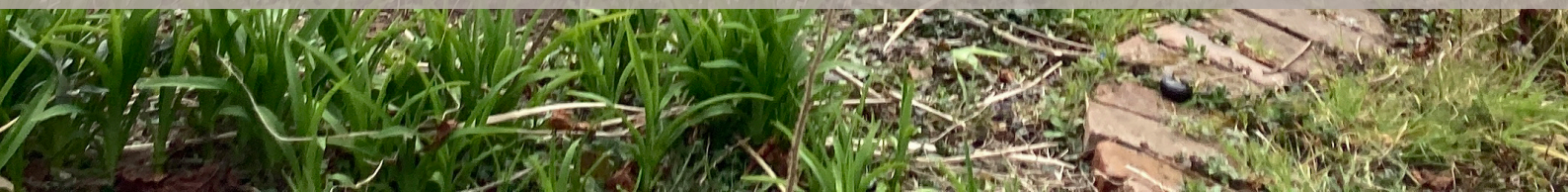




*Exploring the challenges to citizen
participation in renewable energy projects*

In the context of LIFE project, Amsterdam ZuidOost

Diede van Malssen - Master thesis - February 2023



Exploring the challenges to citizen participation in renewable energy projects
In the context of LIFE project, Amsterdam ZuidOost
February 2023

Author

Diede van Malssen
4365542

Master thesis

Msc. Design for Interaction
Industrial Design Engineering
Delft University of Technology

Graduation committee

Chair	Prof. Dr. Bregje van Eekelen
Mentor	Dr. Abhigyan Singh
Company mentor	Dr. Hans Roeland Poolman

In collaboration with

AMS Institute, City of Amsterdam, LIFE project

All drawings by Diede van Malssen



“I have not failed. I’ve just found ten thousand ways that won’t work.”

– Thomas Edison

Preface

Dear reader,

It has been a long and challenging journey towards this moment and I am beyond happy that I can now present you my graduation thesis.

I started the journey over a year ago, driven by the interest in social design, which tackles complex societal issues, such as the energy transition. For my graduation project, I wanted to do a graduation internship. The LIFE project provided me the opportunity to combine both.

Because of the hurdles along the way, I have grown in my role as a researcher and designer, but more importantly, I have grown as a person.

A special thank you to Bregje and Abhigyan for truly understanding me as a person, for being patient and giving me the guidance and support I needed along the way.

Thank you, Hans Roeland, for your guidance through the LIFE project and your great interest in my research and your enthusiasm about my project.

Thank you to Luan, Mum, Dad, friends and family for supporting me throughout the past year, being my sparring partner, study buddy and having to deal with my stress (it will be better from now on, I promise).

Thank you to the beautiful and kind people in Venserpolder, who have welcomed me in their neighbourhood and in their community centres. You have taught me more than what I was looking for.

Thank you to the colleagues at LIFE project for welcoming me in the project and giving me an insight in the life of the working people.

And a last thank you to my fellow students working on the LIFE project for the support, sparring moments and inspiring field trips.

Please enjoy your read,

Diede

Executive Summary

This thesis explores the challenges of citizen participation in renewable energy projects in the context of the LIFE project and neighbourhood Venserpolder. The research is composed of a literature review on participation and an ethnographic study in Venserpolder and in LIFE project between February and July 2022.

The research resulted in the identification of nine main challenges, with several nuanced sub-challenges. These were divided into four challenge spaces describing the context in which these challenges arise. The most important challenge was to “Find the touchpoints between residents’ lives and LIFE project”. Finding those touchpoints will raise appreciation of participation in LIFE project and improve the quality of the participation.

The ethnographic research in the community centres of Venserpolder and one community centre in Holendrecht, provided knowledge about how residents currently participate in their community, which is something LIFE project can learn from.

This knowledge has been transferred to the members of the LIFE project team through a specially designed workshop in which the participants explored the challenges and reflected on how these challenges are relevant to their project. The workshop concluded with clear future steps the project can take. This workshop can be used further to continuously improve awareness around participation challenges in LIFE project, but also in other, similar projects.

It is recommended to explore how residents experience energy in their daily lives and how you can talk about energy, without talking about energy.

Table of contents

1 Introduction	10	5 Design and Evaluation	56
Problem and opportunity	11	Design brief	57
Project assignment	12	Design process	58
Used methods	13	Workshop design	58
		Evaluation	74
2 Participation Literature	18		
Definition of participation	19	6 Concluding the Project	86
Arnstein's ladder of participation	22	Discussion	87
Citizens perspective on participation	24	Conclusion	88
Problems of participation	26	Research and design recommendations	89
Good participation design	27	Personal reflection	90
3 Setting the Scene	28	7 References	92
LIFE Project	29	Literature references	92
Energy transition	31	Fieldwork references	97
Energy poverty	31		
Venserpolder	33		
		8 Appendix	98
4 Results & Discussion	34		
Challenges to participation in Venserpolder	35		
Challenges to participation in design process of LIFE project	44		
Learnings from Venserpolder about (long term) participation	48		
Concluding the results	53		

Terms and Abbreviations

AMS Institute: Amsterdam Institute for Advanced Metropolitan Solutions is a research institution which works on and is part of the LIFE project.

Bloei&Groei: A community and healing garden in Venserpolder, where women (only!) from the neighbourhood have a small garden patch where they can grow their own food and herbs.

Buurtmama's: Women from the Venserpolder who act as key-figures. They often have a large social network, which they use to improve their neighbourhood for example by organizing activities.

Buurtsalon 't Spinnewiel: A community centre in the East of Venserpolder which focuses on fighting loneliness amongst the residents.

Buurtwerkkamer Multibron: A community centre in Venserpolder, where people can get guidance with for example their financial problems and where they can enjoy social activities.

Community centres: A place in a neighbourhood where residents can meet. They often provide the space for various activities, sometime organised by residents themselves. The community centres in Venserpolder also function as a place to both seek help and develop ones talents.

Design process: The process of designing a product consists of multiple phases: In the research phase a problem is identified; Next the problem is explored and solutions are found; After which these are tested and brought together in one product.

EMP: LIFE project is developing an energy management platform to manage the electricity flows between renewable energy assets, households and companies.

Energy poverty: People who spend more than 10% of their income on energy bills, or who reduce their energy use to the bare minimum, live in energy poverty, resulting in an uncomfortable living situation, with all its consequences.

Energy transition: A transition from the use of one energy source to another energy source. At this point in time, we speak of the transition from the use of fossil fuels and nuclear energy to the use of renewable and sustainable energy sources.

Ethnography: A qualitative research method that studies the (social) behaviours of people from within the context, to gain a holistic understanding of the context and the perception and experience of the people in it (Reeves et al., 2008).

Field work: Visits to the context (Venserpolder) to do ethnographic research.

Groene Hub: A doing and learning community centre in Amsterdam Holendrecht which focuses on sustainability through a social lens.

IDE: The abbreviation for the faculty of Industrial Design Engineering, where I followed my bachelor and master programme.

Inclusion: Providing access to opportunities for all who are included. In LIFE project this means, providing access to the EMP and access for residents to participate in the project.

LIFE project: The acronym of Local Inclusive Future Energy, the name of the project that this thesis is part of. The project is a collaboration between different parties such as the municipality of Amsterdam, AMS Institute, CoForce, Stichting WOON!, Johan Cruijff ArenA, Spectral, Delft University of Technology and Liander.

Living lab: An environment in which a project can experiment with solutions for e.g. an energy transition.

Participation: Active involvement of people in activities which are part of a larger process.

Social designer: A designer who addresses social issues through research and designing interventions to improve the situation.

Stichting South East Stars: A community centre in Venserpolder where almost daily, activities are organised to keep youngsters occupied after school. Examples are doing sports, providing homework support or creative activities. Besides, the centre organises a food bank twice a week.

Use cases: A description of the different objectives and values of the stakeholders in LIFE project.

Venserpolder: A neighbourhood in Amsterdam South East that falls within the scope of LIFE project. It is the home to approximately 8,500 people from many different cultures and backgrounds. A higher amount of people than average has a low income.

Ome

Introduction

This part introduces the problem and opportunity of this project fits and describes the methods that have been used to come to the results

Problem and opportunity

Problem

The climate is changing faster than you might think. Due to human activities, the world is now warming instead of nearing a cooling period (NASA, 2022). Since the industrial revolution, people have burned large amounts of coal and other fossil fuels meeting increasing energy demands, causing an enhanced greenhouse effect (NASA, 2022). If we want to maintain a liveable world for our future selves and (grand) children, behavioural change is of great importance.

One solution is the transition from fossil fuels towards renewable energy sources, such as solar and wind energy. Changing our energy systems is one of the most powerful levers we have to reduce the impacts of greenhouse gasses. Unfortunately the Dutch government does not take enough of a leading role in this, leaving municipalities and citizens with the responsibility (Timmermans, 2022). Some have the resources to make their bought house more sustainable. Others live in badly maintained rental properties, they can do nothing about, with sky rocketing energy costs. To maintain themselves, their only option might be to use as less energy as possible: wear three jumpers on top of each other, skip cooked meals and sit in the dark. These people live in energy poverty.

(Local) governments do provide subsidies and a price cap for energy prices, though this is not enough for people with a small budget. As long as governments are not aware of what is going on in the communities, they cannot anticipate it.

That is why citizen participation in projects regarding the energy transition is crucial. Participation ensures that project leaders know what is going on and what wishes and needs they have to take into account.

Participation enhances citizens' acceptance of changes too, because they have been part of the decision-making process. Finally, participation fosters sustainable solutions, that continue to work in communities even after a project has ended.

Environmental changes and the energy transition tend to increase the inequalities in society (Marijnissen, 2018; Livecast Pakhuis de Zwijger, 2021). The energy prices have risen sharply, due to the increased global demand for oil and gas as a result of the economic recovery after the COVID-pandemic, the earthquakes in Groningen as a result of drilling for gas and the war Russia started in Ukraine (de Grip, 2022). This negatively affects those whose budget is insufficient to make their home more sustainable, most. They see their energy bill rising, whilst others with sustainable houses see their energy bill dropping. Especially for those with a low budget, it is important that they are included and become part of the energy transition. People who live in poorly insulated houses benefit greatly if their energy bills decrease and if they can live in a comfortable home too.

Participation is important in energy related projects, but is easier said than done. Although there is information on how to design participatory processes, many (local) governments, industry, scientists and engineers remain unaware of the challenges that need to be overcome before citizens' participation is effective. It happens too often that citizens have negative experiences with participation, though governments have no insight into what goes wrong and why.

Opportunity

The LIFE project in Amsterdam South East is a research project that looks into this problem: How can all residents get a chance to participate in the energy transition and experience its benefits? The LIFE project, which stands for Local Inclusive Future Energy, is a collaboration between AMS Institute, City of Amsterdam, Alliander, Spectral, Stichting WOON!, CoForce and others. They investigate the possibilities of building a local energy network with renewable energy sources in a multiple purpose district in Amsterdam South East through the LIFE project. The project is set up in Amsterdam South East with the idea to give this area, which is labelled as a so-called 'ontwikkelbuurt' (Gemeente Amsterdam,

2020) a boost. Besides the technical challenges of such an energy network, the social challenges form a large part of the project. The multi-cultural and multi-functional area is seen as a living lab, which offers many learning opportunities. LIFE would like to transfer these learnings to other communities in The Netherlands.

This thesis is part of the work package within LIFE project that works on the theme inclusion, which investigates how residents can participate in the energy transition and the shaping process of it. This graduation project identifies part of these challenges, seen from citizens' perspective and conveys these to the members of LIFE project, so they are aware of what needs to be done.

Project assignment

Main goal

The main goal of this thesis is to explore the challenges to participation of residents in a project related to the energy transition. This will be done by focussing on the neighbourhood of Venserpolder in the context of the LIFE project.

Main research questions

The main research questions of this graduation project therefore are:

A: What are the challenges to participation (in the energy transition) of people in Venserpolder?

Ai: What does the design process of LIFE look like regarding the participation of residents?

Aii: What can LIFE project learn from community centres in the Venserpolder about participation of residents in the community?

D(esign): How can members of the LIFE project team become more aware of the existing challenges of residents' participation in the LIFE project?

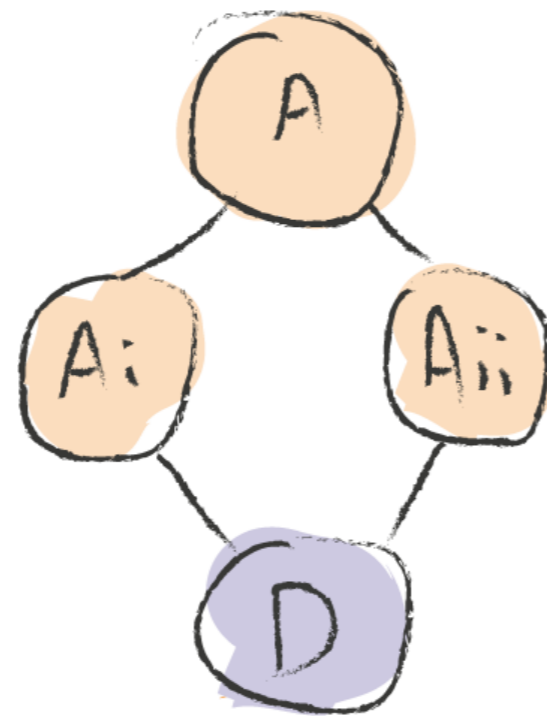


Figure 1: Research questions

Method

Double diamond process

The overall process of this graduation project can be roughly described by the double diamond method. This model, developed by the British Design Council in 2005 (Lipiec, 2022), consists of four phases:

- Research diamond
 - o Discover insight into the problem
 - o Define the area to focus upon
- Design diamond
 - o Develop potential solutions
 - o Deliver solutions that work

(The Double Diamond Model: What Is It and Should You Use It?, 2018)

This method starts with discovering and defining problems that are encountered in the context. Therefore, first divergent thinking is required to map out the context: think broadly, be openminded and consider everything as interesting (Heffernan, 2019). When enough data is collected, converging is required to focus on the key problems and the needs, in this case of the LIFE project.

In the second diamond the search for solutions starts. Divergent thinking helps to think of many ideas and solutions. These are further explored by testing, after which one final concept is delivered by converging.

Why

This double diamond method brings structure to the process and puts people first: it helps to understand the context and how people behave within that context. For this thesis it helps to identify and understand residents' perspectives on participation in energy projects. Next it enhances a shared understanding of the context and its issues by communicating visually and inclusively. For the LIFE project it is important that the consortium has a shared understanding of the problems there are regarding participation of residents in the project, to improve effectiveness through better participation (Framework for Innovation: Design Council's Evolved Double Diamond, 2022).

Reflection

My process has been fuzzy. Doing ethnographic research during the first diamond brought much confusion. It only became clear what I was exactly researching after collecting and analysing the data. Therefore, the start of the second and the ending of

Discover	Define	Develop	Deliver
Research, gathering data in the field and through literature	Identifying the challenges to participation that are found in the field, both in Venserpolder as in LIFE project	Explore ways to make LIFE project aware of the challenges + Explore ways to tackle one of the challenges	
Literature research	Ethnography writing	Brainstorming	Testing workshop
Ethnography	Reflection sessions	Visualisation of problems and insights	Iteration of workshop
Semi structured interviews	Formulating insights	Prototyping workshops	
	Clustering insights	Literature research	
	Literature research		
	Defining the challenges and opportunities		

Figure 2: Activities per phase of the double diamond

the first diamond have some overlap: The exact focus of the research was not clear yet, while I was already thinking about possible solutions. Taking a step back and reassessing my results from the first diamond was necessary to efficiently continue working in the second diamond.

How to make the energy transition social, can be considered as a wicked problem: a complex problem in which many factors are involved. Such problems are not completely clear after the research phase, but the research might continue during the second diamond, when you learn more about the problem and solutions that work (Lipiec, 2022).

Ethnography

Ethnography is a qualitative research method which describes social interactions, behaviours and perceptions of people (Reeves et al., 2008) in a certain context. It requires the researcher to be in the context over a longer period of time, in order to get to know the context from the inside out and understand the world through the eyes of the people in the context (Reeves et al., 2008).

Ethnography originates from the early 1900's when researchers were part of mainly non-Western societies for a long time to study other cultures (Reeves et al., 2008). Meanwhile, some new directions in ethnography have been developed.

- Auto-ethnography: Researcher study themselves, their own thoughts, experiences and behaviours (Denshire, 2014), making their own experiences as a researcher in the field part of the research and the results. As they often use themselves as a character in the stories, auto-ethnography is on the border between academic writing and auto-biography.
- Meta-ethnography: The analysis and synthesis of qualitative research texts to empirically gain new insights and knowledge (Reeves et al., 2008).

- Online/virtual ethnography: Researchers study the social interactions in online networks and communities instead of in the physical world (Fielding et al., 2016). As this direction develops, this research method no longer focuses solely on the virtual environment, but also investigates the relationship between the online and physical world (Fielding et al., 2016).

Besides the traditional ethnography, auto-ethnography is part of this thesis too : my experiences and the experiences of my fellow team members were taken into account while reflecting on the situations we encountered, instead of solely observing the environment and its people.

Ethnographic research can be executed in different ways (Khindri, 2022):

- Passive observation: Observing the subjects without interacting with them
- Contextual interviews: Observing the subjects while interacting with them
- Archival research: Researching existing documents and past research to understand

Both passive observation and contextual interviews are part of the research in this project.

Various ethnographic activities were done, both in Venserpolder as in LIFE project itself:

In Venserpolder:

- Semi-structured interviews with people both in Venserpolder as people who are involved in the neighbourhood
- Participating in local initiatives or community centres as a volunteer
- Observing what happens in the streets of Venserpolder whilst walking to the location

In LIFE:

- Observing during consortium meetings



- Participating in use case discussions
- Observing and/or participating in LIFE talks and other meetings

A complete overview of the activities can be found in appendix B2.

Why

Ethnography fits this research for several reasons. First of all, it is important to gain trust of residents before going deeper into the context. Otherwise residents might just say what they think you want to hear. Knowing one another, helps to open up and have an honest conversation. Next, residents of Venserpolder are generally very friendly and will kindly answer your questions, though as long as they do not know what they will get in return, they will probably not take extra time to help you. [SOURCE field visit 2 BuurtTeams]. Ethnography requires a researcher to stay in the environment for a longer period of time, making it possible to bond with residents. From the perspective of being a researcher, it is also beneficial to visit the neighbourhood regularly, to get to know the neighbourhood and its dynamics better. Last, this method is both interesting to research the context of Venserpolder, and to research the context of the LIFE

project. While working on the project, it is possible to observe what happens during meetings, how people speak of inclusion and about the project itself. This will help to understand the project and its own challenges.

Team ethnography

Within the LIFE project there are multiple students and PhD candidates working on the theme of inclusion. Together they formed an ethnography research team. They kept track of their research activities in a collaborative ethnography document. Within the team, field visits were discussed and evaluated, which often brought more insights and perspectives to the table. Therefore, doing collaborative research was very valuable. Researching a larger area such as Venserpolder, with many possibilities to connect to people and many different activities going on, is simply easier with more people in the field.

The team:

- Jinnan – IPD – master graduate student
- Gijs – PhD candidate – Anthropology and Design
- Alisa – MADE – master graduate student
- Diede – Dfl master graduate student

The process of ethnography

In figure 3 the overall process of ethnographic research is shown. Obviously the process has several feedback loops e.g. to plan next field trips.

Practicalities of doing this research

The research consists of a preparation, doing field work, writing and/or drawing about it and reflecting. Every research activity has the same structure, the execution and outcomes can strongly vary.

Each research activity starts with a considerate **preparation** to ensure a fruitful fieldtrip by setting a clear research question or goal. Without focus, the researcher risks to operate as a sponge absorbing every small detail and become overwhelmed by data.

Next the researcher goes into the context on their **fieldtrip**. It depends very much on the situation how the researcher should act, react and interact. Some situations ask for an active participation (actively joining the interactions), while in other situations a more passive approach is desirable (staying in the background, observing, possibly have some interactions).

During the field work, the researcher should observe their surroundings well with an open mind without judgement. They should not only look at what is happening around them, but also pay attention to what is happening inside them (part of auto-ethnography). Questions as 'What are thoughts or feelings that come up during the field work?' and 'How does the researcher fit into the context?' can be added to the question 'What is happening in the context?'

Carefully describing everything that happened in **field notes** is valuable and necessary to be able to analyse and reflect on it later. In some cases, where the researcher plays a more passive role, field notes can already be jotted down whilst being in the context.

Writing helps the researcher to reflect on their experience and see things from a different perspective. This helps to gain a deeper understanding of the context.

In appendix B5 is an example of personal field notes. For each research activity, the same questions were used to reflect on it.

Almost every field trip was followed by a **debriefing session** of approximately one hour with the ethnography team. The field trip was described and then discussed. Team members who were not present at the field work could look at the situation from a different perspective and ask questions to help the other team members reflect on their field work.

Part of these sessions were held in the online environment of Microsoft Teams, mostly due to COVID measures and team members working remotely. If possible, we met in real life at an office from the municipality of Amsterdam in South East. All sessions were recorded and automatically transcribed in Teams. The findings emerging from the debrief, were summarized in the collaborative ethnography document. Appendix B7 shows an example taken from the ethnography document.

Lastly, the field notes were **analysed**. In first instance, the sense and value of the field notes was not always clear. However, after doing more field visits, patterns and themes became clear. The debriefing sessions were a first start. To accelerate the process, interesting parts of the field notes or passages that sparked were highlighted. These were written down on post-it's on Miro, a digital whiteboard, where they could be clustered easily to find patterns and relations. This analysis method is also used in context mapping: describing the situations, writing down our interpretation of the situation/insights, moving the different insights around to find connections and clusters of insights that feed into the same idea. This results into a framework of insights.

Drawing in ethnography can help to understand situations or the dynamics of a neighbourhood. It forces you to look sharper at the scene, helping to discover things you otherwise might have overlooked.

Reflection

My research is based on my own interpretations of my own observations of the situation I was in. First, that seemed too subjective and a bit scary; it is very different from objective research methods. By doing this ethnographic research however, I have learnt to trust on my own senses and capability of understanding and analysing the things that happened.

There were times that the field trips brought up a lot of confusion. Although it left me puzzled, it was also useful, leading me to new insights or new directions for research.

Doing ethnography has taught me much about the way of approaching other people. These learnings are included in part 4: Results.

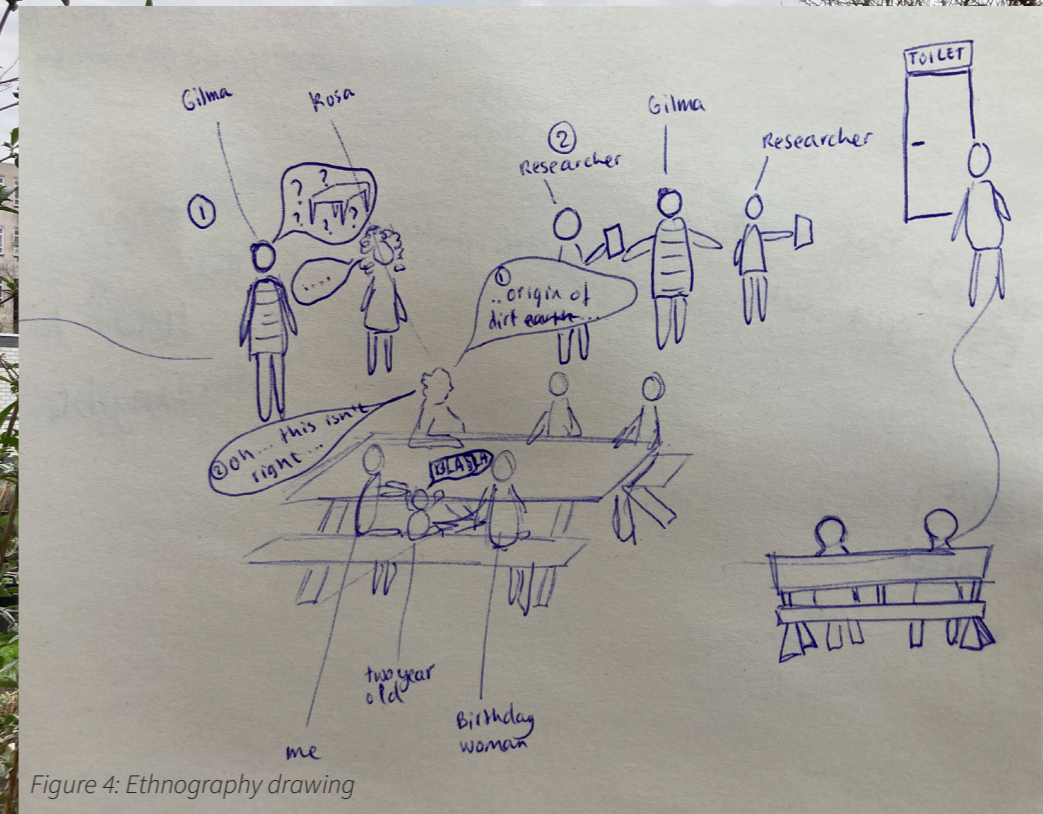


Figure 4: Ethnography drawing



Figure 5, 6: Bloei&Groei, Stichting SES

Two Literature Background

In this literature review, a general introduction to participation is given. A general definition, Arnsteins' famous ladder of participation, the motivations for citizens to (not) participate and some problems of participation are discussed.

Definition of participation

Participation is a very broad concept, taking different forms depending on context and goal of participation. Therefore, a strict definition is impossible, making some to describe it as a vague buzzword or a catch-all concept with unclear meanings (Morales-Guerrero & Karwat, 2020).

The generic definition is found in the dictionary: "the act of participating", to take part in something or have a share of something ("Participate", 2023).

Various authors use a narrower definition. It has been described as a collection of independent and intersecting activities and/or processes (Morales-Guerrero & Karwat, 2020; Eyssen et al., 2011) that together are part of a system (Chilvers et al., 2018). This enables citizens, organisations and other stakeholders to interact with one another, which can lead to the creation of new projects and change of wider systems (Morales-Guerrero & Karwat, 2020). These interactions between different groups of people also encourage people to critically reflect on what is happening and ask critical questions, sometimes resulting in transformational changes both in cognition and in practice (Ernst & Fuchs, 2022).

