

“No home is the same”

*Domestic energy justice in times of rising prices
and the energy transition in Overvecht, Utrecht*



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Sol Iustitiae Illustra Nos

Photo cover page: Skyline of Overvecht (Job den Heeten/Nikita Bharat)

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Energy comes in many forms. It might be shone upon us directly from the sun or be stored in million-years old fossils. We use it for our washing machine or to heat our house. We use it when we take the stairs or when we stand still in an elevator. We use it to spin our chairs or to turn up the volume when we celebrate. Energy gets us forward, literally. To gain energy, we switch on a light or we eat a sandwich. Energy is essential to our lives. Energy is everywhere, and it's everything.

When performing my thesis research, I found out what a lack of energy can mean to someone. I am grateful for the conversations I had with the residents of Overvecht who told me about the impact of the rising energy prices on their lives. From spontaneous conversations to semi-structured interviews, they gave me valuable insights and shared their lives with me. I am thankful for a lot of organizations as well, who welcomed me at their place and answered to all my curiosity. Special thanks go to Dock, Energie-U, and the Voedselbank, for hosting me and letting me host. Kasper was a great presenter for the event on energy saving and I hope great things will follow. I want to thank all my interlocutors, the Rosas and Mariannes, Mikes and Thomases, Pauls and Samiras, Leilas, Aishas, Ankes, Gerts, Doriens, and everyone else that showed me their perspective on energy and what a lack of it could mean.

On a personal level, I discovered how important energy was to my own life. Thanks to my friends and family for recharging me when I ran out of mental energy and for feeding me when I needed my calories. Thanks to my supervisor Hayal Akarsu for spending her energy on all the useful feedback for this thesis.

After a long journey, I can now finally say I am proud of what I did and that it was worth all the energy.

Table of Content

Acknowledgements	3
Introduction	6
0.1 Why to Study Energy Poverty: Societal and Academic Relevance	10
0.2 How to Study Energy Poverty: Research Questions, Methodology, and Ethics	12
0.2.1 Research question	12
0.2.2 Research population and methods	13
0.2.3 Ethical considerations and positionality	14
0.3 Theoretical framework	15
0.3.1 Energy poverty	16
0.3.2 Poverty traps and intersectionality	17
0.3.3 Energy justice	19
0.4 Thesis outline	20
Chapter 1: Vulnerability to energy poverty	21
1.1 The ‘classic’ triad of energy poverty causes	23
1.1.1 Energetic quality of housing	23
1.1.2 Income	24
1.1.3 High energy prices	26
1.2 Sociodemographic characteristics and poverty traps influencing energy needs and practices	27
1.2.1 Household composition	28
1.2.2 Gender	29
1.2.3 Age and health	29
1.2.4 Cultural background and language proficiency	30
1.3 Concluding remarks	31
Chapter 2: Institutional efforts to alleviate energy poverty	33
2.1 Initiatives for energy poverty alleviation	35
2.1.1 Social work	35
2.1.2 Government-initiated policies	37

2.1.3 Energy coaches, boxes, and workshops	39
2.2 Psychological barriers in reaching out to people in energy poverty	41
2.3 Concluding remarks	44
Chapter 3: The Energy Transition in Overvecht	45
3.1 Energy transition actors	48
3.2 Three tenets of energy justice	50
3.2.1 Distributional justice	50
3.2.2 Procedural justice	53
3.2.3 Recognition justice	56
3.3 Concluding remarks	58
Conclusion	60
Bibliography	62

Introduction

I could hear the uproar in the room as soon as Samira told the group of fourteen elderly Morocco-born Dutch women that I came to their meeting today to talk about the rising energy prices. Gathered in the local library of Overvecht in April 2022, they engaged in a heated debate among each other. It was all in Arabic, which made it impossible for me to understand what they said. One of them made an angry face and swung her walking stick in the air. Samira felt the urge to translate what the woman said in anger: “She’s going to protest against the rising prices!”

Together with a colleague, Samira hosted the group on a weekly basis as a social activity for these women, who generally experienced isolation in society. As social workers, they took up the responsibility to look after these women and help with practical matters such as social life, paperwork, and finances. A few weeks ago, Samira and her colleague had invited an energy coach to the group to raise awareness on energy saving among the women. “But I think they already knew a lot,” Samira told me. “These women live on minimum wage, so they already used the heater economically.” Now, Samira feared their financial leeway was decreasing. “I’m afraid they will get into trouble. But how can we help them? We have nothing to offer.” If they saw someone was in need of more extensive financial or administrative help, Samira and her colleague would redirect her to other social work organizations. There, the women could get help with managing their finances and understanding administrative letters, if necessary in their mother tongue.

The women mentioned that their income, for most of them a government benefit, remained the same while prices kept rising. The phrase that “everything is (more) expensive” was repeated by multiple people. The 50 euros that for most women was their weekly spendable budget, was becoming too little to even do basic groceries. Aisha, a woman who received a benefit for people above state pension age (AOW; Algemene Ouderdomswet), spoke to Samira in Arabic with a worried face. “Aisha says that when she has just been to the market, she thinks she has lost her 50 euros on her way. The bags can’t be that empty!” Aisha, like her neighbors in Overvecht, is having a hard time making ends meet.

Energy prices had increased dramatically in the Netherlands during the past few months and these women were well aware of the everyday effects of skyrocketing energy prices. Leila, the woman on my right, said: “I haven’t put on the heater anymore since February,” as this was the moment the steepest acceleration of price increases took off. Responding to Leila, another woman raised her voice with concern. She was also worried about the energy bill but her kidney disease prevented her from cutting her heating, which could have adverse effects on her health. “Sometimes I use an electric blanket to keep myself warm instead of the heater,” she added to show her economic considerations.

The woman who just angrily put her walking stick in the air told Samira in Arabic that she feared that the situation would get even worse. Samira translated: “She's already collecting candles, for when she does not want to turn on the light anymore.”

Of course, they wanted their house to be renovated, some women say, but as they lived in social renting houses, they could not decide themselves when and how that would happen. Some women had had their house renovated already by their housing corporation in line with the government goals of Overvecht becoming a gas-free neighborhood by 2030; others were still waiting. A woman who wanted to have her bathroom renovated because she was afraid of fungus in relation to her diabetes, heard from her housing corporation they would “do something” about it. “But still nothing concrete has happened.” Having better insulation is certainly welcome, some women said.

A less popular trend, however, was electric cooking, which was now being made mandatory with every renovation by the housing corporations. Samira had told me before that the women preferred gas, as this was seen as necessary for making traditional dishes like tajines. But now, the ones who could still cook on gas also faced problems, but this time due to the rising gas prices.

As soon as I brought up the issue of cooking and baking on gas versus electricity, another chaotic discussion started that was difficult for me to follow as many women switched to Arabic again. Samira explained why the topic evoked such strong emotions: “Cooking and baking are very important in Moroccan culture. We eat warm food three times a day, and baking our own bread is an important part of it.” One of the women said she had already quit baking because of the costs of using the oven. Instead, she now bought ready-made bread from the shop. “But now that is becoming expensive too. So should I then just stop eating?” The women laughed, knowing it was only partly a joke.

This month it was Ramadan. Normally, the women would invite their family over for iftar, to break the fast together after sunset. But now the women discussed whether they still wanted to host it, with the energy prices rising so steeply. One woman did not make any concessions: “Oh no, I'm not going to give up my children and grandchildren for this! Yesterday it was packed at my place.” For others, the dilemma was bigger. Some of the traditional dishes were already ‘off the menu’ because the ingredients and the energy use had become too expensive. In the past, they would carelessly cook for the whole family and heat all rooms of the house, but now many women were in doubt. “It's like the corona lockdowns again,” another woman said. “Then we couldn't invite anybody to our place, now the same is happening again.”

At the end of our talk, I asked the women how they would be helped in their situation. “Energy bills to go down,” one of the women simply answered. “Otherwise, I don’t know how I’ll get by in the long-term. I feel powerless to act.”

Faced with rising prices, the women in Samira’s group all felt a need to change their behavior. They shared specific characteristics with each other, such as their low income, and cultural practices such as baking that created higher general energy demands. Also, individual differences among the women in for example their health influenced the trade-offs they made. They showed a variety of vulnerabilities one can experience regarding their energy use, influencing how well they were able to deal with the rising prices. Samira and other social workers recognized specific needs of this audience, but also experienced limited capacity to act upon them.

The stories of the women in Samira's group do not stand alone. Energy prices have risen at an unprecedented speed since the end of 2021, and accelerated even further when the war in Ukraine began in February 2022. For many households in the Netherlands, this rise meant a doubling of monthly energy bills compared to a year before (CBS 2022). People from different socio-economic backgrounds increasingly perceived a need to cut their energy bills, causing dilemmas in what to do to reduce energy use and how much. As the stories of the women in Samira’s group also show however, this capacity to deal with these circumstances can differ largely depending on personal precondition, such as health, income, and cultural background.

From February to April 2022, when the energy prices reached a record-high peak (CBS 2022), I conducted an ethnographic research in the neighborhood of Overvecht in Utrecht, the Netherlands, on the topic of energy poverty. This concept is applied “when households have insufficient funds to pay for the most basic levels of energy needed to provide them with heating, lighting, cooking, and appliance use” (Boardman 2010 in Thomson et al 2016, 2). In particular, I have looked at the way people of different backgrounds experience both energy poverty and at which individual and institutional opportunities and barriers exist to alleviate their situation.

Overvecht has the lowest average income of the ten districts of Utrecht (Utrecht in Cijfers 2020). Almost one in four Overvechters (23%) live in long-term poverty, which is about

three times the city's average (ibid.). Based on an analysis of local demographic data, Agterbosch et al. (2020) conclude that about 16% of households in Overvecht live in energy poverty, either defined as spending more than 10% of their budget on energy bills or having a 'payment risk', meaning that after paying their energy bills, not enough money remains for other necessities. In the light of the recent rise in energy prices, the scale of the problem is only expected to be growing.

The Utrecht provincial government assigned Overvecht-Noord (North) to be an experimental site (*proeftuin*; Programma Aardgasvrije Wijken n.d.) for the Dutch energy transition in becoming one of the first gas-free neighborhoods by 2024, later complemented with Overvecht-South with target year 2030. In social rent housing in both parts of Overvecht, large-scale renovations are being undertaken for these purposes, while private property owners are encouraged to take action for renovations themselves. Most buildings in Overvecht were built in the 1960s and 1970s, resulting in poor energy quality for many houses. The majority of residences still lack sufficient insulation, significantly affecting the energy use (VNG Realisatie 2020; Mitros, personal communication, 3 May 2022). Those people in rental houses have little influence on or control over the energy label of their houses. Homeowners on the other hand, do not always have sufficient capital to make the investments to undertake necessary renovations (TNO 2020; Agterbosch 2020). And as the stories of Samira's women also show, people's willingness to implement or accept certain measures can differ largely based on their cultural background and individual preferences.

In Overvecht, a large diversity of people lives, with i.a. households of immigrant background, elderly and single-parent families being overrepresented compared to the Utrecht average (De Haan, Scheelbeek and Tromp 2015; Utrecht in Cijfers 2020). These characteristics are positively correlated with poverty statistics in general and influence the way they are vulnerable to circumstances of energy poverty more specifically. The stories of the women in Samira's group show for example how having cultural traditions such as baking, uptaking family duties, having a decreased health, and living from a government benefit, all influence how energy poverty is experienced and combatted.

Building on such stories of energy poverty, this thesis will explore the different vulnerabilities to energy poverty that exist to different groups in Overvecht, at a time of rising energy prices and government-supported efforts for the energy transition. It will map out the barriers people from different social, cultural, educational, and economic

backgrounds experience in effectively dealing with energy poverty. Moreover, it will take a look at the role of government actors, housing corporations and NGOs in efforts regarding the issue. After analyzing general institutional efforts to alleviate energy poverty, the potential chances and challenges of the Dutch energy transition will be looked at in more detail. Using the framework of energy justice (Walker 2009; McCauley et al. 2019), an analysis will be given of what obstacles exist that prevent them to have effect in a 'just' way.

In the following sections, a deeper look will be taken to the academic and societal relevance of this thesis, and its methodology will be explained. In the last part before moving to the ethnographic chapters of this thesis, the concepts of energy poverty and energy justice, and of poverty traps and intersectionality will be explained in the theoretical framework.

0.1 Why to Study Energy Poverty: Societal and Academic Relevance

Since the steep rise in energy prices of winter 2021-2022, energy poverty has been an issue with high political and social stakes in the Netherlands. In December 2021, the Dutch government announced a 200 euros compensation for the increased energy prices for all Dutch households, with 800 euros available for households at a minimum income (NOS 2021a; RTL Nieuws 2022). This was done in addition to a general measure of lowering tax added value on domestic electricity. Whether the current policies by the government would be enough to tackle energy poverty effectively, was however doubted by interest groups such as Milieudefensie (Friends of the Earth Netherlands), FNV (Federation of Dutch Trade Unions) and the Woonbond (Dutch Association of Tenants) (NOS 2021a). So far, the Dutch government had not had policies specifically targeted to address energy poverty, simply categorizing it in general poverty alleviation policy (TNO 2020). In January 2022, a first-ever minister for poverty policy was assigned in the new Dutch government, although critics remain that energy policies and poverty policies are not adjusted enough to each other (SCP 2022).

