When The Windmills Turn, They Turn For Us – The Opportunities for a Participatory

Energy Transition in Leeuwarden

Amber Beernink (S3915778)

BSc. Global Responsibility & Leadership

University Campus Fryslân, University of Groningen

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PhD. Abe Hendriks, Dr. Élise Roumeas

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Joep J. Poot, Project Leader Energy Transition

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Preface

This capstone project was written for my Bachelor degree in Global Responsibility and Leadership with specialisation in 'Responsible Planet' at University Campus Fryslân, University of Groningen. Commissioned by the Municipality of Leeuwarden, this study explores the opportunities for Leeuwarden to implement citizen participation for the local energy transition. The choice of collaboration was motivated by my interest to base my project on a case study. Also, the concept of citizen participation in the energy transition is a very fascinating research topic to me, as it is a blend of technological, political, economical and foremost social aspects. This multidimensionality sparks my interest as it requires a higher level of problem-solving and creativity than single-dimensional research.

I would like to express my gratitude to a number of people who have supported me during the process of writing my capstone project. First and foremost, I would like to thank my fellow student and dear friend Richt Fokkens for always providing me with clear feedback and continuous support. Secondly, I would like to express my gratitude to my supervisor, PhD. Abe Hendriks, for his guidance, reviews and recommendations. Lastly, I would like to thank my close friends and roommates for their feedback, emotional support and sweet encouragement throughout this project.

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Abstract

The Dutch government aspires to achieve climate neutrality by 2050, showing their commitment to the Paris Agreement and the European Green Deal. This requires a national energy transition, for which the Dutch Government implemented a decentralised approach where Municipalities take the lead. One of these is the Municipality of Leeuwarden, who found that most of their interventions need to happen in residential areas. To ensure that this process is consensual and without resistance, citizen participation is essential. However, the Municipality of Leeuwarden remains unsure how to appropriately strategise citizen participation for their local energy transition. To address this, this study conducts an extensive literature review on citizen participation and participatory governance for local energy transitions, as well as qualitative interviews with experts. The findings show that higher levels of citizen participation are beneficial for a successful energy transition in Leeuwarden, but there is no one-size-fits all strategy. In practice, the Municipality of Leeuwarden should take more time in the preparation phase, to fully understand the context, problem and goals of their energy transition process, and design it accordingly. For future research, this study suggests conducting interviews with Leeuwarden's citizens, and evaluating this study's recommendations.

Key words: citizen participation, participatory governance, local energy transition

Table of Contents

1. Introduction

This section contains the research context of this study. Following that, a problem analysis is carried out, whereupon the research objective and central question are established. The reading guide is described at the end of this section.

1.1 Research context

The main target of the Dutch Government is to achieve climate neutrality by 2050, showing their commitment to the Paris Agreement as well as the European Green Deal (Ministerie van Algemene Zaken, 2020; Siddi, 2020). For this, a national energy transition is required where fossil-based energy systems are replaced by renewable energy systems (Jansma et al., 2020). This poses challenges across private and public sectors as well as across scales, which ranges from local resistance against the energy transition to infrastructural complications (Lockwood et al., 2010; Salwasser, 2004). Therefore, the Dutch Government has decided to approach the national energy transition with a decentralised strategy in which municipalities take the lead in achieving climate neutrality and processes should be customised according to the specific circumstances and needs of the municipal region (Ollongren et al., 2018). In this process, there is a focus on combining the instruments and knowledge of state, market, and civil society in decision-making processes on local energy transitions. By doing so, the Dutch Government seeks to improve energy policies and with that increase the likelihood of realising the energy transition by 2050.

1.2 Problem analysis

One of the Dutch Municipalities actively engaging in their local energy transition is the Municipality of Leeuwarden. The municipality is located in the northwestern part of the Dutch province Friesland, and consists of the city Leeuwarden and 35 villages.[1] Over the past decade, they have been supporting and initiating various projects focusing on either renewable energy or more conscious energy consumption. Additionally, they have an online energy counter, where they give independent tips and advice on saving energy. Here, citizens can find information on subsidies, possible measures specific to their residences, and local energy cooperatives (Gemeente Leeuwarden, 2022). However, merely 14% of all energy consumption comes from renewable energy sources at this moment (Boers, 2021).

As over 85% of the buildings in Leeuwarden has a residential function, the energy transition is mainly dependent on interventions in the residential sector (BAG, 2022; FSP, 2020). According to Jansma et al. (2020), at least 90% of all these residences must be disconnected from the grid to achieve climate neutrality by 2050. This includes major changes in the residential landscape, where measures extend beyond the front door and also requires a financial contribution (Steenbekkers & Scholte, 2019). This takes a lot of time and will inevitably come with local resistance (De Vries et al., 2019). To ensure consensual adaptation, the Municipality of Leeuwarden wants to create willingness from citizens to support and participate in the local energy transition, and to find an approach that creates the least resistance (FSP, 2020). To do so, they have been exploring different types of citizen participation over the past years. Here,

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[1] The municipality of Leeuwarden consists of the following villages: Aegum, Baard, Beers, Britsum, Cornjum, Finkum, Freinds, Goutum, Grouw, Hempens, Hijlaard, Hijum, Huins, Idaard, Irnsum, Jellum, Jelsum, Jorwerd, Lekkum, Lions, Mantgum, Miedum, Oosterlittens, Oude Leije, Roordahuizum, Snakkerburen, Stiens, Swichum, Teerns, Warga, Warstiens, Wartena, Weidum, Wijtgaard, and Wirdum.

'citizen participation' refers to any type of citizen involvement in public decision-making, ranging from mere observation to having the decision-making power (Baum, 2015). However, the Municipality remains unsure which type is most appropriate for their local energy transition.

1.3 Research objective

Accordingly, this study aims to understand how the Municipality of Leeuwarden should strategise citizen participation for their local energy transition, and provide them with operationable recommendations. To give substance to this objective, the following research question emerges: *How can the Municipality of Leeuwarden appropriately strategise citizen participation for their local energy transition?* To answer this question, the governance and social elements of citizen participation are the focus of this study. The Municipality of Leeuwarden commissioned this scope, despite the fact that the energy transition encompasses more dimensions, such as technology and economy. This, however, may limit the outcomes of this study. Additionally, this research is conducted specific to the Municipality of Leeuwarden, therefore findings might not be generalisable. The discussion section elaborates upon further limitations.

1.4 Reading guide

The study continues with a background analysis. In this section, the focus is on understanding how and why governance has changed to include more citizen participation. Also, this section indicates the current support base for the energy transition in Leeuwarden. This gives context to the study and establishes the baseline for further research. Thereafter, the literature review presents an overview of the relevant publications on citizen participation, with a focus on

participation types, governance styles and local energy transitions. Based on the background and literature review, the methodology explains how the research gap is filled by semi-structured qualitative interviews with experts. The results section presents the findings from these interviews. Then, these results are compared to the findings of the background and the literature review to answer the research question in the discussion. This section also elaborates on the limitations of the study, as well as their implications for the results. Building upon this, the conclusion answers the research question, presents its recommendations for the Municipality of Leeuwarden, and offers suggestions for future research.

2. Background

This section explains how and why governance has changed in the Netherlands to include more citizen participation in decision-making processes. Thereafter, it is explored what the support base is for the energy transition in Leeuwarden.

2.1 Displacement of governance

2.1.1 Displacement of governance in the Netherlands

Over the past century, macrosociological changes, such as individualisation, depillarisation, computerisation, and globalisation have had an influence on governance in the Netherlands. Before that, the connection between the citizens and the Dutch government was formed by a compartmentalised civil society (Raad voor het Openbaar Bestuur, 2004). With the disappearance of this historically grown link, an important element of civil society fell away. As a result, the Dutch Government recognised that they must cede some decision-making authority to the following decision-making bodies: intergovernmental organisations, social organisations,

court, civil service, local governments, and the economic sector (Bovens, 2005). This meant that decision-making in the Netherlands became partly decentralised with a more inclusive approach. However, the citizen perspective still lacked in decision-making processes.