Despite the differences, there are some common features (Participation, 2019):

- Participation is always about action, whether it is something big and long lasting, or small and of short duration, it involves a degree of activity and effort (Carpini et al., 2004).
- Participation is always voluntary, people will always have the free choice to (not) get involved, without coercion.
- Participation is about being part of something, it is collective or connected to a greater whole. This means that every participant plays an active role
- Participation is purposeful. Each participatory act has a goal, whether it is only for the individual participant or it is to change the world around them.

Conditions of participation

Several conditions need to be met for citizens to participate. If one or more are missing, the chances for participation decrease and participation might even become impossible (Brodie et al., 2009). The conditions are:

- **Practical resources**
Citizens should be healthy enough to participate in activities. Besides, they should have enough time and money to be able to participate
- **Learnt resources**
Citizens need the right skills, knowledge and experience to participate
- **Felt resources**
Citizens should have confidence and a sense of efficacy

Difference with engagement and inclusion

The word participation is often used interchangeably with 'engagement' and 'inclusion'. Participation is active, while engagement can be passive (Carpini et al., 2004). Inclusion means access to either participation or engagement.

Types of participation

There are four general categories of participation described in literature:

1. Social participation

Citizens actively take part in community life (Participation, 2019). Also known as civil, horizontal or community participation (Brodie et al., 2009).

Examples: Volunteering in charity shops, associations or a community garden (Participation, 2019).

2. Public participation

Citizens take their responsibility as a citizen of a democracy (Participation, 2019). Public participation facilitates the involvement in the decision-making process of those who are potentially affected by or interested in a certain decision (Stadelmann-Steffen & Dermont, 2021). Participation of citizens in (energy) projects often falls under this category. Also known as political, civic or vertical participation (Brodie et al., 2009).

Examples: Voting, attending demonstrations or campaigning (Participation, 2019).

3. Individual participation

Behaviour of individuals that reflects their ideal society. Citizens are part of a bigger picture, but do not necessarily have interactions with others.

Examples: Buying fair trade products, recycling or separating the trash, because living in a sustainable way is important to them, or visiting an elderly neighbour, because caring for others is important to them (Participation, 2019).

4. Financial participation

It describes how citizens or a local municipality are economically involved in and affected by RET (Renewable Energy Technology) projects (Stadelmann-Steffen & Dermont, 2021). The amount of money they invest in projects, might influence the amount of power they have in a project (Schwarz, 2020). Also known as economic participation (Stadelmann-Steffen & Dermont, 2021).

Examples: Becoming part of an energy project by becoming owner of renewable energy source assets, or investing money in a sustainable housing project (Schwarz, 2020), (Mouter et al., 2021).

Public participation and financial participation are types of participation which are most common in renewable energy projects. The read literature mainly covered information on public participation.

How social participation can be part of renewable energy projects, remains unclear and should be further investigated.

Participation as a part of a culture

Participation says something about the way a society is built up. Depending on national cultures and contexts, a behaviour shift might be needed before citizens and (local) governments benefit from participation.

Switzerland is a great example of a participatory based culture. The country has a long history of public participation, due to the decentralised political structure. This leaves room for local governments and citizens to implement their own initiatives and participate in society. (Hielscher et al., 2021).

In Germany, the public participation culture originates in the opposition to (amongst others) nuclear energy (Hielscher et al., 2021). In both countries, Germany and Switzerland, the anti-nuclear movement has nurtured high public interest in energy issues and made participation in energy related projects common (Hielscher et al., 2021).

Regarding energy, the big energy producing companies made the decisions on the sources of energy for dependent consumers that had a passive role. To change this top-down culture to a participatory energy community, there needs to be a behavioural change first.

In many countries participation opportunities are seen as a means to enhance the acceptance of renewable energy projects (Walter, 2014).

Arnstein's ladder of participation

Sherry Arnstein published an article on participation in 1969, in which she presented the base on which many other scholars would build in the decades to come: the ladder of participation. It is a guide to arrange public participation and describes the degree of participation (Eberson, 2017) It identifies who has how much power when important decisions are made, ranging from full power of (local) governments or project leaders on the one side, to full power of citizens on the other side. It seems that this model is made with the idea that there is a (local) government or project leader who initiates participation.

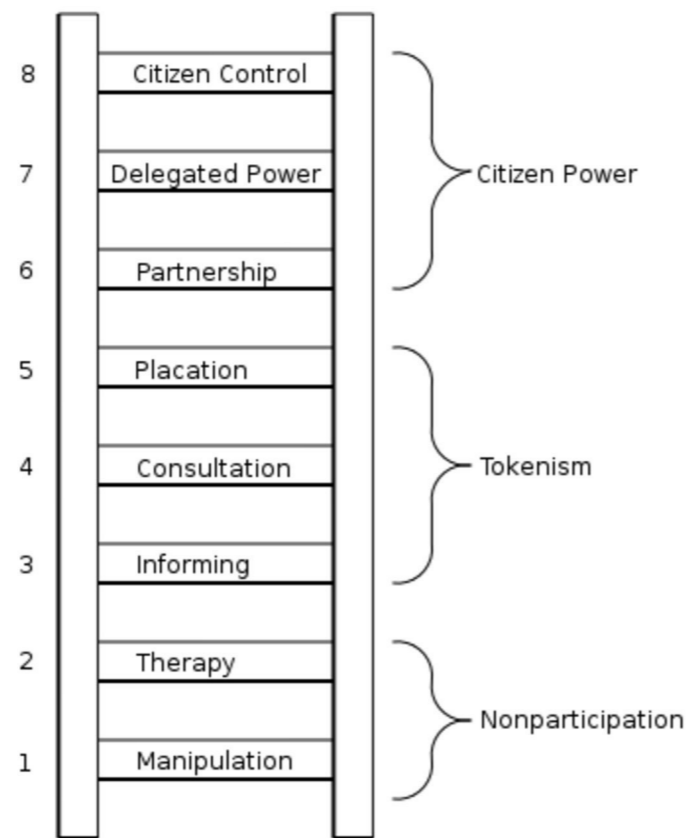


Figure 7: Ladder of participation by Arnstein

Inclusion linked to ladder of participation?

Stadelmann-Steffen and Dermont (2021) speaks of four levels of inclusiveness, derived from the ladder of participation: information, consultation, involvement (in the development or implementation process) and decision-making. However, nothing is said about who is informed/consulted/involved/making decisions, although 'who?' is an important question when inclusion is discussed. Whose opinion is taken into account? Whose experiences? Whose wishes?

Arnstein's ladder might help inclusivity; higher on the ladder means more power and better chances that their needs and wishes are taken into account. Unfortunately, the original ladder does not describe whose voice is heard or has power.

Inclusion depends on the representation of citizens and what is done with their input. If participants form a good representation of the people, citizens higher up the participation ladder improves the chances of an inclusive outcome.

For example, if only retirees have time to participate, young people might be underrepresented without an inclusive result. However, if participation is organised well, the chance for inclusion grows.

Moment of participation

The moment of participation is also not explicit in this model, but can be derived. The higher up the ladder, the earlier and longer citizens can participate in the process.

Choosing the right moment of participation in a project is crucial for it to be effective. To my knowledge, not much has been written yet about what the 'right moment' of participation is. From read literature, it can be concluded that the moment of participation depends on: the goal of participation and the degree of participation.

Also in design processes, people can participate in different stages. User research early in the process, to find out what the current problems are, during the design phase to co-create with the people who will be using the product or in the end of the design process to test concepts to find out which is the best fitting solution.

Revisions on Arnstein's ladder of participation

Arnstein's ladder has been used to explain participation for over 50 years. It has been the basis

Non participative	1	Manipulation	Power in hands of powerholders	Plans of power holders are presented to residents , regardless of citizens opinion. The (local) governments only look for public support.
	2	Education		
Degrees of Tokenism (It seems that citizens have something to say, however the power still lays in the hands of the parties that use participation in their top-down processes.	3	Informing		Informing is an important step towards participation. Participants should have some knowledge before giving input. Often this is a one way information stream from powerholders to citizens, without feedback
	4	Consultation		Consultation makes the information stream a two-way road, though the information exchange is often on a superficial level
	5	Placation		Some influence of hand-picked participants. The powerholders have the last say in decisions and decide who are the participants.
In between rung 5 and 6 the power switches from (local) governments to the citizens. Therefore rungs 6, 7 and 8 are degrees of citizen power				
Degrees of Citizen Power	6	Partnership	Shared power (power holders have the upper hand)	Redistributed power amongst participants and power holders through negotiations
	7	Delegated power	Shared power (citizens have the upper hand)	Active citizens have a large say in the decisions being made
	8	Citizen control	Power in hands of citizens	Full control and leadership by citizens

Figure 8: Explanation of ladder of participation

for other models to discuss participation. The models from Roger Hart, Sarah White and Robert Silverman focus on different aspects of participation. Hart's model focusses on the participation of a specific target group, namely children (R. A. Hart, 1992), Sarah Whites model is about for what participation can be used (Macbeth, n.d.) and Silverman's model focusses on who organises the participation (Silverman et al., 2011).

White distinguishes four types of participation (Macbeth, n.d.; Eberson, 2017; Tisdall, 2013): Silverman's model, the citizen participation continuum, is about who drives the participation (left side) and describes common forms of participation (right side). The continuum ranges between grassroots participation on the top and instrumental participation on the bottom (R. M. Silverman,

Nominal Participation	Instrumental Participation	Representative Participation	Transformative Participation
Display of plans and seeking support for these	Using citizens' skills and knowledge when implementing plans	Citizens have a voice in issues that affect them	Empowers participating citizens and transforms existing structures that initially enabled marginalisation and exclusion
Non-participation	Degrees of tokenism	Degrees of tokenism/citizen power	Citizen power

Figure 9: Four types of participation by White

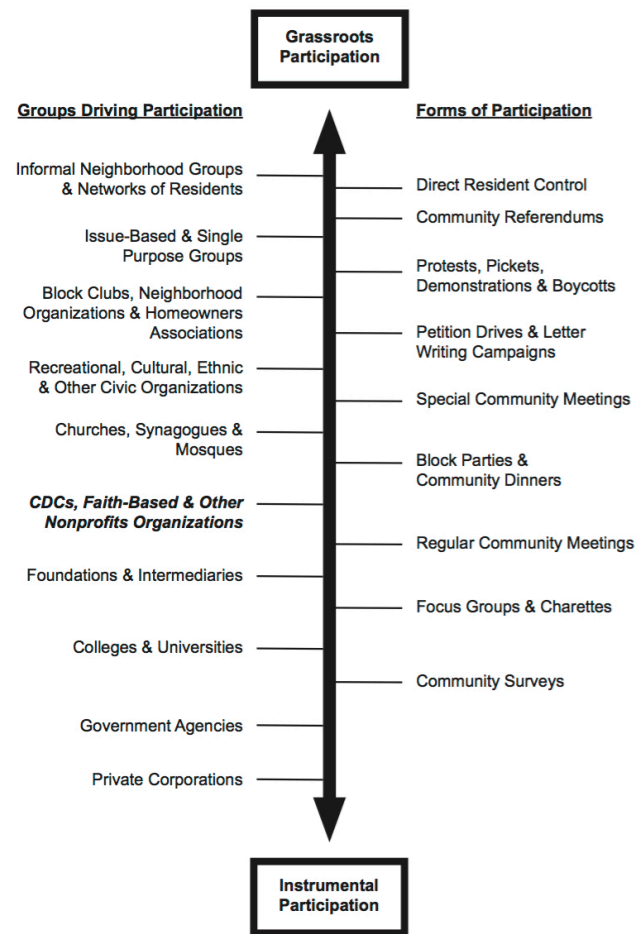


Figure 10: Silverman's model of participation

2005). Participation is seldomly completely at one side, but rather somewhere in the middle. As seen in Silverman's model, both residents and (local) governments can initiate the participation. Moreover, the motivations for residents to participate and self-organise participation can be found in the next section.

Silverman's model addresses an interesting question for participation, who drives the participation? Are they citizens? Are they public authorities and politicians? Or are they project developers (Ernst & Fuchs, 2022) Who has the power to make decisions about participation? Key actors have influence on the participatory processes through making decisions about who is invited, for example choose to "target environmentally conscious consumers rather than price conscious consumers in order to effectively promote participation" (Sloot et al., 2022), choose participation methods, choose which information the participants receive and how to foster trust building (Ernst & Fuchs, 2022). It becomes clear that participation is often viewed from the side of powerholders, what about the other perspective?

Citizens perspective on participation

Role in participation

Citizens can play various roles in participation. It depends on different factors what that role is.

Attitudes towards participation

The attitude one has towards participation, can lead to an active participation or more passive engagement or even to non-participation. In the table below, various attitudes (SparkNotes Editors, 2005a) can be found, along with the motivations citizens have to (not) participate.

Reasons for citizens to self-organise participation

Whereas participation is usually organised by (local) governments and project leaders, several factors cause citizens to initiate participation themselves: (Silverman et al., 2011) Discontent about the current situation or made plans, or the disregard of their needs by the (local) government can be expressed by protests or other ways of exerting power (Schwarz, 2020).

Mistrust can lead to either non-participation or higher levels of participation. An example from the UK shows citizens with low levels of trust towards the government and energy companies, whose participation in community energy initiatives has increased (Hielscher et al., 2021).

Non-participation due to lack of resources

Citizens can choose for non-participation, based on their attitude towards it, but external factors, such as the lack of one or more conditions for participation, leave citizens with no choice but to not participate (Brodie et al., 2009).

	Attitude towards participation	Reasons to (not) participate
Positive	Idealism	- Intrinsic moral concern, based on environmental self-identity and personal norm to participate (Sloot et al., 2022) - Democratic ideal that citizens should have a say in changes regarding their environment (Mouter et al., 2021).
Positive	Responsibility	- Belief that participation has environmental benefits (Sloot et al., 2022) - Citizens want change, but there is nothing done by (local) governments, so they take matters in their own hands. - Citizens feel the duty to act up to the responsibilities of democracy.
Positive	Self-interest	- Belief that participation has personal benefit and has low costs and risks (Sloot et al., 2022) - Financial aspect motivates citizens to participate in energy markets (Sloot et al., 2022) - Prizes and taking part in challenges (Morales-Guerrero & Karwat, 2020)
Positive	Enjoyment	- Participatory activities can be fun ways to socialise (SparkNotes Editors, 2005a)
Neutral	Contentment	- People are satisfied with the current situation and do not require change (Schwarz, 2020), (Stadelmann-Steffen & Dermont, 2021)
Neutral	Freedom	- In a democracy people are free to choose whether they participate or not (SparkNotes Editors, 2005a)
Negative	Apathy	- Costs too much effort - Lack of knowledge (SparkNotes Editors, 2005a)
Negative	Alienation	- Belief that nothing will be done with participation results - Mistrust in (local) governments - The paradox of participation: if everyone votes, one vote makes no difference, so why vote? (SparkNotes Editors, 2005b)
Negative	Discontent	- Citizens are unsatisfied with the current situation or against new plans: 'Not In My Backyard!'. Excluding citizens from the decision-making process, can lead to protests or other forms of self-organised participation (Stadelmann-Steffen & Dermont, 2021).

Figure 11: Attitudes towards participation

Citizens background

Secondly, a citizens role in participation depends on their social, academic and financial background. The higher educated, or the more they can invest, the larger their role in a project becomes (Schwarz, 2020).

Location

Thirdly, a citizens location influences their role in participation. Citizens (directly) affected by plans, will more likely participate and have more rights to do so. For example, they can file lawsuits (Schwarz, 2020).

Problems of participation

The reasons for citizens to (not) participate, reveal some problems around participation:

1. Participation fatigue

Both participants and organisers can become tired of participation processes, leading to early termination, non-participation of citizens and fewer participation opportunities granted in the future (Aanholt et al., 2021).

The first two reasons count for both sides:

A. Unclear goals of participation (Breed & Marle, 2022) lead to a fuzzy process and frustration.

B. Long, intense processes, lacking progress (Aanholt et al., 2021) demanding too much time, knowledge, capability and resources of citizens (Mouter et al., 2021). The benefits of participation do not outweigh the efforts.

Reasons for participation fatigue from citizens perspective:

C. Governments are unaware of how their believes of 'a good neighbourhood' differ from residents ideas (Breed & Marle, 2022). By regularly doing research in a so-called 'development neighbourhood', residents experience constant confirmation of their neighbourhood is not good enough, resulting in an aversion towards researchers and a negative self-image.

D. Citizens experience their input in participatory activities lacks influence (Mouter et al., 2021). Feeling unheard or not taken seriously by decision makers, can lead to non-participation in the future and enhances mistrust in these organisations. This causes point F.

Reasons for participation fatigue from organisations perspective:

E. Policies leave insufficient room to implement residents input. This is in itself is a cause for point D.

F. Who wants to participate, anyone...?

Not enough people willing to participate, can be found., making it hard to compile a representative group of participants (Mouter et al., 2021). Process design and effort done to find people can contribute to this problem. Missing resources (e.g. time) exclude people from participation, complicating good representation.

2. Non-representation and tokenism lead to resistance

Non-representation is a problem for both citizens and organisers of participation. Non-representation means the non-participation of some citizens. Non-participation or forms of tokenism, can lead to plans insufficiently meeting the citizens needs and desires, and an aversion against the plans (Ryghaug et al., 2018).

3. Participation, check!

"Core challenge of participatory governance processes: key actors lacked willingness to take participation and participants serious" (Ernst & Fuchs, 2022). Participation is used as a form of tokenism to let it seem like all sides have been considered. But in reality, only some sides get to benefit from a project (Arnstein, 2019) and participation was merely used to persuade citizens to accept a project (Ernst & Fuchs, 2022).

4. Conflict in time

The urgency of addressing climate change conflicts with the time and patience it takes to create and execute meaningful participatory processes in the energy transition (Morales-Guerrero & Karwat, 2020). Other time dependent projects face the same problem. Time is needed to build trust and to be able to really listen to citizens, but time is not always an available resource.

5. Badly Designed Participation

All previous problems are aspects of badly designed participation which can "harm those who were supposed to be empowered" (Morales-Guerrero & Karwat, 2020).

Good participation design

All these issues raise a question whether participation is necessary at all? Well-designed participation can have large positive impact. It is an important building stone for trust in decisionmakers (Kusi, 2022) which increases the quality and acceptability of new (energy) projects (Liu et al., 2019). Participation can enrich the lives of individuals and groups by providing activities and opportunities to improve skills and networks, grow confidence, self-worth and a sense of purpose (Participation, 2019). People can become involved and interested in plans regarding their neighbourhood (Kusi, 2022) which enhances the chance of long-term participation. Participation can evoke or stop change in the local environment (Participation, 2019) and give people a sense of ownership over the solution (Budiman, 2018) (Energie Participatie, 2022) and enhance the acceptance of projects.

Well executed participation will also improve the project itself, which is of benefit not only for the citizens, but also for the project-owner.

A well-designed participation process is crucial for it to be successful. Morales-Guerrero and Karwat (2020) presented a framework to evaluate participatory processes, which can also serve as a tool to organise good participation.

The framework consists of subjective dimensions and four tangible dimensions of participation: **object, breadth, depth, space and time**. These dimensions can visualised in a graph, creating a clear overview of who participated when in which activities. Visualising participation, can enhance trust between project leaders and a community (Morales-Guerrero & Karwat, 2020).

Subjective dimensions describe how participants experience participatory processes and its quality and what their opinions are about it. Positive experiences enhance the chance of future participation in similar projects.

Tangible dimensions:

- Object: "A group of objects of participation could be aligned to reach a specific object, like the reduction of carbon emissions in an energy system."
- Breadth: describes who participated. 'Wide' participation can be a large and diverse group of people, whereas 'narrow' participation involves only few people or an interest group.
- Depth: describes the level on which citizens or a community participate.
- Space and time: describes where and when the participation takes place. Space is about who and how the space of participation was created, (e.g. online or in a community centre). Time is about the stage of the process.

Morales-Guerrero and Karwat (2020) suggest that when these dimensions are all considered based on the context and possibilities of the community, as well as the goals of the project, it forms an effective participatory process (Morales-Guerrero & Karwat, 2020). More participation is not always better, however in some situations it might be true: "if we regard deeper participation as efforts that allow participants to have influence over major decisions in a given project, then participation might translate into higher project acceptability" (Morales-Guerrero & Karwat, 2020).

Furthermore, a couple of factors for good participation were found in the literature. It is a good collaboration between citizens and decision makers. The expectations of all those involved, are managed, it is clear what will be done with the input of the participants (Mouter et al., 2021). Using different forms of participation, enhances the chance of representation of a broader group of people (Stadelmann-Steffen & Dermont, 2021) (Mouter et al., 2021). Key actors and participants experiencing a feeling of mutual learning, benefits the perceived effectiveness and value of participatory processes (Ernst & Fuchs, 2022). To make informed decisions, citizens should have access to the information, processes and exercises that help them identify their own needs and weigh the different options (Upham et al., 2022).

Three

Setting the Scene

This part describes the context in which this graduation project is situated. The LIFE project, the neighbourhood of Venserpolder, the energy transition and energy poverty will all be discussed.

LIFE Project

In collaboration with the Municipality of Amsterdam, Spectral, Stichting WOON!, CoForce and Liander, AMS Institute has set up the LIFE project. This stands for Local Inclusive Future Energy. This consortium is working on a local energy system for a multifunctional area in Amsterdam SouthEast, the ArenApoort, Venserpolder and the entertainment district. The product they are aiming to develop is an energy management platform on which residents can for example trade or donate sustainable energy with or to their neighbours. This platform should be available for large companies, home owners (with solar panels) and all residents in Venserpolder. How users will interact with the platform and what the possibilities will be, are yet to be explored and designed.

The project is set up in Amsterdam South East with the idea to give this area a boost. It is seen as a living

lab. The project wants to research and experiment with various challenges and possible solutions that arise around an energy transition. They chose this area because Venserpolder is a 'ontwikkelbuurt' (Gemeente Amsterdam, 2020). Here big improvements can be made. It is also a multi-cultural area and multi-functional at the same time, therefore it is an interesting challenge to work on. LIFE would like to transfer the things that are learnt here to other communities in The Netherlands.

Within the project there are multiple themes that are worked on in different work packages. One of these themes is inclusion. The LIFE project searches for a way to include residents into the energy management platform and into the design process of the platform. This is where this graduation project fits in.

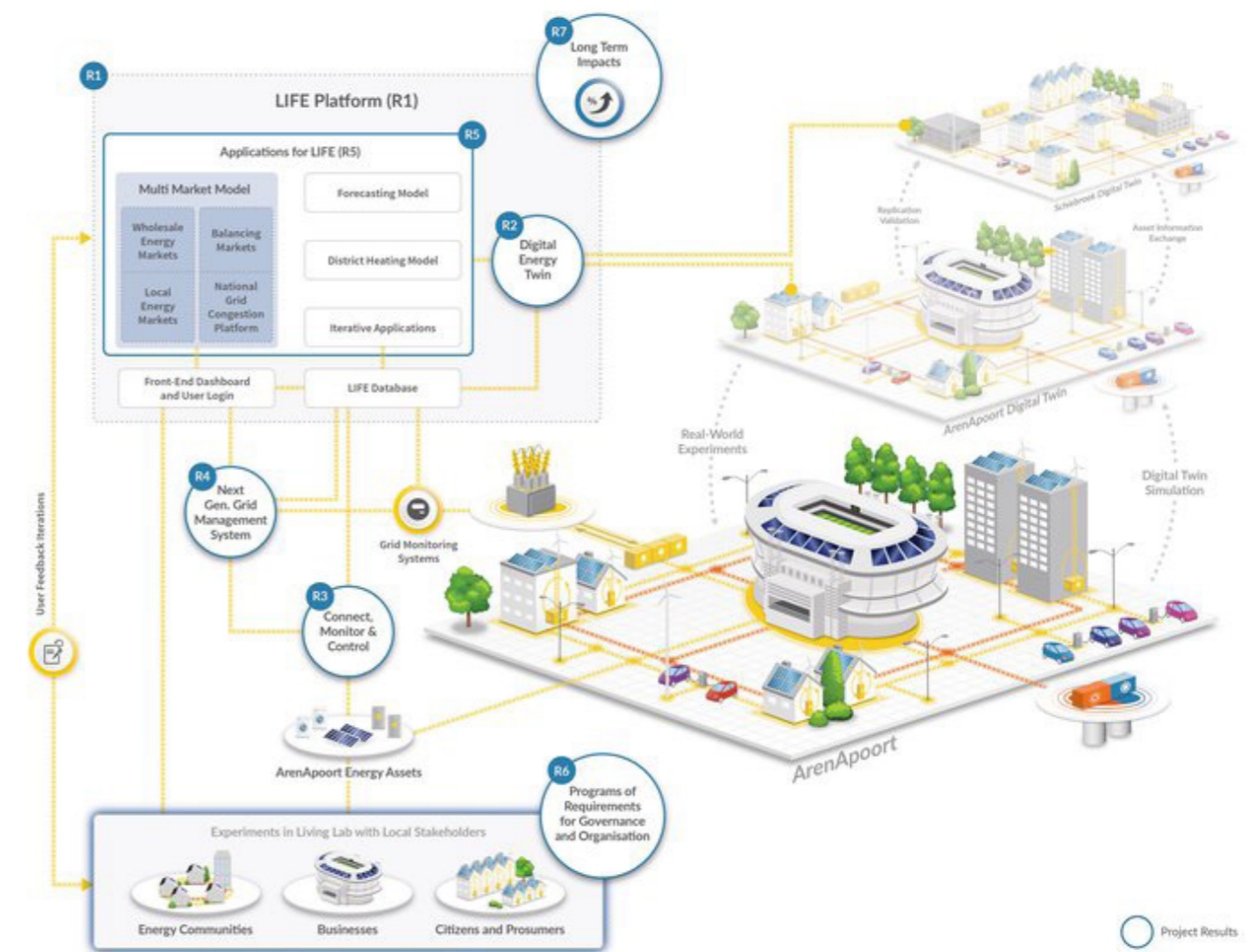


Figure 12: Visualisation of how the energy management platform might look like

At the same time, other work packages within the project are working on the development of the management platform, a digital twin to simulate how the platform will work and how people will act and go around this platform and the legal part of the project.

