

The critical role of trust in experiencing and coping with energy poverty: Evidence from across Europe

1. Introduction

Energy poverty literature has recently seen two shifts. Firstly, its normative orientation has enlarged and deepened. Concepts such as justice, fairness, discrimination, or accountability are used to reflect on decision-making processes, their level of transparency, and the extent of their democratic nature [1, 2, 3]. Secondly, the conceptual work on the causes of energy poverty departed from the classical approach based on the pioneering work of Boardman [4], which emphasized the triangle of low incomes of households, low energy efficiency of homes, and high energy prices as the root of the problem. With widening geography of energy poverty research, other drivers come to the fore, such as infrastructure, economic crisis and austerity policies, spatial planning regimes or housing policies or the legacies of state socialist regimes, to name just a few [5], allowing the larger societal background of energy poverty to be addressed more thoroughly. With this paper, we wish to contribute to this more thorough understanding of the societal background of energy poverty by exploring the conceptual and empirical link between *energy poverty* and *trust*. The two concepts are already each supported by a wide array of literature highlighting how both can be a predictor and an outcome in relation to other societal phenomena and trends, detailed below. But are they also interlinked?

Trust is an inherently normative concept, and a central concern for social cohesion and stable democracies [6]. It also influences social processes. It can become a resource for individual or community development, while lack of trust can hinder cooperation and foster conflicts. Thus, the backdrop of this paper is a larger concern for social cohesion, democratic development, and energy poverty alleviation. This is timely as democracies in Europe and beyond experience destabilization with rising nationalist and authoritarian trends. Recent literature [7] explores how access to energy is increasingly instrumentalized by political entrepreneurs for political gains and can be fertile ground for populism, which thrives on eroding citizens' trust in institutions.

Energy poverty, defined as the inability of households to access energy services up to a socially and materially necessitated level [8], is acknowledged to be the result of a cluster of factors, some deeply rooted in underlying conditions which shape life experiences, associated with values, processes of socialization, and identity formation. In turn, these also shape potential ways out of energy poverty. The fundamental premise is that households affected by energy poverty do not enter and cannot exit situations of energy poverty in isolation, but only as a result of interactions with other stakeholders involved in providing or facilitating the household's access to energy services. Thus, energy poverty depends on relations among a variety of stakeholders, with outcomes mediated by trust. This implies that trust may well be a key ingredient of how energy poverty occurs and how it can be tackled. While most energy poverty research has emphasised the material deprivation of households, recent studies have started to engage with the role of non-material aspects like personal relations or emotions. These studies show how non-material aspects have repercussions on the very state of households energy

poverty, e.g. because emotions of shame or embarrassment prevent people from seeking help [9, 10]. In focusing on trust, we explore another facet of such non-material sources of deprivation or coping.

Thus, the question guiding our exploratory research is: *In what ways is trust linked to energy poverty?* We set out to explore this relationship by investigating the lived experiences of energy-poor households, their situations, their perceptions and interpretations, and their relation to the array of stakeholders involved in providing or facilitating access to energy services (social welfare institutions, energy providers, NGOs, etc.). In particular, we focused on exposure to risk, sensitivity to perturbations, vulnerability at large, and adaptive capacities to cope with stressors. Geographically, we cover ten European countries, including Western welfare states, post-socialist countries, young and old democracies. In line with our exploratory approach, we developed a qualitative research strategy, relying on interviews with energy-poor households. Interviews revolved around the issue of trust directed toward getting a better understanding of 1) the role that trust plays in the occurrence of energy poverty and 2) the extent to which trust is an ingredient of potential ways out of energy poverty. We investigate this link between trust and energy poverty without aiming to reach conclusions about causality, but rather to enable subsequent in-depth qualitative and quantitative analyses which can build a better picture of causal mechanisms.

In the following section, we build on the various dimensions of trust and illustrate that many relate to energy poverty. This lays the groundwork for our empirical research strategy, detailed in the methodological framework. Analysis of the interviews is strongly related to the conceptual links and navigates several issues mediating how (dis)trust fosters energy poverty and how being energy poor can shape trust or lack thereof. The conclusions synthesize our conceptual and empirical approach and lay groundwork for the necessary further research, as well as provide practical elements which can be enacted toward finding effective ways to prevent energy poverty from settling in and fighting it if it is already in place.

2. Trust in institutions, a brief review

Energy poverty involves a complex set of interactions or dependencies between those affected and a variety of public and private stakeholders. Such interactions are mediated by *trust*, a relational concept [11], most often based on a conscious decision of the trusters to engage in a relationship of power with the trustees, thereby willingly recognizing their position of vulnerability based on the assumption that the trade-off may improve their well-being [12]¹. The trusters engage in a relationship based on a personal evaluation of its worth and of the perceived ability of the trustees to respond to their needs

¹ Throughout this paper we do not refer to “vulnerability” in the sense of “energy vulnerability,” but to a state or position associated with energy poverty. Those in energy poverty are vulnerable. The literature has been debating the distinction and overlap between “energy poverty” and “energy vulnerability” extensively. Bouzarovski et al. [60] and Bouzarovski and Thomson [73], among others, distinguish between energy poverty, which points to a descriptor of a state at a certain moment, and energy vulnerability, as a set of conditions that characterise the emergence and persistence of deprivation which is the result of a cumulus of economic, political, social, and institutional dynamics. In our paper we regard “vulnerability” rather in the sense used by the [82], as a dynamic state beyond the control of those affected by it, yet influenced by their own amount of risk aversion [76, 83].

and expectations [13]. The assumptions that determine trust or, conversely, make trusters withhold their confidence, may differ depending on the type of trustee, interaction history, reputation, and personal circumstances.

We refer mainly to institutions, as opposed to the less formal social networks the vulnerable might turn to in situations of distress. The concept of institution is defined as an established and easily anticipated set of rules and patterns of interaction [14, 15], bearing a functional meaning [16], with rational behaviour [17, 18] that may go beyond their initial functions [19, 20]. Institutions are usually associated with governmental bodies—“authorities” of some kind. However, given the diversity of actors referred to in the energy poverty literature, we apply our analysis to a larger set of institutions, such as public administrative bodies of different ranks, supply and distribution companies, and non-governmental institutions and charities. Along the path from producing energy to delivering energy to households, unbundled energy structures operating in market economies of democratic political regimes are at the high end of the complexity ladder [21, 22]. Few domains or systems are more prone to regulation, formal and informal procedures, and the involvement of such a multitude of stakeholders at every step. Citizens cannot escape interaction with a wide range of entities if they want to have reliable access to energy resources.

Given this complexity, we explore the interactions of individuals living in energy-poor households with a variety of institutions involved in their access to energy using analytical lenses from the literature on trust in various fields. This is a rather novel attempt, with only recent scholarly research pointing to trust as an element that mediates the relations between energy consumers to energy providers, and arguing that it needs to be considered when discussing energy poverty [9], and when understanding energy consumption and related decisions [23, 24]. However, in this paper we aim to make deeper use of the wide body of literature built around the concept of trust, as well as to differentiate among varied concepts of trust. We place a particular emphasis on trust as a process rather than simply as a given or as a variable, quantifiable in terms of “less” or “more” – an interpretation that is highly backed by the empirical section of this paper.

Literature on *generalised trust* points at the fundamental (“moralistic”) social fabric [25] that allows people to trust unfamiliar others based on the “knowledge of how society generally works” [26]. From this perspective, both the trust of individuals and the actions of institutions rely on established social rules and duties that allow for interactions with predictable outcomes. A high degree of generalised trust is associated with “getting things done” [25] based on engagement and productive cooperation [27]. These two latter attributes have been often identified as efficient strategies to escape situations of mutual uncertainty [28] in economic relations [29], which makes this approach relevant for exploring the link between trust and energy poverty. A mutual relation of trust based on trustworthiness, moral commitment, and interest in continuing the relationship in mutually beneficial terms [30] leads to both sides being better off compared to the alternative low payoff, secure outcome, where the trustee takes advantage of the truster and assumes all proceeds [31].

Institutional trust stems from generalised trust, but is even more circumstantial, as it goes beyond “faceless” interactions, to “face-work commitments” of direct interactions with clerks [32]. Institutional trust is also built—or destroyed by—experiences that accumulate into perceptions [33, 34]. The role and positions of individuals in institutions and the attitude regarding their behaviour can be important sources of trust [35]. Exploiting a position of power by preferentially or selectively

applying the rules, allowing noncooperative behaviours, or resorting to corrupt practices will impair trust [36]. Trust is the outcome of mutually reinforcing mechanisms: “those who are trusting tend to be trustworthy and those who are suspicious tend to be untrustworthy” [37].

Institutional trust is also derived from utility and the satisfactory performance of tasks [38]. Zucker [39] labels this as process-based trust. Underperformance may render institutions untrustworthy [40, 41], and low responsiveness may also translate into a negative valuation of institutions [42]. While such experiences with institutions are accumulated into perception to a point that might discourage an individual from referring to an institution, there are also more subjective judgement criteria. These may vary based on individual characteristics or circumstances (i.e. characteristic-based trust). Holmberg and Rothstein [43] concluded that vulnerable groups (such as those unemployed, in poor health, or with disabilities) not only display consistently lower levels of trust but are also predisposed to sharper variations and ultimately to identification with populist movements. “Vulnerable people have lower social trust because they are typically in contact with selective and needs-testing authorities in the welfare state which have a lot of discretionary power” [43]. In this situation, the power relation involved in a typical interaction with ‘street-level bureaucrats’ means that applicants may perceive themselves as victims of public agencies whose decisions are difficult to understand and accept [44, 43]. Individuals with lower levels of education [45], lower income groups [46, 47], divorcees [48], the unemployed [49], and ethnic minorities with a history of discrimination [46] also display lower levels of institutional trust. Despite their reliance on trust as a binding element, democratic setups are more vulnerable to fostering distrust, due to the high levels of complexity that democratic processes involve [50, 51], especially under the governance paradigm, where “complexity has to do with the variety of agencies involved in the regulation of a series of relevant domains” [52].

