES by using the theory of Multi-level Governance.

3.2.2. Collaborative Governance

As explained above, the process of the development of the RES is related to vertical Multi-level Governance. On top of that, we see that there is a complex sphere of actors taking part in local decision-making and in the implementation process of environmental development policy, including both actors within the local community and those outside (Newig et al., 2018). This fits the literature of Collaborative or Participatory Governance. Scholars and public administrators are increasingly engaging with participatory and collaborative modes of governance to improve environmental outcomes of public decision-making (Newig et al., 2018). Participation of citizens and stakeholders is used to open up decision making, integrating local knowledge, and the perspectives of multiple

actors (Edelenbos, van Buuren & van Schie, 2011), and promote acceptance and implementation of decisions (Bulkeley & Mol, 2003). Collaborative Governance can be defined as: *'the processes and structures of public policy decision making and management that engage people constructively across the boundaries of public agencies, levels of government, and/or the public, private and civic spheres in order to carry out a public purpose that could not otherwise be accomplished'* (Emerson, Nabatchi, Balogh, 2011).

Vodden et al. (2019) argue that these two forms of governance (multi-level and collaborative) together provide a new lens to examine a context, he called this 'Multi-level Collaborative Governance'. The expanding of the network of actors involved in decision-making characterizes this form of governance (Vodden et al., 2019). This facilitates participation and a heightened examination of policies (Vodden et al., 2019). On top of that, given the diversity of actors and their local/regional knowledge, Multi-level Collaborative Governance can generate regionally relevant and appropriate solutions to the challenges and opportunities confronting a given region (Van Buuren & Edelenbos, 2004).

Citizen participation

In Collaborative Governance, the position of the local level has been strengthened and many actors can take part in decision-making processes of environmental policy. This means that Collaborative Governance is linked with citizen participation. By citizen participation we mean the involvement of individuals or groups, who are not part of the elected or appointed legal decision-making bodies, in preparing, making, or implementing collectively binding decisions (Rauschmayer et al., 2009). Weber and Tuler (2006) define citizen participation as forums that are organized to facilitate communication among interested and affected citizens and groups, scientists, experts, political officials, and regulators to make a specific decision of governance or solving a shared problem.

In this research, citizens are viewed as an integral part of the governance process, and their active involvement is considered essential to the critical decisions facing a community (Callahan, 2007). There is much agreement in the field of public administration on developing and implementing mechanisms for citizen involvement in decision-making. Participatory theorists argue that meaningful citizen participation not only leads to better decision-making, but also facilitates social stability by developing a sense of community, increasing collective decision making, and promoting acceptance and respect of the governance process (Callahan, 2007). Fiorino (1990) developed three participation rationales to answer the question *'why do participation?'*. These three participation rationales guide the choices made in a participatory process (Pisano et al., 2015).

1. Instrumental: effective participation makes decisions more legitimate and improves results. It aims to restore public credibility, diffuse conflicts, justify decisions, and limit future challenges to implementation by creating ownership.
2. Substantive: nonexperts see problems, issues, and solutions that experts miss. It aims to increase the breadth and depth of information and thereby improve the quality of decisions.
3. Normative: democratic ideals call for maximum participation. It aims to counter the power of incumbent interests and allows all who are affected by a decision to have influence.

In the normative rationale, the legitimacy in governance rests on acceptance (Krupa, 2012). Newig and Fritsch (2009) argue that both Multi-level Governance and Collaborative Governance are important to achieve acceptance of the outcomes and the process.

This research explores the collaborative process between the local community and the local government by using the theory of Collaborative Governance. The theory about citizen participation

can be used as additional information to better understand the collaborative process. The collaborative process exists of multiple dimensions. Fung (2006) and Newig & Kvarda (2012) elaborated on these dimensions. The dimensions include the scope of participation (breadth of involvement), mode of communication and decision (communication and dialogue), and the extent of authority (extent of influence). These dimensions are central in the conceptual model. The next paragraphs elaborates on these dimensions.

1. *The Breadth of involvement. The range of stakeholders and other actors included in the process.*

The breadth of involvement in the process is related to inclusiveness. All groups of people must have the ability to participate in the process. One of the assumptions of participatory forms of governance and development is that greater participation will allow more inclusive inputs into decision-making processes, which in turn will lead to better decisions (Gaventa, 2004). Chrislip and Larson (1994) write *'The first condition of successful collaboration is that it must be broadly inclusive of all stakeholders who are affected by or care about the issue.'* Representatives or administrative officials may lack the knowledge, competence, public purpose, resources to command compliance, and cooperation (Fung, 2006).

To get insight into the breadth of involvement it is necessary to focus on who is eligible to participate, and how individuals become participants (Fung, 2006). There are several selection methods. The vast majority of public participation methods use the least restrictive method of selecting participants (Fung, 2006). They are open to all who wish to attend. According to Fiorina (1999), individuals who are wealthier and better educated tend to participate more than those who lack these advantages, as do those who have special interests or stronger views. Another selection method is open to all selectively recruited participants from subgroups that are less likely to engage (Fung, 2006). Selective recruitment may also occur passively, providing structural incentives that make participation more attractive to those who are ordinarily less likely to participate in politics (Fung, 2006). Then, another method of selecting is randomly selecting participants from among the general population. This is the best guarantee of descriptive representativeness (Fung, 2006). A fourth method engages lay stakeholders in public discussions and decisions. Lay stakeholders are unpaid citizens who have a deep interest in some public concern and thus are willing to invest substantial time and energy to represent and serve those who have similar interests or perspectives but choose not to participate (Fung, 2006). Finally, some governance processes that have been described as regulatory negotiation and collaborative planning bring together professional stakeholders. These participants are frequently paid representatives of organized interests and public officials (Fung, 2006). This research uses different selection methods to measure the breadth of involvement in the collaborative process between the local government and the local community.

2. *Dialogue*

Participation can be multiplicatively valuable in that the interaction of participations yields solutions that would not have occurred to the participants individually (Smith, 2003). A dialogue is an honest, open exchange of ideas where the intent is to listen to and understand one another, and deliberation- critical thinking and reasoned arguments as a way to make decisions (Callahan, 2007). Dialogue processes embrace co-producing knowledge collaboratively between different actors based on the different knowledge forms that they bring up into play when they meet and collaborate (Phillips et al., 2013). In a dialogue process, the organizer tries to negotiate an agreement among disparate interests, use participatory decision-making strategies, communicate effectively, build teams, and foster partnerships (Callahan, 2007). The dialogue can build bridges across differences because in a dialogue differences are treated as a dynamic and positive force in collaborative

processes of meaning-making and not as an obstacle to co-existence (Phillips et al., 2013). This research focuses on two different dialogic processes: face-to-face dialogue and digital dialogue.

Face-to-face dialogue

Face-to-face dialogue can be seen as a process of breaking down barriers to communication that prevent the exploration of mutual gains (Bentrup, 2001). Language is an important aspect of face-to-face dialogue. Language is composed of both audible and visible acts and can be separated analytically (Bavelas & Chovil, 2000). Visible acts of meaning are for example communicative facial displays made during a conversation, conversational hand gestures, and communicative body movements such as nodding and shrugging (Bavelas & Chovil, 2000). These acts of meaning are symbols that stand for something Else (Quine, 1987). These symbols reveal information for an observer and are important for the progress of the dialogue (Bavelas & Chovil, 2000). According to Schneider et al. (2003), face-to-face dialogue is the start of a process of building trust, mutual respect, shared understanding, and commitment to the process.

Digital participation

Digital participation is an umbrella term that refers to different citizen exchanges using electronic methods to discuss social concerns as well as public policy issues (Felipe & Reyes, 2017). The evolution of citizen participation in public administration decision-making faces a new phase as many government agencies have initiated electronic government (e-government) development and taken advantage of Internet-based applications to facilitate community development and communication with constituents and to provide online application services (Heeks & Bailur, 2007). The use of media, tools, and platforms supports policymaking. Felipe & Reyes (2017) studied the dialogue on social media platforms. According to this study, social media platforms have proven to be an effective tool for citizens to express themselves and discuss problems. It is also important for that group of people who can not be reached by other sources of information (Felipe & Reyes, 2017). Another form of a digital dialogue is electronic consultation, which includes structured questionnaires to open questions or discussion around an issue (Felipe & Reyes, 2017). These platforms promote participation and ease information processing (Felipe & Reyes, 2017).

To organize face-to-face dialogue or digital participation, participation methods are used. Edelenbos and Monnikhof (2001) argue that the choice of participation method is dependent on goals of participation. Each local government has a goal of its citizen participation process. Edelenbos and Monnikhof (2001) formulate five goals of citizen participation: Informing, Consulting, Advising, Co-producing, and Co-decision (Edelenbos & Monnikhof, 2001; Arnstein, 1969). The participation goal influences the appropriate method and the form of the dialogue. If the goal is co-producing the way the parties collaborate and make policy decisions is different than if the goal is advising. Table 2 shows the goals of participation with the appropriate method.

Participation goal	Description	Method
Informing	The local government informs the citizens of decisions and policies. Citizens do not provide input.	Information evening, debate, campaign
Consulting	Politics decide the policy direction. Citizens take part in conversations about policy.	Citizen panel, survey, focus group
Advising	Politics let the citizen formulate problems and solutions. The ideas of citizens have a full role in policymaking.	Citizen jury, advisory board, neighborhood platform

Co-producing	Politics and citizens together discuss problems and solutions.	Consultation group, project group, work atelier
Co-deciding	Citizens decide about policymaking. Politics take over the results with specific adaptations.	Binding referendum

Table 2: Participation goals and methods (Edelenbos & Monnikhof, 2001)

The way how actors collaborate is an important element in the dialogue. Fung (2006) describes three methods of collaboration. The first one is aggregation and bargaining. In this mode, participants know what they want, and the mode of decision-making aggregates their preferences into a social choice, often mediated by the influence and power they bring (Fung, 2006). The second mode is deliberation. Participants deliberate to figure out what they want individually and as a group (Fung, 2006). In methods designed to create deliberation, participation typically absorbs educational background materials and exchanges perspectives, experiences, and reasons with one another to develop their views and discover their interests (Fung, 2006). Deliberation requires thoughtful examination of issues, listening to other perspectives, and coming to a public judgment on what represents the common good (Roberts, 2004). The last mode is the technical expertise of officials whose training and professional specialization suits them to solving particular problems (Fung, 2006).

The theory about the dialogue processes is useful to explore the organized citizen participation processes. This research uses dialogue literature to get insight into the important elements of effective dialogue processes. The separation between face-to-face dialogue and digital participation helps the researcher to get a better understanding of the design of the dialogue. The focus on the used participation methods, including new participation methods, and the methods of collaboration give the researcher more in-depth information about the content of the dialogue.

3. Communication

The way how decision-makers communicate and share information with participants is important in the decision-making process. Participatory mechanisms typically use educational background material when they are designed to create deliberation and foster the exchange of perspectives, experiences, and reasons (Fung 2006). Information in itself is not knowledge. The process that allows information to become knowledge can be defined as learning. Therefore, learning plays a key role in any participatory process that supplies information and gives participants room for debate (Gudowsky & Bechtold, 2013). Organizing the transfer of expertise in such a way that all participants have access to the same basic information is the true challenge, and the time and resources invested in preparing adequate information sources and supporting the capacity of participants to understand and use this information are crucial (Antunes et al. 2009). Fung (2006) considers that the communication mode plays a distinctive role within a process. Therefore, it is important to examine how different modes affect the transfer of information between the different groups involved in a participatory process (Gudowsky & Bechtold, 2013). Three types of flows of information within participatory processes (Gudowsky & Bechtold, 2013):

- Experts supply information to participants.
- Individual and group learning within a participatory process creates deliberation and provision with information.
- Outside the process (through communication with a peer group).

This research uses the three types of flows of information to indicate the transfer of information in the collaborative process between the local government and the local community. On top of that,

this research focuses on the used communication tools (both physical and digital tools) to get more in-depth information about the communication mode.

4. Extent of influence

The main function of participation and collaboration is to foster better outcomes (Bulkeley & Mol, 2003). The extent of influence of participants is important to foster social outcomes of decisions. Fung (2006) mentioned the importance of the extent of influence of inhabitants for the acceptance of the outcomes. Dietz and Stern (2005) made clear that there are many differences between the extent of influence inhabitants have in decision-making processes. The degree of public influence may vary from negligible to an explicit requirement for consensus on a recommendation. In some cases, the public hearing is conducted only to fulfill a legal public comment requirement, to moderate, such as information exchanges (Dietz & Stern, 2005). Kweit & Kweit (1981) recognized the difficulty to measure participation outcomes. Different stakeholders have different objectives, expectations, and evaluations (Rosener, 1987). Kweit & Kweit (1981) suggest three different levels of impacts: administrative (service delivery improvement), societal (social restructuring or redistribution of power), and individual (trust in government and citizenship).

This research uses the three different levels of impacts to get a better understanding of which impact participants have in the RES-process.

Institutional design

The four dimensions, which are described by Fung (2006), can be seen as central conditions which are important in the collaboration between the local government and the local community. On top of these three dimensions, there are some other conditions that influence the collaboration between the local government and the local community. Ansell & Gash (2007) argued that institutional design is an important factor that influences collaboration. Institutional design refers here to the basic protocols and ground rules for collaboration, which are critical for the procedural legitimacy of the collaborative process (Ansell & Gash, 2007). The literature suggests that clear ground rules and process transparency are important design features (Newig et al., 2018). Both can be understood in terms of procedural legitimacy and trust building (Newig, al., 2018).

Process transparency means that stakeholders can feel confident that the public negotiation is 'real' and that the collaborative process is not a cover for backroom private deals (Newig et al., 2018). Transparency includes good information and knowledge sharing, along with the use of multiple methods to communicate government activity and functions to the local community (Kim & Lee, 2017). Clear and consistently applied ground rules reassure stakeholders that the process is fair, equitable, and open (Murdock, Wiessner, and Sexton, 2005). Important features are the amount of time given to deliberations, the number of participants, and the tasks to which they are directed (Weber & Tuler, 2000). Bryson & Quick (2012) argued that there has to be a set of rules and a good project team to structure the process and guide the overall work to be done.

Exploring elements related to institutional design helps the researcher to get a better understanding of the collaborative process between the local government and the local community. The research focuses on process transparency and clear ground rules.

3.3. Social acceptance

Investigating the conditions of Multi-level and Collaborative Governance will contribute to explore how social acceptance is influenced by the RES-process. As became clear, citizen participation for the RES should contribute to increasing social acceptance and support for the RES (NP-RES, 2019). It is

postulated that public involvement effectively responds to implementation deficits in politics by increasing non-state actors' acceptance and compliance (Bulkeley & Mol, 2003). This assumes that societal opposition will decrease once non-state actors find the preferences and interests they voiced in a participatory process represented in the final policy decision (Bulkeley & Mol, 2003). Over the past decade, the topic of social acceptance has been vitally researched in the context of the European energy system (Wüstenhagen et al., 2007; Devine-Wright, 2012; van der Horst, 2007). Social acceptance is not simply a set of static attitudes of individuals. It refers more broadly to social relationships and organizations, and its dynamic as it is shaped in learning processes (Wüstenhagen et al., 2007). According to Hofinger (2001), acceptance is the result of an interactive process that takes place in certain contexts and which is interpreted by everyone involved.

There are several criteria that are important in the discussion around social acceptance. Fraune & Knodt (2017) mentioned that acceptance requires not only that those involved but also those who are not directly involved in the participatory process perceive the process as legitimate. Van Meerkerk et al. (2015, p.755) argued that there are several aspects that measure acceptance: voice (refers to how stakeholders are involved), transparency (refers to how decision-making is transparent for stakeholders), and deliberation (refers to how argumentation processes are organized). The three aspects mentioned by van Meerkerk et al. (2015) are in line with the mentioned conditions of Fung (2006). Fraune & Knodt (2017) suggest two criteria to ensure social acceptance in multi-level participatory settings: transformation and impact. Transformation refers to the outcomes of the deliberative process. It requires the achievement of '*a final consensus that reflects the entire deliberative process, comprising all stages*' (Pogrebinschi, 2013). The impact criterium is concerned with the influence of deliberative process outcomes on regional and national scales (Fraune & Knodt, 2017). Both the impact and transformation criteria are related to conditions which are described by Fung (2006). Transformation can be seen as an important outcome of the dialogue or the deliberative process, while impact can be seen as the extent of influence participants have in the process.

Another important element in the discussion around social acceptance is time. As Assefa & Frostell (2007) described it is important to take time to increase the public's knowledge so that technologies win the heart of the public. It takes time for the public to feel comfortable and to accept new technologies- even if their ecological and economic performances are good (Assefa & Frostell, 2007).

The above-mentioned criteria should contribute to achieving social acceptance in a Multi-level Collaborative Governance design. However, the literature shows some challenges in achieving social acceptance in the specific context of the energy transition. Beierle and Konisky (2000) were able to demonstrate that the design and the structuring of participatory processes had little effect on the quality of the output and the relative satisfaction of the participants. The origin of frustrations, misunderstandings, and failures is located at more fundamental levels: in conflicting values, expectations, attitudes about participation, and in the limited incorporation of results in the wider policy-making process (Wesselink, et al., 2011). On top of that, Devine-Wright (2011) argued that there is a tension between support for renewable energy policies at the national level on the one hand and decreasing or absent acceptance of renewable technology expansion at the local level on the other hand. This is often attributed to the 'not in my backyard' (NIMBY) phenomenon (Devine-Wright, 2011). Many renewable energy projects aimed at implementing the Energy Transition have not reached a decent level of acceptability (Hoeft, et al., 2017). Especially, public perceptions of wind energy are typically characterized by the NIMBY concept (Devine-Wright, 2004). Wind turbine technology has been more technically advanced in comparison with many other renewable energy technologies (Devine-Wright, 2004). However, Wolsink (2006) made clear that not all opposition to

renewable energy projects at the local level can be assigned to NIMBY. He criticized the validity of the NIMBY explanation, and he elaborated on that in acceptance issues the identification with the quality, the character, and the value of a place is key (Pasqueletti, 2000; Mercer, 2003).

Using the theory of social acceptance contributes to getting a better understanding of the important criteria to achieve social acceptance. Furthermore, the literature about social acceptance shows the issues and challenges of social acceptance.

3.4. Actors

The final part of the theoretical framework includes the involved actors of this research: the Dutch Government, the province of Utrecht, the Energy Region U16, the Local government, and the local community. This paragraph mentions the role of these actors in the RES-process, and the way how these actors are involved in the RES-process.

The Dutch Government

The Dutch Government is not directly involved in the participation processes for the RES, but their influence is recognized in the RES-process. Firstly, the task of the energy regions to produce a RES is commissioned by the Dutch Government. The Dutch Government signed the Climate Agreement and agreed on the reduction of 49% CO₂ emission in 2030 in comparison with 1990. On top of that, the Dutch Government decided that a bottom-up process is needed to develop the RES. From that perspective, the Dutch Government commissioned the energy regions and the local governments to start working on the energy transition and the involvement of inhabitants in this process.

The province of Utrecht

The province of Utrecht is also not directly involved in the participation processes for the RES, but the province of Utrecht stimulates the cooperation between the several energy regions and the municipalities. The province of Utrecht provides energy regions and municipalities with information, tools, and financial support to coordinate the local citizen participation process.

The Energy Region U16

The Energy Region U16 is an important actor in the RES-process. In the context of the energy transition, municipalities are forced to collaborate on a regional scale. In the Energy Region U16, 16 municipalities have to collaborate. In the 1990s, regional collaboration in the Netherlands started as a voluntary form of network governance in many cases (Metze & Levelt, 2012). Arguments for regional collaboration were that the regional scale had better local knowledge than a province or a state and knew better what other solutions could be envisioned (Metze & Levelt, 2012). Metze & Levelt (2012) mention some important factors which influence the coordination with the regional level and the local level. This research includes two of these factors:

- Cultural or identity differences. There could be conflicting identities in one energy region. Examples are rural or urban identities. This influences the collaboration.
- Institutional design. The institutional design is important for the collaboration between municipalities on a regional scale. Transparency, reciprocity, a facilitator or a catalyst, and a space for dialogue are needed to design the collaboration between several parties on a regional scale.

Local government

This research includes multiple municipalities and focuses on the different attitudes of municipalities regarding citizen participation, the different ambitions municipalities have, and the different citizen participation methods municipalities use. To get insight into the differences between municipalities,

it is important to keep in mind that each municipality has its organizational structure and characteristics. This research focuses on two characteristics that influence the local citizen participation process. Firstly, there is a focus on local capacity. Local authorities do appear to vary considerably to function as suppliers of community governance (Wallis, Dollery, 2002). Capacity is concerned with finances and time (Cuthill & Fien, 2005). Secondly, there is a focus on the leadership qualities of the local government. Leadership is widely seen as a critical ingredient in bringing parties to the table and for steering them through the rough patches of the collaborative process (Burger et al. 2001). Leadership is crucial for setting and maintaining clear ground rules, building trust, facilitating dialogue, and exploring mutual gains. This research focuses on three leadership qualities: takes initiative, open towards new ideas, and working collaboratively (Vangen & Huxham, 2003). Vangen and Huxham (2003) argue that leadership is important for embracing, empowering, and involving stakeholders and then mobilizing them to move collaboration forward.

The local community

The local community is one of the central actors in this research. The research focuses on how citizens and stakeholders are involved in the local citizen participation process. Although the research does not want to get insight into the motivation and willingness of citizens to be involved in the process, it is important to mention a few factors which influence the local citizen participation process. Thoughts, feelings, and beliefs about the local community impact behaviors toward such places, thus influencing whether and how people might participate in local planning efforts (Manzo & Perkins, 2006). The bond between people and places influence how the public is involved in the local citizen participation process. On top of that, participation is always carried out on a particular scale. The perceptions and preferences of citizens and interest groups are presumably not neutral regarding the spatial distance to environmental resources or problems, neither is the engagement of actors neutral regarding the level of governance (Koontz, 1999).

3.5. Conceptual framework

Figure 7 shows the conceptual framework of this research.

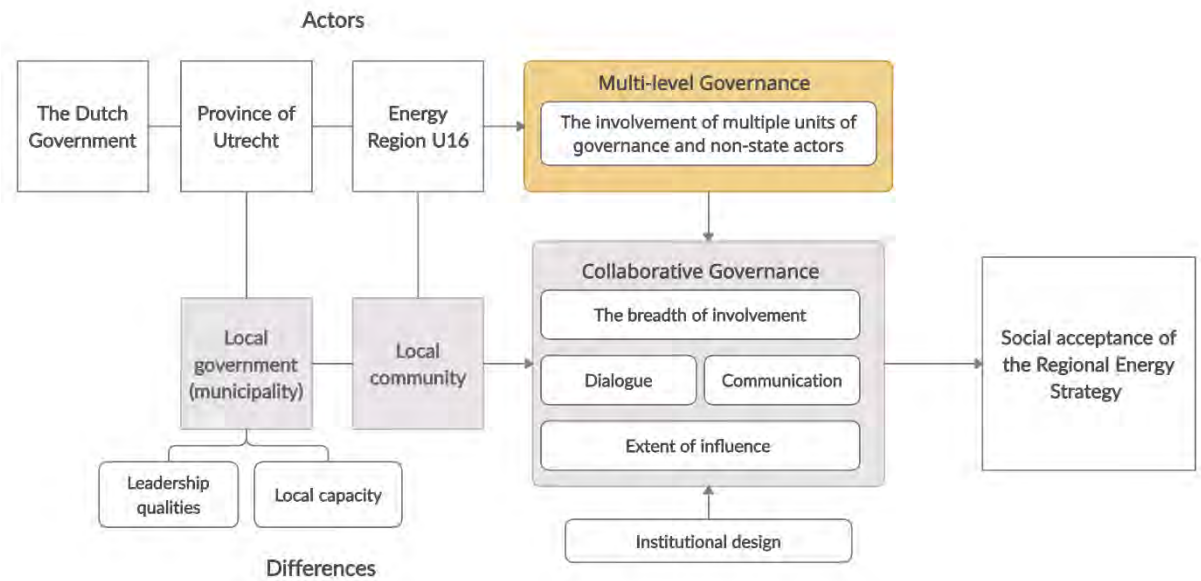


Figure 7: Conceptual Framework

The conceptual framework shows the most important concepts of this research in relationship with each other. There are five actors which are involved in this research: the Dutch Government, the province of Utrecht, the Energy Region U16, the Local Government (municipality), and the local community. All these actors are involved in the RES-process. The research focuses on how local citizen participation processes are organized by the municipalities, and which conditions influence social acceptance of the RES. Therefore, the main part of the framework is the collaborative process between the local government and the local community (purple blocks in the conceptual framework). In the literature, the collaboration between the local government and the local community is defined as Collaborative Governance. The collaborative process consists of four dimensions: the breadth of involvement, dialogue, communication, and the extent of influence. The conceptual framework shows that the collaborative process is influenced by several factors. On the local level, leadership qualities, local capacity, and the differences between local governments influence the collaborative process. Then, Multi-level Governance, which is about the governance design of the RES, influences the collaborative process between the local government and the local community. Lastly, the institutional design influences Collaborative Governance. The institutional design is categorized into two elements: clear ground rules and process transparency. The conceptual framework assumes that the collaborative process between the local government and the local community, which is influenced by factors on the local level, the Multi-level Governance design, and the institutional design, affects social acceptance of the RES.

4. Methodology

This chapter describes the methodology of this research. It starts with explaining the research strategy, followed by the research philosophy. The next paragraph explains the research methods which include data collection, data analysis, and operationalization. The last section of this chapter describes the validity and reliability of this research.

4.1. Research strategy

The research strategy is the overall design or logical procedure that will be followed (van Thiel, 2014). It is the guideline for the research. The decision to apply a strategy is guided by several considerations. Examples are the subject of study and the body of existing knowledge (van Thiel, 2014).

4.1.1. Qualitative research

This research has a qualitative approach. Creswell (2009) states that *'qualitative research is a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem'*. This research aims to find out in-depth information about citizen participation for the RES and social acceptance. The researcher needs to get in-depth information about how municipalities organize citizen participation and which conditions of this process affect social acceptance. One of the reasons why qualitative data is rich and in-depth is that researchers often capture data through the process of 'deep attentiveness, of empathetic understanding' (Punch, 2009). Qualitative research integrates the methods and techniques of observing, documenting, analyzing, and interpreting characteristics, patterns, attributes, and meaning of human phenomena under study (Gillis & Jackson, 2002). Interpretation and understanding meanings of concepts like citizen participation and social acceptance are important in this research.

4.1.2. Case study

The design of this research is a case study. The case study is a research strategy in which one or several cases of the subject of study are examined in an everyday-real life setting. This research focuses on one Energy Region, namely U16. This Energy Region consists of 16 different municipalities which are all included in the research. Case studies focus on a specific situation which will be studied in very great detail. As a result, case study research always renders richly detailed and extensive descriptions of the phenomenon under study (Van Thiel, 2014). Within the unique context of the case in question, case studies offer the possibility for in-depth study. This means that it offers the chance to go into detail on processes and relationships (Denscombe, 2003). Another characteristic of case study research is that it allows and invites the researcher to use multiple sources and methods for data collection (Van Thiel, 2014). This research uses several methods of data collection: document analysis, interviews, and participant observations. This contributes to the validity of the research through triangulation.

The role of the researcher is important in case study research (Yin, 2009). The researcher has to be aware of his/her values and assumptions and how this influences the research. In this research, the researcher is part of the team Energy Transition of the Province of Utrecht. The researcher views the case study from the perspective of the province of Utrecht. Moreover, the researcher supported four municipalities to organize citizen participation for the RES by playing an active role in the organization of participation activities for the RES. Because of that, the researcher was also able to view the case study from the perspective of the local government. The researcher has to be aware that the results of the data collection are interpreted from these two perspectives.