The project is a collective effort from different parties, as mentioned before. They all bring their own perspective into the project. Working together is challenging, but these different views can make it a holistic project.

The project started May 2021 and will continue for four years. The goal is to have researched how an energy management platform can be designed in a multifunctional area in an inclusive way.

The burden of these research projects on the residents can be reduced by asking for their input for LIFE project in an efficient way. Therefore, it should be clear at which moments in the design process residents should participate and which input or information is needed. A first step into clarifying that, is to look at the current design process in LIFE project to see what is already happening regarding participation and where participation is still missing.

The LIFE project started in May 2021 and will continue until 2025. This means that the project was still in a very early stage when I started my graduation project seven or eight months into the LIFE project. The consortium was still finding its way in working together and getting onto the same page.

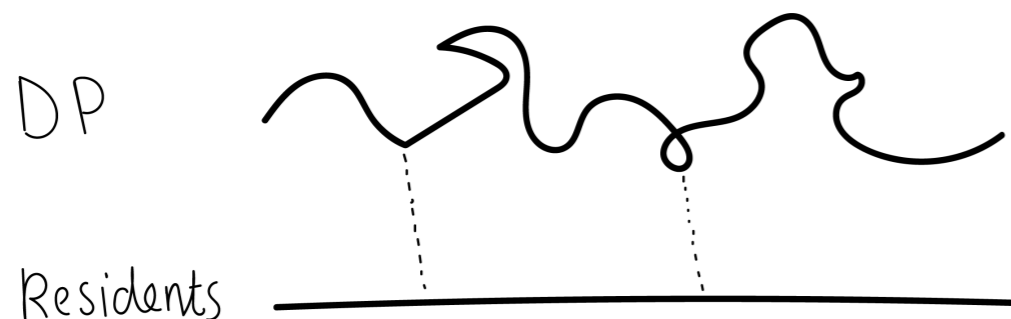


Figure 13: When should residents participate in the design process?

Design process of the Energy Management Platform

Why look at the design process

The I in LIFE stands for inclusive, because the project aims to be an inclusive project. The energy management platform should not only be for people who already have renewable energy assets, but also include people without access to these assets.

If LIFE wants to make sure the end-product is an inclusive one, it is important to know for who they will be designing, what their world looks like and what their role can be in the local energy network. Therefore, research with these people is necessary. That is why residents of Venserpolder should participate in the design process of the LIFE's energy management platform.

The challenge in Venserpolder is that this area is already overstudied, making residents weary of participation and further research. High quality ethnographic research, carefully executed will help to identify the specific challenges for participation in this area.

Within the project there are seven work packages that focus on different themes, all feeding into the final product. My project falls in work package six, that focuses on the inclusion and engagement of stakeholders. My focus is on the residents of Venserpolder.

Local Inclusive Future Energy

Inclusive is in the name of LIFE project. In order to be inclusive, LIFE project needs to understand and consider the needs and desires of a representative group of people, which includes people who are non-aware of their energy consumption and might not be interested at all. Gaining this understanding can be done through their participation in the research, which will be a challenge. An inclusive participation process will enable all residents who want, to participate. In this project inclusion means that all residents are able to make their own choice about participation; inclusion is "providing access to and participation in opportunities and activities" (Sen, 2000).

Inclusion is an external factor, choosing to participate is an internal factor.

Energy transition

Both the winning and the use of fossil fuels to produce energy, bring greater damage to the (life on) earth than the earth can neutralize, which leads to an accelerated climate change. At the same time, the demand for energy is increasing (International Energy Agency, 2021) and we are dependent on oil and gas from Russia. These are important reasons why there is a need for an energy transition towards clean and renewable energy sources, such as solar power and wind energy, hydro energy, tidal energy, biomass energy, geothermal energy (Davies, 2017). Although warnings for climate change came from scientists in the 1950s and the scientific community decided to join forces to take action on climate change in 1980 (Pester, 2021), the urge is still not big enough for many governments to act upon it. Though as seen in the COVID pandemic, it is possible to act quickly and change laws to tame it as much as possible. The difference here is that the consequences of the pandemic were an immediate threat to our lives, whereas the consequences of the climate change show slower (Harman, 2021). Our human brains are not wired for long-term thinking (Sijbesma, 2020).

Learn from the past?

While we are constantly looking at the future of energy, the past has lessons for us to learn too. Many people might not be aware of the energy transition that happened in the 1960's: In The Netherlands we transitioned from cooking and heating on coal to natural gas (Visser, 2021). Citizens then were neither as excited for this change as they are now, due to the expenses people had to make themselves for the conversion of cooking appliances for example (Brinck, 2021). Besides, they did not know what to expect and what this change would mean for them (Brinck, 2021). However, the government went a different way than now: they made the decision to transition to natural gas and they organised it. This central and clear organisation strongly differs from the scattered organisation and endless number of sustainability options nowadays. Participation of people was very specific; it concerned the implementation and practical questions people had (Brinck, 2021). Therefore, there were central points where people could ask questions.

Energy transition in Amsterdam

The city of Amsterdam aims to be almost energy neutral (reduce their CO2 emissions by 95% in reference to the levels in 1990) by 2050 (Nawaz et al., 2021). They want to reduce the emissions with 55% in 2030 and have stopped all the use of natural gas in Amsterdam by 2040 (Nawaz et al., 2021). In Amsterdam South East they want to take an extra step by focusing on the social side of the energy transition. Their three main goals are (1) to increase the amount of jobs in the energy transition for local residents, (2) to prevent the living expenses to increase, by making buildings energy positive (producing more energy than they need) so the surplus energy can go to low-income households to reduce their energy bill for example) and (3) encourage local initiatives in South East around energy production, insulation and saving energy (Nawaz et al., 2021).

Where the city of Amsterdam wants to be climate neutral by 2050, they want to achieve this in Amsterdam South East 10 years earlier (Nawaz et al., 2021). With this energy transition they want to transform the area as a whole and make it a more healthy and pleasant place to live. They want to be the example of a social energy transition (Nawaz et al., 2021).

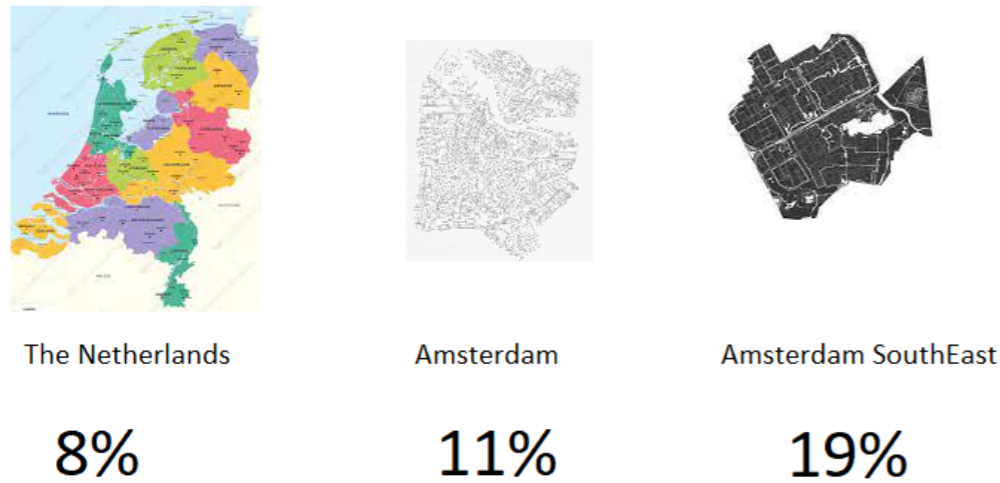
Energy poverty

Energy poverty was chosen as 'word of the year 2022' by Onze Taal (Het Parool, 2022). This makes clear that during that year, an increased number of people have experienced energy poverty (NOS, 2023). Basically, this term means that people cannot afford to use the energy they need. The consequences are either that they pay a large amount of their income, 10% or more (Grip, 2022; TNO, 2020), on energy or that they reduce their energy usage to the bare minimum. This leads to people living in uncomfortable cold houses, warming themselves with multiple sweaters, skipping cooked meals and living in the dark. That leads to mouldy houses, physical or mental health issues, social isolation and unemployment.

Three factors can be of influence on this: the current energy prizes, the income of a household and the amount of energy that is consumed. The energy label of the house gives an indication of how much energy is needed.

People who have a low income and high

Energy poverty



energy bills (due to badly insulated houses or the lack of knowledge on how to efficiently use your energy e.g.) are more likely to become energy poor. Especially women suffer from energy poverty, as a consequence from the income gap between men and women and the fact they tend to live longer than men. Also single parent households or other households with just one income, have a higher risk (de Grip & Booi, 2021).

TNO (2020) identifies 8% of Dutch households as energy poor. This is lower than the average of Amsterdam, where 11% is considered to be energy poor (Aanpak van energiearmoede in Amsterdam, 2022; de Grip & Booi, 2021). In Amsterdam South East, where LIFE project focusses on, the percentage is even higher: 19% of the households is energy poor (de Grip & Booi, 2021).

Hidden energy poverty

Although research shows clear percentages of the amount of energy poverty, it is hard to say how many households in The Netherlands and Amsterdam are exactly affected by energy poverty, because it is a multidimensional problem and it comes in different forms.

The previously named percentage is probably lower than the actual amount of energy poor households. This is because people can also choose to sacrifice their comfort to reduce energy costs and stay within their limited budget. People rather live in a cold home and wear a couple of sweaters to keep warm, than to heat their homes (Aanpak van energiearmoede in Amsterdam, 2022). The so-called “Heating or Eating” dilemma.

Figure 14: Energy poverty in The Netherlands

Growing energy poverty?

The energy transition may enlarge energy poverty as people with low incomes cannot afford to invest in expensive new energy assets such as heat pumps and solar panels. Therefore, they must keep using fossil fuels and (natural) gas, which become more expensive as an encouragement for people to invest in renewable energy sources and such, which they couldn't even afford in the first place.

One part of the social energy transition the LIFE project wants to contribute to, is to decrease the amount of energy poverty in Venserpolder and to prevent people to fall into energy poverty. Since the energy transition in itself can enlarge the group of energy poor, it is extra important to take these people and their situations into account.

Venserpolder

Venserpolder (yellow in figure 15) is a neighbourhood in Amsterdam South East (red in figure 15) and is part of the Bijlmer. It is the home to approximately 8,500 people (Informatie buurt Venserpolder Oost, 2022; Informatie buurt Venserpolder West, 2022). Amsterdam South East has a rich mix of 130 different nationalities and cultures (Amsterdam Zuidoost, 2019). Unfortunately, South East also has the highest percentage (32%) of functionally illiterate people, compared to other parts of Amsterdam in 2016 (redactie openresearch.amsterdam, 2021).

The neighbourhood is built up out of sixteen closed housing blocks with courtyards (Gemeente Amsterdam, 2020). The neighbourhood is mainly for living. However, there are a couple of facilities such as a small shopping area (yellow and red dots on the map), four schools, a nursing home and three community centres.

Some of the WE's (Vereniging Van Eigenaren, owners association) in Venserpolder are very active. An example is one of the blocks in the east of the neighbourhood, which insulated their building and replaced the windows with double glass windows to get a better energy label (Bikeride Venserpolder, 2022).

Several community centres and local initiatives are located in the neighbourhood. Five of these were

part of my research area: Buurtwerkkamer Multibron, Stichting South East Stars, Bloei&Groei, Buurtsalon 't Spinnewiel and the only centre elsewhere in Amsterdam South East, De Groene Hub. These are further described in appendix C10.

Why is LIFE situated in the Venserpolder

Venserpolder is located next to the station Amsterdam Bijlmer ArenA and near the ArenApoort, an area with offices and entertainment. This mix of living (Venserpolder), working and recreation makes it interesting for the LIFE project to research the challenges and possibilities of a local energy network in a mixed use area. Besides, the municipality of Amsterdam has labelled Venserpolder as an 'ontwikkebuurt' (Gemeente Amsterdam, 2020). This means that the district is lagging behind in terms of development compared to other parts of the city, but there are also opportunities for area development (Gemeente Amsterdam, 2020).

When looking at sustainability and renewable energy sources, there is a lot to win in this area. As described before, the housing in this neighbourhood for example, are generally insulated insufficiently, raising energy costs. Luckily, the municipality has identified multiple opportunities for increasing the sustainability of the housing in this neighbourhood. The large amount of flat roofs in the area and the possibilities with new construction for example (Gemeente Amsterdam, 2020).

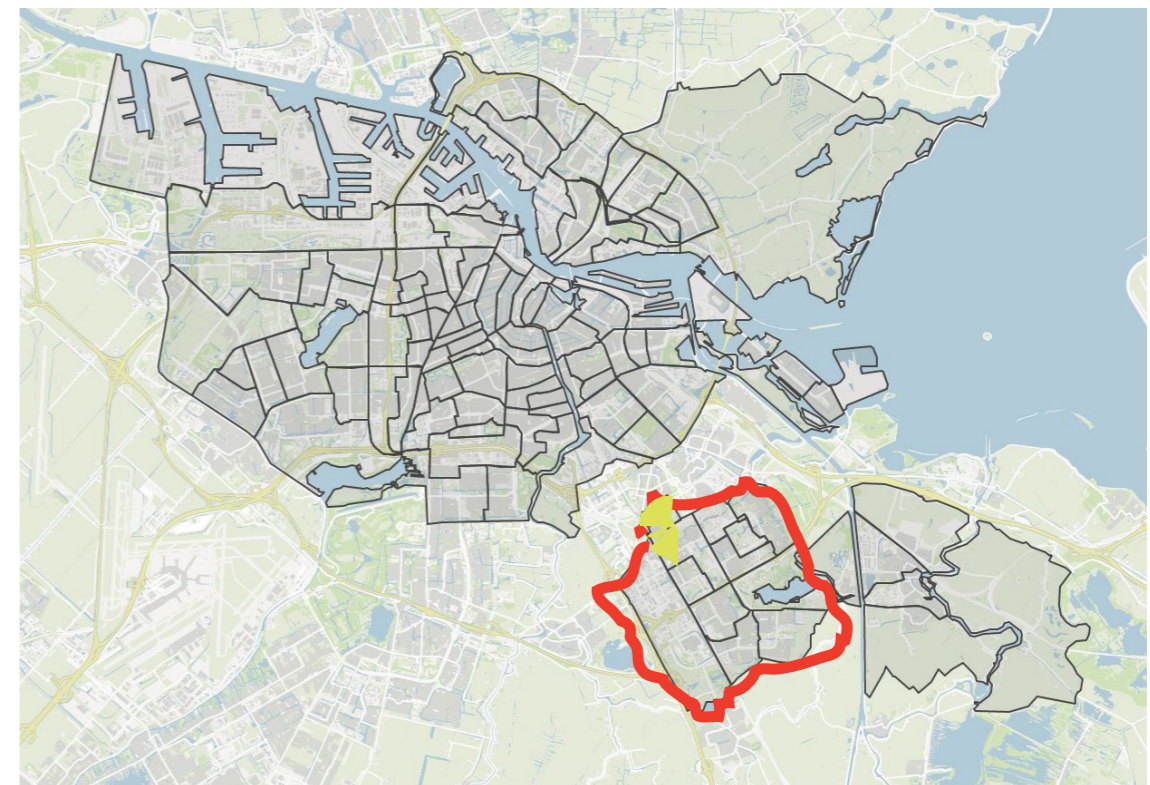


Figure 15: Amsterdam SouthEast (red) and Venserpolder (yellow) on the map

Four

Results & Discussion

The analysis of the ethnographic field trips led to very interesting insights on the challenges there are to participation of residents in the energy transition in Venserpolder. Besides, I have looked at the design process of LIFE project and found a couple of challenges for participation from that perspective. Lastly, residents of Venserpolder do participate in various activities. This can inspire and teach us about what works in this neighbourhood.

Challenges to participation of people in Venserpolder

Through the ethnographic research in Venserpolder, a variety of challenges related to participation of residents in LIFE project have been found. These challenges can be divided into three categories: *i. challenges regarding interactions between residents and researchers, ii citizens perspectives on renewable energy projects that complicate participation and*

iii characteristics of Venserpolder that complicate participation. The challenges of the first category lay in ourselves as researchers from LIFE project, the second category contains challenges about the perspectives of residents on researchers and the third describes challenges that lay in the context of Venserpolder.

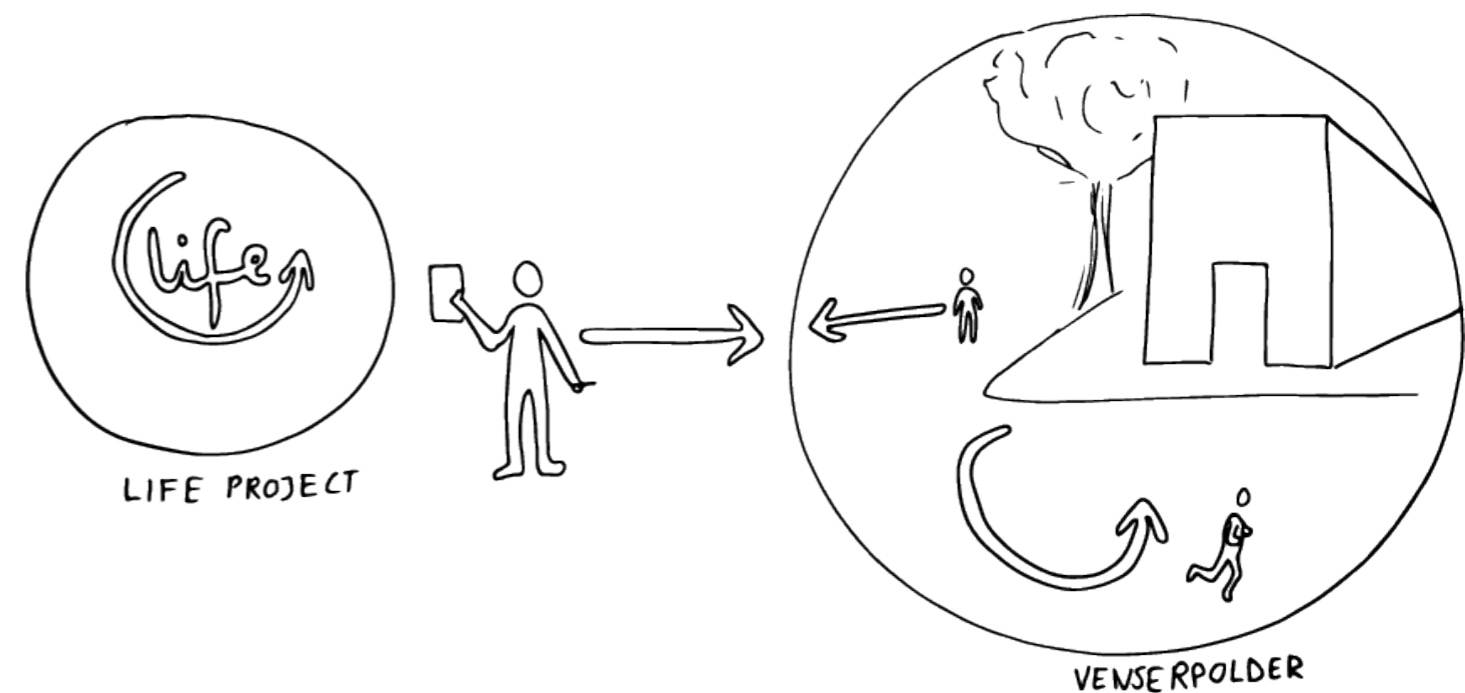


Figure 16: Challenges in LIFE project, in the Venserpolder and in between

Challenges for the researcher

As a learning ethnographer, adjusting myself to this way of doing research took some time. Participating in Venserpolder and talking to residents brought up several challenges. A reflection on the situations we have experienced in the field, leads to the suggestion of an appropriate way of approaching residents when asking for participation.

There are two main challenges for the researcher:

Is my intention your perception?

People can approach someone to ask a question with the best intentions, but this might be perceived very different by the other person. Not being aware of this, can cause an awkward experience for both sides. For example, stepping into a conversation with someone thinking they understand your intentions, but in reality they do not, it can lead to an unexpected reaction from them.

The difference in experience can be caused by different backgrounds, or a different relation to the context. This leads to two persons not starting on the same page when a conversation starts.

Another factor that contributes to misperception, is an unclear story from the researcher about their presence. The resident might fill in this story with past experiences (with researchers) and their image of governmental institutions. The outcome of this is often negative and can create feelings of distrust (10, Visit 't Spinnewiel, 2022).

Difficulties in interaction due to differences

Sometimes members of the ethnography team struggled with interacting with residents while visiting Venserpolder. This was due to differences in culture, age, gender, background and language. Rules of manners from different cultures can cause a clash and it takes time to learn how to communicate appropriately. The question is what the unwritten rules of interaction are in a community. The rich mix of cultures in this neighbourhood, makes this an even larger challenge.

What tools could be used to overcome these differences and make it easier to communicate?

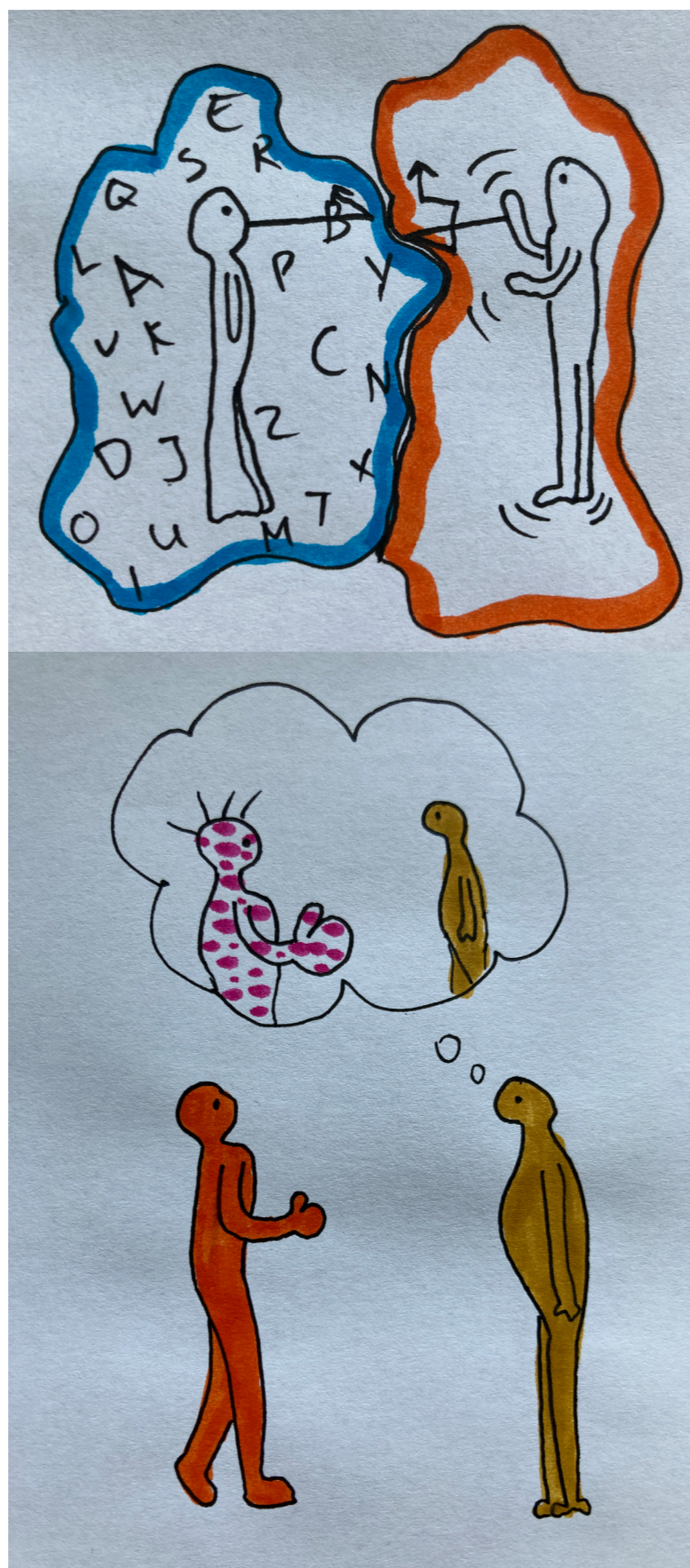


Figure 17; 18: Difficult interactions due to differences; Is my perception your perception

I feel I am the outsider here

As a researcher in Venserpolder, I was the outsider in the eyes of these residents from Venserpolder. The people would look at me differently than they would look at someone that looks and talks like they are from Venserpolder too. As a researcher, I was trying to participate in their world, which is interesting.

During other visits, team member Gijs felt an outsider as he was one of few men in a community that seems to be led by women.

Below are learnings from doing ethnography as a researcher and interacting with residents from Venserpolder:

Be transparent, tell a clear story

In Venserpolder, people have little trust in the government and institutions. When researchers come to the area, they are not always welcome. Having a clear story and being transparent about the reason you are there, can help the residents to decide whether they will trust you and allow you in their world.

From doing ethnography and seeing my fellow team members conduct research, I noticed that everyone took their own approach. Some more pro-active than others. It is important to stay true to yourself and act like yourself.

It takes time to get to know people

It takes time to learn how to converse with people, especially in a neighbourhood like Venserpolder, where there are countless different cultures and languages. Far from everyone can express themselves well in Dutch or English. This complicates the interactions with residents. Be aware of this and try your best to show that you are willing to listen and learn how to understand them.

Be open, humble and kind

In order to make the most out of a field trip, it is important to be open to whatever will happen or whoever you will meet. When talking to people, approach them in an equal way. Be humble towards people, so they will not feel overwhelmed by you, after all, you are visiting *their* world.