Another aspect of this displacement is the growing disparity between citizens and the Dutch Government (Bovens, 2005). The aforementioned macrosociological changes had also created a new type of citizen involvement in which expectations and opinions on the content and course of decision-making processes are expressed (Castenmiller, 1998). Therefore, participation procedures and interactive policy-making have gradually increased to include the citizen perspective in governance, and with that counterbalance the disparity between citizens and the Dutch Government (Castenmiller, 1999; Ollongren et al., 2018).

2.1.2 Motives for displacement of governance

There are three motives for policymakers to include citizens in governance: (1) *legal motives*, (2) *moral motives* and (3) *substantive motives* (Edelenbos, 2000). Legal motives are mostly preventative. This means that certain decisions have the potential to hurt the interests of particular groups resulting in unwelcomed time-consuming judicial processes. Then, the moral motives are concerned with improving the democratic quality of decision-making. In this sense, citizen engagement is viewed as a representation of the aforementioned 'new citizens', where the Government foresees citizens' increased desire to have a direct say in decision-making (Raad voor het Openbaar Bestuur, 2005). Lastly, substantive motives are related to the desire to improve the outcomes of decision-making processes. According to Pröpper & Steenbeek (1999), citizen participation increases the quality of policies and problem-solving capacities. This is the

case because exchanging information broadens the thinking frameworks of both policymakers and citizens, which contributes to mutual understanding and consensus possibilities (Pröpper & Steenbeek, 1999). Also, making use of the creativity and knowledge of the citizen enriches the content of the policy. This form of interaction can provide citizens with a sense of responsibility and self-reliance, thereby strengthening their involvement in public affairs. Additionally, citizen participation can increase the support base of a policy and speed up the implementation process (Pröpper & Steenbeek, 1999). When citizens are involved in decision-making, the acceptance of the policy will likely be higher. As a result, citizens will be less eager to challenge the policy legally, and with this speed up implementation processes. Also, in light of the local energy transition, it might potentially facilitate the recognition of the value of local environmental knowledge and the establishment of new professional forms of expertise (Fischer, 2000).

2.2 Local support base

As outlined above, when there is a support base for a policy, there is a higher chance of acceptance and speedier implementation. Therefore, the Municipality of Leeuwarden is eager to grow their support base in their local energy transition. According to Fries Sociaal Planbureau (2021), there is generally a wide support for the energy transition in Leeuwarden, where 84% of its citizens think it is necessary that fossil energy sources are replaced with renewable energy sources to combat climate change. However, there is a strong feeling among the community that the energy transition should not interfere with the natural environment of the municipality. Approximately 44% of the citizens think that the energy transition must not be at the expense of the landscape, whereas the other 56% still find it undesirable, but inevitable (FSP, 2021). There is no clear preference for solar fields or wind farms (FSP, 2021). Additionally, even though most

of Leeuwarden's citizens support the energy transition, they indicate different levels of trust in local organisations' shared information on the subject (table 1).

Table 1. Trust in organisation information

Organisation	Level of trust (indicated on a scale from 1—10)*
Energy companies	5,1
Dutch Government	5,3
Municipality of Leeuwarden	5,9
Province of Friesland	5,9
Environmental organisations	6,7
Consumer organisations	7,0
Scientific research organisations	7,7

Note. Adapted from FSP (2021)
*Here, 1 indicates no trust and 10 complete trust.

As of now, governmental institutions, like the Municipality of Leeuwarden, do not score sufficiently among Leeuwarden's citizens. According to FSP (2020), this trust is needed to create a supportive environment for the local energy transition to succeed by 2050. Therefore, it might be important for the Municipality of Leeuwarden to understand the importance of trust building and how this should be done in light of the energy transition. Here, collaboration with organisations that score higher levels of trust, such as scientific research or consumer organisations, might be something to consider when wanting to build trust. This is further explored in the results section.

3. Literature Review

This section reviews the existing literature on topics related to citizen participation, energy citizenship, community empowerment and democratising energy systems. There is a focus on strategising a local participatory energy transition. Building upon this, the section analyses the findings to guide understanding and establish the research gap.

3.1 Citizen Participation

3.1.1 Levels of Citizen Participation

There are multiple ways in which cooperation between Government and the public can take place. The literature presents an abundance of theories on this topic, but most build upon the participation ladder by Arnstein (1969). The ladder presents eight ranges of participation, where the degree of participation is presented from low (1) to high (8) (figure 1).

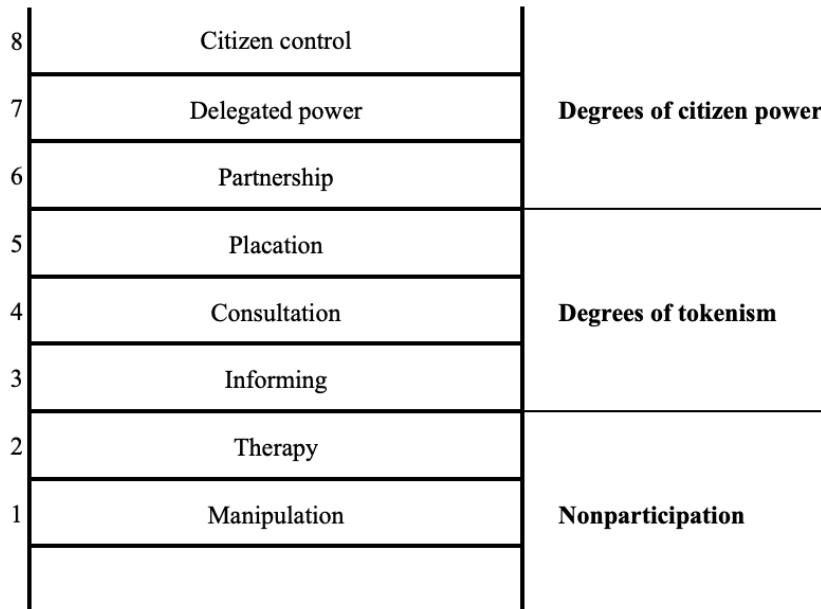| 8	Citizen control	**Degrees of citizen power**
7	Delegated power	
6	Partnership	
5	Placation	**Degrees of tokenism**
4	Consultation	
3	Informing	
2	Therapy	**Nonparticipation**
1	Manipulation	

Figure 1. Arnstein's ladder of participation
Note. Adapted from Arnstein (1969).

These ranges are placed into three typologies: 'Nonparticipation', 'Degrees of tokenism' and 'Degrees of citizen power'. The 'Nonparticipation' category includes the first two types of citizen participation, and refers to processes in which participants are informed or cured by power holders without allowing actual participation (Arnstein, 1969). Moving up the ladder, the category 'Degrees of tokenism' represents the following three types of participation in which citizens do have the ability to share their opinions and experiences, yet there is no actual power for citizens to enforce that these are taken into account in decision-making (Arnstein, 1969). Up till here, there is almost no actual participation, because citizens do not or hardly possess the necessary power to enforce their opinions or wishes (Arnstein, 1969). However, in the uppermost category 'Degrees of citizen power', citizens do have sufficient power and resources to influence the decision-making processes and enforce their opinions and wishes (Arnstein, 1969). According to Arnstein (1969), this category is considered a 'genuine level' of participation, because citizens are fully included in decision-making processes (Arnstein, 1969). Additionally, local participatory governance has the potential to empower marginalised citizens to participate in energy governance when participatory practices are based on citizen power, not tokenism, therapy or manipulation (Arnstein, 1969; Fischer, 2000).

One of the authors who has adapted Arnstein's (1969) participation ladder is Pröpper (2009) (figure 2). The participation ladder partly corresponds to that of Arnstein (1969), but Pröpper's participation ladder combines the levels of participation with associated governance styles necessary to carry out the participation level.

Participation type (Role of the participants)		Governance style (Role of the Government)
Authoritative policy owner	7	**Facilitative style**
Cooperation partner	6	**Cooperative style**
Co-decider	5	**Delegative style**
Advisor (from start)	4	**Participative style**
Advisor (at the end)	3	**Consulting style**
Inspector	2	**Open authoritative style**
None	1	**Closed authoritative style**

Figure 2. Pröpper's participation ladder
Note. Adapted from Pröpper (2009).

Here, Pröpper distinguishes between seven forms of participation. The three lowest levels do not involve interactive decision-making, while the other forms do. The interactiveness increases with each level. For the governance styles, Pröpper (2009) builds upon the findings by Pröpper & Steenbeek (1999) (table 2).