Beyond any individual’s objective categorization, there is also a dose of subjectivity in how individuals perceive their own state and position with respect to their peers and to institutions. This is captured by the concept of subjective well-being. Tov and Diener [53] show that societies that score high on subjective well-being display higher levels of generalised trust, volunteerism, and civic attitudes. There is a wide body of literature documenting the co-variation of income and subjective well-being [54]. As uncertainty is higher in situations of poverty, this leads to preferences for in-group interactions at the expense of out-group interactions [55]. The “we versus them” logic is further amplified by having to operate within complex systems.

The negative impact of energy poverty on a person’s perception of her own subjective well-being is well documented [56, 57, 58]. “The positive association between energy consumption and well-being is enduring” [59]. Thomson et al. [60] document a higher incidence of mental and physical health issues among energy-poor populations. Energy prices significantly impact subjective well-being, especially for those in the lowest income quartile [61]. Moreover, the expectation of increasing energy expenditures further amplifies this negative effect. The link between adequate access to energy services and well-being has gone beyond theory and indicators (such as [62]) and is the backbone of measures addressing energy poverty [59, 63].

Deprivation increases the truster’s vulnerability and amplifies the truster-trustee power gap, leading to feelings of powerlessness. “Material risk (...) gives rise to perceptions of social insecurity and immorality to which authorities do presumably not grant sufficient attention” [64]. Van der Toorn et al. [65] show how feelings of powerlessness resulting from inequality and a perceived inferior status

end up making the powerless justify and legitimize a perceived inferior status (“they are the elite, they lead”) rather than strive to change it. Marien [66] finds that those with lower levels of trust do not completely disengage with the system, but resort to “non-institutionalized” forms of participation and interaction rather than give in to a feeling of alienation. Qualitative studies have shown that the energy-poor often regard themselves as powerless in their interactions with “the system” [67] or tend to resort to informal practices when they feel the formal institutions do not deliver [68].

3. Data and Methods

During workshops in the framework of the European COST Action ENGAGER, we stumbled over independently made observations which suggest that energy poverty and trust are interrelated². From here, we decided to conduct an exploratory study to get insights into the different modes, and maybe causalities, within this interrelation. Therefore, our research adopts a qualitative research methodology based on semi-structured interviews with energy-poor households from 10 countries to investigate lived experiences, perceptions or coping strategies in depth at the expense of generalizability [69], given the practical limits of a study outside research projects and without extra resources.

3.1. Data collection

We interviewed at least five households per country, resulting in a total of 52 interviews. Guidelines for the interviews were elaborated regarding three topics. Firstly, the experience of households with energy poverty, in particular their difficulties in heating or cooling their homes and in using or affording energy, and the constraints and disadvantages following from these difficulties; secondly, how they coped with the situation, whether they asked for help and what their experience was when they did; and finally, whether they considered the institution that helped them as trustworthy. We also included questions to explore for general trust, as well as the reasons for trust or for distrust in institutions. This guideline was used in seven countries, while for France, Scotland, and Romania we based our analysis on a secondary analysis of previously existing interviews that focused on the energy poverty experience of households and their coping strategies. To a large extent, these interviews provided the data we were looking for, as the guidelines used overlapped in much of the investigation of difficulties and experiences related to energy poverty. In addition, the interviewees themselves had raised issues of contact with institutions and related features of trust. By including these results, we thus could extend our analysis to more countries.

For all households, information has been collected on socio-demographic characteristics (age, household composition, employment status), occupancy status (homeowner or tenant), the characteristics of homes (overall evaluation of the building and the heating system), the area in which interviewees live (urban or rural), and the health situation of household members.

The sampling followed the strategy of purposive sampling [70] meaning we aimed for energy-poor households, that is households who experienced difficulties accessing sufficient energy or who were, at the time of the interview, overburdened by their energy bills. We used social media and contacts from ongoing or previous projects. Further, samples were designed to show variation in terms of socio-

² Interestingly, to develop research questions in this way is among the recommended strategies suggested lately for more relevant and novel work in energy social science [69].

demographic characteristics, place of residence, and tenure; selections were monitored during the process to reach sufficient variation. The interview data were collected in one of three ways: face-to-face in people’s homes or public spaces, phone call, or via an online survey tool. Conversations lasted a minimum of 30 minutes. Note that the selection process did not aim at a cross-cultural comparison nor geographical and national characterization, but rather the use of an EU-wide sample.

Upon consent, interviews were recorded and transcribed; others were protocolled after the interview. Then, the transcripts and protocols were analysed using qualitative content analysis [71], again with a common structure for coding and analysis that combined deductive and inductive steps. By following a thematic coding, codes were summarized in themes, explanations, contrasts, and relationships [72], in order to uncover the links between energy poverty and trust. This allowed comparison as well as discovery of mechanisms in the relation between trust and energy poverty and lead to the fourfold relation expressed in Figure 2.

3.2. Characteristics of the sample

The regional distribution of interviews is shown in Table 1. The interviews cover a variety of situations across and within each country, both in terms of income levels and in terms of energy poverty difficulties. Table 2 displays the main features of the sample.

Table 1: Regional distribution of interviews

| Region | Country | Number of interviews |
|-----------------|-----------------|----------------------|
| Western Europe | France | 5 |
| | Germany | 5 |
| | Scotland | 5 |
| Eastern Europe | North Macedonia | 6 |
| | Poland | 5 |
| | Romania | 5 |
| Southern Europe | Greece | 6 |
| | Portugal | 5 |
| | Spain | 5 |
| | Turkey | 5 |

Source: Authors

Table 2: Main characteristics of interviewees in the sample

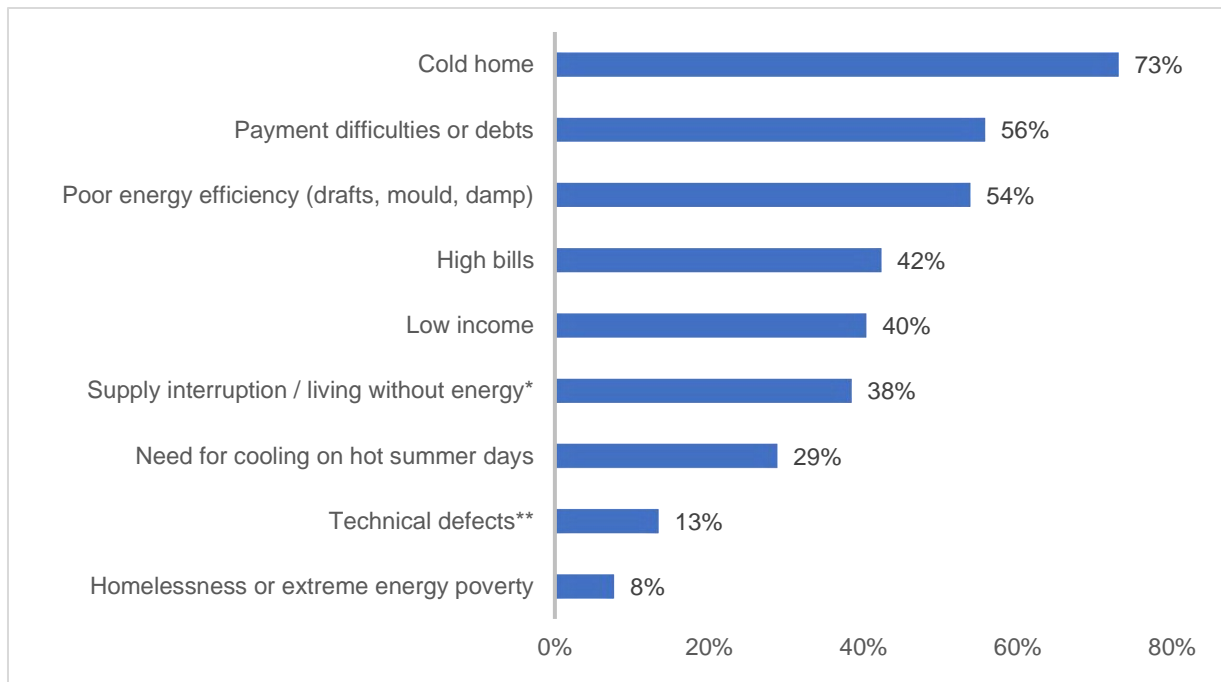
| | | |
|-------------------|--------------------------|-------|
| Age of respondent | from 21 to 35 years old: | 11,5% |
| | from 36 to 50 years old: | 36,5% |
| | from 51 to 65 years old: | 30,8% |
| | from 66 to 80 years old: | 13,5% |
| | 81 or older: | 3,8% |

| | |
|---|---|
| | N/A: 3,8% |
| Gender of respondent | Female: 62.5% Male: 37.5% |
| Average size of household | 2.5 persons |
| Number of households with children under age 18 at home | 15 (out of 52) |
| Area of residence | Urban or suburban: 84.6% Rural: 11.5% N/A: 3.8% |
| Type of accommodation | Flat: 61.5% House: 36.5% Allotment garden house: 1.9% |
| Occupancy status | Owner: 50.0% Tenant: 50.0% |
| Employment status and main income source of respondent | Employed: 51.9% Retired: 17.3% Unemployed/ Social Welfare: : 26,9% Self-employed: 3.8% |

Source: Authors

All interviewees live in energy-poor households, a group estimated to comprise around 50 million households in Europe [73]. Experiences of energy poverty vary from extreme energy poverty, meaning a household has no reliable access to energy despite existing infrastructure [68], to situations in which households struggle to pay for energy and other basic expenses or are in a state of deprivation in terms of heating or cooling conditions that can be addressed only via extraordinary investments in home renovation or equipment replacement.