4.2. Research philosophy

The research philosophy is what the researcher perceives to be truth, reality, and knowledge. It is about the beliefs and values that guide the research design, the data collection, and the data analysis. Questions of research methods and strategies are secondary to questions of paradigm (Guba & Lincoln, 1994). A paradigm can be defined as the basic belief system or worldview that guides the investigator (Guba & Lincoln, 1994). The philosophy of science incorporates certain assumptions or research beliefs concerning the ontology, epistemology, and methodology of scientific research (Guba & Lincoln, 1994). The ontological question is about the form and nature of reality. The epistemological question is about the nature of the relationship between the knower and what can be known. The methodological question is about how the inquirer goes about finding out whatever he or she believes can be known (Guba & Lincoln, 1994). Research paradigms and their philosophical reflections on applications have been relied upon as fundamental scientific and intellectual support for the accountability of methods and approaches in empirical studies in both the natural and social sciences (Tekin & Kotaman, 2013). This research is related to interpretivism and pragmatism.

4.2.1. Interpretivism

Interpretivist researchers understand the world of human experience (Cohen & Manion, 1994). Yanow & Schwartz-Shea (2011) claim that interpretive researchers discover reality through participant's views, their background, and experiences. According to Willis (2007), interpretivism usually seeks to understand a particular context, and the core belief of the interpretive paradigm is that reality is socially constructed. The social world of people is full of meaning. It is built upon subjective and shared meanings. The core idea of interpretivism is to work with these subjective meanings already there in the social world; that is to acknowledge their existence, to reconstruct them, to understand them, to avoid distorting them, to use them as building blocks in theorizing (Goldkuhl, 2012). This research is related to interpretivism because the researcher focuses on the particular context of the Energy Region U16. The researcher tries to get insight into local citizen participation processes and social acceptance by using the perspectives of employees of the municipalities, the researchers' experience in the field, and educational background. Many interpretive researchers seem to work rather close to the practice field, which may imply engagement in the studied practices (Goldkuhl, 2012). This characteristic of interpretivism is also related to this research. As became clear, the researcher contributed to the organized participation process of four municipalities. The researcher focuses on how members of the municipalities communicate and collaborate in social processes, and how these members enact their particular realities. People endow particular realities with meaning (Goldkuhl, 2012). The researcher would like to know how these meanings and intentions help to constitute actions (Goldkuhl, 2012).

One of the interpretive principles is concerned with the relation between researcher and practitioner (Goldkuhl, 2012). During the data generation, there is much interaction between the researcher and researched objects. This implies that empirical data generation is seen as a process of socially constructed meanings; that is socially constructed by researchers and participants (Goldkuhl, 2012). The researcher needs to be aware of the viewpoint he/she faces in the research. The interaction between the researcher and members of the municipalities and the viewpoint of the researcher influence the data. Therefore, the researcher should be aware that he/she views themselves in relation to other individuals in their social context.

4.2.2. Pragmatism

This research is also related to pragmatism. The essence of pragmatist ontology is actions and change; humans acting in a world that is in a constant state of becoming (Goldkuhl, 2012). Blumer (1969) claims that the essence of society lies in an ongoing process of action-not in a posited structure of relations. The writings of John Dewey are important in the emergence of pragmatism. He argues that the world is changed through reason and action and there is an inseparable link between human knowing and human action (Dewey, 1931). According to Dewey, a key idea of inquiry is to create knowledge in the interest of change and improvement. This means that pragmatism is concerned with an instrumental view on knowledge; that it is used in action for making a purposeful difference in practice (Dewey, 1931). This research tries to generate practical knowledge which can be used for improvement and a difference in practice. Scientific knowledge from pragmatist research should be valuable for practices outside the studied ones (Goldkuhl, 2008). It is important to formulate knowledge and to take other actions to facilitate knowledge transfer and knowledge use outside local practices. The role of local intervention in pragmatism is that it is meant as a local improvement, but more importantly, it is instrumental in creating knowledge that may be useful for local as well as general practices (Goldkuhl, 2012). In this research, the researcher investigates the relationship between social acceptance and the organized citizen participation processes of the 16 municipalities of the Energy Region U16. The researcher tries to achieve two goals with the generated knowledge. On the one hand, the researcher tries to use the generated knowledge to support municipalities with citizen participation for the RES and local improvement. The generated knowledge gives information about which conditions in Collaborative Governance, which is about the citizen participation process, are necessary to achieve social acceptance of the RES. This information can be used by municipalities in the next phases of the RES. On the other hand, the researcher tries to find general similarities and differences in the participation processes. These general practices may be useful for practices outside the local context.

This research combines interpretivism and pragmatism. The role of the researcher is to actively contribute to local citizen participation trajectories besides the traditional research tasks like data collection and analysis. The researcher uses an interpretative mode of inquiry in to understand the differences and variations between local citizen participation trajectories. By contributing to local citizen participation trajectories, there was a continual process of collaboration between the researcher and the members of the municipalities. Because of that, interpretations were continually verified through an open communication process. This fits the characteristics of interpretivism. Furthermore, the researcher has many opportunities to learn and explore by actively participating in local citizen participation trajectories. The researcher has the opportunity to identify problems, find possible solutions, and reflect on this process. Because of that, the generated knowledge by the researcher can be seen as a basis for action. This fits pragmatism. Finally, one of the characteristics of pragmatic research is to generate knowledge aimed at general practice. The researcher focuses on local improvements and produces local knowledge. After the data generation, the researcher has information about the local citizen participation processes of 16 municipalities. The researcher tries to create general knowledge out of the local practices.

4.3. Research methods: data collection, data analysis, and operationalization

There are several research methods. Most of these methods can be applied within the context of different strategies (van Thiel, 2014). This paragraph includes how the data of this research is collected, followed by how the collected data is analyzed. Finally, this paragraph indicates how the theoretical concepts of the research can be operationalized.

4.3.1. Data collection

This research used qualitative methods for data collection. Triangulation, the use of different data collection methods, is important for the validity of the research (van Thiel, 2014). Therefore, this research used different methods for data collection.

In-depth Interviews and expert interviews

Interviews are a flexible way of collecting data and are often applied in case studies (Yin, 2009). In-depth interviews are used to discover a shared understanding of a particular group (DiCicco-Bloom & Crabtree, 2006). To get insight into the local citizen participation processes for the RES, employees from each of the municipalities were selected. This research focuses on the Energy Region U16, which contains 16 municipalities. Therefore, the researcher interviewed 15 employees, one of each municipality. One employee worked for two municipalities. However, to obtain some extra information about the structure of local citizen participation processes of the Regional Energy Strategy, some extra interviews were conducted with municipalities of different energy regions. The researcher interviewed one employee of each of the seven municipalities of the Energy Region Amersfoort. On top of that, the researcher interviewed one employee of each of the three municipalities of the Energy Region Foodvalley. These extra interviews are not typed out. If information from these extra interviews is used, the concerned parts are typed out.

To select the experts, purposive sampling was used. Purposive sampling strategies move away from any random form of sampling and are strategies to make sure that specific kinds of cases of those that could be included are part of the final sample in the research study (Campbell et al., 2020). There are several forms of purposive sampling. The most popular are stratified, cell, quota, and theoretical sampling (Campbell et al., 2020). This research uses stratified sampling. Stratified sampling selects specific kinds or groups of participants that need to be part of the final sample. The sample is then stratified by the characteristics of the participant of a group (Campbell et al., 2020). In this research, the interviewed employees were chosen based on the content of their daily work. To get knowledge about the local citizen participation process of the Regional Energy Strategy, it is necessary to speak to employees of the municipalities who are involved in the RES-process. Therefore, the interviews were conducted with the policy officer sustainability or the communication advisor sustainability of each municipality.

Table 3, 4 and 5 give an overview of all the conducted interviews.

	Participant name	Municipality	Affiliation with organisation	Date interview
1	Edwin van Dorp	Wijk bij Duurstede	Policy consultant sustainability	12-11-2020
2	Wim Haver	Bunnik	Policy officer energy and sustainability	13-11-2020
3	Bregje Tettelaar van Nunen	Houten	Program manager Sustainability	17-11-2020
4	Albert Tijdhof	Lopik	Policy consultant energy transition and Omgevingswet	18-11-2020
5	Eline van Wel	Stichtse Vecht	Policy officer sustainability	23-11-2020

6	Femke Batterink	Utrechtse Heuvelrug	Policy consultant sustainability	25-11-2020
7	Jorrit Dortland	IJsselstein	Policy officer energy transition	27-11-2020
8	Krispijn Beek	Woerden en Oudewater	Project Leader electricity	04-12-2020
9	Alex de Bree	Nieuwegein	Policy officer	07-12-2020
10	Remco Spoelstra	Zeist	Employee OMDU (working at municipality Zeist)	09-12-2020
11	Bauke Heikamp	De Bilt	Policy officer sustainability	13-01-2021
12	Inge van de Klundert	Utrecht	Policy officer energy	07-01-2021
13	Jan Knopper	Montfoort	Policy officer sustainability	17-02-2021
14	Marcel Pater	Vijfheerenlanden	Policy officer sustainability	08-01-2021
15	Kim Kijk in de Vegt	De Ronde Venen	Policy officer sustainability	03-02-2021

Table 3: Interviews Energy Region U16

	Participant name	Municipality	Affiliation with organisation	Date interview
1	Niko Paap	Amersfoort	Environment manager energy transition	25-11-2020
2	Jacqueline van Druten	Baarn	Communication advisor sustainability	15-12-2020
3	Rieneke Gerkema	Bunschoten	Policy officer environment	06-01-2021
4	Marjolein Verhoeven	Eemnes	Communication advisor sustainability	11-12-2020
5	Rik Swieringa	Leusden	Program manager energy transition	23-11-2020
6	Puck Brunet de Rochebrune	Soest	Director program energy transition	26-11-2020
7	Karen Kuperus	Woudenberg	Strategic policy advisor spatial planning	09-12-2020

Table 4: Interviews Energy Region Amersfoort

	Participant Name	Municipality	Affiliation with organisation	Date interview
1	Jetteke Boeschoten	Rhenen	Policy officer sustainability	03-12-2020
2	Irene Bremer	Renswoude	Policy officer sustainability	09-12-2020
3	Fenna Aarts	Veenendaal	Policy officer sustainability	08-01-2021

Table 5: Interviews Energy Region Foodvalley

Then, some expert interviews were conducted to ensure diversity. Two experts of different organizations were interviewed (Table 6). Stratified sampling was used to select these three experts. One expert is working for the consultancy EMMA. Several municipalities hired EMMA for the implementation of their local citizen participation process for the Regional Energy Strategy. The interviewee is involved in many local citizen participation processes in the Energy Region U16. The interviewee has much expertise in the field of citizen participation, and much knowledge about the specific context of the municipalities and the Energy Region U16. Then, an employee of Twynstra Gudde was interviewed. The interviewee has much expertise in the field of citizen participation and has much knowledge about the challenges municipalities face during their local citizen participation processes for the Regional Energy Strategy. From September until October 2020, Twynstra Gudde and TNO organized some workshops for municipalities about local citizen participation. During these workshops, Twynstra Gudde and TNO figured out what challenges municipalities face during this process. On top of that, they provided municipalities with advice and tips for the implementation of the local citizen participation process for the Regional Energy Strategy.

	Participant name	Organisation	Date interview
1	Reinout de Vries	Consultancy EMMA	20-01-2021
2	Joost Ruiter	Twynstra Gudde	21-01-2021

Table 6: Expert interviews

Methods for collecting the data of the interviews

In total, 27 in-depth interviews were carried out. During the interview, the researcher could understand the points of view of the participants. The personal interaction between the researcher and the interviewee made it possible to get much in-depth information about the local context of the municipality. A semi-structured approach was taken for the interviews. This means that the interviewer develops an interview manual used as a guideline. In deductive studies, the interview questions are based on the operationalization of the variables derived from the theoretical framework. The interview guide is divided into four central themes which are central in the theoretical framework (Appendix 1). Firstly, there are some questions about the capacity and qualities of a municipality to organize citizen participation for the RES in the interview guide. Secondly, there are some questions related to the governance design of the RES, and how the interviewees interpret the relationships between the involved actors in this governance design. Then, questions about the four mentioned dimensions of Collaborative Governance are used in the interview guide to explore how citizen participation for the RES is organized. These four dimensions are the breadth of involvement, dialogue, communication, and the extent of influence. Lastly, there are some reflective questions. Using the guideline makes it possible to compare the interviews with each other because the structure of each interview was the same. On the other hand, there is still room for the participants to express their views on their terms. Semi-structured interviews have an

informal tone and allow for an open response in the participants' own words (van Thiel, 2014). A list with the most important themes was sent to the interviewees a week before the interview. This made it possible for the participants to prepare themselves.

Document analysis

Document analysis is a systematic procedure for reviewing or evaluating documents- both printed and electronic material (Bowen, 2009). Document analysis requires that data be examined and interpreted to elicit meaning, gain understanding, and develop empirical knowledge (Corbin & Strauss, 2008). Document analysis was carried out to complement the information acquired through the interviews. Some of the participants have sent some extra information in the form of documents, such as participation plans, summaries of past citizen participation activities, and websites. The researcher also found some participation reports, articles related to the participation processes, letters, and websites on the internet. On top of that, the researcher found some formal documents about the Energy Region U16, such as the Draft-RES and the restart document. Table 7 shows an overview of all the analyzed documents. The name of the document, the concerned municipality, and the published year are mentioned.

Document name	Municipality	Published year
Energie enquête Bunnik	Bunnik	2020
Participatieplan Kromme Rijnstreek	Subregion Kromme Rijn gemeenten: Bunnik, Houten, Utrechtse Heuvelrug, Wijk bij Duurstede	2020a
Participatieboek Slotversie januari 2021	Subregion Kromme Rijn gemeenten: Bunnik, Houten, Utrechtse Heuvelrug, Wijk bij Duurstede	2020b
Uitkomsten peiling energie Kromme Rijnstreek	Subregion Kromme Rijn gemeenten: Bunnik, Houten, Utrechtse Heuvelrug, Wijk bij Duurstede	2020c
Routekaart Nieuwe Energie voor Zeist	Zeist	2019a
Verslag bewonersavond 'duurzame opwek in Zeist' 9 december 2019	Zeist	2019b
Verslag bijeenkomst 1 juli 2020 kansen voor zonnevelden en windmolens in Zeist	Zeist	2020
Verslag fase 1	Woerden	2020a
Verslag resultaten fase 2-afwegingskader	Woerden	2020b
Verslag participatie fase 3	Woerden	2020c
Verslag inloopavonden 2 en 3 maart over het opwekken van duurzame energie Oudewater	Oudewater	2020a
Verslag participatie fase 2	Oudewater	2020b
Energie enquête Utrechtse Heuvelrug	Utrechtse Heuvelrug	2020
Houten duurzame energie rapportage	Houten	2020

Uitkomsten vragenlijst duurzaamheid	De Ronde Venen	2020
Rapportage inwonersconsultatie RES	Wijk bij Duurstede	2020
Resultaten vragenlijst Lopik	Lopik	2020a
Verslag inloopavonden Lopik	Lopik	2020b
Resultaten vragenlijst oktober RES	Montfoort	2020a
Resultaten online inloopavonden RES oktober	Montfoort	2020b
Resultaten vragenlijst	IJsselstein	2020a
Verslag inloopavonden IJsselstein	IJsselstein	2020b
Verslag participatietraject Energielandschap Rijnenburg en Reijerscop	Utrecht	2019
Startnotitie RES U16	RES-U16	2019
Concept-RES U16	RES-U16	2020
Digitale infographic overzicht participatie van gemeenten in de RES	Provincie Utrecht	2021

Table 7: Analysed documents

Participant observation

In this research, participant observation is an additional method to collect data. Action research embodies observation. Using the observation method and watching human behaviors and actions guide the researcher in action research (Zieman, 2012). According to Marshall and Rossman (2006), observation can be defined as *‘the systematic description of events, behaviors, and artifacts in the social setting chosen for study’*. Observations enable the researcher to describe existing situations using the five senses, providing a ‘written photograph’ of the situation under study (Erlandson et al., 1993). Participation observation is a method to do fieldwork. Fieldwork involves *‘active looking, improving memory, informal interviewing, writing detailed field notes, and perhaps most importantly, patience’* (Dewalt & DeWalt, 2002).

There are observer stances for researchers conducting field observations (Gold, 1958). In this research, the stance ‘participant as observer stance’ is most related. In this stance, the researcher is a member of the group being studied, and the group is aware of the research activity. The researcher is a participant in the group who is observing others and who is interested more in observing than in participating, as his/her participation is a given (Gold, 1958). By observing, the researcher learns about the activities of the people under study in the natural setting. The researcher is involved in the day-to-day setting of participants. Participant observation can be used as a way to increase the validity of the study (Kawulich, 2005). Observations may help the researcher to have a better understanding of the context and phenomenon under study. The validity of the research is stronger if participation observation is combined with additional strategies, such as interviewing, document analysis, or surveys (Kawulich, 2005). From September 2020 until March 2021 the researcher contributed to the organized participation process of the Kromme Rijn area (Bunnik, Houten, Utrechtse Heuvelrug, Wijk bij Duurstede).

The researcher took part in this process and studied the involved employees of the municipalities. The people under study were observed in the natural setting. The researcher took notes of how the

team organized the participation process, and how several team members of several municipalities collaborated. Moreover, the researcher observed the organized participation activities. The researcher could take part in all the organized activities and took notes of the impressions during the participation activities. The researcher also focused on how participants reacted to the organized activities, and on how the collaboration between the municipality and the participants looked like.

It is important to mention that the researcher constantly introduced oneself as a researcher. Everyone knew that they were observed during the participation process. Another important remark has to be made about the ethical responsibility of the researcher during participant observation. The researcher should be aware that all participants are anonymous in the final write-up and the field notes. This should be done to prevent their identification. In the field notes, the name of the participants is not written.

To record data from participant observation a research diary is used. Research diaries include items of different types and quality according to Altrichter & Holly (2005). They include both 'data' and pieces of reflection, interpretation, and analysis (Altrichter & Holly, 2005). By including data, interpretation, commentaries, and reflection, diaries enable ongoing analysis throughout data collection and can be used to push forward the research (Glasser & Strauss, 1967). A research diary contains descriptive sequences, as accounts of activities, descriptions of events, reconstructions of dialogues, facial expressions, portraits of individuals and their appearance (Altrichter & Holly, 2005). On top of that, research diaries contain interpretative sequences, as feelings, speculations, ideas, explanations of events, reflections on assumptions (Altrichter & Holly, 2005). The researcher made a research diary to record the data of participant observation. During the participation process of the Kromme Rijn area, the researcher observed and participated in many activities of the process. The researcher started observing in October 2020 and finished in February 2021. The research diary obtains descriptions of events, reconstructions of dialogues. It also includes feelings, ideas, reflections on assumptions, and speculations from the researchers' perspective.

The above-mentioned research methods were used to answer the sub-questions and main question. Table 8 shows how the research methods are related to the sub-questions.

Sub-questions	
1. <i>How do municipalities involve citizens in the RES-process?</i>	Answers to this sub-question are related to how citizen participation processes for the RES are organized. Answers are based on the four dimensions of the collaborative process, namely breadth of involvement, dialogue, communication, and the extent of influences. Data about these dimensions is gathered by the interviews with employees of the municipalities (1), participant observation (2), document analysis (3).
2. <i>How can the local citizen participation processes be described, given the ambitions of the municipalities?</i>	Answers to this sub-question are related to how the structure of the collaborative process can be explained by using the ambitions of the municipalities. Answers to this question can be found to link the ambitions of the municipalities with the first sub question. Data for this sub question is gathered by the interviews with employees of the municipalities (1), expert interviews (2), participant observation (3).

3. <i>What is the influence of the governance structure RES-process on the local citizen participation processes?</i>	This sub-question can be answered by collecting data about the governance structure of the RES-U16 and investigating how local participation processes are affected by this governance design. Data for this sub-question is gathered by the interviews with employees of the municipalities (1), expert interviews (2), participant observation (3).
4. <i>Which conditions of the local citizen participation process influence social acceptance of the process and outcomes?</i>	Answers to this sub-question are related to conditions in the citizen participation process that influence social acceptance of the process and outcomes. Conditions that are important to ensure social acceptance are mentioned in the theory. This sub-question focuses on how these conditions are recognized in the empirical processes. This is done by linking the theory with the answers to the above-mentioned sub-questions. On top of that, this sub-question gives insight into findings related to social acceptance. Findings related to social acceptance can be found by talking to the local community and interpreting how the local community accepts the RES-process. However, the researcher did not speak to the local community to gather this information because this did not fit in the scope of the research. The other research methods (interviews, participant observation, and document analyses) are used to get insight into the concept of social acceptance. These other research methods act as mouthpieces for the local community.

Table 8: Sub-questions and research methods

4.3.2. Operationalization

In the conceptual framework and research questions, many concepts are gathered. The used concepts contribute to finding answers to the sub-questions and the main question of this research. The mentioned concepts are complex and cannot directly be translated into variables.

Operationalization is needed to make the ideas measurable (Boeije, 't Hart & Hox, 2009). Table 8 shows the concepts which have to be operationalized. The first concept is the involvement of citizens, or in other words the local citizen participation process. As explained in the theoretical framework, this is about the collaborative process between the municipality and the local community. The second concept is the ambitions of municipalities. This is about the participation goals municipalities have. The third concept is the governance structure of the RES-process. This includes the role actors have in the RES-process and Multi-level Governance. The last concept is social acceptance. This is about how the theoretical conditions to ensure social acceptance are recognized in the RES-process and which issues in the participation process are related to social acceptance. Table 9 presents the operationalization of the concepts.

Concept	Variables	Operationalization
Collaborative Governance (or local citizen participation process)	<i>Breadth of involvement</i>	Selection methods (open design, engage subgroups, randomly

		selecting, lay stakeholders and professional and technical expertise)
	<i>Dialogue</i>	Participation method (face-to-face or digital)
		Methods of collaboration
	<i>Communication</i>	Communication tools
		Transfer of information
	<i>Extent of influence</i>	Administrative impact (service delivery improvement)
		Societal impact (redistribution of power)
		Individual impact (trust)
	<i>Institutional design</i>	Clear ground rules
		Process transparency
Ambitions of the municipality	<i>Participation goal</i>	Informing, consulting, advising, co-producing, co-deciding
Governance design of the RES	<i>Central actor:</i> - <i>Local government</i>	Capacity (time and finances)
		Leadership qualities (takes initiative, open towards new ideas, working collaboratively)
	<i>Central actors:</i> - <i>Local community</i>	The elaboration of this actor is not necessary for this research, because this research focuses on the organizational side of the citizen participation process
	<i>Other actors:</i> - <i>Dutch Government</i> - <i>Province of Utrecht</i> - <i>Energy Region U16</i>	Role of these actors in the RES-process (attitude and organized activities)

	<i>Multi-level Governance</i>	Differentiated perspectives on the problem
		Depoliticization and technical orientation
		Weak central policy coordination structures
Social acceptance	<i>Social acceptance of the outcomes and the process</i>	Conditions to ensure social acceptance from the governance framework and the collaborative process + excluded conditions which are important to ensure social acceptance (gathered from the interviews and document analysis)

Table 9: Operationalization

4.3.3. Data analysis

This paragraph elaborates on how the collected data is analyzed. All data is collected by interviewing, analyzing documents, and keeping a research diary. In total 27 interviews were conducted, but not all of these interviews are transcribed. The 15 interviews with employees of the municipalities of the Energy Region U16 are all recorded and transcribed. This also applies to the two expert interviews. The extra interviews (with people of the Energy Regions Amersfoort and Foodvalley) are recorded but not transcribed. The extra interviews will only be used as additional information for the analysis. This research used Atlas.ti to analyze all the data. The transcripts, documents, and research diary were analyzed with this program.

Coding

With Atlas. ti, the data can be divided into units, labeling these units with a code, and comparing the different codes with each other (Burnard et al., 2008). Saldaña (2009) defines a code in qualitative inquiry as ‘most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data.’ In this research, descriptive and axial coding was important to analyze the data. These forms were used as a guideline but not as a strict rule. Coding is flexible and some other coding methods were also used during the data analysis.

Descriptive coding summarizes data in a word or a short phrase, most often as the basic topic of a passage of data (Saldaña (2009). This led to an index of the data’s content. The starting point of descriptive coding was the conceptual framework and the operationalization. After labeling the important units in a code, all codes were categorized into code groups. These code groups correspond to the concepts in the conceptual framework. Besides the concepts in the conceptual framework, some extra code groups are made. These code groups cannot be placed directly in the conceptual framework but influence the central concepts in this study. After finishing the phase of descriptive coding, the process of axial coding started. Axial coding aims to find patterns that can be found in the codes that have been assigned to the data. This research is a deductive study. In a deductive study, the codes will correspond with the operationalizations and are decided upon in

advance (van Thiel, 2014). Due to labeling units with a code, categorizing code groups, and axial coding, the patterns from the theoretical framework can be investigated. This information makes it possible to give answers to the sub-questions and main question.

The findings chapter includes the data analysis. As explained the analysis is done by labeling codes and constructing code groups. In the findings chapter, the researcher referred to the codes by using the number of the code in the program Atlas ti. This is an example of how this way of referring looks like: ([49;115]).

4.4. Reliability and validity

Validity and reliability are important criteria for sound scientific research.

4.4.1. Reliability

The reliability of a study is a function of the accuracy, and the consistency with which the variables are measured (Van Thiel, 2014). The more accurately and consistently the variables are measured, the more certain it is that results will not be coincidental, but paint a systematic and representative picture (Van Thiel, 2014). Accuracy refers to the measurement instruments that are used, such as questionnaires or observation schemes. The variable to be measured should be captured as correctly and precisely as possible (Van Thiel, 2014). Consistency revolves around the idea of repeatability: under similar circumstances, the same measurement will lead to similar results. Repeatability enhances the reliability of a study, as it provides the certainty that the results that have been found are indeed right (Van Thiel, 2014).

A later investigator should be able to follow the same procedures and find the same results. To do so, it is necessary to document all the procedures in the case study research and to make steps operational (Yin, 2009). Reliability can be hard in research using interviews as a method because consistency and objectivity are hard to achieve in this. It is, therefore, important to explain all the decisions made and to be transparent about the research (Denscombe, 2003). The small number of units of study in case studies can endanger the reliability of case study research. Several methodological questions can be applied to tackle this problem, the most important is triangulation (Van Thiel, 2014). Triangulation is a way of collecting or processing information by using different operationalizations, data sources, researchers, or methods. This research uses different methods, which will have a positive effect on reliability and validity (Van Thiel, 2014).

4.4.2. Validity

There are two basic types of validity: internal and external validity. Internal validity refers to the question if the researcher has measured the effect they intended to measure (van Thiel, 2014). To conduct a valid study, it is important to focus on several things. Firstly, the theoretical construct of the research has to be adequately operationalized. Secondly, the presupposed relationship between the independent and dependent variable does exist (van Thiel, 2014). External validity describes the extent to which a study can be generalized (van Thiel, 2014).

This research focuses on qualitative data. This form of research is often really subjective. There are measures that can be taken to ensure validity. The researcher focused on triangulation to improve the validity of the research.

