



# EnergyMeasures

Tailored measures supporting energy vulnerable households

D1.3

## Citizen views on policy needs for energy poverty alleviation

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## About EnergyMeasures

EnergyMEASURES is working to address energy poverty in seven European countries, namely: Belgium, Bulgaria, Ireland, Netherlands, North Macedonia, Poland and the United Kingdom. The project comprises two complementary and synergistic strands of work.

The first strand involves working with energy poor households to improve their energy efficiency through a combination of low-cost measures, and changes in energy-related behaviours and practices. Recruited householders will be provided with low-cost energy measures and empowered to change their energy-related behaviours and practices through an approach that takes account of existing housing conditions and is reflective of their lived experience.

The second strand comprises working with municipalities, energy authorities, housing associations and other relevant actors to assess how current multi-level institutional contexts affect efforts to alleviate energy vulnerability in the participating countries. This knowledge will be used to develop and support the implementation of policy and practice measures which will address structural issues that combine to trap households in energy poverty.

Through this work the project contributes to reducing participants' vulnerability to energy poverty, while at the same time cutting household energy consumption and associated GHG emissions.

For more information see <http://www.energymeasures.eu>

***Description of the deliverable and its purpose***

This deliverable presents an analysis of the interviews conducted with citizens and stakeholder organisations in the seven focal countries, in order to identify expressed citizen experiences with institutional support and their experienced needs for support. The analysis shows that next to the policy needs that related to the structural causes of energy poverty that need to be addressed, several needs expressed relate to support provided by intermediary organisations. The findings point towards the importance of strengthening social resilience and how intermediary organisations are better positioned and equipped to do this than institutional actors. The analysis also reveals that various intermediaries (aim to) go beyond mere behavioural change interventions, in efforts to strengthen peoples' capabilities to cope with energy poverty. These findings provide relevant points of departure for subsequent work in the EnergyMeasures project.

## ***Glossary***

DoA	Description of Action
BER	Building Energy Rating
CRU	Commission for Regulation of Utilities
HES	Home Energy Scotland
NGO	Non-Governmental Organisation
MABS	Money Advice and Budgeting Service
PSO	Public Service Obligation (levy)
SEAI	Sustainable Energy Authority of Ireland
SAP	Standard Assessment Procedure
SVP	Society of St. Vincent de Paul
WP	Work Package

## 1 Introduction

This deliverable reports on the work conducted within the context of Task 1.3. The aim of T1.3 was to collect diverse perspectives from citizens in local communities in the focal countries (Belgium, Bulgaria, Ireland, Netherlands, North Macedonia, Poland and the United Kingdom), based on their experiences of institutional support in reducing energy vulnerability and assessing their needs for institutional support.

Due to ongoing Covid-19 restrictions in place in each focal country, the partners were unable to conduct large numbers of in-depth face-to-face interviews with citizens, or focus groups, which formed the original approach for T1.3. Instead, it was decided to conduct remote engagements and to combine citizen interviews with stakeholder interviews (stakeholders are the organisations that work with energy poor households). This document therefore reports on the insights collected during interviews held with citizens and relevant stakeholders in all seven participating countries and discusses these given the following overarching questions:

- *What are the experiences of citizens faced with energy poverty?*
- *What are the experiences of citizens with policy and or (other types of) institutional support (in alleviating energy poverty)?*
- *How can interventions better take into account the specific needs of energy poor households?*

### 1.1 Organisation of the report

This report is organised in the following manner. First, in the remainder of this introductory section we briefly discuss how citizen experiences provide relevant insights for designing and implementing interventions. Next, the methods section elaborates how we have organised and structured the empirical work and the analysis. Section 3 provides analytical descriptions for each country. Subsequently, Section 4 discusses these findings and Section 5 draws preliminary conclusions based on the analysis of citizen perspectives, stakeholder perspectives as well as supporting literature.

### 1.2 Connections to other activities and tasks in the EnergyMeasures project

The preliminary conclusions and suggestions will be considered by the partners working on the engagement of households (WP2) to explore if these may help to improve (aspects of) the engagement strategies in each of the focal countries. The outcomes of Task 1.3 will also be taken as a point of departure in Task 1.4, which looks into how existing institutional contexts support the alleviation of energy poverty. Finally, the work done in Task 1.3 also provides a starting point for WP3, which is about the co-development of innovative governance practices to alleviate energy poverty.

### 1.3 Citizen experiences to inform approaches to alleviate energy poverty

It has been pointed out before that how policy is designed and implemented often does not match with the experiences of households in energy poverty (Middlemiss *et al.* 2018). Policies tend to be designed from a technical perspective, often lacking a proper alignment with household needs. Also, policies from different

domains often conflict with one another. Furthermore, policy ambitions can be unrealistic and insufficiently recognise the difficulties that households struggle with (Breukers *et al.* 2018). The result is that policy support is under-used, or that it does not reach the groups that most need it.

Next to the observation that policy measures may not be aligned to the specific needs of groups, recent studies (Longhurst and Hargreaves 2019; Grossmann *et al.* 2021) also reveal the difficulties in the interactions between what we may call – drawing on the work of Habermas (1981)– the ‘system’ and the ‘lifeworld’ of daily life. The system (of state and markets) is where the institutional support is coming from, and where ways-of-doing are based on “instrumental rationality” that require far-reaching specialisation. The system works to a significant degree independently from (and ignorant of) the lifeworld, and, conversely, while systems like the state and markets do serve to integrate individuals in large-scale society, the inner workings of the system tend to become inaccessible to non-members. In the lifeworld itself, meanwhile, interaction is characterised by the ‘communicative rationality’ through which people share experiences and attempt to reach mutual understanding. Where these worlds meet, mismatches or confrontations are liable to be the result. These may result in the withdrawal of the latter.

Negative (emotional) experiences that involve encounters with institutional support providers can thus increase energy poverty when such decisions to withdraw mean that they are excluded from support (Longhurst and Hargreaves 2019; Grossmann *et al.* 2021). For this report, we should therefore be on the lookout for negative (emotional) experiences. Where the mismatch between the institutional system and people’s daily life worlds results in friction, it raises the question of what (and who) is needed to bridge this gap.

Citizen experiences with energy poverty and with (institutional) support, as well as their stated support needs, are therefore very relevant to learn how to support mechanisms and interventions that can alleviate their situation of energy poverty and enhance their ability to cope. We have used the concept of social resilience to analyse the citizen experiences – social resilience referring to the personal, social and environmental resources that people can draw upon to cope with daily challenges and changing circumstances (Van der Haar *et al.* 2018).