As visible in Figure 1, concerning energy poverty difficulties of interviewees, nearly two thirds of respondents reported on cold homes. The number of households using complementary heaters is high, with almost 40% spontaneously mentioning the need to use one. The need for better cooling on hot summer days affects 21 percent of interviewees. In terms of wider consequences, the already well-described picture of energy poverty in Europe is evident in our sample: difficulties in paying for food and energy, reduced quality of life and indoor thermal comfort, health issues, social isolation, subjective deprivation, ongoing conflicts with energy providers, power cut-offs, struggles to find (and pay for) decent housing, and a general feeling of marginalisation.



* this includes disconnections for non-payment of energy bills, heating reductions for economic reasons (central heating regularly not operating several hours a day) and situations where interviewees mention that they have switched off their heating systems for economic reasons

** technical defects include situations where households complain about heating interruptions due to an outdated and heating system, to broken boilers, to insufficient hot water supply, to issues with gas meters or to an insufficient electricity supply

Figure 1: Energy poverty related difficulties in the sample (multiple answers)

Source: Authors.

4. Interrelations between trust and energy poverty

The relation between household energy poverty experiences and trust is analysed from two angles: first, we show how households' experiences with institutions create or destroy trust in these institutions. Second, we explore how existing trust or lack of trust contribute to the emergence of energy poverty or impact the coping strategies of households in trying to overcome energy poverty. Figure 2 summarises the main dimensions of these interrelations, which we will introduce in the following section.

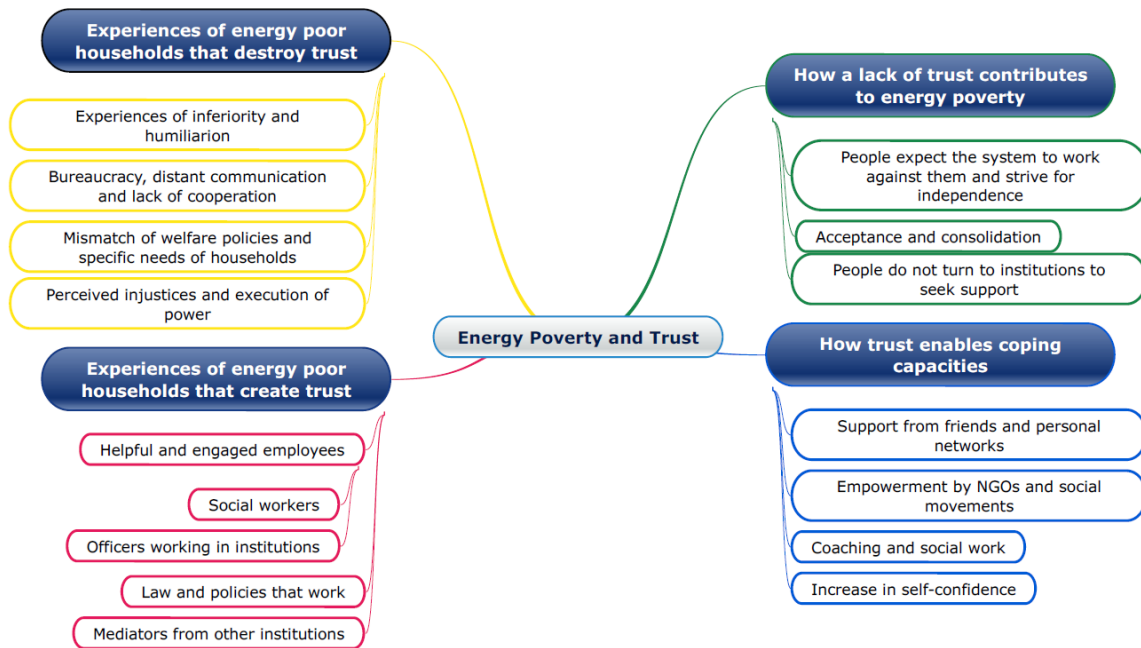


Figure 2: Overview of interrelations between experiences of energy-poor household and trust
Source: Authors.

4.1. How energy-poor households' experiences with institutions destroy trust

Numerous passages in the interviews report experiences that illustrate how these energy-poor households become angry, upset, and frustrated about their contacts with institutions when trying to cope with or solve problems related to energy poverty. From the data, we inductively developed categories of experiences that endanger or destroy trust in these institutions. Most of the institutions mentioned are state institutions, and public or private companies, less so large charities like Caritas and NGOs.

4.1.1 Experiences of inferiority and humiliation

The reported negative experiences with institutions, mostly with energy providers and welfare institutions, range from only a lack of friendliness to open humiliation. To start with, many interviewees reported a cold undertone from officers they were in contact with, including a dry, distanced attitude towards those seeking help. Interviewees expressed that institutional staff strictly followed bureaucratic formalities, did not consider personal circumstances of ordinary people, and ignored the severity of situations. Interviewees felt cheated, looked down upon, and humiliated. In Poland, an interviewee summarised his contact with the social workers in the social welfare centres like this: *“During the interviews I was asked such questions that made me feel like a used toilet paper”* (PL1).

Doubts about the correctness of decisions of the officers in institutions are abundant in our sample. In Spain, a woman in her fifties reported that she first got rejected in her application for the social subsidy: *“According to the assistant, I didn't meet the minimum requirements. A friend told her she*

would in her mind meet the minimum requirements, and after visiting a different office, her request was accepted” (ES2). A young single father from Germany reported on an electricity disconnection: “I felt helpless because they did not want to help me at all in this regard. Even if the facts and legal requirements clearly state that they have to.” He suspects that officers act according to stereotypes of poor people: “I think if I would have pretended to be dumb (...) I would have gotten it [the loan]. But because I confronted them directly with paragraphs and their own operational instructions, they felt overrun” (GE2).

Interviewees sometimes experience contact with welfare institutions as open humiliation and disrespect. A woman who is disabled and depends on a wheelchair feels constantly under pressure by the state welfare institution to move to a smaller flat to reduce costs. The housing market in her city is tense and with her specific needs, she sees no alternative flat available. “I’m going to have to argue this at the Social Court, ... there are no flats in this price range suitable to my needs ... They said, then I should move into a one-room apartment. I said, ‘how should I do that with a wheelchair, with all the equipment I need?’” She was given an ultimatum of six months to find a cheaper place, “I said ‘and then? Then the six months are up and what do I do then? ... ‘There are homeless shelters’. Interviewer: That’s what they said? D: Yes” (GE3). Following repeated negative experiences, institutions even become an enemy one has to fight against. Interviewees do not differentiate between private companies, political and social welfare institutions; an interviewee from Spain boils it down to: “State organizations, as well as politics, are not trustworthy and I don’t rely on companies because they only want your money” (ES1).

Low trust in institutions due to bad experiences can intersect with low general trust in society. Strikingly, all our Spanish interviewees distrust political institutions and assume that politicians, at the end of their political career, may change their position from politics to the private sector. This is widely known in Spain as the “revolving doors phenomenon” and it is particularly strong in the energy sector (since it is one of the stronger economic sectors in the country)³. Interviewee ES2 puts his perspective like this: “There are many politicians, both left and right, who end up being in managerial positions of energy companies. This should not be allowed.” The feeling of collusion of interests between the government and private companies was also denounced by a Scottish interviewee: “They [the government] are not in control of anything, they should better control the energy companies but they don’t, the big boys do” (SCT1).

4.1.2 Bureaucracy, distanced communication, lack of cooperation of institutions

Bureaucracy is a common feature of welfare state regulations that aim at distinguishing deserving applicants from those who do not deserve help. Thus, interviewees experienced the means-testing as discouraging, distanced, and cold, and also as despotic. The burdens of bureaucracy often cause a delay in receiving help whereas energy-poor households often have pressing problems like power disconnections or cold homes. Paperwork requires too much time, and too many actors are involved in any one decision so that people bounce from one door to the other. In North Macedonia, an interviewee highlighted her lack of trust in institutions due to their bureaucracy. Regarding the district

³ According to a journalist’s investigation, from January 2007 to October 2016, the Conflict of Interest Office of Spain has issued 377 authorizations for senior public managers to perform a private professional activity during the two-year incompatibility period after their exercise of their public functions [74].

heat supplier, the woman, 36, recalls: *“They will complete one request, but they would take years to address another. For example, an old bill from many years ago from the previous tenants appears as unpaid but is in fact paid”* (MK2). Institutions here appear to be unreliable. A Portuguese woman, 52, never applied to any support schemes. From her point of view, *“the administrative and bureaucratic procedures are so big, so big, that they just become a source of anxiety and insecurity... we can never be sure whether that [the application] is handled well”* (PT2). This is aggravated by the fact that no officer provides help with understanding what documentation is needed, whether or not the applicant is providing the right documents, or whether the criteria and conditions are being well interpreted. SCT4, an elderly single woman entitled to the “Warm Home Discount,” a policy designed for people in her situation, did not claim the benefit because *“it is complicated.”*

Some bureaucracy is exacerbated by the use of online tools. The digital gap, meaning uneven access to the internet and familiarity with handling issues online, works to the disadvantage of the deprived population. Bureaucracy is a bigger hurdle for vulnerable consumers who may have lower capacities to adequately orient themselves, for whom mobility and accessing the internet can be a huge expense, or who suffer from physical or psychological illness. Bureaucratic procedures create dependence on the internet, and the impersonal contact hinders building good relationships and thus hinders building trust. This is illustrated in an interview from France: *“They gave me a code, but the code did not come in. It's too complicated. It's annoying. It does not work. And I am scared about taxes on the Internet. Because if the day I can't pay the Internet anymore, ... how will I do it? Plus, here I am in front of a screen. Who can I say to 'I can't do it'? There is no longer a relationship. This is also what is painful”* (FR3).

