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An Intersectional Assessment of Energy Poverty Among Migrant Groups in Germany

Hannah Galster (6543103), h.s.galster@uu.nl

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Supervisor: Alberto Alonso Fradejas

Second reader: Kei Otsuki

Credits: 30 ECTS

In collaboration with: Oeko-Institut Berlin

Supervisor: Viktoria Noka

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Summary

Due to rising energy prices in the European Union, energy poverty receives increasing attention among academic scholars and policy makers. The condition compromises households' access to energy, and thereby contributes to experienced energy injustices. In this context, my study deals with the challenges to address energy poverty among diverse groups of first-generation migrants in the German federal state of Rhineland-Palatine.

I followed an intersectional approach to account for diverse manifestations and drivers of energy poverty among my target group. Thereby, my study includes both the perspectives of first-generation migrants affected by energy poverty and energy cost counsellors who provide support for first-generation migrants affected by energy poverty. Using a mixed-method approach, I evaluated data from a literature review, 11 interviews, 11 survey respondents, six case reports, and a dataset containing information of 168 first-generation migrant clients of the consumer advice centre in Rhineland-Palatine.

My results highlight three main proximate reasons for energy poverty among first-generation migrant households (i.e., low financial resources, high energy expenditure, and high energy costs). These relate to various underlying attributes which lead to energy inequalities, encompassing both characteristics of individual households and their housing condition. The energy counselling of the consumer advice centre in Rhineland-Palatine can contribute to achieving energy justice among first-generation migrants by addressing individual household characteristics involved in energy deprivation. However, I found three wider systems surrounding the access to energy in Germany (i.e., the system of energy production and provision, the provision of social security payments, and the housing market) to contribute to systemic energy injustices for some first-generation migrant households. Therefore, a main challenge that remains for addressing energy poverty among first-generation migrants regards a change of such systems in which energy inequalities are currently (re)produced.

Limitations of my research include my geographical focus on Rhineland-Palatine, my sample being limited to first-generation migrants, and my reliance on the consumer advice centre in Rhineland-Palatine as collaborator for my data collection. Future research may focus on the first-hand experiences of energy poverty among affected first-generation migrants to a larger extent, widening the target group (e.g., by including further generations of migrants), and considering a larger number of existing support services for first-generation migrants affected by energy poverty.

Keywords: energy poverty, first-generation migrants, intersectionality, energy justice

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1 Introduction

The access to energy is vital for living in our society, as it enables the fulfilment of basic human needs, welfare, and economic development (Rogner & Popescu, 2000). Thus, Sustainable Development Goal seven aims at ensuring "universal access to affordable, reliable and modern energy services" (United Nations, n.d.)target 1). This is in line with the concept of energy justice, which describes the fairness and inclusivity of the global energy system (Sovacool & Dworkin, 2014). However, the European Commission (2020) and the Energy Poverty Advisory Hub (EPAH, (2021) estimate that around 34 million people in the European Union (EU) suffer from energy poverty (EP). EP broadly refers to the inability to access and afford necessary energy services for adequate warmth, cooling, lightning, and powering appliances (EPAH, 2021; European Commission, 2020).

Due to rising energy prices, especially accelerated by recent geopolitical developments surrounding the Russian invasion of Ukraine, EP has received increasing attention in EU countries, among those Germany. In July 2022, the consumer prices for electricity in Germany increased by 16% compared to the previous year (BDEW, 2022b). At the same time, gas prices for German households in September 2022 even rose by around 117% to 133% compared to 2021 (BDEW, 2022a). In 2018 already more than 1.2 million German households (i.e., 3%) reported arrears on their utility bills (Eurostat, 2022), and this number is expected to rise in light of increasing energy prices.

In their Energy Poverty Recommendation, the European Commission (2020) notes that "there is no standard definition of energy poverty, and it is therefore left to Member States to develop their own criteria according to their national context." (Article 5). However, no official definition of EP exists in Germany (Schumacher et al., 2015). According to the consumer advice centre in the German state Rhineland-Palatine, which works with affected households, a household can be regarded energy poor if their members cannot afford the energy needed for an average German living standard or if they can only do so with extreme effort or after relinquishment of other living expense factors (Kahlheber, 2017a).

The causes and consequences of EP have received increasing attention in academic research in recent years, leading to an expanding research base (Bouzarovski et al., 2021; Chandrashekeran et al., 2022). Studies frequently relate EP to a "triad" of low income, low energy efficiency, and high energy prices (Chandrashekeran et al., 2022; Kahlheber, 2020; Stojilovska et al., 2022). Furthermore, certain socio-demographic aspects were found to be related to EP, amongst those gender (Robinson, 2019), parental status (Primc et al., 2019), employment status (Kahlheber, 2020), and age (Belaïd, 2016). This suggests a higher susceptibility to EP among certain societal groups, highlighting the need for a special consideration of their access to energy (Bouzarovski et al., 2021).

One such group consists of people with migration background. This group has not yet received much attention and is only highlighted in recent studies (Bouzarovski et al., 2022; Drescher & Janzen, 2021; Großmann & Kahlheber, 2017). In fact, UK ethnic minorities are reported to be at higher risk of experiencing EP (Bouzarovski et al., 2022; UK Government, 2022), and official EU-data discloses that the share of households affected by EP is often higher among migrants and asylum seekers than among other parts of the EU population (EESC, 2021). Relatedly, Großmann and Kahlheber (2017) highlight the specific challenges which some people with migration background may face in their adaptation to the energy system. For instance, language barriers can contribute to difficulties to collect information about the energy system, understand procedures, and check one's energy expenditure. Therefore, in some countries, such as the United Kingdom (UK), specific projects are implemented to support migrants in their access to energy (National Energy Action, 2022).

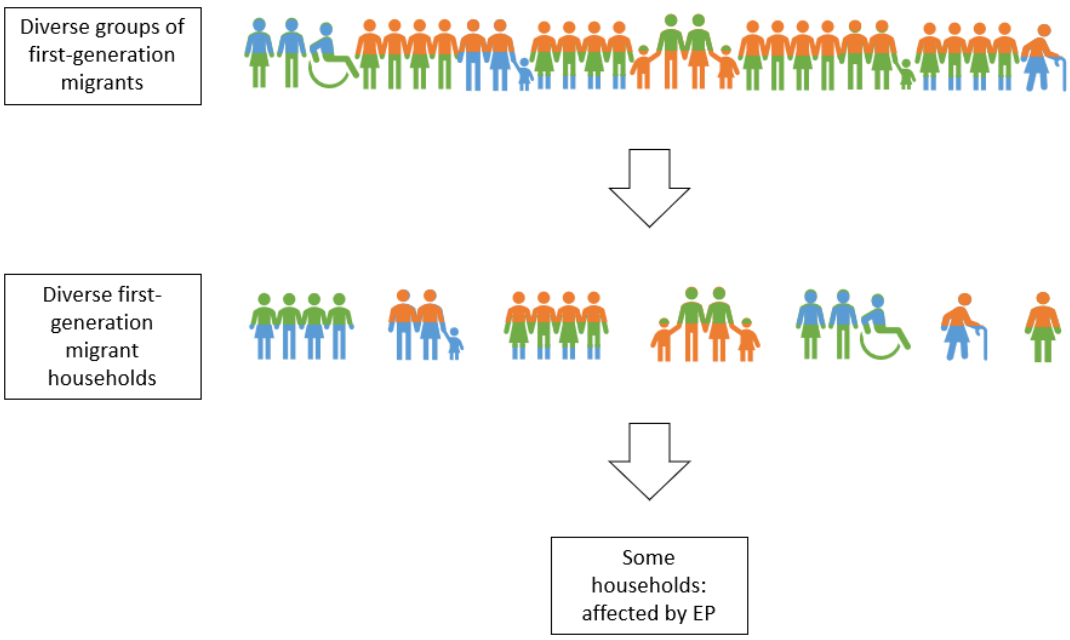
1.1 Research Focus

My research concentrates on the German federal state of Rhineland-Palatine, as around 25% of its residents have a migration background, which is one of the highest percentages among German federal states (Destatis, 2022a). People with migration background in Rhineland-Palatine have been shown to be in danger of income poverty more often than the overall population of the federal state (Fueckel, 2019). As EP shows large overlaps with low income (Drescher & Janzen, 2021; Kahlheber, 2020), a relatively larger share of migrants may also experience issues with affording their energy bills compared to the overall population in Rhineland-Palatine.

In my research I focus on first-generation migrants specifically, as they constitute around two-third of residents with migration background in Rhineland-Palatine (Fueckel, 2019). First-generation migrants are migrants who have not been born in Germany (Gkiouleka & Huijts, 2020). Previous research highlights that the process of adaptation to a country is complex and usually only occurs over several generations of migrants (Birman & Trickett, 2001; Portes, 2001; Will, 2019). Therefore, in comparison to groups of migrants who have resided in Germany for several generations, I assume the challenges regarding the adaptation to the German energy system to be most acute for first-generation migrants.

Large differences exist within the group of first-generation migrants in Rhineland-Palatine in terms of cultural background, reason for migration, and many other factors (Fueckel, 2019). Therefore, first-generation migrants constitute a heterogenous group among which diverse households[1] can be distinguished according to further social, cultural, and economic aspects. As illustrated in Figure 1, only some of those households are particularly prone to experiencing EP, since patterns of energy deprivation are complex and usually depend on various interacting factors (Großmann & Kahlheber, 2017).

Figure 1
Illustration of Delineation of Target Group



Note. Source: Author's own elaboration

[1] EP is usually considered on the level of households (as energy bills concern households and dwelling characteristics often play a role in the condition). Thus, when I refer to first-generation migrants affected by EP, this regards households rather than individuals.

1.2 Public Support Measures for Energy Costs in Germany

The German government follows a social policy approach for addressing EP (Tews, 2013), and the condition is considered a part of wider social welfare (BNE, 2020; Noka & Cludius, 2021). To support households in paying their energy bills in light of recent spikes of energy prices, the government has implemented three "relief programmes" (*Entlastungspakete*) (Bundesfinanzministerium, 2022)[2]. These encompass numerous measures to support German citizens. For instance, one-off payments of 300€ were guaranteed to (self-) employed citizens, while families received an additional 100€ per child (Presse- und Informationsamt der Bundesregierung, 2022). Furthermore, low-income and some other potentially vulnerable households were specifically considered; for example, recipients of social security payments obtained 200€ per person. This illustrates with regards to the aforementioned triad of EP, the governmental measures predominantly target the category "(low) income". However, as the measures do not further distinguish between societal groups, it may be questionable whether they provide financial relief for various societal groups to an equal extent.

Besides the general measures of the German government, the main publicly financed approach to EP in Germany is carried out by social welfare organisations, called consumer advice centres (*Verbraucherzentralen*) (Struenck, 2017; VZ DE, n.d.). These centres exist in every federal state in Germany. However, the specific services differ per German state; in a sub-set of states, the centres offer counselling which specifically focusses on energy debts (VZ Bundesverband, 2022b). In other states, the counselling revolves around legal advice on energy costs and energy usage (VZ Bundesverband, 2022a). Consumer advice centres usually deal with the immediate consequences of EP, for instance by trying to prevent energy disconnections and negotiating payment plans with energy suppliers (Großmann & Kahlheber, 2017). Therefore, while the centres broadly belong to social policy in addressing the financial solvency of their clients, they go one step further than the general measures of the German government by dealing with the proximate impacts of EP on consumers. The concrete support service of consumer advice centres differs across German federal states. The consumer advice centre in Rhineland-Palatine offers an "energy cost consultation", aimed at addressing the "systemic causes" of EP among affected residents (VZ RLP, n.d.b). Considering the high share of people with migration background in the federal state, the service is used by many migrant households (Großmann & Kahlheber, 2017).

1.3 Research gap

Recent academic articles (Bouzarovski et al., 2022; Großmann & Kahlheber, 2017) and citizen projects (National Energy Action, 2022) point out that some groups of migrants experience a heightened susceptibility of being affected by EP. However, while migration background has been incorporated in a few studies as a variable that can correlate with EP (e.g., Drescher & Janzen, 2021), Bouzarovski et al. (2022) remark the "systematic lack of research, evidence, and debate" (p. 1) regarding EP among ethnic minority communities, including migrant groups. In addition, there has been little academic focus to date on EP among groups of first-generation migrants. In terms of support measures for EP, the consumer advice centre in Rhineland-Palatine as the main publicly financed institution offers counselling for any citizen of the federal state who encounters problems in affording their energy bills (VZ RLP, n.d.b). However, how the centre provides support for first-generation migrant households affected by EP and the extent to which they consider any specific challenges regarding the German energy system for such households has not been investigated to date.

[2] Status as of 7th September, 2022

1.4 Research Aim and Questions

In the context of rising energy prices in Germany and the shortage of research regarding EP among migrants, my study investigates EP among diverse groups of first-generation migrant households in the German federal state of Rhineland-Palatine. I combine two analytical strategies. First, I conduct an intersectional assessment of the attributes shaping EP among diverse first-generation migrant households. Second, I assess how first-generation migrant groups affected by EP are supported by the public energy counselling. Thereby, I take the consumer advice centre in Rhineland-Palatine as a key unit of analysis, since it represents the main publicly financed institution for addressing EP in the federal state (Struenck, 2017; VZ DE, n.d.). Combined, my two strategies can point out which main challenges exist for addressing EP among diverse groups of first-generation migrants, leading to the following research questions:

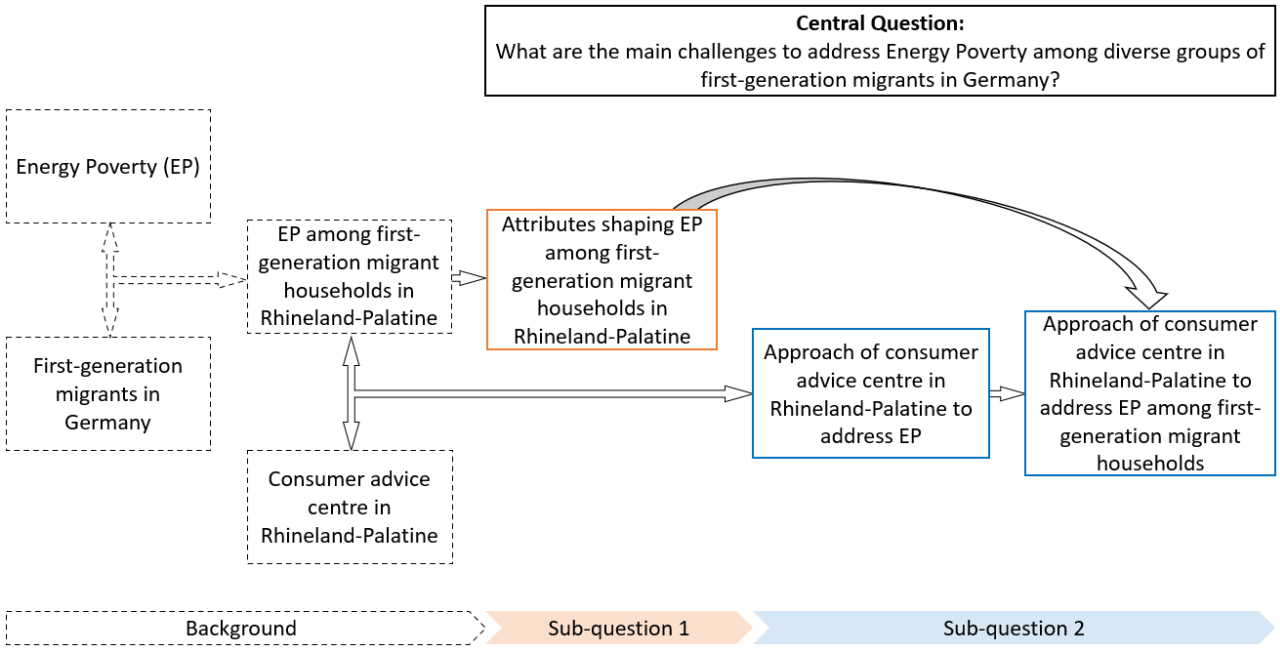
Central question: What are the main challenges to address energy poverty among diverse groups of first-generation migrants in Rhineland-Palatine?

Sub-questions:

1. What attributes shape energy poverty among diverse groups of first-generation migrants in Rhineland-Palatine?
2. What is the approach of the consumer advice centre in Rhineland-Palatine to tackle EP among first-generation migrant residents?

Figure 2 illustrates the structure of the two sub-questions and their relation to the central question.

Figure 2
Structure of Central Question and Sub-Questions



Note. Source: Author's own elaboration

1.5 Relevance

Scientific Relevance

Bouzarovski et al. (2021) call for more research regarding the root causes of EP in consideration of the factors which contribute to the systemic vulnerabilities of certain groups of household. As there is little academic focus on EP among groups of first-generation migrants, my study contributes to a systemic understanding of EP for that group. Furthermore, it can add knowledge beyond the current conceptualization of EP, which mainly focuses on the triad of EP (Kahlheber, 2020). Due to its qualitative nature, my research can provide an in-depth scientific assessment of EP among affected groups of first-generation migrants in Rhineland-Palatine.

Societal Relevance

Rising energy prices in EU countries, which are expected to remain high until at least the middle of the century (Chandrashekeran et al., 2022), emphasize the need for supporting households which are affected or at risk of being affected by EP. There are two ways in which my research can contribute to supporting first-generation migrant households affected by EP in Rhineland-Palatine. First, by providing an in-depth, socially, culturally, and economically differentiated assessment of the attributes shaping EP, my study can shed light on any dynamics of EP related to groups of first-generation migrants. An improved understanding of such dynamics, in turn, provides a necessary starting point for designing targeted interventions. Second, by investigating the public support offered by the consumer advice centre in Rhineland-Palatine, my findings can give insight into the current help provision for first-generation migrant residents affected by EP and may point towards any further measures which may be implemented.

2 Conceptual and Research Framework

The following section provides an overview of my study's main concepts. As EP among first-generation migrant groups in Rhineland-Palatine regards the access to energy, it concerns energy justice, which therefore provides my study's overarching theoretical frame (section 2.1). Furthermore, after describing EP and the triad theory in section 2.2, I move towards an alternative conceptualization of EP by means of intersectional theory (section 2.3). Social and energy/climate[3] policies provide the context for my study, as EP straddles both policy domains (section 2.4) (Tews, 2013). In section 2.5 I subsequently combine the three main concepts in describing the framework of my research.

2.1 Energy Justice

The state of energy deprivation experienced by households suffering from EP highlights the importance of achieving energy justice, which can be defined 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." (Sovacool & Dworkin, 2014, p. 142). The concept encompasses several dimensions (e.g., Hanke et al., 2021; Jenkins et al., 2016). The nonfulfillment of one or more of these dimensions can be related to various forms of energy deprivation and EP.

First, distributional energy justice addresses "the even distribution of benefits and ills on all members of society regardless of income, race, etc." (Jenkins et al., 2016) p. 176). Thereby, benefits and ills can be of environmental, economic, and ideological nature. For instance, distributional justice regards the physical

[3] This refers to the same type of policies, which are interchangeably either referred to as energy or climate policies

access of groups of first-generation migrants to heating and electricity, their financial resources to afford heating and electricity, and their individual choice over their energy consumption.

Second, procedural energy justice describes the "access to decision-making processes that govern the distributions" (Jenkins et al., 2016, p. 178). Thus, it addresses whether groups of first-generation migrants can participate in the energy system in an equitable manner and without experiencing any forms of discrimination.

Third, according to Fraser (2000), recognitional energy justice can be defined as the "recognition of the status of individuals group members as full partners in social interaction" (p. 113). Thus, recognitional justice includes, but is not restrained to the political recognition of the energy needs of diverse groups of first-generation migrants. Rather, misrecognition in this conception may restrain first-generation migrants from any forms of taking part in social life more generally, and thereby prevent them from participating as equitable members of the German society.

In addition to the three aforementioned dimensions, Bouzarovski and Simcock (2017) argue for "spatializing energy justice" (p. 640). Thus, the authors highlight that EP should be analysed through a spatial justice lens, which implies approaching the justice dimensions in a geographically sensitive manner. Concretely, not only do spatial aspects illustrate how energy inequalities can manifest differently, but they can also be involved in the production of those inequalities. For instance, in many areas there are local concentrations of low-income households residing in the worst quality homes, often because they lack the financial means for better quality housing. Such places and their residents are often stigmatised and excluded from decision-making processes, thereby reproducing pre-existing inequalities.

2.2 Energy Poverty

In accordance with the consumer advice centre in Rhineland-Palatine, I consider a household energy poor if members cannot afford to pay for their energy needs to meet an average German living standard or if they can only do so with extreme effort and/or after relinquishment of other living expense factors (VZ RLP, n.d.b). Thus, the definition includes households which can afford their energy bills, but only under extreme effort, for instance by taking on a side job. Furthermore, it covers households which can afford their energy bills, but only after they dispense with other living expenses, such as food or clothing. A German living standard is thereby defined as the access to energy for domestic heating, lightning, cooling, and powering appliances.

Regarding the causes of EP, the condition was initially conceptualised as one of many effects of low income (Herrero, 2017). However, despite low income playing an important role in the EP, there are other factors involved in the condition (Wang & Lin, 2022). Therefore, the triad theory has become the dominant approach to conceptualizing EP, adding the two aspects of poor household energy efficiency and high energy costs (Bouzarovski et al., 2018; Stojilovska et al., 2022; Tews, 2013). An overview of the three factors and their relationship to EP is provided by Table 1.

Table 1
Triad Theory of EP

Factor	Category	Relationship to EP
Low income	Characteristic of households	A household's level of income usually relates to their ability to afford their energy bills. Households with relatively lower income level often experience relatively more difficulties in affording their energy bills.
Poor household energy efficiency	Characteristic of dwellings/ appliances	This factor encompasses the quality of housing (i.e., the energy efficiency of a household's dwelling) and the quality of appliances (i.e., the energy efficiency of a household's technical equipment). A relatively lower energy inefficiency usually leads to a relatively higher energy expenditure. This can create difficulties for a household to afford energy bills, which may be exacerbated by pre-existing financial difficulties.
High energy prices	Characteristic of a country's energy system	High prices for energy relative to a country's income level create a structural burden for households to afford their energy bills.