Simultaneously, shape is given to the Dutch energy transition, the aim of the Dutch national government to have a carbon neutral economy by the year 2050 (Coalitieakkoord 2021). For homeowners and renters, this means a shift towards more energy-efficient housing and

appliances powered by renewable energy. Investments in insulation, gas-free cooking and heating, and in some cases solar panels are incentivized by the government. Although investing in better insulated houses and renewable energy sources is believed to be able to reduce domestic energy costs in the long-term, in the short term they will temporarily increase the energy costs (TNO 2021). This will likely increase the cost of energy for house owners proportionally, making it an important topic of discussion in terms of how the burdens are distributed in society (Milieudefensie 2021). A recent report by TNO, the Dutch Organization for Applied Scientific Research, (2021) stresses the need to find ‘fair’ solutions to the energy transition, with special attention to people in energy poverty and their individual conditions.

Currently, research on the topic of energy poverty is scarce in the Netherlands (TNO 2021). Based on 2019 data, TNO (2021) estimated the number of households experiencing energy poverty at 550,000, or 7% of the national total. They use the definition of a household with low incomes that experience high energy costs compared to income and/or have a house of low energetic quality (e.g., badly insulated) (TNO 2021). In the light of the steep rise in energy prices, this number expectedly has become much higher (ibid.). At this moment, however, no structural monitoring of energy poverty in the Netherlands exists (TNO 2021), in either quantitative or qualitative terms.

In international academics, topics like energy poverty and energy transitions are generally approached from a technocratic point of view. In a review of fifteen years of research in the interdisciplinary field of energy studies, Sovacool (2014) concludes that (qualitative) social sciences have long been underutilized in comparison to ‘hard’ (quantifiable) sciences. For example, net gains of energy projects are expressed in monetary value or kilowatt hours, instead of their meaning to local communities. Instead, Sovacool calls for a more human-centered approach for urgent topics such as the energy transition. Mentioning energy poverty in particular, he stresses the advantages qualitative methods have for expanding our understanding of such issues.

A way in which qualitative research can be particularly of value, is in identifying processes and dynamics that influence the meanings and means people have with regards to their energy situation. Like the example of the women in the introduction of this thesis showed, having worries about the energy bill can affect one's life in a variety of ways, and different people react differently to conditions of energy poverty. Having disadvantageous

pre-conditions makes people both more vulnerable to worsening conditions (i.e., rising energy prices), and less receptive to policies that try to tackle the emerging problems. For example, most of the women lived in social housing, meaning they could not invest themselves in a renovation for their house or make use of subsidies for this. The discussion on gas-free cooking also shows how being from a different culture can create different demands. When looking for ways to alleviate condition of energy poverty, the economic and socio-cultural contexts in which people make decisions should thus be taken into account.

Under the changing conditions of the rising prices and the Dutch energy transition, it is therefore even more important to do research on the everyday meaning of energy poverty to people experiencing it. After receiving limited academic attention for a long time, the lived experience of energy poverty has attracted renewed scholarly interest in recent years (e.g., Brunner, Spitzer, and Christanell 2012; Galvin 2019; Großmann and Kahlheber 2017). After first discussing the research questions, methods, and ethics of the thesis, a closer look will be given to the content of this recent research and its history will be discussed in more detail.

0.2 How to Study Energy Poverty: Research Questions, Methodology, and Ethics

0.2.1 Research question

The main research question of this thesis is:

How is energy poverty experienced and combatted in and around Overvecht, Utrecht, in the context of the 2022 steep rise in energy prices and the Dutch energy transition?

This question will be answered by focusing on three main topics: how vulnerabilities to energy poverty are shaped by the ‘classic’ triad of Boardman (1991) and intersecting sociodemographic factors, the role of governmental and non-governmental efforts to reduce energy poverty, and what role the energy transition plays in this. In addition to relying on the aforementioned definition of energy poverty by Boardman (2010, in Thomson 2015, 2), I also turned the definition of energy poverty into an ethnographic question in the field. That means, I explored the ways in which people define what energy poverty is, the meanings people ascribe to their inability to afford sufficient energy, and their different ways to react to that everyday reality. In delineating different experiences of

energy poverty, and different meanings ascribed to it, I will pay special attention to the effects of long-term poverty and intersecting disadvantages, such as those based on language, gender, and health, influence people's experiences and their ability to cope with it.

0.2.2 Research population and methods

This research is performed in Utrecht and is centered in the neighborhood of Overvecht. Everyone for whom the rising energy prices were of interest was considered a potential interlocutor. This included both residents that pay more for their energy bill, as well as volunteers and officers of organizations that were in contact with them about the energy bills and/or the energy transition.

In the exploratory phase, the main objectives were to get an overall impression of life in the neighborhood, and to identify potential interlocutors. This was mainly done through participant observation. Later in the research, ethnographic interviewing complemented this information. I performed four semi-structured interviews based on predetermined questions, but most interviewing was either done fully unstructured (mostly when performing participant observation) or based on a topic list without fixed questions. During my fieldwork, I have spoken to multiple tens of residents of Overvecht about this topic, in different levels of length, depth and structure. Many of them lived at a minimum income and expressed issues in paying their energy bills. I also spoke to residents that did not consider their energy bill a (significant) problem, which allowed me to compare different situations. Additionally, I interviewed three people living in other city parts of Utrecht.

Next to speaking to residents, I gathered data through interviews and participant observation with government-led organizations and social and energy-related NGOs active in Overvecht, as well as one of the housing corporations active in Overvecht. They could share their perspective from a professional point of view, and could identify difficulties their target audience experienced dealing with energy poverty, as well as their own barriers in providing help.

I organized an energy-saving workshop in a community center in Overvecht, as it would give a natural environment to talk with people about energy use, with the additional goal to 'give something back' to the neighborhood. Also, I had three focus groups on the topic of

energy with groups that came together through Dock, the organization behind most community centers in Overvecht. These three groups all consisted of Muslim women. Other instances where I did participant observation were at neighborhood events, like two cultural festivals, and smaller gatherings organized by the community centers. Also, I volunteered at one of the food banks in Overvecht four times. I went to a platform meeting with organizations of the Utrecht poverty coalition, which gained me interesting contacts and insights. I witnessed two energy-saving workshops organized by the Utrecht energy NGO Energie-U, and three municipal election debates respectively on the topics of wind energy, (general) poverty, and Overvecht. In total, I made 78 diary entries, ranging from short impressions and methodological considerations, to interview transcripts and long conversation reports with one or more people at one instance.

0.2.3 Ethical considerations and positionality

When doing ethnographic research, it is important to critically reflect on the ethical considerations that are inherently part of it. With a topic like energy poverty, this is especially the case, as people in poverty could feel more powerless due to their precarious situation. Therefore, it has been important to build relationships of trust where people would feel safe to share or not share potentially sensitive information. Here, the social organizations were important gatekeepers as they could use their built relationships.

Energy poverty, and poverty in general, are often 'invisible', given the shame and stigma people can feel with it (Longhurst & Hargreaves 2019). Also, as Bartiaux, Day and Lahaye (2021) write about their research on energy poverty in Brussels, “potential interviewees seemed tired of having their daily life controlled (usually by social workers)” (277). During my fieldwork, I found out social work organizations got many requests from students, while at the same time they wanted to protect the privacy of their clients. Similarly, they themselves also described a difficulty of reaching out to people of their target audience, partly due to psychological barriers like unawareness, lack of mental space, distrust, and shame, that will also be discussed in chapter 2 as factors influencing the effectiveness of their work.

Because shame and stigma could prevent people from being open to talk about such a sensitive topic, I usually avoided the words ‘poverty’ and ‘energy poverty’ during interviews

and participant observation. Instead, I would talk about my research on ‘the rising energy prices’. Some topics, such as the income or government benefits someone receives, I decided not to actively ask about, unless they would address the topic themselves. At any point, people had the freedom to avoid certain topics or quit my research overall if they did not feel comfortable anymore. All information shared is anonymized in this thesis.

Before moving to the theoretical framework, lastly, it is important to mention my positionality as a student researcher in this field. Given that roughly half of the Overvechters have at least one non-Western parent (Utrecht in Cijfers 2020), being native Dutch can have affected the way I was perceived and approached by the people in my field. As also visible in the opening vignette, in some cases a language barrier or cultural misunderstandings decreased the amount of information I could receive. Also, having grown up in a middle-class family, I have no direct experience of living in poverty. This as well has had an influence on how I collected and interpreted my data. I should, after all, recognize that my positionality plays a role in how I gathered and interpreted the data for this research. Anyone from a different age, social class, or with a different cultural background might have been perceived differently by their field, and would see things differently than I do.

0.3 Theoretical framework

This thesis positions itself within three main academic debates. First, in contrast to classic energy poverty literature (e.g., Boardman 1991; 2013) based on quantified definitions, I will explain how I use the term *energy poverty* as a spectrum in which many different realities can exist, to allow for a nuanced view close to the lived experiences of people experiencing it. Second, the concepts of poverty traps (Allers & den Heeten 2000) and intersectionality (Crenshaw 1989) are discussed to show how they complement each other in explaining the persistence of barriers of people in disadvantageous positions to overcome energy poverty. Lastly, the energy justice framework (e.g., Walker 2009; Sovacool 2014; McCauley 2019) is applied to energy poverty to show how a ‘fair’ distribution of costs and benefits regarding energy poverty measures and energy transition efforts is inherently linked to inclusive procedures and recognition of needs in decision making, too.

0.3.1 Energy poverty

According to social geographer Stefan Bouzarovski, energy poverty emerges “when a household is unable to secure a level and quality of domestic energy services – space cooling and heating, cooking, appliances, information technology – sufficient for its social and material needs” (2018, 1). In this thesis, the inability to secure these energy services is both understood as the (experienced) lack of access to them, or as causing financial precarities when made use of them. The term energy poverty is used as a spectrum, meaning people experiencing different levels of inconvenience because of their energy costs are considered to have different levels of energy poverty. In addition to this non-binary view on energy poverty, it is of course important to keep in mind that energy poverty affects people in different ways depending on their specific personal circumstances.

Energy poverty gained more attention as a topic of concern in the Global North when Boardman released her book *Fuel Poverty* (1991). The terms fuel poverty and energy poverty are often used as synonyms, although fuel poverty gives the incomplete impression that the phenomenon is limited ‘fueled’ energy such as lamp oil and gasoline. For the sake of consistency, and in line with the popularized Dutch word *energiearmoede*, therefore in this thesis the term energy poverty will be used.

In the first and perhaps most famous definition of energy poverty posed by Boardman (1991), any household that pays more than 10% of its spendable budget on its energy bill is considered energy poor, a definition that overlaps but is not interchangeable with general poverty (Boardman 2013). She identified a triad of causes that make people energy poor: energy-inefficient housing, low incomes, and high energy prices (Boardman 1991). This techno-economical approach has been widely adopted by academics and policy makers, but has also received criticism in recent years. Anthropologists argue that this analysis has led to too much of a focus on energy efficiency, while other important factors that play a role for energy poor households are often neglected and remain unseen (e.g., Connon 2017).

Not all diverse meanings of energy poverty can be captured in statistical definitions, such as when people under-consume to keep their energy bills low (TNO 2020). Moreover, energy poverty is in many ways an ‘invisible’ problem: it is experienced at home, behind closed doors and often people feel a sense of stigma or shame to talk about it (Longhurst and Hargreaves 2019; Brunner, Spitzer, & Christanell 2012). This amplifies the risk with

top-down statistical and economic approaches to the problem, important perspectives are overlooked in decision-making processes, To explore the everyday meaning of energy poverty to the ones experiencing it, anthropologists are now exploring the topic with increasing interest (see for example Connon 2017; Baudaux and Bartiaux 2020).

0.3.2 Poverty traps and intersectionality

Energy poverty is almost never a problem on its own, but amplifies, and is amplified by, other issues that correlate with poverty (TNO 2020; Großmann and Kahlheber 2017). Energy poverty in this way constitutes a “complex intersection of life circumstances, social circumstances, availability of infrastructure, and the political climate” (Middlemiss et al., 227). To understand the dynamics of energy poverty with interrelated issues, it is useful to understand the concepts of poverty traps and intersectionality.

First, a poverty trap is dynamic causing “a situation in which a person who is poor is unable to escape from poverty” (Brittanica Dictionary, n.d.). Poverty traps can take up many forms and have different causes, such as economic and psychological. An example of an economic poverty trap is the inability of poor people to invest in better opportunities, such as education. In the case of energy poverty, living in social housing (relatively cheap housing accessible for people below a certain income standard) reduces the influence people have on the renovations for their house or their chances to make use of certain subsidies for green energy. An example of a psychological poverty trap is the stress people in poverty experience based on the uncertainties in their financial situation, reducing one's mental energy to look for jobs. In the case of energy poverty, this lack of mental space can make them less receptive to information on how to reduce their energy use or their willingness to implement this advice.

In the Netherlands, some poverty traps are institutionalized. For example, finding a paid job could reduce the government benefits one receives. This could make the net financial gain insufficient to be worth the time investment and in some cases even reduce the total income one receives (Allers & den Heeten 2000). Also, the precariousness of temporary contracts make people hesitant to apply for jobs without certainty.

Second, intersectionality is “the idea that these different factors are not separate single issues but rather interconnected forms of injustice – creating distinct experiences of

privilege and oppression” (Poverty and Inequality Commission 2021, 4). This notion emerged from antiracist and feminist criticism by Crenshaw (1989), as she argued that by focusing on just race or just sex in researching inequalities, people who have multiple deprivileges are missed in analysis. Ironically, this would lead to the further marginalization of the double-deprived, Crenshaw argued. Since then, attention has been given to the way a wide range of inequalities are not separate single issues, but intersect with each other in dynamic and unexpected ways (Cho, Crenshaw, McCal 2013).