Bureaucratic obstacles show how energy poverty can differ from income poverty and how welfare state institutions are unaware of this difference. Energy poverty is often experienced by poor homeowners who are locked into inefficient homes, but homeownership is seen as a sign of wealth. A man, 60, applied for income support in Turkey: *“If you own a property, whether it is small or inherited, they [the officials] decline the request for help and do not cooperate to solve the problem ...”* (TU3). A woman, 67, in France commented on a similar experience: *“When you are a homeowner, you are not entitled to much either. You'd think the walls can be eaten, but hey, they can't”* (FR2).

What makes the effect of bureaucracy worse is the distanced and impersonal modes of communication. A woman from Germany remembers a moment when she experienced a service disconnection as a single mother with a small child, where she could not reach out to either the provider or the welfare institutions: *“They said they cannot do anything, you have to pay. ... and you have no chance to even talk to the officers at all. ... if you have no appointment you cannot go in at all, and as for the telephone, you cannot call either. They just leave you standing there”* (GE1).

4.1.3 Mismatch of welfare policies and specific needs

The underuse of support schemes is an indicator that policies and people's needs do not match well. In Germany, retrofitting subsidies have been largely underused [75], but an interviewee who owns an inherited house in a peripheral small town cannot make use of the existing funding schemes. They require high up-front investment that she is unable to cover, so she continues to live in a cold, unrefurbished house (GE6). In France, an interviewee reports that *“13 billion euros that have not been spent by the state, because people are not asking for the aid to which they are entitled. Me, when I needed such and such, I asked CAF (Centre for Family Allocations); I never had the right to anything.*

So, I'm done with asking" (FR2). Others do not apply because of a lack of information as exemplified by a Scottish retired couple who matches the eligibility criteria of the warm home discount but never claimed it because they did not know it existed (SCT3).

One of the common mismatches between needs and policies concern participation thresholds that are so restrictive that help is not accessible or that even small improvements in living or housing are hindered. In Romania, one interviewee, who is a beneficiary of social assistance, told us she wanted to make a renovation to the dwelling that would have increased comfort, yet she was denied the request simply because tenants cannot make any renovations to social houses (RO3). In Greece, social tariffs for electricity exist to support low-income households with their energy bills. However, income thresholds are so low that interviewees raised the suspicion that help is not the intention here. A woman in Greece is concerned she will not qualify for the social tariff but given her low salary, she will not be able to pay for the electricity: *"It seems that they don't want to give the lower tariff"* (GR2).

For the energy poor, factors other than income could be a criterion for assistance, but few countries use them. There is no basis for considering additional factors that impact the situation of people, such as having high medical expenses for oneself or a family member while being fully employed, having a disabled family member, or owning property that may be of low energy efficiency. In Poland, income is the basic criterion for welfare and energy poverty support. Here, a woman living with her mother in an owner-occupied property reports: *"This lady [the social worker] was biased against us because she saw us, she saw the house and given my ownership of the house and the fact that I work, she decided she has no business to help us"* (PL2).

4.1.4 Discrimination and execution of power

People in our sample often expressed feeling discriminated against or oppressed. In Romania, a Roma family with four children were evicted from their home in the winter season (RO1), and another woman living alone told us that she was denied the right to buy her house, a social house, even though it is listed for sale on the internet. An interviewee from France complains about the social worker who has prejudices concerning everyone from a specific neighbourhood: *"Well, considering the neighbourhood where we are, he puts everyone in the same basket. So, he already judges before knowing the person"* (FR3).

Tricking and cheating are mostly ascribed to private companies. Overbilling is a practice that is perceived as common. In Scotland, a woman in her seventies reports a case of unjustified advance payment: *"SSE (the electric utility) called they wanted to increase my debit to £100 per month but I asked them to tell me why since I consume the same and I am sure I don't use that much, but they didn't explain. I checked online, I had overpaid, and guess how much? £980! They were owing me money and asked me to pay more! Now I check every three months to see if they owe me something"* (SCT4). Lack of trust regarding energy bills is created through in non-transparent billing, as was also expressed by a woman, 55 years old, in Portugal. She does not really understand how the companies charge for their consumption. After some time sending bills based on estimates, the company makes adjustments and sends her expensive bills. She is never sure whether the amounts charged are correct or not (PT1). The problem here is the power of the providers as they set the rules of the game and have the power to decide on their interpretation.

The exercise of power by welfare state actors often has a gender dimension. In France, a single mother of four children, comments on how her social worker sidelined care work: *“It’s a man. ... He thinks my children are big enough that I can go to work. So I tell him, my last one has health problems, so, if someone calls me, I need to quit my job right away”* (FR3). Further, eligibility criteria leave room for interpretation. The final decision about support is thus left to those who have the power of interpreting the situation according to their own prescription. In her frustration, the Polish woman who did not receive any help because she owns the house ponders on the welfare system, suggesting that she might need to start using drugs before anyone helps. *“But these people get financial aid and they continue to buy alcohol for this money.”* (PL2). So, we see here a well-known picture of envy and resentment evolving, a competition between vulnerable people for scarce help.

Further, there is a spatial component to the reported discriminations with rural areas facing more difficulties and neglect than urban areas. In Romania, an interviewee reported that: *“last year... they didn’t come to read the meters for about 6 months... And the bill came and we had to pay 2000 lei.⁴ We paid for it in three turns. We ... asked them why we have to pay so much. And they told us that we have to pay because it was our use of electricity. But ... they had to come to read the meters ... and they didn’t come. Because it is far away ... If you want money, you have to come to read it, don’t you?”* (RO4). Also, an interviewee from Spain reports a lack of qualified personnel and proper social services in rural areas, making it impossible for people living in rural areas to know about how to obtain the subsidy “social bonus for electricity”⁵, she declares. Also, she had to travel to the city to fulfil the requirements, which she experienced as a sort of discrimination.

In the post-socialist context and in the relatively recent Western democracies of Spain and Portugal, we came across a sense of general distrust in state institutions and politicians due to their misuse of power. A woman, 52, from Portugal relates this to the very system of parties competing for votes: politicians fuel high expectations regarding what they will do when elected, and later never realize those ambitions. Politics are described as “a whore” (MK1), based on the perceptions of corruption, ineffective administrations, and individuals in power who see themselves above the law and act accordingly. An interviewee from Romania states: *“Nowadays all of them are stealing. You don’t know who you should trust.”* In North Macedonia, one interviewee emphasized: *“One can’t trust individuals who think they have (and sometimes do have) power above the law”* (MK1). To serve one’s own interest when working for a public office seems commonplace and even normal to some extent, as an interviewee from Poland expresses: *“When there is somebody in power to distribute goods between people, he will give to his/her own kind first. That means, he is of a sound mind! I don’t know what I would do ... if I would have such power”* (PL1). Here, we see the naturalization of inequalities, power, and resulting distrust.

4.2. How energy-poor households’ experiences with institutions create trust

While the experiences of trust destroyed dominate the picture in our data, there are also experiences where the contact with institutions created (some) trust. The main figure in these descriptions is a

⁴ Approx. 450 Euro.

⁵ This measure provides a discount on the electricity bills for vulnerable and severe vulnerable households, preventing them from disconnection (for further details see the Energy Poverty Observatory at <https://www.energypoverty.eu/measure-policy/social-bonus-electricity>).

single person that proved to be trustworthy and thus made a difference in a household's contact with an institution. In some cases, this is a social worker. In France, a man who experienced long-term difficulties including homelessness, recalls such a contact: *"there I felt that it was a person who did not want to hurt me. I felt that with her I could get out of the shit ... So, I told her everything, and it went well"* (FR1). He remembers the moment he met the new social worker as a game-changing moment and talks about how he kept the contact: *"And we still have a relationship: I send her emails from time to time to find out how it goes ... it makes me another man actually"* (FR1).

There were other examples where the "normal" officer turned out to be a good person, engaged, and willing to help rather than distant and patronising. GE1 is an example here, reporting on her officer at the job centre: *"I also know from the past, from old assistants who very quickly throw in the towel and say 'there's nothing I can do for you.' But she [the current assistant] is really trying hard, is doing everything and if I need anything, she tries to fund it. Like this coaching, for example, that was her idea as well, and that coaching alone has brought me so extremely forward in my private environment and life in the last year and a half."* In a further comment, we see how this woman transfers the experience with the officer even to the institution: *"... and um, that would not have been possible without the job centre."*

Having positive experiences with people representing institutions can even enable an understanding of the perspective of the institution. An elderly woman living in a rural area of Spain understands that officers are limited due to the design of policies and limited resources. She acknowledges that *"it is a small rural office"* and highlights that the person who assisted her in the process was *"very kind, but she didn't have too much to offer"* (SP3). However, the trustworthy officers are perceived as the exception to the rule. Thus, personal trust emerges within a larger picture of distrust in institutions. In two other interviews from North Macedonia, interviewees said explicitly that they generally have mistrust in institutions but considered the Minister of Labour and Social Affairs as a trustworthy person (MK1 and MK3).