One blends better than two

Following on the latter, one researcher is less intrusive and less overwhelming than two. It is always easier to start a conversation with one person than with two people (9, Visit Bloei&Groe, 2022; 10, Visit 't Spinnewiel, 2022).

See others as an equal

Following on the 'Be open, humble and kind': Presenting yourself as an equal of the other, brings you more than when you are bigger than the other person. It can be as simple as being on the same eye level as the other person or even making yourself smaller. It can help your conversation partner to open up (UCD - University College Dublin [universitycollegedublin], 2014).

Who gives, receives

When you are in the field as a researcher, you are searching for a personal connection with people. It makes it easier for people to open up to you, if you open up to them. By giving them something of yourself, like a personal story, it will be more likely that the other person will also give something to you (9, Visit Bloei&Groe, 2022).

One face for a long time

While being in Venserpolder, it felt wrong that I would only participate as a volunteer at the different community centres for the couple of months my graduation project would last. Although I would be giving something back to the community, in return for conducting my research there, it seemed to be better for the community to have people there who would be there for a longer period.

Things will go differently than you expect

As an ethnographic researcher, you enter a different world which you are trying to understand. The things you experience might be different from what you expect to happen, considering your own personal background. If you are aware of this, it might become easier to see it (6, Volunteering Stichting SES, 2022; 10, Visit 't Spinnewiel, 2022)

Citizens perspectives that complicate participation

Citizens perspectives on researchers and other institutions asking for participation, reveal two main challenges:

Resistance to researchers

In various situations we have experienced that researchers are not always welcome to Venserpolder. It is important to understand that not everyone wants to take part in research and that not everyone wants to take part in a design process for example, even if it will benefit them in the end. These people should be respected in their choice of non-participation. However, they should still have the room to change their mind. They should always have the feeling that they are welcome and can be part of it if they want to. Being able to make your own choice about this participation, belongs to one of the definitions of participation. See example 10.

If researchers are rejected, it is difficult to get close to people and learn about them. In a way, this also lets me as a researcher experience the feeling of being excluded, not being allowed to be part of something, which can be interesting too.

There is a tension here though. The people in Venserpolder might have more experience with exclusion than the average person, maybe that is the reason they are so welcoming and open to us as researchers and as people most of the time, because they don't want others to experience that feeling. See example 10, continued.

Some of the reasons why residents and/or managers of community centres are hesitant to let researchers in are described below:

Overstudied

Venserpolder is overstudied. Because the neighbourhood is labelled as an 'ontwikkelbuurt', more projects and researchers see this area as an interesting place to conduct their research to find out how it can be improved. At Bloei&Groei we were told that there had been much research and other attention over the past few years and therefore they were cautious with who they let in. At Multibron we were told that they did not need any volunteers. And at stichting SES, the founder told us they were working together with some researchers from University of Amsterdam to improve the wellbeing in the neighbourhood. In literature this 'overstudying' and its

effects has been described as participation fatigue.

Possible violation of safe space

The founder of Bloei&Groei had a good reason to be picky about which researchers they would and would not let in. This garden is meant to be a safe space for women who work in the garden to heal. It is the task of the board to protect that environment. If they think the research will take more of the women than that it will bring them, they do not allow it.

Lack of trust

Another reason residents show resistance towards researchers is because they have very little trust in the government and institutions. These have failed and disappointed the residents too often in the past. Someone from CoForce, warned for this: LIFE will experience the downsides of this mistrust, as they can be easily associated with these institutions. LIFE will not be welcomed (22, LIFE project consortium meeting, 2022). See example 3.

What is in it for me?

Another factor that adds to the resistance, is the question 'What is in it for me?'. The 'it' in this question can refer to two things: the energy transition or participation in LIFE project. People are not always aware of what they can gain from participation in the energy transition. In the previous given example, the first association the man had with the energy transition is that it would cost him lots of money. Others have experienced false hope through promises about the future. This all to resistance.

The energy transition and sustainability are often seen as something that is not for them, therefore their interest in the topic lacks, which leads to having little to no knowledge about it. Many residents neither see the value of participating in the energy transition and therefore are hesitant about it.

This also applies to participation in LIFE project, as it is an energy transition project. It is important that LIFE project clarifies their goals of residents' participation and what residents can gain from participating. Researchers get paid, residents will not work for free.

The main question here is: What does LIFE have to offer the residents? What do residents have to bring in for LIFE?

See example 17.

There is a slight mismatch between the community centres and LIFE project

Example (10, Visit 't Spinnewiel, 2022) continued where we were seen as intruders

To illustrate this resistance, I take you to Buurtsalon 't Spinnewiel in the East of Venserpolder. On a sunny morning in March Gijs and I visited the morning coffee hour at the community centre. Before entering the building, we sat down on a bench outside to discuss how we would approach this visit. We wanted to make sure we wouldn't be seen as intruders, so we agreed that we would first try to speak to someone at the front door or a manager for example and only if they are fine with us being there, we would go in. When we walked into the centre however, we didn't see anyone we could talk to, so cautiously we walked a bit further down the hallway, where we saw the common room where a couple of older women were sitting. One woman was waving us in, so we thought it was okay to go inside. We started a conversation with her and got ourselves some tea and coffee. Whilst standing at the bar, the manager of 't Spinnewiel asked us who we were and why we were there. After a short explanation, we sat down again and chatted with the woman who sat next to me. Whilst I was just looking around a bit and chatting, suddenly a woman from across the room raised her voice and started yelling at us. "Who are you?! What are you doing here?! You are only speaking amongst yourself!" Clearly, she was not happy with us being there. "Why didn't you introduce yourself!" She felt left out of the conversation I was having with the woman next to me and she might have felt uncomfortable with a couple of new faces in the room. Although I was overwhelmed and a bit shocked by the situation – this was exactly the kind of thing we wanted to prevent from happening – I tried to remain calm and explain about our research in the neighbourhood and that if they weren't happy with us being there, we would leave. The woman had some trouble getting out of this state of mind and I still felt some adrenaline in my body. I looked down at my cup of tea, there was still some left and I looked at my hand that was still holding half a cookie. I couldn't just leave right away, although I really wanted to...

Example (10, Visit 't Spinnewiel, 2022) continued

... After the woman from across the room yelled at us, a lot happened. One woman (later we learnt she was the activity leader of the day) stepped up and told her that we were welcome there and now she let us feel unwelcome (after I said that we could leave if that was better for them). Another woman came up to us and offered us cookies and started a new conversation with us. The woman next to me looked neutral at the woman who yelled, as if she was thinking "Why the hassle.." and she also continued the conversation I was having with her earlier about her other coffee club with whom they did flower arrangement workshops. Just before I left, she said I was very welcome to join next Tuesday if I wanted to.



Figure 19: Resistance towards researchers

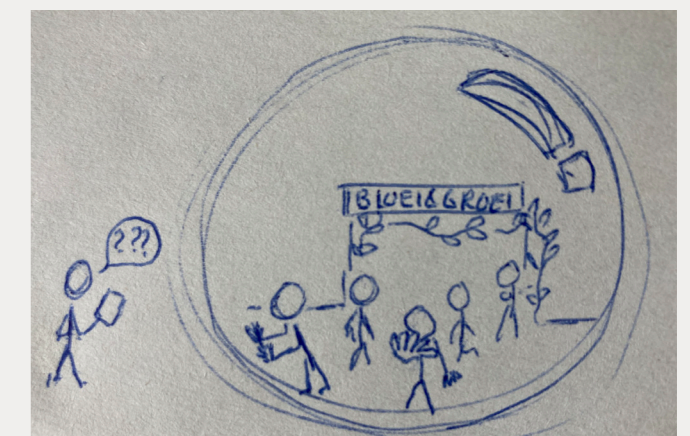


Figure 20: Possible violation of safe spaces

Most community centres in Venserpolder have a vision and a mission. For instance, Multibron helps people with financial struggles and 't Spinnewiel fights loneliness. Currently there are no community centres in Venserpolder that address the sustainability issue. Groene Hub and Mosque Taibah do, however, their reach in Venserpolder is limited. This means that there is a mismatch, even though both aim to address social issues, they approach these issues from different sides. However, if the approach is altered, it might be a possible starting point for a collaboration.

Factors concerning the context that complicate participation

There are two questions: First, should LIFE project connect to existing community centres? And second, how can LIFE fit in these existing community centres as a project about the energy transition?

There are two main challenges:

It is a challenge to find touchpoints between residents' lives and LIFE project

If the LIFE project team aspires participation of residents in their project, they should find the touchpoints between their project and the daily lives of residents. "What is in it for me" is again an important question, which helps to find out how participation can be made tangible for the residents. Various obstacles that make it hard to find the touchpoints:

Knowledge and interest gap

There is a gap in the knowledge people have about energy. Such an abstract concept is difficult to grasp. This makes it challenging to connect a technical project to residents' experience and let them understand what the changes that come along with the energy transition means for their lives. This has nothing to do with how well educated people are. See example 4 and 10.

The associations people have with certain words as *energy transition* and *sustainability*, are rather negative than positive. They associate past experiences, with these words. This makes it challenging to communicate relevant technological or economic details to residents in a way that they do find interesting.

The main cause of the knowledge gap is the lack of interest in energy, sustainability and an energy transition.

Sustainability is a luxury, not for us

People in Venserpolder and South East see sustainability as a luxury and "not for us" (8, Brainstorm Groene Hub, 2022). In their experience, sustainability is only for rich people, with the money to buy solar panels and expensive, sustainable versions of products (Marijnissen, 2018).

Although people do not see sustainability as something that has to do with themselves, most people in SouthEast already live very frugally (Livecast Pakhuis de Zwijger, 2021): if you don't have much money to spend, you will not buy new clothes and shoes every month and new furniture every few years. Things that are broken are more likely to be repaired than replaced.

Higher priorities

People do not only feel distanced to sustainability and the energy transition, they also have other, more important things on their minds. The amount of low-income households in Venserpolder is high, the priority of residents is to get by and have enough food at the end of the month.

This interest gap which we have found, especially becomes clear when speaking of energy, the energy transition or sustainability in these words. However, when you speak of it on another level, for example through energy *related* topics, people do have some interest in being part of the energy transition:

- They want the benefits to be equally distributed amongst the residents (3, Visit community centres, 2021).
- They want to have a say in changes that are made, instead of that these are pushed upon them from above.
- They want to have more money for food and other essential things. If the energy bill decreases, they will save money. The energy bill can be decreased by being part of the energy transition if this is done without unaffordable investments.

Where to find a representative group of people?

Who should be included

During the trips to Venserpolder, we have not seen many people on the streets. In the community centres we saw mainly women and at SES of course children. It is difficult to find a representative set of people if part of the community is hardly visible.

Example of rejection at Bloei&Groei

Another example of this resistance towards researchers, was experienced at the Bloei&Groei garden where Alisa and I wanted to be volunteers. A few weeks earlier we both volunteered at an open volunteer day of the garden. We both enjoyed it very much and were also asked whether we could become regular volunteers. This seemed a good idea, so we said yes. However, we were also honest with the founder of Bloei&Groei about our role as a researcher. I sensed she was not a big fan of people conducting research in the garden, but she would consider it. We later unfortunately heard we were not welcome in the garden as researchers.

Example (3, Visit community centres, 2021)

This is illustrated by one of my first experiences in Venserpolder. We were talking to a volunteer and an employee of Buurtwerkkamer Multibron when my co-researcher said something about the energy transition. The face of the man immediately changed and with anger in his voice he started telling us about what the municipality of Amsterdam had done: They decided that the neighbourhood would be connected to a heat network, which meant that everyone would have to pay a couple hundred euros more per year! He was angry that they had pushed this decision upon them, without giving residents the possibility to give their opinion!

Example (17, Information night Groene Hub, 2022)

During the information night about the infra red panels, people asked very specific questions about what it would mean for them if they would get one.

Example (10, Visit 't Spinnewiel, 2022)

When we told the manager of 't Spinnewiel we were from LIFE project, which is about the energy transition, she said "Yeah, go ahead, sit down and have some conversations with people. But don't expect them to want to talk about energy."

Example (4, Conversation Stichting SES, 2022)

A tax lawyer we spoke at Sichting SES told us that she only started looking at the letters of her energy supplier when the prices were rising, before she was not interested in it at all.

Community versus individuality

The tight communities that have grown around the lively community centres and initiatives, form a big contrast with the individuality that is also present in Venserpolder. Whereas there is a lot going on in and around the community centres, people barely know their own neighbours in the housing blocks in the neighbourhood (21, Interview Beaudoin, 2022).

Examples of these tight communities can be found at Stichting SES where children become interns, finish their school and come back to give sports lessons for example. Or at Multibron, where people come in for help, but walk out as volunteer helping others in their turn.

This is a challenge for LIFE because far from everybody is part of these thriving communities, which are also not representative for the whole Venserpolder. We have barely seen men in the community centres in this neighbourhood.

It is the question whether you want to let a group of residents participate which is a perfect representation of Venserpolder, including people not interested in participating at all. Or whether a group of people who are already active in these community centres is good enough.

Anyhow, it is a challenge to reach all kinds of people solely through community centres. Other approaches should certainly be considered.

Hidden groups

One of the effects of living in (energy) poverty is that people become isolated from social life. This makes it more difficult for them to find opportunities to participate and for organisations seeking participants, to find them. Undocumented people and other vulnerable groups are also likely to stay under the radar. These people seek help in their own social circles. In some cases, community centres are part of these social circles, which makes them slightly more visible (4, Conversation Stichting SES, 2022). According to Multibron, people experience a much lower threshold to come their centre than to ask help at larger institutions. This might make people more visible (3, Visit community centres, 2021).

It is important that the experience of these residents, who may live in (energy) poverty, is known by LIFE

project to be able to find a suitable way to include them in the energy transition. Some people might feel shame for their situation and therefore don't want to be found to participate in LIFE project (3, Visit community centres, 2021).

Data can give some information about these groups, e.g. about the kind of housing they live in. However, their experience will stay a mystery. If you find a way to include residents in social housing in the project, then you've probably also got a part of the hidden energy poor. Through some of the community centres, these groups can also be found (Stichting SES has contact with undocumented people, people come there with problems) (Multibron helps people with financial problems) ('t Spinnewiel helps people with loneliness, so maybe also a part of people that is isolated due to poverty or energy poverty) (Bloei&Groei is also a safe space for people who have problems, maybe also there are people with financial problems).

Where are the men?

The community centres and initiatives in Venserpolder are mainly run by women. Bloei&Groei is an example of an initiative that is even a women only place. A representative group includes men, but where can they be found?

Design Process of energy management platform

Good participation is a collaboration between citizens and organisations. Literature showed challenges to participation on both sides: participating citizens and the organising parties. Therefore, looking at the design process of the energy management platform will give a more complete image of the challenges that arise when LIFE organises participatory processes.

This ethnographic reflection on the process and way of working of the LIFE project, raised questions around the participation of residents. The observations were done during the same period as when ethnographic research was done in Venserpolder.

The challenges which arose from the research in Venserpolder are complemented with challenges for participation found in the LIFE project.

Characteristics of LIFE project that complicate participation of residents in the project

Get the LIFE project consortium on the same page

The project is divided into multiple work packages, for different themes. To connect all parts, there are monthly consortium meetings and regular LIFE talks, in which different topics regarding the project are discussed. This is a first step of getting the LIFE consortium on a single page. However, due to differences in background, ideas and ideals, it is sometimes difficult to get each team on the same book, let alone the whole consortium. Different opinions on content reflect into challenges around resident participation in the LIFE project. At which moments in the project timeline can resident participate? For which teams is resident participation relevant? Why should residents want to participate? And which information should be gained through participation?

Common language

One way to get on the same page is to have a common language within the project. This does not literally mean that everyone speaks Dutch or English, but that there is a mutual understanding of concepts and such.

If everyone understands each other within the project, answers to the previously formulated questions can be given and an effective participatory process can be created.

An example from a consortium meeting (2022):

The goal of this consortium meeting was to choose around eight use cases out of a collection of over one hundred. During this meeting there were several moments that two people were talking to each other. It seemed like they spoke of totally different things, although they actually meant the same. This illustrates the need for a common language to make sure everyone of the consortium would understand each other properly. (LIFE project consortium meeting, 2022).

Until LIFE consortium members do understand each other's work to a reasonable extent, LIFE project is not ready yet to bring in residents, who speak yet another language.

Finding touchpoints between LIFE and residents LIFE

In the project plan proposal the following is written: "To ensure that the perspectives of even the least energy-aware participants are taken into account, a diverse set of local residents will be involved in the iterative co-creation sessions conducted throughout the project." (MOOI LIFE proposal, 2020). This raises the question why people who are not energy-aware want to participate in a project about the energy transition? LIFE project will need to find out how they can connect to these participants on a non-technical level. Therefore, the touchpoints between residents' lives and the project need to be researched.

This is a challenge for LIFE. A challenge is created through their technical approach to the energy transition and the assumptions in the use cases regarding the residents' needs and desires.

Is there room for resident participation in the project?

Currently, the project structure gives little room for participation of residents. The Energy Management Platform is already being made, although it remains unclear how residents and other stakeholders will use

An example of limited space for participation can be found in how the use cases were set up. These are describing the needs and values of the target users and other stakeholders, such as the partners within the consortium. They can be used in different stages of software development, in this case to identify the system requirements (Brush, 2020). It describes the interaction with the system from the perspective of the end user. A use case consists of three elements: the actor (an individual or a group of people using the system), the goal (what the actor wants to achieve by using the system) and the system (which steps need to be taken to reach the goal) (Brush, 2020). Eventually, the use cases result in the requirements of the system. The different partners within the LIFE project wrote several use cases from their perspectives. This was done without talking to real people, only based on assumptions about the end users. The use cases might insufficiently reflect the residents of Venserpolder, reducing the chances of a working system. Even when residents are involved, but in a later stage, their influence on the design will be minor and participation is only a form of tokenism, not helping acceptance of the final product.

Personal reflection

For me it felt the wrong way around. As a designer I am used to first doing research with an open mind, including talking to real people, then based on what is found, create personas or scenarios to communicate the insights about the future users. This approach results in stronger use cases.

Is LIFE really a project in which residents can participate? LIFE project is quite technical. Are the possibilities for the energy management platform negotiable? Maybe residents should participate in other ways: how can the project be implemented? If there is already chosen to implement this energy system in the neighbourhood, then residents might be able to have more input in how it is implemented and what kind of help they need to adapt to this new energy system. This could be researched and the project can already start with educating people and letting people get used to that kind of living.

it and how it will benefit them.

Are residents experts you can learn from or pawns on the board?

This example leads to the question how residents are seen by the project members. The way sometimes is spoken about residents, inclusion and participation

shows they are unknowingly ignorant of the experience and knowledge of the residents. But the attitude differs: Some believe researchers should just go into the neighbourhood and ask residents straight up front what they think about energy, others do not see a point in participation at all. For some the interest to learn about residents' experiences has grown over time and a few find resident participation very important and try to convince the rest.

Anne Steijkel from Groene Hub mentioned, when we told her about our work on inclusion within the LIFE project, she thought that LIFE was a top-down approached project. (Campaign brainstorm Groene Hub, 2022)

What is already happening around participation in the design process

The main form of resident participation during my graduation project is the ethnography team visiting Venserpolder to volunteer and talk with people. When explaining the project, we talked about energy, however, when interacting with residents on other moments during volunteering, we tried not to touch upon this topic as we experienced some resistance triggered by the subject.

Besides, members of LIFE project have worked on an animation in Dutch and English to improve the communication towards people outside the project to explain what it is about. This can be shown to possible future project partners or to residents in Venserpolder.

LIFE talks about the perspective of residents of Venserpolder and a bike tour through the neighbourhood have been organised to enlarge the understanding within the LIFE consortium. This is a small step towards participation of residents, as the LIFE partners will understand them better and will be able to indicate better what they need from the residents and what they can offer them.

Unanswered questions remain

There are remaining questions beside the already mentioned challenges. These can be linked to the framework of Morales-Guerrero and Karwat (2020) about the object, breadth, depth, space and time of participation:

- Time: At which point in the process should residents participate and for how long? Is long-term participation or short-term participation of residents more desirable?
- Object: What does LIFE project need of the people

in the Venserpolder? This question was a regular guest in my head during visits to Venserpolder. And what can residents get in return for their participation?

- Space: Should the LIFE project build upon the existing community of Venserpolder and become a part of the long term life of the community? Or should it be the other way around, where (representative) residents are brought to the LIFE project? Or could there be a combination of both?

Personal reflection

If LIFE becomes part of the community, the chances increase that residents will accept the project and it will work in the community. That requires an understanding of the community and the people in it. What are the dynamics within the community, what are the needs and desires of the people in the community and how can LIFE fit into that?

If the residents would come to the project, there would still be a connection between LIFE and the residents. Taking them out of their own context and placing them in another one to (for example) think about issues from LIFE, it might trigger these people to look at their own situation from a different perspective, which they thereupon can reflect on.

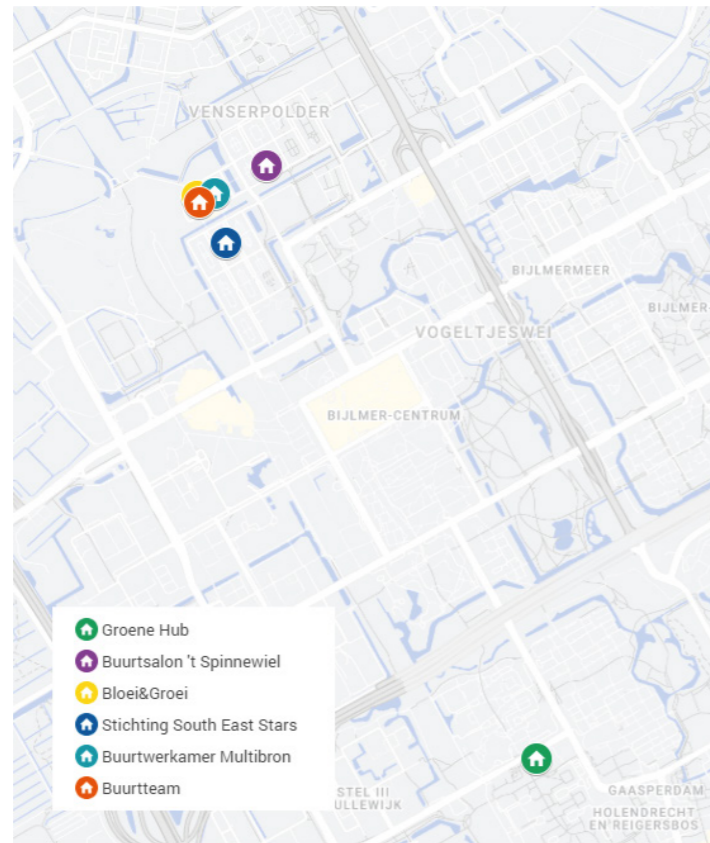


Figure 21: Studied community centres

Learnings from Venserpolder about (long-term) participation

What community centres and local initiatives can teach LIFE about (long-term) participation of residents.

The Venserpolder has, like every neighbourhood, its own characteristics, its own culture and community life going on. The community centres and local initiatives stand or fall on the participation of the residents. A lot of people already participate in these communities, so called social participation. The information on what does and does not work for this neighbourhood, can be found in this neighbourhood and is very interesting for LIFE project to learn from. In the picture below several community centres and local initiatives which were looked into during this research are shown.

The community centres in Venserpolder are safe spaces in the neighbourhood, where everyone from Venserpolder is welcome. Most of the time people from outside are welcome too. The community centres build on the residents. They look at what talents they have, how they can be developed and how these can be used for further community building (Multibron, SES, Bloei&Groei, Groene Hub). Other community centres and initiatives are meant to broadcast knowledge and new perspectives on different topics (Pakhuis de Zwijger, New Metropolis). People who want to have a say in how the neighbourhood develops, can come into New Metropolis to work on these issues together. Some of the centres are working on sustainability (Groene Hub, Mosque, Bloei&Groei). The visited initiatives are shown on the map.

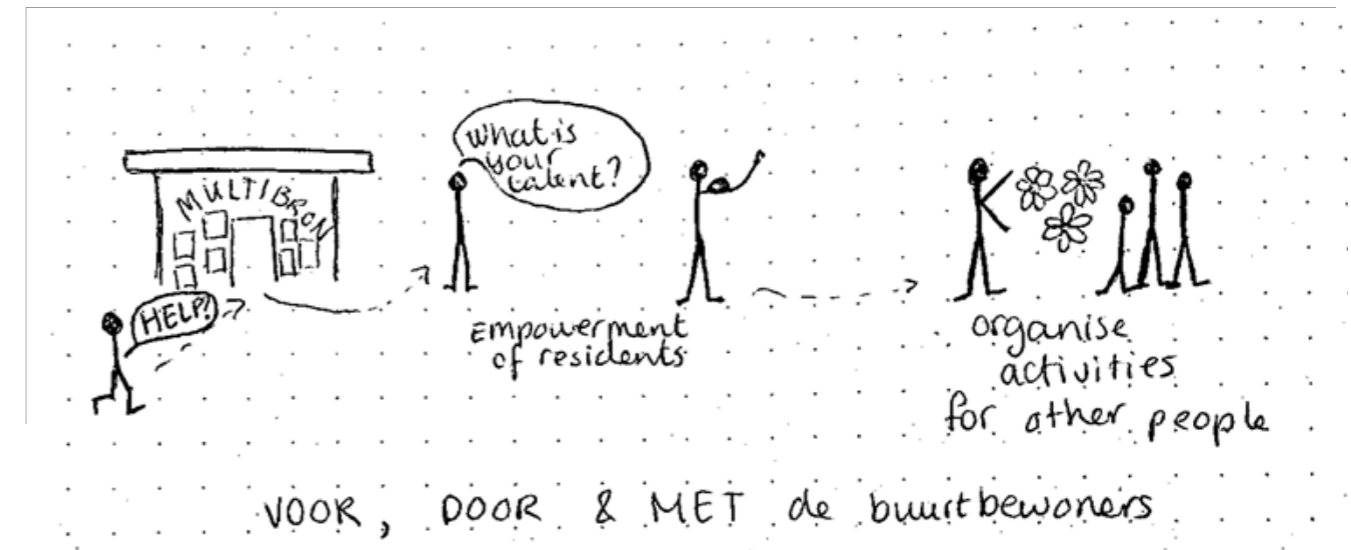


Figure 22: 'Voor en door' principle Multibron

Community growth through available talents

Through ethnographic research, it became clear that there is a particular mindset in multiple community centres: The residents who come to the centres or join an initiative are strongly encouraged to find their own talents, develop them and use them to help the community grow. This leads to stronger communities where everyone has their own role they can flourish in. Different talents complement each other.