The issue of poverty, in this respect, is just one axis of inequality within “intertwined economic, social, cultural, and political contexts in which individual and external conditions interact” (Saatcioglu and Corus 2014, 123). Gender, race, nationality, health and many more inequalities shape how poverty is experienced. So far however, these intersections are understudied in poverty studies (Poverty and Inequality Commission 2021). Policies tackling poverty, subsequently also fail to reach people with intersecting inequalities when they do not take intersectioning demands into account (ibid.). Energy poverty being a distinct manifestation of poverty, the way different axes of inequality intersect also has specific dynamics that are recently getting more attention in literature (Großmann and Kahlheber 2017).

Energy poverty is an extra pressing issue among specific demographic groups (Großmann and Kahlheber 2017; Bouzarovski 2018; TNO 2021). Logically, low-income workers and unemployed are among them, although this is not exclusively true (Großmann and Kahlheber 2017). Other examples of groups that are overrepresented in energy poverty statistics are single parents, retired people, people with limited mobility (for example due to disabilities), people with physical or mental illnesses, tenants, and immigrants (Brunner, Spitzer, and Christanell 2012; Großmann and Kahlheber 2017). Reasons for this increased vulnerability include spending more time at home and therefore using the heater longer (e.g., in the case of pensioners and unemployed), living in bigger houses than needed (e.g., divorced families and pensioners), and not being able to invest in house renovations (e.g., tenants). The latter reason is also the case for lower educated and illiterate people. They have limited access to information on available subsidies or lack knowledge or skills on how to apply for them, causing them to live longer in energy-inefficient homes (TNO 2021). All of the mentioned groups are overrepresented in Overvecht (Utrecht in Cijfers 2020).

The theories of poverty traps and intersectionality complement each other as they are based on similar dynamics. In both cases, a bad precondition causes other conditions to worsen, e.g., one's financial situation. In this thesis, poverty traps and intersectionality will continuously be used as theoretical lenses to understand people's experiences of energy poverty and their ability to cope with it.

0.3.3 Energy justice

In recent years, anthropological attention has grown for the topic of energy justice, following the related interdisciplinary field of environmental justice (Walker 2009). Social scientists Sovacool and Dworkin (2015) define energy justice as a “global energy system that fairly disseminates both the benefits and costs of energy services, and one that has representative and impartial energy decision-making” (4). Smith and High (2017) on the contrary refuse to take up a single definition when they coin their related term energy ethics, as they stress the “multiple and conflicting understandings of energy that animate how people encounter energy in their everyday lives” (5). Regardless of the definition used, it is important to take qualitative perspectives into account to get an in-depth understanding of how energy (in)justice is experienced.

Energy justice is an interdisciplinary field of interest that gains attention from a range of fields, including disciplines such as geography, sociology and law (McCauley et al. 2019; Rasch & Köhne 2017; Heffron 2022; Walker 2009). Howe (2015) argues for the role anthropology in particular can play in understanding the meaning of energy justice to the ones affected by energy transitions, allowing for locally adjusted solutions to global challenges. The way benefits and burdens of energy provision are distributed is at the core of traditional conceptions of energy justice, but recent understandings broaden the focus to include more perceptions of justice than just (infrastructural) end results (McCauley et al. 2019). In this thesis, the term ‘energy justice’ is applied to the domestic end use of energy.

Three tenets of energy justice are generally considered, namely distributional, procedure and recognition (McCauley et al. 2019; Rasch & Köhne 2017; Walker 2009). First, distributional justice addresses the unequal access to affordable energy and the distribution of infrastructural ills and advantages across different parts of society. In the case of energy poverty, this concerns both the relative and absolute costs one pays per unit of energy

service based on one's individual circumstances, and the distribution of opportunities to obtain more energy-efficient housing and devices.

Second, procedural justice is about the non-discriminatory inclusion of people in formal and informal processes of decision-making around infrastructural energy projects. It includes the level of democracy different people experience before decisions are made final and their participation in for example focus groups and other platforms ahead of that.

Recognition justice, lastly, partly overlaps with procedural justice but rather focuses on the intrinsic value of representation, criticizing “cultural and institutional processes of disrespect, denigration, insult and stigmatisation,” (Walker 2009 625-626; Fraser 1997). Recognition justice calls for a broad look on affected groups in society with intersecting characteristics, including gender and race, but also groups as elderly and students who are commonly overlooked in justice research (McCauley et al. 2019).

0.4 Thesis outline

In this thesis, I explore the meaning of energy poverty in the everyday lives of residents of Overvecht, and in the efforts of governments, NGOs and housing corporations to alleviate their conditions. As will become clear, many barriers still exist for these efforts to be effective. In the first chapter, I discuss how Boardman's (1991) 'classic' triad of causes of energy poverty (i.e., energy-inefficient housing, low incomes, and high energy prices) should be complemented with insights in intersecting socio-demographic factors and poverty traps in order to analyze how vulnerability to energy poverty emerges and persists. In the second chapter, institutional efforts, such as the government energy-bill compensation and social work are discussed with regards to the energy justice framework. Special attention will be given to psychological poverty traps of unawareness, lack of mental space, distrust, and shame, to discuss barriers of organizations to reach out to people in energy poverty. The third chapter, lastly, discusses the energy transition as a possible way to alleviate energy poverty. Discussing distributional, procedural, and recognition justice respectively, it becomes clear what barriers still exist for reaching this ideal.

Chapter 1: Vulnerability to energy poverty

I met Paul in March at one of the community centers in Overvecht, where he had just finished his voluntary language class with a senior Chinese student. He showed me a print-out of a Dutch web article with the title Gas more expensive? This is what you can do to consume less (NOS 2021b). “We often discuss energy bills in our class,” he explained. In addition to teaching Dutch, Paul helped his students with practical matters such as reading letters from the energy provider. “It's very hard to understand these matters for someone who doesn't speak the language well.”

Paul himself lived from a government benefit and therefore had a limited budget to spend every month. He had a variable energy contract, making him vulnerable for changes in energy prices. In January 2022, he was told that the expected bills would go to 350 euros for that month, more than double of what it was a year earlier. “I was shocked,” he said. Since the news about the increased costs came, he had cut his energy bills considerably.

At first he “couldn't care less” about his energy use, but since halfway February he had been actively cutting it back - with visible results. He proudly opened his online account of his energy provider to show me the decrease in his energy use. We looked at the first three weeks of March that had just been. “The energy provider had predicted 208 euro by now,” Paul pointed, “while it's only at 115.” Paul managed to save almost half of the energy consumption predicted by his energy provider. “I've raised my standard monthly payment to 155, but I'll probably still get some money back from that eventually.”

I asked him how he managed to do so. Did he look up any tips? “No, I came up with them myself.” He gave an example. “I smoke a lot, even inside. Otherwise you could go and live outside, I think. But that's why I always had the doors open at home. And I also wanted to be able to hear at night if there was a burglar downstairs. I have had that once. But now I close the doors.”

Paul lived on his own in a badly-insulated family house at the corner of a street, affecting his energy use significantly. But by looking closely at his habits, he now made sure to decrease those effects. “You don't have to heat the whole house by default. A small room only needs a small heater. As long as the doors are closed, the heat will stay in the room. Stoking is pointless otherwise, I noticed that right away.”

From February on, Paul started carefully measuring the costs of all his appliances. He told me exactly how much kWhs he used for his laptop, light bulbs, etc. “But it's mostly about saving gas, rather than electricity. For example, what if you bake a pizza. That turns out to cost 1 euro in gas! While the pizza

itself is only 1 euro 50. So then I looked at whether I could put it on a lower setting. It takes longer to bake, but it also works. Because I will still eat pizza once in a while, you know.”

He listed more things of what one could do to cut energy. “In the morning, you should ‘be tough’. For those five minutes of cold in the morning you don't have to leave the stove on all night.” He also mentioned the economical setting for the central heating boiler, that still functioned properly on a lower temperature. Were there any things he did not save energy on, because of comfort reasons? “The shower can be warm, though. But then it still matters if you shower seven days a week, or only five or three and use a washing cloth the rest of the days.”

Like for many people in the Netherlands in winter and spring 2021/2022, the steep rise in energy prices forced Paul to think about his energy practices. Living in an old, badly insulated house and being dependent on a government benefit for his income, he realized the rise in prices would mean he had to rethink his energy practices if he did not want it to affect his financial situation too much. Paul thus fulfilled all conditions of the ‘classic’ triad of energy poverty: low energetic quality of houses and appliances, low income, and high energy prices (Boardman 1991). These three factors have long been identified in literature as the driving forces making someone susceptible for energy poverty (Connon 2017).

However, recent literature has focused on other factors influencing one’s vulnerability to energy poverty than this triad of causes. Critics argue that a too narrow view “results in the analysis of a complex situation in a way that aligns with policy categories, rather than one that conceptualizes the experience from the perspectives of those affected” (Connon 2017, 1). Looking at the specific needs of different socio-economic and demographic groups is therefore crucial. As the example of Paul’s student also shows, language proficiency and familiarity with the Dutch energy billing system can influence the ability one has to understand one’s situation and respond to it in an effective way. For Paul, unhealthy habits (smoking) and bad previous experiences (having burglars at home), initially formed barriers to saving costs on energy, too. Other ways in which intersecting issues can influence one’s resilience to energy poverty include household composition, age, employment status and socio-cultural background (Middlemiss & Gillard 2015; Brunner, Spitzer & Christanell 2012; Großmann and Kahlheber 2017).

In this chapter, I will first discuss the way in which the ‘classic’ triadic causes of respectively energetic quality, income, and energy prices affect this vulnerability, with Overvecht in early 2022 as a case study. Drawing on examples from my fieldwork, I will expand on this view by identifying intersecting factors influencing the needs and coping abilities of people in energy poverty. Poverty traps related to domestic energy use will be a red thread throughout the chapter.

1.1 The ‘classic’ triad of energy poverty causes

1.1.1 Energetic quality of housing

The first of the three driving factors in the original triad is the energetic quality of the housing people live in and the appliances they use. Energy practices are shaped by the material conditions one lives in, and these are generally hard to change, especially in conditions of poverty. Walker and Day (2012) argue that it is this dependency on material conditions that make energy poverty a fundamentally different matter than ‘mere’ general poverty based on a lack of financial means.

Poorly insulated houses lose more warmth to the outside air, increasing the amount of heating needed to increase the desired temperature inside. In Overvecht, most housing was built in the 1960s and 1970s, meaning the original energetic quality used to be low in general (Gemeente Utrecht, personal communication, May 4, 2022). In recent years, social housing companies have made vast efforts to decrease the amount of housing with the lowest energy-labels of E, F, and G (Mitros, personal communication, May 3, 2022). Still, however many houses remain that are not renovated, both in social housing but especially among private renters and homeowners, where these efforts have generally been lower (Gemeente Utrecht, personal communication, May 4, 2022).

The way the house is heated, based on gas, electrics, or city heating, also matters for the amount of energy used per unit heated. An extensive city heating network exists in Utrecht and in Overvecht in particular. Houses connected to this network, constituting roughly 60% of Overvecht (Mitros, personal communication, July 19, 2022), can either use gas for cooking or cook based on electricity.

Another influencing characteristic of housing is the number of neighbors one has. Paul lived on the corner of his street, meaning he had only one neighbor whose heat he received residual heat, and lost relatively much energy to the outside air. In Overvecht, many people live in high-rise apartments, being less affected by this problem. An elder woman I spoke to told me she “had never put on the heating” in her house, as she lived in such a flat and moreover had her apartment facing South, receiving a lot of sunlight during the day.

Energy-inefficient appliances, such as old washing machines and fridges, use more power in order to provide the same services as energy-efficient ones. In many cases, replacing such old appliances with new, more efficient ones will prove financially viable in the long-term. A poverty trap emerges when one is ‘stuck’ with older appliances without having the means to make such investments. Here as well, the way one lives matters. A woman described how she could not dry her clothes at a washing line as she lived in a small apartment without a balcony, forcing her to use the energy-consuming dryer.

All these factors influence the costs people make to achieve a similar amount of comfort (Connon 2017; Walker & Day 2012). There is an unequal distribution between energy-efficient housing and appliances, meaning poorer people generally have a higher energy-demand for the same services (Bouzarovski 2012). In the current scarcity of the housing market in the Netherlands, it is moreover hard to change the way one lives. Several of my interlocutors described the desire to move to a bigger house, for example or one with better insulation. Moving to another place would however usually mean a (steep) increase in rent, especially if this meant one had to move from social housing to private housing. That would reverse possible positive effects of moving to more energy-efficient housing. Connon (2017) underscores how a lack of housing mobility creates a poverty trap for the ones stuck in energy-inefficient housing. As well, the significant investments that are needed to improve the energy efficiency of one’s home and appliances create distinct poverty traps related to energy poverty when one’s income is low.

1.1.2 Income

Second in the triad, having a low income naturally is an important factor in becoming vulnerable to energy poverty. The smaller the budget one has in general, the more likely one is to experience problems with paying for their energy bill. Although general poverty

does not per definition include problems related to the energy bill, and not everyone experiencing these problems falls under common definitions of general poverty (Boarman 2013), large overlap between the two categories exist.