5. Data analysis

This chapter describes the findings and results of the research. The different sections in this chapter are structured based on the conceptual framework. The first section describes the involved actors in the Regional Governance Structure, and the differences between local governmental organizations. The next paragraph elaborates on the Multi-level Governance design of the RES. This includes the relationships between the different involved actors. The third section addresses the Collaborative Governance design in which the collaboration between the local government and the local community is central. This is followed by how the institutional design of the RES looks like. The last section describes the empirical findings regarding social acceptance. Figure 8 shows how the sections in this chapter are linked to the concepts of the conceptual framework.

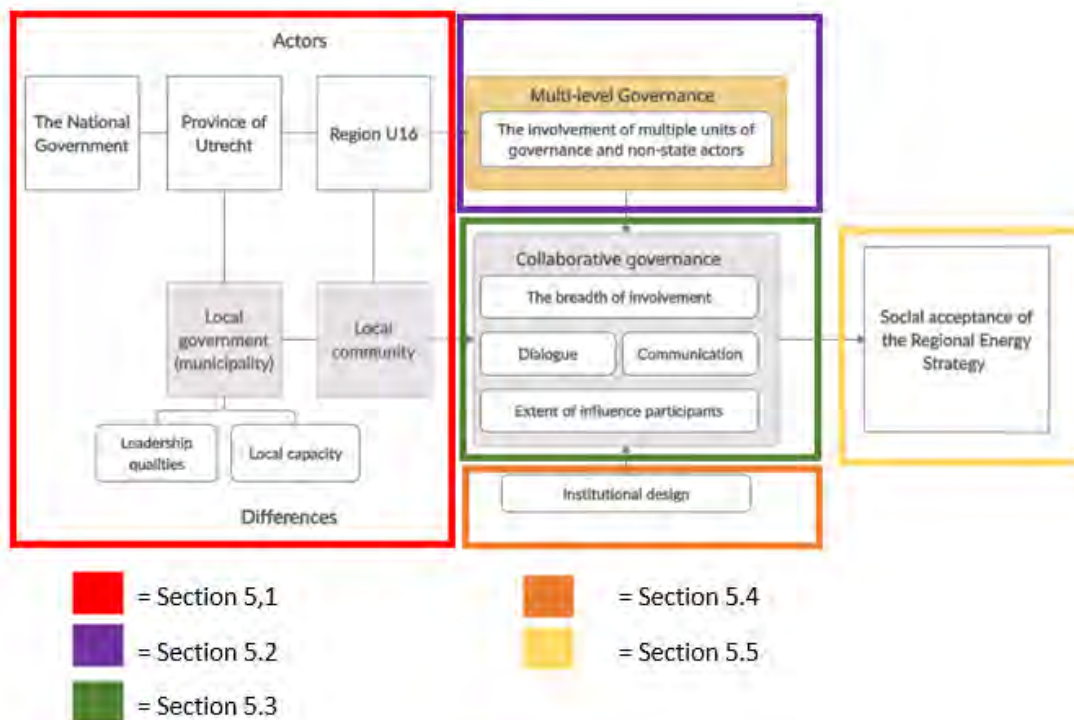


Figure 8: Structure data analysis

5.1. Actors and differences

This research focuses on the organization of local citizen participation processes for the RES in the Energy Region U16. In this process, multiple units of governance are involved. The Dutch Government, the province of Utrecht, the Energy Region U16, and the involved municipalities are part of the governance structure of the Energy Region U16. The conceptual framework (Figure 7) shows that insight into the different roles of the involved actors is necessary to understand the governance design of the RES. This paragraph gives insight into the different roles of the involved actors. Before a distinction is made between central actors and other actors. The central actors are the local government and the local community. The research describes the attitude and role of the local government because the organizational side of the collaborative process is central in this research. The section about social acceptance describes the findings related to the attitude of the local community. The other actors are the Dutch Government, the province of Utrecht, and the Energy Region U16. The next paragraphs describe the role of these actors in terms of their attitude and organized activities.

5.1.1. The Dutch Government

The first actor is the Dutch Government. The introduction shows that all energy regions have to focus on the production of sustainable energy commissioned by the Dutch Government. The Dutch Government decentralized the task to explore possibilities for producing renewable energy to the regional and local level because they recognized that the production of renewable energy influences the living environment of all inhabitants in the Netherlands (NP-RES, 2019). The responsibility to involve inhabitants in the process to explore the possibilities for solar fields and windmills is for the energy regions, and especially for the local governments (NP-RES, 2019). The Energy Region U16 takes the responsibility to get supportive regional choices, to bring together the different involved municipalities, and to involve regional stakeholders (NP-RES, 2019; RESU16, 2020, p.61). The municipalities are responsible to inform and involve citizens and stakeholders in the RES-process and are supported by the Energy Region U16 (RESU16, 2020, p.61; [10;3]).

It was already clear that the Dutch Government is not an actor which contributes to organizing citizen participation for the RES. The Dutch Government is seen as the one who commissioned the task to develop a RES and the one who aims to achieve the goals of the Climate Agreement. However, we see that a different attitude of the Dutch Government was recognized in the RES-process. A few municipalities had the idea that the Dutch Government started interfering during the RES-process ([6;46];[7;42]); [49;115]). In the middle of the RES-process, municipalities received some instructions and principles from the Dutch Government while the Dutch Government decentralized this task at the beginning of the process ([6;46]). From the start, the Dutch Government committed to the bottom-up process, but during the RES-process local governments felt some steering. For example, the Dutch Government published a 'solar ladder' about the possibilities of solar energy in the living environment. Municipalities received this document in the middle of the RES-process while they were trying to find possibilities for solar energy together with inhabitants and stakeholders ([6;47]). One interviewee mentioned that this top-down behavior affects the local autonomy of the municipalities ([49;115]). Textual figure A shows that in the municipality of Woerden the participation process was hindered because of the interference of the Dutch Government.

Interfering by the Dutch Government

The Dutch Government published a map with all possibilities for solar fields of one until three hectare and all possibilities for solar fields of 50 hectare. This document was published after the municipality of Woerden had finished their citizen participation process. This map showed the possibilities for solar energy in the municipality of Woerden. Inhabitants and stakeholders saw this map after they had discussed about their preference locations for solar energy in the municipality. Inhabitants and stakeholders saw possible locations on this map which were not discussed in the participation process. This caused unrest in society. The municipality had to explain the meaning of the published map of the Dutch Government, and how this map was related to the outcomes of their participation process ([7;42]).

Textual figure A

Then, as became clear the Dutch Government aims to achieve the goals of the Climate Agreement but local and regional governing authorities have the responsibility to do this. Local governments had some difficulties with this attitude of the Dutch Government ([49;109];[49; 112];[7;53]). A few interviewees have the feeling that this complex task is 'dumped' at the local level ([49;111]; [7;53][7;50]). Local governments have to convey the message of why renewable energy is necessary and why municipalities focus on producing solar and wind energy. From the perspective of the local

governments, the Dutch Government should support the local authorities with conveying this message (Stadszaken, 2021), and with finances and capacity [49;27]). Remarkably, especially municipalities with less capacity and many possibilities for renewable energy (as Montfoort, Lopik, IJsselstein, Woerden, Oudewater, Bunnik) criticize the attitude of the Dutch Government ([9;1]; [49;26];[4;40]; [12;13];[3;12]; [1;34];[5;37]; [7;2]). These municipalities argued that they need more support from the Dutch Government in the RES-process. However, municipalities with more capacity also mentioned the top-down behavior of the Dutch Government ([6;55]). This shows that from multiple perspectives the interfering attitude of the Dutch Government was recognized.

5.1.2. Province of Utrecht

Before it became clear that the province of Utrecht tries to have a facilitative and supportive role in the local participation processes. The empirical findings confirm this supportive and facilitative role. Firstly, the province of Utrecht supported some municipalities with financial capacity. The Kromme Rijn area got financial support to hire a process manager (Research diary, 2021, p. 6). Besides, the province organized workshops for municipalities. From September 2020 until October 2020, the province facilitated workshops related to ways to involve citizens in the RES-process and theoretical background organized by Twynstra Gudde and TNO (Twynstra Gudde, 2020; TNO, 2020). On top of that, the province of Utrecht shared some participation tools with municipalities on the website 'energiewerkplaatsutrecht.nl'. An example of this is a wind planner. The province developed a wind planner which gives insight into the technical and legal restrictions for locations of wind energy (Jonkers, 2021). Municipalities can use this wind planner tool in their participation process. An important remark about the wind planner is that this tool was finished in the middle of the process towards RES 1.0 (Jonker, 2021). Some municipalities had already finished their participation process, while others were able to use the wind planner in their process (Jonkers, 2021).

Although the supportive and facilitative role of the province of Utrecht is confirmed by the empirical findings, some remarks have to be made. Almost all interviewees doubt the effectiveness of the facilitative and supportive role of the province of Utrecht. One interviewee made clear that the organized workshops by the province were not so effective ([10;44]). Municipalities need local customization and capacity to organize their citizen participation process ([10;45];[12;19]). General information and theories about citizen participation are not supporting municipalities in the process. On top of that, interviewees mentioned that the province did not sufficiently support the local governments during the participation process ([1;48]; [49;136];[7;44];[3;13]). One interviewee said the following: *'The province should facilitate, motivate, support and boost the process instead of hindering the process with a steering attitude and rules'* ([49;136]). Several interviewees mentioned this hindering role of the provincial policy ([13;16]; [49;132]; [7;45]). The provincial policy contains many legal restrictions which influence the possibilities for solar and wind energy. Municipalities have to take this into account. From the perspective of the local governments, the provincial policy makes it more complex to find possible locations for solar and wind energy ([49;131];[13;71]).

So, the supportive and facilitative role of the province of Utrecht, as stated in the theoretical framework, is partly recognized in the RES-process. We learned that the province put effort into supporting municipalities but the interviews also show some difficulties. The mentioned statements about the role of the province of Utrecht apply to almost all municipalities. However, the municipalities which face more difficulties in the participation process more often mentioned the need for provincial support and the hindering role of the provincial policy. These difficulties are related to little experience, little capacity, and many restrictions by provincial policy. Some interviewees of other municipalities mention that it is good that the province of Utrecht is willing to support but that local customization and local choices are important in the RES-process ([13;70]).

This shows that some other sounds are also expressed about the role of the province of Utrecht in the RES-process.

5.1.3. Energy Region U16

The Energy Region U16 consists of 16 municipalities, 1 province, and 4 Regional Water Authorities. The Energy region U16 has no administrative power and is a forced collaboration between the several government authorities as explained in the context chapter (chapter 2)(NP-RES, 2019). The interviews showed that all interviewees recognize the importance of the regional collaboration ([4;60];[12;22];[6;58];[14;36]; [7;25]). The energy transition, and especially the production of sustainable energy, is transcending municipalities. The arrival of windmills and solar fields does not only affect inhabitants of one municipality, it is affecting many people of other municipalities ([7;25] [7;28];[14;36]; [4;60]; [12;22]). On top of that, the regional level has local knowledge and knows who needs what. These positive effects of regional collaboration are in line with the theoretical framework. Another positive effect of regional collaboration, which is not mentioned before, is related to urgency. The arrival of the energy region caused some pressure on the RES-process ([13;73];[6;53]). Some municipalities of the Energy Region U16 did not have done anything regarding the energy transition. They were forced to start thinking about the energy transition ([6;50]).

Before it is assumed that it is important to get insight into how the Energy Region U16 supported municipalities in the participation process. The findings show that the Energy Region U16 organized some activities to support municipalities in the RES-process. The Energy Region U16 tried to bring together the 16 different municipalities of the region by inviting all sustainability communication employees of the 16 municipalities to brainstorm about the possible participation and communication strategies and to share experiences (Ketelaars, 2020). This shows that the Energy Region U16 facilitated a space for dialogue between the municipalities. The theoretical framework indicates that a facilitator and a space for dialogue are needed to design collaboration between several parties on a regional scale. On top of that, the Energy Region U16 organized a webinar for all inhabitants. This webinar was organized to inform inhabitants about the RES, the need for renewable energy, and the RES-process (RESU16, 2020). Regarding stakeholders, the Energy Region U16 organized a few sessions (Provincie Utrecht, 2021, p. 21). Finally, the Energy Region U16 motivated municipalities to collaborate in subregions ([12;79]). During the sessions with sustainability employees of the municipalities, the Energy Region U16 emphasized the importance of the landscape integration of renewable energy (Ketelaars, 2020). This can be reached by coordinating the local citizen participation processes or organizing citizen participation on a subregional level. Citizen participation on the subregional level means that a few neighboring municipalities organize citizen participation for the RES together. Figure 9, which is one page of the digital infographic of the province of Utrecht (2021, p. 4), shows that some municipalities in the region U16 decided to organize the participation process on a subregional level. The reason why exact these subregions exist is related to previous collaborations on other themes ([1;15]; [3;19] Furthermore, the municipalities in a subregion have similar landscapes and therefore landscape integration is seen as important by these municipalities ([4;60]; [3;20]; [2;34]). Remarkably, especially many rural

municipalities decided to collaborate in a subregion. This can be explained in terms of capacity efficiency. The next paragraph elaborates further on this.

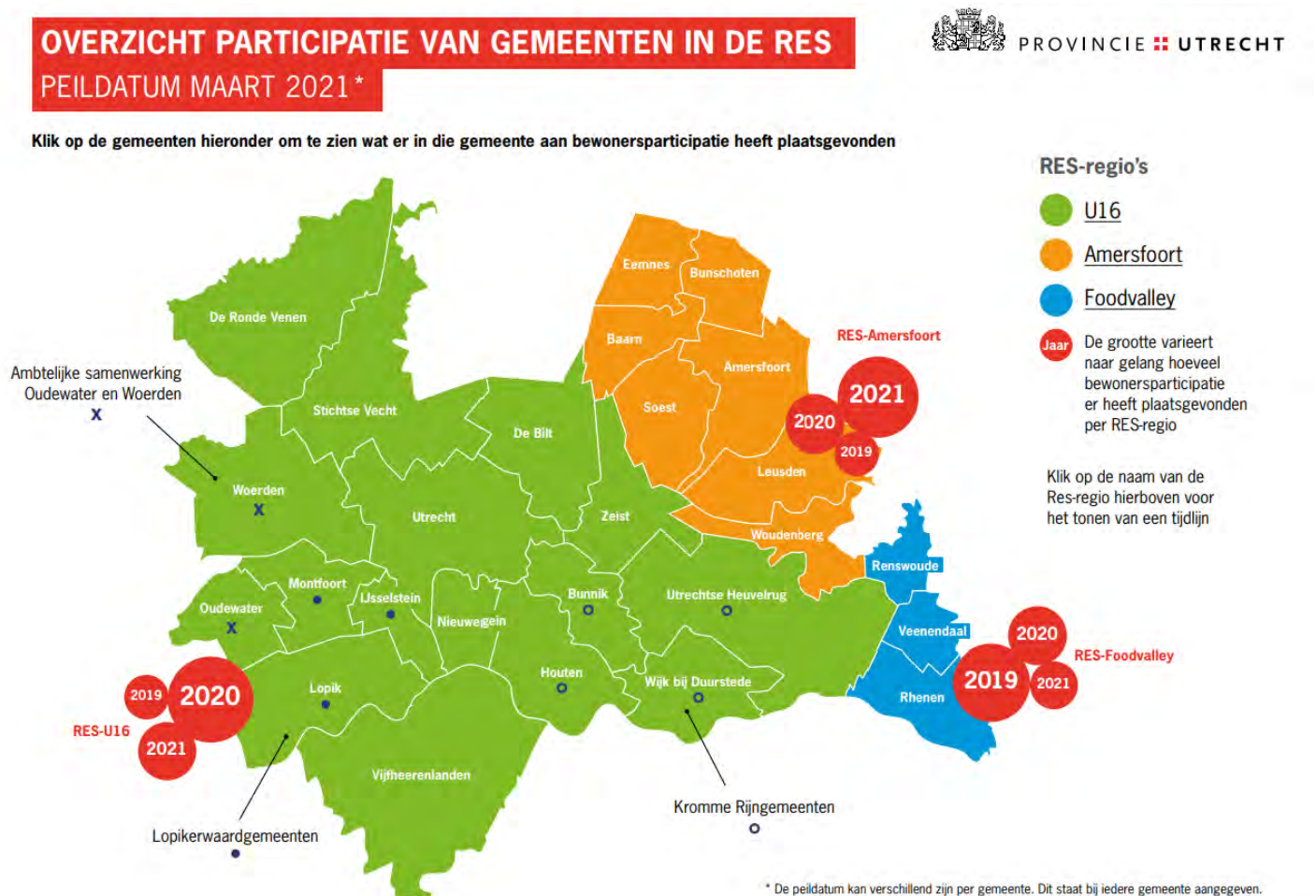


Figure 9: Page of digital infographic

In total, there are 3 subregions:

- Kromme Rijn area (open circles in Figure 9), consists of: Bunnik, Houten, Utrechtse Heuvelrug and Wijk bij Duurstede. These municipalities also collaborated in the development of the Omgevingsvisie ([2;33]; [1;27]). All municipalities of the Kromme Rijn area hired the same process manager (Research diary, 2021, p.5).
- Lopikerwaard municipalities (closed circles in Figure 9), consists of: IJsselstein, Lopik and Montfoort. These municipalities also collaborated in the development of an area vision for rural areas ([3;18]; [49;40]). The Lopikerwaard municipalities hired the same agency to organize citizen participation for the RES ([4;49]).
- Civil service cooperation between the municipality of Woerden and Oudewater (crosses in Figure 9). These two municipalities are administrative cooperation and have worked together on many different themes ([7;85]).

In a subregion, the participating municipalities organized the same participation activities and processed the input in a similar way (Gemeente Woerden, 2020a; Gemeente Oudewater, 2020a; Gemeente IJsselstein, 2020a, Gemeente Lopik, 2020a; Gemeente Montfoort, 2020a, Kromme Rijn gemeenten, 2020b). Working in a subregion has some advantages. Municipalities can easily share

experiences and knowledge ([49;34]). Some municipalities used the questions of each other's surveys in the participation process ([10;22]). One interviewee mentioned that you feel more connected with the other municipalities in the subregion ([49;31]). This interviewee also said: *'We have decided with the municipalities in the subregion to help and support each other'* ([49;78]).

The empirical findings partly confirm the supportive role of the Energy Region U16, because the findings also show that municipalities face some challenges in regional collaboration. Firstly, local governments argue that there is a lack of coordination from the Energy Region U16 ([7;43];[13;74]; [10;4]; [1;41]; [2;9]; [3;13]). A few municipalities (Bunnik, Houten, Stichtse Vecht, Utrechtse Heuvelrug, and Wijk bij Duurstede) argued that they waited for a regionally coordinated participation approach for all municipalities in the first phase towards Draft-RES ([1;20]; [2;13]; [5;6]; [10;2]; [12;20]). After a few months, the Energy Region U16 changed its vision and realized that a bottom-up process was better suited to organize citizen participation for the RES ([3;16]). Therefore they stopped with developing a regional participation approach and made clear that each local government should develop its participation approach. From the empirical findings, the specific reasons for the changed vision of the Energy Region U16 can not be explained. Due to this change, municipalities started too late and doubt the role of the Energy Region U16 in the RES-process ([10;9]; [2;19];[12;79]). One interviewee said: *'We were waiting for the coordinated participation approach of the energy region. I expected a proposal about how we should organize participation for the RES. This proposal did not come and at one point the region said that we became responsible. This caused time pressure'* ([10;4]). The lack of coordination from the Energy Region U16 fits within the broader story and is often mentioned during the interviews. However, again the less experienced municipalities and the municipalities with many possibilities for renewable energy ask for more coordination from the Energy Region U16. Some municipalities, such as Utrecht and Zeist, which face fewer difficulties in the RES-process expressed that the Energy Region U16 is doing its best and facilitated knowledge sharing. This shows that the negative sounds about the Energy Region U16 prevail in municipalities that face difficulties in the RES-process, while positive sounds about the Energy Region U16 are mentioned in the municipalities which face fewer difficulties in the RES-process.

Secondly, before it is assumed that cultural or identity differences influence regional collaboration. The findings show that there are many identity differences between the municipalities. Some of the 16 municipalities had already started with a policy for sustainable energy, while others had to start ([13;73]). On top of that, the 16 municipalities manifest different landscapes ([7;76];[3;61]), different local councils, different sizes ([7;34]) and different time paths ([5;42]; [6;52]). This shows that there are many differences between the involved municipalities in the Energy Region U16. One interviewee said: *'Each municipality is different, and local customization is necessary for the participation processes'* ([12;19]). Another interviewee said: *'It needs time to get to know each other'* ([5;55]). The differences between the municipalities made it more complex for the Energy Region U16 to have a coordinative role.

Lastly, as the institutional design (Figure 6) shows the RES-U16 has no administrative power ([4;68]; [6;56]; NP RES, 2019). Due to the lack of administrative power of the RES-U16, the Energy Region U16 had to clarify its specific role in the RES-process. The interviews showed that there is much ambiguity about the role of the Energy Region in the RES-process. All interviewees have no clear answer what the specific role of the Energy Region U16 entails. We see that municipalities look with different perspectives to the Energy Region U16. Some, especially rural municipalities, have the feeling that the region wants to decide what happens in the living environment of the municipalities [7;34]; [7;9];[4;69]).

Due to the context and scope of this research, it is possible to compare the role of the Energy Region U16 with the role of the Energy Region Foodvalley and Amersfoort. The digital infographic, made by the province of Utrecht (2021), makes it possible to compare the organized activities of the three energy regions which belong to the province of Utrecht: Amersfoort (Provincie Utrecht, 2021, p. 29), Foodvalley (Provincie Utrecht, 2021, p. 33-37), and U16 (Provincie Utrecht, 2021, p. 21). In the Energy Region Foodvalley, the region took an active role in organizing citizen participation for the RES ([3;17]). The interviews with employees of the municipalities in the Region Foodvalley and some documents on the website of the Region Foodvalley gave insight into the active role of the Energy Region Foodvalley. The Energy Region Foodvalley focused on the organization of a citizen forum (Foodvalley, 2020). This is a group of inhabitants from all municipalities of the Region. This group of people represents the inhabitants of the Region Foodvalley. The citizen forum participated in the sessions and work ateliers with stakeholders. On top of that, the Energy Region Foodvalley organized a regional survey for all inhabitants of the region (Foodvalley, 2020). The Energy Region Foodvalley did much regarding citizen participation in the RES-process in comparison with the Energy Region U16. The Energy Region U16 considers the RES-process with less steering and a focus on a bottom-up process, while the Energy Region Foodvalley considers the RES-process with more steering from the regional level. These findings show that energy regions choose their approach in the RES-process. This statement is confirmed by analyzing the interim report of the PBL about the RES-processes. In this report, it became clear that some energy regions choose a top-down approach while other energy regions choose a bottom-up approach (PBL, 2020).

5.1.4. Local Government

Now we have covered the role of the non-central actors in the RES-process. The conceptual framework shows that the local government is one of the central actors in Collaborative Governance. Therefore, it is important to get insight into the role, attitude, and qualities of the municipalities to organize citizen participation. As explained in the conceptual framework, there are differences in leadership qualities and capacity between the municipalities. This section includes how leadership qualities and capacity are related to the RES-process, and investigates the differences between municipalities.

Leadership qualities

Leadership qualities, as explained before, exist of taking initiative, open towards new ideas, and working collaboratively. There are many municipalities which had a passive attitude to start with participation for the RES ([12;80]; [1;26]; [2;2]; [4;38]; [10;8]; [5;6]). As became clear in the previous section, many rural municipalities waited for a regional participation approach of the Energy Region U16. Most of these municipalities did not have much experience with participation and the energy transition. For them, it was hard to start without having a regional participation approach. Other municipalities, which already had done activities regarding the energy transition and citizen participation (such as Utrecht and Zeist), did not wait for the Energy Region U16 and took more initiative at the beginning of the RES-process ([7;81]; [9;42]; [8;46]).

Then, almost all municipalities paid attention to be open to new ideas. In their participation process they tried to collect all thoughts, opinions, concerns, and suggestions of the participants ([1;30]; [13;21]; Gemeente Lopik, 2020). Also, the document analysis shows that municipalities tried to be open towards new ideas. The participation reports often include all expressed concerns, suggestions, opinions, and thoughts (Gemeente Zeist, 2020; Gemeente Montfoort, 2020). Textual figure B elaborates on how the municipalities of the Kromme Rijn area tried to be open towards new ideas.

Several municipalities developed a digital platform (Figure 10) which allowed inhabitants to share their ideas, thoughts, and concerns about sustainable energy (Research diary, 2021, p. 7; [14;25]).



Figure 10: Image of digital platform Kromme Rijn Area

Listen to thoughts and concerns in the participation process of the Kromme Rijn area

In the participation process of the Kromme Rijn area, a special digital platform was made to inform people about the RES, and to give inhabitants the opportunity to share thoughts, concerns, ideas, and opinions. People had the possibility to react on this digital platform, and the municipalities of the Kromme Rijn area noticed all reactions (Research diary, 2021, p.9)

Textual figure B

Lastly, working collaboratively includes clear and thoughtful communication and adaptation as explained before. Almost all municipalities put much attention to communicate about the RES and about the participation activities (Research diary, 2021, p. 5; Gemeente Woerden, 2020a; Gemeente Ronde Venen, 2020; [5;16]; Kromme Rijngemeenten, 2020b; [9;35]). In many surveys, municipalities asked the inhabitants about how they would like to be informed about the process of the RES and the participation activities (Gemeente Lopik, 2020a; [12;63]; Gemeente Montfoort, 2020b). Some municipalities hired an agency to enforce thoughtful and clear communication (Gemeente Montfoort, 2020a; Gemeente Woerden, 2020b; Gemeente Lopik, 2020a, Gemeente IJsselstein, 2020a; Gemeente Oudewater, 2020a; Research diary, 2021, p.2). Textual figure C shows how an agency influenced the organization of a participation process. Many participation reports mentioned how the municipality communicated about the participation activities and the content of the RES-process (Kromme Rijngemeenten, 2020b; Gemeente Oudewater, 2020b; Gemeente Woerden, 2020b). This confirms that municipalities put much attention to communicating about the RES. However, it is important to say that these findings are valid for almost all cases. There are a few municipalities in the Energy Region U16 which have done little regarding communication about the RES.

Structuring participation in the Lopikerwaard Municipalities

The five Lopikerwaard municipalities (IJsselstein, Lopik, Montfoort, Oudewater and Woerden) hired the same agency. This agency organized five similar participation processes for the municipalities (Gemeente Lopik, 2020a; Gemeente Montfoort, 2020a). During the participation process, there was a strict organization and the agency used specific methods to start a dialogue with inhabitants. For example: they used 'energy preferences' with multiple scenarios and visualizations (Gemeente Montfoort, 2020b). Due to this method, inhabitants had more feeling to the topic.

Textual figure C

The interviews showed that a few municipalities had to adapt their participation process during the participation process. In the Lopikerwaard, some municipalities organized an extra digital meeting for inhabitants after much criticism (Gemeente Lopik, 2020b; [7;26]). Also, the municipalities of the Kromme Rijn changed the structure of the digital meeting after much criticism from the inhabitants' perspective (Research diary, 2021, p16). This can be read in the text below.

On the 18th and 24th of February, the Kromme Rijn area organized two sessions for inhabitants about possible locations for solar and wind energy. In the first session, 200 inhabitants participated and some participants criticized the organized session. They expressed that the introduction of the session was too long and that participants did not have time to express their feelings. In the second session, the structure of the digital sessions was changed. The introduction was shortened and municipalities tried to give more space to participants to express their feelings and thoughts (Research diary, 2021, p. 15).

While these findings show that adaptation is recognized in the RES-process, it is important to say that it might be possible that in some cases adaptation was necessary but not implemented. The municipalities which did adapt to the situation expressed this in the interviews and reported this in the participation report. It might be possible that some municipalities did not express that adaptation was necessary.