In literature this mindset is called Assets Based Community Development. Assets based communities look at the available resources within their community, and use these to let their community grow. This is a counterpart of needs-based communities, in which residents have become very dependent on external parties to fulfil their needs (Mathie & Cunningham, 2003; Kretzmann & McKnight, 1996).

Resources can be tangible (buildings or fertile soil) and intangible (personal attributes or skills or relationships among people) (Mathie & Cunningham, 2003).

These communities have a very positive way to go about each other; they look for the good in each person. This attitude leads to respecting one another's talents, having purpose in life (fulfilling your talent) and the feeling they matter in their community.

In Venserpolder this attitude is found in several places: Stichting SES, Bloei&Groei and Multibron. The website of Multibron shows stories of community members who have found purpose again through developing a talent, feel needed and experience fulfilment of helping other people (Dayenne Tempo Kwam Binnen Als Cliënt Bij Een Buurtwerkkamer, 2018)

This strategy celebrates the differences between people and the uniqueness of every single person.

Everyone has their own thing to bring in. Different assets give different possibilities to grow (source). It leads to people feeling connected to a community and staying in it for a longer period of time.

This mindset to be open to what resources residents can bring to the table, might be an inspiring perspective for LIFE. Giving everyone (who wants) a space in the project doing something they feel comfortable doing, might increase the level of (willingness for) participation.

Personal growth

By letting residents fulfil their own role in a community, community centres offer residents the opportunity to grow and flourish. For example, at the gardens of Bloei&Groei there are various teaching programmes for women. They can learn about gardening or attend the training to become a garden coach. These coaches transfer their garden knowledge to other gardeners and offer personal guidance for the women dealing with problems. On a regular basis, well-attended workshops are given by community members or external people.

This garden provides a space for women to gain knowledge, grow healthier organic food, expand their social circle and a space to relax and self-reflect. These possibilities for women to learn and grow, empowers them and increases their self-confidence (de Breed, 2019).

I feel I matter

As mentioned before, Buurtwerkkamer Multibron looks at everyone's individual talents and help them use these talents to help others. This can be called the 'voor en door principe', for and by principle in



Figure 23: Website banner Multibron

English. It shows that there is a place for everyone to contribute to the community. Having an own role, doing something they are good at, has a pleasant concomitant: A feeling of purpose and feeling they matter. “Everyone can do something, what someone else cannot” (Multibron, 2021) perfectly describes this positive mindset. It emphasizes that everyone matters in their own way.

People walk out “I have done something for someone else (help someone, someone helps you)” (Kijkje Achter Schermen Bij BuurtWerkKamers, 2018).

Ownership over their lives

Playing their own role in the community, doing what they do best, gives residents the control over their own life. By volunteering at a community centre as Multibron, they feel more independent, stronger and responsible. People can choose themselves what they want to organise and everyone who organises activities has their own key of the building. (Kijkje Achter Schermen Bij BuurtWerkKamers, 2018). They take responsibility for what happens there.

Donut Deals

The Groene Hub is a ‘doing and learning community’ in Amsterdam South East, focused on the social side of becoming a more sustainable community. To enhance the inclusion of people who cannot afford expensive sustainable solutions, they make use of so-called donut deals. These are invented by Kate Raworth and provide people with a small budget the opportunity to do something for the community in exchange for sustainable solutions or products for themselves. It integrates at least three of the inner themes of the donut to at least one theme of the outer donut to help people out of poverty, into the donut in the middle of the diagram (*Donut Deals* – Groene Hub, 2022). The Groene Hub sets up these donut deals and helps people to find one that is suitable for them. This gives people with low incomes the chance to participate in the energy transition. In this way they can also experience the benefits of an infra-red heating panel for example.

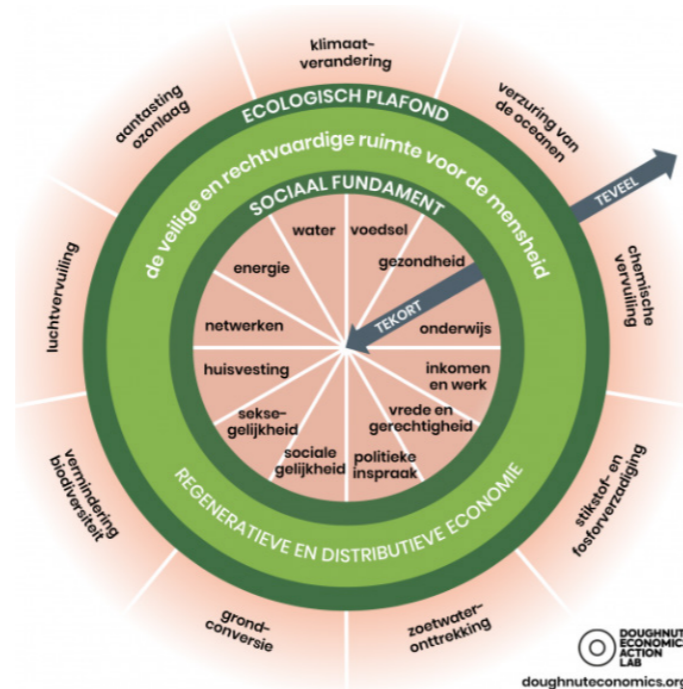


Figure 24: Donut Deal

Key figures can provide regularity and continuity

It is important for the people in Venserpolder to be able to trust on that what is said will happen, will actually happen.

With the assets-based community development in the back of my mind, it felt strange to want to do some volunteers work for maybe a couple of months, as a graduate student. However, if you want to become part of the community, contribute to it and build a trustbond with residents, it is important to be there for a much longer period.

There are different types of key figures in the neighbourhood. One the one hand there are the *Buurtmama's*, women who lead communities, local initiatives and community centres and play a motherly role in the neighbourhood. They are the social glue that keeps these communities together. Well-known buurtmama's in Venserpolder are for example the founders of Stichting SES and Bloei&Groei. These women have a broad network and can get things done in this area.

On the other hand, there are professionals in the field of sustainability projects. These people have experience with managing and executing sustainable projects with residents or have expert knowledge about energy. Some of these people work at the Groene Hub and have much experience with co-creation and other participatory activities. The *Gebiedsmakelaars* are people from the City of Amsterdam who act as intermediaries for residents in the neighbourhood they live in themselves (Amsterdam, 2023). The *Energiecommissarissen* (energy commissioners) are available for questions about energy (02025, n.d.).

Safe spaces

The community centres and local initiatives play an important role in the neighbourhood as safe spaces, where residents feel welcome, trust the people and feel they matter “We help you, we will not let you down” (Kijkje Achter Schermen Bij BuurtWerkKamers, 2018). This environment should be protected for all residents who need these spaces. Everyone is welcome, until they disturb the safe space. Researchers who are there only for their own purpose, are therefore kept out (example 10).

In this area there might be a larger need for safe spaces, as there are more than average vulnerable people. Besides these people have been disappointed

Example (10, Visit ‘t Spinnewiel, 2022)

We went to ‘t Spinnewiel on our best behaviour, however, by some we were seen as a threat for their safe spaces.

Example (9, Visit Bloei&Groei, 2022)

The community garden had already had quite some attention of researchers or documentary makers over the past few years. The healing garden is first of all for the women, thus they are cautious about which outsiders they do and do not let in. We were not welcome.

Example (6, Volunteering Stichting SES, 2022)

The founder of the initiative told me some things about the dynamics in Venserpolder. For instance how people, for example parents of the kids visiting the community centre, sometimes come to her asking help with their problems. The community centre can provide that or organise evenings where certain topics, which count for meore people, are discussed.

a lot by governments. Safe spaces can offer them something they can rely on. Such as regularity in activities and people and clarity about what they can expect at a community centre. For children at Stichting SES this can be the clear rules that are set for the kids. They learn how to respect each other and that they are welcome and respected too.

We are equals of each other

“Everyone is welcome, whether you are orange or blue, you like boys or girls.” Gilma from Stichting SES, (personal communication, Gilma from Stichting SES, March 2022). This quote illustrates how we are all people, whether one is richer than the other, one has another skin colour than the other or you are a man or a woman, we are all people. We should treat each other as such.

Apart from SES, where children are taught to say ‘u’ (the more polite form of ‘you’ in Dutch) to grown-ups, people at the community centres and local initiatives interact with each other in an informal and equal way. There is no hierarchy where one feels better than another. This leads to a very pleasant way in which people interact with each other.

For LIFE this can be a learning point, to see residents as people from whom you can learn something. It is important to have an open mind for their ideas and respect them. The fact that you think something is right, does not mean that everyone thinks that is right.

Social network and dynamics in Venserpolder

When people have problems, they tend to seek help in their own social network from the people they trust. The founder of Stichting SES talked about how some parents of children who join activities at SES, tend to come to her to talk about the issues they are dealing with. To start the conversation, she tries to organise a monthly parent evening, on which they can talk about a topic more people are struggling with or is worth to discuss (4, Conversation Stichting SES, 2022). The centre has also set up a food bank during the covid pandemic to help the undocumented people and other people in need (4, Conversation Stichting SES, 2022). These examples illustrate the short lines and close relations between residents and community centres in Venserpolder.

Besides the lack of trust in governmental institutions, shame about their problems, is a reason for people to stay within their own circles, rather than reach out to organisations such as Buurtteams that provide help (personal communication, local judge Buurtteams, March 2022).

Personal contacts are more likely to help, as seen in the campaign for infrared panels at the Groene Hub: Initiators’ friends and neighbours were the only participants, besides our ethnography team, at the initial brainstorm session. Throughout the campaign, mostly people who were already connected to Groene Hub in some way, showed up. It is easier to get things done through personal contacts. These bring you further and spread the word.

Informal interactions

Overall, the residents have a rather informal and casual way going about each other. They like to keep a positive mind and see the opportunities, rather than the problems. It seems that an informal approach from organisations seeking citizen participation would work better than a formal approach. The informal way of starting conversations causes a friendly and open vibe. It is in contrast with how formal and politically correct the two women of Buurtteam spoke (1, Visit community centres, 2022). We sensed that the Buurtteam is further away from residents than the other community centres in the neighbourhood. See example 8 and 6.

Take your time

Several community centres and initiatives are there to help people with their struggles and help them develop themselves. They have the patience to guide these people along the way, whatever long this road may take.

One example is Multibron, where people with financial problems can seek help. Together with a mentor, they look at the cause of their problems and make plans to solve them. The mentor is there during the whole process and provides after care. It is as a mother that picks up an injured little bird and keeps them safe until they can fly out again.

Speaking the same ‘language’

Venserpolder has a rich mix of cultures and languages, which can complicate communication with neighbours. Volunteers and employees of community centre Multibron have to deal with this language barrier once in a while. But they are creative with their solutions. They try to find volunteers from different backgrounds to be able to help as much people as possible. However, finding volunteers that collectively speak all the languages in Venserpolder is a great challenge. Therefore, volunteers sometimes use google translate on their phone to communicate with each other or communicate with body language (3, Visit community centres, 2021).

One step at the time

The campaign at Groene Hub is an example, multiple smaller steps were taken to get engaged with residents. First, they rang doorbells to hand out flyers and basic information. A while later, they went past the doors again to answer more in depth questions and invite them to an information evening. After several times, people started to recognize the flyer and become more interested in the campaign.

Example (16, Flying Reigersbos, 2022)

“I will tell all my friends about it if you can convince me!” Was something a man said to me and Alisa while I was telling him about Groene Hub’s IR panel campaign on the Reigersbos market.

Example (6, Volunteering Stichting SES, 2022)

In her communication with me through whatsapp about me volunteering at the homework support, this teacher was very informal. She used hearteyed emojis and called me ‘lieverd’.

Example (8, Brainstorm Groene Hub, 2022)

One of the brainstorm outcomes about the approach of the IR panel campaign was that it should be fun and lighthearted. The focus was on sharing warmth with neighbours and friends, rather than a technical approach of the IR panels.

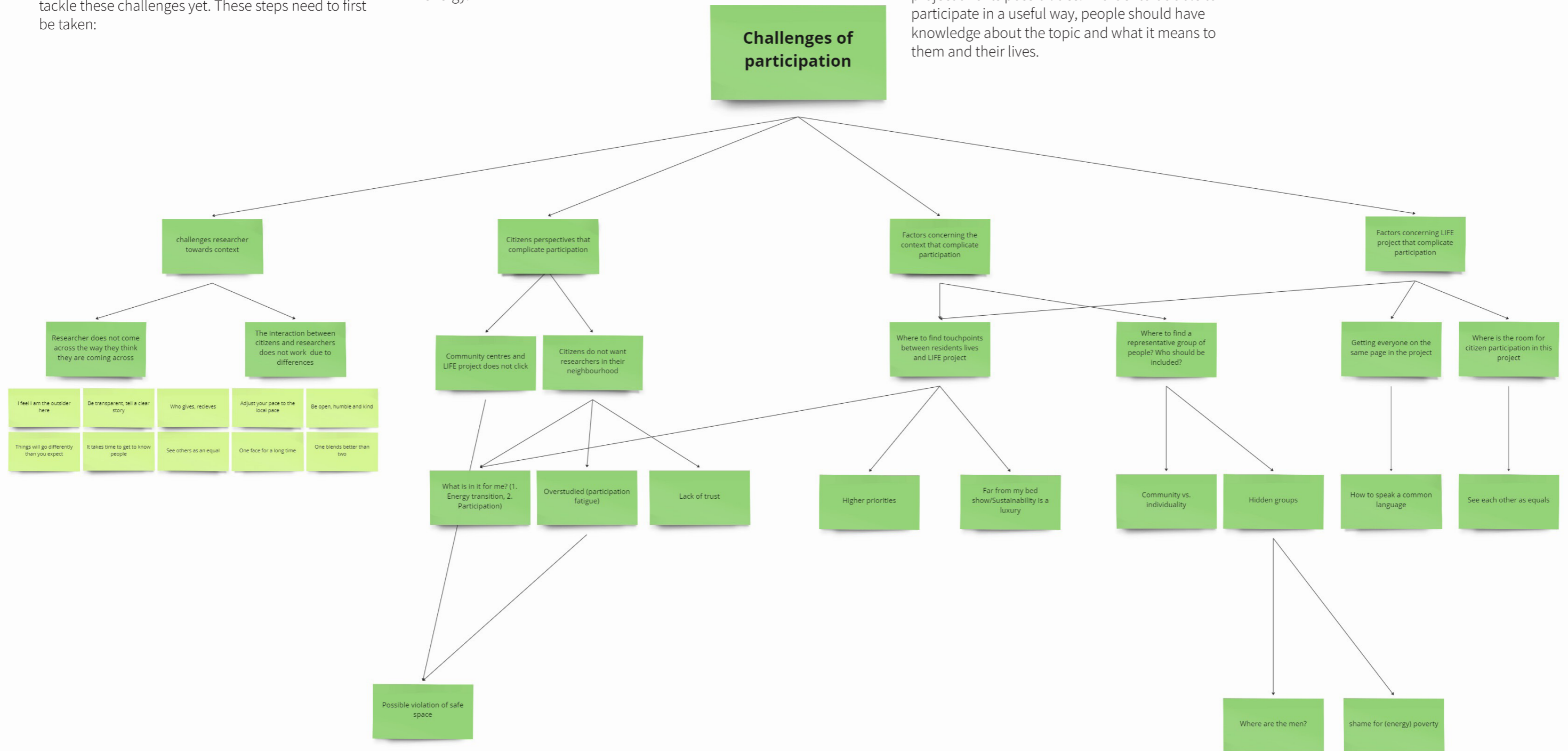
Concluding the results

The results of the research led to nine main challenges to participation which were found in Venserpolder and within the LIFE project. These are shown in the figure below, where also the connections between several challenges are shown. Appendix D11 shows an image in more detail, but you can also zoom in on this image.

In Venserpolder, several aspects were found that teach us something about participation in the neighbourhood and conditions for it to work. These learnings might inspire or provide a hook for LIFE project how to set up a participatory process themselves. At this point, LIFE project is not ready to tackle these challenges yet. These steps need to first be taken:

1. Become aware of the challenges of citizen participation of Venserpolder residents in LIFE project. Identify the questions for the LIFE project and order the challenges from most relevant to least relevant.
2. Find the answers to the questions the LIFE project team needs to organise a well-thought out participatory process.
3. Find ways to tackle the challenges, such as finding out how to talk about energy with residents, without talking about (the technical part of) energy.
4. Next, a trust bond needs to be built between LIFE project and the residents of Venserpolder. This can be carefully initiated earlier in the process, as it takes a lot of time to build trust.
5. Following, residents can be sensitised to LIFE project. Plant a seed and let it grow for a bit. People can take their time to start thinking about the project and the options it might bring. Interest may grow and their thoughts around the topic will form.
6. A next step can be to inform people about the project and its possibilities. In order to be able to participate in a useful way, people should have knowledge about the topic and what it means to them and their lives.

Before steps 2-6 can happen, step 1 is crucial. Therefore, this will be the basis of the design of this graduation project: LIFE project members should both reflect on their own way of working and how participating residents (do not) fit in that process. They should become aware of the challenges they will face in Venserpolder regarding participation.



Five Design

This chapter describes the design of the workshop that is made to transfer the gained knowledge from the research to the members of the LIFE project team. The design brief, design process and the evaluation of the workshop, is also described.

Design Brief

The design brief follows from the conclusions of the results. Multiple challenges that complicate the participation of residents in energy transition projects have been identified, of which only a part is known to some members of the LIFE project team. Only when an understanding of the importance of participation and the challenges is present throughout the consortium, an effective and suitable participatory process can be designed, which offers all residents the opportunity to participate in LIFE project. Therefore, the first step for citizen participation in LIFE project is for the project team to become aware of these challenges.

The design goal on the right:

The design is for members of the LIFE project as they are working on a project regarding the energy transition and seeking for participation of citizens (small stakeholders). Before they design or execute a participation process, it is important that they are aware of the challenges of participation in Venserpolder. The product can also be used for other projects or organisations seeking citizen participation, to become aware of the challenges they might face.

The exploration of the challenges and reflection on how these are part of the LIFE project will help the participants to become aware of the matter. The members of LIFE consortium should share this experience, as it is important that they have a mutual understanding of these challenges, in order to design solutions that fit both the residents and the project itself. Although the topic is serious, it is preferred to keep the interactions airy and leave room for some fun. This helps people to open up to new ideas and other perspectives. A personal goal is to explore the use of illustrations to communicate information and trigger conversations. Illustrations can also contribute to the vibe of the workshop.

This design goal is a first step for building a bridge between Venserpolder residents and the LIFE project. Becoming aware of the challenges, helps to uncover the building stones for this bridge: Trust, a mutual language through which they can effectively communicate with one another, knowing who you want to reach for what, and so on.

Create an intervention that allows **members of LIFE consortium** to **together explore and reflect** on the challenges of citizen participation in renewable energy projects, in a **fun and airy** way, to **enhance the understanding** of the challenges

Design Process

The choice to create a workshop was quickly made. It enables a transfer of knowledge in a controlled way. The facilitator designs the materials used during the workshop and can lead the discussions participants have. It is a safe and concluded environment to explore together such a complex and broad topic.

The book 'Road Map for Creative Problem Solving Techniques' by Katrina Heijne and Han van der Meer (2019) provides a clear structure for creative workshops, including a list of session duties. This given structure formed the basis for the workshop designed for this graduation project. The creative activities described in this book, served as an inspiration for several exercises in the workshop.

The ideas for the different parts of the workshop emerged in several individual and group brainstorm sessions based on a couple of design questions. After developing these ideas into exercises, these were discussed with (ex-)IDE students and others, who provided feedback.

The workshop was tested and iterated twice, based on the evaluation with the participants. Further development ideas were formulated as design recommendations.

Workshop

Overall information



Goal of the workshop

The workshop helps the participants to understand the challenges there are for citizen participation in complex (renewable energy) projects. They learn how participation processes can fail and which questions they should find the answer to in their own project, before starting to involve residents in the project.



Duration of the workshop

Around 2 hours and 15 minutes, including a 10-15 minute break.



Participants

Suitable for 4 to 7 participants, who want to know about the challenges they can face when organising participatory processes. The group can be composed of people from the (LIFE) project. For extra insights and a refreshing perspective, a wild goose (someone who knows nothing or less about the topic or the specific project) or an external expert (someone with an expertise that not directly relates to the topic or project, but can give interesting input) can be brought to the group too.



Location

The workshop is designed to be done offline. With the digitalisation of the materials and the change of the exercise 'step in the mind of.', it can also be conducted in an online environment such as Miro.



Materials

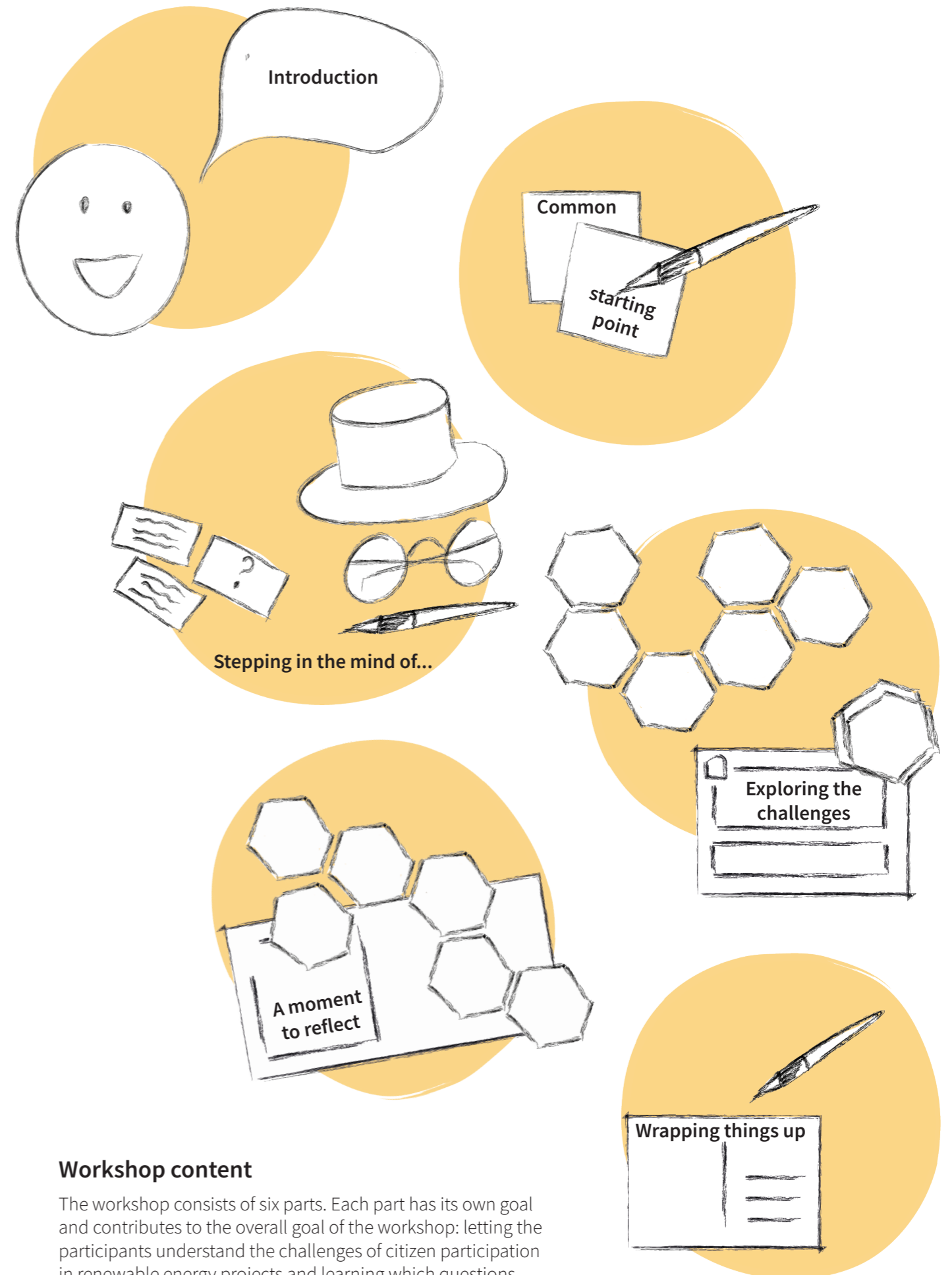
There are specially designed materials for each part of the workshop. Some materials are used during the whole workshop, such as pens and post-its. Cookies were provided to the participants as a snack and thank you.



Instructions

Instructions for the workshop are included in the workshop materials to provide people who want to conduct the workshop with all the information they need. Besides, the instructions and workshop materials can serve as an inspiration when project members want to design a workshop themselves.

The instructions are bundled in a small zine, with one page for each exercise and one page for general instructions. When the zine is unfolded, a large image becomes visible.



Workshop content

The workshop consists of six parts. Each part has its own goal and contributes to the overall goal of the workshop: letting the participants understand the challenges of citizen participation in renewable energy projects and learning which questions they should ask themselves when organising participation in the future.

Introduction

10 minutes

Goal

Everyone should feel comfortable to participate in the session, and the topic and practicalities of the workshop should be explained.

What

The introduction is designed to introduce the participants to each other and the goal and topic of the workshop. It depends on the group of participants to what extent 'participation' needs to be explained. At the end of the introduction, the expectations for the workshop are set, by explaining the agenda and the rules of conduct.

The goal of the workshop is shortly explained: "Participation is important if you want to design a product that fits the needs and desires of the target group. However, there are many ways how participation can go wrong. This can harm citizens who were supposed to be empowered. Therefore, we will explore the ways in which participation can fail, to uncover the challenges we might face. This is a safe environment where we can explore these failures, so in real life the designed participatory process will be a success."