Overvecht is the poorest neighborhood in Utrecht with 23% of the people live in long-term poverty. The average income in Overvecht is around 18,000 euros a year, while the city average is at 28,000 (Utrecht in Cijfers 2020). In Overvecht 32% of households live at a maximum of 15% above the Legal Social Minimum (*Wettelijk Sociaal Minimum*; WSM), compared to the city's average of 15.3% (De Haan, Scheelbeek and Tromp 2015). In 2015, around 20% of the inhabitants of Overvecht had an income around the WSM and this number was growing at that moment (*ibid.*). Already before the COVID-19 pandemic the increase in poverty was visible, especially among those with immigrant backgrounds, youth and single-parent families, which are overrepresented in quarters like Overvecht (De Haan, Scheelbeek and Tromp 2015).

People in general poverty can apply for different government benefits, depending on their specific situation. Long-term unemployed can receive a government-funded income (*bijstandsuitkering*) which constitutes 70-100% of the WSM, respectively for single or cohabiting households (Rijksoverheid n.d.a.). Escaping this benefit-dependency is however difficult, due to several poverty traps that sometimes are institutionalized. “The longer someone is in poverty, the harder it gets to get out of it,” a local preacher active in social work in Overvecht told me. “Every step towards the future you take from a position of stress. After years of not working, it’s actually difficult to deal with a job again. You will need to calculate [with money and time] a lot, once you lose your benefits. It takes quite a salary to actually escape poverty.” Other ways in which poverty exist are for example being retired without a high pension to complement the AOW (*Algemene Ouderdomswet*) benefit for 67 plus years old, or so-called ‘hidden’ poverty, meaning someone is not dependent on government benefits but still faces difficulties to make the ends meet (Armoedecoalitie, personal communication, 11 April 2022).

Who is unable to take care of one’s own financial situation, e.g. due to mental disabilities or addictions, can get help from a financial administrator (*bewindvoerder*). “We take full care of their bills, so in principle they should not notice any rise in prices,” Marianne told me during an interview. “But of course, if we need to spend more money on energy, less money becomes available for other ‘extras’, such as saving up for holidays or decreasing debts.”

Several of my interlocutors who lived in Overvecht shared their worries about making the ends meet. It was often stated that their income stayed the same, while prices, of life in general and energy in particular, kept rising. This created dilemmas of choosing one necessity over another, such as groceries, phones, sports, or energy. General poverty is intertwined with energy poverty in dynamic ways. Rising prices increase these interdependencies, as will become clear in the next paragraph as well.

1.1.3 High energy prices

The last factor of the classic energy poverty triad, high prices, became more present in many people's lives in winter and spring 2021/2022. In a matter of months, energy prices more than doubled in the Netherlands. Gas for domestic use, for example, increased in price by 110,8% between October 2021 and March 2022 (CBS 2022). Other energy prices have risen accordingly, with domestic electricity costs more than doubling (102,4%; *ibid.*) as well. For many people, the steep rise in energy prices has increased their vulnerability to energy poverty.

The extent by which the changes are felt by households is dependent on the type of their energy contracts, especially in the short term. Fixed contracts can keep energy prices at the same amount for a longer period of time (up to a few years), which means these households will notice little to nothing of the rising prices in terms of their energy bill. Gert, a homeowner with a low resting mortgage debt, said he was "bloody lucky" to have his energy contract fixed for three years right before the rise of energy prices started. To reinforce his remark, he added sarcastically: "So the energy bills are my biggest fears."

For people with a variable contract, however, the rising prices formed a serious source of concern. Many of my interlocutors saw their energy costs more than double in a short amount of time. For Paul, this was an incentive to 'overcompensate' by saving energy: instead of paying double the price, he managed to actually reduce his bill compared to a year before. For other people, however, like the women in Samira's elderly group, who already used their energy scarcely, the rise in prices meant an increase of costs that was difficult to cope with. Other people did not yet realize the impact the rising prices would have on their lives, as their standard monthly payment (a predefined estimation of energy costs that can differ from the yearly end bill) might not be adjusted to the new prices yet.

Social worker Rosa said about this latter group: “I think they will come to us only once the problems emerge.” Anke, a social worker responsible for detecting financial issues at an early stage among people in poverty, saw how high monthly energy bills were “not a priority anymore” for people who dealt with more urgent financial problems, such as getting food on the table that night. This poverty trap of lack of mental space will be looked at in further detail in the second chapter of this thesis.

Several of my interlocutors used to switch contracts every year to get the cheapest deals for their energy bills. Now, this did not matter anymore as any new contract would include the risen prices. At the moment of the steepest rise, switching energy contracts was even made impossible by the energy providers. Financial administrator Marianne described how in the past she would connect her clients to smaller, cheaper energy providers. “But now these smaller providers are going bankrupt. And then you automatically get a new contract at one of the ‘expensive guys’ [the bigger energy providers]. Also, then you do not get back any of the money you paid too much if you used less energy than predicted.” She mentioned an example of a woman who saved almost 600 euros on energy throughout the year, just before her smaller provider went bankrupt. “That was very sad, because now she did not get that money back either. I don’t dare to take these smaller providers anymore,” she added, mentioning their difficulty to survive in a market of rising prices.

1.2 Sociodemographic characteristics and poverty traps influencing energy needs and practices

The rising prices, in combination with the low average income and low general energetic quality of housing in Overvecht, made energy poverty more visible in the neighborhood. This triad alone is however not enough to understand how energy poverty is experienced by people of different backgrounds. Issues of intersectionality and related poverty traps have a significant influence on the energy needs of households, as will become clear in the second part of this chapter. Intersecting sociodemographic issues will be discussed according to four main themes that became apparent during my fieldwork. These are household composition, gender, age and health, cultural background and language proficiency. In the conclusion of this chapter, then, it is shown how these factors interact with the triad, with poverty traps, and with each other, as amplifiers of experiences of

energy poverty. The link will be made with the second chapter on institutional efforts to combat energy poverty and their respective barriers.

1.2.1 Household composition

The first sociodemographic factor that proved a relevant theme throughout my fieldwork, is that of household composition. In order to live energy-efficiently, it matters if the house and appliances match the household size and needs.

Paul lived on his own, which meant the energy use of a service (such as using a fridge or heating a room) *per person* was relatively high. The fact that he lived in a house that was ‘meant’ for a family, also decreased the energy efficiency of his heating. On the other hand, he was less dependent on the needs of others in his house, meaning he could adjust his energy use specifically to his needs, such as when he bought a small portable heater in order to save energy in his bigger rooms.

On the other hand, bigger households naturally have higher energy needs in total. In meetings with two different groups that Samira and her colleague organized, attending mothers expressed concerns about their children having high energy demands. A woman in Samira’s senior group explained: “My children play sports, so they shower two, sometimes three times a day. And then I need to wash their football clothing as well.” Samira herself shared the concern, and ‘threatened’ the children that they would need to help pay for the energy bill based on their internship compensation if they would not change their habits. “They use the oven for 20 minutes for just one baguette! They have no clue about the energy costs. I told them: ‘if you stay under that shower for 30 minutes, it will cost you money’.” Slowly, she noticed a change in her children’s habits. Two other women in her groups, however, expressed that their children were too young to become aware of this. One of them had a four-year old daughter with a mental disability who would just always turn the tap open again, until the bath flooded. These examples of women taking care of their children also show the dynamic role of gender in energy use, which will be discussed in further detail in the next paragraph.

1.2.2 Gender

Women take up a large part of responsibility for the caretaking of their children and are generally more concerned with their (physical) wellbeing (Patel 2019). “I won’t sit in the cold with my children,” a client of the food bank told me when I handed out a flier for the workshop on energy saving I organized. The dilemma between finances and wellbeing for one’s own children, is a source of stress women experience more often than men (Fodor 2006). Being a single-parent makes one even more vulnerable to energy poverty, and poverty in general, as the care of children forms an important responsibility that competes with other priorities such as earning money and energy-saving practices. Women often take up the role of a main caretaker after a divorce (Sunikka-Blank 2020).

In my observations, men on the other hand are typically more actively concerned about the energy bill. During the two energy workshops of Energie-U I witnessed, all participants (six in total), and all speakers but one (four in total), were men. Men are usually also the first to look into energy-saving technologies such as heat pumps, a female coworker of Energie-U noted. Some women of Samira’s senior group said that it was their husband who wanted them to save more energy while they were at home. “But how can I do that? I already use so little!”, one of them said.

This shows how gender differences exist both in terms of (theoretical) interest and who are dealing more with choices on a daily basis. Women in general spend more time at home as their working hours are less, increasing their energy demands (Sunikka-Blank 2020). Other factors can also increase the amount of time spent at home and consequently domestic energy needs, such as being pensioned or having a decreased health.

1.2.3 Age and health

Age and health are two intertwined factors that have an impact on households’ domestic energy needs. Older people spend more time at home when they are retired, and a higher age is generally linked with more health issues that can decrease the ability to deal with colder temperatures (Brunner, Spitzer, & Christanell 2012).

All people have different needs in terms of warmth. Underlying health problems can increase one’s heat-dependence, which is moreover correlated with one’s income. Older

people in general have an optimal room temperature of about 2 degrees higher than younger people (Walker and Day 2012). Two women in Samira's senior group explained that they "could not put the heater lower" as they respectively dealt with diabetes and rheumatism, increasing their need for comfort in terms of warmth.

Who is in need of medical care, also makes extra costs for hospital visits and medicines, and in some cases is less able to earn money or to save on their energy bill. Marianne, the financial administrator for people who cannot take care of money on their own, for example saw that some mental health issues increased domestic energy use. "Some people have fear of contamination and/or obsessive-compulsive disorders, so they wash a lot. Other people do not leave their home a lot because of PTSD or an anxiety disorder, making them use a lot of domestic energy."

A dependency on medical care can be extra challenging when it intersects with illiteracy or being of migrant background. "In Morocco, you will never have the situation where they calculated your care benefit [a government contribution for lower-income households for their care insurances] too high and that you suddenly need to pay back part of it," said Rosa, a social worker that mostly helped immigrants, as an example for the difficulties the Dutch bureaucratic system can pose on someone. In the next section, the role of one's cultural background and language proficiency in relation to administration as well as general energy needs will be discussed in further detail.

1.2.4 Cultural background and language proficiency

A significant number of immigrants live in Overvecht, with 59% of its inhabitants having a migrant background, compared to a 35% city average (Utrecht in Cijfers 2020). About half of the Overvechters (49%) have at least one parent born in a non-Western country (Utrecht in Cijfers 2020). Immigrants generally have a lower educational level and a lower proficiency of the Dutch language, especially in the case of first-generation migrants. Some of the women in a language group I visited had been in the Netherlands for over thirty years, but still had struggles mastering the Dutch language. Limited social life outside of their family and cultural circle decreased their opportunities and incentives to practice Dutch.

Cultural norms can influence energy needs, such as shame in cultures where financial independence is valued (Connon 2017), and the expectation to host family and friends in

times of need (such as a relative that needs temporary housing). The example of women cooking for iftar in the opening of this thesis showed the dilemma they perceived between their energy and grocery bills and their strong sense of responsibility to take care of their loved ones. The cultural practice of baking food themselves increased the energy needs as well.

Being from a different country than the Netherlands can make understanding paperwork more difficult. Paul helped his student in understanding his energy bill as both language and system were difficult for him to understand. Even for Dutch natives the energy billing system can be difficult to understand, he reckoned, especially among lower educated people.

When I visited one of Samira's groups in a community garden in Overvecht-Noord, some women complained about calls they got from an energy provider. Samira translated for me what one of them said: "She did not realize she was actually getting a new contract, she thought she was only showing interest for one. And then she thought that if she'd get a new contract, the old one would automatically be stopped. But she found she paid double bills for three months." A native-Dutch Muslim woman that was part of the group said that she recognized the calls, and called this particular energy providers 'frauders' (*oplichters*). "Never say yes during such a call, because they will 'get you' on that." When she would now be called, she would firmly say she has no interest and hang up the phone. One of the women noticed that it helped that she was native in Dutch. "These women are very proactive, they're very strong," Samira told me, "but language can be a barrier."

Being from a migrant background thus both influences the familiarity one has with the energy billing system and the opportunities one has to learn about it due to language barriers. Combined with other sociodemographic factors, such as having a low income, living alone, fulfilling gendered roles such as taking care of children, or facing health problems, these factors can reinforce each other and prove even more difficult to overcome circumstances of energy poverty.

1.3 Concluding remarks

In conclusion, this chapter has shown how the 'classic' triad of energy-inefficient housing and appliances, low income and high prices proposed by Boardman (1991) on its own is not

sufficient for understanding all causes and manifestations of energy poverty. To understand the underlying dynamics of energy poverty, one needs to take into account all intersecting sociodemographic factors that influence, and are interconnected with, one's vulnerability to these factors. Household composition, gender, age, health, cultural background, language proficiency, are all factors that influence one's domestic energy needs and their resilience to rising prices. These characteristics also reinforce poverty traps related to energy use, such as not being able to invest in more energy-efficient housing and appliances, facing insecurity when looking for a job, and lacking mental space to prevent long-term financial problems.

As these factors often coincide and are interconnected with each other as well, they can 'count up' in diverse ways. The woman who had to take care of her mentally disabled child, Paul who lived in a badly isolated family house on his own, and Paul's senior student who did not understand either the language or the system of his energy billing for his social housing apartment, are all examples of how realities of energy poverty cannot be explained by single characteristics apart. It is not 'just' health *or* gender, not 'just' a matter of energy-efficiency *or* household size, and not 'just' age, migration background, income *or* language proficiency. Instead, it is a dynamic interplay of factors that are interlinked and reinforcing each other.