In some interviews, mediators—persons who enjoy the trust of both the energy-poor household and the institutions—were mentioned. Interviewees entrust them with the regulation of their interests. A mediator can be a trustworthy person in a different institution who already has close relationships with the households. A retired lady in Scotland describes how she found help from the energy advisor of a social housing organisation where she lives: *"The agency will answer him, but they are not interested in my questions"* (SCT4). Also, in North Macedonia, two interviewees had issues with district heating and they chose to deal with it through a mediator: the landlord in one case, and the superintendent of the building in the other. In case of problems with the district heating company, both turn for help first to their 'mediator' (MK4 and MK5).

Trust can also emerge from the law, regulations, and policies when these are perceived as functioning. Some interviewees report how regulations provided help because they classified them as eligible. In the language of the literature on trust, an institution may further be classified as trustworthy if the expectation of the trust-giver is met. Interviewee TU2 puts this very clearly: *"After my divorce, I had difficulty in paying the energy bill due to income inadequacy. The district government provided social aid for six months. So, I trust the district government due to such experience."* PL4, a man living on a very low pension, provides a rare example of general trust forming due to government interventions. He remarks: *"... concerning my personal situation, the policy has an impact. I am retired. That the*

government remembers retired people, and that I got the additional 13th pension at the end of the year counts for something." What counts here is the recognition of the specific situation of pensioners with low income.

In sum, trust in institutions can evolve—however limited—in two ways: from the experience of engaged, helpful people in institutions, be it a direct contact or a mediator, and from the experience that policies apply and have a positive effect. In most cases, however, trust is attributed to a specific person or some institutions only, while the general distrust towards institutions remains. As GR4 puts it: *"Trustworthy processes exist but are not always applied; trustworthy people also exist."*

4.3. Lack of trust as a factor contributing to energy poverty

In section 4.1, we reported on how our interviewees' experiences with institutions create a distanced and distrustful attitude towards state institutions or energy providers. Following, we will show how the lack of trust, in effect, contributes to the deprivation of households.

Firstly, distrust hinders the use of support schemes. In North Macedonia, four out of the six households interviewed have not sought any help from institutions and at the same time don't trust them. One household used to receive social welfare, but it was cut off, and now they live on donations and charity (MK6). If people distrust social services, they do not turn to them, and they do not differentiate between different institutions, as GR3 illustrates: *"In Greece, the system is fully corrupt; of course, this does not apply to all; some politicians are not corrupt. In terms of organizations, in Greece individuals do not trust the state because the state does not take care of the people, and because social services do not protect the citizens."*

In two cases, there was even a fear expressed that being open and trustful creates new vulnerabilities: *"I was not telling anybody about my situation. I quickly learned that when you make yourself vulnerable like that, some people will try to take advantage of that and they will try to put you down"* (PL1). In the Western European welfare states, we also found that people in need mistrust the networked institutions and expect the system to work against them. GE2, a single father of a two-year-old child, told us about his experience of being disconnected from electricity. He remembered how he received a letter from the youth welfare office, and feared that they wanted to take his child away: *"The heart started beating fast: what if they found out you don't have electricity? There are very weird things going on in one's head."* Minorities express fear of open discrimination, as in Romania: *"We are on our own. We don't receive much support."* (RO1). So, people give up on the state, and sometimes on themselves. They put up with the deprivation, also assuming that the given structures are not in their favour as with GR1: *"The political climate is not helpful for our class."*

Lack of trust, bad experiences, low expectations, and no external support lead to consolidation and perpetuation of the situation of deprivation. Some of our interviewees turned their back to state institutions out of frustration and feeling powerless. A woman in her seventies from Scotland states, *"I avoid contact with energy suppliers because I never manage to get the answers I need"* (SCT4). Instead, people strive for independence from state resources, being proud to manage on their own, even when remaining in energy deprivation. FR2 states *"When I need something, I need to know how to manage on my own. And I can do it. And when I can't do it, I do without it, that's it."* A man from Poland who experienced years of homelessness puts it like this: *"I was never going to the offices,*

because getting help is a degrading matter for me” (PL1). In North Macedonia, all interviewed households show a high degree of self-reliance and trust mostly their inner circle. One household in deep material deprivation bases its survival on finding its own solutions, such as searching for fuelwood and tree branches for heating, and begging for help from other people: “I beg, I search the dumpsters” (MK6).

4.4. How trust enables coping capacities

Finally, our data points to the effect that trust can help households in energy poverty cope with their situation and overcome a state of deprivation. Here, however, the trust in institutions (or persons working in institutions) is only one source of better coping capacities; social trust in private networks and NGOs is also a crucial source for coping capacities.

Mutual trust between interviewees and representatives of institutions brings a feeling of respect which turns out to be a resource for coping with deprivation. Self-confidence develops better if support from others is felt. FR1, the man with a history of deep deprivation, recalls about how he got back into employment: *“And the trainer also helped me a lot to believe in myself in fact. Because at times you don't believe in yourself. ... And when I came in to do a mock exam, she said, ‘I know you can prove yourself and do that well.’ After two weeks they no longer wanted to let me go.”* GE1 illustrates the interdependence of self-confidence of the client and institutional response. The woman in her forties reports that in the past, she was introverted and social-phobic. With the help of a trustworthy officer, the unemployment office funded her participation in a program to overcome the social phobia. This helped her communicate differently with authorities and power companies, e.g. when complaining about wrong invoices (which she would have just paid in the past). As mentioned above (section. 4.2), also mediators from other institutions can help make a difference for the households, e.g. a community mediator in Romania helps to crack the mutual wall of distrust.

However, for several interviewees, social trust in friends, kin or other social networks seems a more important source of coping. Social networks provide knowledge about which buttons are to be pushed, where one is more likely to find help, what decision of institutions may be false, and where one can stand up against a negative decision of an officer. In North Macedonia, peers are the first source of information about ways of improving the heating or energy efficiency of dwellings.

At the same time, the circle of friends and family reinforces mistrust in the system. Example: *“We often talk [about energy affordability] over family dinner. The recommendation is better insulation as well as finding a new type of heating. But the first reaction is mistrust in institutions, or conspiracy theories about the high electricity price” (MK1). GR6 also expresses that family helps while institutions do not: “I manage to survive thanks to my parents chipping in ... I have borrowed money from people in my inner circle but not from institutions, so nobody is after me.”* In this narrative (trust friends, not institutions), trust is a scarce and precarious thing to develop as TU4 illustrates: *“Due to negative experience, I tend to trust few friends and relatives that I checked their trust for so long. The reason is that I generally tend to consider people not trustworthy.”*

Peers helping each other find ways through institutional disrespect is a starting point for more organised support and social movements. RO1, a family that is part of a Roma community that was evicted from their neighbourhood, reports: *“We created a small association (of the people evicted). The Association of Roma from Coastei Street is the association's name. And then we began the fight*

together. The fight for our rights.” Social movements strengthen people’s self-esteem, remove feelings of shame, and instead turn the blaming towards the institutions. The trust in peers in social movements or NGOs, consequently, empowers energy-poor households while increasing distrust in government institutions and energy providers. The help experienced by NGOs stimulates interviewees to also assist others. GR3, after profiting from information and advice from peers, in turn, informed others about the social tariff. She advised other people to turn to the national provider instead of alternatives so as to take advantage of social billing.

In Spain, where energy poverty has been politicized and social movements have emerged, interviewees report how the individual feeling of guilt and shame has shifted to self-empowerment and opposition. Two interviewees (ES4, ES5) have profited from people’s collaboration through social movements and realized that their negative experiences were not their individual problem. Not feeling guilty and identifying common objectives allowed them to fight for access to energy, against disconnections, and to negotiate the payment of their debts. ES4 comments: *“I help other people with the same problems since the information is not easily accessible. In the end, people should help each other to overcome this issue of lack of energy. Social movements are an effective measure to address energy poverty and improve people’s empowerment.”*

Trust, thus, is an ambivalent source of coping. Trust in institutions (or in specific people working there) can enable people to better cope with energy poverty and with deprivation more generally. Social trust in peers and even in social movements enables people to combat sources of energy poverty but often co-occurs with distrust in institutions.

5. Discussion

Our findings suggest that trust or distrust is an inherent part of the lived experience of energy poverty [67]. The experience of energy poverty puts people in a situation where they consider themselves as having serious difficulties, that is difficulties that are perceived as an actual or potential threat to the functioning of their day-to-day lives. Because of this threat, energy poverty cannot be viewed only as a (technical) problem of low income, access to energy, or a poor building envelope. Energy poverty is rather a problem that puts people in a situation of vulnerability which relates to an essential aspect of their lives. The home does not fulfil one of its essential functions anymore, which is the function of providing an essential protection and feeling of security for the people who live in it.

By referring to the definition of vulnerability [76], emphasizing exposure to risk, sensitivity to perturbations, and adaptive capacities to cope with a stressor, we demonstrated how a lack of trust adds to the vulnerability of energy-poor households. Because a lack of trust reinforces people’s feeling of insecurity, their adaptive capacities may decrease. *Adaptive capacity* includes, among other elements, the ability of people to ask for help and to deal with procedures that aim at addressing energy poverty. This is where the concept of *institutional trust*, defined in the literature review as *process-based trust*, appears as an important factor. As shown in our interviews, trust, or lack thereof, needs to be viewed in the larger context of the life experiences of individuals. These include their lived experience of deprivation, their past interactions with institutions, their network of social relations, and elements of the wider national or regional context. The latter can include perceptions of the countries’ institutions overall – whether they are perceived as well-functioning or corrupt, for example. Under certain circumstances, contact with institutions generates trust and increases peoples’ adaptive

capacities. In other situations, contact with institutions destroys trust and undermines peoples' adaptive capacities [36, 76]. This implies that the way out of energy poverty is mediated through trust.