Letting the participants introduce themselves to each other, can be done in various ways. The chosen exercise in this workshop was to tell your name, where you are from and what your expectations are for the day. The facilitator starts to set the example.

Why

Participants should speak out in front of the group as early on in the workshop as possible, to minimize the threshold to do so later on in discussions. An introduction provides this opportunity. Knowing something about each other, helps the participants to feel comfortable in the group and will positively contribute to the overall atmosphere. The expectations (workshop goal and agenda), need to be set at the beginning of the workshop, so everyone knows what they can expect.

Materials

The agenda and rules of conduct written somewhere all participants can see during the workshop, whiteboard/flipover chart

Link to results

Not everyone is as familiar with the topic participation, therefore it is useful to have a short introduction at the beginning.

Alternatives

Alternatives for introducing yourself to each other: draw a self-portrait with something specific for you and introduce yourself as that. Or draw a portrait of the one sitting next to you, without looking at your paper and ask some questions while doing so, then shortly introduce each other to the rest of the group.

AGENDA

- * Introduction
- * Common starting point
- * Step in the mind of...
- * Exploring the challenges

Break

- * A moment to reflect
- * Wrapping things up

The end

CODE OF CONDUCT

- * Engage in the workshop
- * Inside in, outside out
- * Acknowledge the team effort
- * Have fun!!

Common starting point

18 minutes

Goal

To get rid of all the first thoughts and assumptions on participation and create a mutual understanding of (failed) participation.

What

First, the participants do a purge; they write or draw all their thoughts, associations and assumptions on (failed) participation on post-its. While the facilitator categorises these on a flip over, the participants read through the post-its and write more thoughts and associations down. The facilitator talks the participants through the clusters and asks them to write down a definition for failed participation. After everyone shared their definition, the facilitator creates one overarching definition and asks whether everyone agrees.

Why

For participants to be able to open their mind for new ideas and perspectives in the next exercises in the workshop, it is important to become aware of their biases and assumptions around participation (Birt, 2021). Writing these down, also clears their mind and creates room for new ideas.

Materials

Post-its, pens, flip over chart

Link to results

There are different understandings of various terms within LIFE project. To enable a common starting point for the rest of this workshop, all participants should have a mutual understanding of the concept (failed) participation.

Alternatives

Hidden Presumptions (was taken out after the pilot test): can help to find out what the common features are of the assumptions.





Step in the mind of...

25 minutes

Goal

Make participants aware of the fact there are other perspectives on participation than their own and let them uncover the first challenges.

What

The participants crawl into the minds of other people involved in participatory processes, through a roleplay. They get to either play a role or be the observer of the situation. Two volunteers who wish to act, receive a card which describes their role and goal. Some attributes can help them to emerge in their role. The observers are given another card with one question to focus on while looking at the play. Next, the facilitator outlines the context and the actors can start. After a few minutes, the play is stopped and the whole group discusses what happened, what they saw, how they interpreted the situation and what the actors felt. This leads to a couple of challenges, which are documented by the facilitator. The roleplay can be repeated with new actors, new prompts and shuffled observer questions.

Why

The roleplay sensitizes the participants to the fact there are multiple perspectives on participation they might not be aware of. They can experience how people with a different role in participatory processes than themselves, can have a very different experience. Considering participation from a different perspective, helps the participants towards an open mindset (Birt, 2021) which is favourable for the next exercise.

Materials

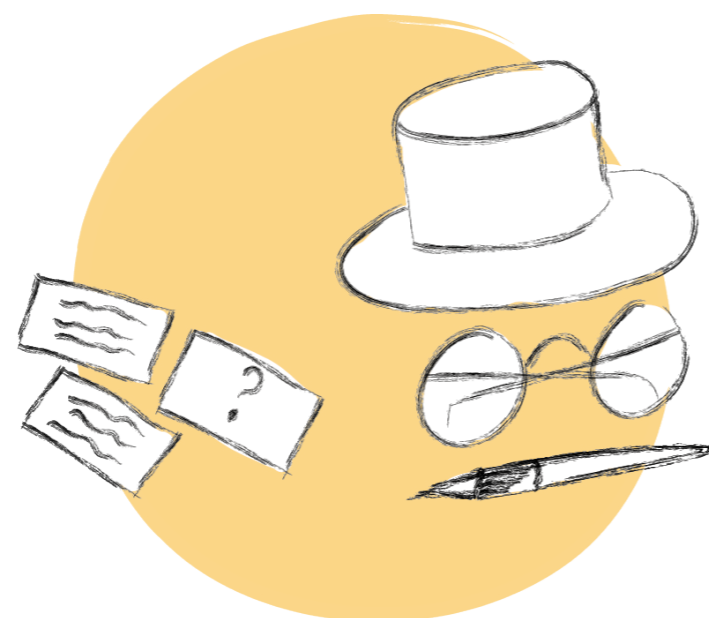
Prompt cards for the actors, cards that describe a situation, reflective questions for the observers and a template to collect the reflections.

Link to results

From literature research and observations at LIFE project, it became clear that not everyone is aware of the fact there are challenges for participation, neither that there are very different experiences of participatory processes. This exercise helps them to start seeing that. The roleplay might especially be suitable to uncover challenges regarding the way researchers approach residents and the way citizens perceive researchers.

Alternatives

The *Guided Fantasy* is an alternative for an online version of the workshop, but serves the same goal. This requires the participants to turn to their own imagination, rather than doing an awkward roleplay through a screen. The facilitator leads them through a story about a situation including participation from the view of a resident. At certain moments during the story, a question is asked to let the participant reflect on how the imagined situation makes them feel or how they would react. At the end of the story, the participants are brought back to the present and they note their thoughts and feelings. Following, the group reflects collectively and tries to identify the challenges for participation.



After the first evaluation...
Props were added to the roleplay, to help participants empathise with their character.

reflection	How might the researcher feel in this situation?	How is the interaction between both going?
What do you feel by looking at this situation?	How might the resident feel in this situation?	After the first evaluation... The reflective questions that were asked after the play, were written on individual cards and were given to the observers to focus on whilst watching the roleplay.

citizen	You not speak much Dutch/English, but have decided to join the participatory activity that was organised in the neighbourhood anyway. Your goal is to express your thoughts to the researcher.	You are a single parent working multiple jobs to afford to feed your children. This month the energy bill rose another €130. You are anxious about getting through the month and ashamed for the fact you are struggling to keep your household running. Do you want to talk about this?
----------------	--	--

researcher	Ask a citizen about their thoughts of setting up a communal energypark in their neighbourhood. It will cost citizens a small investment. You are convinced this is a great opportunity, they will benefit from. Find out how much they can afford.	You are researcher at the participatory activity and want to find out residents think about buying and selling energy to your neighbours.
-------------------	--	---

After the first evaluation...
The prompts cards were revised and a goal was added for both the citizen and researcher card.

situation	A researcher set up a participatory activity at the local community centre.	After the second evaluation... The situation card was updated, with more context about the situation, location etc. of the scene.
	Citizen, you are walking in your own neighbourhood, when someone you don't recognize comes up to you.	After the second evaluation... The situation card was updated, with more context about the situation, location etc. of the scene.

Exploring the challenges

40 minutes

Goal

The participants explore the (sub)challenges, that are a result of this graduation project, through discussion and finding new perspectives.

What

Specially made cards navigate the participants through the different challenge spaces. The challenges on the cards are formulated as open questions, but do contain some keywords that lead the participants in a certain direction. The questions and the accompanying illustrations, that provide an extra layer to the card, provoke an active discussion in which the participants are engaged. The challenge explanation is written on the back of the cards. Main thoughts, new perspectives and other ideas that come up during the discussions, can be collected on a special template. There are some empty challenge cards too, in case participants identify new challenges.

There are five challenge spaces which can be explored. These all contain two or more challenges and four of the challenge spaces also contain sub challenges. One of the challenge spaces is about participation in general and addresses four aspects of participation found in literature, which are important to consider when organising a participatory process. The other four challenge spaces regard the results from the ethnographic research.

The shape of the cards indicates that the challenges are connected to each other and invites participants to find out how. The colours of the cards show to which challenge space they belong. Some fit in multiple spaces. The borders of the card make clear whether it is a challenge (thick border) or a sub challenge (thin border).

The cards can be used in several ways that became clear after evaluation of the second workshop. The initial use was as follows: The participants choose a challenge direction they want to explore. The facilitator lays the first card on the table, after which the participants start to discuss. Main thoughts on the question can be collected on a special template. When the flow of the discussion drops, the facilitator can lay a new challenge on the table the participants can discuss. This goes on until all the questions in this challenge space have been discussed. The cards in combination with a template, can also be used to create a pathway towards the design of a participatory



process. The template leaves room for the participants to document the questions they need to answer as a project and to create an order in which the challenges should be addressed within the project. Another way to use the cards is to use them as a discussion starter only. This might be suitable for a group which is already familiar with the topic. This leaves room for further and deeper exploration, to touch upon new challenges or find new things to research.

Why

This exercise activates the participants to think about these challenges and the different perspectives. The questions evoke discussions amongst the participants, which increases the understanding of the challenges much more than handing out the explanation of the challenges would do. An understanding of the challenges provides a good starting point for the reflection that follows this exercise.

Materials

Illustrated cards with a challenge formulated as a question on one side and the explanation of the challenge on the other side. Post-its, pens, and templates to write the conclusions on and collect the post-its.

Link to results

This exercise lets participants of the workshop explore the challenges that were identified in the research. The challenges were rewritten to questions, to trigger the participants' thoughts. On the back of the card is the explanation of the challenges, which can also be found in the results. The connections between the challenges have been visualised through the design of the cards.

Alternatives

Several other structures to explore the challenges were

considered. E.g. Participants look at visualisations of the challenge spaces and are asked to discuss what they see and find out what the challenges are in this context. Or: Participants are asked to finish unfinished drawings of different challenges. Question cards can help them complete the drawings. An addition for the current exercise can be to assign participants to a (stakeholder)role they should play in the discussion to help them think from another perspective. Last, templates can be added to help participants map out the challenges in different ways.



Figure 24: Identified challenge spaces



Figure 25: The network of the challenge cards, frontside

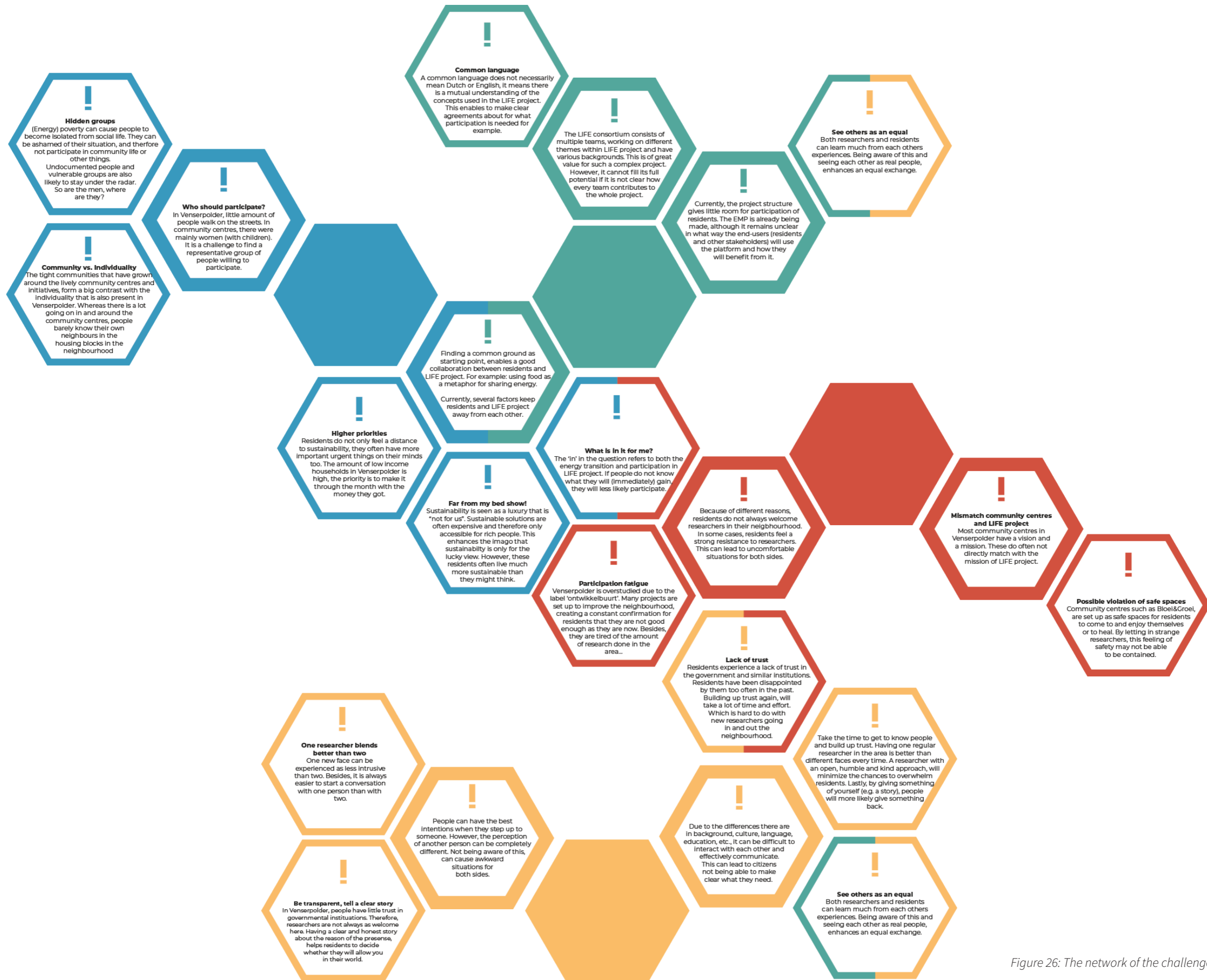


Figure 26: The network of the challenge cards, backside



Figure 27: Challenge cards regarding participation

A moment to reflect

17 minutes

Goal

To let participants find out which challenges are most relevant to the project at this point and which questions are therefore important to ask themselves.

What

After the exploration, the cards can be flipped to read the explanation of the challenge. The participants discuss which challenges are most important for the project to tackle now and which questions they can ask themselves to help them tackle these challenges. The cards regarding the four aspects of participation (breadth, depth, object, space and time) can be used to help the participants reflect.

A poster template that provides questions, helps the participants to reflect. First, they find out which questions LIFE project should ask themselves, then they can order the challenges from most relevant, to least relevant to tackle now.

Why

The reflection helps the participants to link the explored challenges back to the LIFE project and to find out which challenges are important to address.

Materials

Proceed with the cards from the exploration. Turn them around to find the explanation of the challenges. A poster template and pens to document the findings.

Link to results

Research on the LIFE project showed that only part of the consortium was aware of (part of) the challenges. For participation to be well-organised and designed, it is important that there is room within the project for participation. This means that all members should at least be aware of the fact that (well organised) participation is of value for the project. Following, all parties within the consortium can do something about that (leave room for participation, think about which decisions they need residents' opinion on, and so on).

Alternatives

Make a poster about the challenges relevant for LIFE project in a timeline, stick coloured dots on the challenges that represent who/what/why/when and where.

If there is a large group (6 or 7), the group can be split in half, each group can explore one area and reflect on it by making a poster about which challenge is most relevant to the project according to them. And answer some questions about object, depth, breadth, space and time of the participation.



Wrapping things up

10 minutes

Goal

To conclude what the participants have done during the workshop and give them a take-away from the session.

What

The facilitator concludes the session by quickly going through the key points of the workshop and what future steps were identified in the reflection. Next, the participants can write their main take-away of the workshop on a postcard, which can be sent to someone who should know about the workshop too or they can keep it to hang above their desk.

Why

The participants have discussed much during the workshop. Concluding the main topics and key findings helps the participants to remember these. Participants know what the next steps are, so they can take action after the workshop.

Materials

One postcard for each participant with a question on it to reflect on the workshop. The other side of the card is one of the drawings from the workshop.

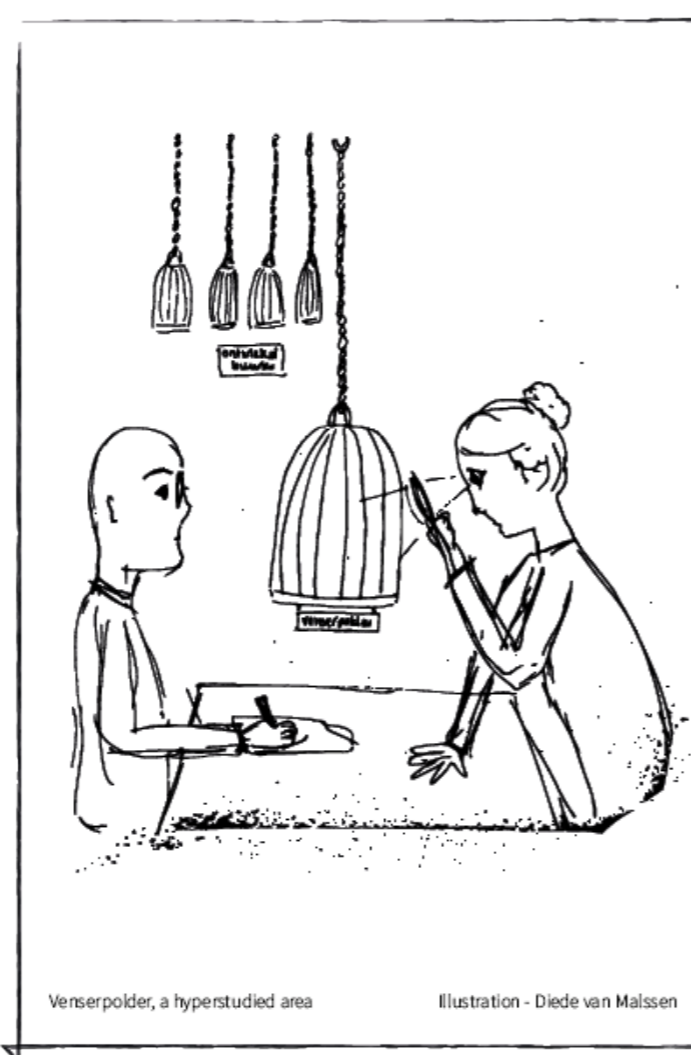
Link to results

One of the identified challenges is "What is in it for me?". The wrap-up reminds the participants what is in the workshop for them and it provides them with a small gift to remind them of the workshop.

Alternatives

Make a poster about the future steps.

After the first evaluation...
The facilitator sums up the key points instead of the group as a whole



After the second evaluation...
The back of the postcard is illustrated with the challenges to emphasize the take-aways. These are two examples of drawings that can be used.

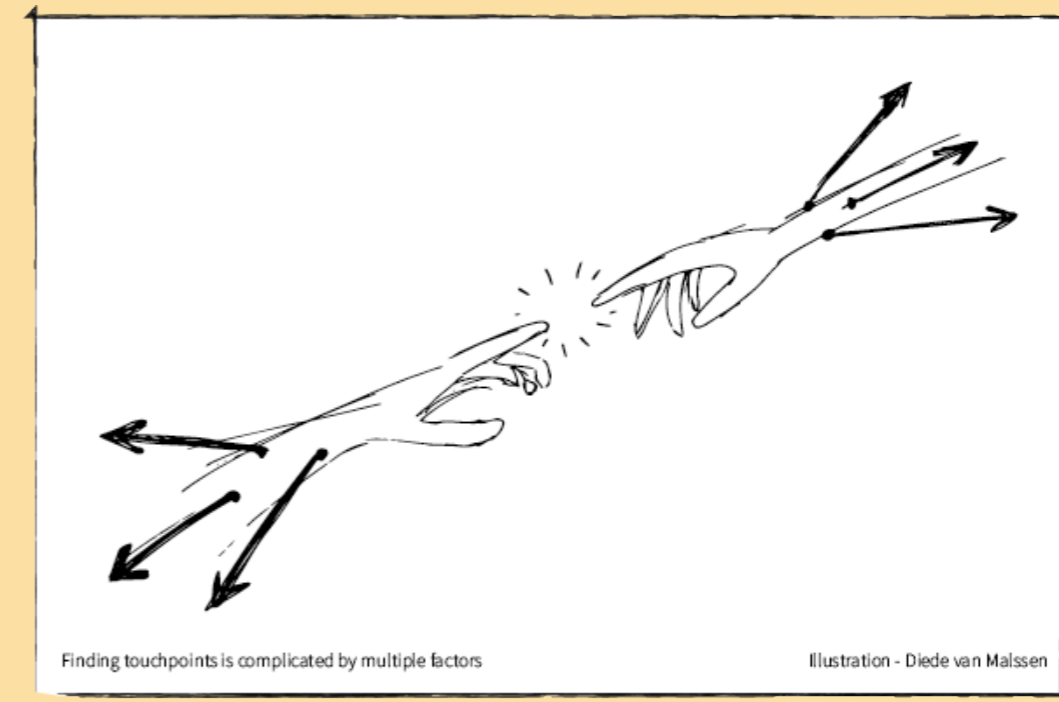
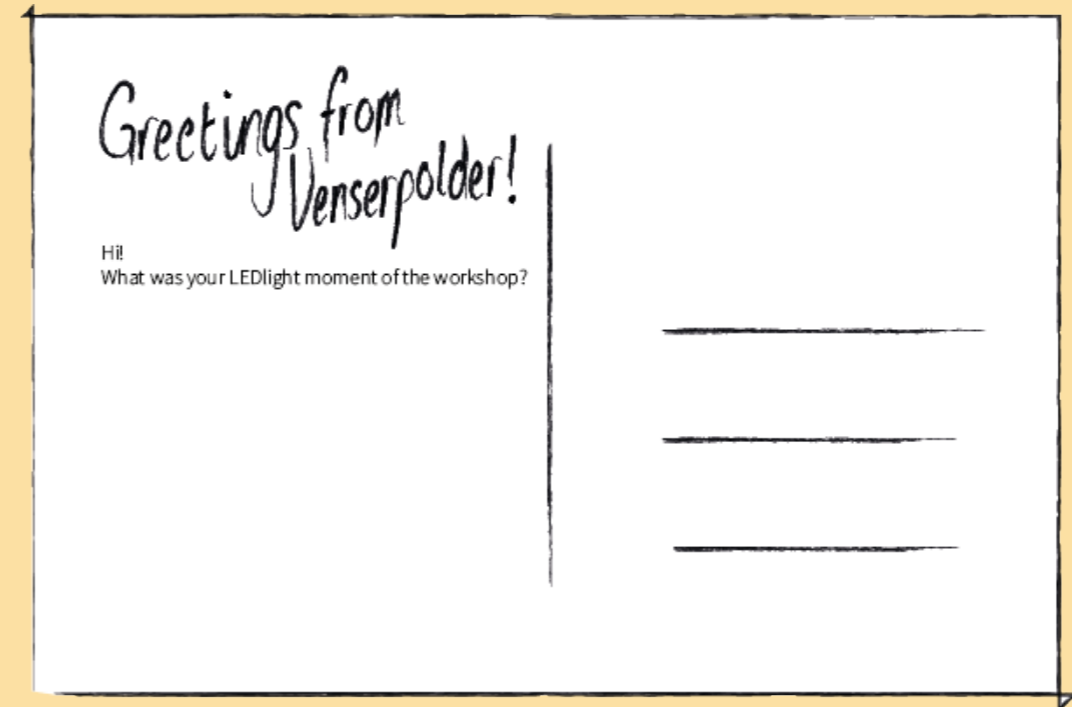


Figure 28: Examples of postcard

Evaluation

The workshop was evaluated through two tests; a pilot test with people from the faculty of Industrial Design Engineering and a test with members of LIFE consortium.

Evaluation method

The tests were evaluated in three different ways: with the participants, through a written auto-ethnographic report of the session and an evaluation of the workshop recordings. The recordings (which were made with permission of the participants) were transcribed for quotes. In the pilot test there was a live feedback session with the participants right after the workshop. The second test was individually evaluated by participants through a google forms during the week after the workshop and one elaborated evaluation session with one of the participants.

W = workshop recordings

E = Ethnographic report

F = Feedback of Participants



Criteria

The workshops were qualitatively evaluated based on several criteria, which were derived from the design goal. The evaluation of the pilot workshop was more focussed on the practical side of the workshop, how the materials contribute to the discussions. The evaluation of the workshop with members from LIFE project team was focussed on the content of the discussions and the outcomes. The criteria were as follows:

- Exploration of the challenges: To what extent did the participants explore the challenges? (W, E)
- Reflection on the challenges: To what extent do the participants relate the challenges to the LIFE project? (W, E)
- Collaboration between the participants: Do the participants make use of each other's knowledge and experience to come to the outcomes of the workshop? (W, E)

- Enhanced understanding of the challenges: To what extent is the understanding of the challenges enhanced during the workshop? (F)
- Vibe: Is the overall vibe as intended (fun and airy)? (W, E, F)

Besides the content of the workshop, the materials and the practical part was tested too:

- Time: Is the time given to the different parts sufficient to reach the goal of the part? (W)
- Instructions: Are the instructions during the workshop clear to the participants? (W, F)
- Materials: Do the materials contribute to the success of the session? (W, E, F)
 - Do the materials speak for themselves?

Pilot workshop

Monday 30th January 2023
5 participants from the faculty Industrial Design Engineering
Studio 1, IDE, Delft

LIFE workshop

Tuesday 7th February 2023
7 participants from LIFE consortium
AMS Institue, Amsterdam



Figure 29: Pictures of the workshop tests

1 | Exploration

The roleplay and the questions on the challenge cards did lead the participants to discussing the challenges that were used as a starting point for these exercises. However, the discussions stayed very much on topic and therefore remaining somewhat superficial. The facilitator could have asked further questions to encourage the participants to find deeper layers of these challenges.

It seemed to be unclear where these explorations would lead to. Knowing this, will probably give the participants more direction and incentive to dive deeper into the challenges.

Interesting discussions during the roleplay (LIFE workshop recordings, 2023)

About how to build a relationship with participants and how good salespersons make people happy with their purchases. The researcher should give citizens a good reason to participate.