## 2 Methodology

### 2.1 Scope and limitations due to Covid-19

Ongoing Covid-19 measures have significantly influenced the approach taken in T1.3. Consequently, we start by discussing their impact on the planning and implementation of T1.3 activities and examining the adaptation strategies taken.

As pointed out before, Task 1.3 was to be based predominantly on direct interactions with citizens in the participating countries. For a while there was the expectation that it might become possible to interview citizens offline, in safe outdoor settings, however this expectation has not materialised. In addition, possibilities to align with recruitment for the engagement activities (WP2) were also absent since the WP2 recruitment has been curtailed in nearly all participating countries for the same reasons.

After much consideration, by the end of 2020 it was decided to take a modified approach and include stakeholder interviews – by stakeholders we mean organisations that work with energy poor households – as part of the T1.3 activities. Considering that recruiting and interviewing stakeholders organisations via online meetings or by telephone conversations would be less difficult than recruiting households for interviews in a lock-down situation, we decided to start with the stakeholders in each country. Our hope that, after concluding the stakeholder interviews, the situation might have improved and allowed for live/offline interviews with citizens, turned out not to be the case.

The recruitment of citizens was mostly based on leveraging existing contacts within the wider networks of consortium partners – directly or indirectly. Most partners could reach out to particular groups in society that now face additional challenges (*e.g.*, minority groups). Some efforts at ‘cold’ recruitment – *e.g.*, letters distributed to households by Eindhoven Municipality – were attempted but proved unsuccessful. Relying on existing contacts furthermore meant that some interviewees included people who have had experience with energy poverty in the past, but currently no longer dealt with (extreme) energy poverty, due to the support they have received from the project partners (this goes for some interviews in Belgium, the Netherlands, North Macedonia and Bulgaria).

Not only the recruitment but also the conducting of interviews was affected by the Covid-19 measures. Doing remote interviews with citizens has several significant disadvantages. An in-person encounter provides more possibilities for a pleasant conversation, not in the least because of non-verbal communication. Other significant disadvantages include not being able to see and experience their home and discuss what you see; another is not being able to also engage in (informal) conversation with other household members.

Because of these limitations, we have not only resorted to additional stakeholder interviews, but also to existing studies based on qualitative research on citizen perspectives, experiences and emotions concerning energy poverty (Grossmann *et al.* 2021; Longhurst and Hargreaves 2019; Middlemiss *et al.* 2018). Using both the stakeholder interviews and these studies to reflect on the citizen interview findings allows us to discuss the findings and draw preliminary conclusions that are of use for subsequent work.

## ***2.2 Research approach, data collection and analysis***

In short, the limitations and impacts due to the Covid-19 situation (on both the number and on the quality of citizen interviews) have been mitigated by adding stakeholder interviews and cross-referencing the results with previous studies that focus on experiences of energy poor households. Triangulating between these three sources we have been able to advance our understanding of the nature and operation of measures that support citizens living in energy poverty.

Practically speaking, consortium partners in the seven countries have recruited interviewees, conducted the interviews (65 in total) and reported the findings back to the lead partner (DuneWorks). Since not all partners have a social science background or other related experience in doing interviews, Interview Guidelines were developed (Appendix 1). These guidelines were discussed at the regular online meetings with the partners. These meetings were also used to discuss progress and to exchange experiences (*e.g.*, difficulties in recruiting households). The number of interviews in each partner country is shown in Table 1. As the table makes clear, we were able to achieve decent samples from both our respondent categories.

**Table 1 Interviews conducted in the participating countries (Dec 2020 - May 2021)**

	Citizen interviews	Stakeholder interviews
Belgium	5	5
Bulgaria	6	3
Ireland	4	8
Netherlands	6	8
North Macedonia	6	4
Poland	2	2
UK	3	3
Total	32	33

The focus of T1.3 was on understanding institutional support from the perspective of citizens. Table 2 summarises the overarching research questions, how they are addressed and to what aim.

**Table 2: Questions, methods, aims**

Overarching questions	Answers based on:	Aim
What are the experiences of citizens faced with energy poverty?	Interviews: expressions of experiences and emotions which affect wellbeing.	Enable/strengthen/improve recognition and understanding of these experiences so that interventions better take account of this.
What are the experiences of citizens with policy and or (other types of) institutional support (in alleviating energy poverty)?	Interviews: types of support discussed/brought up by citizens and stakeholders concerning experienced needs (to what extent are existing policy measures aligned to the specific needs of energy poor households). Interviews: experiences with interactions with (institutional) support providers – when brought up in the interviews by citizens and stakeholders.	Understand what is needed for a better alignment of interventions with citizen needs and possibilities.  Understand what is needed to improve the interactions between citizens and institutional actors.
How can interventions better take into account the specific needs of energy poor households?	Based on the analysis of answers on questions 1 and 2, and with reference to relevant literature.	Provide a basis for subsequent work in the EnergyMeasures project.

Templates to conduct semi-structured interviews have been developed (Appendix 2). The partners translated these into their respective languages. Items addressed in the interviews include the following:

- Housing situation, living circumstances;
- (Views on) experiences of energy poverty (including emotions) and coping mechanisms;
- Available support for energy poor household;
- Evaluation of (different forms of) support;
- Paying the energy bill;
- Efforts to decrease the energy bill;
- Impacts of Covid-19 on the situation at home, specifically on energy poverty situation;
- The role that stakeholders (should) adopt in addressing energy poverty;
- Contact with peers (*e.g.*, sharing experiences; taking action collectively);
- Actions to improve the situation and need for support.

Together with Het PON & Telos, DuneWorks collected the interview reports and compiled overviews of relevant findings based on the items listed above, distinguishing between citizen interview findings and stakeholder interview findings. Based on these overviews, analytical descriptions have been written for each country, presented in the following section. While these descriptions should not be considered representative for each country as a whole – the number of citizen interviews is too limited to enable an in-depth reflection on the existing (lack of) policy support available in each country – they do offer a number of useful insights into the lived experience of energy vulnerable households, particularly in relation to the inequalities people are coping with during the Covid-19 pandemic.

In Section 4, a conceptual perspective on social resilience is introduced to enable an analysis across all countries which allows us to compile an overview of (policy) support needs based on expressed citizen experiences, supported by stakeholder explanations of the supportive contexts in those countries.