Table 2. Governance styles

Facilitative style	The Government offers support in the form of time, money, expertise and material resources.
Cooperative style	The Government cooperates with citizens. Here, there is equal authority among all parties.
Delegative style	The Government gives citizens the authority to make decisions or implement policy within given conditions.
Participative style	The Government asks for an open advice where there is room for discussion and new input. This means, among others, that the citizens can define the problem and give direction to solutions.
Consultative style	The Government consults about a closed question. Here, citizens can express their opinions on a given policy approach within a given problem definition.
Open authoritative style	The Government conducts a completely independent policy. This policy is then shared with the public. The public is convinced or persuaded to act accordingly.
Closed authoritative style	The Government conducts a completely independent policy and does share any information about it to the public.

Note. Adapted from Pröpper & Steenbeek (1999).

3.1.2 Shaping citizen participation

Edelenbos et al. (2006) explains, however, that the degree of interactivity continuously increases or decreases within the participatory decision-making process. This means that the highlighted roles of the citizens and the Government might differ during the process as well (Edelenbos et al., 2006). Still, it was found that citizen participation is most beneficial to the decision-making process when citizens are involved as early as possible in the decision-making cycle, such as in the agenda-building phase (Dreijerink et al., 2008). In line with this, Hurlbert & Gupta (2015) challenge the assumption that higher levels of participation always improve decision-making processes. They found that the nature of a problem and the extent of social learning should also be considered to appropriately implement a participation level. According to Hoppe (2011), the nature of a policy problem is often hard to pinpoint as it is embedded in norms and values, science, and policy goals that are related to the desirable future (Hurlbert & Gupta, 2015). In that sense, a distinction can be made between structured and unstructured policy problems (figure 3).
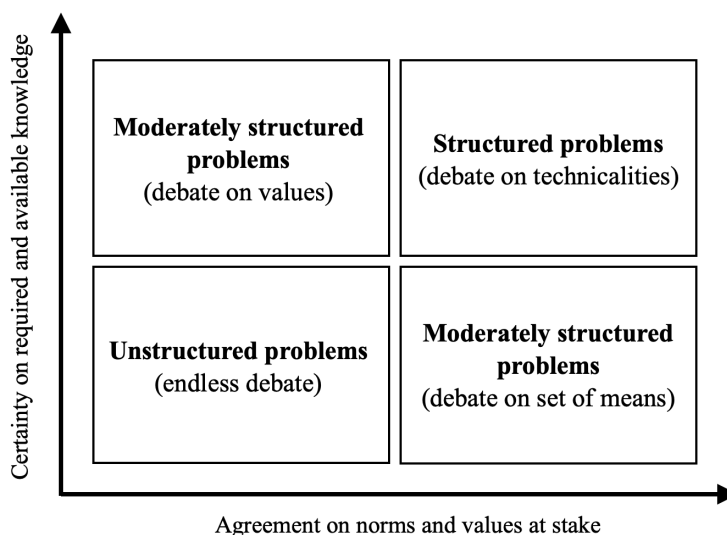
Agreement on norms and values at stake

Figure 3. Typology of problem structures (Hoppe, 2011)

Note. Adapted from Hoppe (2011).

According to the figure, 'unstructured problems' are encountered when policymakers see broad dissatisfaction with the status quo, but there is high diversity about the values at stake. Because of this, unstructured problems often come with endless debate among policymakers (Hoppe, 2011). Here, higher levels of citizen participation are necessary for proper decision-making (Hurlbert & Gupta, 2015). Opposing this, there are structured problems. These are encountered when there is a perceived unanimity or almost complete agreement on the norms and values at stake as well as certainty on the validity and applicability of the solution (Hoppe, 2011). These are problems where there is most often already an established course of action. Thus, minimal participation of the public is necessary to properly come to a solution (Hurlbert & Gupta, 2015). Then, there are two types of moderately structured problems. The first type occurs when there is perceived unanimity on norms, values and the desired future, but simultaneously there are considerable levels of uncertainty about the relevance and reliability of knowledge on how to take action (Hoppe, 2011). For this, it is important to implement higher levels of participation

that focus on coming to a consensus on which means will be most appropriate for decision-making (Hurlbert & Gupta, 2015). The last type occurs when there is consensus on the knowledge on how to take action is relevant and reliable, yet the norms and values at stake encounter great diversity (Hoppe, 2011). In this case, Hurlbert & Gupta (2015) argue that lower levels of participation that focus on informing, mediating and placating might be best for decision-making.

Building upon this, Hurlbert & Gupta (2015) found that social learning is an important element of these debates. There are three types of *social learning* where the cooperation process should then focus on (figure 4): *single-loop learning*, *double-loop learning* or *triple-loop learning*.
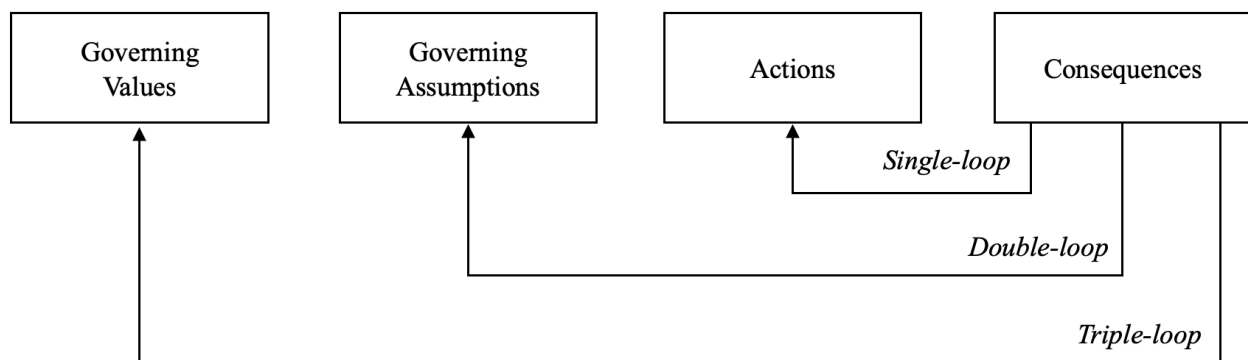
Figure 4. Types of social learning
Note. Adapted from Keen et al. (2005).

In *single-loop learning*, learning takes place within an already existing normative framework that leads to conventional solutions to structured problems (Keen et al., 2005). In *double-loop learning*, there is room for questioning current assumptions and conventional solutions (Keen et al., 2005). Therefore, it is most appropriate for solving moderately structured problems (Hurlbert & Gupta, 2015). Then, in *triple-loop learning*, a complete restructuring of current assumptions

and values is done (Keen et al., 2005). Here, there is a focus on redefining, relearning and unlearning what is currently understood about the problem (Keen et al., 2005). This kind of learning is needed when problems are unstructured (Hurlbert & Gupta, 2015).

Additionally, Hurlbert & Gupta (2015) found that trust is a prerequisite for social learning and it can aid in understanding citizen's willingness to let policy makers decide on problems for them. According to Pahl-Wostl (2009), information flows between citizens and policymakers have to be two-way and repetitive to build this trust between the two parties. In turn, when there are higher levels of trust among citizens and policy makers, there is more social learning through an increase in the quality of information flows (Dorcey et al., 1994). As a result, there is a higher level of problem solving in the decision making process (Hurlbert & Gupta, 2015).

Thus, the literature shows that citizen participation can take place on different levels which correspond to certain governance styles. To operationalise this, Hulbert & Gupta (2015) indicate that it is necessary to first understand what the type of the policy problem is and thus what type of learning is necessary to come to solutions. This approach could be implemented in decision-making on the local energy transition in Leeuwarden to understand which level of participation is necessary for the case. However, there is no practical evidence that combining these tools would be appropriate for a local energy transition, such as in Leeuwarden. This is further explored in the results section.