In the next chapter, a special focus will be given to institutional efforts and the barriers that exist with regards to initiatives to alleviate the circumstances of people in energy poverty.

Chapter 2: Institutional efforts to alleviate energy poverty

Halfway April, I was at a local food bank in Overvecht, to hand out flyers for a workshop on energy-saving I would host the next day. A week before I had told Kasper, an energy coach at energy cooperation Energie-U, about my wish to organize such a workshop as it might both be interesting to the audience of people in (energy) poverty and for my research. He offered to give a presentation at one of the community centers, and as I was reaching the end of my fieldwork period, we decided to organize it in a bit more than a week's time. I quickly started promoting the event by sharing an invitation in an Overvecht-based Facebook group, as well as spreading flyers among the different community centers of Dock, and visiting this food bank during its hand-out days.

At the end of one of these days, when many people had left with a big bag of groceries, I got into a conversation with Anke, a voluntary social worker whose role was to signal financial problems at an early stage among its customers. "So were there many people interested?", she asked me about the event. "Not everyone, but quite a few still," I responded. "Some people reacted very positively to my flyers, while other people were not interested or briefly told me they 'did not want to sit in the cold'."

"It's hard to reach this audience," Anke said. "Many people actually know about the energy bill, but often it's not a priority anymore. You might know that the energy bill is coming within two weeks and that you need to do something with that, but that's within two weeks. While in the first place you're worried if you'll have enough food for tonight. People in debt are not dumb people and they don't do dumb things, but if you're in constant stress because of your finances, you lose sight of what happens in the long term."

"The government compensation [of 200 euros for all households up to 800 for lower-income households] for the energy bill is a nice initiative," Anke said, "but for many people it doesn't end up actually cutting their energy costs. Some people for example are always 1000 euros in debt in their bank account. Well, it's nice that thanks to the compensation, now you're only at minus 200 euros, but of course that won't help with your energy bill." She called it 'undesirable' that the compensation was just a one-time gift. "It's easily spent on other things," Anke said. "I have a minimum income myself, but my house is part of a pilot by the housing corporation [a so-called net-zero house, nul-op-de-meterhuis], which means I actually earn money on my house, as the solar panels deliver more than I use." She was positive about the project, but it meant she herself would also not use the compensation how it was meant. "The 200 euros are still welcome though. I'll buy a new phone from it, as mine has been broken for two years already."

My experiences handing out the flyers for the energy event, and Anke's reflections on her own social work and the government initiative, show how initiatives to help people in energy poverty do not always work out as straightforward as they are intended. Although the tips in the workshops are potentially very useful for people in poverty, not all customers of the food bank showed interest. Anke noticed something similar when she tried to help her clients, but struggled to convince them to make decisions with long-term interests. The energy-bill compensation was a general measure, where it was not guaranteed that the money would actually be used for the energy bill. In Anke's case, the irony was even that she actually does not have any energy costs due to another government-led energy-saving initiative.

Since the steep rise in energy prices, attention for issues of energy poverty has increased among social work organizations, government actors, and energy-oriented NGOs. Social workers saw the amount of questions of their clients rising regarding the energy bill, while national and municipal government agents created supporting regulations such as the energy-bill compensation and awareness campaigns. Energy-oriented NGOs, lastly, articulated the potential social benefits of energy-saving measures more profoundly next to the environmental aims.

The general aim of new initiatives can be defined as increasing distributional justice, by alleviating circumstances of energy poverty. Whether these efforts will be effective, will however also depend on the degree in which procedural and recognition justice are taken into account as well. When citizens are involved in the procedure of creating alleviation measures, their diverse individual needs are likely to be better recognized, and consequently the distribution of effects can be addressed in a more just way as well.

In this chapter, the three tenets of energy justices - distributional, procedural, and recognition justice (Walker 2009; McCauley et al. 2019) - will be central in analyzing the alleviation initiatives tackling energy poverty in Overvecht that existed early 2022. In the first half of the chapter, I will explain these initiatives while discussing some of the barriers people encounter in making use of them. In the second part a special focus is given to the specific role of psychological poverty traps based on unawareness, lack of mental space, distrust and shame working as poverty traps in accessing social aid.

2.1 Initiatives for energy poverty alleviation

In Overvecht, several initiatives exist for people experiencing energy poverty. Some of them are part of general poverty alleviation schemes, while others for example emerged specifically to address the context of the rising energy prices. Some are initiated by municipal or national government agencies, while others are part of (Overvecht-based) NGOs. There is thus a wide variety of organizations people in energy poverty can turn to, and these organizations will also try to reach out to this audience in order to provide their help. According to the three broad categories of social work, government energy poverty initiatives, and energy-focused organizations, these initiatives will be discussed. A critical evaluation is given on their effectiveness using the framework of distributional, procedural, and recognition energy justice.

2.1.1 Social work

There is a wide network of social work active in Utrecht and in Overvecht particularly. The Utrecht poverty coalition (*Armoedecoalitie*) brings together most of these organizations for increasing collaboration between them and collective lobbying. One of their members is the regional board of the national food bank organization (*Voedselbank Utrecht; Voedselbank Nederland*), which were mentioned in the opening of this chapter. They form a stage for Anke and other workers of social organizations to discuss and (politically) address emerging issues, outside of their own offices. Another notable organization in this respect is Dock, which is the government-funded host organization of many community centers in Utrecht. At these community centers, several social activities are organized every week as well as they host other aid organizations. In Overvecht, for example, every week there is a general walk-in morning for people with a variety of aid questions. Neighborhood teams (*buurtteams*) are present, as well as the municipal work and income department and some NGOs. Dock also brings together different groups that meet on a weekly basis, such as the language classes Paul hosted and the groups of Samira and her colleague. Next to their main aims (e.g., teaching Dutch or organizing social gatherings), these groups function as places where problems are detected at an early stage. In case serious problems emerge, the participants are redirected to other help organizations, such as the neighborhood teams.

Neighborhood teams are present all-around Utrecht. In Overvecht there is one team with four locations. They help with a variety of practical matters, including giving juridical and financial advice. Their capacity is however limited, and during my fieldwork I have only had a short interview with Dorien, a coordinator who told me the teams themselves were usually too busy for interviews. Al-Amal, an NGO with one of its main offices in Overvecht, has similar broad objectives as the neighborhood teams, but they target people “with a distance to regular aid work”, such as being (digitally) illiterate. In practice, most of their clients are women of immigrant background. They help by for example going through government letters together in people’s native tongue, or applying for a government benefit together. Rosa, one of the employees of Al-Amal, saw a brief increase in questions on the energy bill when the first news on rising prices came in the media in the last months of 2021. When I interviewed her in April 2022, she noticed however: “Now it’s more quiet again, I can’t really explain why. Maybe because the end bill [calculating the net energy costs at the end of the year] has just been already.”

Some of the social work is government-led or -funded, such as the neighborhood teams and the municipal debt help services (*schuldhulpverlening*). In case someone is not able to handle their finances themselves (whether this is because of mental health problems, addictions, or other reasons), they can get help from a financial administrator. Marianne noticed how some of her clients were willing to think along how to get their finances on the right track again, while others, in her words, “didn’t give a shit”. In terms of energy use she tried to “bring up” these people, with varying results. She described a case of one of her clients who turned desperate of the rising energy prices, willing to take extreme and irrational measures to cut down his costs . “Just cut me off the gas immediately, he said, I’ll go and barbecue instead.”

All these initiatives aim at reducing the effects of energy poverty to vulnerable audiences, i.e. decreasing distributional injustices. Social workers fulfill an important role in signaling issues that play in society and linking initiatives to their target audiences (Tonkens & Verhoeven 2019; Lacy-Barnacle & Bird 2018). As they operate ‘on the ground’ and see direct needs of their target audience on a daily basis, they are the most effective players for securing recognition justice as well (Tonkens & Verhoeven 2019; Lacy-Barnacle & Bird 2018). Neighborhood teams coordinator Dorien explained that however she thought her neighborhood teams did this effectively, she missed a political function to address all issues

they experience with current policies and approaches to alleviate (energy) poverty. Partly, this ‘gap’ is addressed by the joint lobbying efforts of the Utrecht poverty coalition, that the neighborhood teams are part of. These lobby efforts function as a crucial link between people in energy poverty and policy makers, thus increasing the level of procedural justice. In the next paragraph, government-initiated policies for energy poverty will be discussed in further detail while mapping the barriers they face as well.

2.1.2 Government-initiated policies

The Dutch national government has taken four major initiatives to reduce the energy bill for households in the Netherlands. The first regards the direct energy costs people pay, by increasing the yearly energy-bill refund by the government from 560 to 835 euros, and by changing the taxes on energy bills. Tax added value on electricity, gas, and city heating went from 21% to 9% for half a year in 2022 (Milieu Centraal n.d.). Electricity taxes per kWh were furthermore lowered by roughly 6 eurocents. At the same time gas taxes were raised with 2 eurocents, which depending on the energetic quality of the housing would usually mean a net decrease in costs for households. In terms of distribution, however, this could still lead to an unequal cost for people who have energy-efficient gas-dependent housing.

Second, an awareness campaign was started called ‘Make the switch as well’ (*Zet ook de knop om*; Rijksoverheid n.d.b) in which the focus was on changing energy-related practices. The benefits were framed in terms of energy costs, the climate, and “to become less dependent on Russian gas” (ibid.). The effectiveness of such campaigns is however lower for people in energy poverty, as will be discussed in the second part of this chapter in further detail.

The third, and during my fieldwork most discussed initiative was a compensation for the energy bill households. This was first announced December 2021, as 200 euros all Dutch households would automatically receive (NOS 2021a). Later on, an extra compensation adding up to 800 euros in total was announced for lower-income households (RTL Nieuws 2022). People receiving a general government benefit (*bijstandsuitkering*) would automatically receive the 800 euro compensations, while other households could apply for it if their income was below 125% of the legal social minimum or WSM (RTL Nieuws 2020; Gemeente Utrecht n.d.) and had a variable energy contract. Around 400.000 people in the Netherlands are able to claim this additional compensation (RTL Nieuws 2022).

According to RTL Nieuws (2022), however. “thousands of Dutchmen” did not apply for this compensation either because they were not aware they were able to claim it, or because the paperwork was too complicated for them. Al-Amal employee Rosa would help people in doing a request for non-beneficiary low-income households. “But this takes a lot of time for each case, easily 1,5 hours.” She explained that there is a lot of paperwork needed in order to do such a request: “You need your passport, an excerpt of the bank bills of you and your household members, your rental contract, proof of income of you and your partner, your healthcare insurance papers... And that’s not the full list. It could be done quickly if you have everything well-administered, but usually that’s not the case. It’s just a lot of work. I have a job and do not receive so many benefits, but people in poverty have more paperwork in general.”

Once someone would receive the compensation, whether 200 or 800 euros, it would still be a matter of their own financial management to make it effectively reduce the energy bill. As the example of Anke and her phone also showed, the general measure of giving money does not guarantee that people would ascribe the compensation to the energy bill. Whether the compensation is being paid all at once or in phases, depends on local municipality decisions. In Utrecht, this was a one-time payment (Gemeente Utrecht n.d.), meaning it would come down to individual financial planning to effectively use the compensation for its purpose. A woman I met during a Dutch language class said that the neighborhood teams advised her to set money aside for the months to come, although she mentioned this was something her husband usually took care of. Marianne feared that people in her target audience that did not have a financial administrator would just “rush through” the money. Other social workers also criticized the general approach to energy poverty alleviation. A board member of the Utrecht poverty coalition mentioned the compensation was “of course too little” to compensate for the entire rise in prices. She calculated how 800 euros spread over twelve months would not compensate for an energy bill rise of sometimes more than a hundred euros. Instead, she wanted to see a more specifically targeted approach for “the households who need it the most”.

The energy-bill compensation was meant to increase distributional justice, redistributing money to lower-income households in both relative and absolute terms. The generality of this approach however reduced its effectiveness in doing so, as a large share of the budget would still go to households who experienced no to little energy poverty. At the same time,

people for whom extra help was needed, such as help with financial administration or with requesting compensation, this was not always available. Recognition justice - whether individual needs of people were effectively identified and addressed - was thus low. The procedure has been taken on a national level as a fast reply to an emerging crisis, giving the argument that compensation arrangements based on individual needs were “impossible to execute” (NRC 2021). This lack of procedural justice - people targeted were not involved in the decision-making process - has thus likely reduced the recognition and distributional justice as well.

2.1.3 Energy coaches, boxes, and workshops

The Utrecht-centered organization Energie-U is an energy cooperation for “Utrecht residents who drive, organize and monitor sustainable energy at home, in their neighborhood and in our city.” (Energie-U, n.d.). Energie-U has about 500 members, 19 employees, and roughly 30 volunteers active as so-called energy coaches (*energiecoaches*). These energy coaches are communicators on different energy topics that concern residents, such as domestic energy-saving, housing renovation, and renewable energy.