## 3 Findings

### 3.1 Belgium

**Table 3 Stakeholder and citizen interviews in Belgium**

Reference in the text*	Description
BE_SH1	Vito – Energy research organisation with a predominantly technical orientation, but also involved in a project that addressed energy poverty
BE_SH2	Samenlevingsopbouw (SO): SO is a community development non-profit that works to address poverty & energy poverty for over 20 years.
BE_SH3	University of Antwerp: interviewee is an academic staff member at USAB (University Foundation for Poverty Reduction)
BE_SH4	Energie ID: Energie ID offers a platform on which meter readings and consumption data for energy, water, mobility and waste can be kept.
BE_SH 5	HERWIN: HERW!N is the federation of social entrepreneurs, working on circular economy themes. But they also organise the Energiesnoeiers, that implement energy-saving measures
BE_C1	Elderly female homeowner - living with grown-up son
BE_C2	Middle-aged male renting a private apartment – co-habiting with his parents, and his wife and children
BE_C3	Middle-aged male social housing tenant
BE_C4	Young female, private apartment tenant - living alone
BE_C5	Elderly female, private apartment tenant - living alone
BE_C6	Middle-aged male, home owner – living alone

\*BE: Belgium; SH: stakeholder; C: citizen

#### 3.1.1 Experiences of energy poverty

##### **(citizen interviews)**

The Belgium citizen interviewees include two home owners, a social housing tenant, and three private tenants. One interviewee (BE\_C1), an elderly woman, lives with her grown-up son. Another one (BE\_C2) is a middle-aged man (originally from Africa) who lives with his parents, his wife and two teenage children in a very small apartment. The others (BE\_C3, BE\_C4, BE\_C5, BE\_C6) live on their own.

The citizens interviewed indicate that they mainly suffer from dampness and mould in their homes. In addition, their roofs are leaky, and draughts enter the house through the (closed) windows and from under the door. Most of the interviewees (BE\_C2, BE\_C3, BE\_C4) have single glazed windows in their homes. They indicate that they have to use a lot of energy to heat their homes. Two of them (BE\_C2, BE\_C4) explain that they sometimes have to set the thermostat between 25 and 30 degrees to warm up their homes. Most interviewees like their house, but they would like to see their landlord or the housing association take action and do something about the energy-related problems. One interviewee (BE\_C2) lives with a large family in a

very small apartment and is very dissatisfied and would very much like to move out. He would like to get a social housing apartment, but is aware that these are not easily available. A larger private rented house, where his whole family would fit into, is too expensive for him. One interviewee (BE\_C6) used to live in a social housing apartment, which had no insulation and no central heating, so his house was extremely cold. Now, he lives in another house (that he bought).

The interviewees all currently manage to pay their energy bills. One interviewee recalls the problems she had keeping up with payments when she was still living in her previous apartment (BE\_C1). The other interviewees make sure to pay the energy bill and to not fall behind. Two interviewees (BE\_C3, C4) have their energy and other bills paid for by the administrator of the debt relief programme that they participate in. They do not get to see the invoice. Another interviewee (BE\_C5) indicates that she pays a lot for the energy bill, but then also gets money back at the end of the year, which gives her comfort.

Some interviewees (BE\_C2, BE\_C3) are aware of the costs they pay for their energy consumption. They use their heating system as little as possible. Only when it is really cold outside is the heating turned on and even then, they try not to turn the heating too high. One interviewee (BE\_C3) stated that he only takes a bath twice a week, always has the lights off and uses almost no water but he does not know how much he uses, because his bills go to the administrator right away. Another interviewee (BE\_C6) had an aquarium in his house that consumed a lot of energy. He got rid of that aquarium to save energy.

One household (BE\_C2) expressed his frustration about the bad relationship with the landlord. Everything is run-down or broken in the house (oven, cooker, leaking roof). However, the landlord only makes partial repairs and bluntly says that they can do without, for example, the oven. When the roof was still leaking after the landlord had repaired it, he simply denied it.

Given the emotional impact of living in energy poverty, a number of interviewees mentioned being ashamed to invite others into their home because of the cold. Interviewees also expressed feelings of helplessness because of not knowing what their rights as tenants are, and having a landlord that takes advantage of that. Other emotions include anxiety about getting ill due to the poor living conditions; fear of falling into debt because of expensive energy contracts; distrust towards the Tenants' Association; social isolation due to physical impairments or having recently moved (thus not knowing anyone in the new neighbourhood). Positive emotions include the strong trust in Samenlevingsopbouw and the social housing companies SVK and ARK. The following quote illustrates the feeling of trust experienced towards the community developer (named Leen) from Samenlevingsopbouw:

“I will never change my energy supplier again. Ever. I will not change anything again. It's good the way it is now. (...) Yes, if we face another problem, I will return to Leen. She knows the way to go. She can arrange such things. She has done a lot of phone calls for us” (BE\_C1).

The Covid-19 pandemic affects the citizens interviewed. Two interviewees (BE\_C1, BE\_C3) mention increased social isolation because they hardly go outside anymore. Two interviewees (BE\_C2, BE\_C4) have to deal with a decrease in income – due to a reduction in their respective working hours (in a restaurant and a shop), while at the same time, they need to use the heating more often, because they spend more time at home.

### ***(stakeholder interviews:)***

The interviews with the stakeholders show that the social impact of poor housing is very large. A stakeholder (BE\_SH2) states that it leads to financial, psychological and health problems. Another one (BE\_SH3) points to the clear overlap between energy poverty and poverty in general.

Energy poverty leads to social depression, under-consumption and stress. There are also social problems when a household lives in energy poverty. For example, absenteeism due to illness or young people who cannot study properly because everyone is walking around in the same heated room (BE\_SH2). Another stakeholder (BE\_SH1) notes that comfort and ventilation are pressing issues that cause health problems. According to BE\_SH2, the recurring characteristics of families facing energy poverty include low incomes, low levels of education, single-parents with children, old and poorly maintained homes because the owners do not invest in maintenance. Energy poor households, therefore, face an accumulation of problems. These households often end up renting on the private housing market because there are far too few social rental homes in Belgium.

Coping strategies include turning the heating too low, sleeping together in the living room, heating the house with separate (and unhealthy) appliances (BE\_SH1, BE\_SH2, BE\_SH3, BE\_SH5).

The Covid-19 pandemic made it more difficult for stakeholders to engage with households. Two interviewees (BE\_SH1, BE\_SH5) explain that energy advisors cannot conduct home visits. Others (BE\_SH2, BE\_SH3) are worried about the increase in energy costs. After all, people spend more time at home and use more energy. Households that pay an advance usually have no clear insight into whether the advance is sufficient and whether they have to pay extra at the end of the year (in March).