3.2 Energy citizenship

A similar, but slightly different approach to participation in the energy transition is the concept of 'energy citizenship'. Energy citizenship is a solution-oriented concept, responding to calls for decarbonisation and democratisation of energy systems (Wahlund & Palm, 2022). It refers to individual actions of participatory energy production and consumption, rather than the political and social movement which comes with energy democracy (Szulecki & Overland, 2020; Devine-Wright, 2007). In energy citizenship, participation is thus often seen as an individual shift from passive consumption to more meaningful interactions with energy in everyday life, during which energy awareness and literacy are expected to grow (Goulden et al., 2014). This could be in the form of device-centred participation in residences or other individual material practices (Ryghaug et al., 2018). According to Wahlund & Palm (2022), the focus on material engagement in energy citizenship has also contributed to a more ordinary understanding of participation. They argue that citizens' energy literacy will grow as they adopt and engage with small-scale renewables and smart technologies in their homes, allowing them to effortlessly connect to the broad-scale energy transition. Therefore, creating energy citizenship might be an appropriate element to consider when strategising a local energy transition within the Municipality of Leeuwarden

3.3 Community empowerment

According to Coy et al. (2021), community empowerment is also an important factor for achieving the energy transition by 2050. This concept refers to "the process of an individual or group or community increasing their capacity and contextual power to meet their own goals, leading to their transformative action" (Coy et al., 2021, p.10) Using a community empowerment

approach to energy transitions encompasses that local communities and their goals are at the centre of the design (Heaslip & Fahy, 2018; Thomas et al., 2018). Typical drivers of community empowerment include individual knowledge and awareness, governmental support, availability of material and knowledge resources, existence of rising technologies and a strong community dynamic (Biresselioglu et al., 2020; Brummer, 2007; Centgraf, 2018). Municipalities, such as the Municipality of Leeuwarden, can facilitate this by having *one* open-access energy platform on which all information is presented where citizens can get started and ask questions (de Vries & Kooger, 2021). Through this platform, citizens can obtain trustworthy and appropriate information, as well as reach out to other members of their local community and companies that can help their case.

3.4 Representation

However, there are some concerns regarding the risks of using participatory governance over representation. According to Putters (2015), it might lead to inappropriate decision-making when representatives are not selected carefully and replaced over time. This is in line with Michels & de Graaf (2017), who argue that democratic citizenship (where there is a focus on representation) is more important than forms of direct democracy when aiming for effective and fair governance.[2] Nowadays, participation generally comes from the highly educated, older, white man, who has the time and funds to freely and continuously participate in decision-making processes (Fung, 2015; Putters, 2015). This group often has a better socioeconomic status than their local community and because of this, does not closely represent the entire community (Fung, 2015). Also, because this group has the social skills to bring forward their interests within

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[2] In democratic citizenship, citizens vote for their government officials and these officials represent the opinions and wishes of the citizens in the governmental region (Bellamy, 2008).

the participatory process, they can influence the energy transition in a way that benefits themselves most (Snel et al., 2018). This is also known as the 'Matthew-effect,' which explains how individuals with status are often put in circumstances where they acquire more, while those without status struggle to do so (Snel et al., 2018). To prevent this, Fung (2006) and Bleijenberg (2021) argue that when a broad group of citizens –ensuring that socioeconomic status is well-represented– is included, the participation processes would still be effective and fair as the local community is truly represented, combining representation and participation Based on this, the Municipality of Leeuwarden might need to be cautious in gathering citizens for their participation process. However, practice will have to show what the best approach to selection is.

3.5 Energy democracy

3.5.1 Conceptualising energy democracy

In line with the displacement of governance and the recognition of citizen participation as a useful tool for operationalising a local energy transition, concepts of energy democracy emerged over the past decade. These concepts were developed with the aim of democratising both the production and management of energy resources (Jenkins, 2019; Stephens, 2019). Generally, energy democracy builds upon three principles: (1) *civic ownership of energy resources*, (2) *decentralisation of energy system*s, and (3) *participatory energy governance* (e.g. Becker & Naumann, 2017; Burke & Stephens, 2018; Fairchild & Weinrub, 2017; Morris & Jungjohann, 2016; Szulecki, 2017; van Veelen & van der Horst, 2018). As the Municipality of Leeuwarden aims for a local participatory energy transition, the concept of energy democracy might provide some operable suggestions for strategising it.

The first principle, civic ownership, includes a shift toward more citizen ownership of both energy companies and infrastructures. This is based on the assumption that the current privately-owned energy companies are not willingly enough to properly participate in the energy transition. Thus, a sense of civic responsibility can be seen as essential (Stephens, 2019; Stephens et al., 2011). To achieve this, public ownership needs to be expanded (Bozuwa, 2018). In this, public ownership concerns the ownership of any energy infrastructure by a public body, such as the Municipality of Leeuwarden. This thus indicates a shift in who owns and organises energy in a region (Stephens, 2019). Secondly, the decentralisation of energy systems includes a shift to operating and managing energy infrastructures at a local scale, meaning that communities do not have to outsource their energy resources where they depend on privately-owned systems with regional monopolies (Thombs, 2019). As a result, the local community members turn into both producers and consumers, so-called prosumers, that have a direct stake in the nature of energy generation (Stephens et al., 2018). Because the local community both produces and consumes the generated energy, they are more likely to opt for renewable energy generation, such as solar or wind farms (Byrne et al., 2009; Stephens et al., 2018). Thirdly, energy democracy advocates for the expansion of participatory energy governance in the energy transition (Stephens, 2019). By doing so, decision-making on energy related issues will better incorporate local knowledge as well as the wishes and concerns of local communities (Sorman et al., 2020). This can be achieved through the creation of democratically-elected energy oversight boards or by including public deliberation into decision-making processes (Stephens, 2019).

3.5.2 Indicators of energy democracy

To operationalise energy democracy for decision-making on local energy transitions, Szulecki (2017) proposes a set of indicators (table 3). Building upon concepts of energy justice, he pleads for *popular sovereignty*[3], *civic ownership* and *participatory governance* as the main dimensions of democratising current energy systems. The table focuses on ownership, transparency and knowledge sharing. In particular, different types of ownership are highlighted by all dimensions (Szulecki, 2017).

Table 3. Energy democracy as a decision-making tool for energy transition issues

	Components	Indicators
Main dimensions		
Popular sovereignty	- Citizens as recipients of energy policy - Citizens as stakeholders (i.e. producers and consumers) - Citizens as accountholders	- Welfare and energy access as key benchmarks - Consumer prices and quality of service - Prosumer legislation and grid acces - Prosumer support schemes - Public accountability of energy decision-makers
Participatory governance	- Inclusiveness - Transparency - Access to information - Energy education and awareness raising	- Incorporation of public consultations at all levels - Citizen interest and opinion on par with expert agenda - Due process and clear procedures - Regulated lobbying - Independent research possible and available - Existence of dedicated educational programmes
Civic ownership	- Civic ownership of power generation - Civic ownership of transmission and distribution infrastructure	- Renewable energy deployment - Dispersed energy capacity - Share of energy from private, cooperative and communal sources - Ownership structure and power in the political economy of energy - Share of grid infrastructure co-owned by municipalities

Note. Based on findings from Szulecki (2017).

The indicators can be used to measure whether and to what degree energy structures become more or less democratised, where national and regional contexts can be compared for

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[3] Popular sovereignty encompasses a government that is created by and subject to the will of its citizens (Merriam-Webster, n.d.).

decision-making (Szulecki, 2017). These indicators might thus be a possible instrument for the Municipality of Leeuwarden to understand the current energy structures as well as to evaluate the outcomes of initiated energy projects in the region.

4. Methodology

4.1 Study design

The literature review proposes many frameworks related to the topic, but lacks practical implications of combining these for strategising citizen participation for a local energy transition. Therefore, this study aims to understand how the Municipality of Leeuwarden could do so through semi-structured qualitative in-depth interviews. These interviews are conducted among experts on citizen participation in decision-making, as well as employees from the Municipality involved in citizen participation or the local energy transition.[4] These individuals can provide expertise and hands-on experience, as well as area knowledge regarding citizen participation in decision making processes on local energy transition projects, which in turn helps to bridge the research gap. To include as many different perspectives into the data collection, respondents were selected from different sectors and age groups.

For conducting these interviews, a combination of diagnostic and exploratory elements were included in its design. This was done with the goal to both identify quality requirements, and to explore the different strategies for a local participatory energy transition facilitated by the Municipality. In this, the focus was on gaining insights from different perspectives and

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[4] Individuals were considered experts when they have at least five years experience as a researcher or are working in the field of citizen participation in local energy transitions or decision making processes.

experiences related to the subject. As experiences and opinions are not objectively measured, an interpretive approach was used (Willis et al., 2009).