“On the one hand, you don’t want to assume that your participants are also doing that and everyone has the same ideas that you have. And so everyone will join. But also you can’t just be like give you some money or something to participate, that makes it too transactional. So it’s something in between” “It’s like what you said before, yeah I am actually here for the cake”

Interesting discussions during the exploration (LIFE workshop recordings, 2023)

Who should take the responsibility for the energy transition? Not the people who did not cause it. “I do think that the burden shouldn’t fall on communities that didn’t cause the problems. . . so why am I in it now when it come to have to solve it?” “If you look at neighbourhoods in ZuidOost, they are extremely sustainable. They hardly ever travel, they spend very little money on their energy bill, because they can’t afford it. . . So they’re already living extremely sustainable, so why should we tell them they have to participate in this type of project?”

“SouthEast are a lot of small villages” How do these connect to eachother? “Not a very strong connection in the neighbourhood” “So a question could be how can we connect those villages?” “Just being the infrastructure we connected is different, because I could socially be in my own bubble. And because that’s my safe space. But then infrastructure, be sure I’m connected on the grid to a couple of spaces. So let’s say you are physically connected, but if you want to become a community, then you need to be socially connected.”

The exploration of the challenges already started during the purge on (failed) participation in the ‘common starting point’ exercise. Six themes came out of this purge. Some concerning a definition (1), others concerning challenges (4, 5), some defining failed participation (3, 6), what participation can bring (7) and who organises it (2).

The roleplay helped the participants much more than expected. They emerged into their roles very well, which let them feel and experience the challenges I have previously experienced while in Venserpolder. After the play, the actors immediately started reflecting. It was interesting to see how their perspective had shifted to how the situation was experienced by the resident and how it could be improved for them. The observers were given one aspect to reflect on, enabling a more complete reflection on the roleplay. The participants identified five challenges and discussed some interesting topics.

The roles in the roleplay and the questions in the challenge card were formulated as ‘the researcher’ and ‘the resident’. To me it was a way to distinguish two possible roles in participation: The organising

side and the participating side. This was not perfectly clear, as the participants implied that the challenges might be different from the perspective of a different organising role (LIFE workshop elaborated feedback, 2023).

The questions on the challenge cards were mainly used as a starting point for discussion in the exploration phase. The conversations went beyond the initial challenge, but were still connected to it. This shows that the participants explored on a deeper level than only the challenges identified in this research and were able to understand the complexity of the subject.

It can be concluded that especially the roleplay worked well for the group to gain a new perspective on participation. The challenge cards were good conversation starters, from which this group was able to move forward from. For groups that might be less informed over the topic, the cards might give more guidance.

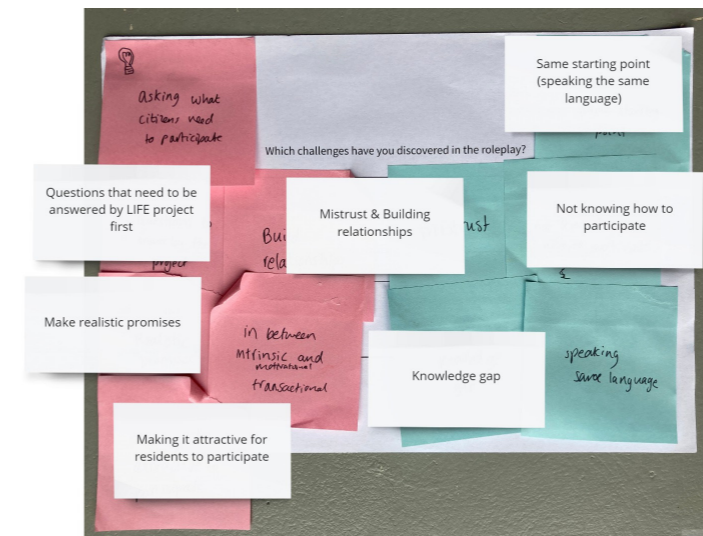


Figure 30: Outcomes roleplay

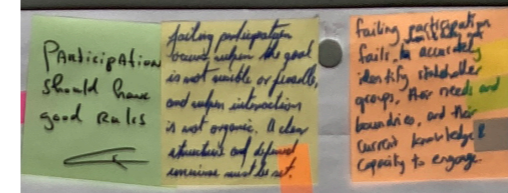
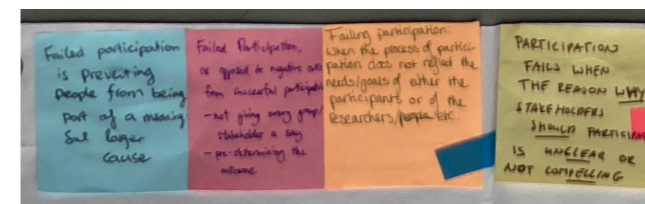


Figure 32: Definitions of (failed) participation by the participants



Figure 31: Outcomes purge

Criteria

2 | Reflection

Pilot workshop

Three of the five participants have their own experience working on the LIFE project and therefore it was easy for them to see how these challenges fit in the LIFE project. They identified a huge amount of questions and challenges that LIFE should answer before engaging with residents. They were very aware of the complexity of the project and these challenges too. The emphasis on failed participation was good, however the participants thought it was beneficial to end the workshop positive by looking at what already is going well in the project and which future steps can be taken towards successful participation.

Questions that came up while reading the explanations on the cards (LIFE workshop recordings, 2023)

Who takes the decisions regarding participation?

Who do we want to participate?

Order of the challenges (LIFE workshop recordings, 2023)

The most important challenge was: Finding touchpoints. If that is solved, then they could start looking at where to find hidden people.

3 | Collaboration

The contribution to the workshop was divided fairly even over the participants. The participants with more affinity to the LIFE project were more talkative. However, when asking one of the other participants about their thoughts, they gave considerate input. Having a wild goose in the group, someone who was not familiar with the topic, gave a refreshing perspective on the topic and asked questions about things that seemed more obvious for participants who were familiar with LIFE project. This helped them to reflect on these topics and explain them to the wild goose.

LIFE workshop

Although the *moment to reflect* was only short, the participants were already reflecting on the challenges and the connection to LIFE project whilst the exploring. This started already during the roleplay. The discussions concerned Amsterdam SouthEast, where LIFE project is located. They questioned residents' responsibility in the energy transition and therefore they questioned the need of their participation (LIFE workshop recordings, 2023).

In the reflection at the end of the workshop, the participants discussed which challenges are relevant to tackle and in which order this should take place.

The connection of the challenges to LIFE project was very clear. "Which challenge is most relevant for LIFE to first tackle?" "All of them" – participant 1, very

fast participant 2 said "I would want to say this one [touchpoints], because I feel like the rest will follow from that one. The others are all social challenges" "But also this one, what is in it for me?" – participant 3. "I think it is very much about starting the conversation. I think by having the right touchpoints, at least you can start the conversation. Then you can connect the dots until you have something to present and to show" – participant 4 (LIFE workshop recordings, 2023).

The postcard helped to reflect on the workshop itself and describe a main learning to take home with them.

The group of seven participants was quite large, which made it difficult for each participant to contribute as much as the other. This was especially the case during group discussions in the exploration and reflection exercise. Some people have a natural preponderance in discussions or have more experience or knowledge about the topic than others.

During the discussion exercises, it might have helped to divide the group into two smaller groups and bring them back together afterwards. This gives more people the opportunity to participate in the discussions, which will lead to a richer outcome.

The collaboration overall was good, however in the discussion could have been better by dividing the group in two.



Figure 33: Pictures of the LIFE workshop

Criteria

Pilot workshop

4 | Understanding

The understanding of the challenges rose strongly during the workshop. The roleplay played an important role in raising awareness and the exploration and the reflection helped to gain more understanding. For some, there was a small dip in the exploration, which can be due to some confusion around all these challenges.

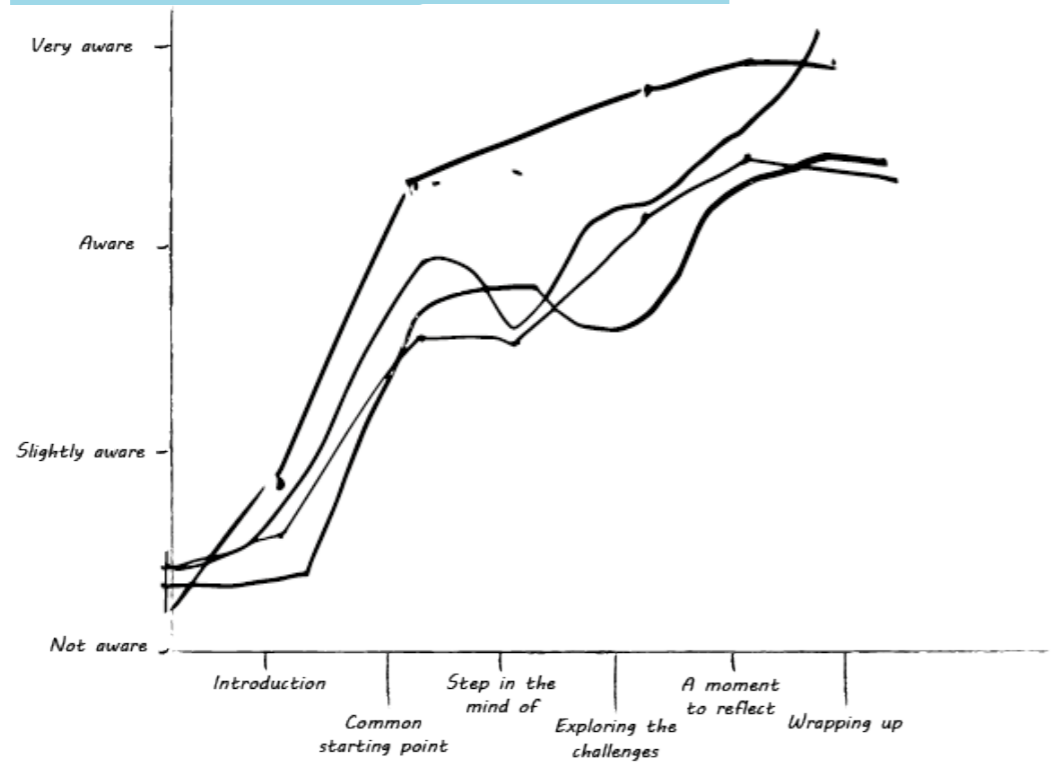


Figure 34: Participants drew their awareness of the challenges over time

5 | Vibe

The participants experienced the workshop to be a safe space where they could openly speak about the topic. The vibe during the workshop was fairly calm. Here and there one of the participants made a comment that made the others laugh. These comments instantly softened the seriousness of the moment and lightened up the conversation afterwards. Having someone in the group that can provide these refreshing moments, is very valuable for the vibe. In this case this was someone that was not familiar with the LIFE project and participation before the workshop.

The vibe was not extremely fun, but rather calm and comfortable. The jokes and random comments in between made the participants more relaxed and the conversations lighter.



LIFE workshop

The roleplay helped the participants to become aware of the experience of citizens in a participatory context: "I think it made it easier to think from the perspective of the citizen" – Participant (LIFE workshop feedback, 2023) "This part was closer to real life and human behaviour beyond a theoretical approach" – Participant (LIFE workshop feedback, 2023). Through analysis of the discussed content and the outcomes, it became clear there was an enhanced understanding of the challenges. The participants had identified a core challenge¹ for their project to first focus on, from which the other challenges² would follow. The in-

depth discussions which emerged further than only the questions on the challenge card, demonstrated a deeper understanding of how the challenges are connected to each other, the project and society.

- 1: Finding the touchpoints between LIFE project and residents' lives
- 2: Defining what residents can get out of participation and finding a representative group of people

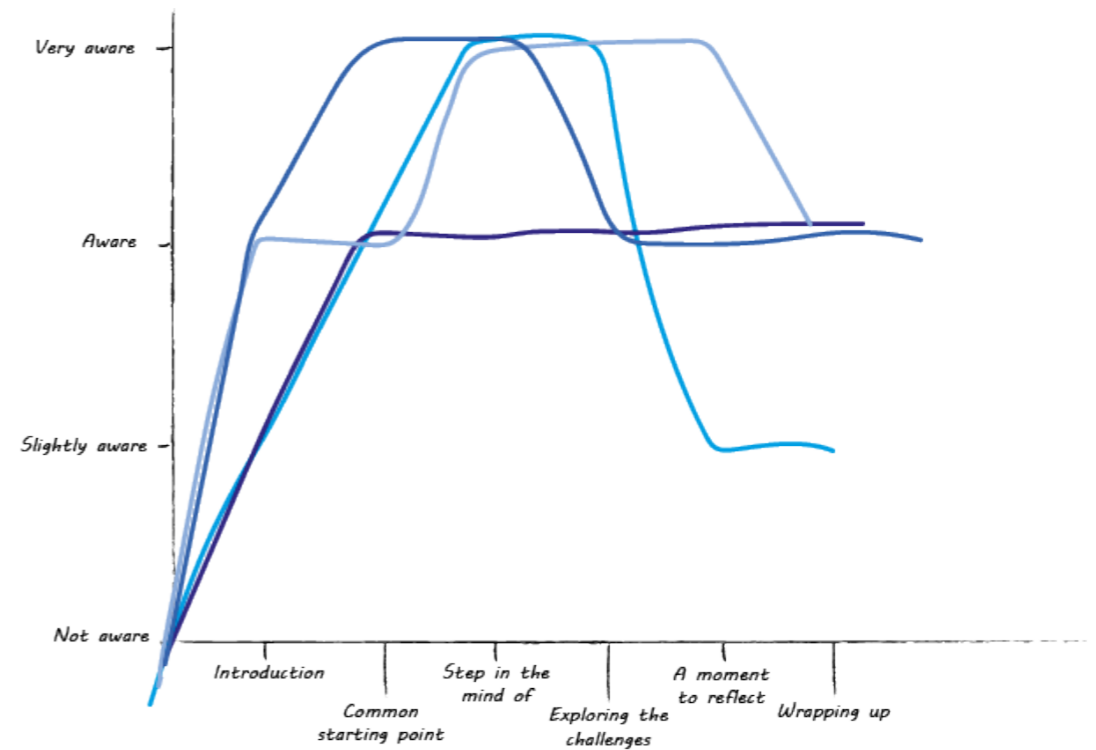


Figure 35: Participants drew their awareness of the challenges in the different parts of the workshop

It was a beautiful sunny afternoon and everyone seemed to be happy and motivated to join the workshop. Throughout the workshop, the participants had casual and fun interactions with each other and they laughed regularly. This contributed to the comfort the participants felt to give their honest opinion (LIFE workshop feedback, 2023). They respected each other and had an open mind for different thoughts and opinions, which they listened and reacted to.

According to participants' feedback, they experienced the vibe as positive, good, energetic and constructive (LIFE workshop feedback, 2023). According to the observations and the personal reflection, casual, loose and fun, are also words to describe the vibe.

Some aspects might have contributed to this experience: the sun was shining, the atmosphere of the room was pleasant, there was enough fresh air and the participants were more activated by frequently standing up and moving during the workshop, which is good for the activation of the brains. Besides, the roleplay exercise was a good way for the participants to loosen up.

"It was great! It was really creative! Some good ideas and conversations!" – Participant after the workshop (LIFE workshop observation, 2023).

Criteria

6 | Time

First indicated durations:

Introduction – 10 minutes

Common starting point – 10 min

Step in the mind of – 20 minutes

Exploring the challenges – 45 minutes

A moment to reflect – 15 minutes

Wrapping up – 10 minutes

7 | Instructions

8 | Materials

Pilot workshop

Introduction – 6 minutes

Common starting point – 20 minutes

Step in the mind of – 18 minutes

Exploring the challenges – 26 minutes

A moment to reflect – 11 minutes

Wrapping up – 15 minutes

Break – 15 minutes

The instructions were not always clear to the participants. The steps were explained, but the goal was not always clear. In some exercises, the facilitator was also still looking for the right way to explain and lead the exercises. This was adjusted for the second workshop.

Feedback on the materials is taken into account in the iterated version that is tested in the second workshop.

LIFE workshop

Introduction – 8 minutes

Common starting point – 21 minutes

Step in the mind of – 32 minutes

Exploring the challenges – 42 minutes

A moment to reflect – 11 minutes

Wrapping up – 5 minutes

Break – 0 minutes

Due to a time limit, some exercises were shorter than they might have been without the limit. The final time indications have been based on both sessions.

This time, the facilitator brought more structure to the workshop by starting each part with a clear explanation of the goal and all the steps of an exercise. Before it started, any remaining questions were answered. This gave the participants the tools to do the exercise.

In the introduction the facilitator explained why they would look at the failures of participation, in order to find out what is important to consider when the wish is to design a good participatory project.

The materials for the roleplay worked well; the formulations on the cards were clear and the observer questions helped to focus on one aspect. The props were a great addition for the actors to climb in their role.

The participants did not naturally connect the challenge cards to each other, although the form was designed to give that incentive. However, after seeing three or more connected cards, it did become clear that they can form a chain. "Aahh so we're making like a chain here!" – Participant (LIFE workshop recordings, 2023).

The questions and explanations were clearly formulated. The illustrations were a bit too small for everyone to clearly see, therefore it lacked the power they could have had (LIFE workshop feedback, 2023).

The postcards that were used during the wrap-up were a nice take-away of the workshop.

Additional changes

Besides the adjustments that have been made to the design according to the evaluation, there are some last design recommendations that require more time to implement and test:

Add illustrations

The challenge cards now only have illustrations on the question side, however, an illustration accompanying the explanation might enhance the understanding of the challenge.

The prompts cards for the roleplay exercise now consist of only text, but illustrations of the character and its emotions might help the actors to get into their roles.

Another use of illustrations

While the illustrations of the challenges might really help the participants to understand and further explore the challenges, the cards and therefore the pictures on it, are rather small and make it difficult for all participants to see. It is recommended to further explore how the illustrations can be presented to the group, to really help them explore these challenges. An idea is to exhibit large prints of the images illustrating the main challenges in the workshop room.

Let participants draw

The workshop can be made more creative by encouraging the participants to draw instead of writing. A short drawing exercise can ease them into the right mood. For example: instead of an introduction round, participants take one minute to draw the person next to them and ask them a few questions while doing so. After that one minute, they introduce their neighbour to the group.

Use templates

In the reflection phase, a poster can be used to find out which questions LIFE need to ask themselves and how the challenges are ordered from most relevant and important to tackle now, to less relevant and less important to tackle now.

Add symbols

A small symbol on the challenge card can show to which aspect of participation the challenge is related. This makes it easier for participants to reflect.

Conclusion

Overall, the workshop has reached its goal.

Exploration of the challenges

The participants did a broad exploration of the challenges. They went beyond the presented challenges and explored new and deeper levels. The exercises helped them to see other perspectives and come to new insights.

Reflection on the challenges

The participants connected the challenges to each other and to the LIFE project. They identified what is relevant to research now. Next steps were clear, how to exactly take these next steps, remained more abstract.

Collaboration between the participants

The participants all contributed to the workshop, one more than the other. Splitting the group in two, might enhance a more equal participation.

Enhanced understanding of the challenges

It can be concluded that the participants had a better understanding of the challenges after the workshop.

Vibe

The vibe was loose and casual, with room for laughs.

Time

It depends on the group how much time exercises exactly take, for a larger and more talkative group, more time is desirable. The first indicated duration of the exercises were a good indication.

Instructions

The instructions during the workshop were clear, the participants understood what they had to do. The exploration part regarded some extra explanations. Some parts can be more emphasized, such as the workshop goal at the start of the session.

Materials

The roleplay, reflection and wrap-up materials were very clear. The challenge cards were multi interpretable in the way of use. However, all materials contributed to the workshop goal.

Sir

Concluding the report

This chapter concludes this graduation project with recommendations for future research and design projects, an idea spread for the challenges and my reflection on this whole graduation journey.

Discussion

The ethnographic research was performed between February 2022 and June 2022, a much shorter period than common for this type of research. This short period reduced the opportunity of bonding with residents in this highly over-studied neighbourhood. Longer presence improves relationships with residents, which might have enabled me to gain a deeper understanding of the challenges and the reasons behind them. It is likely there are even more challenges and challenge directions than those in the four categories I identified. Besides, the categorisation of these challenges is subjective, there is a big chance that others would have categorised them differently. I did so too.

This research is based on qualitative data from multiple field studies. Ethnographic research stands on personal observations, interpretations and experience, especially if it involves auto-ethnography and is conducted by a novice ethnography researcher. First, this made me sceptical about the reliability of the results. However, the observations and interpretations were always questioned by fellow ethnography team members and the complete set of data was analysed, making it possible to identify several themes. Part of the results were backed with literature. Besides, I have learnt to trust my own observations and sensitivity to situations.

To transfer the learnings from the ethnographic research to the LIFE project team, a workshop was designed. Since there was half a year between the ethnographic research from February to June 2022 and the final workshop in February 2023, during which time I hardly worked in Amsterdam, I was slightly worried the created workshop was no longer relevant to the project. However, the evaluation test of the workshop with members of LIFE project proved otherwise. The team members might have even been more sensitised to the challenges over time, by the stories that were previously told about our experiences in Venserpolder.

This workshop can be reused to train more members of the LIFE project in order to improve participation of residents in the use and implementation of the energy management platform. The workshop is suitable for similar projects too.

Conclusion

The initial aim of this project, as described in the project brief, consisted of three layers. The theoretical layer defined the term ‘inclusion’ in the LIFE project based on literature. The empirical layer concerned the identification of groups in Venserpolder who are vulnerable to exclusion of the energy transition and exploration of the potential role of community centres for the inclusion of these people. In the practical layer tools were (co-)designed to enable a bottom-up inclusive design process of the energy management platform.

The ethnographic research showed that there are several challenges before a successful participatory process can be executed. The focus of this thesis shifted to identifying these challenges and transferring that knowledge to the LIFE consortium. This shift illustrates how the ethnography method requires researchers to stay open minded to what they come across. Although the research questions were reformulated, the results still provide some answers for the initial questions. For example, social dynamics of Venserpolder, such as the large contrast between the tight community life around the community centres and the individuality in the neighbourhood, can explain which people are more difficult to find and recruit for participation.

The research questions were reformulated but still connect to the ones in the project brief. What are the challenges to participation, what are the challenges in the design process of the energy management platform, what can LIFE project learn from community centres in Venserpolder and how can members of LIFE consortium be made aware of the challenges.

Nine challenges with sub-challenges have been found. The community centres have taught us much about the way residents (do not) participate in their community. These learnings have been transferred to LIFE project.

The results of this work, meeting the reformulated goals, form an important step towards the original goal. Next steps can be made using the materials I created.

Research & Design recommendations

During the project, many interesting side roads for research and design showed up. Unfortunately, these were not relevant to this project or executable in the time that stood for the project. Now this thesis research is completed, these might be interesting starting points for other (graduate) students or researchers to work on:

Tackling the challenges

Nine challenges to citizen participation in renewable energy projects were identified. During the final workshop, some of these challenges were ranked from most relevant to least relevant for the LIFE project at this point. The most important challenge was to “Find the touchpoint between residents’ lives and LIFE project”. Nevertheless, the other challenges also form incentives for future research.

The experience of energy

One approach to find touchpoints, can be to investigate how residents experience energy in their daily lives. This can be used to discover how residents might use an energy management platform and what they would need the EMP to have.

“Talk about energy, without talking about energy”

Another approach to find touchpoints, can be to explore how LIFE project members should speak to residents of Venserpolder about the project, regardless of the technical perspective. Energy is an abstract topic and therefore stands further away from people. However, energy concerns us all and therefore it is interesting to find out which tools can be used. Are these tools for example metaphors?

How do people use energy?

Different creative interventions can be used to research peoples use of energy in their homes. An example: Create a model home in which people can

live for a day, while their behaviour is observed and tracked. This could provide some insightful data.

Answering questions

Several questions remain unanswered in this thesis, mainly regarding how LIFE project would like to shape their participatory processes. Finding out which teams within LIFE might benefit from citizen participation, how that contributes to the project as a whole and how residents can benefit from it, can take the project a step forward.

Make the value of the energy transition tangible

Another remaining question is what residents can gain from the energy transition and their participation. The value of being part of this transition, should be made more visible and tangible for the residents, to enhance their motivation to participate. With storytelling residents can be engaged and show them the benefits of the energy transition.

Explore with the workshop materials

The workshop has been created to explore the challenges and find new challenges or perspectives and discover what makes them challenges. I recommend further using it, to enhance the understanding of these challenges and find inspirations on how to tackle these.

Carefully prepare participation!

Whenever the LIFE project is ready to bring in residents, carefully consider the different dimensions of participation and take these with you while preparing the participatory processes.

Personal reflection

Over the past year, I have learnt much from doing this graduation project. To stay in theme, I will discuss the challenges that I faced and have overcome and some challenges that are still left to work on.

I have overcome some challenges of my own:

- I have learned how to better deal with stress before meetings and calm down and have more trust in myself and what I am doing. I now much better know when to take some time for myself. Taking a month off during the summer, has really helped me to relax. When I came back, my mind was fresh again and I saw my project in a new perspective. I had a better overview of what was relevant and what not. Just a reminder that taking a break is important.
- I took a step forward in accepting 'failures' and really seeing it as lessons for the future.
- I have learned how I can use my sensitivity to the world around me, as a power. It has helped me through various situations during my field work. I can trust on my intuition.
- I have learned about approaching other people and really putting ALL assumptions aside. I see every person as a person who has a story to tell. This ethnographic research changed the way I see the world around me. I was already a very curious person, but it took away the assumptions and lets me focus on positive things in people. My perspective has shifted.
- My writing has improved but can still do better. I already knew just do it, write small parts, rewrite, etc, but the mental barrier kept me from doing it. Nearing the end, when I much better new what to write and I had done some practice, this barrier was less present.
- I find it challenging to communicate the insights I found to my supervisory team and the LIFE project. It took some time, but in the end through the workshop the insights were clear. I really had to challenge myself in taking a step back and communicate what was already so clear in my own head, to others.
- I am very interested in many different things, but in the end I did manage to focus on one thing and finish it.