Note. Source: Author's own elaboration

However, various authors argue to go beyond the triad in investigating further underlying reasons for EP, as the theory is too simplistic to capture the complex dynamics under which the condition unfolds (Chandrashekeran et al., 2022; Kahlheber, 2020; Stojilovska et al., 2022). Specifically, the factors described in the theory may be seen as symptoms or proximate reasons for EP, which relate to various other underlying factors creating inequalities and vulnerabilities (Bouzarovski et al., 2018; Großmann & Kahlheber, 2017).

2.3 Intersectional Theory

Intersectional theory first originated from feminist debates regarding differing life chances of women compared to men (Carbado et al., 2013) and focusses on the multiple interrelationships between social divisions (Yuval-Davis, 2006). For example, pioneer work on the topic highlighted how social movements around women's rights tended to ignore other characteristics which make some women even more susceptible to discrimination, such as belonging to an immigrant or socially disadvantaged community (Carbado et al., 2013). Thus, intersectionality aims to deconstruct categories, such as "women" or "migrants", and instead capture the intersections of diverse characteristics which contribute to inequalities (Yuval-Davis, 2006).

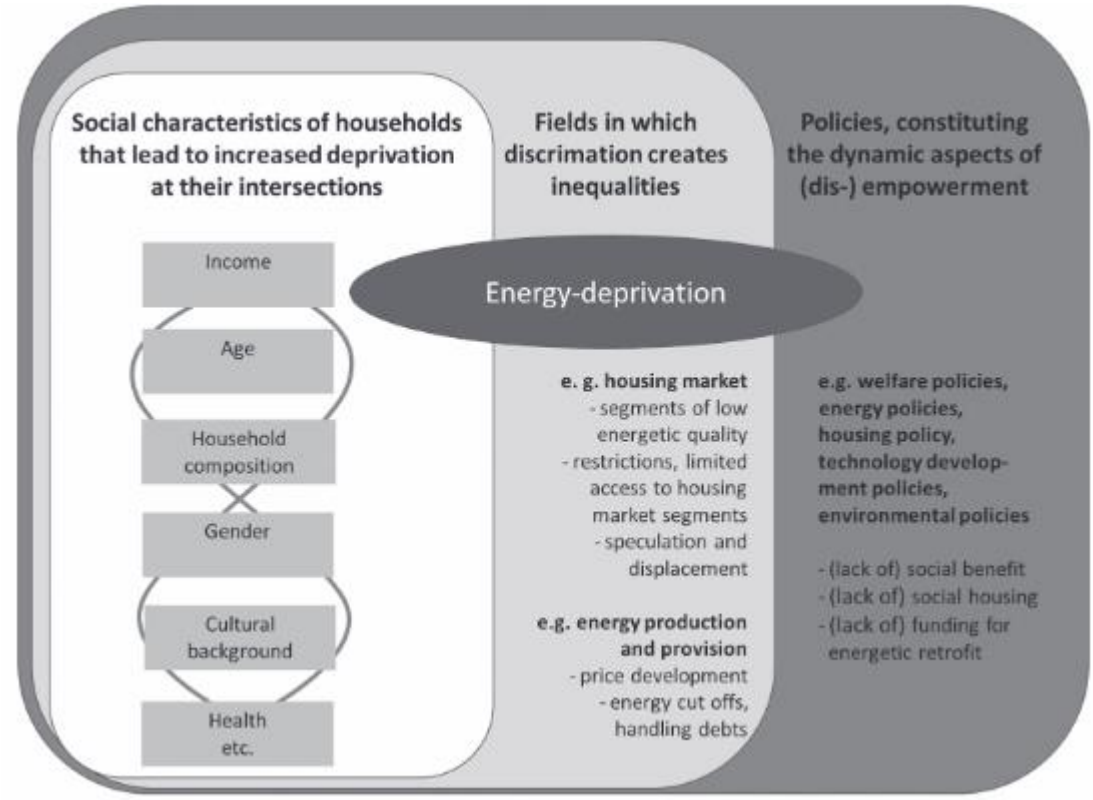
Viewing EP from an intersectional lens can provide an underlying dimension compared to the triad theory. Concretely, it conceptualizes the condition based on intersections of multiple characteristics such as gender, age, and migration background, which usually act as mutually reinforcing (Großmann & Kahlheber, 2017). In their intersectional account of EP, Großmann and Kahlheber (2017) distinguish between internally deprivileging characteristics of households, such as age or migration background, and external conditions, such as high energy prices. For instance, living in a house of poor energy efficiency and lacking knowledge of the German energy system can make a household more vulnerable to experiencing EP. Combined with low income, the likelihood of a household suffering from EP increases. Furthermore, already vulnerable households are usually most affected by rising energy prices (Edmiston et al., 2022; Noka & Cludius, 2021).

In an intersectional account of EP, household characteristics function as "axes of inequalities" (Grossman & Kahlheber, p. 21) which open avenues for discrimination and energy deprivation at their intersections and, together with external conditions, lead to EP. Großmann and Kahlheber (2017) map three types of possible outcomes. First, single characteristics, such as poor energy efficiency, can by themselves cause households to be affected by EP. Second, simple intersections regard two overlapping characteristics, such as a lack of knowledge of the German energy system and a low income. Third, multiple intersections describe various overlapping characteristics which mutually reinforce each other, leading to the most severe cases of energy deprivation. An example of such is a household living from a low income, not speaking German, and where one of the household members suffers from a chronical illness.

Intersectionality can be useful in explaining why inequalities arise for some, but not for other households. Thus, it is specifically suitable to account for the heterogeneity of characteristics among a certain group (Middlemiss, 2020; Razum et al., 2016). Moreover, Thomson et al. (2022) emphasize that intersectionality can help to understand how cultural practices can contribute to EP among some households without stigmatising such practices. Therefore, I chose an intersectional lens for my study to capture the diversity among first-generation migrant households in a culturally-sensitive manner.

An intersectional account of EP can also point towards broader fields in which discrimination creates inequalities (Großmann & Kahlheber, 2017; Middlemiss, 2020). For instance, some people with migration status may be more likely to be approached by dubious landlords renting out low-quality and energy-inefficient dwellings. Thus, "it is not the low energy-efficiency housing itself that is a cause of energy deprivation; rather, it becomes a problem through discriminatory housing markets" (Großmann & Kahlheber, 2017), p. 27). Furthermore, intersections of various characteristics can create barriers for certain groups and determine the extent to which they can benefit from regulations, policies and support offerings (Großmann & Kahlheber, 2017). The intersectional framework of energy deprivation described by Großmann and Kahlheber (2017) is displayed in Figure 3.

Figure 3
Energy Deprivation in an Intersectional Perspective



Note. Source: Großmann and Kahlheber (2017)

2.4 Social and Energy/Climate Policy

Politically, EP intersects with both social and energy/climate policy (Tews, 2013). As current policy understanding is usually focused on the three drivers of EP specified in the triad theory (Stojilovska et al., 2022), Table 2 describes the two policy dimensions by showing how they relate to the triad.

Table 2
Policy Domains in Light of Triad Theory of EP

Factor	Policy Domain
Low income	**Domain**: Social policy **Explanation**: This policy measure aims at improving social security and ensuring sufficient income levels for all citizens
Poor household energy efficiency	**Domains**: Social policy and Energy/climate policy **Explanation**: Social policy measures can provide social security payments of various kinds for households. If sufficiently high, these payments can support households in affording housing or technical appliances of higher quality. Energy/climate measures aim at implementing energy efficiency measures and accelerating the transition towards renewable energy. Thus, they can improve the energy efficiency of appliances and buildings in general.
High energy prices	**Domain**: Energy/climate policy **Explanation**: These policy measures can address the overall energy system. For instance, the government can decrease energy prices by adjusting the level of taxes included in consumers' energy bills.

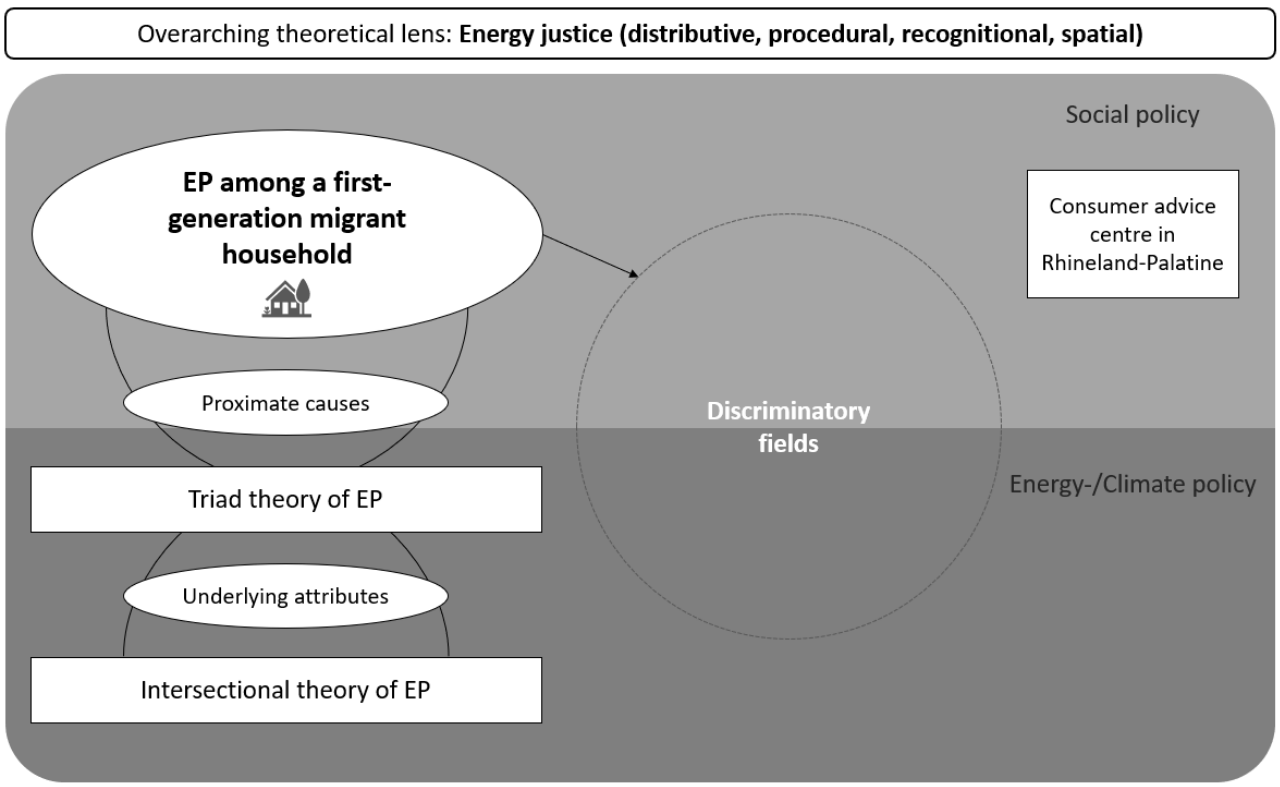
Note. Sources: Bundeszentrale fuer politische Bildung (2016), Umweltbundesamt (2020)

As described, Germany follows a social policy approach to EP (Noka & Cludius, 2021; Tews, 2013), exemplified in the one-off payments by the German government to financially support households with their energy bills. In contrast, energy/climate policy measures consider the low energy efficiency of many dwellings which often leads to elevated energy and thereby contributes to EP (Tews, 2013). This indicates an area of conflict, where a purely social policy approach disregards that many households do not merely lack financial resources but may suffer from underlying disadvantages, for instance due to low-quality housing (Kahlheber, 2020). The energy cost counselling of the consumer advice centre in Rhineland-Palatine bridges both policy domains. As the counselling supports individual households in affording their energy bills, it can partly be classified within a social policy realm. However, since the programme also aims to increase energy efficiency and foster energy savings, it can partly be placed in the energy/climate policy domain. Furthermore, they agency frequently submits political statements, for instance demanding a supervisory body for housing space to prevent the lease of very precarious dwellings.

2.5 Research Framework

I use the triad theory of EP to conceptualize the proximate causes of EP in my study. I then move beyond the triad by means of intersectional theory, which serves as my analytical tool to map the underlying attributes shaping EP among diverse first-generation migrant households in Rhineland-Palatine (Carbado et al., 2013). Furthermore, I assess the fields of discrimination which some first-generation migrant households affected by EP may be faced with (Großmann & Kahlheber, 2017). Energy justice helps me to assess how the attributes shaping EP and potential discriminatory fields prevent energy justice (Cannon & Chu, 2021; Ryder, 2018), and to evaluate how the consumer advice centre addresses energy injustices among their first-generation migrant clients. Social and energy/climate policy serve as the political context of my research. Figure 4 illustrates the framework of my research and displays the interrelationships between the main concepts.

Figure 4
Research Framework



Note. Inspired by Großmann and Kahlheber (2017)

3 Methods

My research featured a mixed-method approach, involving both qualitative and quantitative data. However, I put more emphasis on the collection of qualitative data, as this type of data can provide detailed insight into attributes involved in EP, their interactions, and the underlying mechanisms of energy deprivation (Großmann & Kahlheber, 2017; Razum et al., 2016; Ryder, 2018). I triangulated my data to evaluate findings across the various methods (Verschuren & Doorewaard, 2010). This is in accordance with Ryder (2018), stressing that triangulation is specifically important for "intersectionally-informed" methods to fully grasp the intersectional differences among research participants.

The target group of my research consisted of first-generation migrant households who were in contact with the consumer advice centre in Rhineland-Palatine because of difficulties with affording their energy bills. Thereby, I defined a first-generation migrant household as a household where all members are first-generation migrants. Furthermore, my target group only encompassed first-generation migrant households who live autonomously and afford their own energy bills, implying a focus on migrant newcomers with a regularized German citizenship. In contrast, I did not include first-generation migrants residing in publicly financed shared accommodations[4], as utility costs in these accommodations are paid by the state. My target group was concentrated on people with a residency in Rhineland-Palatine, as this is a pre-requisite for accessing the consumer advice centre's services. The consumer advice centre acted as collaborator for my study, enabling me to access a large share of data for my research.

[4] This type of accommodation is usually provided for refugees/ asylum seekers upon their immediate arrival in Germany.

The fact that my research regards migrants highlights that power dynamics were involved in my research (Iosifides, 2017). Concretely, I as a researcher represented an outsider, trying to gain insight into the socio-cultural reality of first-generation migrant households suffering from EP (Wilson & Neville, 2009). First-generation migrant households affected by EP, in turn, are a potentially vulnerable population (Vannini et al., 2020). Therefore, I considered it of special importance to adhere to ethical principles in my research (Ullah et al., 2020), and my study's data collection and analysis was guided by such principles. I will reflect on these in more detail in Section 3.5.

3.1 Operationalisation of Key Concepts

To assess the attributes shaping EP among first-generation migrant households in Rhineland-Palatine I first mapped the proximate reasons for the condition, taking the triad theory of EP as the basis (i.e., low income, poor household energy efficiency, and high energy prices). Second, I used intersectionality to distinguish underlying factors related to the proximate causes, i.e., the attributes shaping EP among first-generation migrant households. I classified those attributes into external conditions (i.e., related to the context surrounding the German energy system) and (internal) household characteristics (i.e., related to the households themselves) (Großmann & Kahlheber, 2017). I further distinguished the household characteristics into social, cultural, and economic factors.

Third, I related the attributes shaping EP among first-generation migrant households to wider areas of injustices along the four dimensions described previously (Cannon & Chu, 2021). Furthermore, I assessed the approach of the consumer advice centre in Rhineland-Palatine with regards to which potential injustices are tackled by it. I operationalized the dimensions of energy justice as follows:

- Distributional injustices regarded all attributes related to limitations in the access to energy and the individual choice of first-generation migrants over their energy consumption (e.g., an inefficient heating system which leads to higher costs for energy).
- Procedural injustices included legal and political procedures which may in any way be unfair, such as the manner by which first-generation migrant households can access social welfare support to receive financial help with their energy bills. Moreover, procedural injustices encompassed limitations in the extent to which they can actively participate in the energy system (e.g., by freely choosing/switching the energy provider).
- Attributes for recognitional injustices related to any characteristics which preclude first-generation migrants' ability to participate as equitable members of society, such as a lack of language skills.
- Spatial injustices regarded any attributes which carry a geographical aspect. For instance, they included the unfair spatial distribution of housing quality among cities in Rhineland-Palatine (e.g., in some cities, cheaper but relatively lower quality housing is available).

As the dimensions show some overlap, clear-cut distinctions were not always possible. In cases of attributes overlapping with more than one dimension, I chose the relatively more obvious or suitable dimension. Furthermore, I used the individual injustices as a basis to establish wider discriminatory fields in which inequalities are created (Großmann & Kahlheber, 2017). For instance, injustices may relate to the housing market or the structure of energy production and provision. As social and energy/climate policy served as the political context of my research, I did not operationalise the two policy dimensions.

3.2 Research Strategy

My research followed an interpretive strategy, intending to grasp EP as a socio-cultural phenomenon which occurs within a certain socio-cultural context (Draper, 2004; Thomson et al., 2022; Wilson & Neville, 2009).

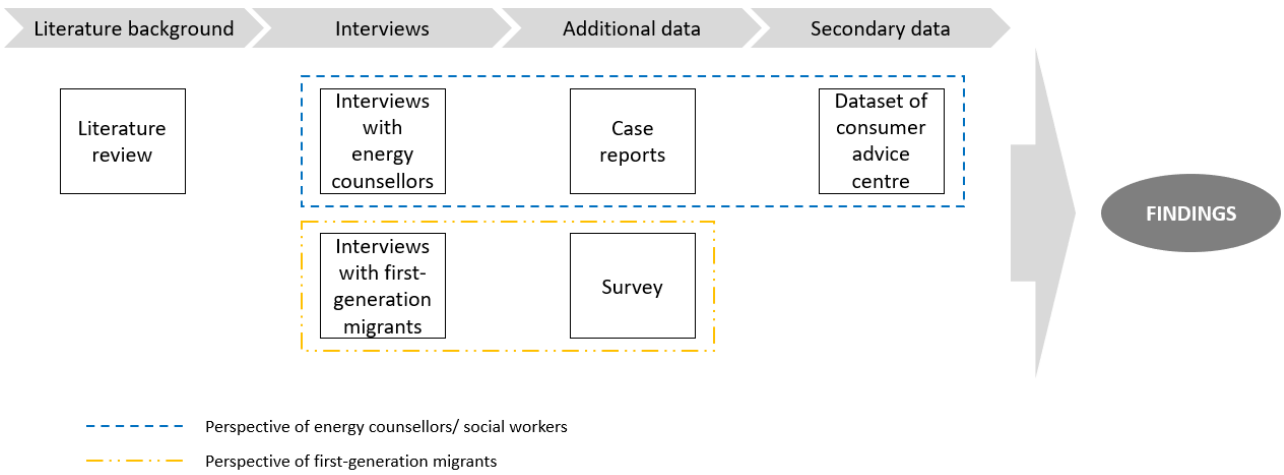
This acknowledges the subjectivity implied in both the perspective of me as the researcher and my research participants (Hennink et al., 2020). I considered two main perspectives on my research subject. First, I involved first-generation migrants affected by EP to gain insight into their situation and their individual experiences. Second, I inquired energy cost counsellors. In contrast to regular energy counsellors, energy cost counsellors specifically give advice regarding the payment of energy bills, potential arrears on energy bills, and energy saving options. Therefore, as energy cost counsellors also work with people affected by EP, among those first-generation migrants, I was able to ask them to reflect on their experiences with the target groups' situation and the current support service of the consumer advice centre in Rhineland-Palatine.

Considering the scarcity of findings regarding EP among first-generation migrant groups (Bouzarovski et al., 2022), my research was explorative in nature and I did not form any prior hypotheses regarding the outcome of my research questions (Passer, 2014). Furthermore, my study is a small-scale investigation which featured a purposive rather than a randomized sampling approach (Jansen, 2010). This is in line with my aforementioned aim to produce findings of depth rather than breadth (Golafshani, 2003; Hennink et al., 2020).

3.3 Data Sources and Data Collection

Figure 5 displays a visual overview of my data collection. Moreover, Table 3 provides an overview of the methods according to my research's sub-questions, which I will further elaborate on in the following text.

Figure 5
Overview of Data Collection



Note. Source: Author's own elaboration

Table 3
Research Sub-Questions, Analytical Categories, and Data Sources

Sub-Question	Analytical Category	Data Sources
1) What attributes shape EP among diverse groups of first-generation migrants in Rhineland-Palatine?	• Intersectional theory • Energy justice	• Literature review • Interviews with • s and first-generation migrants • Survey • Case reports • Secondary data
2) What is the approach of the consumer advice centre in Rhineland-Palatine to tackle EP among first-generation migrant residents?	• Energy justice	• Literature review • Interviews with energy cost counsellors and first-generation migrants • Secondary data

3.3.1 Literature review

I used a literature review to summarise and evaluate the state of knowledge regarding EP among first-generation migrant households (Knopf, 2006). Thus, the review served as starting point for my study (Verschuren & Doorewaard, 2010) by providing a preliminary overview of the various potential attributes involved in EP among first-generation migrant groups and their relation to energy justice. Due to the scarcity of existing findings regarding my research topic (Bouzarovski et al., 2022), I did not conduct the review in a fully systematic manner. Instead, I complemented a systematic approach by a non-systematic snowballing technique. Concretely, I first retrieved articles systematically and then found further literature based on the sources cited in the initially retrieved articles.

I performed the literature search between 1st April and 15th July, 2022. I retrieved academic articles, website articles, and reports using Google Scholar, Scopus, Worldcat, and Google. The papers I examined rely on multiple wording regarding their target group, and I could not find a paper which distinguishes between different generations of migrants. Therefore, my search strings consisted of "energy poverty" AND ("migrants" OR "refugees" OR "foreigners" OR "ethnic minorities" OR "ethnicity" OR "asylum seekers")[5], and "energy" AND ("migrants" OR "refugees" OR "foreigners" OR "ethnicity" OR "asylum seekers"). I included literature if it regarded energy, EP or energy justice and it contained the words "migrants", "refugees", "ethnic minorities", "foreigners" "ethnicity", or "asylum seekers" in title, abstract, keywords or the main text. My further inclusion criteria encompassed the English or German language and a relative recency of findings (i.e., a publishing date after 2012). My initial systematic literature search resulted in four academic peer-reviewed articles and one report. I retrieved seven additional academic peer-reviewed articles using the non-systematic snowballing technique.