Capacity

Capacity, as explained before, consists of time and finances. Generally, all municipalities did not have much time to organize participation for the RES ([1;22];[9;39]). The Dutch Government and the Energy Region U16 put much time pressure on the municipalities to organize citizen participation ([6;12]; [1;62]; [4;44]). Many interviewees mentioned that municipalities need more time to organize a well-thought process with inhabitants ([2;73]; [7;17]; [1;44]). One interviewee mentioned the following: 'Due to time pressure, you have to make important decisions in a short time' ([3;11]). This interviewee also said that it is necessary to take small steps together with inhabitants to get a supportive RES-process. This is not possible due to the time pressure by the Dutch Government ([3;58]). However, as already became clear in the previous section, municipalities with less experience in participation and energy policy were passive in the first phase of the RES-process and started late with their participation process. The differences in time capacity are strengthened by the fact that municipalities differ in what they have done regarding energy policy in the past. Some municipalities were already started a few years ago ([14;1]; [6;63][6;9]; Gemeente Zeist, 2019a), while others started with the arrival of the RES ([11;7]; [49;1]). The municipalities which already started felt less time pressure in the process than the starting municipalities. A few municipalities, such as Nieuwegein, Lopik, and Stichtse Vecht, already have some realized solar fields and windmills. For these municipalities, the RES-process was not completely new ([4;33][4;32][6;10];[9;26]; [5;15]).

As already became clear in the previous sections, many rural municipalities do not have enough financial capacity to organize a really intensive participation process ([4;40]; [12;13]; [49;22]; [49;20]; [3;12]; [1;43]). Most rural municipalities often have one employee who is responsible for developing the RES, and most of the time this employee is responsible for even more sustainability themes ([4;41]; [49;24];[7;73]). It took some time for municipalities to realize that the RES-process was a comprehensive task ([4;42]; [12;12]). Some municipalities hired an agency to increase capacity, like the Kromme Rijn municipalities (with the financial support of the province of Utrecht) and the Lopikerwaard municipalities (Research diary, 2021, p. 3; [1;17]; [2;18]). These municipalities also have joined together in a subregion to increase capacity. In a subregion, experiences and knowledge are shared between municipalities ([1;14]; [49;78][49;34][49;42]). It is efficient for municipalities with little capacity to organize citizen participation for the RES together. It is problematic that rural

municipalities face capacity problems because these municipalities have much open space and possibilities for solar and wind energy. Well-thought and intensive participation processes are important for municipalities in which the RES will have much impact on the living environment.

As explained in the conceptual framework there are differences between the leadership qualities of municipalities. On the one hand, this can be confirmed by the fact that some municipalities, especially the ones with little experience with energy policy and participation, had a passive attitude at the beginning of the RES-process. The more experienced municipalities took more initiative at the beginning of the process. On the other hand, the findings show that all municipalities pay attention to be open towards new ideas and put effort to work collaboratively. Before capacity differences between municipalities are mentioned. In general, all municipalities felt some time pressure due to the strict deadlines of the RES, but especially the less experienced municipalities need more time for the RES-process. The findings show that there are many financial capacity differences between the municipalities. Urban municipalities often have sufficient financial capacity while rural municipalities often have insufficient capacity.

The qualities and attitudes of the municipalities are investigated by focusing on leadership qualities and capacity. However, the findings show that there are some more differences between municipalities. These differences are not included in the conceptual framework but influence the organized citizen participation processes.

Firstly, the time path of one municipality is influencing the citizen participation process of other municipalities. One interviewee made clear that it is hard to collaborate with neighboring municipalities which follow a different time path ([7;29]). Some municipalities already determined their possible locations for solar and wind energy through a technical analysis, legal restrictions, and citizen participation, while neighboring municipalities were still in the process of finding possible locations for solar and wind energy. Because of these differences in time paths, some participation processes were delayed ([5;42]). The text below indicates how different time paths influence each other.

The municipality of Woerden and Oudewater started at the beginning of January 2020 with their participation process for the RES. This was much earlier than other surrounding municipalities. The municipality of Woerden and Oudewater tried to involve inhabitants of surrounding municipalities to discuss the possibilities for solar and wind energy in the areas close to the municipal border. However, the surrounding municipalities disagreed with this. They explained that they were in a different phase of the process and that they prefer to inform and involve inhabitants and stakeholders by themselves ([7;29]).

It can be said that different time paths exist between the municipalities, but it can not be proved that all participation processes are influenced by these different time paths. The influence of different time paths on the participation processes can rather be seen as an example of how differences between municipalities affect citizen participation for the RES than as general knowledge.

Then, there are differences between urban and rural municipalities. In urban municipalities, there is not so much space for the production of solar and wind energy ([9;3][9;31]; [6;65]; [8;8]). These municipalities have a completely different participation process than rural municipalities. Textual figures D and E show two examples that indicate the differences in the participation process for the RES between rural and urban municipalities. The rural municipalities have much space and open areas for solar fields and windmills. Therefore, rural municipalities must discuss with inhabitants about the preferred areas for the arrival of solar and windmills. A few employees of rural municipalities are concerned about the tension between the urban and rural municipalities ([7;33]; 49;6]). The local councils and inhabitants of rural municipalities have the feeling that they have the burdens, and the urban municipalities the lusts. These differences between municipalities in one energy region strongly influence the participation process. Inhabitants expressed their concerns about the participation process of rural municipalities and became more suspicious about the process.

Context of Utrecht

Utrecht is an urban municipality with little space for the production of solar and wind energy. In the first phase towards the Draft-RES, the municipality did research about all potential locations for sustainable production. On all potential locations, the energy transition has to be integrated with other spatial issues ([6;16]). The municipalities will start the dialogue with inhabitants and stakeholders if a potential location is under discussion ([6;17]). Because of the scarce space, inhabitants of Utrecht do not have the possibility to discuss about the preference locations for sustainability. In the process towards RES 1.0, the municipality informs inhabitants about the RES and people can think about general rules for the production of solar and wind energy.

Textual figure D

Context of Oudewater

Oudewater is a rural municipality with an open landscape and many possible locations for the production of solar and wind energy. Besides the technical viewpoint to the locations for solar and wind energy, the input of inhabitants and stakeholders is really important. During the participation process, the municipality discussed with inhabitants and stakeholders about the preference locations and preconditions and criteria for the production of sustainable energy ([7;78]). In rural municipalities with much open space, it is important to listen to the voices from inhabitants and stakeholders. The energy transition will have much impact on their living environment ([7;83]).

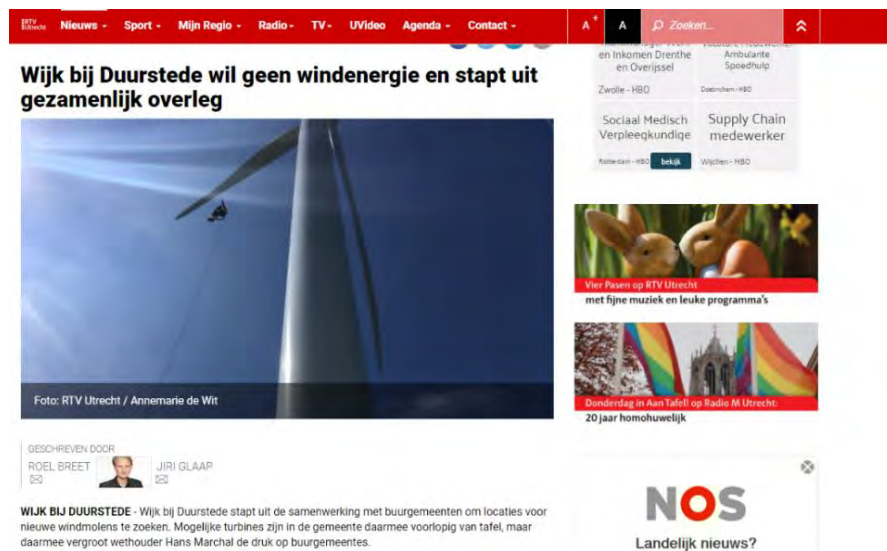
Textual figure E

Next, municipalities differ in possibilities for solar and wind energy because of technical and legal constraints. An example of a technical constraint is the distance to electricity networks ([11;13]). A legal constraint is for example the presence of protected natural areas ([13;34]). Some municipalities, such as the municipality of De Bilt, have many protected natural areas in their municipalities and these locations are all excluded for the production of solar and wind energy. Municipalities with little technical and legal constraints have more possibilities for solar and wind energy. This difference shows that technical and legal constraints influence the complexity and extent of the participation process. This is valid for all municipalities because all municipalities have to deal with little or many technical and legal constraints.

Finally, each municipality has a different local council. The local council is the governing body that has to decide about the RES and has much power in the RES-process. The findings show that some

local councils have decided to not focus on the production of wind energy ([9;40]; [5;36]). Before it is assumed that wind energy is characterized by much opposition. Also, the interviews showed that the production of wind energy is most sensitive in society ([12;26]; [11;11]), and that many local councils prefer the production of solar energy. The literature associates this social opposition of wind energy with NIMBY (not in my backyard). However the findings show that the sensitivity of wind energy can be declared in terms of values and respect for the rural landscape ([13;52]; [8;40]; Gemeente Lopik, 2020a, p.6). Paragraph 4.5 elaborates on this. Figure 11 and textual figure F show an example of the sensitivity of wind in the municipality Wijk bij Duurstede. Surrounding municipalities and other municipalities of the Energy Region U16 have the feeling that they have to produce more sustainable energy due to municipalities that do not focus on wind energy ([49;65]; [2;44]). The tension between municipalities will increase because of the different standpoints of local councils.

Figure 11: Page news article RTV-Utrecht Wijk bij Duurstede (Breet, 2021)



Sensitivity of wind energy in local council

In the local council in the municipality of Wijk bij Duurstede wind energy is a sensitive topic. The local council prefers to just focus on solar energy instead of both. However, the municipality of Wijk bij Duurstede collaborated with the other Kromme Rijn municipalities and together they decided to focus on both wind and solar energy. During the process, it became clear that many participants from Wijk bij Duurstede were against wind energy. There was much opposition during the digital participation sessions with inhabitants. Due to the resistance and the preferences of the local council, the local council decided to just focus on the production of solar energy (figure 11) (Breet, 2021b). This decision of Wijk bij Duurstede had some impact on other municipalities in the Energy Region U16. Some municipalities prefer to follow the same path as Wijk bij Duurstede. They are afraid that all windmills will land in their municipality. Because of that other municipalities also prefer to just focus on solar energy. This behaviour causes even more tension between the municipalities in one energy region (Research diary, 2021, p.17).

Textual figure F

Above we learned that the local councils of municipalities influence the citizen participation process. In a few cases, the local council showed their power by deciding to not focus on wind energy. By doing this, tension between some municipalities arose. This does not apply to all municipalities. This tension was only recognized between municipalities that had much open space for windmills and solar fields and municipalities which decided to just focus on solar energy.

So, it was already clear that differences in leadership qualities and capacity between municipalities affect the participation process. Now we also see that differences between time paths, type of municipality (rural/urban), technical and legal constraints and local councils affect the participation process. However, it can not be proved that these differences have an impact on all participation processes of all municipalities because these differences can not be applied to all municipalities.

5.2. Multi-level Governance

In chapter 5.1 we have covered what role non-central actors and central actors have in the RES-process. My conceptual framework assumes that the relationships between the involved actors can be explained in terms of Multi-level Governance (Figure 7). The Multi-level Governance design affects Collaborative Governance, which is about the collaboration between the local government and the local community or in other words the citizen participation process. This paragraph elaborates on the characteristics of Multi-level Governance and the way how this governance design is related to the collaborative process.

Multi-level Governance, as explained before, consists of differentiated perspectives on the problem, depoliticization, and weak central policy. The empirical findings confirm that the RES-process is recognized with Multi-level Governance. Firstly, differentiated perspectives on the problem characterize the RES-process. Paragraph 5.1 shows that all involved governing authorities face the RES from a different perspective. As became clear in chapter 5.1. the Dutch Government aims to achieve the goal of the 'Climate Agreement' and decentralized the task to involve citizens and stakeholders in the energy transition to lower authorities. The province of Utrecht views the RES from the perspective that they would like to support and facilitate municipalities on the one hand. On the other hand, they need to stick to their provincial policy. Sometimes, municipalities argue that provincial policy causes more complexity in the participation process ([13;63]; Gemeente Oudewater, 2020b). Then, the Energy Region U16 tries to facilitate the collaboration between municipalities and tries to develop a jointly supported RES. However, this regional level is a new governing body in the energy transition with no specific tasks and authority. Finally, local governments try to find support for energy policy and their ambition to become CO₂-neutral on the one hand. On the other hand, the local government represents their inhabitants and their preferences ([7;54]). By involving inhabitants in the RES-process, local governments try to make supportive and accepted decisions regarding the production of solar and wind energy. For local governments, local autonomy is very important ([7;9];[7;32]).

Also, depoliticization and a technical orientation characterize the RES-process. Many interviewees mentioned that the energy transition should be faced from a technical perspective ([13;33]; [4;8]; [49;95]). Also, the Draft-RES of the Energy Region U16 mentions the importance of a technical orientation, because each region has its spatial context and technical constraints (RES-U16, 2020; [49;18];[6;14];[3;27];[11;13]). Many municipalities have done some technical studies to indicate the technical constraints in their environment, and to get insight into the possibilities for the production of solar and wind energy (Gemeente Oudewater, 2020b;[1;78]; Gemeente Zeist, 2019b; [2;10]). This shows that multiple governing authorities acknowledge the relevance of local and technical knowledge in the RES-process. In the local participation process, many municipalities discussed with experts and stakeholders before they started the conversation with inhabitants ([2;22]; Gemeente Zeist, 2019b; [13;33]). The document with guidelines about the RES-process of NP-RES (2019) and the Draft-RES of the Energy Region U16 show that a technical orientation fits the approach of the RES. On top of that, we found that municipalities used technical studies to explore the possibilities for

solar and wind energy. Although depoliticization and technical orientation are investigated and confirmed by the empirical findings, a remark has to be made. The interviewees argued that the local council of the municipality still has an important role in deciding about location areas for the production of solar and wind energy ([7;15]; [1;11]). The technical view is seen as one layer out of multiple layers which are all important for the decision-making about the locations for sustainable energy. It might be possible that the final decision is not the best one according to the technical perspective. This applies to all municipalities.

Lastly, paragraph 5.1 shows that the RES is a bottom-process. Each local government is responsible for organizing citizen participation for the RES and the province and the Energy Region U16 support the local government with this. This shows that weak central policy characterizes the RES-process.

Before it became clear that the Multi-level Governance design of the RES is related to the way how citizen participation is organized. A few arguments confirm this relationship. The RES has a weak central policy structure and municipalities are the ones who are responsible to organize citizen participation for the RES supported by the province of Utrecht and the Energy Region U16. Municipalities decide how their participation process looks like, which actors they involve in the process, and how they use the outcomes of the participation process. This means that the municipality has much power in this comprehensive task. This can be applied to all municipalities of the Energy Region U16. Furthermore, the fact that different governmental authorities have differentiated perspectives on the problem causes undesired interference in the citizen participation process. This includes the mentioned interference of the Dutch Government and the mentioned supportive but also hindering role of the province. Finally, there is much agreement about the importance of the technical perspective in the RES-process. Due to this, municipalities are forced to invite professionals and experts in their participation process and take them seriously.

5.3. Collaborative Governance

The previous chapters explained the role of the involved actors and the Multi-level Governance design of the RES. Now it is clear that the differences between municipalities and Multi-level Governance influence Collaborative Governance. The local government and the local community are both the main actors in Collaborative Governance. Citizen participation is one of the central elements in Collaborative Governance. The citizen participation process can be explained in terms of breadth of involvement, dialogue, communication, and extent of influence. The next paragraphs elaborate on the four dimensions of Collaborative Governance.

5.3.1. Breadth of involvement

As explained before, the inclusion of all stakeholders who are affected by or care about the issue is an important condition of successful collaboration. In the local participation processes, municipalities put much effort to involve a diverse and representative group ([2;51]; [14;15]; [6;71]). Selection methods play a role in achieving an inclusive group of participants. Before several selection methods are mentioned, namely open design, select subgroups which are less likely to engage, randomly selecting, engage lay stakeholders, and select technical experts and professionals. Most municipalities organized participation activities that were open to all who were willing to attend. Many surveys and organized digital meetings were aimed at all inhabitants of the municipality ([40;3]; Gemeente Wijk bij Duurstede, 2020; [6;37]; [10;32]). In the municipality of Utrecht, the municipality put out a poll on social media. Everyone could participate in this poll ([6;75]). However, the interviewees also mentioned some disadvantages of an open design. A few municipalities experienced that higher educated and better-informed inhabitants more often participate in the

participation processes ([4;43]). One interviewee said: *'Better informed people take part in digital meetings for the RES. They have the knowledge they can use during the participation process. The energy transition is characterized by much complexity and difficult content. It is hard to reach the bigger and less informed group.'* ([4;43]). People with special interests and stronger views are more likely to participate than those who lack these advantages. In the participation process of the Kromme Rijn area, it was remarkable that many participants of the digital meetings had special interests or stronger views. Many participants lived in or close to one of the potential locations for solar and wind energy and expressed that they do not want to have windmills and solar fields in their living environment (Research diary, 2021, p.11). The above-mentioned disadvantage is related to what types of people participate in the open participation activities. This disadvantage is not mentioned in all interviews so it can not be confirmed that this is valid for all municipalities.

To counter the disadvantage of the open design, the municipality organized some participation activities for subgroups, which is another selecting method. A few municipalities, like Woerden and Oudewater, put effort to involve subgroups that are less likely to engage with for example interviews and street conversations (Gemeente Oudewater, 2020b; Gemeente Woerden, 2020b). Some interviewees mentioned that young people are less represented during the participation activities for the RES ([7;60]). The province of Utrecht and most municipalities aim to involve more young people in the participation process and focus on this subgroup. They think young people have a more positive attitude regarding the energy transition and the production of solar and wind energy ([7;70]). The NMU (Nature Milieu federation) of Utrecht organized a campaign 'Wattnou' to involve young people in the energy transition. Many municipalities took part in this campaign ([7;59]; [12;69]; [13;46]; [8;29]). In a few cases, municipalities put effort to involve subgroups, such as young people, in the participation process, but this did not happen often.

Then, another method is to select random people who can participate in the participation process. As became clear, this method is the best guarantee of descriptive representativeness. A few municipalities, like Woerden and De Ronde Venen, organized street conversations with random people in the municipality ([14;21]). The interviews showed that invitations by door-to-door letters are most effective to involve inhabitants in the participation ([4;57]). By sending invitations to inhabitants, people are more willing to participate in the participation process. Therefore, some municipalities have sent door-to-door letters to a randomly selected group of inhabitants ([5;19]; [2;60]; [14;24]; [6;73]). Remarkably, this can be applied to a specific group of municipalities. Most of the municipalities with sufficient financial capacity have sent door-to-door letters which indicates that sending door-to-door letters is expensive. This is not confirmed by the literature but it is stated in many interviews and the research diary ([49;90]; [3;13]; [4;40]; Research diary, 2021, p. 10). This shows that little capacity might be one of the reasons some municipalities did not involve a representative group of people.

The last-mentioned selecting method is inviting lay stakeholders and technical expertise in the participation process. In many local participation processes lay stakeholders and technical professionals are seen as serious actors. As already became clear, municipalities acknowledged the importance of technical expertise in the RES-process and invited many professional stakeholders. Lay stakeholders mostly live in the direct living environment (1;114)). They have local knowledge ([12;16]), and most often lay stakeholders represent the voice of a group of inhabitants ([1;15]). The municipality also sees a role for lay stakeholders and technical professionals as disseminators of information about the RES to residents ([49;96]). Textual figure G shows an example of how lay stakeholders are invited in the participation process. It can not be confirmed that lay stakeholders were invited in all participation processes because not all interviewees mentioned this.

Inviting lay stakeholders

In the participation process of the Kromme Rijn area, lay stakeholders were seen as a serious actor. Firstly, lay stakeholders were invited in all meetings with professional stakeholders (Research diary, 2021, p.12). It is remarkable that most lay stakeholders were part of an interest group. In some meetings, there were many people of one interest group. Therefore, the interest groups had a strong voice in the meetings. In one digital meeting there was one interest group of a neighbourhood in Wijk bij Duurstede. This interest group was against wind energy in their living environment. During the meeting, many people of this interest group were trying to tell their viewpoints. Other people and lay stakeholders were shocked by the overwhelming input of one interest group (Research diary, 2021, p.17).

Textual figure G

Above we learned that municipalities used different selecting methods in the participation process for the RES. We see that most participation activities were open for everyone and that several municipalities invited lay stakeholders and professional stakeholders. Randomly selecting and inviting subgroups that are less likely to engage are less common. However, these two methods are especially important to get a representative group in the participation process as became clear before. The findings show that municipalities face difficulties to get a representative group in the participation process according to some interviewees ([8;38]; [10;34]). This is confirmed by a published interim analysis about the RES-process by the PBL (2020).

Before it became clear that the breadth of involvement can be investigated by exploring the used selecting methods. Now it also became clear that municipalities used communication tools to get an inclusive group of people ([14;22];[11;19]; Kromme Rijngemeenten, 2020b; Gemeente Woerden, 2020b). This applies to all municipalities. Municipalities used several communicative tools, such as videos, social media, local media, newspapers to inform people about the RES. The interviewees mention that people need to see the urgency of the problem and need to be convinced to participate. Better informed people are more likely to participate in the process than people who do not have any feelings about the problem as the theoretical framework shows ([7;78]; [12;73]).

5.3.2. Dialogue

Now it is clear how municipalities tried to get an inclusive group of participants. Next, it is important to focus on the dialogue as explained in the conceptual framework. The intensity of the dialogue depends on the participation method and the participation goal. The interviews showed that most municipalities had the same participation goals in their participation process. Remarkably, different participation goals are related to different phases in the RES-process (Figure 12). In the first phase towards Draft-RES, municipalities focused on informing inhabitants about the energy transition, the RES, the Climate Agreement, the need for sustainable energy, the content of the regional collaboration, and the municipal ambitions ([2;24]; [14;6]; Gemeente Montfoort, 2020a; Gemeente Lopik, 2020a). Most municipalities used social media, local media, and the municipal website to inform people about the RES ([5;23]; [2;59]; [3;44]; [3;45]). This applies to almost all municipalities as the interviews and the analysis of the participation reports show. A few municipalities send a letter to their inhabitants with information about the RES ([4;53]; [49;93]). The interviewees argued that the RES-process was very abstract in the phase towards Draft-RES. In this phase the discussion was about a draft offer of TWh energy regions are willing to produce. This discussion was too abstract for inhabitants ([49;98]; [3;23]; [6;5]; [12;67];[10;19]). This statement is also mentioned by the Energy Region U16 in the starting note about the RES. The Energy Region U16 made clear that it is important

to involve stakeholders in the phase towards Draft-RES. They advise municipalities to focus first on stakeholders, and then on inhabitants (RES-U16, 2019). Therefore, in the phase towards Draft-RES municipalities and the Energy Region U16 started the dialogue with stakeholders and professionals ([6;3]; [49;39]). Generally, this can be applied to all municipalities. Then, municipalities focused on consulting, advising, and co-producing in the second phase.

In the first few months (September until November 2020), municipalities used methods related to the participation goal consulting. This can be applied to the majority of the municipalities, but there are some exceptions. The municipality of Zeist started with an intensive citizen participation process in January 2021. They did not have done anything regarding citizen participation from September until November

2020 (Provincie Utrecht, 2021, p. 9). This also applies for the municipality of Nieuwegein (Provincie Utrecht, 2021, p. 10). Many municipalities tried to collect the first thoughts from society about sustainable energy (Gemeente De Ronde Venen, 2020a; [9;15]; Gemeente Lopik, 2020a; [1;4]). The interviews and participation reports confirm this. The participation reports show that municipalities asked questions to get insight into how people think about sustainable energy. Methods, like a survey or a digital platform, were used to get insight into how inhabitants thought about sustainable energy and the RES ([2;29]; [6;78]; Gemeente Woerden, 2020a; [13;29]; [10;21]). The digital infographic of the province of Utrecht (2021) shows that many municipalities used these forms to get insight into the perspectives of inhabitants. The Lopikerwaard municipalities organized energy scenarios to give people the opportunity to develop an opinion and to let people think about their preferences (Gemeente Woerden, 2020b; Gemeente Oudewater, 2020b; Gemeente Montfoort, 2020a; Gemeente Lopik, 2020a; Gemeente IJsselstein, 2020a).

After the phase of collecting the first thoughts about sustainable energy, many municipalities allowed inhabitants to advise about possible solutions and alternatives in several digital meetings, organized by Zoom or Microsoft Teams ([3;41]; [6;77]; [4;4]; [9;21]; [49;57]). During these meetings, people could express their concerns, thoughts, alternatives, and chances. A few municipalities developed work ateliers with a group of inhabitants to get a dialogue (Research diary, 2021, p. 13-14; Zeist, 2020a; Gemeente Oudewater, 2020b). In these organized work ateliers, people discussed with a small group of participants and some employees of the municipality about the possibilities of solar and wind energy. Proponents and opponents listened to each other and explained their ideas and thoughts (Gemeente Oudewater, 2020a; Gemeente Montfoort, 2020b). Participants also had the opportunity to ask the municipality questions. The work ateliers provided a way to have an open and fair discussion. Some municipalities tried to find possibilities for solar and wind energy by co-producing with their inhabitants. In the municipality De Ronde Venen, people got the possibility to draw their preferred locations on digital maps ([14;10]; Kromme Rijn gemeenten, 2020b).

Participation goals in different phases towards RES 1.0



Figure 12: Participation goals in different phase towards RES 1.0

In the different phases of the RES-process, you see a line from abstractness and informing to concrete locations and advising and co-producing. It started by *informing* people about the RES and the need for sustainable energy. Then, municipalities tried to collect how inhabitants think about sustainable energy (*consulting*). On top of that, inhabitants got the opportunity to *advise* municipalities with solutions, alternatives, and new chances. Furthermore, some municipalities focused on *co-producing* by discussing the preference locations of solar and wind energy in their municipality. Textual figure H shows the structure of the participation process of the municipality Woerden. This municipality started organizing citizen participation for the RES in January 2020. The line from informing to consulting, advising, and co-producing can be generally applied to the municipalities, but it is important to remark that there are exceptions, such as the municipality of Zeist, Vijfheerenlanden, and Stichtse Vecht.

Participation process of Woerden

In January 2020, the municipality Woerden started with their participation process for the RES. They split up their participation process in several phases. In the first phase (January and February 2020) they informed inhabitants and listened to the first ideas and thoughts about the energy transition. They organized an Energy café to inform people, they talked with random people on the street, and they organized an online survey. The goal of this phase was informing people and to get insight into the first thoughts about the energy transition from the society (consulting). In the second phase, the municipality focused on the dialogue with the society about energy preferences. They created the dialogue by digital meetings and interviews. Inhabitants got the opportunity to give advice to the municipality. In the last phase, the municipality tried to make choices about the criteria for wind and solar energy and potential locations on the basis of the first two phases. They shared these choices with the inhabitants. Inhabitants had the possibility to give feedback.