Both interviews with the households (BE\_C1, BE\_C4) and the stakeholders (BE\_SH2, BE\_SH3) show that some energy companies in Belgium may be operating in overly aggressive and unethical ways to acquire new customers. They do this by going door-to-door, cold-calling, or addressing people at shopping centres. They target poorer neighbourhoods, the elderly and non-native Belgians. These people are told that they are going to save a lot of money, and their monthly advance bill is set unrealistically low. People often think that they are indeed saving, but they actually sign the most expensive contract that the supplier in question has to offer and receive a very high final invoice at the end of the year, based on actual consumption. Stakeholder BE\_SH2 explains that there are rules and laws to reduce these practices, but energy companies are not complying it seems. For example, energy companies are not allowed to sell contracts to people who do not understand the language well. Yet this happens all the time, which undermines the work of various stakeholders interviewed helping energy poor households.

### ***3.1.2 Institutional support and other forms of support***

#### ***(citizen interviews)***

Based on the citizen interviews, there is little concrete information about the extent to which citizens make use of existing government schemes. Interviewees do point to the support received from their personal coach at 'Samenlevingsopbouw' – e.g., in finding information, reaching an agreement with the landlord. The personal relationship with these coaches is very important for the trust that the interviewees feel towards this organisation.

Four out of six interviewees receive no additional help from family or friends in paying their energy bills. Two interviewees (BE\_C2, BE\_C3) consider it a private matter that households solve for themselves. One interviewee (BE\_C1) gets support from her adult child who lives with her but has little or no contact with family, friends or neighbours. One interviewee (BE\_C6) did talk about his energy bill with some of his friends and they advised him to switch to LED-light bulbs, which he did. Another interviewee (BE\_C4) once discussed his energy bill with a friend who is with the same energy company.

Interviewees indicate that they need help from their landlord to renovate the house to solve the problems with dampness, draughts and cold. Several of the interviewees indicate that they would prefer social housing above private tenancy. One interviewee (BE\_C2) elaborates on the problems he experiences with his landlord. If the landlord does repairs, it is the interviewee that has to pay the costs. He is not sure what his rights are and whether the landlord is violating those rights. This interviewee is a member of the Huurdersbond (Tenants' Union). He annually pays €20 for this membership. This Union once helped him when the roof was leaking. However, he has little confidence that they will/can support him in addressing the problems with his landlord.

There is also appreciation when support is provided. Several citizen interviewees highly appreciate the support from Samenlevingsopbouw (BE\_C1, BE\_C2, BE\_C4) – which is not surprising since the respondents have been recruited by this community development non-profit (based in Turnhout). "t Antwoord", an organisation providing social support, is also mentioned by two interviewees (BE\_C3, BE\_C5), as being very supportive with information provision, activities (like affordable day trips, toddler play activities) and food.

***(stakeholder interviews:)***

According to the stakeholders, the solution to energy poverty often has to be sought in improving the housing situation. Two interviewees (BE\_SH1, BE\_SH2) point out that first of all, the available social housing needs to increase. Next, landlords should be encouraged to invest in the homes they rent out. One of the stakeholders (BE\_SH1) emphasises that a lot of attention must be paid to communication with households and the behavioural aspects. Another stakeholder (BE\_SH5) indicates that home visits and informal talks with households are important to make people feel comfortable to talk about their situation. Speaking the same dialect can be helpful. Another interviewee (BE\_S3) points out that small interventions through energy coaches can help reduce their energy bill. Stakeholder BE\_SH2 emphasises that it is best to target people who are still in a somewhat stable situation because households that are in 'survival mode' are very hard to engage. In addition, newcomers should be given more explanation on issues such as how to heat their homes properly. Another example of effective support provided by this interviewee is the "Good Plan" project in Turnhout, which does not provide financial support, but advice and guidance to landlords who want to renovate their rental accommodation.

Stakeholder interviewees (BE\_SH4, BE\_SH2, BE\_SH3, BE\_SH5) explain that the social tariff for gas, electricity and water - a (strongly) reduced tariff set by the Belgian government - has been expanded during the Covid-19 pandemic. The tariff is fixed, regardless of which energy supplier you choose. This rate is automatically assigned and only to certain categories of persons. As a measure in the Covid-19 pandemic, the government has decided to expand the social rate, only during the year 2021, to all people who receive increased benefits from health insurance. This increased allowance is awarded purely on the basis of a maximum income, and May 2021

so, for example, people with low wages are also included. The extension of the social tariff is a temporary measure. However, many organisations are pleading with the government to make this extension permanent, because for many people it makes a large difference in the affordability of their bills.

### 3.1.3 Discussion on institutional support to address citizen needs in Belgium

Problems with health often result from poor living conditions. Some express feelings of embarrassment – not inviting others to the home because of the cold. In addition, a lack of control is felt where tenants are dependent on their landlords who seem not to care. Worries about falling into debt (again), combined with bad experiences with energy suppliers – discourage people from trying to find better energy contracts. Next to feelings of distrust towards energy suppliers and landlords, even the organisation that is supposed to represent tenants’ interests is not trusted because it is not clear how this association is providing help or support. The experience of being stuck is based on these aspects, but relates to the more structural issues pointed out by stakeholder interviews as well: the low number of available social housing, which ‘forces’ households to rent from private landlords in combination with a lack of incentives for private landlords to improve the energy efficiency of the homes. Possibilities to improve circumstances are limited by these structural conditions. Community developers such as Samenlevingsopbouw try to support households with information, active support in getting things arranged, and energy coaching. Positive emotions expressed relate to established personal relations with community workers and the experience that these people actually do something to improve the situation. Institutional support provided entails social tariffs (energy allowance) – a measure that has been temporarily expanded to apply for a larger group of households during Covid-19. However, there are no institutional measures that effectively target the main challenge of improving (and incentivising landlords to improve) the energy efficiency and quality of the housing stock. In addition, it appears that little action is taken to decrease the sometimes aggressive sales methods used by energy suppliers. The support offered by various NGOs or semi-public organisations, is effective but not sufficient to address the structural problems of energy poverty.