Together with environmental consultancy firm De Jonge Milieuadvies (JMA), the municipalities of Utrecht and Zeist, and housing corporations, the initiative was taken for so-called energy boxes (*energieboxen*). These are free-to-order packages for renters with energy-saving materials, such as water-saving showerheads, weatherstrips, led lights, radiator foil, shower timers and energy meters. Ordering an energy box is always accompanied by a conversation with an energy coach to make people aware of the use of these materials. During the corona lockdowns, these conversations were turned into phone calls instead of house visits.

Samira and her colleague explained how this approach would be for the immigrant women with little proficiency of Dutch in her groups. Furthermore, these conversations do not yet include the installation of these materials. “I also had this box and the conversation,” Samira’s colleague said, “but I only used the led lights, the rest is still in the box. A pilot where the visit of energy coaches would include installation (e.g., the placing of the weatherstrips and radiator foil), and an extra visit to see what materials were actively used after the first visit, was planned to be performed after my fieldwork period. The energy

boxes are handed out on request, but especially since the rise of energy prices the initiators tried to target “based on energy label and neighborhood”, as the team leader of the energy boxes explained. “But it’s hard to actually target these people [in energy poverty],” she added. “I think everyone [all organizations] struggles with that. The target audience does not show off their situation.”

Energie-U also organizes online energy-related workshops. During my fieldwork I followed two of them, on the respective topics of measuring domestic energy use and energy-saving practices. Except for one hosting woman, all other people during these workshops (nine in total), were all men. Based on the tips shared and the questions they asked, I got the impression that the workshops targeted an ‘advanced’ audience. Tips included cleaning up the radiator with special brushes to increase its efficiency and measuring whether the eco-mode of the washing machine actually saved as much energy as it promised. One participant for example expressed that he was already active in energy-saving and “was curious what could be done more”. Offline workshops or workshops targeted specifically for people in energy-poverty were not yet organized by Energie-U.

The projects and workshops (co)organized by Energie-U were originally meant to promote sustainable energy use from an environmental objective, while during the rise in energy prices the aim of helping people in energy poverty became more apparent. Still, the use and effectiveness for this target audience has been limited. The recognition of needs for energy-poor people, such as the level of the workshop and the need for extensive help in understanding and installing the materials in the energy boxes, has so far been limited. This in practice meant that people who already have the time and resources to reduce their energy use, profit most from the energy initiatives, decreasing its distributional justice as well.

In the second part of this chapter, a closer look will be taken at the psychological barriers that prevent people in energy poverty from making use of initiatives by social work organizations, the government, and energy-oriented NGOs.

2.2 Psychological barriers in reaching out to people in energy poverty

A week after we agreed on organizing an energy-saving workshop in Overvecht, me and Kasper awaited the people to come. From different organizations, Kasper had already heard they spread the message about the workshop further, and also when I handed out flyers at the food bank, some people showed interest in the event. A food bank volunteer and a municipal energy transition officer joined the workshop out of professional interest.

Around 9:30am, one of the people that showed interest in my flier at the food bank the day before, turned out to be the only resident to show up for the event. “I was very curious about what I could do more to save on my energy,” she said and explained she already took ‘simple’ energy-saving measures such as cooking for two days at once. She had seen her energy bill doubled in the last few months, although thanks to renovations by her housing corporations, her energy bill was still relatively low at 104 euros a month. While Kasper held his talk, two people who were at the community center for other reasons (a volunteer and someone joining for the weekly coffee morning), listened from a distance and actively participated in the conversation by asking questions.

Kasper received requests for giving more workshops all around Utrecht in the community centers of Dock, and also the Dutch mental healthcare organization GGZ (Geestelijke Gezondheidszorg) invited him to give a workshop specifically for their target audience. When the first follow-up event was organized a few weeks later in a community center in Noordoost, however, the ratio between social workers and interested residents was even more skewed. The table was surrounded by me, Kasper, another volunteer of Energie-U, four students of the Hogeschool Utrecht, a member of the poverty coalition, an employee of the community center and the employee of the GGZ that had contacted Kasper before. Only one resident joined this group, after saying she originally thought it was an information event of a heat pump initiative.

While looking for interviewees throughout my fieldwork, I already experienced difficulties in identifying and reaching out to people in energy poverty. Organizing this energy-saving workshop provided me with personal experience in reaching out to this audience for helping in particular. As I already mentioned in the opening of this chapter, not everyone I handed out fliers to showed interest in energy saving even though they were likely to (and sometimes mentioned to) be affected by the rising energy-prices. The residents who came to the event were either originally there for other reasons, such as the coffee morning, or

because they thought the event had a different purpose, or had already a basic interest in energy-saving practices in the first place.

As many of my aid-providing interlocutors had told me before, reaching the audience of people in energy poverty to improve their situation can prove difficult. Many of these reasons have a psychological foundation, that prevent people from searching for, or making effective use of, energy poverty alleviation initiatives. First, one needs to be aware of what initiatives exist and what one can do to cut energy costs. Second, one needs to have the mental space to actually be receptive to this information and apply it. Third, one needs to trust the instances that provide potential help. A last psychological barrier for making use of initiatives, is the shame for one's situation.

Like my own event and the government campaign *Make the switch as well*, many initiatives on energy poverty had the aim of sharing knowledge like energy saving, with the assumption that raising awareness is enough to change behavior. The Energie-U energy measuring workshop started with a slide stating: *To measure is to know, to know is to improve, to improve is to save money*. Deriving from this assumption, the main challenge would be to reach people for this information in the first place. The people who listened to the workshops at the community center 'by accident', showed interest once they were there and the threshold to join was low.

However, sharing information is likely not enough for people in financial precarious situations, as one also needs to have the mental space to look for and process this information. When I asked Anke if she thought raising awareness for her audience was a solution, she answered that the mental space of people in (energy) poverty is usually too limited to think about long-term problems.

For this reason, Anke suggested that initiatives such as the government energy bill compensation should involve as little bureaucratic work as possible for households in need. She proposed the municipality could take over the total care for the energy bills for them, similar to the work of a financial administrator, and include the compensation there. "That would be one bill less to worry about for these people." Like pointed out by social worker Rosa earlier in this chapter, the bureaucracy around the government compensation formed a large threshold for people to actually apply for it, especially given their limited mental space in their situation.

Some employees of Energie-U described distrust by people in energy poverty to be a barrier to reach out. This accounted especially to initiatives with commercial interests at stake such as renewable energy initiatives and housing corporation projects, but distrust in social work is a significant issue as well. At a platform meeting of the poverty coalition, someone noticed: “People in deprived neighborhoods are very suspicious. They think everyone who visits them does that because they get paid to do so.” Like Bartiaux, Day, and Lahaye (2021) also noticed, people “seemed tired of having their daily life controlled (usually by social workers)” (277). Decreasing the bureaucracy could again be a way to make people more receptive to help. Also, when someone has long-term contact with a limited number of social and government workers, stronger relationships of trust can be built (Tonkens & Verhoeven 2019).

A last psychological factor why people in energy poverty would not make use of existing alleviation initiatives, is the shame they feel for their situation. This naturally is an ‘invisible’ cause, although literature suggests shame indeed exists among people in energy poverty (Longhurst & Hargreaves 2019). “People hate it when they need to beg for things,” a board member of the poverty coalition explained to me. That was also a reason why she did not think of the government compensation as an ideal solution. Instead, she suggested energy-poor people could get solar panels from the government to reduce their energy bills. “I would like to know how much that would actually cost, compared to the problems that now emerge [with the rising prices]” a board member said, “if it would even out, it’s an easy choice.”

These psychological factors, of unawareness, lack of mental space, distrust, and shame, work as poverty traps that prevent people from making use of available help. In practice, this might increase the distributional injustice between different groups, such as the people who have the time and mental space for following energy workshops and those who do not. Without a grounded exploration of the needs of people in energy poverty and how to reduce these psychological barriers, top-down aid initiatives miss sufficient procedural and recognition justice as well.

2.3 Concluding remarks

In conclusion, this chapter has shown how energy poverty alleviation initiatives do not have straightforward results for the people who need it the most, due to intersecting issues, (psychological) poverty traps and insufficient attention for the three tenets of energy justice. Although social workers, governments and energy-related NGOs show increased interest in addressing energy poverty by among other things initiating awareness campaigns and providing financial and material aid, they face barriers in effectively reducing it.

People have different needs, such as language assistance when applying for benefits or help with finances when they cannot take care of it themselves. Moreover, distinct poverty traps emerge as unawareness, lack of mental space, distrust, and shame, are bigger among people in (energy) poverty. An integrated approach that recognizes individual needs and addresses barriers people encounter in (being able to) make use of initiatives (i.e. ensuring recognition justice), based on an inclusive decision-making procedure (i.e. ensuring procedural justice), could ultimately increase distributional justice in a time where rising prices are challenging this.

In the next chapter, the energy transition in Overvecht will be explored as a potential source of energy poverty alleviation while taking these same (in)justices as the lens of analysis.

Chapter 3: The Energy Transition in Overvecht

“It's a running gag that I was able to retire because I renovated my house. But it's true that my energy is ridiculously low! My yearly bill is now minus 400 euro, thanks to all the compensations from the government!” In many ways, Kasper was an energetic person. I met him in front of a community center in Overvecht, where he had just finished teaching biking lessons for newcomers. “That's a form of energy saving, too.”

Kasper lived in an apartment building in Noordoost, the city part east to Overvecht, together with 93 other homeowners. He had tried to convince the people in the homeowners' organization (vereniging van eigenaren), to renovate them together, among other things to get the apartment gas-free. “I told them it's cheaper, and also more fun. I even proposed to pre-finance 600 solar panels myself! But they didn't want to. They were scared it would set fire to the roof, all sorts of fears. It's idiotic. But people don't want to change. It's nice what you did, they say, but it's not for me.” Now, he had made his own house gas-free and used his energy efficiently, partly thanks to investments in technology like infrared panels. “And I know exactly what I use my energy for. It has become a habit; I don't think about it anymore.”

Kasper now tried to share his passion for energy saving through several voluntary and paid positions. One of them was being an energy coach at Energie-U, for which he visited apartments that are either being renovated or newly built in an energy-efficient way by housing corporations.

“You see the building over there?” Kasper pointed to a tall, black flat behind us. It was a remarkable building, with solar panels on each balcony and a vertical layer of solar panels on top too. “It was a pilot project in which all apartments also got thorough insulation and low-temperature heating. Temperature and ventilation are all monitored and adjusted automatically. In principle, you don't need to think anymore.”

Despite these promising features, Kasper saw during his visits how many people do not use the new technologies the way they are meant. “People keep their old habits. Opening your window is fine for 15 minutes, but not for the whole day. Otherwise, the heat is lost to the air outside while the heat pump keeps working hard - wasting a lot of energy, actually. And when it's cold at home, people still tend to put the temperature higher. But low-temperature heating doesn't work like that. It's better to have one steady temperature all-year round. Well, I get it, if you're used to city heating for 40 years,” Kasper said. “But what if you suddenly feel cold?” I asked him. “You just wear an extra sweater. But people need to learn that.”

The energy coaches of Energie-U only visited such apartments one time, but Kasper would still have liked to come back to check whether the message got across. “I hope people will see the benefits. Because the renovations have also caused some trouble, some noise. The first yearly bill is coming up now, although I am not sure if people knew how much they paid before. They only pay for electricity now, while having their own solar panels, and their rent didn't even go up! They are truly lucky. But they don't see it yet.”

Kasper sees getting support as one of the biggest barriers in carrying out the energy transition. “In this flat, they made the 70% consent threshold required to carry out the project, but the residents actually had no clue about what was going to happen.” A few weeks before, at the very same place, I spoke to social worker Thomas, who pointed at the same building. He told me that seemingly minor things, such as having to change your curtains because of the new isolation, and changing one's cooking behavior with new induction panels, already led to resistance among residents. Although they were financially reimbursed by the housing corporation for the needed personal investments, traditions and memories attached to old practices provoked strong emotions.

I asked Kasper what should be done if Overvecht wants to reach the goal to become a gas-free neighborhood by 2030, and for the overarching targets of the energy transition in the Netherlands. “There needs to be clarity. There need to be laws that will obligate owners of buildings to renovate. People should know when they need to be switched. Otherwise, it has no chance to succeed. As long as people can keep resisting as much as they want, they will.”

In the example of Kasper, we see how despite the existence of good intentions of a housing corporation, government actors and an NGO, unconsciousness and distrust among the people affected can impede progress in the energy transition. In this particular case, people in energy poverty were given a head start in the energy transition - i.e., there is a sense of distributional justification. Although this was true ‘on paper’, less attention was given in the process to the other two tenets of energy justice, i.e. procedural and recognition justice. Lack of grounded participation in the procedure, and a consequent misrecognition of individual concerns such as the sentimental value of old curtains or cooking on gas decreasing the trust relationship with the initiators, sabotaged the process.

Overvecht, being a low-income neighborhood with low energetic quality of housing, was chosen to be one of the first pilot neighborhoods in the Netherlands to become gas-free, in

line with the national government target of having a carbon-neutral national economy 2050 (Coalitieakkoord 2021; Gemeente Utrecht, personal communication, May 4, 2022). Overvecht-Noord was the first area assigned to get off the gas in Utrecht, and by 2030 the whole of Overvecht is supposed to only use electricity and city heating for household energy use (Gemeente Utrecht, personal communication, May 4, 2022). Whether this target will be made, will however largely depend on the support by the residents of the neighborhood for this transition. As the stories Kasper collected show, however, skepticism exists, and it will be crucial for succeeding to gain the trust of these residents.