In addition, I collected literature to outline the approach of the consumer advice centre in Rhineland-Palatine for tackling EP among groups of first-generation migrants. I performed the literature search between 1st April and 30th May, 2022. I focused my search on website articles, reports, and academic peer-reviewed articles. As I could not find any literature which directly regards first-generation migrants, I again did not distinguish between different generations of migrants in my search. My search strings were "consumer advice centre Rhineland-Palatine" AND ("energy poverty" OR "energy" OR "energy costs" or "energy cost consultation"), and "consumer advice centre Rhineland-Palatine" AND "energy poverty" AND

[5] Despite the usage of multiple wording in prior literature, I will use the phrasing "migrants" in my study as other terms may be negatively or politically connotated.

("migrants" OR "refugees") (in German and English). I included literature if it contained a description of the approach of the consumer advice centre in Rhineland-Palatine for tackling EP. My further inclusion criterion was the German or English language. My initial systematic literature search resulted in one academic peer-reviewed articles, four website documents, and two reports. I retrieved one additional peer-reviewed article using the non-systematic snowballing technique.

3.3.2 Interviews

Interviews With Energy cost counsellors

I conducted nine semi-structured interviews with energy cost counsellors, ranging from 30 to 60 minutes. These counsellors all give advice to households experiencing difficulties with affording their energy bills, and among their clients are first-generation migrant households. I chose a semi-structured interview type since this method allows for flexibility in the order of questions and follow-up questions can be asked (Hennink et al., 2020). At the same time, it provided a broad structure, which ensured that I discussed the key aspects relevant for my study.

I created a semi-structured interview guide of one introductory question and seven central questions (including topical probes per question), which linked back to both research questions and the conceptual framework of my study (Hennink et al., 2020) (see section 8.1). Based on the first two interviews, I adjusted the interview guide (Hennink et al., 2020). Concretely, I modified the question "how do you define energy poverty in your work as energy cost counsellor?" into "what is energy poverty for you, based on your experiences of working as an energy cost counsellor?". I did this since I realised that EP is usually not defined in practice, and the first interviewees did not know how to come up with a definition and started to be insecure not knowing the answer to my question.

I conducted seven interviews with energy cost counsellors working at the consumer advice centre in Rhineland-Palatine. Five of the counsellors focus on different regions within Rhineland-Palatine, and two work cross-regionally. To get in contact with them, I sent an email to the head of the department of the agency's "energy cost consultation" on 1st March, 2022. She provided me with a contact list of all employees working in the department. I approached the employees by phone and/or email on 7th and 8th April, 2022 to schedule an appointment for an interview. As travel distance precluded in-person interviews, I conducted the interviews between 19th April and 12th May, 2022 via MS Teams. At the beginning of each interview I introduced my research and gave the interviewees space to ask questions. I then asked for their consent for both participating in my study and me recording the interview. Interviewees signed a consent form for their participation in my research, which is included in section 8.2.

In addition, I contacted several organisations besides the consumer advice centre which also provide energy counselling. I did this to include viewpoints beyond the perspectives of the employees of the consumer advice centre in Rhineland-Palatine, thereby reducing the potential for bias regarding findings from the interviews with energy cost counsellors. I researched migrant organisations, charities, and social services. Due to feasibility, I approached organisations in entire Germany rather than only the region Rhineland-Palatine and I also included energy counsellors (rather than energy cost counsellors) given they worked with the target group of my research. This resulted in two more interviews, one with an energy counsellor from a charity (in the region Thuringia) and one with a counsellor working for a migrant organisation (in the region Saxony). I contacted the two organisations by phone on 7th and 8th April, 2022 to schedule an interview. Again, as travel distance precluded an in-person interview, I conducted the interviews using MS Teams on 19th April and 26th April, 2022. I followed the same procedure as for the previous seven interviews (see description above).

Table 4 provides a list of all interview partners. To clearly distinguish findings from energy cost counsellors working in Rhineland-Palatine and the energy counsellors working in other parts of Germany, I used either

numbers or letters as identifiers. Furthermore, I kept in mind that energy counsellors A and B do not work in Rhineland-Palatine during the analysis of my findings and did not use their data to infer any region-specific and spatial findings.

Table 4

Energy cost counsellor Interviewees

Rhineland-Palatine	
Energy cost counsellor 1	Employee of consumer advice centre, focused on several sub-regions
Energy cost counsellor 2	Employee of consumer advice centre; focused on several sub-regions
Energy cost counsellor 3	Employee of consumer advice centre; focused on one sub-region
Energy cost counsellor 4	Employee of consumer advice centre; focused on several sub-regions
Energy cost counsellor 5	Employee of consumer advice centre; focused on several sub-regions
Energy cost counsellor 6	Employee of consumer advice centre; cross-regional focus
Energy cost counsellor 7	Employee of consumer advice centre; cross-regional focus
Germany	
Energy counsellor A	Employee of a charity; region: Thuringia
Energy counsellor B	Employee of a migrant organisation; region: Saxony

Interviews With First-Generation Migrants

Following the conversations with counsellors, I planned interviews with first-generation migrants. However, I experienced difficulties in recruiting first-generation migrant interview participants due to two main reasons. First, for many first-generation migrants affected by EP my interviews were an additional burden on top of their already very straining situation. Thus, my study was an imposition, highlighting the ethical implications of inquiring potentially vulnerable populations about their situation and asking them to open up about their vulnerabilities to an outsider (Wilson & Neville, 2009) (see section 3.5 for further reflection). Second, language barriers only allowed me to interview first-generation migrants who speak German or English, which further limited the range of potential research participants. Despite the described difficulties, I was able to carry out two interviews with first-generation migrants affected by EP, lasting 15 and 20 minutes. While the interviews cannot be considered representative due to their small number, they still provided me with important insights for my research as they enabled me to directly speak with two members of my target group.

I followed an unstructured approach in the interviews to allow for an open exploration of the interviewees' situation and to give the interviewees space to shape the conversation (Fedyuk & Zentai, 2018). I preferred this method over semi-structured interviews, as the goal was to freely explore aspects of the interviewees' experiences without the conversation being constraint by a pre-defined structure. Furthermore, I chose unstructured interviews over more in-depth investigative approaches of participants' life histories, since my research specifically focusses on the difficulties with affording energy bills. As preparation for the interviews, I created a short list of potential interview topics which I used as a general guidance (see section 8.3).

Again, due to practical reasons I conducted the interviews via telephone. MS Teams was not suitable, since no stable internet connection could be guaranteed from sides of the interviewees. I received the contact of

the two interviewees through the consumer advice centre in Rhineland-Palatine. Specifically, I sent the head of the "energy cost consultation" department a short description of my research. It included a form on which potential participants could note down whether they agree with receiving a call and which time of the day would be most suitable for them (see section 8.4). The form also included a written consent to participate in my research. The head of the department forwarded the form to all energy cost counsellors and told them to approach those first-generation migrant clients who can communicate in German or English. Therefore, between 2nd June and 16th September, 2022, the energy cost counsellors then informed any first-generation migrants clients of the research and inquired whether they were willing to participate. This led to one of the interviews, which I conducted on 31st August, 2022.
Furthermore, one of the energy cost counsellors of the consumer advice centre provided me with the contact of an employee of a municipal migration/integration office within Rhineland-Palatine. I contacted her via email on 25th August, 2022 and sent her the short description of my research including the aforementioned form (see section 8.4). She then approached her first-generation migrant clients to inquire whether they would be willing to participate in my research. This resulted in the second interview, which I held on 7th September, 2022. Table 5 summarizes those socio-economic characteristics of the interviewees which are relevant for understanding my interview findings.

Table 5
First-Generation Migrant Interviewees

Interviewee	Socio-economic Characteristics
Interviewee 1	• High German language skills (has lived in Germany for 25 years) • Size of household: 6 (4 teenage children) • Suffers from a chronical illness • Household income from sickness allowance and social security payments
Interviewee 2	• Low German language skills • Size of household: 4 (2 young children)

3.3.3 Survey

To compensate for my difficulties of finding first-generation migrant interview participants, I constructed a qualitative survey for my target group. I considered such survey a useful tool for involving the perspective of first-generation migrants affected by EP in my research and for gaining further insight into the diversity among my target group (Jansen, 2010). As a survey demands less time from research participants, I assumed that it adds less strain on participants compared to interviews. Furthermore, participants did not have to open up to me in a conversation, which I presumed to lower the imposing character of my research.

Based on the literature review and prior interviews, I created eight survey questions, of which five were multiple choice questions and three were open-ended questions (see section 8.5). In addition, seven short questions asked for some socio-economic characteristics of the participants, such as their income and the number of people living in their household. The survey included a description of my research on the first page and a consent form for participating in the study on the last page.

I distributed the survey following a purposive sampling approach (Jansen, 2010). Thereby, the consumer advice centre Rhineland-Palatine put me in contact with two intermediaries helping me to approach first-generation migrants affected by EP (the centre themselves was not willing to include my survey in their counselling, as they already require clients to fill out a large set of questions before using their services). One of the intermediaries is a social worker in the city of Pirmasens (Rhineland-Palatine), and the other one is the deputy head of a charity in the city of Bingen (Rhineland-Palatine). I contacted them via telephone on 12th July, 2022, and they distributed my survey among their first-generation migrant clients who experience

difficulties with affording their energy bills. The head of the charity mainly distributed the survey in the context of a workshop about the German energy system for migrants who receive social security payments. In total, 11 completed surveys were returned, most of them from the participants of the workshop (*n* = 10).

3.3.4 Case Reports

I analysed six detailed case reports describing the situation of six first-generation migrants affected by EP. The reports were written by social workers in the city of Pirmasens (Rhineland-Palatine) as part of a social support programme to re-integrate migrants which are unemployed into the labour market. I obtained the reports from a social worker whose contact I received from the consumer advice centre in Rhineland-Palatine. I approached her on 30th June, 2022 by email and informed her about my research. She then forwarded the anonymised case reports of six of her former clients who are first-generation migrants and experience/ experienced difficulties with affording their energy bills.

The reports were intended to assess the clients' situation and record any developments within the course of the programme. They were written between 1st January, 2021 and 25th August, 2022, and are of four to seven pages. The reports feature descriptions of the clients' situation based on 10 aspects, such as their social network, their financial situation, and their living situation.

The case reports were valuable for my research as they helped me to gain a general feeling for the living and financial situation of some first-generation migrants affected by EP. Furthermore, they describe and illustrate some of the attributes shaping EP among first-generation migrants based on six example cases. However, I am conscious of the fact that the reports were written by social workers in close contact with first-generation migrants rather than first-generation migrants themselves, and kept this in mind during the data analysis. A sample case report is included in section 8.6.

3.3.5 Secondary Data

The use of secondary data in my research served to complement my findings from primary data (Verschuren & Doorewaard, 2010). Thus, it served as quantitative counterpart to complement my remaining qualitative data and to triangulate information sources. I used a dataset which I received from the consumer advice centre in Rhineland-Palatine. It contained data of clients using their services between the years 2016 to 2018 (i.e., the most recent data they could provide). The data is collected by the consumer advice centre in order to support their political activities, serving as the basis for their political statements as well as demands.

The centre does not record whether clients are first-generation migrants. Nevertheless, they do record their ability to speak German and their citizenship. Therefore, I used these two variables as a proxy, assuming that many residents not speaking German and/ or holding a non-German citizenship are likely to be first-generation migrants. I do acknowledge that these are very traditional assumptions regarding my target group, which may not hold true in some cases and might have led to miss-classifications of data. However, making these assumptions was necessary as it enabled me to utilize the dataset of the consumer advice centre for my study. Using these two proxies, I could use the data of 168 clients.

I selected 11 variables of the dataset which I considered relevant for my study. I selected variables if they pointed towards any intersectional characteristics which I derived from the literature, interviews, surveys, and case reports. I excluded variables that contained information on the quality and outcome of the counselling sessions for individual clients, as this was outside of the focus of my study. Table 6 provides an overview and a short description of the variables I selected.

Table 6
Selected Variables of Secondary Dataset

Variable	Description
Size of household	Number of people in clients' households **Scale**: ratio
Income	Clients' monthly net household income (in €, from employment and/ or social security payments) **Scale**: ratio
Debts	Clients' arrears on energy bills (in €, distinguished by electricity, gas, and district heating) **Scale**: ratio
Social security payments	Reception of social security payments and type of social security payments **Scale**: nominal
Classification of energy expenditure	Placement of clients' energy expenditure (distinguished by electricity and heating) **Scale**: ordinal
Additional aspects relevant for clients' energy consumption	Distinguished into further issues (e.g., language problems) and other life aspects (e.g., illness) **Scale**: nominal

3.4 Data Analysis

I relied on both coding and descriptive statistics for the data analysis of my study. An overview of the methods of analysis according to each data source is given in Table 7. I will further describe the two main methods (i.e., coding and descriptive statistics) in the following text. I did not follow any specific type of analysis for the literature review.

Table 7
Overview of Data Analysis

Data Source	Type of Analysis
Interviews	Coding
Survey	Coding & Descriptive statistics
Case reports	Coding
Secondary data	Descriptive statistics

3.4.1 Coding

I used coding for the content of the interviews, the case reports, and the open questions of the survey to establish patterns of the data which I could subsequently interpret (Hennink et al., 2020). Thereby, I followed the approach of thematic analysis (Kuckartz, 2019; Peterson, 2017). Concretely, I generated codes both based on prior knowledge (i.e., the literature review) and on a subset of interview transcripts, case reports, and survey questions (i.e., a grounded within the data) (Peterson, 2017). This implied that my codes were deductive and inductive in nature (Hennink et al., 2020). I used the software Nvivo for the coding.

In line with Peterson (2017), I performed two rounds of coding. In a first round I established primary codes and applied those to the data. In the second round I then derived broader, second-level codes by focusing on patterns and connections within my data. Thereby, I summarized the primary codes into broader

categories to form my coding frame (Kuckartz, 2019; Travers, 2001) (see section 8.7). Furthermore, I adopted a method of constant comparison by which I continuously compared new data to my established codes and added new codes if necessary (Peterson, 2017). This emphasizes the cyclic process of coding (Hennink et al., 2020). I kept track of my reflections, thoughts, and ideas during the coding by adding notes to the data in Nvivo (Peterson, 2017). This helped me to capture and remember insights I gained during the process.

3.4.2 Descriptive Statistics

I analysed the secondary data and the closed questions of the survey using descriptive statistics. The variables I considered were recorded on nominal, ordinal, and ratio scales. I summarized nominal and ordinal variables by calculating the frequencies of their categories. I complied the ratio variables by calculating their mean, standard deviation, median, maximum, and minimum. Comparing the mean to the median and examining the standard deviation, I determined whether influential outlier existed in the data. Specifically, the mean lying far from the median and a high standard deviation point towards a skewed distribution (Moore et al., 2014). In such cases, I relied on the median rather than the mean as the measure of central tendency. I used the software IBM SPSS version 27 for my analysis. I did not conduct any statistical tests based on the secondary data – since my research serves as an exploration of the subject matter, I did not intend to establish any statistical relationships between variables or to statistically compare different groups and therefore, did not consider statistical tests to be of added value.

3.5 Ethical Considerations, Positionality, and Subjectivity

Several ethical aspects of qualitative research apply to my study (Hennink et al., 2020). First, I ensured the anonymity of all my participants' data. I already received the secondary data and the case reports in an anonymised version. In the survey, I did not require respondents to indicate their name and I explained on the survey's first page that I will handle their data completely anonymously. Furthermore, I did not mention names and any other aspects which may identify the interviewees in my findings. I communicated this clearly before the interviews and also stated it on the consent form. Second, I informed interview and survey participants about my research and obtained their written consent for their participation (see section 8.2 and 8.4). I also asked for participants' consent for a recording of their interview. I used the recordings solely for transcription purposes, and did not share them with any external parties. Third, I ensured confidentiality by storing research data on a local computer and not sharing it with external parties. Fourth, I was careful in asking potentially sensitive questions about the participants' life situation during the interviews with first-generation migrants. Moreover, I briefed all interview participants before the start of the interview that they did not need to provide answers if they did not wish to do so. To make participants feel comfortable during the interview, I started with some opening questions and made sure to use motivational probes (i.e., giving encouraging reactions to what an interviewee said) (Hennink et al., 2020).

As migrants represent a potentially vulnerable population (Vannini et al., 2020), further considerations apply to my study (Ullah et al., 2020). First, first-generation migrants affected by EP are usually highly strained by their situation and often find themselves in a position of experiencing challenges in multiple domains. In this context I represent an outsider, asking them to participate in my research. This imposes another perceived stain, while at the same time I am not directly able to help participants with their difficult situation (Wilson & Neville, 2009). Therefore, I found it difficult to conduct interviews with my target group. An in-depth community involvement to establish the necessary trust and connections could have helped me to speak to more first-generation migrants. However, this was beyond the scope and possibilities of my study. Therefore, in close consultation with one of the supervisors of my research I decided to involve the perspectives of first-generation migrants in my research through short surveys

rather than interviews. The difficulty to involve first-generation migrants in my research causes a relatively larger reliance on insights of third parties which are in close contact with the target group (e.g., energy cost counsellors and social workers). I acknowledge this as an important consideration to my research and will further reflect on it in section 5.3.

Second, research with migrants involves different cultural backgrounds and power structure dynamics (Iosifides, 2017; Ullah et al., 2020). Therefore, I paid close attention to the research process and systematically noted down any potential aspects in which my own positionality or power dynamics may have been of influence regarding my data collection, my data analysis, and the interpretation of my findings. This pointed my attention to aspects of positionality, thereby enabling me to reflect and report them (Bourke, 2014; Hennink et al., 2020).

Third, in research which involves different cultural backgrounds, there is a risk of "misappropriate[ing] and misrepresent[ing] the knowledge and resources" of the target group (Wilson & Neville, 2009) ,p. 70). To counteract this risk, I stayed committed to understanding the socio-cultural reality of first-generation migrant households affected by EP, and regularly reflected upon my own cultural assumptions during the research process. Moreover, I critically and carefully considered any underlying explanations for my findings to avoid the reinforcement of (negative) stereotypes.

In addition, several aspects should be considered which regards to the subjectivity of my research. First, since the consumer advice centre in Rhineland-Palatine acted as a collaborator for my study, I will critically consider the reliance on this centre when evaluating the representativeness of the sample. Second, each perspective on the research matter, including my own, is subjective to some extent. While this is in line with the interpretive approach of the study (Draper, 2004), I took it into account during the data analysis and will reflected upon this aspect in Section 5.3. Third, my own positionality may have exerted an influence on the research setting and therefore on the answers of the participants (Fedyuk & Zentai, 2018; Hennink et al., 2020). While this can never be avoided, I kept track of any such influences to be able to reflect on them when evaluating my findings.

4 Results

The starting point for the results of my research was a literature review (section 4.1). As the papers I examined rely on multiple wording regarding their target group (i.e., ethnic minorities, migrants, asylum seekers, and foreigners), I will discuss the literature in light of the factors shaping EP among migrant groups in general. However, despite differing labels, I found significant overlaps between the findings derived from previous literature and my findings derived from the remaining data collection, emphasizing the relevance of my literature review. In the remaining sections I will elaborate on the attributes shaping EP among first-generation migrant households based on the collected data (i.e., sub-question one) (section 4.2), and the approach of the consumer advice centre in Rhineland-Palatine for addressing EP among first-generation migrant households (i.e., sub-question two) (section 4.3).

4.1 Attributes Shaping EP Among Migrants

Various articles refer to specific challenges experienced by some migrant households in their access to energy. I found three themes to be most frequently cited, namely, financial situation, housing condition or spatial aspects, and language or culture. First, Bouzarovski et al. (2022) and Edmiston et al. (2022) refer to income disparities between the overall UK population and ethnic minority households, with a lower income (on average) increasing the vulnerability of ethnic minority households to experiencing EP. Relatedly, according to Drescher and Janzen (2021), there is a large overlap between EP among migrants and low income. Thereby, the financial situation of ethnic minority households affected by EP can often be

described as complex; for instance, health issues, disabilities, other financial problems, or family commitments my play a role in diverting financial priorities away from energy (Lorenc et al., 2013).

Second, Bednar et al. (2017) emphasize the relationship between low energy efficiency of housing and race or ethnicity. Concretely, migrants may mistakenly be considered high energy consumers in mainstream debates, while in fact the energy inefficiency of the dwelling of some migrant households causes an elevated energy expenditure (Bednar et al., 2017; Belaïd, 2016). This, in turn, usually results in higher average costs for energy and increases the susceptibility to EP (Reames, 2016). In fact, Bouzarovski et al. (2022) see poor housing conditions as the main determinant of EP among ethnic minorities in the UK. The authors further refer to a "racial housing segregation" in which ethnic minority groups are overrepresented in deprived neighbourhoods which feature precarious housing conditions (p.4).

Third, some migrants experience difficulties in navigating through the energy system due to language problems (Bouzarovski et al., 2022; Großmann & Kahlheber, 2017). According to Großmann and Kahlheber (2017), having a migration background often intersects with experiencing language difficulties and "these two factors strictly limit coping capacities, so that an already difficult situation becomes a nearly unsolvable problem." (p. 16). For instance, language difficulties can make it harder to understand energy bills (George et al., 2011) and check energy expenditure (Großmann & Kahlheber, 2017). They may also lead some migrants to sign contracts with energy providers without grasping their entire content, which can result in choosing costlier energy tariffs (George et al., 2011). Furthermore, language difficulties and associated literacy problems may contribute to an overall lack of confidence, which can further limit negotiation power (George et al., 2011). Moreover, differences in cultural practices can impact energy expenditure, such as being used to taking warm baths relatively often (Bouzarovski et al., 2022). Such cultural differences in combination with some migrants' unfamiliarity with their destination country's energy system can result in elevated energy expenditures, thereby making a household more susceptible to EP (George et al., 2011).