## 3.2 Bulgaria

**Table 4 Stakeholder and citizen interviews in Bulgaria**

Reference in the text*	Description
BL_SH1	Centre for the study of Democracy (CID): sociological research work on (energy) poverty
BL_SH2	Habitat for Humanity: NGO providing loans & advice to vulnerable households
BL_SH3	Active Consumers: a consumer organisation
BL_C1	Young couple
BL_C2	Retired couple
BL_C3	Family with three children
BL_C4	Family with two children
BL_C5	Family with one child
BL_C6	Elderly couple

\* BL: Bulgaria SH: stakeholder; C: citizen)

### 3.2.1 Experiences of energy poverty

#### **(citizen interviews)**

Among the Bulgarian citizen interviewees are families of different sizes and elderly couples. Interviewees either rent a flat in a multistorey apartment building or own a house. Most dwellings were constructed during the 1960s and 1970s and some have undergone renovations within recent years. Most interviewees stated that they are happy with the house and neighbourhood they live in.

All citizens mention moisture as an issue in their home. One interviewee (BL\_C1) states that the damp, combined with overheating in the summer, affects their comfort negatively. Overheating is experienced by at least half of the interviewees (BL\_C1, BL\_C2, BL\_C4), ranging from “mild” overheating which does not affect comfort to “very hot” indoor temperatures during the summer.

Two of the interviewees (BL\_C4, BL\_C5) state that they have trouble paying their bill. During winter, the bills are said to be especially high. One citizen (BL\_C5) says that during winter they only heat the living room. This interviewee adds that she is “literally surviving on loans”. Of those who can to pay the energy bill, some (BL\_C1, BL\_C2) do state that it weighs heavy on the family budget. One interviewee (BE\_C6) remarked that changing electricity provider – as a way to decrease the energy bill – is not an option in Bulgaria since there is only one company supplying electricity.

Several measures are implemented by interviewees to decrease their energy costs. Among these are use of the night tariff and less frequent use of electrical appliances (BL\_C1, BL\_C4). Several home owners (BL\_C2, BL\_C3, BL\_C6) have upgraded the insulation and joinery as well as their heating system. The degree to which measures can be implemented by the tenants depends on their landlord.<sup>1</sup> One of the tenants interviewed (BL\_C4) told that he had offered the landlord to perform repairs in return for a rent reduction, which the landlord did not agree to out of a reluctance to invest in the apartment. The other tenant (BE\_C5) was confronted with a similar reluctance: in his case the landlord only allowed ‘cosmetic repairs’ while thorough measures were needed.

As for the impact of Covid-19, only interviewee (BE\_C1) said that it had led to a decrease in income and increasing costs for heating and electricity. All other interviewees indicated not to have experienced changes related to their energy use.

#### **(stakeholder interviews)**

Two stakeholders (BL\_SH1, BL\_SH3) stated that energy poverty as a concept is relatively new in Bulgaria. One of them (BL\_SH1) explained how energy poverty typically is conceived as general poverty, and so people feel uncomfortable talking about it. Against this, an interviewee (BL\_SH2) states that there are also people that are very poor in terms of their income, yet experience full comfort because they supplement their heating fuel with free wood from the forests.

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<sup>1</sup> Note that renting of dwellings is very limited in Bulgaria, a little over 10%, and mostly in big cities (remark added by Bulgarian consortium partner EnEffect)

According to two stakeholders (BL\_SH1, BL\_SH3), vulnerable groups such as the poor and less educated are often misinformed about energy use. Stakeholder BL\_SH1 gives the example of an elderly lady who heats her apartment with an electric oven as she is convinced that this is the cheapest option – she did not know that this is more expensive than using a heating appliance. This example betrays a lack of awareness about the efficiency of different heating sources. He further adds that younger people also lack knowledge about domestic energy management.

The same interviewee also explained how, particularly in rural areas, households can access cheap fuel at the grey markets. However, this ends up being more expensive because it is less efficient. Related to this, another stakeholder (BL\_SH2) indicated that citizens are quite insensitive to the issue of air pollution and would therefore rather take cheaper, more polluting fuel such as wet wood. Children with respiratory diseases are more common in energy poor households due to the poor quality of the fuel used, even when these households are generally aware of the relationship between health and energy. Other common health problems relate to moisture and mould in the home.

According to one stakeholder (BL\_SH3), the centralised government system instils a passive attitude among citizens. This interviewee thinks that households lack the ambition to improve their situation, and do not show any collective responsibility or action to tackle these problems. Stakeholder BL\_SH1 argues that the low level of income leaves them with little perspective:

“The only thing they want is someone to pay their bills or to buy them wood for heating. They do not have a longer horizon than the next heating period.”

### *3.2.2 Institutional support and other forms of support*

#### ***(citizen interviews)***

None of the interviewees has benefitted from any state support programme. However, they are aware of these programmes, but lack proper information. One citizen (BL\_C5) mentions that the Rehabilitation Programme by the municipality might help to implement energy efficiency measures.<sup>2</sup>

All citizens have a clear image of the kind of support they require. Home owners (BL\_C1, BL\_C2, BL\_C6) state that they require financial support to perform domestic improvements. Tenants (BL\_C4, BL\_C5) on the other hand would need consent from their landlord to perform such measures. As to who could provide the necessary help, citizens are less certain. One homeowner (BL\_C1) expressed uncertainty about the options for external financing for home improvements. Another interviewee (BL\_C4) said that help by anyone is gladly accepted. Yet another citizen (BL\_C6) would turn to local consultancy companies. All but one of the interviewees (BL\_C1, BL\_C3, BL\_C4, BL\_C5, BL\_C6) tend to talk to their peers about energy, most commonly about the high cost of energy bills. One interviewee (BL\_C2) receives financial support for paying his energy bill from his children.

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<sup>2</sup> The Rehabilitation Programme is actually a state programme, operated by municipal officials (remark added by Bulgarian consortium partner EnEffect)

Interviewees indicated an interest in receiving advice on lowering their energy bills and advice for energy efficient behaviour. According to one interviewee (BL\_C1), the municipality should provide more accessible information to citizens who do not take action to improve their situation (“passive people”), and in addition policy efforts should be focused on increasing energy efficiency. Another citizen (BL\_C3) remarked that wages in general should be increased.

### ***(stakeholder interviews)***

Stakeholders mentioned several policies available to citizens: the Energy Efficiency Program, the support provided by the governmental department for social services, the Urban Development Initiative (a fund), the Housing Rehabilitation programme and the Heating Equipment Replacement program.

Stakeholders explained that there are many support schemes targeted at municipal buildings, but there are very few, if any, targeted at private homeowners (97% of the dwellings in Bulgaria are privately owned<sup>3</sup>). Even in the case of a programme for renovation of multifamily buildings, resources were only sufficient to cover approximately 4% of the eligible buildings. Overall, there is no support for single-family buildings, and in rural areas and small cities, they are occupied mostly by poor people. For owners of apartments or flats in multi-apartment buildings, there is also no direct support available because of the organisational complexities involved in multi-ownership (a block of flats can have more than 100 individual owners).