I still have some challenges left

- I am not great at making decisions, this personality is a challenge in my whole life. Yet again, I experienced this in the project, when postponing choices. I thought the writing would help me choose. It did a little, but not what I was hoping for. My perfectionism and fear of failure and perfectionism certainly don't help with that.
- Fail often, fail fast. Testing solutions for the design was a hurdle. Although I put myself out there during my ethnographic research and as a student working in the LIFE consortium, experiencing different things, I still have not learned to fully accept failing. This kept me back mainly in the design part, when I was working on the workshop. I could not 'fail fast and fail often', although Bregje told me to do so multiple times. Still too much perfectionism and maybe some fear of failure in my, although I KNOW that you learn from your failures and it can be something to build on.
- Asking for help is a big challenge. I do not really ask for it often, I expect that I need to figure things out by myself. I want to be independent. The challenge for me is to reach out more and check more often with my supervisors whether I am in the right direction I should challenge myself to show my progress and ask if I need anything.
- Time blindness is also a personality trait. This makes time management a bigger challenge to me. The type of research (ethnography) might have not been super beneficial for the time management of this project. In ethnography, you will just have to see what happens and where it takes you. Looking back, also a lot of pushing forward and postponing choices.

Literature references

A

02025. (n.d.). Energiecommissarissen. 02025.nl. Retrieved February 17, 2023, from <https://02025.nl/energie-commissarissen>

Aanpak van energiearmoede in Amsterdam. (2022, February 16). !WOON. Retrieved June 27, 2022, from <https://www.wooninfo.nl/nieuws/2021/12/aanpak-van-energiearmoede-in-amsterdam/>

Amsterdam. (2023, February 17). Gebiedsmakelaars. Amsterdam.nl. <https://www.amsterdam.nl/bestuur-organisatie/gebiedsgericht-werken/gebiedsmakelaars/>

Amsterdam Zuidoost. (2019, January 10). I Amsterdam. Retrieved July 11, 2022, from <https://www.iamsterdam.com/nl/in-en-om-amsterdam/zuidoost/%7E:text=In%20Zuidoost%20wonen%20mensen%20met,%20lang%20onderdeel%20van%20Amsterdam.>

Arnstein, S. R. (2019). A Ladder of Citizen Participation. *Journal of the American Planning Association*, 85(1), 24–34. <https://doi.org/10.1080/01944363.2018.1559388>

B

Birt, J. (2021, April 26). 10 Steps To Become More Open-Minded. Indeed. Retrieved February 1, 2023, from <https://www.indeed.com/career-advice/career-development/open-minded>

Bloei&Groei. (2022a, March 10). Tuinen. Bloei & Groei. Retrieved June 28, 2022, from <https://www.bloeiengroei.org/tuinen/#healing##>

Bloei&Groei. (2022b, June 7). Over Bloei&Groei. Bloei & Groei. Retrieved June 28, 2022, from <https://www.bloeiengroei.org/over-bloei-groei/>

Breed, M., & Van Marle, F. (2022, January 17). Bewoners aandachtswijken voelen zich klein gehouden door onderzoekers en beleidsmakers. *Www.SocialeVraagstukken.Nl*. Retrieved September 15, 2022, from <https://www.socialevraagstukken.nl/bewoners-aandachtswijken-voelen-zich-klein-gehouden-door-onderzoekers-en-beleidsmakers/>

Brinck, T. T. (2021, April 4). Transitie in de jaren '60 als voorbeeld voor ons afscheid van aardgas - Duurzaam energienieuws, WattisDuurzaam.nl. Nieuws, Informatie En Opinie Over Innovatie, Duurzaam Ondernemen En Hernieuwbare Energie. Retrieved May 30, 2022, from

<https://www.wattisduurzaam.nl/33866/featured/transitie-in-de-jaren-60-als-voorbeeld-voor-ons-afschied-van-aardgas/>

Brodie, E., Cowling, E., Nissen, N., Paine, A. E., Jochum, V., & Warburton, D. (2009). Understanding participation: A literature review. In *involve.org.uk*. Retrieved October 10, 2022, from <https://involve.org.uk/sites/default/files/field/attachemnt/Pathways-literature-review-final-version.pdf>

Brush, K. (2020, February 14). use case. *SearchSoftwareQuality*. Retrieved July 12, 2022, from <https://www.techtarget.com/searchsoftwarequality/definition/use-case>

Budiman, I. (2018). Enabling Community Participation for Social Innovation in the Energy Sector. *Indonesian Journal of Energy*, 1(2). <https://doi.org/10.33116/ije.v1i2.23>

Buurtsalon Zuidoost. (2021, July 7). Home. Retrieved June 10, 2022, from <https://www.buurtsalonzuidoost.nl/>

Buurtsalon Zuidoost. (2022, March 30). Programma. Retrieved June 10, 2022, from <https://www.buurtsalonzuidoost.nl/programma/>

C

Carpini, M. X. D., Cook, F. L., & Jacobs, L. R. (2004). PUBLIC DELIBERATION, DISCURSIVE PARTICIPATION, AND CITIZEN ENGAGEMENT: A Review of the Empirical Literature. *Annual Review of Political Science*, 7(1), 315–344. <https://doi.org/10.1146/annurev.polisci.7.121003.091630>

Chilvers, J., Pallett, H., & Hargreaves, T. (2018). Ecologies of participation in socio-technical change: The case of energy system transitions. *Energy Research & Social Science*, 42, 199–210. <https://doi.org/10.1016/j.erss.2018.03.020>

County, A. B. (2021, August 5). Defining: Equity, Equality and Justice | Achieve Brown County. Achieve Brown County |. Retrieved May 23, 2022, from <https://achievebrowncounty.org/2021/05/defining-equity-equality-and-justice/>

D

Davies, L. (2017, December 21). Types and alternative sources of renewable energy. EDF. Retrieved January

15, 2023, from <https://www.edfenergy.com/for-home/energywise/renewable-energy-sources>
Dayenne Tempo kwam binnen als cliënt bij een buurtwerkkamer. (2018, November 3). [Video]. YouTube. <https://www.youtube.com/watch?v=ho5-3ieiVBg&t=29s>

De Breed, E. (2019, January 1). De Vrouwen van Venserpolder [Video]. HUMAN. <https://www.human.nl/vrouwen-van-venserpolder/lees/over-de-film.html>

De Grip, F. (2022, April 22). Energiearmoede in Amsterdam 2021 | Website Onderzoek en Statistiek. Onderzoek Amsterdam. Retrieved June 27, 2022, from <https://onderzoek.amsterdam.nl/publicatie/energiearmoede-in-amsterdam-2021>

De Grip, F., & Booi, H. (2021, July 20). Van de Amsterdamse huishoudens kampt 11 procent met energiearmoede. *Openresearch.Amsterdam*. Retrieved June 27, 2022, from <https://openresearch.amsterdam.nl/page/73040/van-de-amsterdamse-huishoudens-kampt-11-procent-met-energiearmoede>

De kern. (2019, November 6). BuurtWerkKamerCoöperatie. Retrieved June 23, 2022, from <https://www.buurtwerkkamer.nl/de-kern/>

Denshire, S. (2014). On auto-ethnography. *Current Sociology*, 62(6), 831–850. <https://doi.org/10.1177/0011392114533339>

Donut Deals – Groene Hub. (2022). Retrieved February 11, 2023, from <https://groenehub.org/donut-deals/>

E

Eberson, D. (2017). 360participation - » Models of participation. 360participation.com. Retrieved December 1, 2022, from <https://360participation.com/models-of-participation/>

Energie Participatie (Ed.). (2022, August 17). Gelderse Inspiratielunch Burgerberaad: 'Al doende leren we.' *Energieparticipatie.nl - Dé Leeromgeving Voor Participatie Bij Duurzaam Opwekken*. Retrieved November 1, 2022, from <https://www.energieparticipatie.nl/community/praktijkverhalen/gelderse-inspiratielunch-burgerberaad-al-doende-leren-we>

Ernst, A., & Fuchs, D. (2022). Power dynamics, shifting roles, and learning: Exploring key actors in participation processes in the German energy transformation (Energiewende). *Energy Research & Social Science*, 85, 102420. <https://doi.org/10.1016/j.erss.2021.102420>

Eyssen, I. C., Steultjens, M. P., Dekker, J., & Terwee, C. B. (2011). A Systematic Review of Instruments Assessing Participation: Challenges in Defining Participation. *Archives of Physical Medicine and Rehabilitation*, 92(6), 983–997. <https://doi.org/10.1016/j.apmr.2011.01.006>

F

Feldhoff, T. (2016). Asset-based community development in the energy sector: energy and regional policy lessons from community power in Japan. *International Planning Studies*, 21(3), 261–277. <https://doi.org/10.1080/13563475.2016.1185939>

Fielding, N. G., Lee, R. M., & Blank, G. (2016). *The SAGE Handbook of Online Research Methods*. SAGE Publications. https://books.google.nl/books?hl=en&lr=&id=EeMKURpicCgC&oi=fnd&pg=PA257&dq=virtual+ethnography+sage&ots=3AP-0vkD2bY&sig=FM0sZmky5zKoaSli7JyYCsUf2Y&redir_esc=y#v=onepage&q=virtual%20ethnography%20sage&f=false

Framework for Innovation: Design Council's evolved Double Diamond. (2022, June 8). Design Council. Retrieved July 8, 2022, from <https://www.designcouncil.org.uk/our-work/skills-learning/tools-frameworks/framework-for-innovation-design-councils-evolved-double-diamond/>

G

Gemeente Amsterdam. (2018). Venserpolder. In <https://plygrnd.city/storage/file/a7b63c40-b21f-401c-8f8d-ae46d68405d/ANALYSE-2018.pdf>. Retrieved September 15, 2022, from <https://plygrnd.city/storage/file/a7b63c40-b21f-401c-8f8d-ae46d68405d/ANALYSE-2018.pdf>

Gemeente Amsterdam. (2020). Principenota Venserpolder. https://openresearch.amsterdam/image/2021/1/29/verkenning_van_kansen_stadsdeel_zuidoost.pdf

Gemeente Amsterdam - Onderzoek, Informatie en Statistiek. (2022). Gebiedsindelingen. maps.amsterdam.nl. Retrieved July 12, 2022, from <https://maps.amsterdam.nl/gebiedsindeling/?LANG=nl&C=52.348344,%204.886856&Z=12&T=1&L=8&K=>

H

Harman, G. (2021, August 25). Your brain on climate change: why the threat produces apathy, not action. *The Guardian*. Retrieved July 4, 2022, from <https://www.theguardian.com/sustainable-business/2014/nov/10/brain-climate-change-science-psychology-environment-elections>

Hart, R. A. (1992). Children's Participation: From Tokenism to Citizenship. *Innocenti Essays*, 4. https://www.unicef-irc.org/publications/pdf/childrens_participation.pdf

Heffernan, K. J. (2019, August 21). Design Thinking 101 — The Double Diamond Approach (Part II of II). *Medium*. Retrieved July 8, 2022, from <https://medium.com/seek-blog/design-thinking-101-the-double-diamond-approach-ii-4c0ce62f64c7>

Heijne, K., & Van der Meer, H. (2019). Road Map for Creative Problem Solving Techniques: Organizing and facilitating group sessions. Amsterdam University Press.

Het Parool. (2022, December 31). Onze Taal kiest 'energiearmoede' als woord van het jaar. *Het Parool*. Retrieved January 16, 2023, from <https://www.parool.nl/nederland/onze-taal-kiest-energiearmoede-als-woord-van-het-jaar~bc00f5f7/?referrer=https%3A%2F%2Fwww.google.com%2F>

Hielscher, S., Wittmayer, J., Rogge, K., Isakandarova, M., Parrish, B., Vernay, A. L., & Buccolini, B. (2021). SONNET – Social Innovation in Energy Transitions: Co-creating a rich understanding of the diversity, processes, contributions, success and future potentials of social innovation in the energy sector. *In sonnet-energy.eu*. University of Sussex (SPRU). Retrieved October 10, 2022, from https://sonnet-energy.eu/wp-content/uploads/2022/01/SONNET_D3_3-CASE_COMPARISON_SUBMITTED_v1_0_20211130.pdf

Hossain, M. Z., & Rahman, M. M. (2020). Climate change vulnerability and resilience of urban poor in Khulna, Bangladesh: the role of asset-based community development approach. *International Journal of Urban Sustainable Development*, 13(2), 131–147. <https://doi.org/10.1080/19463138.2020.1828891>

I Informatie buurt Venserpolder Oost. (2022, June 22). *AlleCijfers.nl*. Retrieved June 28, 2022, from <https://allecijfers.nl/buurt/venserpolder-west-amsterdam/#:%7E:text=Het%20aantal%20inwoners%20in%20de,januari%20in%20het%20bevolkingsregister%20vastgelegd.>

Informatie buurt Venserpolder West. (2022, June 22). *AlleCijfers.nl*. Retrieved June 28, 2022, from <https://allecijfers.nl/buurt/venserpolder-west-amsterdam/#:%7E:text=Het%20aantal%20inwoners%20in%20de,januari%20in%20het%20bevolkingsregister%20vastgelegd.>

International Energy Agency (Ed.). (2021, July 15). Global electricity demand is growing faster than renewables, driving strong increase in generation from fossil fuels - News. IEA. Retrieved January 10, 2023, from <https://www.iea.org/news/global-electricity-demand-is-growing-faster-than-renewables-driving-strong-increase-in-generation-from-fossil-fuels>

K Khindri, D. (2022, October 11). How to Do Ethnographic Research: The 8-Step Process. *Insights - Web and Mobile Development Services and Solutions*. Retrieved January 10, 2023, from <https://www.netsolutions.com/insights/how-to-do-ethnographic-research/>

Kijkje achter schermen bij BuurtWerkKamers. (2018, November 21). [Video]. YouTube. <https://www.youtube.com/watch?v=ODsCgE94O-c&t=174s>

Kretzmann, J. P., & McKnight, J. A. (1996). Assets-based community development. *National Civic Review*, 85(4), 23–29. <https://doi.org/10.1002/ncr.4100850405>

Kusi, N. (2022, November 18). Arnstein's Ladder of Citizen Participation explained. Retrieved November 5, 2022, from <https://www.commonplace.is/blog/arnsteins-ladder-of-citizens-participation-explained>

L Lipiec, M. (2022, January 17). Beyond the Double Diamond: thinking about a better design process model. *Medium*. Retrieved July 8, 2022, from <https://uxdesign.cc/beyond-the-double-diamond-thinking-about-a-better-design-process-model-de4fdb-902cf>

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, 137–144. <https://doi.org/10.1016/j.erss.2019.03.006>

Livecast Pakhuis de Zwijger. (2021, June 29). Groene Transitie #14: De sociale rekening van de energietransitie [Video]. Pakhuis De Zwijger. <https://dezwijger.nl/programma/de-sociale-rekening-van-de-energietransitie>

M Macbeth, S. (n.d.). Levels of Participation | Participatory Methods. *participatorymethods.org*. Retrieved November 1, 2022, from <https://www.participatorymethods.org/method/levels-participation>

Marijnissen, H. (2018, September 7). Een groene toekomst is er alleen voor de rijken: de eco-elite. *Trouw*. Retrieved May 24, 2022, from <https://www.trouw.nl/duurzaamheid-natuur/een-groene-toekomst-is-er-alleen-voor-de-rijken-de-eco-elite~b4847e15/?referrer=https%3A%2F%2Fdezwijger.nl%2F>

Mathie, A., & Cunningham, G. (2003). From clients to citizens: Asset-based Community Development as a strategy for community-driven development. *Development in Practice*, 13(5), 474–486. <https://doi.org/10.1080/0961452032000125857>

Milikowski, F. (2021). *Wij zijn de stad* (Druk 2). Uitgeverij Pluim.

Morales-Guerrero, J., & Karwat, D. (2020). Visualizing Energy Participation: A Method for Practitioners and Researchers. *Energy Research & Social Science*, 66, 101496. <https://doi.org/10.1016/j.erss.2020.101496>

Mouter, N., Shortall, R. M., Spruit, S. L., & Itten, A. V. (2021). Including young people, cutting time and producing useful outcomes: Participatory value evaluation as a new practice of public participation in the Dutch energy transition. *Energy Research & Social Science*, 75, 101965. <https://doi.org/10.1016/j.erss.2021.101965>

Multibron. (2021, November 5). BuurtWerkKamer-Coöperatie. Retrieved March 3, 2022, from <https://www.buurtwerkkamer.nl/buurtwerkkamers/multibron-is-een-van-de-buurtwerkkamers-in-amsterdam-zuidoost/>

N NASA. (2022). The Causes of Climate Change. *Climate Change: Vital Signs of the Planet*. Retrieved July 4, 2022, from <https://climate.nasa.gov/causes/#:%7E:text=In%20Brief%3A,planet%20toward%20a%20cooling%20period.>

Nawaz, M., Veldman, E., & Nienhuis, A. (2021). *Visie Amsterdam Zuidoost Energieneutraal 2040 - editie 2021*. *openresearch.amsterdam*. <https://openresearch.amsterdam/nl/page/72690/visie-amsterdam-zuidoost-energieneutraal-2040---editie-2021#:~:text=Het%20bestuur%20van%20zowel%20Amsterdam,-de%20ambities%20uit%20het%20coalitieakkoord.>

NOS. (2023, January 27). Meer energiewaarde, maar compensatiemaatregelen hebben erger voorkomen. *NOS.nl*. Retrieved January 27, 2023, from <https://nos.nl/artikel/2461476-meer-energiearmoede-maar-compensatiemaatregelen-hebben-erger-voorkomen>

P participate. (2023). *In The Merriam-Webster.com Dictionary*. <https://www.merriam-webster.com/dictionary/participating>
Participation. (2019, June 19). *involve.org.uk*. Retrieved October 10, 2022, from <https://involve.org.uk/resources/knowledge-base/what/participation>
Pester, P. (2021, December 12). When did scientists first warn humanity about climate change? *livescience.com*. Retrieved July 4, 2022, from <https://www.livescience.com/humans-first-warned-about-climate-change>

R redactie openresearch.amsterdam. (2021). Masterplan ZuidOost programma 2021 - 2040. https://zoo-zuidoost.nl/wp-content/uploads/2021/05/ZO-Zuid-oost-Masterplan_final-2021-2040.pdf

Reeves, S., Kuper, A., & Hodges, B. D. (2008). Qualitative research methodologies: ethnography. *BMJ*, 337(aug07 3), a1020–a1020. <https://doi.org/10.1136/bmj.a1020>

Ryghaug, M., Skjølsvold, T. M., & Heidenreich, S. (2018). Creating energy citizenship through material participation. *Social Studies of Science*, 48(2), 283–303. <https://doi.org/10.1177/0306312718770286>

S Schwarz, L. (2020). Empowered but powerless? Reassessing the citizens' power dynamics of the German energy transition. *Energy Research & Social Science*, 63, 101405. <https://doi.org/10.1016/j.erss.2019.101405>

Sen, A. (2000). Social exclusion: concept, application, and scrutiny. *Asian Development Bank*, 1. <https://www.adb.org/sites/default/files/publication/29778/social-exclusion.pdf>

Shapiro, H. T. (1990). The Willingness to Risk Failure. *Science*, 250(4981), 609–609. <https://doi.org/10.1126/science.250.4981.609>

Sijbesma, F. (2020, February 6). Our minds are wired to fear only short-term threats. We need to escape this trap. *World Economic Forum*. Retrieved January 15, 2023, from <https://www.weforum.org/agenda/2016/06/how-to-thrive-with-long-term-solutions-for-the-fourth-industrial-revolution/>

Silverman, R. M. (2005). Caught in the Middle: Community Development Corporations (CDCs) and the Conflict between Grassroots and Instrumental Forms of Citizen Participation. *Community Development*, 36(2), 35–51. <https://doi.org/10.1080/15575330509490174>

Silverman, R., Patterson, K., & Taylor, H. (2011). Including voices of the excluded: Lessons from Buffalo, NY [Pdf]. In *Deliberations in Community Development: Balancing on the Edge* (pp. 61–86).

Sloot, D., Lehmann, N., & Ardone, A. (2022). Explaining and promoting participation in demand response programs: The role of rational and moral motivations among German energy consumers. *Energy Research & Social Science*, 84, 102431. <https://doi.org/10.1016/j.erss.2021.102431>

SparkNotes Editors. (2005a). Political Culture and Public Opinion: Political Participation. SparkNotes. Retrieved October 25, 2022, from <https://www.sparknotes.com/us-government-and-politics/political-science/political-culture-and-public-opinion/section4/>

SparkNotes Editors. (2005b). U.S. Government and Politics Glossary: Glossary of Terms in U.S. Government & Politics. SparkNotes. Retrieved November 3, 2022, from <https://www.sparknotes.com/us-government-and-politics/glossary/terms/>

Stadelmann-Steffen, I., & Dermont, C. (2021). Acceptance through inclusion? Political and economic participation and the acceptance of local renewable energy projects in Switzerland. *Energy Research & Social Science*, 71, 101818. <https://doi.org/10.1016/j.erss.2020.101818>

T
The Double Diamond model: what is it and should you use it? (2018, December 18). *justinmind.com*. Retrieved July 8, 2022, from <https://www.justinmind.com/blog/double-diamond-model-what-is-should-you-use/>

Timmermans, R. (2022, July 26). Energietransitie: Hoe participatie de gemeente hierbij kan ondersteunen. *Gemeentepeiler*. Retrieved January 21, 2023, from <https://www.gemeentepeiler.nl/energietransitie/>

Tisdall, E. K. M. (2013). [The Transformation of Participation? Exploring the Potential of 'Transformative Participation' for Theory and Practice around Children and Young People's Participation. *Global Studies of Childhood*, 3(2), 183–193. <https://doi.org/10.2304/gsch.2013.3.2.183>

TNO. (2020). Energy poverty and the energy transition. <https://www.tno.nl/en/about-tno/news/2020/11/energy-poverty-and-the-energy-transition/>

U
UCD - University College Dublin [universitycollege-dublin]. (2014, April 24). On how I approach strangers in the street | Humans of New York creator Brandon Stanton | UCD, Dublin [Video]. YouTube. <https://www.youtube.com/watch?v=KPxzIGPrM3A>

Upham, D. P., Sovacool, P. B., & Ghosh, D. B. (2022). Just transitions for industrial decarbonisation: A framework for innovation, participation, and justice. *Renewable and Sustainable Energy Reviews*, 167, 112699. <https://doi.org/10.1016/j.rser.2022.112699>

V
Van Aanholt, J., Bakker, I., Ekkel, D., Heijkers, B., Heijne, D., Van den Hende, H., Jansen, E., De Kreek, M., Lankester, W., Nijkamp, J., Notten, N., Renders, C. M., Ruiten, C. A., Walraven, G., & Wilderink, L. (2021). PARTICIPATIEMOE(D) (G. Helleman, S. Majoor, G. J. Peek, & H. Van der Veen, Eds.). Platform Stad en Wijk. Retrieved October 9, 2022, from <https://sway.office.com/smyJ8icyfLfDmoNa?ref=Link>

Visser, Y. (2021, October 27). Van kolen naar aardgas – De Nederlandse aardgastransitie. *Historiek*. Retrieved May 23, 2022, from <https://historiek.net/van-kolen-naar-aardgas-de-nederlandse-aardgastransitie/142576/>

W
Walter, G. (2014). Determining the local acceptance of wind energy projects in Switzerland: The importance of general attitudes and project characteristics. *Energy Research & Social Science*, 4, 78–88. <https://doi.org/10.1016/j.erss.2014.09.003>

Fieldwork references

Ethnographic research Venserpolder

2, Visit Venserpolder and ArenApoort (2021) – First visit to the area, Venserpolder and ArenApoort, November 2021

3, Visit community centres (2021) – First acquaintance with community centres, Venserpolder, December 2021

4, Conversation Stichting SES (2022) – A scheduled meeting to discuss the volunteer possibilities, Stichting SES, January 2022

5, Volunteering day Bloei&Groei (2022) – Joining the volunteering day, Bloei&Groei, February 2022

6, Volunteering Stichting SES (2022) – Volunteering at the homework support, Stichting SES, February 2022

8, Brainstorm Groene Hub (2022) – First brainstorm for IR panel campaign, Groene Hub, March 2022

9, Visit Bloei&Groei (2022) – Volunteering in the garden, Bloei&Groei, March 2022

10, Visit 't Spinnewiel (2022) – Visiting the coffee hour, 't Spinnewiel, March 2022

13, Mini training Groene Hub (2022) – Mini training about flyering, Groene Hub, April 2022

14, Flyering Groene Hub (2022) – Flyering for the IR panel campaign, Holendrecht, April 2022

16, Flyering Groene Hub (2022) - Flyering for the IR panel campaign, Reigersbos Market and Maldenhof, May 2022

17, Information night Groene Hub (2022) – Information night IR panels, Groene Hub, May 2022

18, Festive opening Groene Hub (2022) – Mini conference and a festive opening of the bio digester, Groene Hub, June 2022

Ethnographic research LIFE project

19, Bikeride Venserpolder (2022) – Presentation in the field by Beaudoin Knaapen during a bike ride through Venserpolder, Amsterdam, July 2022

20, Interview Wouter (2021) – Semi structured interview with Wouter from CoForce, Teams, December 2021

21, Interview Beaudoin (2022) – Semi structured interview with Beaudoin from Stitching !WOON, Teams, January 2022

22, LIFE project consortium meeting (2022) – Consortium meeting at Johan Cruijff ArenaA, March 2022

Evaluation workshop

Pilot workshop feedback (2023) – Live feedback session with participants, pilot workshop, 30th January 2023

Pilot workshop recordings (2023) – Evaluation of the recorded workshop, pilot workshop, 30th January 2023

LIFE workshop elaborated feedback (2023) – Elaborated feedback session with one participant, workshop at LIFE project, 14th February 2023

LIFE workshop feedback (2023) – Participants feedback through google forms, workshop at LIFE project, 7th February 2023

LIFE workshop recordings (2023) – Evaluation of the recorded workshop, LIFE workshop, 7th February 2023