The above discussion highlights the complex, multidimensional, and culturally sensitive nature of EP (Thomson et al., 2022). Therefore, EP among migrant households cannot sufficiently be captured by focussing on differences in income, housing condition, and language or culture – instead, wider social, economic, and political energy inequalities must be considered (Bouzarovski et al., 2022). Bouzarovski et al. (2022) discuss various injustice dimensions with regards to EP in their sample of UK ethnic minority households. The authors relate distributional injustices to structural disadvantages for some households to access good-quality housing, often exacerbated by the scarcity of housing in many areas. This may leave some ethnic minority households with no choice but to reside in precarious housing, which explains and further contributes to wider patterns of socio-spatial segregation, and thereby spatial injustices. Regarding procedural injustices, some ethnic minority households were found to struggle to gain information about prices and switching providers, especially in a country like the UK where the energy system is considered relatively complex. Procedural injustices can further be exacerbated by income disparities, as lower financial resources may restrict ethnic minorities' abilities to participate in the energy system equitably (Bouzarovski et al., 2022; Edmiston et al., 2022). Bouzarovski et al. (2022) relate injustices of recognitional nature to current UK policies, which usually do not specifically recognise the situation of ethnic minorities affected by EP.

Being a migrant can also lead to discrimination in several domains, such as the housing market or in interactions with institutions (Großmann & Kahlheber, 2017; Razum et al., 2016). For example, Großmann and Kahlheber (2017) report instances of Job Centre[6] staff in Germany refusing to speak English with clients. Furthermore, according to Bouzarovski et al. (2022) the over-representation of ethnic minorities in

[6] Institution responsible for receivers of Supplementary Unemployment Benefit (ALG II); affiliated with Federal Employment Agency (see

Box ***2*** for more information)

deprived neighbourhoods in the UK can insufficiently be explained by the availability of housing and instead, partly relates to discrimination in the housing market. Thus, energy inefficient housing becomes problematic through a discriminatory housing market (Großmann & Kahlheber, 2017), in which "structural disadvantages in access to save, affordable, and healthy housing" lead to EP among some groups of migrants (Bouzarovski et al., 2022, p. 9).

However, it must be noted that there are large "differences within diversity" (North East Child Poverty Commission, 2013, p. 13), meaning that usually various aspects of migrants' lives interact in creating the individual disadvantages which lead to EP. For instance, factors such as health problems, disabilities, financial difficulties besides energy, and family commitments may restricted capacities for energy and required households to prioritise other life aspects (Lorenc et al., 2013). This highlights the variety of attributes which may combine in leading to EP among households.

4.2 Attributes Shaping EP Among First-Generation Migrants

To answer research sub question one, I first classified the proximate reasons for EP among diverse first-generation migrant households (section 4.2.1). Second, by asking what the proximate reasons result from, I distinguished various attributes shaping EP among first-generation migrant households (Großmann & Kahlheber, 2017) (section 4.2.2). Third, I connected the attributes to wider areas of injustices and situated them within various discriminatory fields (Bouzarovski et al., 2022; Kahlheber, 2020) (section 4.2.3).

4.2.1 Proximate Reasons

The most immediate reason for EP according to my data is a lack of financial resources to afford energy bills. This includes low income, which is the factor specified in the triad theory, but may also refer to other aspects, such as a lack of savings or the existence of debts in other domains. Nevertheless, low income was emphasized the most across all interviews. This is corroborated by findings from the secondary data, showing that the median monthly net income of the first-generation migrant households recorded in the dataset was 1000€, which is much lower than the German average of 3612€ (Destatis, 2022b). In line with the literature, this indicates that financial resources play a major role in EP among first-generation migrant households (Bouzarovski et al., 2022; Drescher & Janzen, 2021).

Second, I found a high energy consumption to be a proximate cause for EP among first-generation migrant households, shown in over 60% of clients being classified as having a high energy consumption leading to a high energy expenditure due to heating and 70% of clients having a high energy consumption leading to a high expenditure of electricity. To a large extent, this may relate to poor household energy efficiency (Bouzarovski et al., 2022), as defined by the triad. However, more factors can play role; for instance, interviewee 1 explained that his teenage children tend to waste a lot of energy. Energy cost counsellor 7 cautioned that any findings related to a higher energy consumption of first-generation migrants must be communicated carefully. Specifically, migrants may easily be stigmatised and constructed as purposefully high energy consumers in mainstream debates, which is in line with findings from previous literature (Bednar et al., 2017; Belaïd, 2016).

Third, I found high energy prices in Germany to be an important contextual reason for EP among first-generation migrant households. This is equivalent to the factor specified in the triad theory. As emphasized by energy counsellor B, the situation for households even worsens due to current sharp price increases for energy in Germany. The above discussion shows that there are various possible underlying factors explaining the three proximate reasons for EP among first-generation migrant households.

4.2.2 Underlying Attributes

I distinguished the underlying attributes shaping EP among diverse first-generation migrant households derived from my data according to (internal) intersecting household characteristics and external factors (see

Table **8**). As some knowledge about the German energy system provides a helpful background for grasping my findings, I provide an overview in Box 1.

Table 8
Attributes Shaping EP Among First-Generation Migrant Households

Intersecting Household Characteristics		
Attribute	Energy Justice Dimension	Category
Low income/ income from social security payments	Distributional justice	Economic
Lack of savings		
Arrears on energy bills		
Lack of knowledge or experience regarding the German energy system	Procedural justice	Social
Lack of (German) language skills		
(Acute) crises, illnesses (psychological or physical) and other problems	Recognitional justice	
Size of household	Distributional justice	
Money sent to home country		
Cultural habits or traditions	Recognitional justice	Cultural
External Factors		
Factor	Energy Justice Dimension	Category
Energy efficiency of home	Distributional justice	Housing
Spatial availability of high-quality housing	Spatial, procedural, and distributional justice	

Box 1
The German Energy System

The following outlines the basic components of the German energy system from the perspective of energy consumers:

- Depending on the specific region, the German energy market is either privatized or under public control. In Rhineland-Palatine, most energy providers are public (however, they still pursue economic interests).
- Energy consumers must make a contract with an energy supplier. If they do not do so, their energy will not be disconnected but they automatically fall into a default contract type (*Ersatzversorgung*), which is usually more expensive than other contracts. After 3 months, energy consumers fall into another default contract type *(Grundversorgung).*
- For tenants, electricity is usually not included within additional charges but must be afforded as separate utilities. Heating costs may be covered depending on the type of heating system in place.
- Consumers pay monthly progress payments for energy. These are calculated by the supplier based on:
  1) The consumer's energy consumption of the previous year (or their estimated expenditure in the first year of a contract)
  2) The energy price of the supplier
- At the end of each year, the energy supplier examines the household's actual energy expenditure, and the consumer must either make an additional payment or receive a back-payment.

Note. Source: Author's own elaboration

Intersecting Household Characteristics: Economic

There are three main economic attributes which I found to shape EP among first-generation migrants in Rhineland-Palatine. First, the secondary data shows that the median monthly net income of first-generation migrant households who sought help at the consumer advice centre is around 70% lower than the average German income (Destatis, 2022b). The is in line with previous literature, substantiating low income as a major defining characteristics of EP (e.g., Drescher & Janzen, 2021; Lorenc et al., 2013). Furthermore, over 80% of the survey participants (n = 9) indicated that they do not receive enough income from social security payments (ALG II, see

Box ***2***) to afford their electricity costs. This aligns with interviewee 1 and energy cost counsellors 1 and 3 explaining that the level of ALG II and SGB XII (

Box ***2***) is insufficient, especially considering recent spikes of energy prices. If social security payments do not fully cover energy bills, this creates a structural disadvantage for receivers in meeting their energy needs. Overall, a low income or an (insufficient) income from social security payments restrict households' financial means and therefore, can lead to difficulties with affording energy bills.

Box 2
The German System of Social Security Payments

An extensive system of social security payments exists in Germany. The following provides an overview of those components which are most relevant for my findings:

Supplementary Unemployment Benefit (ALG II)	
Target group/ eligibility	Everyone who is not eligible for Unemployment Benefit (ALG I) or cannot ensure adequate subsistence from own income or assets. Receivers are required to follow various "integration" measures aimed at re-integrating them into the labour market (e.g., vocational training).
Responsible institution	Job Centre (*Jobcenter*)
Amount of financial benefit	Mainly dependent on the number of people in a household (e.g., singles receive 449€/ month; 36.87€/ month of this is designated for "energy and repairs") Costs for housing and heating[a] are fully compensated if judged "reasonable". This depends on the local Job Centre (e.g., housing cost limit is calculated based on average prices for housing in a region)

Welfare Benefit (SGB XII)	
Target group/ eligibility	Everyone who requires financial support for living and is not eligible for ALG II.
Responsible institution	Social Security Office (*Sozialamt*)
Amount of financial benefit	Mainly dependent on the number of people in a household (e.g., singles receive 449€/ month; 36.87€/ month of this is designated for "energy and repairs") Costs for housing and heating[a] are fully compensated if judged "reasonable". This depends on the local Social Security Office (e.g., housing cost limit is calculated based on average prices for housing in a region)

[a] However, according to one of the interviewed energy cost counsellors, it is often observed that in case of electric heating systems, these "electric heating costs" are in fact not compensated by Job Centres or Social Security Offices.

Note. Sources: Bundesagentur fuer Arbeit (2022), Bundesministerium fuer Arbeit und Soziales (2021). See section 8.8 for a more detailed overview of the German system of social security payments.

However, energy cost counsellor 7 expressed that "over the last years we observed that it is not even predominantly the income, but the lack of savings. Of course, this is interrelated; if you have a low income, you cannot build up savings." This shows that EP is not restricted to a household's income – instead, it may also affect some households with a medium income (Großmann & Kahlheber, 2017). Thus, while some first-generation migrant household's may be able to afford their monthly energy payments, they lack savings to cope with supplementary payments charged at the end of the year (see Box 1) or energy price increases.

Third, based on the dataset 93% of first-generation migrant clients had accumulated arrears on energy bills, highlighting that EP is often associated with energy debts (Kahlheber, 2017a). This is corroborated by case reports 1 to 4, mentioning that clients had received various dunning letters by their energy suppliers. Based on the secondary dataset, the debts of clients mostly concerned electricity (n = 130). This may be due to two factors. First, cheaper but more precarious places often feature older heating systems which function with electricity: "(…) and many people don't know (…) that they must expect much higher electricity costs in comparison to a regular heating system." (energy counsellor A). Second, over 66% of clients recorded in the dataset receive social security payments under ALG II or SGB XII. However, 36.87€ per month designated for "repairs and electricity" (see

Box ***2***) may not suffice to afford electricity bills and therefore lead to the accumulation of debts (energy cost counsellor 6). Overall, arrears on energy bills often bring households into a downward spiral in which a lack of financial resources to afford energy costs lead to the accumulation of debts, which then further restrict financial resources to afford energy costs (energy cost counsellor 7).

Intersecting Household Characteristics: Social

I identified seven social attributes shaping EP among diverse first-generation migrant households in Rhineland-Palatine. First, a lack of knowledge or experience regarding the German energy system can contribute to EP. For instance, "there are completely different heating systems in other countries. In Syria, for example, central heating does not really exist. So, people are not used to it, and they don't know how to use it properly." (energy counsellor B). This is corroborated by one of the survey participants indicating: "I find the energy supply in Germany very unclear, and at the moment it is even more difficult because of very high energy prices. This is an extreme challenge for me." According to energy cost counsellor 7, an aspect that is particularly often unclear is the fact that consumers make monthly advance payments for energy in Germany (see Box 1). This implies that households must actively keep track of their energy usage to determine whether additional costs will incur at the end of the year. Overall, the above illustrates that the unfamiliarity with the German energy system creates additional barriers for first-generation migrant households, for instance causing an unintendedly high use of energy or limiting the foreseeability of energy costs (George et al., 2011).

Second, a lack of (German) language skills can play a role in EP among first-generation migrant households. Concretely, "the energy system is complicated, even for German speakers. If you have difficulties with the German language, then it is almost impossible to understand the system." (energy cost counsellor 7). For instance, one of the survey participants indicated that she has difficulties to communicate with her energy provider as she does not know how to speak German well. This illustrates that a lack of language skills limits the extent to which information regarding the energy system can be acquired, and thereby restricts a household's capacity to cope with their energy bills (Großmann & Kahlheber, 2017). Furthermore, as indicated by George et al. (2011) language issues can contribute to an overall lack of confidence and thereby confine a household's negotiation power.

Third, the presence of (acute) crises, illnesses (psychological or physical) and other problems can devote attentional and financial resources away from energy (Lorenc et al., 2013).

> "If someone arrives in Germany and you tell them, so, let's talk about saving energy, they will say 'leave me alone. I have problems with my residence permit. I have problems with my language course. I have problems with the immigration authority. I can't also talk about this now'." (energy counsellor B)

Therefore, **"**it's not that households' only problem is energy, no, there are other problems." (energy counsellor A). The dataset indicates that some first-generation migrants affected by EP suffered from (chronical) illnesses (*n* = 15), depression (*n* = 16), breakups or the death of a loved one (*n* = 2), and addiction problems (*n* = 2). Furthermore, case reports 1 and 4 describe that bills and dunning letters regarding expenses in other domains limited clients' financial resources for energy. Thus, some first-generation migrant households may be financially and/or emotionally strained in other domains, restricting their available resources for the energy system.

Fourth, the size of a household matters in terms of energy expenditure – the larger the household, the more energy is used (energy cost counsellor 6). According to the experiences of energy counsellor B, especially larger first-generation migrant families tend to be affected by EP relatively more often. Amongst others, this might be explained by children showing less awareness for saving energy (interviewee 1).

Moreover, children do usually not earn an own income and thus, cannot contribute to the payment of energy costs.

Fifth, 64% of survey participants (*n* = 7) indicated that their difficulties with affording their energy bills are partly due to sending money to their home country. One participant wrote "we are sending to Syria around 50 – 100€ per month". At the same time, this participant specified that he receives ALG II (see

Box ***2***) and the total net income of his household, consisting of three people, is below 900€ per month. This leaves less than 283€ of monthly budget per person, which is below the German poverty line (Bundesregierung, 2022). Furthermore, energy cost counsellor 7 told:

> "I met a Syrian refugee; he sent his entire social security payments back to Syria to afford food and medical costs for his family. And he thought Germany is a rich country, it will be fine, so he sent all his money there and didn't have anything left for rent and energy. We hear about cases like this every once in a while."

This illustrates that not only aspects regarding the household themselves play a role, but also financially supporting relatives and friends can cause some first-generation migrants to find themselves in difficulties regarding the payment of their energy bills.

Intersecting Household Characteristics: Cultural

In line with previous literature, culture-specific habits or traditions can play a part in EP among first-generation migrants (Bouzarovski et al., 2022). For instance, "there are people who are used to keeping their tea warm on the stove for hours. Doing that in Germany on an electric stove is crazily expensive." (energy cost counsellor 1). Thus, differences in cultural practices might increase energy expenditure unintendedly (Bouzarovski et al., 2022). In line with Thomson (2022), this highlights the need for considering EP in a culturally sensitive manner.

External Factors: Housing

In many cases, I found the intersectional household characteristics to combine with a poor household energy efficiency. Based on my findings, it is an underlying (structural) cause as it does not directly lead to EP but contributes to a higher expenditure, which then elevates energy bills:

> "I've met a family during counselling, (…) their apartment (…) was rented out without any heating system. So they had to use electric ovens for heating the place. This led to 16.000€ expenses for electricity within 2.5 years." (energy cost counsellor 6)

Relatedly, a precarious housing condition was mentioned by interviewee 2 as the main issue for her difficulties with affording her energy costs: "The only thing that can help me is a better apartment. Nothing else.". While this applies to all households, some first-generation migrants may experience additional issues in their access to high-quality housing: "it is often not the most energy efficient housing which migrants get, or better, which they have to take. And of course, especially when heating is done with electricity, debts accumulate quickly." (energy cost counsellor 6). This may be due to various reasons, such as experiencing discrimination in the (private) housing market (Bouzarovski et al., 2022) or shortages of high-quality housing.

Having discussed the intersectional household characteristics and (external) housing conditions individually, it must be noted that often their interrelation(s) lead(s) to EP, with the most severe energy deprivation occurring at multiple intersections (Großmann & Kahlheber, 2017). This is exemplified in the situation of interviewee 1 described in

Box ***3***.

Box 3
The Situation of Interviewee 1

Interviewee 1 has lived in Germany for over 25 years. As the main wage earner of his household, he always used to receive a sufficient income to afford the energy bills for him, his wife, and his four children. However, a few months ago he developed a chronical illness, which has resulted in him being laid off. His wife, who is unemployed, struggles with her application for social security payments and experiences the process as extremely lengthy, complex, and bureaucratic. Thus, the household's income currently consists of interviewee 1's sickness allowance and a small amount earned from child allowances. His four teenage kids tend to use a lot of energy and can hardly be convinced to save energy. The family might be able to lower their energy usage by moving to a smaller, more energy efficient flat, but as of now they were unable to find an affordable place. As a result of the above-described circumstances, interviewee 1 started to experience difficulties with affording the household's monthly energy payments. After receiving a bill for an additional payment from his energy supplier due to a higher energy expenditure of the household, he started accumulating arrears on his energy bills.

4.2.3 Energy Injustices and Discriminatory Fields

All four dimensions of energy injustices are reflected in the above findings. First, distributional injustices show in the energy deprivation experienced by some first-generation migrant households due to lack of financial resources. This may be exacerbated by high energy bills due to a high energy expenditure. However, a dwelling of low energy efficiency might leave some first-generation migrant household with no choice but a high energy expenditure. Relatedly, my findings indicate injustices in the distribution of good-quality housing, which is in line with Bouzarovski et al. (2022). Overall, these factors indicate structural disadvantages for some first-generation migrant households for meeting their energy needs, thereby precluding a fair distribution of energy.

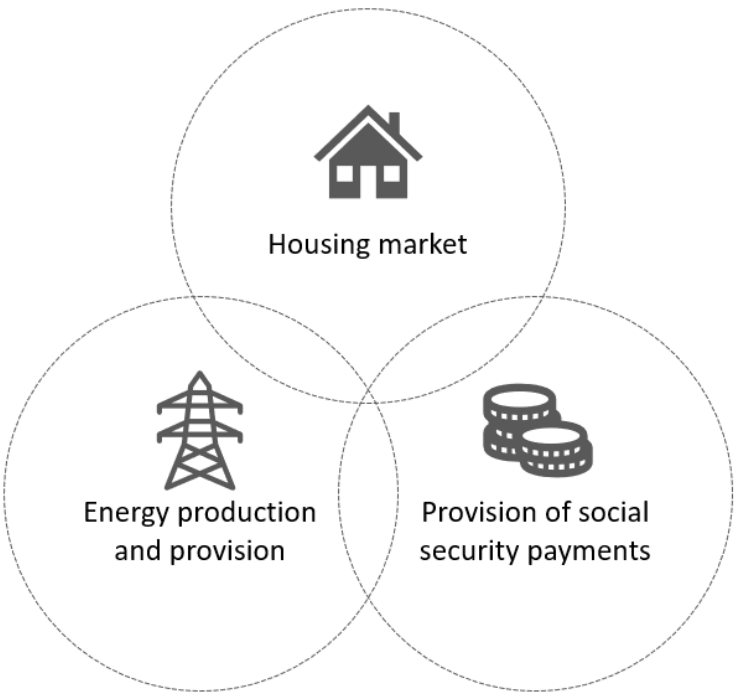
Second, I found procedural injustices to mostly regard language difficulties and a lack of knowledge and experience with the energy system. Concretely, the liberalised energy market in Germany hinges on consumers actively selecting their preferred energy supplier. This implies that one needs to be proactive, keep track of energy usage, and initiate a switch of suppliers if necessary (Großmann & Kahlheber, 2017). However, language difficulties and a lack of knowledge and experience may limit a household's abilities to participate in the energy system and restrict negotiation power. In addition, I found procedural injustices to show in the process of acquiring high-quality housing – even in cities where higher-quality housing is available, it may be too expensive for some first-generation migrant households or not accessible for those households receiving social security payments ALG II and SGB XII.

Third, recognitional injustices are reflected in (acute) crises, illnesses and other problems limiting the ability of first-generation migrants affected by EP to participate as full and equitable members in society. Moreover, the tendency to stigmatise the use of energy of some first-generation migrant households in mainstream debates (energy cost counsellor 7, Bednar et al., 2017; Belaïd, 2016) points towards recognitional injustices.

Fourth, as the availability of high-quality housing differs per region of Rhineland-Palatine, some first-generation migrants experience disadvantages in accessing such housing due to their residential location, which reflects spatial injustices. Furthermore, Bouzarovski et al. (2022) highlight that energy injustices often relate to the overall organisation and structure of energy provision and housing, which is inherently spatial.

Overall, intersections of households' characteristics can open various discriminatory field in which injustices regarding first-generation migrants' access to energy are (re-)created (Großmann & Kahlheber, 2017; Razum et al., 2016). Based on the findings of my study, I can distinguish three such fields, which are shown in Figure 6.

Figure 6
Discriminatory Fields



Note. Source: Author's own elaboration

First, structural issues with the provision of social security payments in Germany were summarized by energy counsellor B saying: "As you know, everything in Germany is a little bit complicated". Concretely, based on my findings the application procedures for social security payments are lengthy and often lead to confusion, even for people who are proficient at speaking German (interviewee 1, energy cost counsellor 7). First-generation migrants who experience difficulties with speaking German face even more barriers due to information often not being available in other languages and staff of welfare services refusing to speak English:

> „We talked to the Job Centre (….) to ask whether they can provide information in other languages than German. And whether they can't employ someone (…) who at least speaks English. And they were always like 'no, our official language is German, and it will stay this way'." (energy cost counsellor 7)

Overall, this implies disadvantages in the application for social security payments, especially for first-generation migrants who do not speak German. Moreover, receivers of ALG II and SGB XII must find housing which's rent does not exceed a pre-defined financial limit (see

Box ***2***); however, this limit is often too low to afford energy efficient housing (energy cost counsellor 5). A low amount of compensated housing costs in some regions might force some first-generation migrants to rent cheaper places of lower energy efficiency. Such lower energy efficiency usually results in higher energy bills, which are then insufficiently covered by social security payments (energy cost counsellors 1 and 3). This illustrates the vicious cycle which some first-generation migrant household receiving social security payments are confronted with – if, despite aforementioned difficulties with the application process, "they did, in fact, succeed to apply [for their social security payments] in due time" (energy cost counsellor 1).