To recruit respondents for this study, two main strategies were used: (1) sampling through professional network connections and (2) snowball sampling. For the first strategy, professional connections that might know appropriate candidates for the interviews were contacted and asked whether they knew experts who would like to participate in an interview. Then, after the interviews took place, the respondents were asked whether they might know other possible candidates for interviews. The respondents have knowledge on the expertise of their own network and are sufficiently influential to encourage them to participate in the interview (Hennink et al., 2020). By using these sampling methods, eight appropriate candidates were contacted for the in-depth interviews. Here, three of the experts were employees at the Municipality of Leeuwarden.

4.2 Data collection

Through the in-depth interviews, the respondents provided detailed information on their strategies, experiences and opinions regarding the inclusion of citizens in decision making processes on energy transition projects. To get an understanding of how the Municipality of Leeuwarden should facilitate this, an interview guide was developed (Appendix A). After a short introduction to the contents and aim of the study, a set of opening questions were included. These questions were included to introduce the respondent, establish the interview setting and ensure that the respondent felt comfortable. For example, respondents were asked what their experience with citizen participation is. Thereafter, a set of key questions were asked. Here, the focus was

on how municipalities can facilitate citizen participation, including the quality requirements and results of certain strategies. To mindfully end the interviews, closing questions were asked to ensure that the respondents eased out of the interview-setting and had no further uncertainties regarding the study or interview. Afterwards, there was scheduled time for casual conversation and unwinding. This was done to make sure the respondents left the interview feeling comfortable. Also, the interviews were conducted in Dutch, the native language of the respondents, helping them feel more comfortable in the formal setting. The duration of the interviews was between 40 minutes and an hour. This gave the respondents enough time to thoroughly answer the interview questions.

The interviews took place on the online platform Google Meet. The default iPhone recording application was used to record and validate the data from the interviews. The recordings were automatically saved on a private drive. After the completion of this study, these recordings were deleted. To ensure the recording functions worked well, the sound quality and the transferring process were tested prior to conducting the interviews.

4.3 Data preparation and analysis

To prepare the data for analysis, the interviews were transcribed. Additionally, during this process the data were anonymised to prevent potential privacy concerns. All the names mentioned during the interview were substituted by "[NAME]", and any names of companies or organisations that needed to stay anonymous were replaced with "[COMPANY]".

For the data analysis, a phenomenological method was used. This method has a subject-centred approach to analysing that aids in understanding the views and experiences of the respondents on how and whether to include citizens in decision making processes on energy transition projects (van Manen & Adams, 2010). The phenomenological method provides a framework to examine the interviews from different angles and create a database based on subjective viewpoints (van Manen & Adams, 2010). Thereafter, the database was analysed based on similarities and recurring answers in the data. Based on these findings, the meaning of the views and experiences were evaluated (Gill, 2020). Then, these findings were reduced to a few main statements that aim to reflect the respondents' views and experiences (Gill, 2020). These are presented in the results section.

4.4 Ethical approval

Before conducting the in-depth interviews, the respondents were provided with an informed consent letter with the goal to prevent ethical issues (Appendix B). Through signing of this letter, the respondents gave informed consent to the aim and design of the study. Also, both in the informed consent letter and during the interviews it was made sure that the respondents knew of the purpose of the interview and how long the interviews would take. The respondents were given the opportunity to freely ask questions during the entirety of the interviews. Additionally, it was made sure that the respondents knew they had no obligation to answer any questions and were allowed to leave the interview at any given time. During the interviews, the respondents were notified when the recording started and ended during the interviews. These measures were taken to make sure that the respondents felt respected and comfortable participating in the interviews (Hennink et al., 2020).

5. Results

This section presents the results of the in-depth interviews with experts in the field of citizen participation and local energy transitions. The focus is on the roles of citizens and municipalities within the energy transition, and how the Municipality of Leeuwarden can facilitate this role change. This includes suggestions for strategising citizen participation for the local energy transition. Subsequently, the differences between Leeuwarden as a city and the municipal villages are highlighted. Lastly, the concept of representation is further explored in light of the energy transition of Leeuwarden.

5.1 Role change

In the first question respondents were asked to describe the roles of citizens and municipalities in the energy transition. Currently, "there is inflicting behaviour on the part of the government, and individualistic consumers on the side of the citizens. And both are fairly low on the participation ladder" (1).[5] However, "governments expect citizens to act high up the ladder" (1), where they "take responsibility in the process and pay for everything themselves (2), but this "skewed relationship is not working" (1). All respondents firmly argue that citizens should become more involved in decision-making processes on the topic. They emphasise the importance of "co-ownership" (1)(2)(4)(8), but also mention "cooperation in decision-making" (5), "citizen control" (6)(7), or "a process where the responsibility is split" between stakeholders (3). Respondent 1 emphasised that "it is really about developing [processes] together".

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[5] Here, respondent 1 refers to the participation ladder by Pröpper (2009).

To achieve this, respondents advocate for the municipalities to become "facilitators" (1)(2)(5)(6)(7)(8). Respondent 2 argues that municipalities "should really listen to what the wishes and burdens are". "Citizens know what is coming with the energy transition, so they often already have some ideas" (3) about how they "want to shape the process" (8). According to respondent 5, "there are very energetic people with expertise everywhere, young and old". However, "citizens are not going to build [windmills] themselves, they have to hire companies for this" (5). Based on this, respondents 1, 3 and 5 highlighted that energy companies will also change in roles, going from project-owner to "project executor".

5.2 Facilitating role change

5.2.1 Awareness within the Municipality

All respondents argue that there is some type of "unwillingness" (1)(3), "uncertainty" (2)(6) or "cold feet" (4)(5)(7)(8) within Municipalities that "halters them to include more participation in their decision-making" (8). nowadays municipalities often include citizens "because they have to" (2). According to respondent 1, "people know when [the Municipality] is sincerely interested and when you are not". "You should not play games with this as you will organise your own misery related to protests and procedures" (1). This is confirmed by respondents 2, 3, 4, 7 and 8. Therefore, there should be a "genuine desire of the Municipality to include the citizen perspective in decision making" (2). To achieve this, "at the beginning of this process [municipalities] have to spend a lot of time on the inside of their organisation to allow this awareness to grow among all the employees, then [they] need time to gain and grow trust among the citizens, all before action takes place" (1).

5.2.2 Shifting focus to preparation

In line with that, respondents 1, 2, 3, 5, 7 and 8 explain that "the preparation time of the process should consume a considerable amount of time, way more than the implementation or participation part itself" (1). Here, they "should start with defining the problem" (2). "From where do you start? Has the goal already been set? And who did that? Are we mainly concerned with implementation or can we still start with decision-making? Determine the goal first, together. What should it exactly be about? And what do citizens have influence on?" (8). In this process, "it might also make sense to include a small group of citizens to design this participation process" (3), because "they have the knowledge of their local community and can help design an appropriate plan" (1). According to respondent 3, "this is much more intensive and also costs a lot more effort and money". However, "if you do everything very quickly, make a determined plan, people will revolt." (3) "In classic cases of mediation, you need a year. If you go to court, it sometimes or usually takes three years" (3). That is a much longer and more complex procedure" (5). "By doing the preparation work, you eventually earn back time" (8), which is reiterated by respondent 1, who argues that "as a result, the implementation phase will be relatively quicker". Also, "the invested money will be earned back" (7). Additionally, respondent 2 and 8 mentioned that "when the problem definition and the course of action is clear, one can design an ideal participation process on every level" (2). It was emphasised that "when you choose to operate on a lower level on the ladder, that is not necessarily a bad thing if you accept that there will be a lot of hassle and objections" (2).[6] "It just has to be a conscientious decision to do it like this" (8).

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[6] Here, respondent 2 refers to the participation ladder by Pröpper (2009).

5.2.3 Frames and conditions

For this, it is "necessary to clearly communicate the frames and conditions set in the preparation phase" (7). This is confirmed by respondent 2, who mentioned that "as the Municipality you obviously have an interest, it is just important that this is clear at the beginning". In line with this, respondents 3 and 8 argue that citizens "understand that there are limits to what is possible" (8) and that "they know they have to be flexible in these turbulent times" (3). "You can be very clear about this, but what happens within this framework is up to the citizens themselves" (1). By doing so, "you arrange and create as much customisation as possible" (1). Respondents 2, 3, 5 and 8 found this a necessary component as "you cannot assume that all citizens will participate in an initiative if they are not even allowed to shape the process a bit themselves" (8).