Textual figure H

Participation methods

Above we learned that municipalities had different participation goals in different phases of the RES-process. Next, it is important to investigate how the dialogue is organized by focusing on the used participation methods. Before a distinction is made between the face-to-face dialogue and the digital dialogue. In the participation processes for the RES, municipalities used digital participation due to COVID-19. This applies to all municipalities as the participation reports and the interviews show. Digital participation reaches a different group of people than face-to-face participation according to the interviewees ([7;66]; [2;28]). Some inhabitants do not prefer digital meetings and are only participating in face-to-face meetings ([12;41]). Furthermore, some people do not have a computer and are not able to participate in digital sessions ([1;37]). Only a few municipalities could organize some face-to-face meetings ([13;11]; [2;23]; Gemeente Oudewater, 2020a). Examples are the organization of an Energy café (Gemeente Woerden, 2020a), organized street conversations ([14;21]; [7;61]; Gemeente Woerden, 2020a) and physical meetings in a hall ([2;23]; Gemeente Oudewater, 2020a; Gemeente Zeist, 2019) to inform people about the RES and to collect the first thoughts about the RES from the society.

The digital infographic of the province of Utrecht (2021) gives an overview of the used participation methods through the 16 municipalities in the participation process for the RES. This overview is based on the collected data from the interviews with the municipalities. The most used forms of digital participation were webinars, digital meetings, and surveys on an online platform. However, there are many differences between the organization of these forms of digital participation. Some

municipalities organized a local webinar for all inhabitants of their municipality. During many webinars, people were informed about the RES-process and could react and express their feelings. Webinars are very useful to inform many people but are not so effective for creating a dialogue as some examples show. In some organized webinars, municipalities realized that participants did not have much time to express their feelings. In an organized digital meeting in the Kromme Rijn area, many people were angry because they did not have time to say what they wanted. Textual figure I elaborates on this.

Difficulties to have a dialogue in digital sessions

On the 18th of February, the Kromme Rijn area organized a digital session for inhabitants to talk about the possible locations for solar and wind energy. The digital session had an open design and many inhabitants of the four municipalities participated (around 200 participants). The digital session started with a long introduction about past participation activities, the RES-process and the need for sustainable energy. This took much of the time. During the introduction, participants started to interrupt the speaker because they did not want to listen to the introduction. They participated because they would like to express their feelings and concerns. After the introduction, there was only 45 minutes to discuss the possible locations for solar and wind energy. In these 45 minutes, just a few participants had the opportunity to say something. Many people were angry because they had no chance to say what they want (Research diary, 2021, p. 15).

Textual figure I

In some cases, the digital webinars increased the social distance between the municipality and inhabitants (Research diary, 2021, p. 16; Gemeente Woerden, 2020c). In one of the digital participation sessions for inhabitants of the Kromme Rijn area, it looked like the municipality and the inhabitants were two parties with completely different standpoints. From the perspective of the participants, the municipality looked like the enemy who wanted to have as many solar fields and windmills as possible. People got the idea that the municipality already decided and that there was no space for the opinion of inhabitants (Kromme Rijn gemeenten, 2020b; Gemeente Woerden, 2020c). Furthermore, the anonymity of people in the webinar caused a lack of mutual respect in some cases. Textual figure J indicates this. The negative stories about the dialogue processes can not be used as general knowledge. It might be true that in some cases the organized webinars were successful.

Mutual respect in the digital dialogue

In the participation process of the Kromme Rijn area there was no respect in one of the digital meetings. This digital meeting was about the preference locations of solar and wind energy. At one point, the digital meeting turned out in a meeting with no respect and decency. Inhabitants started screaming in their microphone and had no respect for the chairman of the evening. People did not listen to each other, people interrupted each other, and sometimes the chairman was insulted by inhabitants. The organization of the digital meeting had the idea that people dare to say more in the digital setting. People are hidden behind their computer and do not show their faces in the camera. There is more anonymity in this digital setting which has a negative influence on mutual respect.

Textual figure J

So, many municipalities were forced to organize digital participation due to COVID-19. Above we found some negative aspects of the organized digital dialogue processes. The interviews showed some more other disadvantages of digital participation. Firstly, municipalities did not have much experience with e-participation. They had to invest much time and effort to find out how they could start an effective digital dialogue with inhabitants. This took much time of the process ([12;45]; [7;13]). Furthermore, some interviewees mentioned it is more difficult to get a dialogue in a digital setting. You can not see body language and some people did not even put the camera on ([9;25]). As already became clear, municipalities faced some difficulties with the amount of time to deliberate in the digital session. The municipalities who hired an agency in the participation process, such as Lopik, IJsselstein, Woerden, Oudewater, and Montfoort, found a solution for this and organized digital work ateliers in small groups to discuss with inhabitants and stakeholders. Also, interviews with inhabitants were organized to listen to people (Gemeente Woerden, 2020b; Gemeente Oudewater, 2020a; Gemeente Lopik, 2020b). The participation reports show that many inhabitants are positive about the conversations in small groups. Inhabitants got the feeling that the municipality was open for reactions, people felt heard (Gemeente Woerden, 2020b).

Now we have covered which participation goals and participation methods are used in the participation processes for the RES. Both elements are important in the dialogue. Another element of dialogue processes is the collaborative form. Before three types of collaboration are mentioned, namely: aggregation and bargaining, deliberation and negotiation, and collaboration with technical experts. In the mode of aggregation and bargaining, participants know what they want and try to aggregate their preferences into a social choice as explained before. In the context of the RES, municipalities try to fulfill the task imposed by the Dutch Government. The interviews showed that municipalities are forced to find potential locations for solar and wind energy, even if inhabitants, interest groups, and stakeholders are against it ([7;58]; [9;10]). This applies to all municipalities. There is no discussion if windmills and solar fields are coming into the living environment. On top of that, many municipalities already formulated their preference locations based on technical and legal restrictions ([9;13]). Some participation reports show that participants have the feeling that the municipality does not listen to the resistance against sustainable energy (Gemeente Oudewater, 2020b; Gemeente Woerden, 2020b). Inhabitants feel that municipalities respond to people who express their preferences about potential locations, and do not respond to other sounds (Kromme Rijngemeenten 2020b; Research diary, 2021, p.15). Inhabitants and stakeholders got the idea that municipalities tried to aggregate their preferred locations into a social choice. These feelings of the inhabitants are important to keep in mind while thinking about social acceptance. However, aggregation and bargaining are not recognized in all participation processes. This is rather an example to show that aggregation and bargaining are recognized in the RES-process from the perspectives of the participants.

Then, another collaboration form is deliberation and negotiation. Most municipalities tried to deliberate with their inhabitants about the criteria for the production of solar and wind energy and the potential collections. During the participation process, municipalities tried to collect all thoughts, ideas, preferences, concerns about the RES and the potential locations for solar and wind energy (Gemeente Zeist, 2019; Bunnik, 2020; [12;28]; [12;32]; Gemeente Lopik, 2020b; [8;36]). Some interviewees mentioned that their municipalities tried to find the right balance between all interests and views ([1;118] [1;122]; [7;74]). One interviewee said: *'It is important to find the most supportive proposal'* ([2;46]). Another interviewee said: *'You have to find the majority'* ([1;5]). By exchanging perspectives, people developed their views and discovered each others' interests. Although municipalities tried to find the right balance between the different perspectives and views, it is still the question to what extent this balance is reached. This question is related to one important

criterion, which is called transformation, to ensure social acceptance. This criterion is about the achievement of a final consensus in the participation processes. The participation process of the Kromme Rijn area shows that municipalities face some challenges to achieve a final consensus. After two organized digital sessions in December 2020, the subregion Kromme Rijn processed all input in a participation report. All participants could read this document and react to it. There was much resistance against the processing of the input. Many people did not have the feeling that the participation report was the right balance between the different perspectives (Research diary, 2021, p.12).

Finally, a last form is collaboration with the technical experts in the participation process. Many municipalities involved professionals in the RES-process before they involved inhabitants in the process (Gemeente Woerden, 2020b; Gemeente Oudewater, 2020b, Kromme Rijngemeenten, 2020b; [13;33]). Technical professionals and stakeholders are seen as serious conversation partners, and their input is regarded as important. In the participation process of Woerden and Oudewater, the municipality discussed with inhabitants about possible energy scenarios. The municipality developed these energy scenarios with professional stakeholders. This shows that the input of stakeholders has an important role in the participation process.

So, all three forms of collaboration are recognized in the RES-process. Especially deliberation and negotiation and collaboration with technical expertise are important in the organized participation processes.

5.3.3. Communication

Many interviewees acknowledge the importance of communication in the RES-process. Information about the RES and the energy transition is needed to create deliberation and foster the exchange of perspectives, experiences, and reasons (Fung, 2006). Therefore, people must be informed about the content of the discussion. Before it became clear that the transfer of expertise in such a way that all participants have access to the same basic information is challenging (Antunes et al., 2009). Many municipalities communicated about the RES through their municipal website (Gemeente Woerden, 2020a; Kromme Rijn gemeenten, 2020b; Gemeente De Ronde Venen, 2020), social media (Kromme Rijngemeenten, 2020b; Gemeente de Ronde Venen, 2020; [3;43]), the local newspaper (Gemeente Woerden, 2020a; [5;16]; [12;72]; [2;56]; [8;24]) and local media (Gemeente Woerden, 2020a; [9;35]). Some municipalities developed a special digital platform for the participation process of the RES (Kromme Rijngemeenten, 2020b; [2;31]; [14;25]). The Energy Region U16 and some municipalities used videos to inform inhabitants about the RES-process ([5;16]; [3;43]). Almost all municipalities used the same communication tools but in different intensities. The digital infographic of the province of Utrecht (2021) confirms this. This infographic shows which communication tools the 16 municipalities used to inform inhabitants about the RES and the participation possibilities. Municipalities with more financial capacity had more possibilities to communicate with inhabitants, for example by sending door-to-door letters ([4;53]; [6;72]; Kromme Rijngemeenten, 2020b; [2;60]; [14;24]). In the participation process of the Kromme Rijn area, the municipalities gave more attention to communicate with people who live in the outskirts of the municipalities. The arrival of solar fields and windmills have more impact on these people than on people who live in the more urban areas of the municipality (Research diary, 2021, p. 13).

There are three types of flows of information. The first type is the supply of information to participants through experts. This type of flow is less common and is not recognized in all participation processes. A few municipalities hired experts to share information about the energy

transition and the technical limitations of sustainable energy. For example, the municipalities of the Kromme Rijn area worked closely together with energy corporations. The corporations have much knowledge about the impact of solar and wind energy in the living environment and the possibilities (Research diary, 2021, p. 12). This is an example of how experts are used to spreading information about the RES.

Then, group learning within a participatory process through deliberation and provision of information is a type of flow of information. This form is most common and used by all municipalities. During the digital meetings, municipalities shared information about the energy transition to inform people. The provision of information was done by the mentioned communication tools in the digital infographic of the province of Utrecht (2021). For example, information about the RES was shared by presentations and webinars ([3;24]; Gemeente Woerden, 2020b; Gemeente Oudewater, 2020b), videos ([3;45]; [5;16]), information letters ([4;50]; [7;64]; [2;60]; Kromme Rijn gemeenten, 2020b).

The last type of flow of information is outside the process through peer groups. Many interest groups and lay stakeholders spread information about the RES and the need for sustainable energy ([49;96]; [1;115]). Interest groups and lay stakeholders are mostly connected with inhabitants in the municipality, and many lay stakeholders live in the direct living environment ([1;114]). Many interest groups and lay stakeholders represent the interests of a group of inhabitants in the municipality ([12;52]). Municipalities mention the positive effects of the exchange of information by interest groups and lay stakeholders. However, there are some exceptions. Some interviewees mentioned that lay stakeholders and interest groups have much impact on the information exchange. One interviewee said the following: *'Interest groups try to get more members by spreading fear to their members'* ([7;57]). They spread negative information about the production of wind and solar energy, and they try to convince inhabitants about the bad impact of solar fields and windmills in the living environment ([12;36]). One interviewee said: *'Interest groups try to feed the worries of people which harm the RES-process'* ([12;35]). This shows that some municipalities are not positive about the influence of lay stakeholders and interest groups.

Although municipalities put much effort into communicating about the RES, many participants criticized the information exchange as became clear in a few participation reports. The content of the RES and the energy transition are complex. The participation reports show that participants did not always understand the information. For example, they often did not understand why municipalities focus on solar and wind energy instead of other forms of renewable energy (Gemeente Oudewater, 2020b; Kromme Rijn gemeenten, 2020b). This shows that participants sometimes lack the capacity to understand and use the information which is crucial according to the theoretical framework. On top of that, many participants had the idea that they were not well-informed enough (Gemeente Oudewater, 2020b; Gemeente Woerden, 2020b; Kromme Rijn gemeenten, 2020b). This also happened in the participation process of the Kromme Rijn area.

Textual figure K shows an example of this. It is not possible to conclude that all municipalities received criticism on the information exchange because this is not mentioned in all participation reports and interviews. The criticism on the information exchange shows the importance of communication and might be a reason for social opposition against the RES-process.

Lack of information in participation process

The Kromme Rijn area organized two digital meetings about the potential locations for solar and wind energy in the four municipalities. The municipalities showed a map to participants about all potential locations for solar and wind energy. Inhabitants had the possibility to vote on the best (in their view) locations for solar and wind energy. Many participants disagree with this method, they argued that they were not well-informed and that they had no opportunity to prepare themselves for the meeting. For them, it was hard to vote on locations they do not know. The municipalities were criticized by the fact that they did not inform the inhabitants well enough about the map with potential locations for solar and wind energy (Research diary, 2021, p. 15).

Textual figure K

5.3.4. Extent of influence participants

Above we explored the breadth of involvement, the dialogue processes, and the communicative mode in the RES-process. The next step is to indicate what extent of influence participants have in the citizen participation process for the RES. As explained before, the extent of influence participants have is important to foster social outcomes of a decision.

The literature assumes that it is difficult to measure participation outcomes because different stakeholders have different objectives, expectations, and evaluations. As explained before there are three levels of impacts: administrative, societal, and individual impacts. The findings show that administrative and societal impacts are most related to the participation processes of the RES-process. Firstly, the administrative impact will be reached if the outcomes of the participation process are used in the RES. In all participation processes municipalities tried to collect a complete view of opinions and thoughts ([4;35]). The question is how all different opinions and thoughts are processed in the participation reports, and eventually how these outcomes are used in the RES. The interviews showed that some municipalities had some difficulties using all input ([12;82]). It is challenging for municipalities to process the input of the participation process. Municipalities try to find a compromise between all outcomes of the participation process. ‘As a civil servant you have to find a compromise between all different thoughts and opinions’ ([1;12]. Participation reports show that participants do not have the idea that their input is used in the compromise. People doubt if the administrative impact was reached in the participation processes for the RES.

In a few cases, the municipality co-produced together with inhabitants the potential locations for solar and wind energy. For example, in the municipality of De Ronde Venen inhabitants were able to draw their preferred locations for solar fields and windmills on a digital platform ([14;38]). The outcomes of this process are used by the municipality as one important layer to determine the final locations for solar and wind energy (see Figure 13). If many people disagreed with one special potential area, the municipality did not choose this area in their product. In this case, the administrative impact was reached. This is an example of how municipalities tried to increase the extent of the influence of participants.

The societal impact will be reached if there is a redistribution of power. The findings show that inhabitants and stakeholders are more empowered because of the organized citizen participation activities for the RES. As Figure 11 and textual figure F show, participants can have much power in the end-decision by expressing their feelings and emotions. In the municipality of Wijk bij Duurstede, many people expressed their anger against windmills, and eventually the local council decided to not focus on wind energy (Amerongen, 2020).

It is important to note that participants do not have a direct influence on the end-decision of the RES. Both the context chapter and the interviews showed that the local council is responsible for deciding about the RES ([3;34]; [1;125]). The local council can use all outcomes of the participation process in the decision-making process ([3;32]; [3;39]; [13;56]). From that perspective, participants have an indirect influence on the decision-making process. Participants shared their viewpoints with municipalities. The local council considers all these viewpoints in the decision-making process.

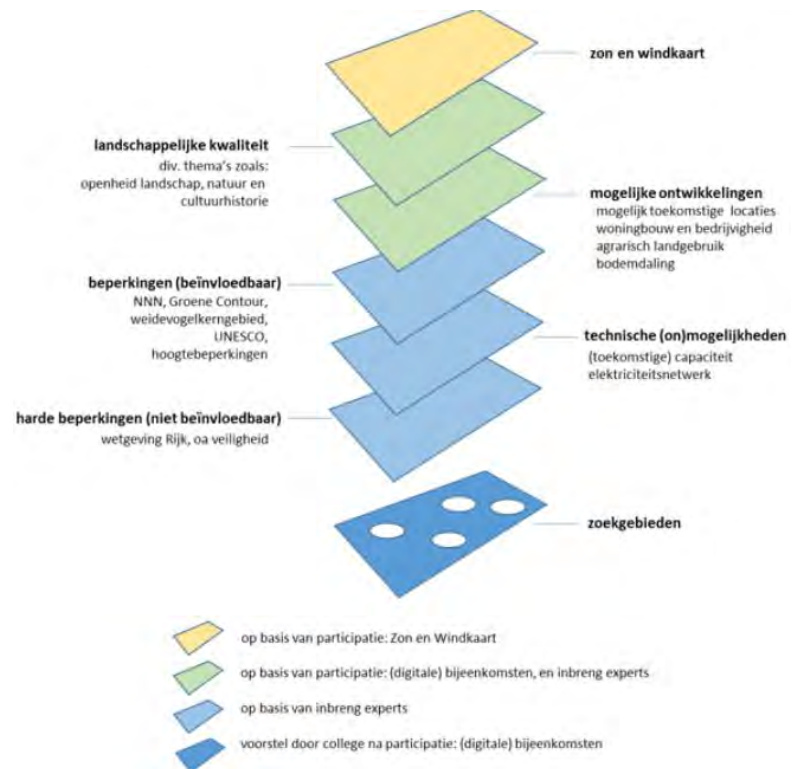


Figure 13: Layers which determine the possible locations for solar and wind energy

5.4. Institutional design

Collaborative Governance is influenced by both the Multi-level Governance design of the RES and the institutional design. Therefore, it is important to explore the institutional design of the RES-process. The institutional design, as explained before, consists of clear ground rules and process transparency.

5.4.1. Clear ground rules

Before it is said that clear ground rules are important to reassure stakeholders that the process is fair, equitable, and open (Murdock, Wiessner, and Sexton, 2005). There are several important features of clear ground rules. Firstly, the organizers of the process must know their tasks. Paragraph 5.2 shows that there is a lack of coordination between national, provincial, regional, and local scales. The exchange of information between these different spatial levels is not structured ([12;79]; [7;43]). This creates ambiguity for inhabitants ([7;41]; [12;48]). Inhabitants got information about the RES-process from several different scales in several phases ([7;40]; [6;49]; [6;47]). Textual figure A showed an example of this. This example showed that it is important to have clear ground rules about the tasks and responsibilities of each governing authority.

Then, it is important to have clear ground rules in the local participation process itself. Municipalities tried to formulate clear instructions for inhabitants during the participation process. Inhabitants should be informed about the correct data, how they can join a digital meeting, what they need to join in a digital meeting, and how they can give input during the digital meeting (Interview Lopik,

2020 [4;25]; [4;22]). On top of that, clear ground rules are related to the amount of time given to deliberation and the number of participants. As already became clear, in some organized webinars participants did not have enough time to express their thoughts and feelings. In the Kromme Rijn area, more than 200 inhabitants participated in the organized digital session in February 2021. Because of that, everyone could not express all their feelings (Research diary, 2021, p. 15). However, in some cases (for example in the participation process of the Lopikerwaard municipalities), participants discussed different energy scenarios in small groups. During these work ateliers, there was much space for discussion and deliberation (Gemeente Woerden, 2020b).

There are also some other important clear ground rules which are not mentioned before. The interviews showed that it is important to be clear about what can be discussed and what can not be discussed ([12;38]. Municipalities should set clear frameworks in the participation process (Research diary, 2021, p.14).

5.4.2. Process transparency

Besides clear ground rules, process transparency is another important element in institutional design. One interviewee mentioned that it is important to be open as possible ([14;34]). Municipalities shared outcomes of surveys and participation reports through social media, the municipal website, and sometimes digital participation platforms ([14;32]; [2;76]; [2;25]; [4;19]; Gemeente Bunnik, 2020a). Some municipalities informed participants about the results of the participation process by sending them an email ([13;57]; Kromme Rijn gemeenten, 2020b; [2;77]). By doing this, inhabitants could read the outcomes and give feedback about this ([13;58]). Other municipalities organized a special digital session about the outcomes of the participation process. In this meeting the municipalities showed how they processed the results of the participation process ([7;26]; [4;10]; [14;11]; [8;7]). As already became clear, the Lopikerwaard municipalities (Lopik, Montfoort, IJsselstein, Oudewater, and Woerden) hired the same agency in their participation process. This company put much attention in reporting all the results of the participation process. For all municipalities, they did this in the same way. All reports were published online (Gemeente Oudewater, 2020a; Gemeente Oudewater, 2020b; Gemeente Woerden, 2020a; Gemeente Woerden, 2020b; Gemeente Woerden, 2020c; Gemeente IJsselstein, 2020a; Gemeente IJsselstein, 2020b; Gemeente Montfoort, 2020a; Gemeente Montfoort, 2020b; Gemeente Lopik 2020a; Gemeente Lopik, 2020b).

Then, inhabitants must understand and follow the process. *‘As a governing authority, you have the responsibility that inhabitants can follow the process’* ([7;27]. Therefore, many municipalities put much effort into the explanation of the several phases of the participation process ([1;127]; Gemeente Woerden, 2020c; [4;34]). It is also important to be transparent about the use of the results of the participation process in the decision-making of the RES. Many municipalities wrote down in documents how they use the results of the participation process (Gemeente Montfoort, 2020b; Gemeente Woerden, 2020c).

As explained in the conceptual framework, process transparency and clear ground rules affect the citizen participation process. The findings show that the exchange of information was not structured between the different governing authorities and that municipalities faced difficulties to set clear frameworks about what can be discussed. Then, in terms of process transparency municipalities tried to be as open as possible and put much attention to share the outcomes of the participation process.

5.5. Social acceptance

Now it is clear which role actors have in the RES-process, how the Multi-level Governance design of the RES looks like, how citizen participation is organized, and how the institutional design looks like.

The conceptual framework considers that all these elements affect social acceptance of the RES-process and outcomes. This section describes which conditions of Multi-level and Collaborative Governance influence social acceptance of the RES. The first paragraph focuses on which conditions in the established governance framework of the RES-process affect social acceptance. The next paragraph describes which conditions in Collaborative Governance affect social acceptance. This section also indicates how conditions in the institutional design influence social acceptance. The last section describes other conditions that influence social acceptance.

5.5.1. Conditions in the established governance framework

A few important conditions in the governance framework of the RES are important to ensure social acceptance. Power of the local government and participatory governance are two important conditions to ensure supportive outcomes. The findings show that both local and participatory governance characterize the RES-process, because local and regional levels are responsible to develop and implement the RES in collaboration with citizens and stakeholders. Participation of the public is important to integrate local knowledge and to promote acceptance and implementation of decisions. In the case of the RES, municipalities organized participation for the RES which shows that the public got the opportunity to participate. Participation of an expanded network of actors contributes to a heightened examination of policies and compliance. The involved governing authorities acknowledged the relevance of local and technical knowledge in the RES-process. The Energy Region U16 involved regional stakeholders in the RES-process and municipalities put much attention to involve citizens, lay stakeholders, interest groups, and professionals as the findings show.

The above-mentioned conditions of the RES governance structure are important to achieve social acceptance. However, there are some issues in the established framework of the RES-process which influence social acceptance. Firstly, the mentioned interference of the Dutch Government and their top-down behavior during the RES-process had some impact on social acceptance. Despite the decentralization of the task to develop the RES, the Dutch Government commissioned municipalities to fulfill this task. Inhabitants and stakeholders got the idea that municipalities follow the Dutch Government instead of following their ambitions. In one participation report, the following was said: *'The municipality lag behind the government'* (Gemeente Oudewater, 2020b). Some participation reports indicated that participants would like to see that municipalities take control in the process instead of following the Dutch Government (Kromme Rijngemeenten, 2020b, p.13). Some people see the RES-process as a task of the Dutch Government which might be one explanation of societal opposition.

Then, we found that the RES has to be made on the regional level and that all included municipalities have to agree with the RES. This means that regional collaboration is an important element to get a supportive RES. Paragraph 5.1.3. shows that there are some difficulties in the collaboration between municipalities on the regional level. As already became clear, there was a lack of coordination between local and regional levels, especially at the beginning of the process. Because of that some municipalities, especially the ones with less experience in the energy transition and participation, started late with the involvement of citizens and stakeholders. These municipalities had to deal with much time pressure. Time pressure and insufficient time to organize citizen participation might be an issue that impedes social acceptance of the RES. Problems with time capacity are related to the strict time planning of the Dutch Government.

Lastly, the theoretical framework assumes that financial capacity and strong leadership qualities are important to organize a well-thought participation process and to ensure social acceptance. The findings show that many, especially rural, municipalities have financial capacity problems. They have

both financial problems and problems related to organizational capacity. Many small municipalities have just one employee on the RES. For these municipalities, it is hard to organize many participation activities which is an important criterion to ensure social acceptance.

5.5.2. Conditions in Collaborative Governance

The literature shows that there are some conditions needed in the collaborative process between the local government and the local community to ensure social acceptance. These conditions are related to the breadth of involvement, dialogue, communication, and extent of influence. Also, conditions in the institutional design are important to achieve social acceptance. The next paragraphs describe the dimensions of Collaborative Governance and institutional design.

Breadth of involvement

The findings show that municipalities faced many difficulties to get an inclusive group of participants. Firstly, municipalities have the idea that people with knowledge about the RES and the energy transition are more likely to participate than people with less knowledge about the topic ([10;35]). Some interviewees have the idea that many inhabitants do not see the need to participate in the process ([10;35]). The participation reports confirm this. One of the participation reports of the municipality of Oudewater indicated that many people are not interested in the energy transition (Gemeente Oudewater, 2020b). On top of that, the participation process of the Kromme Rijn area showed that the voice of opponents prevailed and people with a positive attitude had no space to express themselves (Kromme Rijngemeenten, 2020d, p.13). In one of the digital meetings of the participation process of the Kromme Rijn area, there were many people against solar and wind energy. They expressed their feelings, and this took much time of the evening. Because of all the resistance against wind and solar energy, few positive sounds were expressed (Research diary, 2021, p.17). Then, another issue that is related to the breadth of involvement is about the special interests of the participants. In some participation processes, participants were discontent about the presence of inhabitants with special interests, such as initiators of windmills and solar fields, people from energy companies, and members of energy corporations. (Kromme Rijngemeenten, 2020b; Gemeente Oudewater, 2020b). These people have special interests regarding the policy-making of finding possibilities to produce solar and wind energy (Gemeente Utrecht, 2019, p. 7). The participation of an inclusive group of people with both opponents and proponents contribute to achieving social acceptance.

Dialogue

Another dimension in the participation process is the dialogue. Participation methods influence the direction and intensity of the participation. The participation method can be a face-to-face dialogue or a digital dialogue. Due to COVID-19 most municipalities organized digital participation activities with their inhabitants and stakeholders for the RES. However, the interviews showed that there are some issues related to digital participation and social acceptance. Some interviewees mentioned that it is hard to organize a real dialogue with digital participation. From the participants' view, there were also reactions to the organized digital participation. Inhabitants argued that there were too few participation possibilities. People prefer to have a face-to-face dialogue with municipalities. According to participants, the local council can not decide about the RES by only using the outcomes of the few digital participation activities. The participation process for the RES needs to be expanded (Gemeente Oudewater, 2020b; Kromme Rijngemeenten, 2020b; Research diary, 2021, p.15). On top of that, many people do not agree with the participation goal of the municipalities. People do not support that municipalities focus on finding locations for windmills (Gemeente Lopik, 2020b, p.7) (Gemeente Montfoort, 2020b, p.7). One participation report of the Kromme Rijn area said the following about this: *'There is no support for the aim of the organized participation process for the*

RES. The aim is to find potential locations for solar fields and windmills. However, municipalities did not ask inhabitants if they agree with the arrival of solar fields and windmills. Municipalities implement the national decisions and the decisions of the local councils' (Kromme Rijngemeenten, 2020d). Textual figure L shows some reactions of participants about the participation process.