Second, the stigmatisation of certain groups or cultural practices can limit some first-generation migrants' ability to find housing in an already tense housing market in Rhineland-Palatine:

> "There are landlords who do not want to rent out to migrants because of actual or presumed cultural differences. That's why they might only get places from unscrupulous landlords who do not take care of the places and rent out places in a very bad condition." (energy cost counsellor 7)

This indicates structural problems with the German private housing market[7], in which available housing is rather scarce, landlords can freely decide about the renters of their properties, and landlords usually have commercial intentions. At the same time, landlords usually lack incentives to improve the energy efficiency of their properties, as energy bills are afforded by the renters (energy cost counsellor 7), creating structural barriers to improving the energy efficiency of privately rented low-quality housing.

Furthermore, the spatial availability of high-quality housing differs within Rhineland-Palatine. According to energy cost counsellor 1, in some cities the quality of dwellings is better, however, as a consequence they are often more expensive. Thus, while their higher energy efficiency theoretically reduces energy bills, first-generation migrants who earn a low income may not be able to afford such high-quality housing in the first place. This resonates with energy counsellor B: "there are many migrants who know that their homes are using too much energy, but they cannot find a new place, or they cannot afford any higher rents." It was also substantiated by interviewee 1, explaining that he would like to move to a smaller and more energy efficient dwelling, but is unable to find a place within his residential region. Overall, these findings point towards structural disadvantages for some first-generation migrant households to access good-quality housing, which is in line with findings of Bouzarovski et al. (2022).

Third, the system of energy production and provision can generate inequalities and discrimination. For instance, the production of renewable energy is mainly available for higher-income households and to a much lesser extent accessible to households who belong to a lower income group and therefore lack the saving which are needed for investing in renewable energy sources (energy cost counsellor 4). Regarding the provision of energy, the fact that some first-generation migrants experience language difficulties and lack knowledge and experience with the German energy system might be used by certain energy providers to their advantage. For instance, first-generation migrants may be convinced to sign contracts which they cannot fully grasp (energy cost counsellor 2), which is in line with findings by George et al. (2011). Bouzarovski et al. (2022) highlight that changing energy providers can also often be a challenge, which is corroborated by energy cost counsellor 5: "you barely find suppliers which offer prices as affordable as they used to be. And then suppliers also have to accept new customers.". In addition, consumers must proactively approach their energy provider if they would like to pay energy bills in instalments. "If someone does not do so, maybe because of language barriers or fears, then the energy supply might be disconnected, and even more costs accumulate." (energy cost counsellor 3). Overall, this suggests

[7] My study focusses on the private housing market, as this market is more prominent in Germany compared to social housing. Furthermore, as private landlords can determine the energy efficiency standards for their properties themselves (i.e., there are no public guidelines for energy efficiency standards in the private housing market), its relationship to EP is of higher relevance.

structural issues with the German energy market, in which providers usually have economic interests and in which participants who are not familiar with the German energy system and/ or do not speak German may be disadvantaged.

In addition, discrimination might not be restricted to the energy market, as exemplified by the following quote:

> "And many people make money with this. (…) I experienced this here in [city] a lot, people came to me first and I said alright, I will also make an appointment for you with my colleague of the legal advice department so she can cancel all cell phone contracts and whatever else was imposed upon those people." (energy cost counsellor 1)

4.3 The Approach of the Consumer Advice Centre in Rhineland-Palatine

To answer sub-question two, I assessed the services of the consumer advice centre in Rhineland-Palatine for first-generation migrants affected by EP. As this necessitates knowledge about the general approach of the centre, an overview is given in Box 4.

Box 4
The 'Systemic Energy Cost Consultation' of the Consumer Advice Centre in Rhineland-Palatine

Range of Services

- 7 energy counsellors provide advice in 14 sub-regions of Rhineland-Palatine
- Households are supported with the payment of their energy bills by:
  - Checks of energy bills
  - Checks of energy expenditure (can take place on-site)
  - Mediation and negotiation with energy providers, Job Centres, and landlords
  - Legal, psychosocial, and insolvency advice
- Counselling services are tailored to households

Target group

- Any resident of Rhineland-Palatine who experiences difficulties in affording their energy
- In practice, clients mostly consist of low-income households who are subject to or threatened by energy debts and energy disconnections.
- Interviews with energy counsellors suggest that diverse first-generation migrant households use the services, differing in terms of nationality, reasons for migration, and the intersecting household characteristics described previously.

Financing

- Public (by Ministry for Climate Protection, Environment, Energy, and Mobility)

Note. Sources: Kahlheber (2017b), VZ RLP (n.d.a), VZ RLP (2019), interviews with energy cost counsellors 1 to 7

On top of their general energy counselling services, the consumer advice centre offers specific support for migrants[8]. Based on my findings, three types of offerings can be differentiated (see

[8] The consumer advice centre in Rhineland-Palatine does not distinguish between different generations of migrants in their services

Table ***9***).

Table 9
Services of Consumer Advice Centre in Rhineland Palatine *for Migrants*

Service	Description
Translation	Counsellors can use a database of translators and interpreters in their counselling sessions.
Provision of Information	On the website of the centre, brochures about energy saving strategies and the German housing system are available in English, Arabic, Russian, Farsi, and Ukrainian. Moreover, refugees are specifically addressed invited to use the counselling services[9].
Education/ Training	The centre organises lectures and workshops in collaboration with regional charities, migrant organisations, and social workers. These discuss energy costs in Germany, the German system of energy provision, and energy saving strategies. They often feature translators.

Note. Source: interviews with energy cost counsellors 1 to 7, VZ RLP (n.d.b)

My results suggest that the consumer advice centre in Rhineland-Palatine addresses energy injustices among their first-generation migrant clients mostly by targeting procedural and distributional injustices. For instance, energy cost counsellors can help to grasp energy bills and construct payment plans with clients who lack experience with the German energy system (i.e., addressing procedural injustices) to prevent energy disconnections (i.e., addressing distributional injustices). This is illustrated by one of the survey participants: "the consumer advice centre helped me to understand my energy bills.". Moreover, the use of translators and interpreters ensures that first-generation migrants who do not speak German can benefit from the services. This is particularly relevant considering that around half of the first-generation migrants recorded in the secondary dataset experienced major difficulties with speaking German, suggesting that especially households who are faced with language difficulties might seek help at energy counselling services (Bouzarovski et al., 2022).

Interviewee 1 expressed his happiness and thankfulness about the services, explaining that the energy cost counsellor gave him some hope that he will be able to cope with his energy bills. This highlights that the consumer advice centre contributes to recognitional energy justice by recognising and addressing the difficulties of some first-generation migrants regarding their access to energy. Furthermore, with their services (e.g., by supporting negotiations with energy suppliers) energy cost counsellors recognise the difficulties of some first-generation migrants when navigating through the German energy system (Großmann & Kahlheber, 2017) and strengthen their negotiation power.

However, my results highlight three aspects for consideration with regards to the energy counselling services of the consumer advice centre for first-generation migrants. First, energy cost counsellor 1 mentioned the centre's difficulties of reaching first-generation migrant households. The counsellor explained that such households are often best reached via intermediaries who are part of networks and community structures, such as social workers or members of communities. However, despite the centre trying to keep close contact with such intermediaries, the quality of their network differs depending on the sub-region of Rhineland-Palatine. Additionally, some first-generation migrants may refrain from using the services of the centre as they are unfamiliar with the concept of publicly financed energy counselling and therefore suspect an economic interest of the consumer advice centre in the counselling (energy cost counsellor 3).

[9] Energy counsellors indicated that in the aftermath of the arrival of many refugees in Europe (2015 and 2016), their services have been used by a large number of those refugees once they moved from publicly financed shared accommodation to the private housing sector. This explains the specific focus on refugees.

Second, my results indicate that language and/ or cultural issues can impact the quality of the counselling. Specifically, some comprehension problems may not fully be offset by offering translation services:

> „Even if you have a translator, if this person does not have good knowledge of the German energy system that's a problem. There are many highly qualified energy cost counsellors who use scientific terms and give their advice within half an hour. And then, even if you have a translator, you don't understand anything." (energy counsellor B)

This indicates that the extent to which a translator is familiar with the German energy system may partly determine the extent to which first-generation migrant households benefit from the counselling. Furthermore, the quote suggests that some energy cost counsellors might find it difficult to tailor their advice to clients who are unfamiliar to the German energy system. Additionally, cultural differences can play a role in the counselling process, as energy cost counsellor 6 reflected:

> „Compared to some other cultures, Germans are extremely result-oriented. The counselling starts and we say 'give me your energy bills, how much money did you pay' (…) while for some it's normal to start with 'how are you? Is your family doing well? Yes yes, how about you' (...), so only after some warmup you start with the counselling. And of course that needs some adjustment, also for us counsellors, cause I gotta admit I planned one hour of counselling so I don't really have time to talk about how the parents are doing who I don't even know."

This illustrates that cultural differences in communication styles might impact the counselling and thereby compromise the extent to which some first-generation migrant households benefit from the sessions.

Third, spatial issues apply to the services of the consumer advice centre, as not every region has a nearby facility where counselling sessions can be attended. Therefore, first-generation migrants in some regions of Rhineland-Palatine face larger travelling distances and thus, may be disadvantaged in accessing the services. Furthermore, the consumer advice centre likely has a higher visibility in regions where their facilities are located.

Overall, the consumer advice centre deals with the immediate consequences of energy deprivation on the level of individual first-generation migrant households, such as arrears on energy bills and (threatened) energy disconnections (Großmann & Kahlheber, 2017). My findings suggest that they can also address structural causes of EP on the level of the individual household, for instance by targeting energy-related consumption behaviours (energy cost counsellor 4). Most energy cost counsellors also expressed their awareness of wider structural issues related to the German system of social security payments, energy production and provision, and the housing market, for instance: "There is such precarious housing which is rented out, this shouldn't be possible anymore." (energy cost counsellor 7).

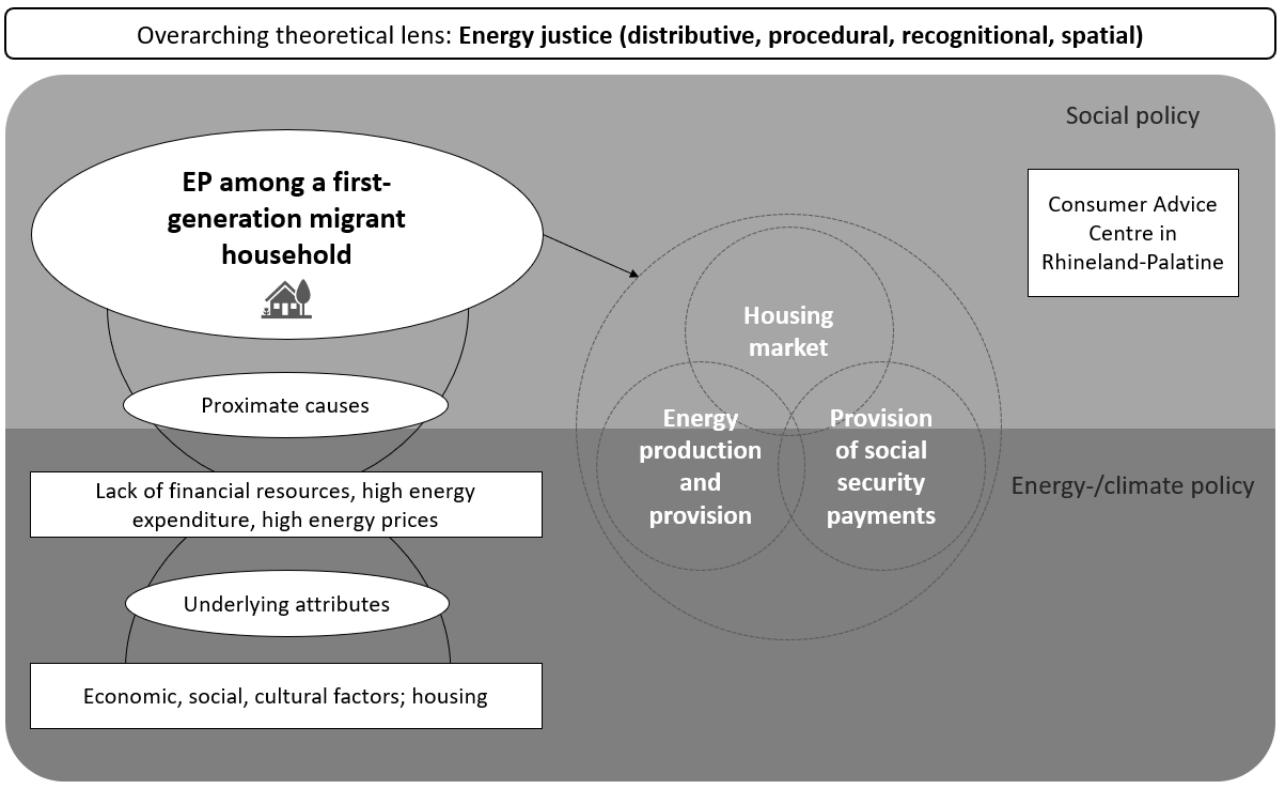
However, regarding problems with the German housing market and the system of social security payments, energy cost counsellor 3 remarked "no, I don't have a solution. I think if I had a solution, we would've already tried to execute it somehow." The quote illustrates that energy cost counsellors' ability to impact structural causes of EP which go beyond the level of their individual clients is very limited. It is also indicative of the area of conflict between social and energy/climate policy, where the consumer advice centre mainly addresses a household's financial solvency and faces more difficulties in impacting the triad's remaining two aspects "low household energy efficiency" and "high energy prices".

5 Discussion

Figure 7 provides an overview of my findings in relation to my research framework. In the following, I will first discuss the wider implications of the findings of sub-questions one (Section 5.1) and two (section 5.2). I will subsequently reflect on aspects of subjectivity and positionality of my research (section 5.3). In the remaining part of the discussion, I will address theoretical and practical contributions and implications, my study's limitations, and avenues for future research.

Figure 7

EP Among First-Generation Migrant Households in an Intersectional Perspective.



Note. Inspired by Großmann and Kahlheber (2017)

5.1 Reflection on the Attributes Shaping EP Among First-Generation Migrants

By outlining a variety of intersecting household characteristics and external factors shaping EP among first-generation migrant households, my findings emphasize the heterogeneity of cases of EP. Furthermore, many attributes which shape EP among first-generation migrants in Rhineland-Palatine also play a role in the condition among other households, such as a lack of financial resources, the presence of acute crises, and psychological or physical illnesses (Großmann & Kahlheber, 2017). Nevertheless, I consider four dynamics to be relevant to highlight in the context of EP among first-generation migrants specifically.

First, my findings indicate that there are cultural traditions and habits which can elevate energy expenditure. This highlights that EP should be considered in a culturally sensitive manner and without stigmatising any groups or cultural practices (Thomson et al., 2022). Second, problems with the German language can add an additional burden on first-generation migrant households when navigating through the energy system (Bouzarovski et al., 2022; George et al., 2011; Großmann & Kahlheber, 2017). Third, I found direct discrimination (e.g., from sides of landlords, energy providers, and employees of employment

offices) to create disadvantages for some first-generation migrant households in Rhineland-Palatine (Großmann & Kahlheber, 2017; Razum et al., 2016).

Fourth, my findings show that a lack of financial resources plays an important role in EP among my target group (e.g., (Drescher & Janzen, 2021; Wang & Lin, 2022). In combination with official data reporting migrants in Rhineland-Palatine to be endangered by income poverty relatively more often (Fueckel, 2019), this may point towards a higher susceptibility to EP among some groups of first-generation migrants compared to the overall population in the state (Bouzarovski et al., 2022; Edmiston et al., 2022). Furthermore, my results indicate that remittances being transferred to support relatives and friends in first-generation migrants' home countries can further restrict the financial capacity to cope with energy costs. This calls attention to the financial burden of remittances, especially for first-generation migrants who struggle to afford their own living costs in Germany (Carling, 2020). In addition, a "trans-local" perspective may aid in conceptualizing EP among first-generation migrants (Zoomers & Westen, 2011, p. 377). By highlighting the complex interconnections between various localities established through migration processes, such perspective can account for trans-local influences on EP.

When conceptualizing the reasons for EP in my research, a modified version of the triad theory was needed to account for my findings regarding proximate causes. For instance, it was a general lack of financial means (e.g., due to a lack of savings) rather than only a low income that captured my target group's difficulties with affording their energy bills. This suggests that the triad in its original form may be too narrow to capture the full range of proximate reasons for EP. Additionally, even in its modified version, the three factors gave limited insight into the underlying reasons shaping EP among my sample. This highlights the shallowness of conceptualizing EP according to only three factors, and highlights the need to move beyond the triad theory (Chandrashekeran et al., 2022; Kahlheber, 2020; Stojilovska et al., 2022). In this regard, intersectionality could account for the variety of underlying causes involved in EP. In the context of EP among first-generation migrants, I consider the theory to be specifically suitable for assessing dynamics of EP in a culturally sensitive manner (Thomson et al., 2022) as it provides deeper insights into the energy consumption of households. This stands in contrast to the triad theory, which may open avenues for stigmatisation by highlighting only three broad drivers of EP (Bouzarovski et al., 2018).

My research shows how the individual and diverse cases of EP among first-generation migrant households in Rhineland-Palatine relate to various energy injustices (Cannon & Chu, 2021; Großmann & Kahlheber, 2017). Thereby, I found distributional injustices to relate to underlying procedural, recognitional, and spatial injustices. For instance, a households might suffer from energy deprivation due to a lack of financial resources to afford energy bills (i.e., distributional injustice), but might be unable to find a cheaper energy supplier due to language barriers (i.e., procedural injustice). Furthermore, the intersections of attributes shaping EP can open avenues for discriminatory fields (i.e., the German housing market, the system of energy production and provision, and the system of social security payments) in which procedural energy injustices are rooted (Bouzarovski & Simcock, 2017). Injustices can be directly visible, such as when employment office staff refuses to speak English. However, most often they are ingrained within the underlying system and reflected in aspects such as relatively larger difficulties of switching energy providers due to languages issues, and social security payments limiting the access to energy efficient housing. My findings suggest that the discrimination may even go beyond the access to energy. For instance, some first-generation migrants may be approached by unscrupulous cell-phone providers, trying to benefit from selling telephone contracts to people who experience difficulties with speaking German.

My results also point towards the need to consider the spatiality of energy injustices (Bouzarovski & Simcock, 2017). Concretely, the German housing market, the system of energy production and provision, and the provision of social security payments are inherently spatial in nature. For instance, there is a differing availability of affordable energy-efficient housing among regions of Rhineland-Palatine. Moreover,

it is local Job Centres and welfare offices deciding on the region-specific limit of housing costs which are compensated by the social security payments ALG II and SGB XII.

Rather than only relating to the manifestation of EP, spatial aspects might also contribute to the production of energy injustices among some first-generation migrant households. Concretely, a "diversity penalty" may apply in which patterns of energy deprivation are created by processes of marginalisation, prevarication, and exclusion (Bouzarovski et al., 2022), p.4). For instance, some residents of neighbourhoods with low-quality housing may be stigmatised and excluded from the decision making within a city's community, thereby leading to recognitional and procedural injustices.

5.2 Reflection on the Approach of the Consumer Advice Centre

I found the approach of the consumer advice centre to address various energy injustices among their first-generation migrant clients. Concretely, in considering individualized solutions per household, the centre can address a wide range of attributes shaping EP among first-generation migrants. Furthermore, they recognises that barriers in the access to energy for first-generation migrants can be created by intersections of their households' characteristics (Großmann & Kahlheber, 2017). Therefore, they address such barriers by, amongst others, offering translation services and trying to increase first-generation migrants' knowledge and information regarding the German energy system. This work is supported by a large network which is actively maintained by the centre, consisting of social workers, charities, and other institutions or contact people. However, despite recognising structural causes for EP among first-generation migrants due to aforementioned discriminatory fields, the consumer advice centre has limited power to address those. Thus, even if the centre would find solutions for all the intersectional household characteristics which contribute to EP among a first-generation migrant household, this household may still suffer from EP due to external factors, such as high energy prices and a dwelling of low energy efficiency.

Based on my findings, two wider approaches to addressing EP can be distinguished. On the one hand, EP can be targeted by increasing the financial means of households for affording their energy bills, the approach which is currently taken by the German government (Noka & Cludius, 2021; Tews, 2013). However, thereby the burden of EP remains on individual households suffering from EP and any wider areas of inequalities revolving around the access to energy in Germany are disregarded.

On the other hand, EP can be addressed by considering the (structural) causes and consequences of the condition. This is done by the consumer advice centre, however, only on the level of individual households (e.g., addressing clients' energy-related consumption behaviour). According to my research, there is insufficient policy understanding with regards to wider systemic issues related to EP (Bouzarovski et al., 2022). However, such understanding may be needed to effectively target the root causes of EP, as these relate to structural procedural injustices created within the system of social security payments, energy production and provision, and the housing market.

The fact that Germany lacks an official definition of EP (Schumacher et al., 2015) may currently preclude any systemic approaches to addressing the condition on a political level. Concretely, merely addressing the condition by means of wider social welfare (BNE, 2020; Noka & Cludius, 2021) disregards the complex and multi-facetted nature of EP which was illustrated in my study. As suggested by the European Commission (2020), a definition of EP according to the national context might be needed for a broader policy approach in Germany. My findings suggest that such definition should be based on a more detailed conceptualization of EP beyond the triad theory. Concretely, even if social policy measures would address households' income levels, and energy/climate measures would targeting energy prices and dwellings' energy efficiency (Tews, 2013), the structural issues ingrained in the German energy system may remain. Therefore, an intersectionally-informed definition may be needed to address the systemic disadvantages which lead to

energy deprivation among some groups of energy consumers in Germany, among those some groups of first-generation migrants.