5.2.4. A learning process

This is a "quite new approach" (2) that will "need a lot of learning" (1)(5). According to respondents 1, 2, 7, 8, both citizens and the Municipality will "have to get used to" (1)(2) "these new processes" (7)(8). "Normally, they are used to having a project leader from the Municipality or deployed by the Municipality involved in a project and then citizens being pushed around" (1). "This needs to change" (6)(7). Respondent 5 argues that "energy transition should be seen as a playing field to start learning". "When you really work closely together with a small group of people, there is room to make mistakes" (3). "Everyone then understands that it is still a learning process" (1). Because of this, respondent 1 mentions that the process should include "qualitative research that is real action research with which you really learn as you go".

Also, respondent 1, 4 and 5 argue the importance of sharing learning points: "when the wheel is already invented in another area, this information should be shared with the rest of the Netherlands" (5). Because "together we will learn best" (5). Eventually, "processes might become more efficient, because there is some more experience with this (3). However, it is important to consider that for "every region or project another strategy works best" (5) and "a one-size-fits-all approach is not possible" (1).

5.2.5 Communication and capacity

Additionally, by ensuring there is a "two-way communication" (7) between municipalities and citizens in the learning process, a "clear perspective change" can occur that "aids in proper decision-making" (3). In this process, respondents mention that the Municipality "should share relevant information" (8) and "bring in the experts" (1)(2)(3). Thus, the Municipality "does not lead the process" (2). Rather, "they should hire an independent process leader" (3). This can also result in "citizens being more satisfied with the participation process" (8), as both parties "have equivalence in the process" (1). Here, it is important for "civil servants to engage in this perspective exchange" (3), to "really understand what is wanted and needed" (4). However, respondent 3 and 6 emphasise that "this would require a lot of capacity to organise this properly" (3), which the Municipality "currently does not have" (6). "The total energy transition team consists of five people" (6), "more employees are needed to properly and equivalently participate in this energy transition process" 6). Still, respondent 7 mentioned that "when there is not a lot of capacity, communication could still be improved". "Communication is essential as you can still get a lot of support when it is done right and consistently before, during and after the process" (7).

5.2.6 Examples and visualisations

Additionally, respondents 3 and 4 mention the importance of using "example cases" (4) and visualisations (3) to "really show all the possibilities" (4). According to respondent 3, this is necessary "because perhaps in the rudiments of a project, people cannot quite picture the outcome yet". "With new things, such as an energy transition, the possibilities may be a bit more vague" (3). "Therefore, it might be better to show what the possibilities look like" (3), and "here the plans should not be concrete yet" (4). "Now, you can have a real discussion, because everyone understands" (4). However, respondent 8 also mentions that "even if everything has already been decided, you can sometimes give some options to people in the implementation phase of a project, for instance regarding the colours or placements". These are things people can envision and have opinions on" (8).

5.2.7 Quality requirements

For these abovementioned processes, various quality requirements were highlighted. Respondents 1, 2 and 3 found that "equivalence" was of great importance in cooperation. "And then we are not talking about equality, people are not equal as we can tell as civil servants, but their input should be worth the same" (1). For this, respondents 3 and 4 argued that "direct contact is really important" (4), because "only then you are really cooperating and designing everything together" (3). In this contact between the Municipality and the citizens, "clarity" (1)(2)(3)(8), "genuineness" (1)(2)(4) and "humanity" (2)(3) should be central. "[The Municipality] has to be very clear in their problem statement and very clear in their expectation management" (1). Also, it "should be clear what is done with [citizens'] input, and what effect

their participation will have" (3). When the contact is genuine, "and the citizens perceive it as such" (2) "citizens will feel empowered and motivated to participate, even when they were not excited beforehand" (1). "Thus, genuine intentions are really important" (1). Then, it is also important for both parties to "see the humanity in the 'civil servant' and the 'evil citizen' back again" (2). "This humanity is needed to build trust, which currently is at an all time low in The Netherlands" (6).

In line with this, respondents 4 and 7 highlight that the energy transition "should become more fun, a more positive experience" (4). This attracts citizens "in a completely different way than beforehand, and it often works way better" (7).

Then, in the preparation phase of an energy transition project, respondent 2 mentions that "it is important to make the process adaptable in every way possible" (2). Here, the Municipality "should not start thinking about possible solutions, as they underestimate the power of the public and they get tunnel vision in the process" (2). This is reiterated by respondents 1, 3 and 8.

5.3 City and villages

Respondent 4 highlights that there are differences between Leeuwarden's villages and the capital city, as in villages "every house is different" (4). This needs a "completely different approach than an apartment building or terraced housing in the city" (4). To strategize a local energy transition in the villages, respondent 4 and 6 suggest energy cooperatives to act "as a kind of intermediary between governments and villagers to see what is going on over there" (4). Energy

cooperatives "are able to come behind the front door" (6) whereas "the municipality has a hard time doing so" (6). This is the case, because "villagers distrust the big city, and Leeuwarden is also a big city to them" (4). But, energy cooperatives "can just contact the villagers in person or by telephone" (4). According to respondent 6, "that approach works best".

Yet, respondent 1 and 7 explained that in the city there is also a big distrust towards the Government, because "many citizens no longer feel represented by the government and their smaller administrative bodies" (1) and also because "there is a tendency among citizens to not trust anything the Municipality claims" (7). There is a "big discrepancy between the government and the citizens" (8). Therefore, "it is necessary to take the time to build this trust" (1). This is confirmed by respondent 3, 4 and 7.

5.4 Representation

Another important factor in the energy transition, "is the danger of a participation elite" (1) which often consists of "the typical old white wealthy man" (4). "As they have gained knowledge through experience, this group might seem as an efficient partner" (1), but they "do not do justice at all to what is really needed, and that is co-ownership for all" (1). "This is not representative" (7). However, respondent 1 argues that they "know their neighbour and can ask them to join". "They are the group that can start to create a representative group for a genuine participatory process" (1).

Also, respondent 2 explains that "the higher you work on the participation ladder, the less important representation is, because everyone is included". "But, lower on the ladder, the more

important representation is" (2). This is also highlighted by respondent 3, who argues that "the trade-off between participation and representation should be good".

6. Discussion

6.1 Limitations and implications

Before discussing the findings of this study, certain limitations should be addressed. Firstly, due to the abundance of literature on citizen participation, some insights might have been missed in the literature review. This might have led to an incomprehensive overview of the current findings. Then, in the data collection process, only eight interviews were conducted, of which most were men. This might have provided an inaccurate depiction of the expertise in the field of citizen participation in the local energy transition. Additionally, the data collection lacked interviews with citizens of Leeuwarden, which might have provided a more comprehensive overview of the citizen perspective in this study. Still, with the goal to provide an accurate overview of citizen perceptions, this study includes quantitative data from citizen panels as well as interviews with representatives of energy cooperatives.

Also, because the result analysis was carried out by a single researcher, her subjective interpretations may have been incorporated. However, in order to avoid subjective outcomes, the researcher attempted to be as objective as possible throughout the procedure. Nonetheless, the discussion is based on expertise and peer-reviewed literature, and the following conclusions may still be relevant to the Municipality of Leeuwarden.

6.2 Preparation and problem definition

The results of this study show that the preparation of the participation process should consume a considerable amount of time. By doing so, the Municipality will be able to plan a suitable participation process that will be relatively quick and trouble-free to implement. First and foremost, there should firstly be an internal focus, where the Municipality develops a genuine desire to incorporate citizens in decision-making. As stated in the background, Municipalities aim to integrate citizen engagement as a tool for decision-making for various reasons. It might be of interest to the Municipality of Leeuwarden to familiarise themselves with these motives and understand where their desire to include citizens comes from. Thereafter, the results explain that there should be a focus on building trust between the citizens and the Municipality. As previously explained, Leeuwarden's inhabitants have a low level of trust in the Municipality, which is a vital component for a successful participation process. The results reiterate this, but they also imply that trust levels could be raised by having genuine conversations with citizens and taking the time to build trust. Also, it was emphasised that both parties should rediscover humanity in each other again. This should be done before implementing any form of citizen participation in local energy transition decision-making.