Understanding how institutions either create or destroy *process-based trust* thus emerges as highly important in the case of energy poverty. Energy poverty is different from income poverty in the sense that it is often addressed outside the traditional circuits of social assistance: specific schemes for energy poverty are in place in many countries, and a wider range of stakeholders (including energy suppliers) are involved in addressing it. This means that getting help and adapting to energy poverty is a distinct challenge for the affected households. As shown by the interviews, people feel that there is a specific complexity inherent to energy poverty due to the interwovenness of material, personal, and societal aspects. Being familiar with the assistance schemes in other domains is often not helpful for dealing with energy poverty schemes, because public stakeholders dealing with energy poverty are often different from those who deal with other difficulties of households. Moreover, contact persons in public institutions might have limited insight into the situation of energy poverty and applicable schemes. Finally, energy suppliers are part of the picture of getting help, which involves additional complexity for households ranging from understanding their bills, being able to contest wrong bills, difficulties in case of non-payment, managing debts, and managing the consequences of power cuts.

Our interviewees report various experiences in their contacts with institutions, often negative, sometimes positive. On the one hand, they report being faced with bureaucracy, and many mention experiences of powerlessness and unfair treatment resulting in a feeling of inferiority. These contribute both to lower generalised trust and low trust in specific institutions which then may result in prolonged or enhanced energy poverty. Some interviewees have met people in institutions or NGOs who made a difference, resulting in higher levels of social trust, but less so in higher levels of trust in the institutions themselves. This increased social trust may increase a household's coping capacities. Thus, here we find very similar effects related to trust that have been shown for social relations and for emotions [9, 10]: they can influence peoples coping capacities both in a positive or a negative way. Social trust in networks that distrust institutions altogether may also have ambivalent outcomes: it may empower people to fight for their rights, but it may also keep them from asking for help from institutions. The relations between energy poverty, people's experiences, and related contacts with institutions, and evolving (dis)trust are summarised in Figure 3.

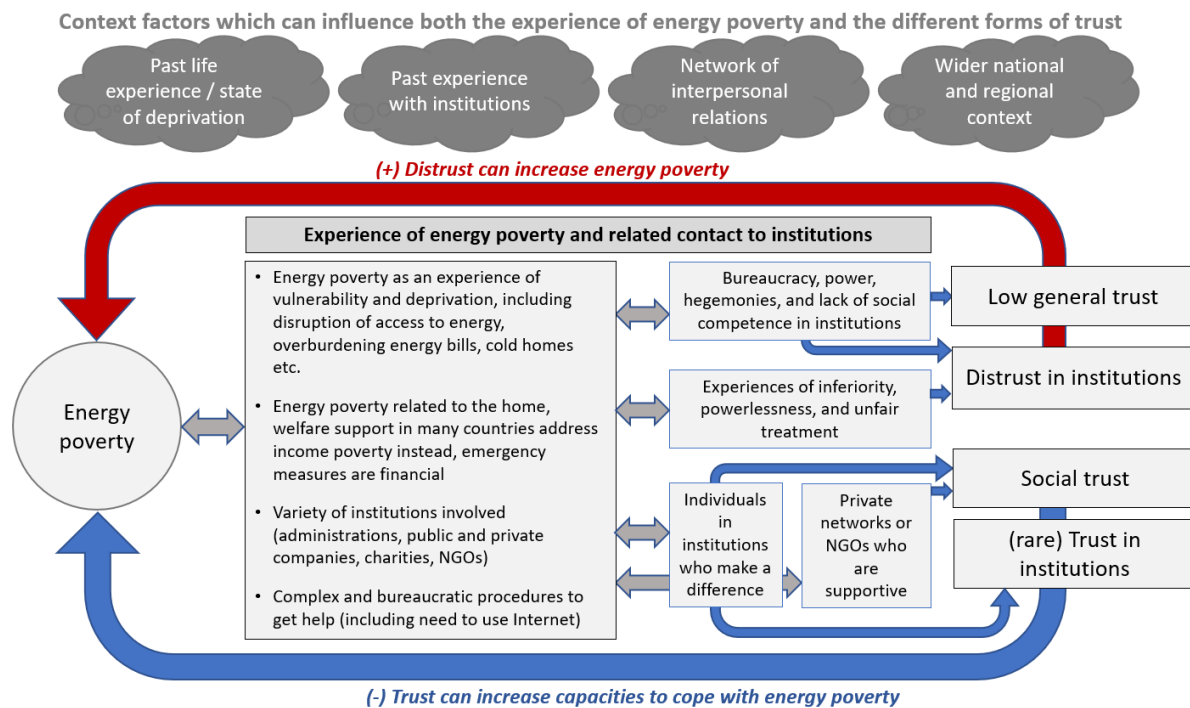


Figure 3: Patterns of energy poverty-trust relations and the mediating role of experience with institutions. Source: Authors.

Understanding the relation between energy poverty and trust requires looking not only at “objective” descriptors of energy poverty such as types of difficulties faced by households. It also requires considering peoples lived experiences of energy poverty and their experiences in the contact with institutions. These experiences do not exist in a vacuum: they are shaped by what we called “context factors”, which also influence the different dimensions of trust. The important element here is that the experiences of energy poverty and of contact with institutions as well as the dimensions of trust can increase or decrease peoples’ capacity to cope with energy poverty and to get the help they need.

Looking at the state of vulnerability associated with energy poverty puts a focus on the perceptions of insecurity that can be generated by situations of energy poverty. These perceptions of insecurity seem to become more or less intense in contact with institutions. This implies that for institutions to efficiently address the issue of energy poverty, they need not only propose technically sound solutions to help people, but they also need to create a climate of trust with those seeking help. The interviewees insisted on the various aspects that matter to them: feeling that people in institutions are competent to help them, but also that they are able to listen to them, to understand their specific difficulties, and to treat them with respect. For some interviewees, the human dimension when dealing with institutions goes even farther. One of the interviewees, who had experienced homelessness and various forms of severe deprivation, said about his route out of his difficulties: *“It is not me who trusted them, they trusted me”*.

Last but not least, a statement on the limits of this study is needed: As it is exploratory and qualitative nature, it does not allow for generalization, but rather discovers existing modes of the interrelation of energy poverty and trust, which needs further refining and testing with more substantial data sets. Despite an analysis of interviews from ten European countries, we do not compare these countries. Future research can do precisely this: bring in a comparative framework in which particular concepts such as cultural and political background, market structures, levels of corruption, or quality of

government can be used either in a qualitative logic as analytical dimensions or in a quantitative logic as variables in order to quantify the role trust plays in a context of energy. Ideally, future endeavours could be supported by cross-national datasets, such as European Values Survey or World Values Survey, which already collect data on generalized trust and institutional trust. This could be accomplished by adding specific items regarding energy providers and by capturing the levels of trust in certain institutions and processes which occur in energy poverty contexts, such as those involving social workers. We hope that the analysis presented above provides a first framework for such academic work.

6. Conclusion

The energy-poor households in our sample rarely exhibited generalised trust, that is trust in unfamiliar others based on a shared moral fabric [77]. With variations, they tend to distrust general society, along with its institutions including the political system, welfare state institutions, and private companies. In such a context of distrust in society, our interviewees' experiences with institutions are mainly negative and discourage the formation of trust. Our study confirms the mechanism that the lived experience of (energy) poverty increases the trusters' vulnerability when in contact with powerful institutions. People clearly see how they depend on the decisions of officers, social workers, and clerks, and they report feelings of inferiority and powerlessness. A "them" versus "us" pattern of perception is prevalent. However, positive experiences with institutions lead to trust in persons, in individual officers or social workers, while the general notion of distrust is retained. Trust tends to be personalized while distrust concerns institutions and society, which is underlined by the emphasis on social networks and families when it comes to existing trust. This may explain why positive experiences are personalized, the officer is not part of "them"—he or she is an exception to the rule.

If generalised trust is a "knowledge of how society generally works" [26], then the overall picture that derives from our interviews is that energy-poor people assume society in general does not work for them. This meets the observations of e.g. Holmberg and Rothstein [43] that vulnerable people display consistently lower levels of trust. While our data are not appropriate to investigate how this relates to energy-poor people's propensity to populist and anti-democratic orientations, we know from the literature that distrust in institutions, corporations, experts, and political leaders has been linked to the adherence to conspiracy theories [77, 78], both as an explanation [79] and as an outcome [80]. Our paper has shown that the energy poor relate the problems they experience to the profit-making strategies of providers, the stubbornness and stinginess of street level bureaucrats, corrupt politicians, or inefficient administrations. We also showed how the state of being energy poor can foster a lack of both *institutional* and *generalized trust*. Pending further research that would test this claim, this implies that energy poverty may lead to the negative externalities related to mistrust in society mentioned above. At the same time, our research has shown how institutions can help bring people out of energy poverty and how institutions can build not only *institutional trust*, but ultimately also *generalized trust* through a perseverate display of "*trustworthy*" behaviour towards the energy-poor.

Finally, our study also shows how the loss—or less often the gain—of trust interacts with the capacity of people to adapt to the difficulties they meet when they are energy poor. A policy implication is that *how* institutions deal with energy-poor people plays an important role in efficiently addressing energy poverty. Transparent and reliable communication certainly is a first step, a client-centred approach

that recognises people as humans with feelings and needs; existing models of mediators like ombudsmen are another low-threshold-option [81] while enforcing energy rights⁶ would be require more structural changes.