5.3 Reflection on Positionality and Subjectivity

Two aspects regarding positionality and subjectivity should be considered in the context of my findings (Hennink et al., 2020). First, the collaboration with the consumer advice centre has helped me to collect a wide range of diverse data sources. At the same time, it implies that my research is to some extent conditioned by the perspective of the German public sector. I actively balanced this aspect by involving the perspective of first-generation migrants in my research as much as possible. However, as ethical and practical issues restricted the number of first-generation migrant participants in my study, the perspective of the consumer advice centre might still have been slightly overrepresented in my study.

Second, my research is conducted in the context of pre-existing power structures (Iosifides, 2017): The consumer advice centre is usually conceptualized as "the ones who help", and first-generation migrant clients as "the ones who need help regarding their energy bills". However, my findings highlight structural injustices involved in many cases of EP among first-generation migrant households. Therefore, first-generation migrant households might be in need of help due to being affected by wider discriminatory fields which restrict their access to energy. Furthermore, according to Iosifides (2017), even the very use of term "migrant" complies with underlying power relations and should therefore be consciously reflected upon to prevent the stigmatisation of societal groups. In this regard, my use of intersectionality has highlighted the individuality of cases of EP and thereby stresses that no broad generalisations can be made. Rather, my findings have highlighted that specific dynamics might be present among some cases of EP among first-generation migrant which can help in addressing the condition in a targeted fashion.

5.4 Theoretical Contributions and Implications

The conceptual contributions of my research lie in demonstrating how energy injustices form within wider fields of discrimination. I have described this for first-generation migrant households in Rhineland-Palatine, however, it can be expected that such fields affect a wider range of households suffering from EP (Großmann & Kahlheber, 2017). Concretely, as discriminatory fields concern the structure of the housing market, the energy production and provision, and the system of social security payments, they are deeply ingrained within the (spatial) organisation surrounding a country's energy system (Bouzarovski et al., 2022). This implies that structural inequalities encompassed within the organisation of a country's energy system should be considered when investigating energy deprivation (Cannon & Chu, 2021).

Methodologically, my study shows how intersectionality can be utilized as a research tool to capture the heterogeneity among a research's target group (Razum et al., 2016). Furthermore, my results illustrate that intersectionality can provide a culturally sensitive lens regarding EP (Thomson et al., 2022), as it gives detailed insight into the underlying factors shaping EP among a household. I also showed how the various attributes shaping EP captured by intersectionality can then be related to wider dimensions of energy justice. This highlights the importance of intersectional approaches in energy research for "understanding of how power generates injustice across energy systems, policies, availability, and access" (Cannon & Chu, 2021 p. 6).

On an empirical level, my study addresses three research gaps regarding EP. First, it provides insights regarding attributes and broader dynamics shaping EP among groups of migrants (Bouzarovski et al., 2022). Second, I further investigated intersecting household characteristics related to EP, taking "first-generation migration background" as a starting point (Großmann & Kahlheber, 2017). Third, by investigating the public

support services of the consumer advice centre Rhineland-Palatine, I was able to show both the value of individualized, targeted support for individual households affected by EP, and its limits reflected in the inability to impact (structural) external factors.

5.5 Practical Contributions and Implications

As I closely collaborated with the consumer advice centre in Rhineland Palatine, my findings can directly inform the centre regarding the dynamics which can play a role among first-generation migrants affected by EP. Furthermore, my results suggest two practical implications for their approach. First, in case translation services are relied on, it is advisable that translators have some basic knowledge of the German energy system. Second, cultural awareness among the energy cost counsellors can be raised to ensure that they are alert to potential cultural differences impacting the counselling sessions. Beyond the counsellors working at the consumer advice centre (energy cost counsellors 1 to 7), I will share my findings with energy cost counsellors A and B as my insights may be helpful for their work as well.

Furthermore, my research has implications for the conceptualization of EP in German policy. I have shown that under the current social policy approach followed by the German government, the burden of EP remains on individual households, and external factors are disregarded. This implies that energy/climate policies may be needed, for instance to ensure that the energy efficiency of homes is improved. For instance, landlords could be incentivized for improving the energy efficiency of their properties, which then lowers the residents' energy bills and thereby remove part of the burden of EP which rests on individual households.

However, such approaches must be implemented in consideration of structural inequalities ingrained in the German energy system – if this is not done, there is a risk of deepening pre-existing inequalities rather than improving them. Therefore, my results highlight the need for structural changes in the German system of energy production and provision, the provision of social security payments, and the housing market. For instance, limits of compensated housing costs within ALG II and SGB XII should be reconsidered. For example, they could be adjusted based on the energy efficiency of dwellings to ensure that households receiving the social benefit gain access to homes of higher energy efficiency. Furthermore, information regarding the German energy system should be provided for migrants upon their arrival in Germany and there should be guidance, for instance regarding the choice of supplier and the meaning of energy bills.

To increase the visibility of my findings, I will forward them to the head of the "energy cost consultation" department of the consumer advice centre in Rhineland-Palatine. The department, in turn, is regularly in contact with policy makers on the level of the federal state. Furthermore, as my research was done in collaboration with a large German research institute (*Oeko-Institut Berlin*), I will make a blog post on their website.

5.6 Limitations and Avenues for Future Research

Several limitations of my research open avenues for future studies. First, my sample only included first-generation migrant households eligible to use the services of the consumer advice centre. Thus, there may be more groups of migrants affected by EP who I did not consider, such as second- or third-generation migrants, illegal migrants (who might not use official services such as the counselling of the consumer advice centre), and those migrants out of reach of the network of the consumer advice centre. Therefore, future research may include more migrants affected by EP and distinguish groups according to further indicators such as migrant generation, cultural background, community membership, and socio-economic status in home country to gain insights into potential differences.

Second, receivers of social security payments (especially ALG II) were overrepresented among both survey respondents as well as clients in the secondary dataset. On the one hand, this may indicate that EP predominantly occurs within this group due to aforementioned problems with compensated housing costs and an insufficient amount designated for households' electricity costs. On the other hand, receivers of the social security payment ALG II are required to follow "integration measures" (see

Box ***2***) and may therefore be in contact with charities and social workers, who often direct them to the consumer advice centre.

Third, my focus on insights of depth rather than breadth resulted in my choice of a relatively small sample. While this has helped me to gain detailed knowledge regarding EP among first-generation migrant households in Rhineland-Palatine, my findings cannot be regarded as fully representative. Thus, my study can inform future research which may focus on establishing a larger sample size. Thereby, the involvement of a larger number of first-generation migrants could be achieved by an in-depth community involvement of the researchers, which can establish networks and build trust. Such larger, more representative sample could also be used to illuminate whether first-generation migrants who receive ALG II are indeed more often affected by EP.

Fourth, my geographical focus on Rhineland-Palatine implies that spatial aspects cannot be related to other federal states. Furthermore, the exact services of consumer advice centres as well as their allocated public budget differ per federal state. Therefore, further studies could extend the geographical focus to involve other German federal states or different countries, as this can shed light on wider spatial dynamics regarding EP among first-generation migrant households.

Fifth, only being able to speak in English or German restricted my inclusion of research participants. While outside of the possibilities of my study, it would have been helpful to speak other languages, such as Arabic, to involve a larger number of first-generation migrants affected by EP in my study. In this regard, future research could involve translators or a team of more researchers speaking various languages.

Sixth, my choice of utilizing language skills and/or foreign citizenship as a proxy for identifying first-generation migrants within the secondary data may have led to misclassifying or excluding some cases. Future research may refrain from using such proxies by recording a client's migrant generation directly.

Last, the attributes shaping EP which I found in my study are not restricted to first-generation migrant households. For instance, native German households may also lack knowledge regarding the German energy system. EP is often associated with (acute) crises and a lack of financial resources (Grossmann & Kahlheber). In this regard, future studies may use the data of the consumer advice centre to produce more concrete findings by comparing groups of clients, for instance by t-tests, ANOVAs, or Chi^2 tests. This can shed lights on the extent to which attributes shaping EP show any unique dynamics for first-generation migrants, which can then be used to derive further recommendations for targeted approaches to address the condition.

Future research may also focus on the spatiality of EP (Bouzarovski & Simcock, 2017) and a more detailed investigation of the three discriminatory fields. While my sample was not large enough to connect findings of different data sources according to the specific location within Rhineland-Palatine, future studies may shed light on the spatial manifestation of EP across the federal state. Furthermore, additional research could investigate the spatial production of energy injustices, for instance by conducting in-depth analyses of individual neighbourhoods. This could also shed light on the wider impact of the discriminatory fields and illuminate which groups of households are restricted in their access to energy due to their inherent procedural injustices.

Future studies could also include more support measures available to first-generation migrants suffering from EP beyond the consumer advice centre, for instance by involving migrant organisations, charities, and other facilities. This can assess include approaches beyond the current public measures and shed light on their relative importance and effectiveness. In addition, the energy counselling services of different federal states could be compared. This may contribute to an exchange of information between consumer advice centres and inform their individual approaches.

6 Conclusion

In my research I investigated the challenges of EP among diverse groups of first-generation migrants in the German federal state of Rhineland-Palatine. Using an intersectional approach, I first shed light on the attributes which shape EP among first-generation migrants. Then, I assessed the approach of the consumer advice centre as the main public institution providing energy counselling for households affected by EP in Rhineland-Palatine.

My results show that EP among diverse first-generation migrants must be addressed beyond the level of individual households. Concretely, while energy counselling and other measures directed at first-generation migrants' households can target intersectional characteristics and contribute to an improvement of individual livelihoods, they do not provide a solution which focusses on (external) root causes of EP. Therefore, the main challenge to address EP among first-generation migrants in Rhineland-Palatine lies in tackling discriminatory structures surrounding the German energy system, specifically, the systems of energy production and provision, the provision of social security payments, and the housing market. My findings indicate that only by changing such systems in which inequalities are (re-)created, the root causes of EP can be targeted.

Overall, my study contributes to an increased understanding of the underlying drivers which can lead to energy deprivation among diverse first-generation migrant households in Germany. Furthermore, it tackles the scarcity of prior research regarding EP among migrant households. At the same time, my results highlight that more academic attention is needed regarding the systematic inequalities which restrict some societal groups' access to energy.

7 References

BDEW. (2022a). *BDEW-Gaspreisanalyse. September 2022*. https://www.bdew.de/media/documents/220916_BDEW-Gaspreisanalyse_Sep_2022_16.09.2022.pdf

BDEW. (2022b). *BDEW-Strompreisanalyse. Juli 2022*. https://www.bdew.de/media/documents/220727_BDEW-Strompreisanalyse_Juli_2022.pdf

Bednar, D. J., Reames, T. G., & Keoleian, G. A. (2017). The intersection of energy and justice: Modeling the spatial, racial/ethnic and socioeconomic patterns of urban residential heating consumption and efficiency in Detroit, Michigan. *Energy and Buildings, 143*, 25-34. https://doi.org/https://doi-org.proxy.library.uu.nl/10.1016/j.enbuild.2017.03.028

Belaïd, F. (2016). Understanding the spectrum of domestic energy consumption: Empirical evidence from France. *Energy Policy, 92*, 220-233. https://doi-org.proxy.library.uu.nl/10.1016/j.enpol.2016.02.015

Birman, D., & Trickett, E. J. (2001). Cultural transitions in first-generation immigrants: Acculturation of Soviet Jewish refugee adolescents and parents. *Journal of Cross-Cultural Psychology, 32*(4), 456-477.

BNE. (2020). *Stellungnahme Energiearmut- Position zu Stromsperren und zugehörigen sozialen Fragen*. BNE. https://www.bne-online.de/fileadmin/bne/Dokumente/Positionspapiere/2020/20200114_bne_Stellungnahme_Energiearmut_final.pdf

Bourke, B. (2014). Positionality: Reflecting on the Research Process. *The Qualitative Report, 19*(33), 1-9. https://www.proquest.com/scholarly-journals/positionality-reflecting-on-research-process/docview/2486198787/se-2 https://utrechtuniversity.on.worldcat.org/atoztitles/link?sid=ProQ:&issn=10520147&volume=19&issue=33&title=The+Qualitative+Report&spage=1&date=2014-08-

18&atitle=Positionality%253A+Reflecting+on+the+Research+Process&au=Bourke%252C+Brian&id=doi:

Bouzarovski, S., Burbidge, M., Sarpotdar, A., & Martiskainen, M. (2022). The diversity penalty: Domestic energy injustice and ethnic minorities in the United Kingdom. *Energy Research & Social Science, 91*, 102716. https://doi.org/https://doi-org.proxy.library.uu.nl/10.1016/j.erss.2022.102716

Bouzarovski, S., & Simcock, N. (2017). Spatializing energy justice. *Energy Policy, 107*, 640-648. https://doi.org/https://doi.org/10.1016/j.enpol.2017.03.064

Bouzarovski, S., Simcock, N., Thomson, H., & Petrova, S. (2018). Introduction. In N. Simcock, H. Thomson, S. Petrova & S. Bouzarovski (Eds.), *Energy Poverty and Vulnerability - A Global Perspective* (pp. 1-11). Routledge.

Bouzarovski, S., Thomson, H., & Cornelis, M. (2021). Confronting Energy Poverty in Europe: A Research and Policy Agenda. *Energies, 14*(4), 858. https://www.mdpi.com/1996-1073/14/4/858#cite

Bundesagentur fuer Arbeit. (2022). *Arbeitslosengeld II /Sozialgeld*. https://www.arbeitsagentur.de/datei/merkblatt-algii_ba015397.pdf

Bundesfinanzministerium. (2022). *Entlastungspaket I + II.* Bundesministerium der Finanzen. https://www.bundesfinanzministerium.de/Content/DE/Bilderstrecken/Bildergalerien/Mehr-Entlastungen-Ein-Plus-Fuer-Alle/massnahmen.html

Bundesministerium der Justiz. (2022). *Asylbewerberleistungsgesetz (AsylbLG).* https://www.gesetze-im-internet.de/asylblg/BJNR107410993.html

Bundesministerium fuer Arbeit und Soziales. (2020). *Allgemeines zum Arbeitslosengeld.* https://www.bmas.de/DE/Arbeit/Arbeitslosengeld/arbeitslosengeld-art.html

Bundesministerium für Arbeit und Soziales. (2021). *Leistungen der Sozialhilfe.* https://www.bmas.de/DE/Soziales/Sozialhilfe/Leistungen-der-Sozialhilfe/leistungen-der-sozialhilfe.html#docf437a09c-5acd-4184-8466-9308f9c11f03bodyText2

Bundesregierung. (2022). *Regelsaetze sind gestiegen.* https://www.bundesregierung.de/breg-de/suche/regelsaetze-steigen-1960152

Bundeszentrale fuer politische Bildung. (2016). *Sozialpolitik*. https://www.bpb.de/kurz-knapp/lexika/lexikon-der-wirtschaft/20654/sozialpolitik/

Cannon, C. E. B., & Chu, E. K. (2021). Gender, sexuality, and feminist critiques in energy research: A review and call for transversal thinking. *Energy Research & Social Science, 75*, 102005. https://doi.org/https://doi-org.proxy.library.uu.nl/10.1016/j.erss.2021.102005

Carbado, D. W., Crenshaw, K. W., Mays, V. M., & Tomlinson, B. (2013). INTERSECTIONALITY: Mapping the Movements of a Theory. *Du Bois Review: Social Science Research on Race, 10*(2), 303-312. https://doi.org/10.1017/S1742058X13000349

Carling, J. (2020). Remittances - eight analytical perspectives. In T. Bastia, & R. Skeldon (Eds.), *Handbook of Migration and Development* (1st ed., pp. 114-124). Routledge.

Chandrashekeran, S., Cludius, J., McConnell, D., Noka, V., & Ritter, D. (2022). *Energy Affordability: Sharing Lessons from the EU and Australia's Low Carbon Transitions*.

Destatis. (2022a). *Bevölkerung und Erwerbstätigkeit*. Statistisches Bundesamt (Destatis). https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bevoelkerung/Migration-Integration/Publikationen/Downloads-Migration/migrationshintergrund-endergebnisse-2010220207004.pdf?__blob=publicationFile

Destatis. (2022b). *Einkommen, Einnahmen und Ausgaben privater Haushalte 2020 in den Gebietsständen.* https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Einkommen-Konsum-Lebensbedingungen/Einkommen-Einnahmen-Ausgaben/Tabellen/liste-gebietsstaende.html#115610

Draper, A. K. (2004). The principles and application of qualitative research. https://doi.org/10.1079/PNS2004397

Drescher, K., & Janzen, B. (2021). Determinants, persistence, and dynamics of energy poverty: An empirical assessment using German household survey data. *Energy Economics, 102*, 105433. https://doi.org/https://doi-org.proxy.library.uu.nl/10.1016/j.eneco.2021.105433

Edmiston, D., Begum, S., & Kataria, M. (2022). *Falling faster amidst a cost-of-living crisis - Poverty, Inequality and Ethnicity in the UK*. https://assets.website-files.com/61488f992b58e687f1108c7c/633d8007a3bfa49bd4cd0fa8_Runnymede%20Briefing%20Cost%20of%20Living%20FINAL.pdf

EESC. (2021). *Konferenz über Energiearmut im Spannungsfeld zwischen der europäischen Säule sozialer Rechte und dem europäischen Grünen Deal*. https://www.eesc.europa.eu/sites/default/files/files/qe-02-21-605-de-n_0.pdf

EPAH. (2021). *About us.* https://energy-poverty.ec.europa.eu/about-us_en

European Commission. (2020). *Commission Recommendation (EU) 2020/1563 of 14 October 2020 on energy poverty.* (No. 357). http://data.europa.eu/eli/reco/2020/1563/oj/eng

Eurostat. (2022). *Arrears on utility bills - EU-SILC survey.*

Fedyuk, O., & Zentai, V. (2018). The interview in migration studies: a step towards a dialogue and knowledge co-production? *Qualitative research in European migration studies* (pp. 171-188). Springer.

Fraser, N. (2000). Rethinking Recognition. *New Left Review.* https://newleftreview.org/issues/ii3/articles/nancy-fraser-rethinking-recognition

Fueckel, S. (2019). *Bevölkerung mit Migrationshintergrund 2017*. Statistische Monatshefte Rheinland-Pfalz. https://www.statistik.rlp.de/fileadmin/dokumente/monatshefte/2019/Juni/06-2019-407.pdf

George, M., Graham, C., & Lennard, L. (2011). *Too many hurdles: information and advice barriers in the energy market*. University of Leicester, UK.

Gkiouleka, A., & Huijts, T. (2020). Intersectional migration-related health inequalities in Europe: Exploring the role of migrant generation, occupational status & gender. *Social Science & Medicine, 267*, 113218. https://doi.org/https://doi.org/10.1016/j.socscimed.2020.113218

Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The Qualitative Report, 8*(4), 597-607.

Großmann, K., & Kahlheber, A. (2017). Energy poverty in an intersectional perspective. *Energy Poverty and Vulnerability,* 21.

Hanke, F., Guyet, R., & Feenstra, M. (2021). Do renewable energy communities deliver energy justice? Exploring insights from 71 European cases. *Energy Research & Social Science, 80*, 102244. https://doi.org/https://doi-org.proxy.library.uu.nl/10.1016/j.erss.2021.102244

Hennink, M., Hutter, I., & Bailey, A. (2020). *Qualitative research methods*. Sage.

Herrero, S. T. (2017). Energy poverty indicators: A critical review of methods. *Indoor and Built Environment, 26*(7), 1018-1031. https://doi.org/10.1177/1420326X17718054

Iosifides, T. (2017). Against 'Migration': Using Critical Realism as a Framework for Conducting Mixed-Method, Migrantization Research. *Journal of Critical Realism, 16*(2), 128-142. https://doi.org/10.1080/14767430.2017.1280283

Jansen, H. (2010). (2010). The logic of qualitative survey research and its position in the field of social research methods. Paper presented at the *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research, 11*(2).

Jenkins, K., McCauley, D., Heffron, R., Stephan, H., & Rehner, R. (2016). Energy justice: A conceptual review. *Energy Research & Social Science, 11*, 174-182. https://doi.org/https://doi-org.proxy.library.uu.nl/10.1016/j.erss.2015.10.004

Kahlheber, A. (2017a). Spielräume am Limit. *Energie und soziale Ungleichheit* (pp. 209-238). Springer.

Kahlheber, A. (2017b). *Spielräume am Limit - Energiearmut in Theorie und Praxis.*

Kahlheber, A. (2020, -06-18). Energieschulden - gewöhnliche Schulden? *Sozialmagazin.* https://content-select.com/de/portal/media/view/5ef5a920-9a64-4e5c-8d69-5940b0dd2d03

Knopf, J. W. (2006). Doing a Literature Review. *PS: Political Science & Politics, 39*(1), 127-132. https://doi.org/10.1017/S1049096506060264

Kuckartz, U. (2019). Qualitative text analysis: A systematic approach. *Compendium for early career researchers in mathematics education* (pp. 181-197). Springer, Cham.

Lorenc, A., Pedro, L., Badesha, B., Dize, C., Fernow, I., & Dias, L. (2013). Tackling fuel poverty through facilitating energy tariff switching: a participatory action research study in vulnerable groups. *Public Health, 127*(10), 894-901. https://doi.org/https://doi.org/10.1016/j.puhe.2013.07.004

Middlemiss, L. (2020). Energy poverty: Understanding and addressing systemic inequalities. *Inequality and energy* (pp. 99-114). Elsevier.

Moore, D., McCabe, G., & Craig, B. (2014). *Introduction to the practice of statistics* (8th ed.). W.H. Freeman and Company.

National Energy Action. (2022). Empowered by Energy. https://www.nea.org.uk/project/national-energy-action-nea-empowered-by-energy-refugees-project/

Noka, V., & Cludius, J. (2021). *Energy Vulnerability and Energy Poverty: Experience and Approaches in the EU*. Oeko Institut. https://www.oeko.de/fileadmin/oekodoc/WP-EnergyVulnerability_EnergyPoverty.pdf

North East Child Poverty Commission. (2013). *Written out of the picture?*. https://www.refugeevoices.org.uk/wp-content/uploads/2019/02/written_out_of_the_picture.pdf

Passer, M. W. (2014). *Research Methods - Concepts and Connections* (2nd ed.). Worth Publishers, Macmillan Higher Education.

Peterson, B. L. (2017). Thematic Analysis/Interpretive Thematic Analysis. *The International Encyclopedia of Communication Research Methods* (pp. 1-9). John Wiley & Sons, Ltd.