Furthermore, the results suggest that the Municipality should take the time to define the problem. Here, there should be a focus on understanding the nature of the problem and how the Municipality wants to approach it. This is consistent with the literature on citizen participation, which proposes utilising Hoppe's (2011) quadrant to determine the nature of a problem. Based on this problem definition, the Municipality can then select what level of participation is suitable for their process. The results highlight, however, that there is no one-size-fits-all approach,

especially when looking at the city and the villages in Leeuwarden. Therefore, this preparation should be done at the beginning of every process.

6.3 Design and conditions

According to the results and literature, all levels of participation can be utilised for decision-making on local energy transitions under the condition that the process is well designed. To do so, the results show that it is important to match the level of participation to the governance style. For this, Pröpper's (2009) ladder can be deployed.

Still, it is highlighted in the results that for a local energy transition, higher levels of participation are most appropriate, as the transition will take a lot of responsibility and involvement of citizens. Here, the results and literature on energy democracy highlight the importance of creating (co-)ownership of the decision-making process. By fully, and equivalently, including them in the decision-making processes, there will be less resistance, which in turn helps speed up the energy transition. Therefore, the decision-making process might be more successful when implementing levels higher up the ladder, in the so-called 'degrees of citizen power' category of Arnstein's (1969) ladder. The literature review also explains that these are considered to be genuine levels of participation, where citizens can really influence and shape the decision-making outcomes. Accordingly, the Municipality of Leeuwarden should take on a more facilitating role to match these types of citizen participation. By clearly indicating this in the design, all parties understand their roles and responsibilities in the participation process. The results show that clear expectation management is key to a successful participation process.

In line with that, the results highlight that the Municipality of Leeuwarden can indicate a variety of conditions in which the participation process takes place. It is just necessary to clearly explain them to the citizens as well as their reasoning. However, it is then still important to arrange and create an open process with as many customisation possibilities within these conditions. By doing so, the Municipality established the boundaries in which citizens can freely shape the decision-making process and outcomes.

6.4 Participation process

After the participation process is designed according to the problem definition and established conditions, the implementation phase starts. When the Municipality opts for higher participation levels, such as (co-)ownership, for decision-making on the local energy transition, they will have a facilitative role in this phase. According to the results, this will include sharing their knowledge and bringing in experts, such as energy companies with knowledge on technology and infrastructures or mediators who have the knowledge and capabilities to lead the participation process. In line with the literature on community empowerment, the Municipality could provide their resources by expanding their current energy counter. This helps the citizens to fully understand the range of possibilities within their local energy transition process, and make appropriate decisions or consultations. Additionally, the results emphasised the utility of using examples or visualisations in this process. This is in line with the literature on community empowerment, which argues that municipalities should bring in all the needed resources for the local community to take up ownership in the energy transition process. Lastly, the results highlight the importance of approaching the participation process with positivity, really empowering the community to participate themselves.

The results explain, however, that there is not enough capacity at the Municipality of Leeuwarden to sustain this. Therefore, it might be of interest to the Municipality to expand the energy transition team, hire outside experts or engage employees from other departments in the energy transition process as well. In particular, the communication department could be involved, as the results explain, the importance of communication between the Municipality and the citizens. According to the results, citizens might still show support towards projects they do not have ownership of when communication is done right and consistently during the process.

6.5 Learning by doing

According to the results, implementing higher levels of participation in decision-making on local energy transitions will require a lot of learning. It is indicated that there is not a lot of experience with this, thus processes will need to learn by doing. The literature on social learning shows that there are three types of learning, of which triple-loop learning is most appropriate when implementing higher levels of participation. Thus, the Municipality should use this type of learning in the process. Additionally, the results highlight that continuous evaluation and adaptation are necessary. For this, the energy democracy indicators by Szulecki (2017) might be utilised to understand how the participation process evolves, in particular when the Municipality wants to create ownership.

6.6 Participation-elite and representation

As mentioned in the results, representation should be considered in all aforementioned processes. Both the literature and the results explain how there is a participation elite that consists of the

older white man that has required energy knowledge over the years. According to the results, this might seem effective, but is not representative for the entire local community. The literature on representation shows that by including a broader group of citizens, focusing on social-economic status, the participation process will become more representative. The results show that the participation-elite could still play a part in this, as they have the knowledge and skills to reach the local community and invite them to participate. This could be in the form of energy cooperatives. Also, based on the concept of energy citizenship, it was found that by actively engaging citizens in energy problems it helps them to grow energy awareness and literacy. Therefore, participation processes might become more efficient in the long-term, while simultaneously becoming more representative.

7. Conclusion

7.1 Answering the research question

To achieve climate neutrality by 2050, the Municipality of Leeuwarden has been actively engaging in their local energy transition. However, the use of renewable energy resources remains relatively low. It was found that most of the transition will have to take place in the residential areas, meaning that the living environment of Leeuwarden's citizens will be altered. Based on this, the Municipality recognised the importance of including citizens in the decision-making process for a successful energy transition. However, the organisation remained unsure about how to appropriately strategise citizen participation for their local energy transition. Therefore, the aim of this study was to give substance to the research question: *How can the Municipality of Leeuwarden appropriately strategise citizen participation for their local energy transition?* Building upon the background analysis, literature review, in-depth interviews and

discussion, this study formulates the following answer to the research question: *there are multiple levels on which the Municipality of Leeuwarden could strategise citizen participation for their local energy transition, depending on their problem definition and goals. However, it is highlighted that higher levels of participation, such as (co)-ownership, will be most appropriate for the energy transition.*

7.2 Recommendations

To operationalise this, the following recommendations could be considered by the Municipality of Leeuwarden:

1. *Take more time at the beginning.* When the Municipality of Leeuwarden wants to appropriately strategise citizen participation for their local energy transition, the focus should be on the preparation phase. Here, it is important to first grow awareness of the need for citizen participation within the organisation. Thereafter, time must be spent to build trust between the citizens and the Municipality. Additionally, it is essential that a considerable amount of time is spent on defining the problem, as well as the conditions in which the participation process will take place.

2. *Dare to learn and to let go.* Implementing higher levels of participation in decision-making for the local energy transition is still a niche. Therefore, the Municipality of Leeuwarden will have to learn what strategies fit their region and goals best. Here, constant evaluation and adaptation is necessary. Also, the Municipality will have to learn to let go of their complete decision-making power when they want to implement higher levels of citizen participation.

3. *Prioritise consistent and clear communication.* Regardless of which level of participation is decided on, there should be clear and consistent communication between the Municipality and Leeuwarden's citizens. By doing so, citizens may feel they are being taken more seriously. Also, they will fully understand what is happening in their neighbourhood and be able to anticipate the process. Lastly, it should be clearly indicated what will happen with the citizen input, so that the expectation management of the participation is clear among all parties.

4. *Create capacity.* The proper implementation of citizen participation in Leeuwarden will take a lot of effort. Therefore, the Municipality might want to create more capacity within their organisation. By doing so, the organisation may be able to obtain enough manpower to put the aforementioned recommendations into practice.

7.3 Future research

For future research, this study suggests exploring the utility and outcomes of above-mentioned recommendations. This could be done by (1) conducting similar interviews with a broader group of people, including Leeuwarden's citizens (e.g. through group discussions or surveys) and more females, and (2) implementing and evaluating these recommendations. The evaluation process could be done according to the indicators by Szulecki (2017). Additionally, when the recommendations are evaluated positively in Leeuwarden, a comparative analysis could be conducted to understand their utility in other cities in the Netherlands.

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Appendices

Appendix A: Interview guides

Interview Guide I

Introductie

Dit onderzoek wordt gedaan om een beter inzicht te krijgen in de rol van gemeenten in het faciliteren van burgerparticipatie in de beleidsvorming over de lokale energietransitie. Ik ben een student van de Universiteit van Groningen, Campus Fryslân en doe dit onderzoek in samenwerking met Gemeente Leeuwarden. Ik zou u graag wat vragen willen stellen over uw ervaringen op het gebied van burgerparticipatie voor beleidsvorming in de energietransitie, en dan met name hoe gemeenten hier een rol in kunnen spelen.