7. References

- [1] K. Jenkins, D. McCauley, H. Stephan, R. Rehner, Energy justice: A conceptual review, *Energy Research & Social Science* 11 (2016) 174–182. <https://doi.org/10.1016/j.erss.2015.10.004>.
- [2] K. Grossmann, A. Kahlheber, Energy Poverty in an intersectional perspective: On multiple deprivation, discriminatory systems, and the effect of policies, in: N. Simcock, H. Thomson, S. Petrova, S. Bouzarovski (Eds.), *Energy Poverty and Vulnerability: A Global Perspective*, Routledge Explorations in Energy Studies, 2017, pp. 12–32
- [3] S. Sareen (Ed.), *Enabling Sustainable Energy Transitions. Practices of legitimation and accountable governance*, Palgrave MacMillan, 2020.
- [4] B. Boardmann, *Fuel Poverty: From Cold Homes to Affordable Warmth*, Belhaven Press, 1991.
- [5] N. Simcock, H. Thomson, S. Petrova, S. Bouzarovski (Eds.), *Energy Poverty and Vulnerability: A Global Perspective*, Routledge Explorations in Energy Studies, 2017.
- [6] D. Putnam, What makes democracy work?, *National Civic Review* 82(2) (1993) 101–107. <https://doi.org/10.1002/ncr.4100820204>.
- [7] G. Jigla, A. Sinea, U. Dubois, P. Biermann, *Perspectives on Energy Poverty in Post-Communist Europe*, Routledge, 2020.
- [8] S. Bouzarovski, S. Petrova, A global perspective on domestic energy deprivation: Overcoming the energy poverty- fuel poverty binary, *Energy Research & Social Science* 10 (2015) 31–40. <https://doi.org/10.1016/j.erss.2015.06.007>.
- [9] P. Ambrosio-Albala, L. Middlemiss, A. Owen, T. Hargreaves, N. Emmel, J. Gilbertson, A. Tod, C. Snell, C. Mullen, N. Longhurst, R. Gillard, From rational to relational: How energy poor households engage with the British retail energy market, *Energy Research & Social Science*, 70 (2020), 101765. <https://doi.org/10.1016/j.erss.2020.101765>.
- [10] N. Longhurst, T. Hargreaves, Emotions and fuel poverty: The lived experience of social housing tenants in the United Kingdom, *Energy Research & Social Science* 56, 2019, 101207. <https://doi.org/10.1016/j.erss.2019.05.017>.
- [11] S. Oskarsson, T. Svensson, P. Öberg, Power, Trust, and Institutional Constraints: Individual Level Evidence, *Rationality and Society* 21(2) (2009) 171–195. <https://doi.org/10.1177/1043463109103898>.
- [12] C. Offe, How can we trust our fellow citizens, in: M.E. Warren (Eds.), *Democracy and Trust*, Cambridge University Press, 1999, pp. 42–87.
- [13] G. Moellering, *Trust: Reason, Routine, Reflexivity*, Emerald Publishing Group, 2006.
- [14] J. P. Voss, Innovation of governance: The case of emissions trading, in: M.J. Arentsen, W. van Rossum, A. E. Stenge (Eds.), *Governance of innovation: Firms, clusters and institutions in a changing setting*, Cheltenham Edward Elgar, 2010, pp. 125–148.
- [15] J. Urpelainen, The origins of social institutions, *Journal of Theoretical Politics* 23(2) (2011) 215–240. <https://doi.org/10.1177/09516298114004732011>.
- [16] J.O. Hertzler, *American Social Institutions - A Sociological Analysis*, Allyn & Bacon Inc, 1961.

⁶ <https://righttoenergy.org/2019/07/15/a-right-to-energy-or-energy-rights/>

- [17]R. Greenwood, C. Olivier, K. Sahlin, R. Suddaby, Introduction, in: R. Greenwood, C. Oliver, K. Sahlin, R. Suddaby (Eds.), *The SAGE handbook of organizational institutionalism*, London Sage, 2008, pp. 1–46.
- [18]J. C. Lammers, J. B. Barbour, An Institutional Theory of Organizational Communication, *Communication Theory* 16 (2006) 356–377. <https://doi.org/10.1111/j.1468-2885.2006.00274>.
- [19]G. Moellering, Rational, Institutional and Active Trust: Just Do It!?, in: K. Bijlsma-Frankema, R. Klein Woolthuis (Eds.), *Trust under Pressure - Empirical Investigations of Trust and Trust Building in Uncertain Circumstances*, Edward Elgar Publishing Ltd, 2005, pp. 17–36.
- [20]P. Selznick, *TVA and the grass roots: A study in the sociology of formal organization*. Berkeley, CA University of California Press, 1949.
- [21]G. Kayakutlu, Complexity in Energy Systems, in: C. Kahraman, G. Kayakutlu, *Energy Management – Collective and Computational Intelligence with Theory and Applications*, Springer, 2018, pp. 3–13.
- [22]C.S.E. Bale, L. Varga, T.J. Foxon, Energy and complexity: New ways forward, *Applied Energy* 138 (2015) 150–159. <https://doi.org/10.1016/j.apenergy.2014.10.057>.
- [23]R. Caferra, A. Colasante, A. Morone, The less you burn, the more we earn: The role of social and political trust on energy-saving behaviour in Europe, *Energy Research & Social Science* 71 (2021). <https://doi.org/10.1016/j.erss.2020.101812>
- [24]M. de Wilde, The sustainable housing question: On the role of interpersonal, impersonal and professional trust in low-carbon retrofit decisions by homeowners, *Energy Research & Social Science* 51 (2019), 138–147. <https://doi.org/10.1016/j.erss.2019.01.004>
- [25]E. Uslaner, *The Moral Foundation of Trust*, 2002, prepared for Symposium “Trust in the Knowledge Society,” University of Jyväskylä, Finland, 20 September 2002. <https://doi.org/10.2139/ssrn.824504>.
- [26]K. Newton, Social and Political Trust, in: R.J. Dalton, H.-D- Klingemann (Eds.), *The Oxford Handbook of Political Behavior*, Oxford: Oxford University Press, 2007, 344.
- [27]D. De Cremer, T.R. Tyler, The effects of trust in authority and procedural fairness on cooperation, *Journal of Applied Psychology* 92(3) (2007) 639–649. <https://doi.org/10.1037/0021-9010.92.3.639>.
- [28]E. Lorenz, Trust, contract and economic cooperation, *Cambridge Journal of Economics* 23(3) (1999) 301–315. <https://doi.org/10.1093/cje/23.3.301>.
- [29]H. Farrell, Trust and Political Economy: Institutions and the Sources of Interfirm Cooperation, *Comparative Political Studies* 38(5) (2005) 459–483. <https://doi.org/10.1177/0010414004273506>.
- [30]S. Oskarsson, P. O. Oberg, T. Svensson, Making Capitalism Work: Fair Institutions and Trust, *Economic and Industrial Democracy*, 30(2) (2009) 294-320. <https://doi.org/10.1177/0143831X09104044>.
- [31]T. K. Ahn, J. Esarey, A Dynamic Model of Generalized Trust, *Journal of Theoretical Politics* 20(2) (2008) 151–180. <https://doi.org/10.1177/0951629807085816>.
- [32]A. Giddens, *The Consequences of Modernity*, Stanford University Press, 1990.
- [33]T. Kelleher, Conversational Voice, Communicated Commitment and Public Relations Outcomes, *Journal of Communication* 59 (2009) 172–188. <https://doi.org/10.1111/j.1460-2466.2008.01410>.
- [34]D. Anderson, J. Leahy, P. Jakes, M. Davenport, Building Trust in Natural Resource Management Within Local Communities: A Case Study of the Midewin National Tallgrass Prairie, *Environmental Management* 39 (2007) 353–368. <https://doi.org/10.1007/s00267-006-0016-1>.