Portes, A. (2001). *Legacies: the story of the immigrant second generation*. University of California Press.

Presse- und Informationsamt der Bundesregierung. (2022). *Hohe Energiepreise: Entlastung fuer Buerger| Bundesregierung.* Webseite der Bundesregierung. https://www.bundesregierung.de/breg-de/aktuelles/entlastungspaket-2026602

Primc, K., Slabe-Erker, R., & Majcen, B. (2019). Constructing energy poverty profiles for an effective energy policy. *Energy Policy, 128*, 727-734. https://doi.org/https://doi.org/10.1016/j.enpol.2019.01.059

Razum, O., Karrasch, L., & Spallek, J. (2016). Migration. A neglected dimension of inequalities in health? *Bundesgesundheitsblatt-Gesundheitsforschung-Gesundheitsschutz, 59*(2), 259-265.

Reames, T. G. (2016). Targeting energy justice: Exploring spatial, racial/ethnic and socioeconomic disparities in urban residential heating energy efficiency. *Energy Policy, 97*, 549-558. https://doi.org/https://doi.org/10.1016/j.enpol.2016.07.048

Robinson, C. (2019). Energy poverty and gender in England: A spatial perspective. *Geoforum, 104*, 222-233. https://doi.org/https://doi-org.proxy.library.uu.nl/10.1016/j.geoforum.2019.05.001

Rogner, H., & Popescu, A. (2000). An introduction to energy. *United Nations Development Programme [UNDP](Eds.).World Energy Assessment: Energy and the Challenge of Sustainability,* 31-37.

Ryder, S. S. (2018). Developing an intersectionally-informed, multi-sited, critical policy ethnography to examine power and procedural justice in multiscalar energy and climate change decisionmaking processes. *Energy Research & Social Science, 45*, 266-275. https://doi.org/https://doi.org/10.1016/j.erss.2018.08.005

Schumacher, K., Cludius, J., Förster, H., Greiner, B., Hünecke, K., Kenkmann, T., & Van Nuffel, L. (2015). How to end energy poverty? Scrutiny of current EU and member states instruments. *European Parliament.*

Sovacool, B. K., & Dworkin, M. H. (2014). *Global energy justice*. Cambridge University Press.

Stojilovska, A., Guyet, R., Mahoney, K., Gouveia, J. P., Castaño-Rosa, R., Živčič, L., Barbosa, R., & Tkalec, T. (2022). Energy poverty and emerging debates: Beyond the traditional triangle of energy poverty drivers. *Energy Policy, 169*, 113181. https://doi.org/https://doi.org/10.1016/j.enpol.2022.113181

Struenck, C. (2017). *Energiearmut bekämpfen – Instrumente, Maßnahmen und Erfolge in Europa.* Friedrich Ebert Stiftung. http://library.fes.de/pdf-files/wiso/13273-20170403.pdf

Tews, K. (2013). Energiearmut definieren, identifizieren und bekämpfen-Eine Herausforderung der sozialverträglichen Gestaltung der Energiewende. https://refubium.fu-berlin.de/bitstream/handle/fub188/20098/Studie_Energiearmut_FFU_Tews.pdf?sequence=1&isAllowed=y

Thomson, H., Day, R., Ricalde, K., Brand-Correa, L. I., Cedano, K., Martinez, M., Santillán, O., Delgado Triana, Y., Luis Cordova, J. G., Milian Gómez, J. F., Garcia Torres, D., Mercado, C., Castelao Caruana, M. E., & Pereira, M. G. (2022). Understanding, recognizing, and sharing energy poverty knowledge and gaps in Latin America and the Caribbean – because conocer es resolver. *Energy Research & Social Science, 87*, 102475. https://doi.org/https://doi.org/10.1016/j.erss.2021.102475

Travers, M. (2001). *Qualitative Research through Case Studies / Max Travers*. SAGE Publications Ltd.

UK Government. (2022). *Fuel poverty gap.* https://www.ethnicity-facts-figures.service.gov.uk/housing/housing-conditions/fuel-poverty-gap/latest

Ullah, A. A., Hossain, M. A., Azizuddin, M., & Nawaz, F. (2020). Social Research Methods: Migration in Perspective. *Migration Letters, 17*(2), 357-368. https://doi.org/10.33182/ml.v17i2.869

Umweltbundesamt. (2020). *Klimaschutz- und Energiepolitik in Deutschland.* Umweltbundesamt. https://www.umweltbundesamt.de/themen/klima-energie/klimaschutz-energiepolitik-in-deutschland

United Nations. (n.d.). *7 |Ensure access to affordable, reliable, sustainable and modern energy for all.* https://sdgs.un.org/goals/goal7

Vannini, S., Gomez, R., & Newell, B. C. (2020). "Mind the five": Guidelines for data privacy and security in humanitarian work with undocumented migrants and other vulnerable populations. *Journal of the Association for Information Science and Technology, 71*(8), 927-938. https://doi.org/10.1002/asi.24317

Verschuren, P., & Doorewaard, H. (2010). *Designing a research project*. Eleven International Publishing. The Hague.

VZ Bundesverband. (2022a). *Ihre Energieberatung der Verbraucherzentrale.* Energieberatung der Verbraucherzentrale. https://verbraucherzentrale-energieberatung.de/

VZ Bundesverband. (2022b). Stromsperre – was nun?. https://www.verbraucherzentrale.de/wissen/geld-versicherungen/kredit-schulden-insolvenz/stromsperre-was-nun-11674

VZ DE. (n.d.). *Über uns.* https://www.verbraucherzentrale.de/ueber-uns

VZ RLP. (2019). *Allein, Überlastet, Energiearm? Ergebnisse der ersten landesweiten Auswertung der Energiekostenberatung der Verbraucherzentrale Rheinland-Pfalz Januar 2016 bis August 2018*. https://www.verbraucherzentrale-rlp.de/sites/default/files/2019-08/Energiekostenberatung_Bericht_Auswertung_2018.pdf

VZ RLP. (n.d.a). *Energiekostenberatung. Hoher Verbrauch? Schulden? Sperre? Wir beraten Sie kostenlos.* *https://www.verbraucherzentrale-rlp.de/sites/default/files/2021-03/190611_Flyer_Energiekostenberatung.pdf*

VZ RLP. (n.d.b). *Projekt "Energiearmut verhindern mit systemischem Beratungsansatz".* https://www.verbraucherzentrale-rlp.de/energie/projekt-energiearmut-verhindern-mit-systemischem-beratungsansatz-31595

Wang, Y., & Lin, B. (2022). Can energy poverty be alleviated by targeting the low income? Constructing a multidimensional energy poverty index in China. *Applied Energy, 321*, 119374. https://doi.org/https://doi-org.proxy.library.uu.nl/10.1016/j.apenergy.2022.119374

Will, A. (2019). The German statistical category "migration background": Historical roots, revisions and shortcomings. *Ethnicities, 19*(3), 535-557. https://doi.org/10.1177/1468796819833437

Wilson, D., & Neville, S. (2009). Culturally safe research with vulnerable populations. *Contemporary Nurse, 33*(1), 69-79. https://doi.org/10.5172/conu.33.1.69

Yuval-Davis, N. (2006). Intersectionality and Feminist Politics. *European Journal of Women's Studies, 13*(3), 193-209. https://doi.org/10.1177/1350506806065752

Zoomers, A., & Westen, G. v. (2011). Introduction: translocal development, development corridors and development chains. *International Development Planning Review, 33*(4), 377-389. https://doi.org/10.3828/idpr.2011.19

8 Appendices

8.1 Appendix A: Interview Questions (Energy cost counsellor Interviewees)

FRAGEN	RÜCKFRAGEN	ZIEL	ANMERKUNGEN
	Einstiegsfrage		
Können Sie mir zunächst etwas über Ihre Tätigkeiten bei der Energieberatung erzählen?	Mögliche Rückfragen: Was sind Ihre Aufgabengebiete? Wie sieht ein regulärer Arbeitstag bei Ihnen aus? Wie lange arbeiten Sie schon bei der Energieberatung?	Interesse zeigen, gute Gesprächsatmosphäre schaffen	
	Schlüsselfragen		
Wie definieren Sie "Energiearmut" in der Energieberatung?	Gibt es eine allgemeine Definition, die Sie verwenden? **Wie wichtig/sinnvoll ist es für die Beratung, Energiearmut zu definieren?**	Baseline: Wie wird Energiearmut von den InterviewpartnerInnen definiert? Damit kann ich das Gesagte in Relation zu den verschiedenen Definitionen von Energiearmut setzen. Ich kann damit auch eventuelle Unterschiede in der Definition von Energiearmut zwischen den InterviewpartnerInnen herausfinden (diese könnten evtl. ein Grund für unterschiedliche	Laut 10% Definition sind nicht alle der Ratsuchenden von Energiearmut betroffen (siehe Veröffentlichung der VZ-RLP). Es ist also wichtig, über die Definition von Energiearmut zu sprechen, welche die Energieberatung bzw. welche der/die InterviewpartnerIn verwendet.
Welche Gruppen von MigrantInnen kommen zu Ihnen in die Energieberatung?	Welche Nationalitäten haben MigrantInnen, die in die Beratung kommen? Aus welchen Kulturkreisen kommen sie? Wie häufig kommen Menschen mit Migrationshintergrund zu Ihnen in die Beratung?	Überblick über verschiedene Gruppen von MigrantInnen, die die Beratung nutzen. Eingrenzung der verschiedenen Kulturkreise von MigrantInnen, die in die Energieberatung kommen.	
Warum kommen die MigrantInnen zu Ihnen in die Energieberatung?	Was sind die Problematiken, die sie dazu bewegen, in die Beratung zu kommen? Wie werden sie auf die Beratung aufmerksam? Wie äußert sich Energiearmut bei MigrantInnen, die in die Beratung kommen? (z.B. Stromsperren? Oder angedrohte	Festsetzung des status quo: Wie äußert sich Energiearmut bei den MigrantInnen und warum entscheiden sie sich, die Energieberatung aufzusuchen? Einblicke, wie man diese Gruppe erreichen kann	Anmerkung 1: Die Merkmale von Energiearmut bei den MigrantInnen unterscheiden sich evtl./wahrscheinlich unter anderem je nach Kulturkreis/ Herkunftsland. Anmerkung 2: Nicht alle Ratsuchenden sind von Energiearmut betroffen. Es ist wichtig, dass ich die InterviewpartnerInnen spezifisch nach Erfahrungen mit den MigrantInnen frage, welche ihrer Meinung nach von
Was sind die (sozio-ökonomischen) Merkmale von Menschen mit Migrationshintergrund, die in die Energieberatung kommen?	Haushaltsmerkmale? Bildungsstand? Wohnlage? Einkommen? Energiekosten? Energieverbrauch? Familienstand (sind sie beispielsweise häufig alleinerziehend)? Geschlecht? Andere Merkmale?	Sub-question 1	Anmerkung 1: Die Merkmale von den MigrantInnen unterscheiden sich evtl./wahrscheinlich unter anderem je nach Kulturkreis/ Herkunftsland. Anmerkung 2: Nicht alle Ratsuchenden sind von Energiearmut betroffen. Es ist wichtig, dass ich die InterviewpartnerInnen spezifisch nach Erfahrungen mit den MigrantInnen frage, welche ihrer Meinung nach von
Was sind Ihrer Erfahrung nach die Gründe für Energiearmut bei MigrantInnen, welche Sie in der Energieberatung betreuen?	Warum spielt dieser Aspekt eine Rolle? In wieweit stehen diese Gründe in Verbindung mit dem Migrationshintergrund der Ratsuchenden? **In wiefern unterscheidet sich Energiearmut wesentlich von genereller Armut?**	Sub-question 2	MigrantInnen unterscheiden sich evtl./wahrscheinlich unter anderem je nach Kulturkreis/ Herkunftsland. Anmerkung 2: Nicht alle Ratsuchenden sind von Energiearmut betroffen. Es ist wichtig, dass ich die InterviewpartnerInnen spezifisch nach Erfahrungen mit den MigrantInnen frage, welche ihrer Meinung nach von Energiearmut betroffen sind.

Inwiefern unterscheiden sich Merkmale und Gründe für Energiearmut zwischen Ratsuchenden mit Migrationshintergrund anderen Ratsuchenden (ohne Migrationshintergrund)?	Was sind Ihrer Meinung nach die Gründe für diese Unterschiede? Was sind Problematiken, die Ihrer Erfahrung nach besonders/ vermehrt bei MigrantInnen auftreten? **Welche sozio-ökonomischen Faktoren spielen eine Rolle?**	Abgrenzung der Gruppen von MigrantInnen von nicht-MigrantInnen (für sub-question 1 und 2). Damit kann ich herausfinden, welche Aspekte im Bezug auf Energiearmut bei MigrantInnen besonders wichtig sind/ besondere Aufmerksamkeit erfordern.	
Was sehen Sie als Lösungsansätze für Energiearmut bei MigrantInnen?	Welche Rolle kann die Beratung spielen? Welche weiteren Instrumente/Maßnahmen sind wichtig (bspw. Unterstützung vom Staat)? Welche Rolle können Ihrer Meinung nach erneuerbare Energien spielen? Welche Rolle können erneuerbare Energien spielen, welche von Energiegenossenschaften erzeugt und bereitgestellt werden	Sub-question 3	Falls der/die InterviewpartnerIn zunächst über allgemeine Lösungsansätze für Energiearmut spricht, sollte ich sicher gehen, auch nach Lösungsansätzen spezifisch für die Gruppen von MigrantInnen zu fragen.
Schluss			
Das waren alle meine Fragen. Es hat mich sehr gefreut mit Ihnen über Ihe Erfahrungen aus der Energieberatung sprechen zu können! Das hat mir sehr gute Einblicke für meine Forschung verschafft.			
Vielen Dank für Ihre Zeit und Unterstützung! Ich werde in Kontakt bleiben und Ihnen auch die Ergebnisse meiner Forschung zusenden.			
Haben Sie abschließend noch Fragen? Sollten Sie zu einem späteren Zeitpunkt noch Fragen haben, können Sie mich selbstverständlich auch jederzeit kontaktieren.			

8.2 Appendix B: Interview Consent Form (Energy cost counsellors)

Utrecht University

INFORMED CONSENT FORM for participation in:

Thesis research – An intersectional assessment of Energy Poverty among migrant groups in Germany

To be completed by the participant:

I confirm that:

- I am satisfied with the received information about the research;
- I have been given opportunity to ask questions about the research and that any questions that have been risen have been answered satisfactorily;
- I had the opportunity to think carefully about participating in the study;
- I will give an honest answer to the questions asked.

I agree that:

- the data to be collected will be obtained and stored for scientific purposes;
- the collected, completely anonymous research data will be reviewed before publication by the consumer advice centre in Rhineland-Palatine (Verbraucherzentrale RLP);
- video and/or audio recordings may also be used for scientific purposes.

I understand that:

- I have the right to withdraw my consent to use the data;
- I have the right to see the research report afterwards.

Name of participant:

Signature:_____ Date, place: ___/___/____,

8.3 Appendix C: Interview Topics (First-Generation Migrant Interviewees)

FRAGEN	ZIEL	ANMERKUNGEN
	Einstiegsfrage	
Aus welchem Land kommen Sie ursprünglich?	Eingrenzung: Herkunftsland	
Warum sind Sie nach Deutschland gekommen?	Eingrenzung: Grund der Einwanderung	
Wie lange leben Sie schon in Deutschland?	Eingrenzung: MigrantInnen Generation	
	Schlüsselfragen	
Warum sind Sie zur Energiekostenberatung gegangen?	Auslöser für das Aufsuchen der Beratung	Das bezieht sich darauf, wie sich Energiearmut bei dem/der Befragten akut äußert bzw. was der akute Grund für den Termin/die Termine bei der Beratung waren
Können Sie mir mehr darüber erzählen, warum Sie diese Probleme haben?	Gründe für Energiearmut	Hier sind Rückfragen wichtig, um die Probleme besser eingrenzen zu können und um die weitreichenderen Gründe zu erkennen (bspw. hoher Energieverbrauch auf Grund von hohem Warmwasserverbrauch auf Grund von häufigem Duschen auf Grund von ....)
Was finden Sie schwierig an der Energiebeschaffung in Deutschland?	Welche Faktoren spielen eine Rolle speziell in DE, in wieweit unterscheiden sich diese vom Herkunftsland der/des Befragten?	Abgrenzung Deutschland-spezifischer vs. allgemeiner Problematiken
Warum?	Warum spielen diese Faktoren eine Rolle?	
In wieweit hat Ihnen die Energiekostenberatung geholfen?	Wie effektiv war die Beratung?	In wieweit hilft das jetzige Angebot der VZ?
Welche weiteren Dinge würden Ihnen helfen?	Welche Aspekte fehlten in der Beratung/ welche weiteren Hilfeleistungen werden benötigt?	Was fehlt beim jetzigen Angebot der VZ/ welche Probleme gibt es beim jetzigen Angebot der VZ?
	Schluss	
Das waren alle meine Fragen, vielen Dank. Unser Gespräch hat mir bei meiner Forschung sehr weitergeholfen.		
Haben Sie abschließend noch Fragen an mich? Wenn Sie später noch Fragen haben, können Sie mich natürlich auch gern jederzeit kontaktieren.		
Nochmal vielen Dank und einen schönen Tag noch.		

8.4 Appendix D: Consent Form for Telephone Interviews

Utrecht University

Einwilligungserklärung zu telefonischem Interview

Hiermit gebe ich meine Einverständnis, an einem kurzen Interview der Universität Utrecht zum Thema Energiebeschaffung von Migrant:innen in Deutschland teilzunehmen.

Dazu werden ich in den nächsten 2 Wochen von Frau Galster unter meiner Telefonnummer kontaktiert.

_____

Telefonnummer

Am besten bin ich erreichbar zwischen _____ Uhr und _____ Uhr.

Ich bestätige, dass

- ich ausreichende Informationen zur Forschung erhalten habe und mir die Möglichkeit gegeben wurde, Fragen zu stellen.
- mir genügend Zeit gegeben wurde, um über meine Teilnahme an der Studie nachzudenken.
- ich die Fragen, welche mir gestellt werden, ehrlich beantworten werde.

Ich bin damit einverstanden, dass

- meine im Interview getätigten Angaben anonymisiert zu Forschungszwecken verwendet und gespeichert werden.
- Audioaufnahmen meiner im Interview getätigten Angaben anonymisiert zu Forschungszwecken verwendet und gespeichert werden.

Mir ist bewusst, dass

- ich meine Einverständnis zur Teilnahme freiwillig gebe und diese jederzeit widerrufen kann.
- ich das Recht habe, über die Ergebnisse der Forschung informiert zu werden.

_____

Name

_____

Datum, Ort **Unterschrift**

Von der Befragenden auszufüllen:

Ich erkläre, dass ich dem/der oben genannten Teilnehmer/in ausreichende Informationen zu meiner Forschung bereitgestellt habe. Ich garantiere, dass bei der Sicherung der Daten datenschutzrechtliche Normen eingehalten werden.

_____

Name

_____

Datum, Ort Unterschrift

8.5 Appendix E: Survey

Umfrage zum Thema Energiearmut bei Migrant:innen in Deutschland

Liebe/r Teilnehmer/in,

in meiner Masterarbeit an der Universität Utrecht beschäftige ich mich mit dem Thema Energiearmut bei Migrant:innen. Von Energiearmut betroffen sind Menschen, die ihre Energierechnung (Strom- und/ oder Heizkosten) entweder nicht bezahlen können oder nur unter Verzicht auf andere grundlegende Bedürfnisse bezahlen können. Mit meiner Arbeit möchte ich herauszufinden, wie sich Energiearmut bei Migrant:innen in Deutschland äußert und welche Unterstützungen hilfreich wären.

Durch das Ausfüllen meines Fragebogens helfen Sie mir dabei, mehr zu den Hindernissen bei der Energiebeschaffung in Deutschland herauszufinden. Außerdem interessiert es mich, was Ihrer Meinung nach helfen würde, um die Situation zu verbessern.

Der Fragebogen ist anonym, das heißt, Sie müssen Ihren Namen nicht angeben. Ihre Daten werde ich ausschließlich für meine Forschung verwenden und nicht an andere Personen weitergeben.

Das Ausfüllen des Fragebogens dauert ungefähr 10-15 Minuten.

Vielen Dank für Ihre Unterstützung bei meiner Forschung!

Hannah Galster

Bei Fragen und/oder Anmerkungen, kontaktieren Sie mich gerne:

Telefon: +4915738985434

Email: h.s.galster@uu.nl

Angaben zur Person:

Alter:

Geschlecht:

Herkunftsland:

Ich bin in Deutschland seit:

Leistungsbezug: ja / nein

Wie viele Personen leben in Ihrem Haushalt? _____

Mein monatliches Haushaltsnettoeinkommen (das heißt, das gesamte Nettoeinkommen von allen Personen, die im Haushalt leben) ist:

- Niedriger als 900€
- Zwischen 900€ – 1300€
- Zwischen 1300€ – 2000€
- Zwischen 2000€ - 2600€
- Zwischen 2600€ - 3600€
- Über 3600€

Fragen zum Thema Strom:

Von welchem/welchen der folgenden Punkte zum Thema **Strom** sind Sie betroffen? *(mehrere Antworten möglich)*

- Meine Stromkosten werden vom Sozialamt/Jobcenter übernommen
- Mir wurde eine Stromsperre angedroht
- Mein Strombezug wurde gesperrt
- Ich habe eine hohe Stromnachzahlung bekommen
- Ich habe Stromschulden
- Ich habe eine falsche Stromabrechnung bekommen
- Ich habe ein anderes Problem mit der Strombeschaffung:
  _____
  _____
  _____
  _____
  _____

Fragen zum Thema Heizen:

Ich heize mit

- Gas
- Heizöl
- Strom
- Holz
- Andere:_____

Von welchem/welchen der folgenden Punkte zum Thema **Heizen** sind Sie betroffen? *(mehrere Antworten möglich)*

- Meine Heizkosten werden vom Sozialamt/Jobcenter übernommen
- Mir wurde eine Sperre angedroht
- Mein Energiebezug wurde gesperrt
- Ich habe eine hohe Nachzahlung bekommen
- Ich habe Energieschulden
- Ich habe eine falsche Energieabrechnung bekommen
- Ich habe ein anderes Problem mit der Energiebeschaffung:
  _____
  _____
  _____
  _____

Allgemeine Fragen zum Thema Energie (Strom und Heizen):

Bitte wählen Sie aus, was auf Sie zutrifft *(mehrere Antworten möglich)*:

- Weil ich nicht so gut Deutsch spreche, habe ich Probleme, Briefe von meinem Energieversorger zu verstehen
- Weil ich nicht so gut Deutsch spreche, habe ich Probleme, mit meinem Energieversorger zu kommunizieren
- Ich habe Probleme mit dem Stellen von Anträgen, damit meine Energiekosten vom Jobcenter/Sozialamt bezahlt werden
- Ich finde es schwierig, das deutsche Energiesystem zu verstehen
  - Weil das System in meinem Heimatland sehr anders ist
  - Weil ich nicht genügend Informationen über das deutsche System habe
  - Andere Gründe:
    _____
    _____
    _____
    _____
    _____
- Ich habe einen hohen Energieverbrauch weil meine Wohnung in einem schlechten Zustand ist (z.B. schlechte Isolierung)
- Ich kann meine Energiekosten nicht bezahlen
  - Weil ich nicht genügend Geld verdiene
  - Weil ich nicht genügend Sozialleistungen bekomme
  - Weil ich Geld in mein Heimatland sende
  - Andere Gründe:
    _____
    _____
    _____
    _____
    _____

Welche weiteren Dinge sind schwierig für Sie bei der Energiebeschaffung in Deutschland?