One stakeholder (BL\_SH1) stated that the degree to which citizens make use of the support is limited by people having no interest other than their bills being paid. Daily needs are perceived as more important than receiving information. Another interviewee (BL\_SH3) remarked that people are more concerned with access to healthcare and food than with their energy management. He stated that the media discourages people from taking action by implying that the government will take care of everything.

Access to policy support is also limited by a lack of basic knowledge to implement even simple energy efficiency improvements. An interviewee (BL\_SH2) explained that some householders would for example not know the meaning of a square meter. This is particularly prevalent in rural areas.

A stakeholder (BL\_SH1) stated that the only programmes which work are the ones that use intermediaries who directly work with people. Typically, these are NGOs.

Stakeholders made several observations about the role of the government in addressing energy poverty. Stakeholder BL\_SH1 remarked that generally, the public distrusts the government, its departments and the services it offers. This interviewee thinks that the policies of national government are ineffective because they only aim at complying with EU legislation. The current support schemes provide no long-term solutions to energy poverty because they ‘only pay bills’ and the lack of any form of longer-term investment prevents sustainable improvement, according to BL\_SH1. Another stakeholder (BL\_SH2) confirmed this view, adding that as a consequence, policies do not incentivise households to become more energy efficient. According to

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<sup>3</sup> Georgiev, G. (2015). Bulgarian Housing. Status and Prospectives Procedia of Economics and Business Administration. ISSN: 2392-8174, ISSN-L: 2392-8166

another stakeholder (BL\_SH3) it is the heavy subsidies for energy that hamper the efforts at improving energy efficiency.

One interviewee (BL\_SH2) explains that policies are insufficiently integrated. For example, the Heating Replacement programme only addresses air pollution without paying attention to energy poverty. It thus only replaces heating appliances. Two interviewees (BL\_SH1, BL\_SH3) elaborated on how support is not tailored to the daily needs and situations of households. All financial instruments are directed at the public sector instead of at households.

Regarding the role of municipalities, a stakeholder (BL\_SH1) states that there are significant differences between municipalities in tackling energy poverty. Some inform and engage citizens while others “go over owners’ heads”. One stakeholder (BL\_SH2) acknowledges that municipalities find it difficult to communicate with citizens, while another (BL\_SH1) argues that municipalities do not acknowledge the need to train and educate people.

Three issues regarding gender and diversity were brought up by the three interviewed stakeholders: firstly, in Roma communities, it is mostly men attending coaching and training about finances and energy (BL\_SH1). Secondly, Roma communities often have much lower educational attainment and therefore are more vulnerable (BL\_SH2). Thirdly, older people often do not use the internet for online consultation (BL\_SH3).

According to stakeholders interviewed the following policy changes are required:

- Households and especially young people need to receive education on energy consumption (BL\_SH1, BL\_SH2);
- People should be made more aware of the importance of energy efficiency (BL\_SH2);
- Housing improvement programmes should be organised in a decentralised manner (BL\_SH2). Financial support in form of funds and loans should be offered to people (BL\_SH2);
- Illegal forms of housing must receive legal status to be eligible for welfare measures (BL\_SH2);
- Covid-19 support policies should support the poorest, right now they merely receive a standard compensation (BL\_SH1).

### *3.2.3 Discussion on institutional support to address citizen needs in Bulgaria*

In all cases, the households spend more than 10% of their income on energy. However, they consider that to be normal – energy poverty is not perceived as an issue even by those who are affected by it. It may be that because of this, no elaborate (emotional) experiences have been expressed by (citizen) interviewees. Stakeholder organisations work with target groups that are much worse off compared to the householders interviewed. None of the interviewees has benefitted from any state support programme. However, they are aware of these programmes.

Many of the responding citizens have performed measures to improve their home’s energy efficiency. However, they state they would require financial aid to implement further energy efficiency improvements. In the case of tenants, consent by the landlord is an additional crucial factor. Stakeholders’ responses reflect that financial support for domestic energy efficiency measures is lacking. There are many support schemes

targeted at municipal buildings, but there are very few, if any, targeted at private homeowners<sup>4</sup>. For single-family building owners (rural areas and small cities) and owners of apartments in multi-apartment buildings, no support is available to improve their homes. In the latter case, this also relates to the organisational complexities that government policy is unable to address.

Some of the stakeholders mention that households might not be interested in investing in energy measures because other daily needs are seen as more important. This could not be confirmed by the responses of citizens who were all very keen on improving their energy situation. In fact, several householders indicated they would be interested in receiving more information about energy consumption and energy efficiency. The demand for reliable information could be addressed through programmes providing education and training to households as suggested by some of the stakeholders.

The government is described by citizens and stakeholders alike as discouraging action and the taking up of responsibility on the part of citizens. The stakeholders agree on national policies' ineffectiveness and the lack of integration in addressing energy poverty and energy efficiency.

### 3.3 Ireland

**Table 5 Stakeholder and citizen interviews in Ireland**

Reference in text*	Description
IR_SH1	NCE Energy Hub – Northside Community Enterprises: promote and support domestic energy saving and efficiency measures
IR_SH2	SE Systems – Retrofitting and refurbishing company
IR_SH3	Energy supplying company
IR_SH4	Threshold – national housing charity supporting in households that experience problems of poverty and exclusion.
IR_SH5	<i>MABS</i> – Publicly funded agency for budgeting and financial advice
IR_SH6	Sustainable Energy Authority of Ireland – Governmental Authority
IR_SH7	Society of St. Vincent De Paul – Charity organisation
IR_SH8	Dublin City Council – City council
IR_C1	Elderly female tenant
IR_C2	Elderly female housing owner
IR_C3	Middle-aged male housing owner
IR_C4	Elderly couple and their adult son

\* IR: Ireland; SH: stakeholder; C: citizen

<sup>4</sup> An estimated 97% of the dwellings in Bulgaria are privately owned (Georgiev 2015)

### 3.3.1 Experiences of energy poverty

#### **(citizen interviews)**

The Irish citizens who responded are all over 55 years in age. The majority of them (IR\_C1, IR\_C2, IR\_C3) are single occupants. The construction dates of respondents' dwellings are quite diverse, ranging from a historic house from 1849 to a terraced house built in 1995. Half of the respondents are tenants (IR\_C1, IR\_C4) and half are house-owners (IR\_C2, IR\_C3).