- [35] P.S. Ring, A.H. van de Ven, Developmental Processes of Cooperative Interorganizational Relationships, *The Academy of Management Review* 19 (1994) 90–118. <https://doi.org/10.2307/258836>.
- [36] B. G. Robbins, Institutional Quality and Generalized Trust: A Nonrecursive Causal Model, *Social Indicators Research* 107(2) (2012) 235–258. <https://doi.org/10.1007/s11205-011-9838-1>.
- [37] M. Deutsch, Cooperation and trust: Some theoretical notes, in: M. R. Jones (Ed.), *Nebraska Symposium on Motivation*, University Nebraska Press, 1962, pp. 275–320.
- [38] W. Mishler, R. Rose, What are the Origins of Political Trust? Testing Institutional and Cultural Theories in Post-Communist Societies, *Comparative Political Science* 34(1) (2001) 30–62. <https://doi.org/10.1177/0010414001034001002>.
- [39] L. G. Zucker, Production of trust: Institutional sources of economic structure, *Research in Organizational Behavior* 8 (1986) 53–60.
- [40] B. Rothstein, Trust, Social Dilemmas and Collective Memories, *Journal of Theoretical Politics* 12(4) (2000) 477–501. <https://doi.org/10.1177/09516928000120040072000>.
- [41] T. K. Ahn, Trust and Collective Action: Concepts and Causalities, paper presented at the annual meeting of the American Political Science Association, Boston, 28 August - 1 September 2002.
- [42] H. Liu, H. Gao, Q. Huang, Better Government, Happier Residents? Quality of Government and Life Satisfaction in China. *Social Indicators Research* 147 (2020) 971–990. <https://doi.org/10.1007/s11205-019-02172-2>.
- [43] S. Holmberg, B. Rothstein, Social Trust – The Nordic Gold, QoG Working Paper 1, April 2020. <https://www.socialeurope.eu/wp-content/uploads/2020/04/socialtrust.pdf>.
- [44] S. Kumlin, B. Rothstein, Making and Breaking Social Capital. The Impact of Welfare State Institutions, *Comparative Political Studies* 38 (2005) 339–365. <https://doi.org/10.1177/0010414004273203>.
- [45] L. J. Glanville, P. Paxton, How do We Learn to Trust? A Confirmatory Tetrad Analysis of the Sources of Generalized Trust, *Social Psychology Quarterly* 70(3) (2007) 230–242. <https://doi.org/10.1177/019027250707000303>.
- [46] A. Alesina, E. La Ferrara, Who trusts others?, *Journal of Public Economics* 85(2) (2002) 207–234. <https://EconPapers.repec.org/RePEc:eee:pubeco:v:85:y:2002:i:2:p:207-234>.
- [47] Y. Li, A. Pickles, M. Savage, Social Capital and Social Trust in Britain, *European Sociological Review* 21(2) (2005) 109–123. <https://doi.org/10.1093/esr/jci007>.
- [48] O. Patterson, Liberty against the democratic state: On the historical and contemporary sources of American distrust, in: M.E. Warren (Ed.), *Democracy and Trust*, Cambridge University Press, 1999.
- [49] J. Brehm, W. Rahn, Individual-level evidence for the causes and consequences of social capital, *American Journal of Political Science* 41(3) (1997) 999–1023. <https://doi.org/10.2307/2111684>.
- [50] G. Jigla, Conclusions: Energy Poverty as a Threat to Democracy in Post-Communist Countries, in: G. Jigla, A. Sinea, U. Dubois, P. Biermann (Eds.), *Perspectives on Energy Poverty in Post-Communist Europe*, Routledge, 2020 (in print).
- [51] M. E. Warren, Democratic theory and trust, in: M. E. Warren (Ed.), *Democracy & Trust*, Cambridge University Press, 1999, pp. 310–345. <https://doi.org/10.1017/CBO9780511659959>.
- [52] P. Rosanvallon, A. Goldhammer, *Counter-Democracy: Politics in an Age of Distrust (The Seeley Lectures)*. Cambridge University Press, 2008, 261.
- [53] W. Tov, E. Diener, The Well-Being of Nations: Linking Together Trust, Cooperation, and Democracy, in: E. Diener (Ed.), *The Science of Well-Being. The Collected Works of Ed Diener*, Springer, 2009, pp. 155–173.

- [54]A. Deaton, Income, Health, and Well-Being around the World: Evidence from the Gallup World Poll, *Journal of Economic Perspectives* 22(2) (2008) 53–72. <https://doi/10.1257/jep.22.2.53>.
- [55]R. Inglehart, C. Welzel, *Modernization, Cultural Change, and Democracy: The Human Development Sequence*, Cambridge University Press, 2005.
- [56]S. Buzar, *Energy Poverty in Eastern Europe: Hidden Geographies of Deprivation*, Ashgate, 2007.
- [57]D. Uerge Vorsatz, S.T. Herrero, Building synergies between climate change mitigation and energy poverty alleviation, *Energy Policy* 49 (C) (2012) 83–90. <https://doi/10.1016/j.enpol.2011.11.093>.
- [58]S. Jones, Social Causes and Consequences of Energy Poverty, in: K. Csiba (Ed.), *Energy Poverty Handbook*. European Union, 2016, pp. 21-38.
- [59]R. Day, G. Walker, N. Simcock, Conceptualising energy use and energy poverty using capabilities framework, *Energy Policy* 93 (2016), p. 255. <https://doi/10.1016/j.enpol.2016.03.019>.
- [60]H. Thomson, C. Snell, S. Bouzarovski, S. Health, Well-Being and Energy Poverty in Europe: A Comparative Study of 32 European Countries. *International Journal Environmental Reserch Public Health* 14(6) (2017), p. 584. <https://doi/10.3390/ijerph14060584>.
- [61]H. Welsch, P. Biermann, *Energy Prices, Energy Poverty and Well-Being: Evidence for European Countries*, No. V-369-14, Working Papers, University of Oldenburg, Department of Economics, 2014. <https://EconPapers.repec.org/RePEc:old:dpaper:369>.
- [62]P. Nussbaumer, F. Nerini, I. Onyeji, M. Howells, Global Insights Based on the Multidimensional Energy Poverty Index (MEPI), *Sustainability* 5 (2013) 2060–2076. <https://doi/10.3390/su5052060>.
- [63]Caritas, C. Liddell, When Energy is not Affordable: Health and well-being impacts of energy poverty. <https://www.caritas-germany.org/focus/currentissues/when-energy-is-not-affordable-health-and-wellbeing-impacts-o>, 2016 (accessed 19 September 2020).
- [64]R. Scheidegger, C. Staerke, Political Trust and Distrust in Switzerland: A Normative Analysis, *Swiss Political Science Review* 17 (2011) 164–187, p. 180. <https://doi/10.1111/j.1662-6370.2011.02010>.
- [65]J. van der Toorn, M. Feinberg, J.T. Jost, A.C. Kay, T.R. Tyler, R. Willer, C. Wilmuth, A Sense of Powerlessness Fosters System Justification: Implications for the Legitimation of Authority, Hierarchy, and Government, *Political Psychology* 36 (2014) 93–110. <https://doi/10.1111/pops.12183>.
- [66]S. Marien Political Trust. An Empirical Investigation of the Causes and Consequences of Trust in Political Institutions in Europe, PhD thesis dissertation, 2011. <https://lirias.kuleuven.be/handle/123456789/308122>.
- [67]L. Middlemiss, R. Gillard, Fuel poverty from the bottom-up: Characterising household energy vulnerability through the lived experience of the fuel poor, *Energy Research & Social Science* 6 (2015) 146–154. <https://doi/10.1016/j.erss.2015.02.001>.
- [68]N. Teschner, A. Sinea, A. Vornicu, T. Abu-Hamed, M. Negev, Extreme energy poverty in the urban peripheries of Romania and Israel: Policy, planning and infrastructure, *Energy Research & Social Science* 66 (2020). <https://doi.org/10.1016/j.erss.2020.101502>.
- [69]B.K. Sovacool, J. Axsen, S. Sorrell, Promoting novelty, rigor, and style in energy social science: towards codes of practice for appropriate methods and research design, *Energy Research & Social Science* 45 (2018) 12–42. <https://doi.org/10.1088/1748-9326/ab8a84>.
- [70]K.F. Punch, *Introduction to social research: quantitative and qualitative approaches*, 2005, 2nd ed. London; Thousand Oaks, Calif.: Sage Publications.
- [71]M. Schreier, Qualitative content analysis, in: U. Flick (Ed.), *The SAGE handbook of qualitative data analysis*, SAGE Publications Ltd, 2013.

- [72] M.B. Miles, A.M. Huberman, J.Saldana, *Qualitative data analysis: a methods sourcebook*, third ed., Thousand Oaks, California Sage Publications, 2014.
- [73] H. Thomson, S. Bouzarovski, *Addressing Energy Poverty in the European Union: State of Play and Action*. EU Energy Poverty Observatory, 2018 (updated 2019).
<https://www.energy-poverty.eu/publication/addressing-energy-poverty-european-union-state-play-and-action>.
- [74] J. Castellano, E. de la Nuez, C.Tarín, *Estudio sobre las puertas giratorias en la administración general del estado y el papel de la oficina de conflictos de intereses*, Fundación Hay Derecho por una sociedad cívica, 2017. https://hayderecho.com/wp-content/uploads/2017/04/Estudio-sobre-Puertas-Giratorias_Vconsolidada-2.pdf.
- [75] geea (Allianz für Gebäude-Energie-Effizienz) *Energieeffizienz in Gebäuden: hoher Handlungsdruck, hohes Potenzial*,
https://www.dena.de/fileadmin/dena/Dokumente/Themen_und_Projekte/Gebaeude/geea/geea-Politikbrief_April_2016.pdf, 2016 (accessed 19 September 2020).
- [76] W.N. Adger, *Vulnerability*, *Global Environmental Change* 16(3) (2006) 268–281.
- [77] B. Castanho Silva, F. Vegetti, L. Littvay, *The Elite Is Up to Something: Exploring the Relation Between Populism and Belief in Conspiracy Theories*, *Swiss Political Science Review* 23 (2017) 423–443. <https://doi.org/10.1111/spsr.12270>.
- [78] T. Goertzel, *Belief in Conspiracy Theories*, *Political Psychology* 15(4) (1994) 731–742.
<https://doi/10.2307/3791630>.
- [79] S. Aupers, *Trust no one: Modernization, paranoia and conspiracy culture*, *European Journal of Communication* 27(1) (2012) 22–34. <https://doi/10.1177/0267323111433566>.
- [80] K. L. Einstein, D. M. Glick, *Do I think BLS data are BS? The consequences of conspiracy theories*, *Political Behavior* 37(3) (2015) 679–701. <https://doi.org/10.1007/s11109-014-9287-z>.
- [81] M. Hesselman, S.T. Herrero, *New narratives and actors for citizen-led energy poverty dialogues*. ENGAGER, 2020. http://www.engager-energy.net/wp-content/uploads/2020/09/WG3-Policy-Brief_Sept-2020.pdf (accessed 31 December 2020).
- [82] L. Pritchett, Lant, Asep Suryahadi, Sudarno Sumarto, *Quantifying Vulnerability to Poverty. A proposed measure, applied to Indonesia*. World Bank Policy Research Working Papers, 2000.
- [83] E. Ligon, L. Schechter, *Measuring Vulnerability*, *The Economic Journal* 113 (2003) C95-C102.