The reactions of participants show that people are against the aim of the participation process. Many participants disagree with the arrival of windmills and solar fields in the municipalities. According to

'This is no participation, it is already decided' (Kromme Rijngemeenten, 2020b, p.12).

'It is remarkable that non of the inhabitants agree with this, it is only the local government. Because it is a command from Den Hague. What interest does local politics serve: the national or the local interest?' (Kromme Rijngemeenten, 2020b, p.12)

'I have hope municipalities listen to the inhabitants and decide that windmills are not suiting the Kromme Rijn area' (Kromme Rijngemeenten, 2020b, p. 12).

Textual figure L

many participants, municipalities steer the process because they do not ask if windmills and solar fields are desired in the municipality (Gemeente De Ronde Venen, 2020; Gemeente IJsselstein, 2020b).

According to the literature, it is important to achieve a final consensus in the organized dialogue process. The interviews showed that many municipalities struggled to achieve this. Textual figure M gives an example of this. Many interviewees mentioned that there was much resistance against the arrival of solar fields and windmills (Gemeente Bunnik, 2020; [12;54]; Gemeente Oudewater, 2020b). Despite the resistance against solar fields and windmills, the municipality continued with the RES-process and policy making of locations for solar and wind energy ([7;58]; [9;10]; Research diary, 2021, p. 16). Many participants do not have the idea that a final consensus was achieved in the participation process. People feel that municipalities have much more power in the decision-making process and have the idea that the municipality already decided (Kromme Rijngemeenten, 2020d, p.12).

Trying to achieve a final consensus

In the participation process of the Kromme Rijn area, it became clear that it is hard to reach a final consensus as output of the participation process. In a digital meeting, the municipality tried to find consensus for preference locations of solar fields and windmills. However, there was much resistance against this. Inhabitants do not want to any solar field or windmill in their municipality. They did not want to choose preference locations. In the processing of the input of this digital meeting, the municipality noticed the fact that people did not want to choose. On the other side the municipality continued the process and focused on the preference locations which were chosen by the other participants. This shows that it was too hard to reach a final chosen consensus (Research diary, 2021, p.16)

Textual figure M

Communication

Then, some participants have the idea that municipalities should put more attention to communication. They expressed that inhabitants are not well enough informed about the RES-process and the energy transition (Kromme Rijngemeenten, 2020b, p.12) (Gemeente Oudewater, 2020b). According to them, digital communication tools (such as social media and local media) do not reach everyone. Therefore, it is important to send door-to-door letters to reach many different inhabitants (Kromme Rijngemeenten, 2020b, p. 12). However, as became clear some municipalities could not use more communication tools to inform people about the RES.

Extent of influence

The last dimension is the extent of influence or the impact participants have in the decision-making process. The literature assumes that this is an important criterion to ensure social acceptance. Societal opposition will decrease once non-state actors find the preferences and interests they voiced in a participatory process represented in the final policy decision. The impact is concerned with the influence of the deliberative process outcomes on regional and national scales. The participation reports show that inhabitants are concerned about the democratic legitimacy of the RES (Gemeente Oudewater, 2020b). People are concerned about who decide how much sustainable energy the municipality will produce, and who decides about the definitive potential locations for solar and wind energy (Gemeente Oudewater, 2020b). This shows that participants are insecure if they have an impact on the process outcomes on a regional scale. In a participation report, the following was said about this: *'Participants have a voice in the discussion but do not have the responsibility in the end decision. This became more an issue during the participation process'* (Gemeente Utrecht, 2019, p.7). Currently, it is not possible to indicate how the deliberative process outcomes are processed in the RES, because the decision about the RES is not made yet. The interviews showed that the local council is responsible for the determination and implementation of the RES ([3;34]). They have to decide about the RES and take into account the outcomes of the deliberative process outcomes.

Institutional design

The theoretical framework assumes that clear ground rules and process transparency, which are both two elements of the institutional design, are important to achieve social acceptance. Clear ground rules, which include the amount of time given to deliberation and the number of participants, are an important condition to ensure compliance. As already became clear, many participants criticized the amount of time given to deliberation. In many participation processes, not everyone could express their feelings. On top of that, in some organized webinars there were too many participants to have an effective dialogue. However, the municipality organized interviews and small group discussions to give people the opportunity to discuss and express their feelings in some cases. Many participants were really positive about this (Gemeente Woerden, 2020b; Kromme Rijngemeenten, 2020b).

In many participation processes, people criticized the transparency of the process. Some municipalities are not sufficiently transparent about why they focus on the production of wind and solar energy and the extent of influence participants have. Participants wonder how the municipalities and the Energy Region U16 process the outcomes of the participation process in the RES (Gemeente Oudewater, 2020b). Furthermore, it is not clear why municipalities focus on wind and solar energy and not on other forms of sustainable energy (Gemeente Oudewater, 2020b; Gemeente Zeist, 2019). On top of that, the participation reports show that inhabitants do not have a clear view of the role of Energy Region U16 and the relationships between municipalities in the region. Participants have the idea that municipalities are not collaborating in the RES-process

(Gemeente Oudewater, 2020b). Finally, it is often not clear for inhabitants what will happen if one municipality does not want to produce wind energy or solar energy (Gemeente Oudewater, 2020b). People have questions about how much each municipality has to do (Zeist, 2019). However, the mentioned transparency issues can also be linked to a lack of communication of information exchange. Above we learned that many people have the feeling that they need to be better informed about the RES. Better communication might solve these process transparency issues.

5.5.3. Other factors which influence social acceptance

Above we learned about how all concepts of the conceptual framework are related to social acceptance. This section describes other conditions (which are not included in the conceptual framework) which influence social acceptance.

The conceptual framework only mentions the differences in leadership qualities and capacity between municipalities. The findings show that there are many more differences between municipalities. Some of these cultural and identity differences cause some tensions between municipalities which affect social acceptance. The findings show that there is tension between urban and rural municipalities. Little possibilities for renewable energy and a high energy consumption characterize urban municipalities, while many possibilities for renewable energy and a lower energy consumption characterize rural municipalities. Both the local council and the inhabitants of rural municipalities are concerned and have the idea that all solar fields and windmills will land in their municipality. This might be one explanation for social opposition in the participation processes of rural municipalities. This indicates that acceptance issues in the context of renewable energy are related to values, feelings, and mistrust. Another difference, which is excluded in the theoretical framework, is related to the different local councils of the municipalities. Some local councils decided to not produce wind energy, which is most sensitive in society. Inhabitants of surrounding municipalities think it is unfair. They feel that if one municipality does not focus on the arrival of windmills then other municipalities have to do more. This issue is important to mention in the discussion about social acceptance.

Then, as became clear before there is a tension between support for renewable energy policies at the national level on the one hand and decreasing or absent acceptance of renewable technology expansion at the local level on the other hand. This is called NIMBY. This NIMBY attitude is often recognized in the participation processes for the RES but is not placed in the conceptual framework. People think that windmills and solar fields do not fit in the living environment of people. One interviewee said: *'Inhabitants are concerned that all windmills will land in their direct living environment'* (Interview Woerden and Oudewater, 2020 [7;77]). The interviewees noted that inhabitants are generally positive about sustainable energy. In the first phases towards RES 1.0, many municipalities organized a survey about sustainable energy. Many participants indicated that they were not against sustainable energy. However, the more concrete municipalities became in their process, the more resistance arose ([13;53]; Gemeente Lopik, 2020a, p.6). Figure I shows that societal opposition in the participation process of the Kromme Rijn area can be declared with NIMBY. In one organized digital session participants had the opportunity to vote on preference locations. Participants voted on their preferred locations. By analyzing the input, it was remarkable that most participants voted on locations in municipalities they do not live in. A communication advisor of one of the municipalities said: *'People do not want to have windmills and solar fields close to their house. They started voting on locations which were far away from their direct living environment'* (Research diary, 2021, p.16). The empirical findings confirm that NIMBY is linked with the RES-process. However, the findings also show that not all opposition can be explained with NIMBY. Other factors which influence opposition are motives, feelings, respect for the rural landscape, and values.

6. Conclusion

This research investigated the organized local participation processes for the RES in the Energy Region U16. To implement the RES in the Energy Region U16, citizens and stakeholders must accept the RES-process and outcomes. This research gave insight into the way citizens and stakeholders are involved in the RES-process and which conditions of this process affect social acceptance of the RES. This research concentrated on answering the following research question: *'How do municipalities in the Energy Region U16 organize local citizen participation processes for the RES, and which conditions influence social acceptance of the RES?'*

To enable answering this question, a comprehensive study of the literature is done. This resulted in a conceptual framework, including the conditions of Multi-level and Collaborative Governance. Figure 7 shows the conceptual framework. Firstly, this research identified how municipalities involved citizens by focusing on the four dimensions of Collaborative Governance. This gives insight into how the conditions of Collaborative Governance are recognized in the RES-process. Then, the research explored how the citizen participation processes can be described given the ambitions of the municipalities. This includes the time path of the RES-process and the participation goals of municipalities. Next, this research identified how the Multi-level Governance design of the RES affects the collaborative process between the local government and the local community. Finally, this research identified how the explored conditions influence social acceptance of the RES. This also includes new conditions which are not mentioned in the conceptual framework.

The results of this research contribute to the active role of the province of Utrecht in the citizen participation processes for the RES and can be used by the province to inform the Provincial States what is done regarding citizen participation. Moreover, this research contributes to the knowledge of effective citizen participation to achieve social acceptance.

The data of this research is collected with interviews, participant observation, and document analysis. In total 27 people were interviewed to get insight into the organized participation processes for the RES. 15 of them worked for one of the municipalities in the Energy Region U16. 10 of them worked for one of the municipalities in the Energy Region Amersfoort and Foodvalley. Two interviews were conducted with experts. Then, a research diary is conducted about the organized participation process for the RES of the Kromme Rijn area. From September 2020 until March 2021 the researcher was able to observe the employees of the municipalities of the Kromme Rijn area while they were organizing citizen participation for the RES. Moreover, the researcher participated in the organized participation activities and was able to observe these activities and the reactions of participants. Finally, 26 documents are analyzed to get more in-depth information about the organized citizen participation processes. Most of the documents were participation reports. The transcripts of the interviews, the research diary, and the documents were all analyzed with Atlas ti. In this program, the researcher had the opportunity to divide the data into units and label these units with a code. Afterwards, it was possible to compare these codes with each other. The use of these different research methods had a positive effect on the reliability and validity of this research.

This final chapter describes the conclusion of the research. The central question of the research is:

'How do municipalities in the Energy Region U16 organize local citizen participation processes for the RES, and which conditions influence social acceptance of the RES?'

The following paragraphs answer the sub-questions. After answering the sub-questions, the central question will be answered.

1. How do municipalities involve citizens in the RES-process?

One central element of Collaborative Governance is the involvement of actors in local decision-making, including actors within the local community and those outside which means that participation of the public is important in this governance design (Newig et al., 2018). Collaborative Governance is about the collaborative process between the local government and the local community. As explained in the literature, there are four important dimensions in this collaborative process: the breadth of involvement, the dialogue, communication, and extent of influence (Fung, 2006). All four dimensions are in a way recognized in the organized participation processes for the RES.

This research identified the used selecting methods, which are described by Fung (2006), to explore the breadth of involvement in the collaborative process. All municipalities used the selecting methods 'open design' and 'engage lay stakeholders and professionals'. Most organized participation activities were open for all who were willing to attend and in most participation activities lay stakeholders and professionals were invited and seen as serious partners. The selection method 'randomly selecting' is the best guarantee to reach descriptive representativeness as described by Fung (2006) but is used by just a few municipalities. Randomly selecting can be done by organizing street conversations with random people. We found that most municipalities were hindered to organize these activities because of COVID-19. Based on the theory, it is also important to focus on subgroups that are less likely to engage. One subgroup that was less represented in all participation processes was the younger generation. Therefore, a few municipalities and the NMU, which is a nature and environmental federation, focused on how young people can be involved in the RES-process. It is expected that young people have a more positive view regarding the production of wind and solar energy in the living environment. Besides selecting people for participation activities, communication is used to involve a diverse and inclusive group of people. All municipalities used different communication tools, such as social media and the municipal website, to inform and invite citizens and stakeholders in the RES-process. An important conclusion is that despite the effort to involve a representative group of people, the findings identified some challenges. According to the interviewees, inclusiveness and representativeness are general challenges of citizen participation. There are multiple reasons for this. Examples are people are not interested in the energy transition or do not see the urgency to participate. On top of that, some other factors caused difficulties to involve an inclusive group of participants. We learned that these difficulties are related to experience with participation, capacity, and time.

The dialogic processes can be organized through a face-to-face dialogue or digital participation. Due to COVID-19 and time pressure, most municipalities were forced to organize only digital participation. The digital infographic of the province of Utrecht (2021) shows that the most organized activities are digital sessions, webinars, and surveys on platforms. The findings showed that some municipalities tried to get a dialogue by organizing work ateliers in small groups. Within these small groups, people could discuss and express their feelings and thoughts. It is important to note that there are many intensity differences between the municipalities. We see for example that one municipality organized five consultation activities while another municipality organized just one consultation activity. As described by Phillips et al. (2013) dialogue processes embrace co-producing knowledge between different actors based on the different knowledge they bring up into play when they meet and collaborate. The dialogue processes can be explained in terms of three collaboration forms, which are described by Fung (2006). The most common type of collaboration is deliberation and negotiation. The findings showed that municipalities tried to collect all opinions and ideas from society to find the right balance between interests and views. Moreover, the majority of the municipalities collaborated with technical experts and professionals, including energy corporations

and the NMU. These stakeholders were both on the local and regional level invited, and their input was regarded as important. This is confirmed by the fact that in most participation processes municipalities discussed and talked with stakeholders before they involved inhabitants. It is hard to define to what extent the last type of collaboration, which is about aggregation and bargaining, is recognized in the participation processes for the RES. Some examples in the empirical findings show that participants have the idea that municipalities try to aggregate their preferences into a social choice. We learned that municipalities developed their preferences based on a technical and legal analysis. An example of this is that municipalities only included possibilities for renewable energy based on a technical study in the participation process. Participants got the idea that municipalities tried to find support for these preferences instead of listening to participants in an open discussion. People have the idea that technical and legal layers are more important than the layer of social acceptability. However, this statement is based on the perspectives of the participants and is not mentioned in the interviews.

Municipalities paid much attention to communication in the participation processes for the RES. Municipalities communicated about the RES through their municipal website, social media, local newspapers, and local media. Some municipalities developed a special digital platform to inform inhabitants about the RES and the process, which is an important aspect of digital participation according to Filipe & Reyes (2017). We learned that just like with the participation activities there are some intensity differences between municipalities. Municipalities with more capacity and time had more possibilities to communicate with inhabitants, for example by developing a digital platform and sending door-to-door letters. All three types of flows of information, which are described by Gudowsky & Bechtold (2013), are recognized in the findings. Some municipalities used experts to spread information, but this is not the most common form. Group learning within a participatory process occurred during the organized participation activities by municipalities. Municipalities provided inhabitants with information about the RES during these sessions. Information exchange through peer groups occurred in the majority of the participation processes. Lay stakeholders and interest groups exchanged information and informed their members and others about the RES. Some municipalities experienced some problems with the information exchange by interest groups and stakeholders. Some interest groups, which were against wind and/or solar energy, tried to influence people's opinions by spreading subjective negative information about the RES.

According to Fung (2006) and Fraune & Knodt (2017), it is important to explore what extent of influence participants have in the decision-making process, or in other words what impact participants have. The findings showed that participants had administrative and societal impacts in the participation processes for the RES. In several cases, the administrative impact was reached because municipalities tried to process all opinions and ideas of participants into a report. The local council can use this report to decide about the RES. However, we learned that municipalities had some difficulties in processing all the outcomes. The societal impact was reached because people were more empowered by participating in the RES-process. Some examples show that participants have much power to influence the local council.

The last important aspect of the collaborative process is related to the institutional design, which consists of clear ground rules and process transparency. Clear ground rules refer to the strict and clear tasks of the organizer. Due to the complexity of the governance design of the RES, the specific role and tasks of each governing authority were not always completely clear. We also found that municipalities had some difficulties setting clear ground rules in the participation process itself. In some cases, municipalities experienced issues to limit the number of participants and organizing sufficient time to deliberate. The findings showed that in some organized webinars and digital

sessions, for example in the participation process of the Kromme Rijn area, there were so many participants that not everyone had the opportunity to express their feelings. Other municipalities, as the Lopikerwaard municipalities, found a way to ensure participants to have a real dialogue by organizing work ateliers. Talking about process transparency, we learned that municipalities tried to be as open as possible by sharing all results on the municipal website and social media. We learnt that the Municipality of Woerden, Oudewater, Lopik, IJsselstein, Montfoort, Bunnik, Houten, Utrechtse Heuvelrug, Wijk bij Duurstede, Utrecht, Zeist and De Ronde Venen shared their results on a digital platform, social media or the municipal website. As a result, people had the opportunity to read the outcomes of the participation process and to respond to it. Some municipalities used this feedback to determine the final outcomes of the participation process.

Overall, we learned how municipalities involved citizens in the participation process for the RES. On the one hand, the findings show that there are several aspects in the participation process that are valid for each municipality. This includes the use of multiple communication tools to inform people, the use of similar participation methods, the focus on deliberation and negotiation, the involvement of technical expertise, and sharing of results of the participation process with the participants. On the other hand, it can be concluded that each participation process has its characteristics and difficulties.

2. How can the local citizen participation processes be described, given the ambitions of the municipalities?

We found that local governments used different participation methods in different phases of the RES-process. The use of specific participation methods in specific phases of the RES-process can be linked to the ambitions of the local governments. The ambitions of the local governments can be described in terms of participation goals which are described by Edelenbos & Monnikhof (2001). We learned that each phase of the RES-process had different starting points in terms of ambitions. In the first phase towards the Draft-RES (November 2019- September 2020), municipalities had low ambitions regarding citizen participation. In this phase, municipalities focused on informing inhabitants by using different communication tools such as social media, local newspapers, and the municipal website. Almost all municipalities, except for Woerden and Oudewater, did not start the dialogue with inhabitants. Both the interviews and the participation reports showed that the majority of the municipalities organized a dialogue with stakeholders and lay stakeholders in the phase towards Draft-RES. This is because the Energy Region U16 advised municipalities to first talk with professional stakeholders. Both the Energy Region U16 and the municipalities argued that the phase towards Draft-RES was too abstract for inhabitants.

Then, in the first few months towards RES 1.0 (October- November 2020), most municipalities had higher ambitions regarding citizen participation. Almost all municipalities, except for Vijfheerenlanden, started organizing participation activities for inhabitants. The most related participation goal of Edelenbos & Monnikhof (2001) is *consulting* in this phase. Generally, municipalities had the ambition to get insight into the opinions of people regarding sustainable energy and windmills and solar fields by organizing digital webinars and surveys. People had the opportunity to express their feelings but in most participation processes there was not much time for a dialogue in this phase. Just a few municipalities, as the Lopikerwaard municipalities and De Bilt, had higher ambitions and organized work ateliers with inhabitants to have an open discussion.

In the last phase towards RES 1.0, municipalities had higher ambitions and used participation methods to get a dialogue with inhabitants. In this phase, the participation goals *advising* and *co-producing* were recognized. It is important to note that these participation goals are recognized in different ways and intensities. In some cases, such as in the Lopikerwaard municipalities, the

Kromme Rijn municipalities, and de Ronde Venen, much attention was given to let people advise and co-produce possibilities for solar and wind energy. They organized for example work ateliers to map preference locations for solar and wind energy on a digital platform. Municipalities allowed inhabitants to express their preferences, ideas, and solutions. In this phase, the participation process became more concrete. In other cases, such as in the municipality of the Stichtse Vecht and Nieuwegein, fewer activities were organized to co-produce and let people advise. Generally, it can be concluded that the RES-process started with much abstractness and ended with concrete ideas about the possible locations for solar fields and windmills. This conclusion can be generally applied to all municipalities, but the findings show that there are some exceptions. Examples of exceptions are the municipality of Utrecht, Nieuwegein, and Zeist, which had a different participation process due to limited possibilities for solar and wind energy.

3. What is the influence of the governance structure RES-U16 on the local citizen participation processes?

The arrival of energy regions can be seen as a new regional governance structure. Multi-level and Collaborative Governance characterizes this governance structure. The findings show that the local government gained much power in the RES-process which is one important element of Multi-level Governance according to Eckerberg & Joas (2004). We also found that several different actors took part in the RES-process including actors within the local community and regional stakeholders which is one important element of Collaborative Governance. The previous paragraph showed how Collaborative Governance is organized in the RES-process.

All three characteristics of Multi-level Governance which are described by Scholten (2012) (page 18) are recognized in the RES-process. The involved actors all face the energy transition from a different perspective. The Dutch Government aims to achieve the goals of the Climate Agreement. On the one hand, they want to keep their hands off the process because they acknowledge the importance of a bottom-up process. On the other hand, they tend to steer and intervene in the process because they see the need for the energy transition. The province of Utrecht aims to adhere to its provincial policy and tries to support municipalities in the RES-process. The Energy Region U16 tries to connect and support municipalities in the RES-process. However, the Energy Region U16 did not have a strict and clear approach. The local governments aim to fulfill the task of the Dutch Government on the one hand, but they also represent the interests of their inhabitants on the other hand. We found that these differentiated perspectives made the local citizen participation process more complex. The steering and interference of the Dutch Government increased the feeling that the energy transition was imposed by the Dutch Government. On top of that, municipalities did not feel support from the Energy Region and Province. Lastly, the provincial policy hindered the possibilities for solar and wind energy. These differentiated perspectives were often hard to understand by people and local governments noticed that people struggled to accept the influence of the other governing authorities.

Also, depoliticization and a technical orientation characterize the RES-process. The NP-RES (2019) and the RES-U16 (2019) mentioned the importance of the technical perspective in the energy transition. Many municipalities have done technical studies to indicate the possibilities for solar and wind energy in their municipality. On top of that, municipalities discussed with experts and stakeholders before they started the dialogue with inhabitants. This shows that the technical perspective is included in the RES-process. Due to this, the matter of the energy transition became more complex. Municipalities had to explain the technical studies and assumptions. Municipalities noticed that many people had difficulties understanding the technical story of the energy transition.

Finally, weak central policy influences the local citizen participation process. The local government is responsible for the citizen participation process and the local council has to decide about the RES. The findings show that each municipality is focused on its territory despite the importance of regional collaboration. Due to the local autonomy of each municipality, there is tension between rural municipalities, which have many possibilities to produce solar and wind energy, and urban municipalities, which have little space for the production of solar and wind energy.

4. Which conditions in the local citizen participation process for the RES influence social acceptance of the RES-process and outcomes?

Generally, three different kinds of conditions are recognized in the conceptual framework.

Conditions of Multi-level Governance

Firstly, there are some conditions in the established governance framework of the RES which affect social acceptance. This includes the role of the involved actors in the RES-process and Multi-level Governance. The empirical findings show that each municipality in the Energy Region U16 developed its participation approach for the RES and made its own decisions regarding citizen participation for the RES. This shows that both local and participatory governance are recognized in the RES-process. The literature assumes that Multi-level Governance is a condition that contributes to social acceptance (Vodden et al., 2019). However, the empirical findings show that there are some issues related to Multi-level Governance which affect social acceptance. Through weak central policy, municipalities can make their own decisions regarding citizen participation for the RES. They can decide how and when they include citizens and stakeholders. Because of that, there are many differences between the participation processes of the municipalities, except for the municipalities which collaborate in a subregion. Due to the bottom-up process, there is a lack of coordination between the municipalities, and also the Energy Region did not succeed to connect the municipalities. The interviews showed that many municipalities in the Energy Region U16 do not feel connected to the other involved municipalities. The differences, which include the structure of the municipalities (urban/rural), the past activities related to energy policy and participation, the time-paths, the different local councils, and the different legal and technical constraints, caused some tensions between the municipalities which influence the regional collaboration. These tensions manifest themselves in issues related to social acceptance. Inhabitants and local councils of municipalities doubt the ambitions of other municipalities and whether they are fully committed to producing as much renewable energy as possible. Especially rural municipalities, which have many possibilities for renewable energy and little energy consumption, are suspicious about the RES-process and are concerned that all windmills and solar fields will land in their living environment. Moreover, the fact that the Dutch Government and the province of Utrecht have differentiated perspectives on the energy transition caused some social acceptance issues. As became clear, the Dutch Government tried to steer the process while they decentralized the RES-process. This interfering behavior gave people the idea that the autonomy of local government was reduced and that municipalities followed the Dutch Government instead of making their own choices. Municipalities noticed that people had difficulties understanding the approach of the RES-process.

Conditions of Collaborative Governance

The second type of conditions includes the collaborative process between the municipality and the citizens and stakeholders. These conditions point at to what extent the four dimensions of the collaborative process, which are described by Fung (2006), are recognized in the RES-process. Also, process transparency and clear strict rules are important to ensure social acceptance. Firstly, an

inclusive group of participants is an important condition to ensure social acceptance. Diverse actors and local/regional knowledge lead to ecology-supportive outcomes according to the literature. We found that many municipalities had difficulties reaching an inclusive and representative group of people. Municipalities realized that especially people with more knowledge about the energy transition or people with special interests participate. There is still a large group of people who do not see the urgency to participate. Randomly selecting and focusing on subgroups are two selection methods that counter this problem. However, these methods were not often used because of time pressure and little capacity.

Then, organizing a dialogue is an important condition to ensure social acceptance. We learned that almost all municipalities tried to organize dialogue but in different intensities and directions. There are some aspects in the organized dialogue which influence social acceptance. Firstly, as the literature shows, organizing a face-to-face dialogue contributes to breaking down barriers to communication that prevent the exploration of mutual gains (Bentrup, 2001). However, most municipalities did not organize face-to-face participation activities due to COVID-19. The findings show that through digital participation municipalities were able to reach a big group of people in a short time by organizing webinars in the evening to inform people about the RES. In the organized dialogue some crucial aspects are missing. We learned that municipalities had difficulties organizing a dialogue with sufficient time to deliberate which is an important condition according to Weber & Tuler (2000). Moreover, in many organized webinars there were too many participants to have an open discussion. We also learned that municipalities had difficulties achieving a final consensus in the dialogue which is an important criterion to ensure social acceptance according to Fraune & Knodt (2017). Municipalities tried to find the right balance between all collected opinions but there was no space for people who did not agree with the aim of the participation processes for the RES. A last issue in the dialogue is that municipalities faced difficulties with building trust, shared understanding, and mutual respect in their organized dialogue. In a digital dialogue, there is more anonymity and municipalities did not see the visible acts of meaning which is an advantage of face-to-face dialogue processes according to Baveles & Chovil (2000). Furthermore, we found that municipalities in the phase towards Draft-RES and the first months towards RES 1.0 stayed quite abstract because they focused on informing people and asking people abstract questions about sustainable energy and the RES. Only in the last few months municipalities became more concrete and clear. However, transparency and openness are important from the beginning of the process.