Alles wat u mij vertelt zal alleen voor dit onderzoek worden gebruikt en zal niet gedeeld worden met iemand buiten het onderzoek. Uw naam zal ook niet aan uw antwoorden gelinkt worden om te verzekeren dat u anoniem blijft. Als u toch graag uw naam genoemd zou willen hebben in het eindverslag, kan dat altijd. In de door u getekende toestemmingsverklaring heeft u al gelezen dat u op ieder moment kunt stoppen met het interview. Heeft u nog vragen voordat we beginnen?

Openingsvraag
- Op welke manier heeft u te maken (gehad) met burgerparticipatie binnen de energietransitie?

Hoofdvragen
- In uw ideale burgerparticipatie proces voor beleidsvorming voor lokale energietransities…
  - Wat zou, in een á twee zinnen, de de rol van de burger hierin zijn?
  - Wat zou, in een á twee zinnen, de de rol van de gemeente hierin zijn?
  - Wat zou, in een á twee zinnen, de de rol van de energieleveranciers hierin zijn?
- Hoe kan een gemeente deze verandering in rollen faciliteren?
  - Wat voor een bestuursstijl is hiervoor nodig?
- Wanneer moeten burgers betrokken worden in beleidsvorming over de energietransitie?
  - Moeten ze door het hele process heen betrokken blijven?
    - Zo ja: Verschilt de soort participatie per stap in het beleidsvormingsproces?
      - Zo ja: Hoe dan?
      - Zo nee: Waarom is dit het geval?
    - Zo nee: Waarom niet?
      - Hoe kan de gemeente dit duidelijk houden voor de burger?
- Wat zijn de drie belangrijkste kwaliteitseisen voor een lokale energietransitie waar burgerparticipatie een grote rol speelt?

Afsluitende vraag
- Wat is uw belangrijkste les geweest tijdens uw werkzaamheden binnen de energietransitie?

Interview Guide II

Introductie

Dit onderzoek wordt gedaan om een beter inzicht te krijgen in de rol van gemeenten in het faciliteren van burgerparticipatie in de beleidsvorming over de lokale energietransitie. Ik ben een student van de Universiteit van Groningen, Campus Fryslân en doe dit onderzoek in samenwerking met Gemeente Leeuwarden. Ik zou u graag wat vragen willen stellen over uw perceptie van de voorgestelde maatregelen voor hoe burgerparticipatie voor beleidsvorming in Leeuwardens energietransitie benaderd, en dan met name hoe de Gemeente Leeuwarden hier vorm aan zou kunnen geven of bereid is te geven.

Alles wat u mij vertelt zal alleen voor dit onderzoek worden gebruikt en zal niet gedeeld worden met iemand buiten het onderzoek. Uw naam zal ook niet aan uw antwoorden gelinkt worden om te verzekeren dat u anoniem blijft. Als u toch graag uw naam genoemd zou willen hebben in het eindverslag, kan dat altijd. In de door u getekende toestemmingsverklaring heeft u al gelezen dat u op ieder moment kunt stoppen met het interview. Heeft u nog vragen voordat we beginnen?

Openingsvraag
- Op welke manier heeft u, als ambtenaar, te maken (gehad) met burgerparticipatie binnen de energietransitie?

Hoofdvragen
- In uw ideale burgerparticipatie proces voor beleidsvorming voor lokale energietransities…
    - Wat zou, in een á twee zinnen, de de rol van de burger hierin zijn?
    - Wat zou, in een á twee zinnen, de de rol van de gemeente hierin zijn?
    - Wat zou, in een á twee zinnen, de de rol van de energieleveranciers hierin zijn?
- Onderzoek toont aan dat de Gemeente echter een veel meer faciliterende rol moet gaan spelen in de besluitvorming over de energietransitie. Hoe kijkt u daar tegenaan?
- Wat is er nodig om deze procedure te gaan implementeren in de Gemeente?
- Wie zijn ervoor nodig?

Afsluitende vraag
- Wat is uw belangrijkste les geweest tijdens uw werkzaamheden binnen de energietransitie?

Appendix B: Informed consent form

GEÏNFORMEERDE TOESTEMMINGSVERKLARING

BACHELORSCRIPTIE: "WHEN THE WINDMILLS TURN, THEY TURN FOR US – THE OPPORTUNITIES FOR A PARTICIPATORY ENERGY TRANSITION IN LEEUWARDEN"

Auteur: Amber Beernink

Overzicht

Deze toestemmingsverklaring informeert u over de bachelorscriptie: "*When The Windmills Turn, They Turn For Us – The Opportunities For A Participatory Energy Transition in Leeuwarde*n", uitgevoerd door een student van de BSc Global Responsibility and Leadership, University College Fryslân (RUG). U kunt kiezen of u meedoet aan het interview. Dit proces heet 'geïnformeerde toestemming'. Lees alstublieft elk onderdeel hieronder aandachtig. Vraag het gerust als iets onduidelijk is. Maak daarna de beslissing of u mee wilt doen. U mag deze beslissing bespreken met uw familie, vrienden of iemand anders die met u woont. Mocht u mee willen doen, dan wordt u gevraagd om dit formulier te ondertekenen en op te sturen naar de onderzoekers voordat u meedoet in onderzoeksactiviteiten.

Doel van het onderzoek

Dit onderzoek wordt gedaan om een beter inzicht te krijgen in de rol van gemeenten in het faciliteren van burgerparticipatie in de beleidsvorming voor de lokale energietransitie. Ik ben een student van de Universiteit van Groningen, Campus Fryslân en doe dit onderzoek in samenwerking met Gemeente Leeuwarden. Ik zou u graag wat vragen willen stellen over uw ervaringen op het gebied van burgerparticipatie in de beleidsvorming voor lokale energietransities, en dan met name hoe gemeenten hier een rol in kunnen spelen.

Privacy en uw Data

Voor een correcte analyse van het interview zal het interview worden opgenomen, tijdens het interview mag de camera uitstaan indien gewenst. Alle originele data zal behouden worden voor de duur van het project, met de mogelijkheid van verlenging van dit project. Hierna zal alle originele data (de audio van het interview) worden verwijderd van alle apparaten en zal er alleen gewerkt worden met de transcripties.

Uw data zal volledig anoniem blijven. Geen naam, geslacht, fysieke eigenschappen of etnische/culturele achtergrond zal worden geregistreerd of behouden. Dit onderzoeksproject volg alle nieuwe eisen voorgeschreven door de "General Data Protection Regulation" van de Europese Unie.

De onderzoeker zal een eindrapport opstellen met behulp van de informatie verkregen in het interview. Met het tekenen van dit formulier gaat u hiermee akkoord.

Vrijwillige participatie en risico's

Deelname in dit interview is volledig vrijwillig. Er zijn geen risico's verbonden aan dit interview. Als u tijdens het interview ongemak of stress ervaart kunt u het op elk moment verlaten of ervoor kiezen om een vraag niet te beantwoorden. Er zijn geen kosten verbonden aan dit interview. De onderzoekers zullen geen foto's nemen tijdens het interview.

Voordelen

Er zijn geen directe voordelen, maar alle deelnemers kunnen informatie verstrekken die gebruikt kan worden voor het verbeteren van burgerparticipatie in beleidsvorming voor de energietransitie binnen de gemeente Leeuwarden.

Contact

Heeft u vragen, zorgen of klachten? Of denkt u schade te hebben opgelopen als gevolg van dit onderzoek? U kunt direct communiceren met a.beernink@student.rug.nl (Amber Beernink, Bachelor student, University College Fryslân, Rijksuniversiteit Groningen).

Toestemmingsverklaring

- Ik heb de informatie in dit formulier aandachtig gelezen en ga er mee akkoord.
- Al mijn vragen over dit onderzoek en interview zijn voldoende beantwoord.
- Ik begrijp dat mijn deelname in dit interview volledig vrijwillig is.
- Ik begrijp dat ik mij op elk moment terug kan trekken uit dit interview zonder enige negatieve gevolgen.

Ik stem toe mee te doen aan dit interview. De handtekening hieronder dient als bewijs voor deze toestemming.

Handtekening

_____

Naam van deelnemer

_____   _____

Handtekening van deelnemer   Datum

_____   _____

Handtekening   verantwoordelijke   Datum
onderzoeker