Haben Sie schon Unterstützung/Hilfen bei der Energiebeschaffung bekommen (zum Beispiel durch die Energiekostenberatung der Verbraucherzentrale)?

- Ja, nämlich:
  _____
  _____
  _____
  _____
  _____
- Nein

Was würde Ihnen bei der Energiebeschaffung in Deutschland helfen?

Gibt es noch andere Dinge, die Sie mir zu meiner Forschung mitteilen möchten?

Sind Sie bereit, mir in einem kurzen Telefonat mehr über Ihre Situation zu erzählen?

Falls ja, bitte schreiben Sie hier Ihre Telefonnummer auf: _____

Einwilligungserklärung

Ich bestätige, dass

- ich ausreichende Informationen zur Forschung erhalten habe und mir die Möglichkeit gegeben wurde, Fragen zu stellen.
- mir genügend Zeit gegeben wurde, um über meine Teilnahme an der Studie nachzudenken.
- ich die Fragen, welche mir gestellt wurden, ehrlich beantwortet habe.

Ich bin damit einverstanden, dass

- meine Angaben anonymisiert zu Forschungszwecken verwendet und gespeichert werden.

Mir ist bewusst, dass

- ich meine Einverständnis zur Teilnahme freiwillig gebe und diese jederzeit widerrufen kann.
- ich das Recht habe, über die Ergebnisse der Forschung informiert zu werden.

_____

Datum, Ort Unterschrift

8.6 Appendix F: Sample Case Report

Förderplan Quartal I

Teilnehmer-ID:	
Zuweisungszeitraum:	11.01.2021 – 31.12.2021
Erstfassung vom:	04.03.2021

Bei der Situationsanalyse vom 04.03.2021 wurden folgende Handlungsbedarfe festgestellt:	
1. Qualifikation:	**Großer Handlungsbedarf**
2. Alltagskompetenzen:	**Großer Handlungsbedarf**
3. Angehörige / Soz. Netzwerk:	**Geringer Handlungsbedarf**
4. Arbeits- und Sozialverhalten:	**Geringer Handlungsbedarf**
5. Finanzielle Situation:	**Großer Handlungsbedarf**
6. Gesundheit:	**Kein Handlungsbedarf**
7. Straffälligkeit:	**Kein Handlungsbedarf**
8. Wohnen:	**Geringer Handlungsbedarf**
9. Erziehung:	**Kein Handlungsbedarf**
10. Bildungssituation minderjähriger Kinder:	**Geringer Handlungsbedarf**

Sonstiges:	**Kein Handlungsbedarf**

1. Handlungsfeld **Qualifikation**	**Zielvereinbarung/en bis zum 31.03.2021** 1. Sprachkurs suchen 2. Anmeldung zu einem Sprachkurs 3. Ausbildungsplatz suchen
04.03.2021	TN möchte gerne eine Ausbildung zum Elektriker machen. Er wird darüber informiert, dass er zuerst einen B1-Sprachkurs machen muss, da er ohne den Kurs wahrscheinlich keinen Ausbildungsplatz finden wird. Mit ihm soll nun nach Deutschkursen gesucht werden.
	Aktuelle Einschätzung: Großer Handlungsbedarf

2. Handlungsfeld **Alltagskompetenzen**:	**Zielvereinbarung/en bis zum 31.03.2021** 1. Lese- und Schreibkompetenz verbessern 2. Selbstständigkeit erhöhen
11.01.2021	TN hat diesen Monat zu wenig Geld vom Jobcenter bekommen. Sie bitten darum, nachzufragen und zu klären, woran dies liegt.
12.01.2021	TN wird erklärt, dass das Elterngeld nicht mehr mit berechnet wird und deshalb diesen Monat weniger Geld kam. Die Nachzahlung sollten sie in Kürze bekommen.
08.02.2021	TN hat die Jahresabrechnung der Stadtwerke erhalten. Da, vor allem der Gasverbrauch, sehr hoch erscheint, wird Kontakt mit der Verbraucherzentrale aufgenommen, um den Verbrauch und die Abrechnung prüfen zu lassen. Außerdem habe TN kein Wasser verbraucht, was darauf schließen lässt, dass mit der Abrechnung etwas nicht stimmt. Außerdem wurde der Antrag auf Schulbuchausleihe für den Sohn ausgefüllt und wird TN beim nächsten Termin TN zurückgegeben, um diesen, zusammen mit dem Jobcenterbescheid, beim Schulverwaltungsamt abzugeben.
09.02.2021	Mit TN gemeinsam wird die Vollmacht und der Fragebogen für die Energiekostenberatung ausgefüllt. Die Unterlagen werden gemeinsam mit der Abrechnung der Stadtwerke an die Verbraucherzentrale weitergeleitet.

11.02.2021	TN unterschreibt die Vollmacht und den Fragebogen für die Energiekostenberatung der Verbraucherzentrale. Die Unterlagen werden weitergeleitet.
19.02.2021	Die Fotos der Zähler und die benötigten Informationen werden an die Verbraucherzentrale weitergeleitet
26.02.2021	TN meldet sich, sie hätten mehrere Briefe bekommen. Es wird ein Termin für kommenden Montag vereinbart um die Briefe zu sichten.
01.03.2021	TN hat mehrere Briefe bekommen. Hauptsächlich handelt es sich um Zahlungsaufforderungen beziehungsweise Rechnungen. Ihm wird erneut erklärt, wie wichtig es ist, sich an Zahlungstermine zu halten. Die meisten Briefe von Inkassounternehmen beziehungsweise reguläre Rechnungen möchte er direkt zahlen. Eine Vollstreckungsankündigung hat er erhalten, bei der er darum bittet, dass abgeklärt wird, wie der Ursprungsbetrag zustande gekommen ist, da er nicht weiß, wofür die Rechnung ist. Dies wird per Mail angefragt. Außerdem hat er noch einen Fragebogen der Krankenkasse erhalten, da er für eine bestimmte Zeit nicht versichert war. Die Krankenkasse wird kontaktiert, um den Zeitraum und die Kosten dafür zu erfragen, woraufhin der Fragebogen ausgefüllt und abgeschickt wird.
	Aktuelle Einschätzung: Großer Handlungsbedarf

3. Handlungsfeld **Angehörige/** **Soziales Netzwerk**	**Zielvereinbarung/en bis zum 31.03.2021** 1. Kinderbetreuung ausweiten 2. Teilnahme der Frau an einem Sprachkurs sicherstellen
17.02.2021	Die Mutter von TN ist etwas krank. Er ist momentan bei ihr, um sich um sie zu kümmern.
02.03.2021	TN nimmt an der Gruppenveranstaltung über GoTo-Meeting teil.
11.03.2021	TN nimmt an der Online-Gruppenveranstaltung über GoTo-Meeting zum Thema „Europa & ich" teil.
15.03.2021	TN wird darüber informiert, dass seine Frau am 17.03.2021 zwischen 10:00 und 12:00 Uhr zu integra gehen soll, um sich zu einem Sprachkurs anzumelden.
17.03.2021	TN und seine Frau wurden zu dem Anmeldetermin für den Sprachkurs begleitet.
	Aktuelle Einschätzung: Geringer Handlungsbedarf

4. Handlungsfeld	**Zielvereinbarung/en bis zum 31.03.2021**

Arbeits- und Sozialverhalten	1. Termineinhaltung sicherstellen 2. Zuverlässigkeit herstellen
14.01.2021	TN öffnet beim Hausbesuch nicht die Tür. Beim Telefonat stellt sich heraus, dass die Klingel nicht funktioniert. Ein neuer Termin wird für den nächsten Tag vereinbart.
	Aktuelle Einschätzung: Geringer Handlungsbedarf

5. Handlungsfeld **Finanzielle Situation**	**Zielvereinbarung/en bis zum 31.03.2021** 1. Abzahlung der Schulden sicherstellen 2. Einhaltung von Zahlungsfristen
28.01.2021	TN hat einen Brief von einem Inkasso-Unternehmen bekommen. Er hat die erste Rate bereits bezahlt, möchte aber gerne wissen, wie lange er bezahlen muss. Dies wird für ihn im Büro erfragt und er wird beim nächsten Termin darüber informiert.
01.02.2021	TN wird darüber informiert, dass er noch circa 10 Monatsraten bezahlen muss, um den Betrag bei dem Inkasso-Unternehmen zu tilgen. Er glaubt, er habe schon mehr bezahlt und möchte bei der Bank Kontoauszüge holen, um dies zu kontrollieren.
11.02.2021	TN wird erneut erklärt, wie lange er die Raten an das Inkasso-Unternehmen noch zahlen muss. Er meint er hätte bereits mehrere Raten gezahlt und verstehe nicht, warum er noch so lange zahlen soll. Er soll bis zum nächsten Besuch nachweise darüber zusammensuchen, damit dies überprüft werden kann
19.02.2021	TN hat eine Mahnung der Telekom erhalten. Ihm wird erklärt, dass er diese zahlen muss. Er gibt an, er habe erst letzten Monat eine höhere Rechnung bezahlt. Mit ihm wird vereinbart, dass die Telekom kontaktiert wird um nachzufragen, wie sich die Rechnung zusammensetzt.
01.03.2021	TN hat mehrere Briefe bekommen. Hauptsächlich handelt es sich um Zahlungsaufforderungen beziehungsweise Rechnungen. Ihm wird erneut erklärt, wie wichtig es ist, sich an Zahlungstermine zu halten. Die meisten Briefe von Inkassounternehmen beziehungsweise reguläre Rechnungen möchte er direkt zahlen. Eine Vollstreckungsankündigung hat er erhalten, bei der er darum bittet, dass abgeklärt wird, wie der Ursprungsbetrag zustande gekommen ist, da er nicht weiß, wofür die Rechnung ist. Dies wird per Mail angefragt.
08.03.2021	TN wird darüber informiert, dass die Vollstreckungsankündigung der Stadtverwaltung, wie bereits vermutet, von der Erstellung eines Ausweises stammt. Er bittet darum, bei der Ausländerbehörde nachzufragen, um wessen Ausweis es sich dabei handelt und möchte dann, sobald er dies weiß, bezahlen.
	Aktuelle Einschätzung: Großer Handlungsbedarf

6. Handlungsfeld **Gesundheit**	**Zielvereinbarung/en bis zum 31.03.2021** Keine, da kein Handlungsbedarf
	Aktuelle Einschätzung: Kein Handlungsbedarf

7. Handlungsfeld **Straffälligkeit**	**Zielvereinbarung/en bis zum 31.03.2021** Keine, da kein Handlungsbedarf
	Aktuelle Einschätzung: Kein Handlungsbedarf

8. Handlungsfeld **Wohnen**	**Zielvereinbarung/en bis zum 31.03.2021** 1. Unterstützung bei der Wohnungssuche
28.01.2021	TN sucht eine neue Wohnung, da er sich in der jetzigen nicht wohl fühlt. Er wird bei der Bauhilfe als Wohnungssuchend gemeldet.
01.02.2021	TN wird informiert, dass er bei der Bauhilfe nun als Wohnungssuchend gemeldet ist.
	Aktuelle Einschätzung: Geringer Handlungsbedarf

9. Handlungsfeld **Erziehung**	**Zielvereinbarung/en bis zum 31.03.2021** Keine, da kein Handlungsbedarf
	Aktuelle Einschätzung: Kein Handlungsbedarf

10. Handlungsfeld **Bildungssituation minderjähriger Kinder**	**Zielvereinbarung/en bis zum 31.03.2021** 1. Unterstützung in schulischen Fragen
04.02.2021	Der Sohn hat von der Schule Aufgaben bekommen, die er nicht versteht. Auch die Eltern können ihm die Aufgabe nicht erklären. TN möchte ein Bild der Aufgabe per Telegram schicken, um ihm entweder die Aufgabe erklären zu können, oder mit ihm die Schule zu kontaktieren und weiterzugeben, dass der Sohn Probleme damit hat, die Aufgabe zu lösen.

11.02.2021	Für den Sohn des TN wird der Leistungsbescheid für die Schulbuchausleihe kopiert und gemeinsam mit dem Antrag an das Schulverwaltungsamt weitergeleitet. Außerdem habe der Sohn Probleme mit dem Homeschooling. Er verstehe die Aufgaben nicht und wisse auch nicht, wie man sich in die Online-Treffen der Klasse einloggt. Sowohl die Hausaufgaben als auch das Einloggen in Zoom-Meetings werden TN erklärt und der Sohn ist froh, dass er nun weiß, welche Aufgaben er machen muss und wie er diese lösen kann.
	Aktuelle Einschätzung: Geringer Handlungsbedarf

Sonstiges	**Dokumentationsmöglichkeiten für alle anderen allgemeinen Aktivitäten und Kontaktaufnahmen des BG-Coaches, die nicht unter die Handlungsfelder 1-10 zu subsumieren sind:** *Keine, da kein Handlungsbedarf festgestellt wurde.*
	Aktuelle Einschätzung: Kein Eintrag

Verbleib:

☐ Der Teilnehmende befindet sich weiterhin im Projekt. Die Förderplanung wurde in einem Förderplangespräch erörtert. Die Richtigkeit der Angaben wird bestätigt.

☐ Der Teilnehmende befindet sich weiterhin im Projekt. Die Förderplanung konnte aktuell nicht in einem Förderplangespräch erörtert werden.

Begründung:

☐ Der Teilnehmende befindet sich nicht mehr im Projekt. Ein Abschlussgespräch wurde durchgeführt. Die Richtigkeit der Angaben wird bestätigt.

☐ Der Teilnehmende befindet sich nicht mehr im Projekt. Ein Abschlussgespräch konnte nicht durchgeführt werden.

Begründung:

Die Richtigkeit der Angaben wird bestätigt.

_____ _____

Datum, Unterschrift Teilnehmer/-in Datum, Unterschrift Projektpersonal

8.7 Appendix G: Coding Tree

Name
contents of energy cost advice program of VZ
activities with consumers
check of data (bills, energy usages, income, transfer payments, ...)
collaboration with other actors (e.g. job centres, energy providers, ...)
education
energy advice
finding new energy supplier
keeping track of energy usage
making deferred payment plans
on-site checks
referral
general information
project started 2013, was extended 2015
target group
delineation of target group
time for counselling
general issues
urgency of action

Name
goals
prevention of energy cut-off
sustaining energy supply
behaviour change
lowering energy usage
Groups of migrants reached
groups of migrants
age
amount of time in GER
degree of community in place
degree to which they are distinct from other consumers
family status
gender
GER language skills
income
location of origin
location of origin (city vs. countryside)
location of origin (warm vs, cold)
nationality
reason for migration
economic

Name
education
refugees
receivers of transfer payments
retired people
socio-economic status in home country
type of accommodation
collective accommodations
differences between locations of counselling
individual apartments
shared flat
social housing
issues with regards to migrants
cultural differences in counselling
distrust of migrants
language problems during counselling
reaching migrants
other activities
data analysis
political lobbying
specific offerings for migrants

Name
interviews by VZ with migrants
project for refugees
translation services
workshops
definition of EP
importance of definition for counselling
example cases
reasons for consultation
energy bills
arrears on energy bills
faulty energy bills
high energy bills
inability to afford bills
lack of understanding of bills
energy cut-off
prevention
referral from other agents
reasons for EP among migrants
general (intersectional) factors
(lack of) solidarity (Persp. energy cost counsellor)
lack of knowledge or information or experience
being exploited due to lack of knowledge

Name
different system in home country
different energy system in home country
different housing in home country
finding informal agreements
lack of information about energy system before renting own apartment
lack of knowledge of GER energy system
no experience with energy bills
not having to afford bills in initial collective accommodations
not knowing or understanding GER system of transfer payments
not taking dunning letter serious enough
underestimating energy cut-offs
waiting will make things cheaper
language problems
personal factors
feeling overwhelmed by energy system

Name
high costs in other domains
illness
multiple other problems divert attention from energy
prioritising other aspects
slow behaviour change
GER system
bureaucratic issues
complications due to system of transfer payments
GER energy system
high costs for energy
choosing shady energy provider bec of recommendations from community
high costs for energy in GER
high energy usage
children using more energy
high energy usage due to many people in hh
high usage of warm water
cultural - perception of cleanness
physical illness

Name
psychological problems
wellness
high use of energy (heating & water)
keeping tea warm
lack of knowledge of energy efficiency devices
lack of knowledge of energy usages
lack of knowledge of GER energy prices
no knowledge where high energy usage results from
not aware or underestimating energy costs
own behaviour (wasteful use of energy)
perception of temperature
receiving transfer payments from state - not being used to saving energy
little money available
lack of savings
low basic rent, high extra costs
low income
low transfer payments
money sent home
low-quality housing

Name
assuming good faith of people
consequences
low quality housing leads to high energy bills
low quality housing leads to high heating costs
description of housing
defects
heating system does not work
heating with electricity
lack of knowledge about energy system of own house
lack of own usage recoding device
low energy-efficiency
no heating system in place
discrimination in housing market
no availability of high-quality housing
not enough transfer payments to afford better housing
particular importance for migrants or not
solutions for EP

Name
changes in energy system
changes in laws regarding energy system
easier energy system
monthly payment of energy bills
no power cut-offs allowed
saving fonds
changes in housing system
improving housing conditions
improving quality of buildings
minimum standards for housing
more pressure for landlords to improve energy efficiency
social housing
social rent
tenancy law
more money
higher transfer payments
poverty prevention
potential issues - often agency of consumer required
renewable energy
saving energy

Name
exchanging old devices for more energy efficient devices
measures to save energy
specifically for migrants
education
education of energy system
education of living standards regarding energy usage
integration courses
financing of projects to address EP among migrants
language
other supportive public offerings
consultation
help with understanding of system EARLY
translation and support services

8.8 Appendix H: The German System of Social Security Payments

An extensive system of social security payments exists in Germany. Four main components of this system are related to my research:

Arbeitslosengeld I (ALG I)	
Target group/ eligibility	Everyone who paid into public unemployment insurance for at least 12 months (most employees are obligated to do so)
Responsible institution	Employment office (*Agentur für Arbeit*)
Amount of financial benefit	60% of average net pay over past 12 months (67% if recipient has children). Payment is treated like a normal salary and thus, subject to taxes.
Eligibility period	Granted max. 1 year. Recipients can then apply for ALG II or SGB XII.

Arbeitslosengeld II (ALG II)	
Target group/ eligibility	Everyone who is not eligible for ALG I or cannot ensure adequate subsistence from own income or assets. Age must be between 15 and statutory retirement age, recipients must generally be able to work. Receivers are required to follow various "integration" measures aimed at re-integrating them into the labour market (e.g., vocational training).
Responsible institution	Job Centre (*Jobcenter*); affiliated with Federal Employment Agency *(Agentur fuer Arbeit)*
Amount of financial benefit	Mainly dependent on the number of people in a household (e.g., singles receive 449€/ month; 36.87€/ month of this is designated for "energy and repairs") Costs for housing and heating are fully compensated if judged "reasonable". This depends on the local Job Centre (e.g., housing cost limit is calculated based on average prices for housing in a region) Additional payments possible (e.g., for pregnant women)
Eligibility period	Not specified

Sozialhilfe (SGB XII)	
Target group/ eligibility	Everyone who needs financial support for living and is not eligible for ALG II. Most relevant target groups: 1) Recipients who cannot ensure an adequate subsistence from income and assets/ are unemployable (*Hilfe zum Lebensunterhalt*) 2) Recipients of old age/ who suffer from a reduction in earning capacity (*Grundsicherung im Alter und bei Erwerbsminderung*)
Responsible institution	Social security office (*Sozialamt*)
Amount of financial benefit	Mainly dependent on the number of people in a household (e.g., singles receive 449€/ month; 36.87€/ month of this is designated for "energy and repairs") Costs for housing and heating are fully compensated if judged "reasonable". This depends on the local social security office (e.g., housing cost limit is calculated based on average prices for housing in a region) Additional payments possible (e.g., for pregnant women)
Eligibility period	Not specified

Asylbewerbergesetz (AsylbLG)	
Target group/ eligibility	Migrants who reside in Germany and have applied for/ have been granted asylum
Responsible institution	Immigration authority (*Ausländerbehörde*)
Amount of financial benefit	Dependent on average salaries and prices in Germany (e.g., singles who do not reside in an initial communal accommodation receive 367€/ month) Additional payments possible, these depend on the judgement of the respective official in charge.

Additional information	Granted max. 18 months. Recipients can then apply for ALG II or SGB XII if they have attained a German citizenship.

Note. Sources: Bundesagentur fuer Arbeit (2022), Bundesministerium fuer Arbeit und Soziales (2021), Bundesministerium fuer Arbeit und Soziales (2020), Bundesministerium der Justiz (2022)