Another important condition to ensure social acceptance is that citizens and stakeholders should have a certain extent of influence on the outcomes of the decision-making process. Fraune & Knodt (2017) called this 'impact' and mentioned this as an important criterion. The participation reports show that many participants are concerned about the democratic legitimacy of the RES. People doubt if they have an administrative impact. However, the results show that people do have a social impact if they participated in the RES-process. Some cases show that participants have much power to influence the local council of their municipality which is responsible to implement the RES.

Finally, communication, clear ground rules, and process transparency are important to ensure social acceptance. People should understand and use the information to participate in the process. Municipalities tried to be as open as possible by publishing outcomes of the participation process on their municipal website and social media. Moreover, all types of flows of information, which are described by Gudowsky & Bechtold (2013) are recognized in the participation process. However, there is still criticism. The findings show that participants criticize the information exchange and participants emphasized that municipalities should put more attention to communicating about the RES-process. People still have the idea that they are not well-informed. For participants, it is often

not clear why municipalities focus on wind and solar energy and not on other forms of sustainable energy. Participants are also concerned about how municipalities collaborate. According to participants, municipalities should be more open about the RES-process, what can be discussed and what is decided, and how the results will be used by the municipalities.

Other conditions

Finally, there are some other conditions that are important to ensure social acceptance for the RES. We learned that respect, values, and feelings are important elements that affect social acceptance. The findings show that rural municipalities have the feeling that the rural identity of their municipality is not respected in the RES-process. Inhabitants of rural municipalities feel that they have to bear the burdens without receiving respect from the urban municipalities. Protection of the countryside and the value of the rural identity is important in the eyes of inhabitants of rural municipalities. This shows that respect for each identity of the municipality is important in regional collaboration.

On top of that, we found a tension between support for renewable energy policies at the abstract and national level and decreasing or absent acceptance of renewable technology expansion at the local level. In the literature, this is called NIMBY, which means Not In My Backyard. We found that people do not agree to have windmills in their direct living environment while they do agree with placing windmills somewhere else. However, not all opposition can be declared with NIMBY as Wolsink (2006) described. Some opposition to renewable energy must focus upon the selected landscape and those values should be weighed against the ecological merit of renewable energy (Mercer, 2003). The findings confirm that the conflicting values and expectations can be a reason for social opposition. This can be linked to the importance of respecting identities and feelings. This shows that opposition can be partly explained in terms of NIMBY. Another explanation for social opposition is conflicting values.

Lastly, as Assefa & Frostell (2007) state, social acceptance needs time. Also, the findings show that people need sufficient time to form an opinion and to understand the need for sustainable energy. The RES-process started at the end of 2019. In less than two years, people have to understand the reason for the RES-process and the need for sustainable energy. People also have to get insight into the motives of the Dutch Government and the municipalities. The empirical findings show that the amount of time to organize citizen participation for the RES and to increase people's knowledge about the energy transition is limited which affects social acceptance for the RES.

Central question

This part answers the central question of this research: *'How do municipalities in the energy region U16 organize local citizen participation processes for the RES, and which conditions influence social acceptance of the RES?'*

Multi-level and Collaborative Governance characterize the RES-process. Due to this governance design, municipalities became responsible to involve citizens and stakeholders in the RES-process. Therefore, almost all municipalities in the Energy Region U16 started to organize participation for the RES. The results show that there are many similarities between the organized local citizen participation processes for the RES. In all local citizen participation processes, municipalities tried to get an inclusive group of participants by using multiple communication tools such as social media, local media, and the municipal website. The municipality with more capacity could send door-to-door information which is an effective instrument to get a representative group of participants. Then, most municipalities organized digital participation by organizing surveys and digital sessions (due to COVID-19), whereby some municipalities distinguished themselves by organizing work ateliers in

small groups. Furthermore, the results show that most municipalities started with abstract questions in the participation processes and ended with more concrete ideas and plans. Lastly, all municipalities tried to get insight into the thoughts, ideas, and concerns about wind and solar energy from society. They noticed the multiple opinions and ideas of participants in participation reports which can be used by the local council to determine the RES. Despite many similarities, the findings show that the differences between the municipalities had a big impact on the participation processes. As mentioned above, there are differences between the municipal capacity to organize citizen participation. Other differences include the landscape of the municipalities (urban/rural), technical and legal possibilities to produce wind and solar energy, leadership qualities, what municipalities have done regarding the energy transition in the past, and different local councils. The findings show that these differences affect regional collaboration.

Above we learned how the citizen participation processes for the RES are organized. Now we can explain which conditions of this process influence social acceptance of the RES. This can be described in the form of three types of conditions. The conditions in the governance framework refer to Multi-level Governance and the role of the involved actors. We learned that weak central policy and differentiated perspectives caused some coordinative problems. These problems made the RES-process more complex and sometimes not understandable for inhabitants. Then, the conditions in the collaborative process refer to the four dimensions of Collaborative Governance. We learned that all four dimensions are in a way recognized in the citizen participation process but there are some issues. We found that municipalities have difficulties getting an inclusive and representative group of people and organizing a dialogue with sufficient time to deliberate. On top of that people criticize the information exchange and people do not have the idea that they have an impact on the decision. Furthermore, people have the idea that municipalities should be more open and transparent. Finally, there are some conditions that are gathered from the empirical findings but not included in the conceptual framework. This is about the importance of respecting the identity of each municipality and the importance of sufficient time to let people think about the RES-process and to accept the necessary changes in the living environment.

7. Discussion

This chapter contains a discussion on the research. The discussion consists of a reflection, policy recommendations, and recommendations for further research. The first section includes a reflection on the methods and results of the research. This includes factors in the research process which influenced the applicability of the used methods, such as limited time and resources and the willingness of people to participate in the research. The second part details some policy advice that can be used by the province of Utrecht in the next phases of the RES-process. The last part gives some recommendations for further research.

7.1. Reflection

This research is divided into several phases. The first phase is about encompassing a literature review, which resulted in a conceptual framework. My theoretical framework and conceptual framework helped me to gain insight into the organized participation processes and conditions to achieve social acceptance. Using the steps of the conceptual framework made it possible to explore the collaborative process between the local government and the local community in the Multi-level Governance setting of the RES. It also helped me to capture which conditions of Multi-level and Collaborative Governance were recognized in the collaborative process. The results of my research show that the mentioned conditions were all in a way recognized in the RES-process. Using the four dimensions (Breadth of involvement, Dialogue, Communication, Extent of Influence) of Collaborative Governance helped me to get a deeper understanding of the collaborative process between the local government and the local community. At the end of my research, I realized that communication and dialogue are the most important dimensions in the context of social acceptance for renewable energy. Communication and organizing the dialogue help municipalities to raise awareness, involve more people, and get insight into the deeper motives and feelings of the local community. Next research can further focus on the dialogue processes and the power of communication.

Remarkably, not just these conditions of Multi-level Governance and Collaborative Governance influence social acceptance. As described in the theory, acceptance is the result of an interactive process that takes place in certain contexts and is interpreted by everyone involved. It is a process that is different for each person. Therefore, it is not possible to conclude that meeting the mentioned conditions of Multi-level and Collaborative Governance will lead to full acceptance. Municipalities face challenges to achieve social acceptance because of the already existing resistance against renewable energy, a NIMBY-attitude, and time pressure on the RES-process. On top of that, the results show some other key challenges of social acceptance. One challenge is a lack of awareness and understanding of the problem. There are still too many people who do not see the urgency of the energy transition. Also respect, values, and feelings are important elements to achieve social acceptance. Social acceptance can only be achieved if municipalities focus on the local context and take enough time to listen to the values and feelings of the local community. This research shows that social acceptance is influenced by the deeper motives of each municipality.

There are some theoretical limitations. Although there was much literature available about Multi-level Governance, Collaborative Governance, and citizen participation strategies, literature on the relationship between governing the energy transition and social acceptance of renewable energy was limited. Much literature about social acceptance of renewable energy focused on behavioral aspects and people's willingness to join community energy initiatives. To overcome this issue, this research focused on how general conditions of Multi-level Governance and Collaborative Governance are recognized in the RES-process of the Energy Region U16. It is important to note that this research

only included these general conditions to investigate the relationship between the governance design of the RES-process and social acceptance. Including a larger number of conditions might have resulted in some other conclusions. Conditions related to the perception of renewable energies might for example be useful to investigate social acceptance according to Sütterlin & Siegrist (2017). Moreover, due to the scope of this research, it was not possible to establish a direct relationship between governing capacity and social acceptance of the RES-process and outcomes because the RES-process is not finished yet. However, the researcher was able to establish relationships between conditions for governing capacity and social acceptance of the RES-process and outcomes.

Another limitation of the research is related to the research period and the RES-process. The research period was from September 2020 until March 2021. However, the RES-process is an ongoing process and did not end in March 2021. Because of that, the research did not include all organized participation activities. In the case of the Energy Region U16, there were a few municipalities, such as Zeist and Vijfheerenlanden, which started very late with organizing participation for the RES. The municipality of Vijfheerenlanden started at the beginning of February 2021. Because of that, it was not possible to get a complete overview of all participation processes for the RES. It is a shortfall that the researcher does not know what municipalities have done after the research period. It might be possible that some municipalities organized extra participation activities or changed plans and ideas.

The second phase of the research includes data collection. Several methods were used to collect the data of this research: interviews, participant observation, and document analysis. Each of these research methods has its limitations.

Interviews

Firstly, the process of doing research and working for the province of Utrecht was sometimes hard to combine. At one point, I started interviewing the municipalities while I did not have comprehensively operationalized the concepts of my theoretical framework. The interview guide was based on the literature, but some concepts could have been differently formulated.

Due to time constraints, I interviewed just one person from each municipality. Most often a sustainability policy officer or energy policy officer was interviewed. However, questions in the interview were also related to the communication and participation strategies of the municipalities. A larger number of interviews with several employees of the municipalities might have resulted in a more complete view of the organized citizen participation process. In this respect, the research will be improved by including interviews with communication employees of each municipality. Another important shortfall in this phase is that there are no interviews conducted with employees of the Energy Region U16 due to time constraints. This means that conclusions and statements about the energy region are based on the interviews with the municipalities. The research could be improved by including interviews with employees of the Energy Region U16.

Additionally, this research tries to generate conclusions about social acceptance of the RES-process and outcomes. Statements and findings related to social acceptance are gathered by analyzing participation reports and interviews with municipalities. The interviewees expressed their experiences regarding the social acceptance of the RES-process and outcomes. This means that findings related to social acceptance are not gathered by speaking to inhabitants, stakeholders, or other participants of the participation process for the RES. The research could be improved by interviewing citizens and stakeholders to get more in-depth information about social acceptance of the RES-process and outcomes.

Participant observation

In the phase of data collection, a research diary was conducted to capture the data of participant observation. Due to the scope of this research, I was able to participate in the participation process of the municipalities of the Kromme Rijn area. From September 2020 until March 2021, I observed the employees of these municipalities to get in-depth information about how citizen participation for the RES is organized and which dilemmas there are. I conducted a research diary to capture all this information. However, I realized I had much more in-depth information about the municipalities of the Kromme Rijn area in comparison with the other municipalities of the Energy Region U16. As a result, I was able to draw more conclusions about the local citizen participation process of these municipalities while I intended to draw sharp conclusions for all municipalities. The research could be improved by participating in more participation processes for the RES.

Document analysis

The document analysis has its limitations due to time constraints and the limited availability of data. This research used participation reports of municipalities to get more insight into the organized participation processes for the RES. However, there were many differences in the size of the participation reports. Some municipalities published an expanded participation report, including reactions of participants and a description of the ambiance. Other municipalities published a participation report of one page with a summary of the evening. Due to the limited available data of some participation processes, it was not possible to get the same in-depth information of all participation processes for the RES in the Energy Region U16.

Finally, it is important to reflect on the internal and external validity of this research. The first point is to focus on if the results of this research can be generalized. This research focused on one of the energy regions, but it is the question to what extent the results of this research can be compared with other energy regions. I think some conclusions of this research can be generalized to other energy regions, as the importance of capacity in the citizen participation process. However, it is hard to estimate whether the relationships between the municipalities in the Energy Region U16 are comparable to other energy regions. It might be possible that the political relationships between municipalities in other energy regions are completely different. Therefore, it is important to be careful in generalizing the results. Lastly, it is important to reflect on triangulation which is used to improve the internal validity of this research. This research used several qualitative methods to collect the data. However, the research could be improved if qualitative and quantitative methods were combined. The differences between municipalities in the Energy Region U16 are an important aspect of this research. To get a better understanding and more in-depth information on these differences it would be good to use quantitative methods. An example of this is to collect quantitative data about the capacity of the municipalities which enables the researcher to draw sharp conclusions about the capacity differences between municipalities.

7.2. Policy advice

Based on the research findings, some policy advice is formulated. The policy advice can be divided into two sections. Firstly, recommendations are given about the organization of citizen participation for the RES based on the empirical findings. Secondly, this research is carried by order of the province of Utrecht. Therefore, some recommendations are given about the role of the province of Utrecht in the RES-process and the citizen participation processes for the RES.

Recommendations organizing citizen participation for the RES

Present voice of proponents

There are four recommendations related to organizing citizen participation for the RES. Based on the empirical findings, it would be good if the voice of proponents is more prominent in the citizen participation process. Currently, there are many opponents in the organized citizen participation processes. Because of that, the voice of opponents prevailed. It would be good if municipalities pay more attention to involve groups with a more positive attitude regarding renewable energy, such as young people. Municipalities can organize specific activities for young people, such as organizing interviews and discussions with young people or visiting schools. Mixing the voice of opponents and proponents will lead to better decisions and discussions. As Callahan (2007) described different standpoints between participants are a positive force in collaborative processes of meaning-making. It is important to note that it might be possible that many municipalities were willing to do this but that they were hindered because of COVID-19.

Organize more dialogue

A second recommendation would be to pay more attention to organize a dialogue between the municipality and the local community. By engaging in the province of Utrecht I learned that municipalities are still finding out how to organize an effective dialogue and how to process the input of citizens and stakeholders. Municipalities need some instructions on how to do this effectively. Currently, much input was collected based on surveys and digital webinars. Due to COVID-19, almost all participation activities were digital. One advantage of digital surveys and webinars is that many people were able to participate. However, there was little space for discussion or open exchange of ideas in many digital participation activities. A lot of criticism was related to the amount of time of deliberation. Participants did not have the feeling that they had the opportunity to express their feelings. Therefore, it would be good if municipalities organize small group discussions and interviews with a random group of people. This will lead to more understanding from the participants' perspective.

Raising awareness and understanding

Based on the findings from the interviews, it would be good to pay more attention to raising awareness and understanding. In many participation reports, it became clear that people do not understand the urgency of renewable energy and the focus on wind energy and solar energy. Currently, people have many questions about why municipalities focus on windmills and solar fields instead of other forms of renewable energy production. On top of that many people do not understand the complex matter of the energy transition and have the idea that municipalities follow the Dutch Government and do not make their own choices. Acceptance and support will be achieved if people do understand the need for renewable energy, the need for windmills and solar fields, and the reason why municipalities are doing this. Therefore, it is important to take time to inform people about this and to explain this information in such a way that is understandable for everyone.

Take more time

Finally, a fourth recommendation would be that municipalities take more time to involve citizens and stakeholders in the energy transition. Currently, many municipalities have time constraints because of the strict deadlines of the RES-process. In some cases, the participation process for the RES was organized in just two months. As Assefa & Frostell (2007) described, social acceptance needs time. Participants need time to form an opinion and to understand and accept the process. Therefore, it would be good if municipalities get more time to organize a careful collaborative process for the RES. The Energy Region U16 and the Dutch Government should accept that some municipalities,

especially municipalities which face many problems in their citizen participation process for the RES, need more time. Eventually, this will lead to better outcomes.

Recommendations role province of Utrecht

Based on the findings some recommendations are formulated about the role of the province of Utrecht in the RES-process and the citizen participation processes for the RES. Three recommendations are formulated for the province of Utrecht.

Support municipalities with little capacity

Firstly, based on the findings many rural municipalities face capacity problems. They have little financial capacity to organize citizen participation for the RES and often there is just one person who is responsible for the RES. For these municipalities, it is hard to organize a careful and expanded citizen participation process for the RES. Therefore, it would be good if the province of Utrecht tries to find a way to support the municipalities with little capacity. The findings show that the province of Utrecht tried to support municipalities by organizing workshops about citizen participation together with TNO and Twynstra Gudde. However, municipalities experienced these workshops as too abstract and not directly applicable in practice. Local customization is needed in the citizen participation processes for the RES. It would be good if the province of Utrecht focused on how they can effectively support municipalities with organizing citizen participation for the RES. An example is to focus on solutions to the challenges municipalities face in the different phases of the RES-process. This can be done with experts and professionals. If a municipality faces a specific challenge in a specific phase of the RES-process they can ask the Province of Utrecht for help. By doing this the province of Utrecht supports municipalities with practical and local challenges.

Improve the inter-municipal relationships

A second recommendation is based on what I have learned by engaging in the province Of Utrecht. From the perspective of the province of Utrecht, I saw that inter-municipal relationships are very important in regional collaboration. At the moment municipalities look suspiciously at each other which influence social acceptance. Municipalities wonder what other municipalities are doing and are afraid that some municipalities try to take advantage of other municipalities. An example is that rural municipalities, especially in the Energy Region U16, are concerned that all windmills and solar fields will land in their municipality. In the next phases of the RES-process it is important that municipalities feel more connected in a region. It would be good if coordination, collaboration, and knowledge sharing improve. This can be done by support of the Energy Region U16 and the province of Utrecht who can facilitate and organize more dialogue between the municipalities. During the dialogue, municipalities can share best practices, problems, and solutions.

Attention to raise awareness

Finally, raising awareness and understanding are important to achieve social acceptance of the RES. The empirical findings show that municipalities have the idea that the local level is not responsible to convey the message of the need for sustainable energy, the energy transition, and the arrival of windmills and solar fields. Municipalities have the idea that this discussion must take place on a higher spatial scale, for example on the provincial or national scale. It would be good if the province of Utrecht pays more attention to raise awareness and tell the story of the energy transition and the need for sustainable energy. This can for example be done with a provincial campaign. The campaign should include a strong motto, videos, and podcasts. The province can organize events to explain the content of the campaign. It would also be good to spread the campaign to universities and schools because it is important to involve young people in the energy transition. On top of that, the province

should put much attention to communicating about the campaign. Social media, regional tv, regional newspapers, and posters should be used to inform people about the campaign.

7.3. Recommendations for further research

This research contributed to some important questions regarding citizen participation in the RES-process. At the same time, there are some new questions to examine.

Citizen participation in the process towards RES 2.0

Firstly, it would be interesting to explore citizen participation for the RES in the phase towards RES 2.0. The RES-process is not finished and within two years the RES 2.0 has to be determined. The involvement of citizen and stakeholders is still crucial in the phase towards RES 2.0. How do municipalities continue with citizen participation after the determination of RES 1.0?

Explore the role of involved actors in the process towards RES 2.0

Secondly, this research also raises some questions concerning the relationships between governing authorities in the Netherlands. This research made clear that interaction between the different scales and governing authorities resulted in some complexity in the RES-process. An example of this is that the Energy Region U16 did not have a strict and clear role in the RES-process. Therefore, it would be interesting to investigate the role of different involved actors in the phase towards RES 2.0. It might be useful to examine how the role of involved actors changes in the phase towards RES 2.0 relative to the phase towards RES 1.0. More coordination and clear tasks between the different governing authorities might be crucial to ensure social acceptance for the RES.

Investigate relationship social acceptance and concrete ideas and plans

Thirdly, this research focused on the period towards RES 1.0. In this period, municipalities tried to explore possibilities for solar and wind energy together with citizens and stakeholders. However, municipalities conducted few concrete plans and ideas in this period. The involvement of citizens and stakeholders in the RES-process should eventually contribute to the acceptance of windmills and solar fields in the living environment (NP-RES, 2019). It would be interesting to investigate social acceptance if plans and ideas are more concrete. How do concrete plans and ideas about solar fields and windmills influence social acceptance?

Compare results with other energy regions, other kinds of transitions, and other countries

Lastly, further research could focus on whether the conclusions of this study can be generalized for other energy regions, other kinds of transitions, and other countries. This research focused on the context of the Energy Region U16. The conclusions of this research might also be proven for other energy regions or countries. The conclusions showed that the political relationships between the municipalities of the Energy Region U16 affect the local citizen participation processes and social acceptance. It would be interesting to examine whether different political relationships between the municipalities affect citizen participation and social acceptance.

8. References

- Altrichter, H., Holly, M.L. (2005). Research diaries. Chapter in Research Methods in the social sciences. Sage publications.
- Amerongen, W. (2020). Windmolens? Niét in Wijk bij Duurstede: 'Ik pas ervoor dat de grote steden huizen krijgen en wij windmolens'. AD. Retrieved from <https://www.ad.nl/utrecht/windmolens-niet-in-wijk-bij-duurstede-ik-pas-ervoor-dat-de-grote-steden-huizen-krijgen-en-wij-windmolens~af0b56f4/>
- Ansell, C., Gash, A. (2007). Collaborative Governance in Theory and Practice. University of California, Berkeley.
- Antunes P., Kallis G., Videira N., Santosa R. (2009). Participation and evaluation for sustainable river basin governance. *Ecological Economics* 68, pp. 931-939
- Arnstein, S.R. (1969). A ladder of citizen participation. *Journal of the American Institute of Planners*, 35, 216-224.
- Assefa, G., Frostell, B. (2007). Social sustainability and social acceptance in technology assessment: A case study of energy technologies. *Elsevier, technology in society*, 29, 63-78.
- Bavelas, J.B., Chovil, N. (2000). Visible actors of meaning. An integrated message model of language in de face-to-face dialogue. University of Victoria, *Journal of Language and Social Psychology*.
- Beierle, T.C., Konisky, D.M. (2000). Values, conflict and trust in participatory environmental planning. *Journal of Policy Analysis and Management* 19.
- Bentrup, G. (2001). Evaluation of a collaborative model: A case study of analysis of watershed planning in the Intermountain West. *Environmental Management* 27:739-48.
- Benz, A. (2006). Governance in Mehrebenensystemen. In *Governance-Forschung. Vergewisserung über Stand und Entwicklungslinien*. 2. Aufl age, Schuppert GF (ed.). Baden-Baden: Nomos; 95-120
- Berner, M., Morse, R.S. (2011). What constitutes Effective Citizen Participation in Local Government? Views from City Stakeholders. *Public Administration Quarterly*. DOI: 10.2307/41804544
- Blumer, H. (1969). *Symbolic interactionism: Perspective and method*. Berkeley: University of California Press.
- Boeije, H., 't Hart, H., Hox, J. (2009). *Onderzoeksmethoden* (eighth edition). The Hague, The Netherlands: Boom Lemma uitgevers.
- Bowen, G.A. (2009). Document Analysis as a Qualitative Research Method. *Qualitative Research Journal* vol.9, no 2.
- Breet, R. (2021a). Utrechtse gemeenten (U16) willen uitstel voor grote zon- en windenergieplannen. RTV Utrecht. Retrieved from <https://www.rtvutrecht.nl/nieuws/2143880/utrechtse-gemeenten-u16-willen-uitstel-voor-grote-zon-en-windenergieplannen.html>

Breet, R. (2021b). Wijk bij Duurstede wil geen windenergie en stapt uit gezamenlijk overleg. RTV-Utrecht. Retrieved from: <https://www.rtvutrecht.nl/nieuws/2142159/wijk-bij-duurstede-wil-geen-windenergie-en-stapt-uit-gezamenlijk-overleg.html>

Brody, S. D. (2003). Measuring the effects of stakeholder participation on the quality of local plans based on the principles of collaborative ecosystem management. *Journal of Planning Education and Research*, 22, 407-419.

Bryson, J.M., Quick, K.S. (2012). Designing Public Participation Processes. *Public Administration Review*. Vol, 73, pp 23-24.

Bulkeley, H., Arthur P. J. Mol. (2003). Participation and Environmental Governance: Consensus, Ambivalence and Debate. *Environmental Values* 12 (2): 143–54.

Burger, J., Michael, G., Powers, C. W., Waishwell, L., Warren, C., Goldstein, B.D. (2001). Science, policy, stakeholders, and fish consumption advisories: Developing a fish fact sheet for Savannah River. *Environmental Management* 27: 501–14.

Burnard, P., Gill, P., Stewart, K., Treasure, E., Chadwick, B. (2008). Analysing and presenting qualitative data. *British Dental Journal*, 204, 429-432.

Buuren, M.W. van, Edelenbos, J. (2004). Conflicting knowledge. Why is knowledge production such a problem, *Science and Public Policy*, 31(4).

Callahan, K. (2007). Citizen participation: Models and Methods. *International Journal of Public Administration*. Retrieved from <https://www.tandfonline.com/action/showCitFormats?doi=10.1080/01900690701225366>

Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of Research in Nursing*. DOI: 10.1177/1744987120927206

Chrislip, D., Larson, C.E. (1994). Collaborative leadership: How citizens and civic leaders can make a difference. San Francisco, CA: Jossey-Bass.

Cohen, L., Manion, L. (1994). *Research methods in education* (4th ed. ed.). London: Longman.

Corbin, J., Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Thousand Oaks, CA: Sage.

Cresswell, J. W. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (3rd ed.). Los Angeles: Sage.

Curtin, J., McInerney, C., Gallachóir, B. Ó., Salm, S. (2019). Energizing local communities—What motivates Irish citizens to invest in distributed renewables? , *Energy Research and Social Science*. doi: 10.1016/j.erss.2018.08.020.

Cuthill, M., Fien, J. (2005). Capacity Building: Facilitating citizen participation in local governance. *Australian Journal of Public Administration*.