Interviews with citizens point out that their homes are leaky, with persistent draughts, dampness and cold. In some cases (IR\_C1, IR\_C4), comfort is lacking because the heating is not used to avoid high energy bills. For others heating (IR\_C2) is necessary because of health issues, but this results in very high energy bills. One interviewee (IR\_C3) explains how the cost of heating means that no money is left over to spend on social activities, holidays or other (small) luxuries. Another problem pointed out by interviewees (IR\_C2, IR\_C3), is that inviting people to one's home becomes problematic because they feel ashamed of their housing situation or because it is the visitors themselves that prefer not to visit because of the cold in the house. Where dampness is persistent, this negatively affects health. Health problems can be a consequence and at the same time a cause – e.g., one interviewee (IR\_C3) points out that health problems (lung condition) prevent him from insulating the attic despite having purchased the insulating materials to do so. Regardless of the bad state of their homes, most interviewees (IR\_C1, IR\_C2, C4) are quite happy with their neighbourhood.

All interviewed citizens are highly aware of their energy bill and make sure to pay it – risking arrears in other areas such as insurances and cutting spending on other items such as clothing. Interviewees (IR\_C1, IR\_C2, IR\_C3) point out that unexpected expenditures cause stress, and socialising becomes difficult because of these financial pressures. To keep the energy bill as low as possible, interviewees indicate to wearing extra layers of clothing, turning off lights, using the kettle to only heat the amount needed, lowering the temperature of the thermostat, purchasing energy saving devices, putting foil behind radiators/heaters, insulating attics, using thermal blinds and curtains, and replacing the open fireplace with a stove. In addition, seeking information on further behavioural change is mentioned.

“I don't mind going around the house wearing coats, and lots of jumpers and stuff, I wear long-johns, and then I wear pyjamas over that, and then I have much bigger pyjamas to go over that, so it doesn't bother me, but it's kind of humiliating when people call in, you know, especially if they bring their kids with them, especially if they can see their breath on top of that as well.” (IR\_C3)

Some interviewees (IR\_C2, IR\_C3) point out that they 'shop around' to find the best energy rates to lower their energy bills.

The Covid-19 pandemic has had several negative impacts. All interviewees stated that staying indoors and/or working from home has led to an increase in energy costs. One interviewee (IR\_C1) mentions delays in the promised upgrade of their heating system. For one citizen (IR\_C3) not being able to go to warmer places (e.g., friends' homes or a public house) and further deterioration in wellbeing (both physically and socially) were

stated consequences from the Covid-19 restrictions. Unemployment resulting from Covid-19 was also mentioned as negatively affecting the situation in one case (IR\_C4).

As for the experiences of households in energy poverty concerning emotional well-being, mention is made of embarrassment, humiliation, shame, frustration, feelings of powerlessness, stress, panic, loneliness (social isolations – further aggravated by Covid-19). Most of these experiences relate to the precarious situation of the interviewees, when they are forced to choose between basic needs, with a negative impact on comfort, physical health, mental health and social life.

***(stakeholder interviews:)***

Several stakeholder interviewees (IR\_SH1, IR\_SH5, IR\_SH6, IR\_SH7, IR\_SH8) describe a chain-reaction of negative consequences of living in energy poverty, confirming how the poor quality of housing leads to inefficient heating, which in turn results in higher energy bills. Incomes are low (low wages; insufficient pensions; unemployment) so the result is deprivation where households go without the necessary energy and heating and/or cut back in other areas of spending (*e.g.*, food or clothing). This all has consequences for their physical and mental health as well as for their financial situation. One stakeholder interview (IR\_SH5) points out how being afraid of the energy bill, *e.g.*, among elderly people, results in them being afraid to turn on the heating, resulting in health problems related to hypothermia and dampness. Another stakeholder (IR\_SH4) explains how poor money management practices within the household (*e.g.*, in relation to poor mental health or problems such as substance abuse or crime) in cases lead to arrears in paying bills and then people easily get caught up in a negative spiralling debt.

One stakeholder IR\_SH5 states that the situation is especially difficult for low-income home-owners and tenants that live in bad quality homes. They have less ability to insulate and to invest in energy efficiency improvements. Inefficient heating systems (no zoned heating, electrical heaters) are more costly, partly due to higher carbon taxes, and thereby aggravate the lack of access to affordable energy

While for tenants, problems relate to the split incentive (how to get landlords to improve their homes), for energy poor homeowners there are several programmes in place but this group is often concerned about the changes involved and what it will cost them, according to one stakeholder (IR\_SH2).

Stakeholder interviews (IR\_SH3, IR\_SH4) also confirmed that due to Covid-19, housing upgrades were put on hold, as well as refurbishments and the building of new homes. The general observation among the stakeholders that were interviewed is that energy bills have gone up due to (more) people staying at home. In addition, the place of home (with all its negative experiences such as dampness, draughts, leaks, etc.) has become more important during this period. One stakeholder (IR\_SH1) indicated that the pandemic has increased the contact between neighbours which may have led to people exchanging more information about available support schemes.

To ameliorate the impact of Covid-19, energy suppliers have temporarily stopped disconnecting people and some also provided additional supportive measures (*e.g.*, an extension of payment periods; some level of debt write-off; and meter instalment to enable better monitoring of costs), according to one stakeholder (IR\_SH3).

### 3.3.2 Institutional support and other forms of support

#### **(citizen interviews:)**

There is a variety of programmes and schemes that provide institutional support to citizens.

Based on the citizen interviews, there is some concrete information on the extent to which existing programmes and schemes are being used. Citizens make use of the Fuel Allowance which provides financial support in the form of lump sum payments to vulnerable households during the winter months (early October until the end of April). Two citizens (IR\_C3, IR\_C4) mention that they receive the free Electricity Allowance (€35/month) from the Department for Social protection.

When asked about support from peers, family and friends, one citizen (IR\_C1) says that she discusses the (dis)advantages of pre-paid cards and the smart card system. In addition, some (IR\_C1, IR\_C2, IR\_C4) receive support from friends and/or family – loans to pay for the utility bills or being treated to a meal are mentioned. One interviewee (IR\_C3) pointed out that energy issues are not discussed with friends, but that the family provides support in paying the heating cost. This interviewee feels uncomfortable asking people for support.