The energy transition in the Netherlands is often mentioned as a chance to reduce energy poverty, provided that it is executed in a ‘just’ way (see e.g., TNO 2021). Possibility and willingness to participate in decision-making are crucial for ensuring this. When efforts to incorporate residents in this decision-making are insufficient, residents will perceive this as a lack of procedural justice. Consequently, this insufficiency can also prevent the recognition justice when specific needs of different groups and individuals are not recognized. Next to being willing to make the needed investments, there is also the question whether someone is able to. Distributional justice can be impeded by different poverty traps and their opposite counterparts. Whereas Kasper had the means to invest in his own home efficiency as a homeowner with a stable income, for (social) renters and people with a lower income this is less easy to do.

In an essay collection on the energy transition, ECN, the Energy Research Centre of the Netherlands, (Kooger, Straven & Rietberg 2017) warns for the Matthew effect in the Dutch energy transition: “Those who have a lot, gain. Those who have not enough, lose” (Clancy et al. 2017, 86). Homeowners with a high income could make use of Dutch tax reductions and subsidies that make it financially attractive to insulate their homes and take solar panels. Middle- and low-income households, on the other hand, have fewer means to invest in energy efficiency measures and little voice in whether or how they would like to renovate. This is one of the ways in which an energy transition could lead to a poverty trap, especially in the context of rising prices (Clancy et al. 2017).

Whether the energy transition, in particular the renovation of houses of low energetic quality, can be a means for alleviating energy poverty depends on the way substance is given to distributional, procedural and recognition justice in its implementation. In the coming chapter, the role of the energy transition in Overvecht and Utrecht in the daily lives

of people experiencing energy poverty will be analyzed by looking at these aspects of energy justice respectively. Before moving to this analysis, a broad overview of current policies and practices will be given by looking at the main actors of the energy transition in Overvecht and Utrecht.

3.1 Energy transition actors

Overvecht has been the main area of focus for the energy transition in the municipality of Utrecht when it comes to reducing household emissions, since this goal was set in 2015 as part of the national pilot neighborhood program PAW (Programma Aardgasvrije Wijken [Program Gas-free Neighborhoods] n.d.). Making all houses gas-free is seen as the main challenge in addition to improving insulation and expanding renewable energy sources in the form of solar panels on roofs (Gemeente Utrecht, personal communication, April 7, 2022). During the first years since this target was set, the focus is on Overvecht-Noord to become gas-free in 2024, while Overvecht-Zuid (South) is targeted in 2030.

One of the reasons these two areas were chosen to be the pilot neighborhood in getting houses off the gas, is that more than half of all houses in Overvecht (roughly 60%; Mitros, personal communication, 19 July 2022) have already been connected to city heating (*stadsverwarming*), the municipal heating infrastructure that gets its energy mostly from residual waste burning. For houses connected to this system, becoming gas-free is usually a matter of changing to induction or electric cooking instead of gas stoves. Most houses that use gas for their heating will be connected to city heating if this turns out to be the economically most viable option for becoming gas-free. For building these infrastructures, the executing corporation is Eneco. When someone is getting connected to city heating, they will automatically be given a separate contract for their heating bill at Eneco.

The municipality describes its role in the energy transition as a ‘director’ of the process with all stakeholders (Gemeente Utrecht, personal communication, May 4, 2022). Also, together with the national government they make the legislative framework for the energy transition. Currently, there are no binding rules that obligate owners of residences to become gas-free and being connected to the gas infrastructure is a nationally regulated right. The municipality helps look for support for households of both homeowners and social and private renters for undertaking the needed renovation and transitions.

For homeowners, taking their own initiative is supported and stimulated. Some (national government) subsidies for people actively choosing these solutions exist. There are however at least two activist groups in Overvecht consisting of homeowners who do not see these incentives as sufficient for renovation. In some cases, taking early action on house renovation meant missing later available subsidies or compensation. The municipality talks on a regular basis with these kinds of activist groups, as well as organizing focus groups with other homeowners to shape plans for becoming gas-free that can count on their support (*draagvlak*). Although no date is set, the tendency is clear that at some point in the future, homeowners will one way or another also need to get off the gas. When a street is designated to be connected to city heating, households are also given the opportunity to solve it in another way, such as getting heat pumps, as was said during a webinar for homeowners in Overvecht-Zuid and the city part of Noordoost. The municipality does not provide full compensation for renovations for homeowners, giving the argument that renovations will increase the net-worth of their houses. Homeowners that cannot afford renovations with the currently existing subsidies, and do not want to, or cannot take up a so-called sustainability loan, however have limited ability to perform these demanding renovations.

Renters have little active power over the energetic quality of their house as their property owner that takes the initiative for bigger renovations. People renting in the private sector are usually dependent on the economic consideration of their property owners on the benefits of renovations. In the current situation of housing scarcity in the Netherlands, it is hard to find good housing, decreasing the incentive for private property owners to invest in better energetic housing quality.

Housing corporations are the property owners for public housing, where rents are deliberately kept low for the lower incomes, and in general they are more proactive in undertaking initiatives for renovation than private property owners. In Overvecht the main housing corporations are called Mitros, Bo-ex, and Portaal. The aim is to minimize the effects of the costs for these renovations for the price of the rent. In Overvecht, about half of social rental houses had been renovated by 2017, and most of the rest was planned to be done before 2030 (Gemeente Utrecht, personal communication, May 4, 2022).

Housing corporations regularly renovate houses in the periods between two residential contracts, and in some cases based on the active request of renters (e.g., in the case of

getting induction stoves). In order to make bigger steps, they aim at doing renovation projects for entire apartment buildings or rows of houses at once (Mitros, personal communication, May 3, 2022). By law, they are however obliged to gain 70% consent of their residents before they are allowed to carry out such a larger renovation. In the case of so-called ‘non-improvement interventions’, a classification that replacing gas stoves for electricity-based ones has, a 100% consent is still needed. Semi-government organization Dock employs social workers that visit renters before, during, and after renovations to help with emerging concerns.

Potentially, the energy transition can improve the circumstances of residents of Overvecht. But in order for the energy transition to actually increase domestic energy justice, it is important to take all its three tenets into account. In the second part of this chapter, therefore the degree to which distributional, procedural, and recognition justice are present in Overvecht will be discussed respectively.

3.2 Three tenets of energy justice

3.2.1 Distributional justice

According to McCauley et al. (2019), “[d]istributional justice entails an assessment of where the key impacts [of energy systems] are located” (917) It concerns the distribution of ills and benefits of energy systems over geographical areas, but also over the parts of society affected in terms of categories of people. Originally, most literature focused on the burdens of energy production, e.g., in Utrecht there is currently a political debate on the placement of wind turbines in the municipality close to residential areas. More and more research is however now done on the end-use of energy. The distribution of accessible and affordable energy throughout societies, and the redistribution energy transitions bring, are emerging topics in a variety of (social) academic disciplines (Walker 2009; McCauley et al. 2019).

Historically, Overvecht is an area where the energy quality of houses is low. With most buildings built in the 1960s and 1970s, energy labels of most houses were approximately energy label E, F, or G on a the nationally defined scale from A (high) to G (low) for a long time. In more recent years, renovations have taken place at social housing properties, improving the labels to C or D (Mitros, personal communication, May 3, 2022). It is a deliberate policy to structurally invest in renovations for the lowest-quality buildings by

these housing corporations. As social housing rents follow strict legislated rules, renovations can at most lead to an increase of rent of roughly 20 euros at maximum (Mitros, personal communication, May 3, 2022). In return, the energy bill is supposed to go down with a similar amount of money. Given the current rise in energy prices, however, this last promise can often not be fulfilled completely.

To be able to be assigned a social (rent) housing, one cannot earn more than a lawfully defined maximum, normally at roughly 22,000 euros. As there is a large general shortage in affordable and qualitative housing in the Netherlands as of 2022, being able to get social housing is however a long process. A woman living in a house of low energetic quality described to me the desire to move to a place that had better insulation and that would have better facilities for her two disabled children, but if she were to give up the social housing she had, she could not afford the prices of an empty apartment in the private sector, this would be roughly double of what she paid at the moment.

In contrast to social housing that have to obey strict rent prices regulations and follow government-led social programs such as those made around the energy transition, private renting works mostly on an economic logic. Rents in the private sector are rising steeply in the past years in the Netherlands. The existing scarcity reduces the incentives for landlords to invest in the quality of the housing they rent out.

Sometimes private property owners abuse the unequal power position they have to their renters. A woman studying in Utrecht described an in her view unjust raise of her monthly rent, described by her landlord as due to the rising energy prices. When she and her housemates calculated that the imposed rise was higher than expected based on just energy prices, they complained about this. According to this student, this was a reason for her landlord to try to “kick her out”, even though he was not legally allowed to.

Due to their limited financial opportunities, most people in energy poverty belong to these groups of social and private renters. Still, there is a significant amount of people in energy poverty that are homeowners. This group has a bigger agency over the energetic quality of their house, but they are then dependent on their own financial capacity to invest in renovations. So-called sustainability loans exist for house renovations for homeowners. In theory, the long-term return rate of the investment is supposed to outweigh the investment costs, but people in financial precarity do not always want, or are not always able legally, to take up such a financial risk.

In Overvecht, being part of the national PAW pilot neighborhoods, also special subsidies exist, but for these to be sufficient, still an investment of the homeowners themselves is expected (Gemeente Utrecht, personal communication, May 4, 2022). Also, knowing about the existence of these subsidies and how to apply for them is dependent on one's personal circumstances, such as the mental space one has available, and the proficiency one has in Dutch. An employee of Energie-U said that it is usually higher-educated people or people with a technical background, and related, a higher income, that apply "that do not need it" and people who could actually use it as an incentive do not know how to apply for it.

In some areas of Overvecht, getting connected to the city heating infrastructure is not seen as economically viable. These houses are expected to get other alternatives to gas heating, demanding large investments in the house. The municipality does not want to subsidize or compensate for these renovations fully, giving the argument that the value of the house will increase as well. So far it is legally not possible to oblige homeowners to get their house off the gas grid, but to make the target of Overvecht becoming gas-free by 2030, this obligation is expected to be developed.

When it comes to solar panels, the local and national government are slowly phasing out subsidies, giving the argument that "the market has become full-grown", and that investments now pay back even quicker now energy prices are rising steeply (Gemeente Utrecht, personal communication, April 7, 2022). For both renters and homeowners, the type of house defines for a large part the possibility to do so. Living in an apartment building, most common among low-income households and groups like elderly and single-parent households, reduces the size and the ownership of the roof. In this way, people that already have limited resources, have again fewer chances of producing their own renewable energy.

The access to the measures for the energy transition is distributed over society in uneven and ambiguous ways. Policy efforts exist that target specifically the groups in society that are most likely to suffer from energy poverty, such as social renters and poor homeowners. At the same time, however, certain mechanisms, such as being dependent on property owners and living in shared buildings, still prevent the most vulnerable groups from profiting from the potential benefits of the energy transition, leading to poverty traps. Having intersecting disadvantages decreases this access, such as language disadvantages and lower education, as will be talked about more in the subchapter on recognition justice.

In the next subchapter, injustices surrounding procedures in shaping the energy transition will be discussed in further detail.

3.2.2 Procedural justice

Procedural justice concerns “democracy, openness and inclusion in decision making” (Walker 2009, 627). In the context of energy interventions, it refers to the “right to a fair process” for actors, that is, how they are being involved in (or excluded from) decision making processes that impact their lives (McCauley et al. 2019, 917). Structural involvement of affected stakeholders can improve the overall support for policies and the way energy infrastructural developments are appreciated once the final results are met (Yenneti and Day, 2015; Knudsen et al., 2015).

During the first phase of the energy transition in Overvecht, the focus of the municipality was to pilot different projects together with housing corporations. The fact that Overvecht, and Overvecht-Noord in particular, has a large share of corporation-owned property allowed for “making big first steps”, as a municipality officer explained to me. In order to make the legal 70% consent rate, housing corporations invest in communication with renters in getting them along. However, as the opening story of Kasper showed in some cases still “residents actually had no clue about what was going to happen” when this consent was asked.

Renters in general have less power in choosing when and how their house is being renovated. For people in social renting housing, some measures taken, such as insulations, were welcomed. However, lack of active involvement in decision-making led to dissatisfaction with both the process (e.g., when one was told to leave its house for a few weeks during the renovations), and with the final result (e.g, for someone who had to replace his old curtains that bared sentimental value to him). Another story regularly told was dissatisfaction with gas-free cooking, especially in the case of Arabic women who mentioned this as a loss of their tradition. Samira, the social worker organizing social gatherings for immigrant women, said how some women bought a portable gas stove in order to still be able to cook the same way at home as she was used to. “I think I would do that too, if my house was taken off the gas,” she said.

Samira was also frustrated because of what she was gone through while renovating her apartment. She complained about the low quality and delivered. “Of course, the quality was old, but nothing fell down the ceiling,” she said. She mentioned that these bad experiences also led to a lack of trust in other well-meant efforts, when the housing corporation was looking for support for solar panels on the roof of her apartment building. These examples stress the need for inclusive participatory approaches during all steps of the energy transition processes when imposed top-down.

Homeowners also described concerns about lack of participation, although with different underlying dynamics. As homeowners have more agency over the energetic quality of their house, the government-imposed transition to a gas-free neighborhood was sometimes described as a threat to their freedom. According to the current government plans, initiative, and a significant share of the needed investments would have to come from the homeowners themselves to make their house gas-free. This led to resistance among these residents of Overvecht.