Denscombe, M. (2003). *The good research guide: for small-scale social research projects*(Second edition). London, United Kingdom: McGraw-Hill Education

- De Rynck, F., Voets, J. (2006). Democracy in Area-Based Policy Networks: The Case of Ghent. *The American Review of Public Administration* 36 (1): 58–78.
- Devine-Wright, P. (2004). Beyond NIMBYism: towards an Integrated Framework for Understanding Public Perceptions of Wind Energy. Institute of Energy and Sustainable Development. DOI: 10.1002/we.124
- Devine-Wright, P. (2005). Beyond NIMBYism: towards an integrated framework for understanding public perceptions of wind energy *Wind Energy* 7 125–3
- Devine-Wright, P. (2011). Public engagement with large-scale renewable energy technologies: breaking the cycle of NIMBYism. Department of Geography, College of Life and Environmental Sciences. DOI: 10.1002/wcc.89
- Devine-Wright, P. (2012). Explaining NIMBY objections to a power line: the role of personal, place attachment and project-related factors. *Environ. Behav.*, 45 (2012), pp. 761-781
- DeWalt, K. M. & DeWalt, B. R. (2002). Participant observation: a guide for fieldworkers. Walnut Creek, CA: AltaMira Press.
- Dewey, J. (1931). The development of American pragmatism. In *Philosophy and Civilization*. Minton, Balch & Co, New York.
- Dicicco-Bloom, B., Crabtree, B.F. (2006). The qualitative research interview. Retrieved from <https://doi.org/10.1111/j.1365-2929.2006.02418.x>
- Dietz, T., and Stern, P.C. (2005). Further Analysis of the Democracy in Practice Database. Paper prepared for the National Research Council Panel on Public Participation in Environmental Assessment
- Eckerberg, K., Joas, M. (2004). Multi-level Environmental Governance: a concept under stress? *Local Environment*, Vol. 9, No. 5, 405-412.
- Edelenbos, J., Monnikhof, R.A.H. (2001). Lokale interactieve beleidsvorming: een vergelijkend onderzoek naar de consequenties van interactieve beleidsvorming voor het functioneren van de lokale democratie. Utrecht: Lemma.
- Edelenbos, J., Van Buuren, A., van Schie, N. (2011). Co-Producing Knowledge: Joint Knowledge Production Between Experts, Bureaucrats and Stakeholders in Dutch Water Management Projects. *Environmental Science and Policy* 14: 675–84
- Emerson, K., Nabatchi, T., Balogh, S. (2011). An Integrative Framework for Collaborative Governance. *Journal of Public Administration Research and Theory* 22: 1–29.
- Erlandson, D.A., Harris, E.L., Skipper, B.L., Allen, S.D. (1993). *Doing naturalistic inquiry: a guide to methods*. Newbury Park, CA: Sage.
- Felipe, L., Reyes, L. (2017). Opportunities and challenges for digital governance in a world of digital participation. *Information Policy* 22 197-205. DOI 10.3233/IP-170408

- Fiorina, M.P. (1999). Extreme Voices: A Dark Side of Civic Engagement. In *Civic Engagement in American Democracy*, edited by Theda Skocpol and Morris P. Fiorina, 395-426. Washington, DC: Brookings Institution Press
- Fiorino, D.J. (1990). Citizen participation and environmental risk survey of institutional mechanisms. *Science, Technology, and Human Values* 15 226-243
- Flacke, J., de Boer, C. (2017). An interactive planning support Tool for addressing Social Acceptance of Renewable Energy Projects in the Netherlands. *International Journal of Geo-Information*. DOI: 10.3390/ijgi6100313
- Folke, C., T. Hahn, P. Olsson, and J. Norberg. (2005). Adaptive governance of social-ecological systems. *Annual Review of Environment and Resources* 30:8.1–8.33.
- Foodvalley.(2020). Burgerforum en online vragenlijst. Retrieved from: <https://www.regiofoodvalley.nl/programma/energietransitie/bieb/burgerforum-en-raadpleging>
- Fraune , C., Knodt, M. (2017). Challenges of Citizen Participation in Infrastructure Policy-Making in Multi-Level Systems- The Case of Onshore Wind Energy Expansion in Germany. *European Policy Analysis*, Vol. 3, No 2, 2017.
- Fung, A. (2006). Varieties of Participation in Complex Governance. *Public Administration Review* 66(Special Issue): 66–75.
- Gaventa, J. (2004). Representation, Community Leadership and Participation: Citizen involvement in Neighbourhood Renewal and Local Governance. Institute of Development Studies.
- Gillis, A., Jackson, W. (2002). *Research methods for nurses: Methods and interpretation*. Philadelphia: F.A. Davis Company.
- Glasser, B., Strauss, A. (1967). *Discovery of Grounded Theory: Strategies for Qualitative Research*. Berlin: Aldine de Gruyter.
- Gold, R, L. (1958). Roles in sociological field observations. *Social Forces*, 36, 217-223.
- Goldkuhl, G. (2008). Practical inquiry as action research and beyond. In *Proceedings of the 16th European Conference on Information Systems*, pp 267–278, Galway, Ireland.
- Goldkuhl, G. (2012). Pragmatism vs interpretivism in qualitative information systems research. *European Journal of Information Systems* (2012) 21.
- Guba, E., Lincoln, Y. (1994). Competing paradigms in qualitative research. rom N/A, *Handbook of qualitative research* pp.105-117,Thousand Oaks, Calif.: Sage Publications.
- Gudowsky, N., Bechtold, U. (2013). The Role of Information in Public Participation. *Journal of Public Deliberation*. Volume 9.
- Haufler, V. (2003). New forms of governance: certification regimes as social regulations of the global market. University of Maryland, College Park, USA.

Head, b., Alford, J. (2008). Wicked problems: The implications for Public Management. Panel on Public Management in Practice International Research Society for Public Management 12th Annual Conference 26-28 March, 2008, Brisbane.

Heeks, R., Bailur, S. (2007). Analyzing E-Government Research: Perspectives, Philosophies, Theories, Methods, and Practice. *Government Information Quarterly* 24(2): 243–65

Hoeft, C., Zilles, J. (2017). 'Einleitung' In *Bürgerproteste in Zeiten der Energiewende: Lokale Konflikte um Windkraft, Stromtrassen und Fracking*. Studien des Gottinger Instituts für Demokratieforschung zur Geschichte politischer und gesellschaftlicher Kontroversen.

Hofinger, G. (2001). Akzeptanz-formen von Sichtweisen auf ein Biosphärenreservat. *Umweltpsychologie*, 1, pp. 10-27.

Hooghe, L. (2001). Types of Multi-Level governance. *European Integration Online Papers*. October 2001

Hoppe, T., Miedema, M. (2020). A Governance Approach to Regional Energy Transition: Meaning. Conceptualization and Practice. *Sustainability* 2020. DOI: <https://doi.org/10.3390/su12030915>

Jonkers, W. (2020). Statenbrief RES. Retrieved from
[file:///C:/Users/aniek/Downloads/RES,%20ingediend%20door%20JA21,%20beantwoording%20007-202102007%20\(1\).pdf](file:///C:/Users/aniek/Downloads/RES,%20ingediend%20door%20JA21,%20beantwoording%20007-202102007%20(1).pdf)

Kawulich, B. (2005). Participant observation as a Data Collection Method. *Forum: qualitative social research*, Volume 6, NO. 2, Art 43.

Kern, F., Smith A. (2008). Restructuring energy systems for sustainability? Energy transition policy in the Netherlands. *Energy policy* 35.

Ketelaars, S. (2020). Verslag communicatie overleg. Retrieved from:
<https://www.energiowerkplaatsutrecht.nl/werkgroepen/werkgroep+res+u16/participatie-communicatietafel/verslagen+communicatie-overleggen/default.aspx#folder=1743539>

Kim, S., Lee, J. (2017). Citizen participation, Process, and Transparency in Local Government: An Exploratory Study. *Policy Studies Journal*. Volume 47.

Koontz, T. (1999). Administrators and Citizens: Measuring Agency Officials' Efforts to Foster and Use Public Input in Forest Policy. *Journal of Public Administration Research and Theory* 9(2): 251-80

Koppenjan, J., Klijn, E-H. (2006). *Managing Uncertainties in Networks: A Network Approach to Problem Solving and Decision Making* [eng]. London: Routledge.

Krupa, J., (2012). Blazing a new path forward: a case study on the renewable energy initiatives of the Pic River First Nation. *Environmental Development*, 3, 109–122.

Kweit, M.G., Kweit, R.W. (1981). *Implementing Citizen Participation in a Bureaucratic Society: A Contingency Approach*. New York: Praeger.

Leach, W.D., Pelkey, N.W., Sabatier, P.A. (2002). Stakeholder partnerships as collaborative policymaking: evaluation criteria applied to watershed management in California and Washington. *Journal of Policy Analysis and Management* 21(4): 645–670

Liu, L., Bouman, T., Perlaviciute, G., Steg, L. (2019). Effects of trust and public participation on acceptability of renewable energy projects in the Netherlands and China. *Energy Research & Social Science* 53. DOI: <http://dx.doi.org/10.1016/j.erss.2019.03.006>

Loorbach, D. (2010). Transition Management for Sustainable Development: A Prescriptive, Complexity-Based Governance Framework. *Governance: An International Journal of Policy, Administration, and Institutions*, Vol 23, No. 1.

Manzo, L.C., Perkins, D.D. (2006). Finding Common Ground: The importance of place attachment to community participation and planning. *Journal of planning literature*, vol.20, NO. 4. DOI: 10.1177/0885412205286160

Marshall, C., Rossman, G. (2006). *Designing qualitative research*, (4th Ed.). Thousand Oaks: Sage.
Kitzinger, J. (1995). Qualitative Research: Introducing Focus Groups. *British Medical Journal*, 311, 299-302.

Mayntz, R. (2003). From government to governance: political steering in modern societies. *International Summer Academy*. September 7-11, 2003, Wuerzburg, Germany.

Mercer, D. (2003). The great Australian wind rush and the devaluation of landscape amenity *Australian Geographer* 34 91–121

Metze, T.A.P., Levelt, M. (2012). Barriers to credible innovations. Tilburg University.

Murdock, B., Wiessner, C., Sexton, K. (2005). Stakeholder participation in voluntary environmental agreements: Analysis of 10 Project XL case studies. *Science, Technology & Human Values* 30:223–50

Nationaal Programma Regionale Energiestrategie (NP RES). (2019). Handreiking 1.1.

Newig, J., Challies, E., Jager, N.W., Kochskaemper, E., Adzersen, A. (2018). The Environmental Performance of Participatory and Collaborative Governance: A framework of Causal Mechanisms. *The Policy Studies Journal*, Vol. 46.

Newig, J., Fritsch, O. (2009) Environmental Governance: Participatory, Multi-level- and effective? *Environmental Policy and Governance*, 19, 197-214.

Newig, J., Kvarda, E. (2012). Participation in environmental governance: Legitimate and effective? DOI:10.4337/9781849802703.00010

Organisation for Economic Co-operation and Development (OECD). (2001). The Hidden Threat to E-Government. Avoiding Large Government IT. Retrieved from <http://www.oecd.org/dataoecd/19/12/1901677.pdf>

Orton M. 2005. The Colorado River through the Grand Canyon: applying alternative dispute resolution methods to public participation. In *Public Participation in the Governance of International Freshwater Resources*, Bruch C, Jansky L, Nakayama M, Salewicz KA (eds). United Nations University Press: Tokyo; 403–432.

Pasqualetti, M.J. (2000). Morality, space, and the power of wind-energy landscapes *Geographical Review* 90 381–94

- Petrova, M.A. (2016). From NIMBY to acceptance: Toward a novel framework- VESPA- For organizing and interpreting community concerns. Elsevier, Volume 86, Pages 1280-1294
- Phillips, L., Kristiansen, M., Vehviläinen, M., Gunnarsson, E. (2013). Knowledge and Power in Collaborative Research, A reflexive approach. Routledge.
- Pierre, J. (2000). Introduction: understanding governance, in: J. Pierre (Ed.) Debating Governance Authority, Steering and Democracy (Oxford, Oxford University Press).
- Pisano, U., Lange, L.K., Lepuschitz, K., Berger, G. (2015). The role of stakeholder participation in European sustainable development policies and strategies. European Sustainable Development Network (ESDN).
- Pogrebinschi, T. (2013). The Squared Circle of Participatory Democracy: Scaling Up Deliberation to the National Level. *Critical Policy Studies* 7 (3): 219–41.
- Provincie Utrecht. (2019). Regionale Energie Strategieën (RES'en). Retrieved from: <https://www.provincie-utrecht.nl/onderwerpen/energie-en-klimaat/regionale-energie-strategieen-resen>
- Provincie Utrecht. (2020). Animatie RES door Provincie Utrecht. Retrieved from <https://lcnk.mett.nl/praktijkvoorbeelden/1615801.aspx?t=Animatie+RES+door+Provincie+Utrecht>
- Punch, F. K. (2009). Introduction to research methods in education. London: Sage.
- Quine, W.V.O. (1987). Symbols. In R. L. Gregory (Ed.), *The Oxford companion to the mind* (pp. 763-765). Oxford: Oxford University Press.
- Rauschmayer, F., Bauler, T., Schöpke, N. (2014). Towards governance of sustainability transitions: giving place to individuals. Helmholtz Centre for Environmental Research, Université Libre Bruxelles.
- Rauschmayer, F., Paavola, J., Wittmer, H. (2009). European Governance of Natural Resources and Participation in a Multi-Level Context: An Editorial. *Environmental Policy and Governance*, 19, 141-147. DOI: 10.1002/eet.504
- RESU16.(2020). Regionale Energiestrategie, Webinar over RES U16- 9 september 2020. Retrieved from <https://www.energieregioutrecht.nl/achtergrond/default.aspx>
- Roberts, N. (2004). Public deliberation in the age of direct citizen participation, *American Review of Public Administration*, 2004, vol. 34 (pg. 315-53)
- Rosenau, J. N. (2004). Strong demand, huge supply: Governance in an emerging epoch. In I. Bache & M. Flinders (Eds.), *Multi-level governance* (pp. 31–48). Oxford: Oxford University Press
- Rosener, J. (1978). Citizen Participation: Can We Measure Its Effectiveness?, *Public Administration Review* 38(5): 457– 63.
- Rotmans, J., Kemp, R., Asselt, M.v., Geels, F.W., Verbong, G., Molendijk, K., Notten, P.v. (2001). Transitions and transition management. The case for a low emission energy supply. ICIS Working Paper: IO1-E001, Maastricht.

- Saldaña, J. (2009). *The coding manual for qualitative researchers*. London, UK; Thousand Oaks, CA: Sage Publications.
- Schneider, M., Scholz, J., Lubell, M., Mindruta, D., Edwardsen, M. (2003). Building consensual institutions: Networks and the national estuary program. *American Journal of Political Science* 47:143–58.
- Scholten, P.W.A. (2014). *Agenda Dynamics and the Multi-Level Governance of Migrant Integration. The Case of Dutch Migrant Integration Policies*. DOI 10.1007/s11077-012-9170-x
- Smith, G. (2003). *Deliberative Democracy and the Environment*. London: Routledge.
- Stadszaken. (2021). Decentrale overheden willen betere Rijkscommunicatie over energietransitie. Retrieved from <https://stadszaken.nl/artikel/3360/decentrale-overheden-willen-betere-rijkscommunicatie-over-energietransitie>
- Sütterlin, B., Siegrist, M. (2017). Public acceptance of renewable energy technologies from an abstract versus concrete perspective and the positive imagery of solar power. *Energy Policy*, 356-366. DOI: 10.1016/j.enpol.2017.03.061
- Tekin, A.K., Kotaman, H. (2013). The Epistemological Perspectives on Action Research. *Journal of Educational and Social research*. Vol. 3.
- TNO. (2020). Participatieproces bij de Utrechtse RES'en. Retrieved from: <https://www.energieworkplaatsutrecht.nl/themas/participatie/documenten+participatie/default.aspx#folder=1920253>
- Twynstra Gudde. (2020). Handreiking participatie vormgeven in de regionale energietransitie. Retrieved from: <https://www.twynstragudde.nl/inzichten/handreiking-participatie-vormgeven-in-de-regionale-energietransitie>
- Van der Horst, D. (2007). NIMBY or not? Exploring the relevance of location and the politics of voiced opinions in renewable energy siting controversies. *Energy Policy*, 35 (2007), pp. 2705-2714
- Vangen, S., Huxham, C. (2003). Enacting leadership for collaborative advantage: Dilemmas of ideology and pragmatism in the activities of partnership managers. *British Journal of Management* 14:S61–76.
- Van Meerkerk, I., Edelenbos, J., Klijn, E.H. (2015). Connective Management and Governance Network Performance: The Mediating Role of Throughput Legitimacy. Findings from Survey Research on Complex Water Projects in the Netherlands. *Environment and Planning C: Government and Policy* 33 (4): 746–64.
- Van Thiel, S. (2014). *Research methods in Public Administration and Public Management*. Routledge, London.
- Vodden, K., Douglas, D.J.A., Markey, S., Minnes, S., Reimer, B. (2019). *The Theory, Practice, and Potential of Regional Development*. Routledge.
- Vringer, K., de Vries, R., Visser, H. (2021). Measuring governing capacity for the energy transition of Dutch municipalities. Elsevier, Volume 149. Retrieved from <https://doi.org/10.1016/j.enpol.2020.112002>

Wallis, J., Dollery, B. (2002). Social capital and local government capacity. *Australian Journal of Public Administration*, 76-85.

Weber, T., Tuler, S. (2000). Fairness and Competence in Citizen Participation: Theoretical Reflections from a case study. *Social and Environmental Research Institute*. 566-595.

Weber, T., Tuler S. (2006). Four perspectives on public participation process in environmental assessment and decision making: combined results from 10 case studies. *The Policy Studies Journal* 34(4): 699–722.

Wesselink, A., Paavola, J., Fritsch, O., Renn, O. (2011). Rationales for Public Participation in Environmental Policy and Governance: Practitioners' Perspectives. *Environment and Planning*.

Willis, J. W. (2007). *Foundations of qualitative research: interpretive and critical approaches*. London: Sage.

Wolsink, M. (2006). Invalid theory impedes our understanding: a critique on the persistence of the language of NIMBY. *Department of Geography, Planning and International Development Studies*

Wolsink, M. (2012). The research agenda on social acceptance of distributed generation in smart grids. *Renew. Sustain. Energy Rev.*, 16 (2012), pp. 822-835, 10.1016/j.rser.2011.09.006

Wüstenhagen, R., Wolsink, M., Bürer, M.J. (2007). Social acceptance of renewable energy innovation: An introduction to the concept. *Energy policy* 35.

Yanow, D., & Schwartz-Shea, P. (2011). *Interpretive Approaches to Research Design: Concepts and Processes*. Netherlands: Routledge.

Yin, R. K. (2009). *Case study research: Design and methods (Volume 5)*. Thousand Oaks, United States: Sage publications

Zieman, G.A. (2012). Participant observation. In S.R. Klein, *Action Research Methods* (pp. 49-69).

9. Appendixes

Appendix 1: Interview guide

Even voorstellen: Introductie over mezelf en onderzoek

Geïnterviewde zichzelf laten voorstellen

Wat doen met de resultaten > terugkoppelen

Introductie

Vanuit het Nationaal Programma RES wordt er veel aandacht besteed aan burgerparticipatie in de regionale energie strategieën. Bewoners moeten zich betrokken voelen bij de energietransitie en vertegenwoordigd voelen in de besluitvorming. Burgerparticipatie moeten leiden tot: acceptatie, betere besluitvorming, draagvlak en eigenaarschap.

Voor het organiseren van burgerparticipatie wordt veel verantwoordelijkheid bij lokale overheden. Gemeenten zijn verantwoordelijk voor het burgerparticipatie proces.

1. Hoe belangrijk vindt u burgerparticipatie in het RES-proces?
2. Welke van de 4 doelen (acceptatie, betere besluitvorming, draagvlak en eigenaarschap) verwacht u te bereiken met burgerparticipatie?
3. Voor welke onderdelen van de RES wordt er geparticipeerd?
 - Waarom deze onderdelen?
4. Neemt u als gemeente zelf een regierol in het participatieproces?
5. Hoe denkt u dat u als gemeente het participatieproces kan sturen?
 - Initiatief nemen?
 - Open naar nieuwe ideeën?
 - Sterke kwaliteiten om samen te werken?
6. Denkt u dat u als gemeente voldoende kennis, capaciteit en budget beschikbaar heeft om het participatieproces uit te voeren?

Governance design RES

1. Heeft u erover nagedacht om samen te werken met gemeenten in een deelregio om de burgerparticipatie tot de concept-RES te regelen?
 - Ingaan op delen van expertise, uitvoeringsplan, gelijkschakelen van werkvormen, communicatie, participatieniveaus.
2. Heeft u erover nagedacht om samen te werken met gemeenten in een deelregio?
 - Ingaan op delen van expertise, uitvoeringsplan, gelijkschakelen van werkvormen, communicatie, participatieniveaus.

Participatieproces tot concept RES:

In eerste instantie zou ik graag even willen inzoomen op wat er heeft gespeeld rondom burgerparticipatie tot concept-RES in uw gemeente.

3. Heeft de gemeente een participatieplan opgesteld om de participatie richting concept-RES vorm te geven?
4. Wat was voor u het kader waarbinnen de participatie tot concept-RES wilden ophalen? (het moet duidelijk zijn waarover geparticipeerd moet worden)
 - Wat lag er al vast, en wat wilde u ophalen uit de samenleving?
5. Wat zag u als haalbaar richting Concept-RES ten opzichte van participatie?
6. Welke ambitie (participatiedoel: informeren, consulteren, adviseren, coproduceren en meebeslissen) had u richting concept-RES met betrekking tot burgerparticipatie?
 - Heeft u deze ambities bereikt?
 - Waren de gebruikte participatievormen geschikt om de ambities te halen?
7. Wat heeft de gemeente gedaan aan participatie richting Concept-RES?
 - Participatieproces voor bewoners?
 - Welke participatiemethoden zijn gebruikt?
 - o Waarom die? Met deze methoden de ambities bereiken?
 - o Hoe is de verhouding tussen fysiek en digitaal?
 - o Uitdagingen van digitale participatie?
 - Uitdagingen van digitale participatie: trust, mutual respect, shared understanding, commitment to process
 - o Kan je een echte dialoog bereiken met digitale participatie? Of is dit niet de intentie?
8. Wanneer bent u begonnen om bewoners bij het proces richting Concept-RES te betrekken?
 - Hoe zag uw planning eruit?

Participatieproces richting RES 1.0

Nu lijkt het mij ook interessant om in te zoomen op wat u als gemeente wilt gaan doen aan participatie richting RES 1.0 (of wat er al heeft gespeeld)

9. Heeft de gemeente een participatieplan opgesteld om de participatie richting RES 1.0 vorm te geven?
10. Wat is voor uw gemeente het kader waarbinnen de participatie tot RES 1.0 gaat plaatsvinden? (het moet duidelijk zijn waarover geparticipeerd moet worden)
 - Wat ligt er al vast? Wat wil je uit de samenleving ophalen?
11. Wat ziet u als haalbaar richting RES 1.0 ten opzichte van participatie?
12. Welke ambitie (participatiedoel: informeren, consulteren, adviseren, coproduceren en meebeslissen) heeft u richting RES 1.0 met betrekking tot burgerparticipatie?
 - Verschillend ten opzichte van concept-RES?
 -

13. Wat is uw gemeente van plan te gaan doen aan burgerparticipatie richting RES 1.0?
 - Vooral digitaal
 - Uitdagingen van digitale participatie
14. Wanneer bent u van plan om het participatietraject in gang te zetten? Welke planning heeft u?
15. Hoe verhoudt het participatietraject van de RES zich tot juridisch vastgestelde kaders voor participatie van zon- en wind initiatieven?

Betrekken van welk publiek

(Uit het onderzoek van Bureau Emma blijkt dat het voor veel gemeenten uitdagend is om verschillende groepen uit de samenleving te betrekken in het participatieproces. Het wordt als belangrijk gezien dat er inclusiviteit ontstaat, en veel diversiteit van de deelnemers is in het participatieproces)

1. Hoe belangrijk vindt u dat zoveel mogelijk groepen mensen uit de samenleving worden betrokken in het participatieproces?
2. Welke uitdagingen ziet u hierbij in uw gemeente?
 - Belangrijke uitdagingen:
 - Kennistekort bij inwoners > daarom doen ze niet mee?
 - Weinig bereidheid van inwoners > daarom doen ze niet mee?
3. In hoeverre zijn bepaalde stakeholders betrokken die de stem van de burger vertegenwoordigen?
 - Welke stemmen worden van vertegenwoordigd?
4. Wat is het belang van herkenning en erkenning in het proces?
 - Herkenning: burger ziet 'oh het is een belangrijk probleem'
 - Erkenning: 'ik wil dan ook gehoord worden'
5. Hoe heeft u het belang van de RES geframed? Hoe is het probleem scherp gemaakt dat het voor bewoners motiverend werkt?
6. Zijn de bewoners geïnformeerd over de Regionale Energie Strategie en de gerelateerde lopende processen?
 - Is dit bedoeld om herkenning van het probleem te vergroten?
 - Hoe wordt deze kennis gedeeld?
7. Hoe brengt u de bewoners op de hoogte van participatiemogelijkheden in de RES?
 - Welke media wordt gebracht?
 - Website?
 - Nieuwsbrief?
 - Sociale media of lokale media?

8. Brengt u alle bewoners op de hoogte van de participatiemogelijkheden in de RES?
- Of steekproefsgewijs met brieven?
 - Worden mensen uitgenodigd? Of is het op eigen initiatief van de mensen? > dus open of closed design van het proces.
16. Verwacht u dat er groepen onvertegenwoordigd zijn in het participatieproces?
- Welke groepen? Waarom die?
 - Hoe gaat u hiermee om?
 - Hoe betreft u bijvoorbeeld jongeren in het participatieproces?

Lokaal traject in regionale besluitvorming

Het participatieproces van de RES is een samenspel tussen regio en gemeenten. Participatietrajecten worden vooral lokaal of subregionaal georganiseerd, terwijl de besluitvorming van de RES op regionaal niveau is. Ik benieuwd hoe gemeenten hiermee omgaan.

17. Hoe verzamelt u de resultaten uit het lokale participatieproces?
- Welke technieken gebruikt u? of welke middelen?
 - Ziet u het als een uitdaging om alle resultaten duidelijk weer te geven?
18. Hoe belangrijk is het naar uw mening dat lokale kennis vanuit de burger wordt meegenomen in besluitvorming van de RES?
- Kennistekort bij de gemeente en RES? > deze kennis zit bij bewoners?
 - Veel kennis en capaciteit ligt bij bewoners?
19. Hoe wordt het participatietraject meegenomen naar de gemeenteraad?
- Is er ruimte voor wat er uit de participatieprocessen komt?
 - Welke groepen zijn het beste betrokken in de besluitvorming?
20. In hoeverre wordt stakeholderparticipatie ten opzichte van burgerparticipatie meegenomen in de besluitvorming?
- Wat is de meerwaarde van burgerparticipatie?
21. Hoe neemt u de opbrengsten uit het lokale participatietraject mee naar de regionale besluitvorming?
- Ervaring richting Concept-RES?
 - Plan richting RES 1.0.
22. Hoe ziet de burger de resultaten uit het participatieproces terug?
- Presenteert de gemeente wat uit het lokale participatietraject is meegenomen in de RES? Wordt dit gedeeld met de burger?
 - Hoe wordt dit gedeeld? Worden de resultaten van het participatieproces gepresenteerd zodat bewoners deze kunnen inzien?

Reflectie

1. Hoe tevreden bent u tot nu toe met het participatieproces van de RES in uw gemeente?
2. Wat kan er beter?
3. Wat vindt u van de ondersteuning vanuit de RES voor het participatieproces in uw gemeente?
 - Wat kan er beter?
4. Wat vindt u van de ondersteuning vanuit de Provincie voor het participatieproces in uw gemeente?
 - Wat kan er beter?

Heeft u nog andere opmerkingen?

Afvinklijstje issues	
Issues breedte van het publiek	
Inclusiviteit en exclusiviteit	
Diversiteit	
Representiviteit	
Bereidheid van inwoners om mee te doen	
Kennis over ow bij bewoners	
Issues vorm van participatie	
Relatie participatiedoel en participatiemethode <ul style="list-style-type: none"> - Informeren - Consulteren - Adviseren - Coproduceren - Meebeslissen 	
Richting en intensiteit van communicatie	
Face-to-face design issues: <ul style="list-style-type: none"> - Trust - Mutual respect - Shared understanding - Commitment to process - Welke issues spelen bij de gemeente? 	
Digital participation issues: <ul style="list-style-type: none"> - Welke issues spelen bij de gemeente? 	
Issues machtsdelegatie	
Relevantie lokale kennis in besluitvorming	
Kennistekort bij de overheid	
Kennis en capaciteit van de bewoners	
Issues Institutional design	
Issues design > moeten mensen zichzelf aanmelden of wordt men uitgenodigd?	
Ground rules <ul style="list-style-type: none"> - De kaders van participatie 	

<ul style="list-style-type: none"> - De kennis die er al ligt in verhouding met de participatietrajecten - Waarover kan men meepraten en wat ligt er al vast? 	
Issues transparency	
<ul style="list-style-type: none"> - Delen van de resultaten online? 	
Local capacity	
Tijd voor participatieprocessen en verwerken van de resultaten	
Geld	
Issues leadership qualities	
Initiatief nemen in participatietraject	
Kwaliteiten om informatie te verzamelen	
Open naar nieuwe ideeën	
Kwaliteit om samen te werken	