Early May 2022 I went to the Utrecht city hall to speak with Mike, who had just taken over the job of area manager (*omgevingsmanager*) in Overvecht-Noord from his predecessor three months before. In this role, he was responsible for providing communication to and facilitating participation of residents with regards to the energy transition. From his governance and public management background, he described an interest in “reducing the gap between policymakers and citizens.” The role of the municipality he described as the ‘director’ of the energy transition, bringing stakeholders together to create support (*draagvlak*) for possible solutions in reaching the targets of Overvecht becoming gas-free by 2030.

The main focus of Mike's activities was to engage with homeowners and private renters for these goals. He led three municipality-initiated focus groups, where citizens were asked for their inputs on potential plans. One of the outcomes was the formulation of six core values for rolling out of the energy transition: affordability, sustainability, transparency, freedom of choice, openness of process and reliability of found solution.

In his two longer-running focus groups, Mike noticed how over time, mostly technically interested residents stayed longest while others quit earlier in the process. This is one of the reasons, he thought, why sustainability was a relatively important value to these groups. Concerns regarding energy poverty, on the contrary, he did not see often returning

in the conversations with these groups. "I don't think people in energy poverty would make the time investment," he explained. This shows how the lack of mental space, time, knowledge, language proficiency, and/or other disadvantageous factors that poor people in general experience, could impede access to procedural justice.

In addition to his role as an area manager for Overvecht-Noord, Mike was the contact point for two citizen initiatives of homeowners. These initiatives were critical towards the municipality's plans for their houses. Although not principally against the energy transition, the procedure of citizen involvement and lack of democracy was a source of discontent for these groups. When I asked Mike whether I could join one of his meetings with them, he doubted as he warned "that emotions could run high there." The activist groups were not open for an interview when I approached them, but they replied briefly to my questions by mail. The spokeswoman of one of them wrote:

As regards the plans for gas-free Overvecht-Noord, the municipality unfortunately did not and does not yet have any financial assistance for residents who actively go ahead and insulate. Only 'process money' is available to encourage and guide residents in devising and implementing insulation plans. Nice for people who need that push, but it didn't help me at all. What's more: I had to pay the highest bills for insulation myself. This is painful and detrimental and it doesn't contribute to an eagerly awaited gas-free future. No matter how good I think it is, by the way.

In Overvecht, most housing is getting connected to the city heating network, except for some neighborhoods where this is not deemed economically viable. During a webinar for homeowners in Utrecht Noordoost and Overvecht-Zuid, viewers were told that homeowners did not necessarily need to connect to the city heating if they had different preferred solutions. In this case they would need to "fix it [becoming gas-free] themselves". Although no date was set, after some hesitation the hosts said that gas eventually would "be thrown out" based on the existing government goals. Currently, access to domestic gas legally cannot be denied yet, although the government-set goals imply that at a certain point the gas network will be dismantled in more and more areas. During my fieldwork, I encountered multiple homeowners who described a sense of powerlessness in this decision-making process.

In his role as a director of the energy transition, Mike tried to get stakeholders together in shaping gas-free alternatives such as city heating. Once an approach for city heating is

designed, Eneco will be the executor of the project. The municipality tried to get together Eneco with residents. “But before the offer is there, I think most people are waiting with participating,” he said.

Whoever gets connected to city heating, automatically gets a separate bill from the executing company Eneco. This also accounts for social renters who were assigned city heating top-down. Although it is presented in policy framing as a sustainable and affordable alternative to gas heating, multiple social workers described concerns on the costs of city heating for lower income, especially since no freedom of choice remained once connected to city heating.

Several obstacles exist for achieving procedural justice for the residents of Overvecht. Renters have limited agency over the energetic quality of their house, and even legally required consent rates do not guarantee satisfaction throughout all phases of the renovations. Since the designation of Overvecht as a pilot area for the Dutch energy transition, the quick rollout of required renovation in (social) rent houses and the ‘pressure’ for homeowners to renovate as well has led to discontent and a sense of powerlessness. Reaching fixed goals that involve all residents of an area might never be possible without discontentment of some of them, but in order to keep support for the imposed measures, it is crucial to involve residents through all stages of the process. Often matters of (mis)recognition play an important role, as will be discussed in the next paragraph.

3.2.3 Recognition justice

The last of three energy justices concerns recognition justice. It “pertains to fair representation and full political rights with regard to energy issues” (Rasch & Köhne 2017, 606; McCauley et al., 2013) and calls for special attention to “where injustice emerges with regards to the impact on parts of society” (McCauley et al. 2019, 917). Recognition justice overlaps with procedural justice and distributional justice but has a special focus on the lived experience of “cultural and institutional processes of disrespect, denigration, insult and stigmatization, which devalue some people in comparison to others” (Walker 2009, 615; Fraser 1997; McCauley et al. 2019). It looks at what knowledge, values and practices are given what attention in the execution of energy interventions. This concerns people with different intersecting disadvantages in society, such as based on unchangeable identity

aspects such as gender and race, but includes broader groups such as students, single-parent households, and elderly. Walker (2009) writes on this: “while all bodies are not physiologically equal, neither, clearly, is the social context for people in households, living and working within communities with differential access to resources, to healthcare, to healthy and good-quality food and so on.” (619-620) Recognition justice thus theoretically connects to the concepts of intersectionality and poverty traps as discussed in previous chapters.

A woman working as a policy maker for the energy transition at the municipality of Utrecht pronounced the goal of performing the energy transition “in a socially-inclusive way”. Instead of just sending letters in Dutch, she tried to reach out in diverse ways, including the making of videos in different languages and communication through churches and mosques.

Social workers and residents that I spoke to, however, still had a fair share of critique on the degree of inclusivity that exists now. For applying to subsidies or to know the best options for renovating one's own house, certain technical insight is expected. The three people I interviewed that were most passionate about energy saving all had a technical working or study background. When I attended webinars organized by the municipality and Energie-U, I noticed a large share of the audience already had an interest in sustainability and renovation. People that lack this initial interest or insight – possibly the people that would profit most from such communications – attended these webinars far less. During my own energy-saving event I also noticed the difficulty of reaching my target audience, as described in the previous chapter.

Other examples of misrecognition of possibly important interest groups include people that are in poverty. Employees of the Utrecht poverty coalition said how they had rather seen the money now spent on energy bill compensations, instead used to improve housing quality of energy-poor people first. Another example are the earlier mentioned Moroccan women in Samira's group can be described as a form of misrecognition of cultural differences. Little importance was given to foreign cooking traditions in the decision-making processes, decreasing the sense of recognition these women experienced.

Municipal officer Mike described the focus groups of citizens he led as “representative for the group of homeowners”. Next to the mentioning of relatively higher- and technically educated people in his groups, he realized that his focus on homeowners and private

renters did not mean the groups were representative of Overvecht as a whole. He tried to be ‘visible’ in the neighborhood for questions and concerns of social renters about the energy transition as well. When I asked him whether this had led to results since he started the job three months earlier, he answered briefly: “To be honest: no.” He added that he did his best for this by for example attending my energy-saving event and doing interviews for local newspapers. “I’ll always make sure that there is something written on energy poverty in there as well, then.”

In addition to the municipality, there are social work organizations that invest in community building in order to raise support for a broad audience. I spoke to Thomas, a social worker at Dock, who had visited social housing apartment buildings in Overvecht that were renovated in order to address possible concerns of neighborhood residents. He invested in relationships of trust to make sure people felt safe sharing their concerns and personal matters with him. “The energy transition is too much invented at the drawing board,” he said, stressing the need to look at individual needs and practices of households. “I have visited hundreds of apartments by now, but no home is the same.”

This point is supported by similar findings of Lacy-Barnacle & Bird (2018), that identify how intermediary organizations such as Dock can play a “critical bridge” in engaging people in energy transitions (71). Tonkens and Verhoeven (2019) underscore this by examining how front-line social workers use different strategies, such as asking, enabling, linking, and responding, to engage citizens they know from close-by in civic participation. Audiences that usually would not actively engage in decision-making or do not know how to sound their voice in these processes, could be activated by the efforts of social workers. In this way, by investing in the recognition of all involved individuals, procedural justice and eventually distributional justice can be increased at the same time.

3.3 Concluding remarks

In conclusion, despite the potential of the energy transition to decrease inequalities and make the energy system more ‘just’ (TNO 2021), in practice this process is not linear and many barriers still exist in reaching distributional, procedural, and recognition justice in Overvecht. Given its departure point as a low-income neighborhood with generally badly insulated homes, the head start Overvecht got as a pilot neighborhood in theory could

improve distributional justice by decreasing the difference with other neighborhoods. In practice however, some efforts to stimulate renovations are not accessible for low-income households, reinforcing poverty traps. Subsidies can miss this target audience when requested own investment is still too high for homeowners, while (social) renters generally have limited say in how and when their apartment will be renovated.

In order to increase distributional justice, the other two tenets of energy justice are just as important as they ensure to take residents along in the decision-making procedure and to recognize their concerns and needs. Efforts to ensure procedural justice are being made by the municipality, housing corporations, and other organizations such as Dock and Energie-U, that invite residents for focus groups and conversations. However, difficulties appear in reaching them and general unclarity in how and when which houses are supposed to be made gas-free still exists. Furthermore, recognition of differing needs of all sorts of housing, such as when people demand other sources of communication to be reached or when changes conflict with cultural or personal traditions.

The need for domestic energy justice is more and more seen by governments and organizations, especially in the context of rising prices and the energy transition. But similar to the general energy poverty alleviation efforts discussed in the previous chapter, straightforward policies might not have straightforward effects in the energy transition either. Intersecting sociodemographic factors and poverty traps create different needs for different people. Or as social worker Thomas put it: “No home is the same.”

Conclusion

The steep rise in energy prices of winter and spring 2021/2022 brought the topic of energy poverty high on the Dutch political agenda. Before, no policy specifically targeted on energy-poor people existed in the Netherlands, and no structural quantitative or qualitative monitoring of the issue existed yet. By performing anthropological research on the low-income neighborhood of Overvecht, Utrecht, I aim to contribute to a growing academic literature on the everyday realities of people in energy poverty (Brunner, Spitzer, and Christanell 2012; Connon 2017; Großmann and Kahlheber 2017). Examining intersecting disadvantageous sociodemographic and poverty traps that affect the residents of Overvecht, this thesis shows how achieving energy justice (Walker 2009; McCauley et al. 2019) is a complex challenge especially in times of rising prices and the Dutch energy transition.

The ‘classic’ energy poverty triad of energy-inefficient housing and appliances, low income, and high prices proposed by Boardman (1991) does not explain all complex dynamics that determine one’s vulnerability to energy poverty. Sociodemographic factors such as household composition, gender, age, health, cultural background, and language proficiency, influence to a large extent how resilient one can be to rising prices. Often these factors intersect with each other, creating distinct vulnerabilities when for example divorced women become the main caretaker of their children and less labor participation makes them spend more time at home (Crenshaw 1989). Poverty traps, such as the fact that some subsidies for house renovations are in practice difficult to profit from for lower-income homeowners and renters, are furthermore amplified when one is for example not familiar with the Dutch language or the Dutch bureaucratic system.

Intersecting sociodemographic factors and (psychological) poverty traps can also reduce the effectiveness of policies targeted at people in energy poverty. Social workers can play a crucial role in identifying and addressing these disadvantages (Lacy-Barnacle and Bird 2018), but also they recognized difficulties in reaching this audience. Psychological barriers such as unawareness, lack of mental space, distrust, and shame that emerge in situations of poverty, decrease the willingness and ability of people to make use of initiatives intended to help them in the first place. For example, the additional government compensation for the energy bill up to 800 euros, was difficult to apply for if one did not regularly receive a

government benefit (RTL Nieuws 2022), especially for illiterate people or when other (financial) issues were perceived more urgent.

Overvecht has been assigned to be the first gas-free city part of Utrecht by 2030, potentially creating a large opportunity to relieve energy poverty in the neighborhood. Lack of inclusivity in decision-making, created distrust and a sense of misrecognition among both homeowners and social and private renters. Possibilities to renovate are unevenly spread among both income groups and homeowners and renters, and in some cases renovations are performed without full agreement of renters (e.g., switching to electric cooking when this has sentimental and cultural value to one).

While most policies are intended to increase distributional energy justice – i.e., decreasing and redistributing the burdens of energy poverty in particular for the ones who need it the most – the other two tenets of energy justice are crucial preconditions for effectively achieving this first target as well. Procedural justice was addressed by for example organizing focus groups when houses were planned to get renovated, but among residents this was still perceived as a top-down decision making process, decreasing their willingness to cooperate. Recognition justice was in some cases addressed when social workers listened in person to people’s concern or when diverse modes of communication were used, but still for some people being forced to switch cooking felt as a form of injustice, such as Moroccan women demanding gas stoves for their traditional dishes.

This thesis has given a broad overview of issues of energy justice in Overvecht, given its position as a low-income neighborhood in times of rising energy prices and an on-going energy transition. Further research could explore more specifically the energy needs of one or a few specific groups, such as elderly or people of migrant backgrounds. A closer look into their everyday needs, and the role of different stakeholders play in this, could deepen the understanding dynamics of energy poverty and its opportunities for alleviation shown in this thesis. Furthermore, this could eventually make it possible to identify specific policy recommendations for these groups.

Energy poverty is experienced by a growing group of people that have diverse characteristics. More than ever before, it is now crucial to see their needs and address them in a just way.

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