When asked about the support needed, citizen interviewees point out that they need financial support to upgrade their heating systems, install insulation, fix their windows and make small repairs, and to install solar panels. In addition, an extension of the fuel allowance into the summer months is mentioned by one citizen (IR\_C2). When asked who should provide support, one interviewee (IR\_C4) mentions the landlord company (semi-public) as one organisation that should offer support to improve the energy efficiency of homes. Other interviewees (IR\_C1, IR\_C3, IR\_C4) mention the city council and national government as the most important institutional support providers. The national government is considered responsible for enabling people to live comfortably and sustainably, according to IR\_C4. One respondent (IR\_C2) is critical about the pre-payment meters. Vulnerable households are obliged to use these while they are more expensive compared to a billing system. The type of support that the interviewees were most interested in, involve support to lower the energy bill through behavioural changes; improvements to the house by the city council; support with preventing or tackling indebtedness; support when being disconnected; support in changing supplier and information about electrical equipment's energy consumption (when on stand-by).

To sum up, citizen interviewees have pointed towards the following policy or support needs:

- Direct financial support: fuel allowances for those currently not eligible or an extension into the summer period;
- Financial support for upgrading the heating system, for insulation, repairs, and for solar panels;
- National government requiring landlords to improve the energy efficiency and quality of the homes;
- Support to lower the energy bill (*e.g.*, behavioural change advice);
- Information about electrical appliances' energy consumption;
- Support in changing suppliers;
- Support in preventing and tackling indebtedness;
- Support to prevent being disconnected;

- Arrange that energy metering is not more expensive than other forms of billing.

These supportive measures can all help to improve their situation – through financial relief, improvement of the home, empowerment through information provision, improvement of one’s position vis-à-vis the landlord and vis-à-vis the energy supplier.

### ***(stakeholder interviews)***

Stakeholder interviewees (IR\_SH1, IR\_SH2, IR\_SH7) mention several coping mechanisms, such as wearing more clothing inside the house and using extra blankets; only heating one room; turning off heating and lighting when children are at school; and cutting costs in other areas (*e.g.*, food).

One stakeholder (IR\_SH5) points out that for tenants the problem is that many landlords do not want to invest in their properties. Due to the scarcity in housing, there is a large demand for rental accommodation and limited choice for tenants. Consequently, many people live in homes with rents that they cannot afford.

According to one stakeholder (IR\_SH4), changing energy supplier can make a difference as well as accepting support from the Access Housing Unit which provides support to tenants, for example through information about their rights, mediation with landlords and assistance in organising payments. Another interviewee (IR\_SH3) mentions that homeowners can receive free insulation under the SEAI Warmer Homes Scheme. Two stakeholders (IR\_SH6, IR\_SH7) state that it can be a good idea for homeowners to participate in community groups to collectively organise upgrades.

When asked what households need most to resolve their issues relating to energy vulnerability, stakeholder interviewees point out several things. The standard for rental homes should be such that landlords are in fact encouraged to invest in their houses and this is something that the national government should address, according to one interviewee (IR\_SH2). The provision of adequate advice and information is considered important by stakeholder IR\_SH4, who also underlines the importance of being represented by a dedicated advocacy partner when dealing with housing providers and utility companies.

One interviewee (IR\_SH7) explains that more generally, there is a need for higher minimum wages and social security, benchmarked against the cost of living. In addition, lower energy costs are pointed out as crucial. This interviewee further argues for a rollout of retrofitting for low-income households across different tenures – meaning substantially larger funding needs to be made available to enable this.

There are a range of programmes running in Ireland that the stakeholder interviewees refer to:

- Financial support: fuel allowance for people on social welfare; fuel subsidies for pensioners and people on disability payments, and credit unions<sup>5</sup>; support in paying bills (SVP); financial support to improve the efficiency of homes; free credit to some energy providers when registering with the provider;

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<sup>5</sup> According to the official website of the Irish League of Credit Unions: “a credit union is a group of people, connected by a ‘common bond’ based on the area they live in, the occupation they work in, or the employer they work for, who save together and lend to each other at a fair and reasonable rate of interest” (source: <https://www.creditunion.ie/about-credit-unions/what-is-a-credit-union/>)

- Household Benefits Package; Living Alone Allowance;
- Better Energy Homes and Better Energy Warmer Homes scheme – free of charge energy efficiency measures;
- Better Energy Communities scheme – grant for energy efficiency measures for communities;
- SEAI (Sustainable Energy Authority Ireland) schemes but limited funding is an issue;
- Educational programmes, e.g., targeting older people (SEAI and MABS);
- Financial coaching (MABS);
- Energy coaching (Large Energy Supplier, Energy Action);
- Social support (area partnerships and local community organisations);
- Prevent disconnections (Commission for Regulation of Utilities (CRU) & energy supplier);
- Fuel poverty households avail free upgrades including survey, Building Energy Rating (BER); support is offered in cooperation with Dept. of Communications, Climate Action and Environment;
- Tenancy Sustainment supports by specific organisations.

However, discussing the extent to which households make use of the available supports, stakeholders (IR\_SH1, IR\_SH2, IR\_SH4, IR\_SH7, IR\_SH8) point out that many people are not aware of existing support programmes (especially in rural Ireland) and/or do not know exactly how to apply for these. People also struggle with the forms and paperwork that needs to be filled out in order to access the grants. Furthermore, different eligibility criteria (for different programmes) are complicating factors. For instance, the Warmer Homes Scheme & Better Energy Homes Scheme are only available to owners or housing association tenants, not private tenants<sup>6</sup>. Pre-assessment costs (*e.g.*, Better Energy Communities programme) - with the risk of concluding that a house is not eligible – present a barrier to participation. Not all vulnerable households are eligible to participate Better Energy Warmer Homes and Better Energy Communities Scheme; eligibility criteria for various schemes are such that some vulnerable groups fall out. There is a general lack of effective incentives to encourage private landlords to upgrade their houses, they are not incentivised by the promise future bill savings. Two stakeholder organisations (SH\_IR5; SH\_IR7) that consider themselves relatively successful in reaching vulnerable households are MABS and SVP (Society of Vincent De Paul – a large charity).

Interestingly, unlike most stakeholders, the representative of the institution providing most governmental energy efficiency services (SH\_IR6) states that households are very familiar with supports available.

One stakeholder (IR\_SH3) states that the carbon tax is an extra burden that hits the fuel poor most. In addition, the application of the PSO levy (Public Service Obligation levy) at a flat rate for all electricity customers, like the carbon tax mean these are a heavier burden for households in energy poverty and so requires mitigation, according to another interviewee (IR\_SH7).

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<sup>6</sup> Interviewee also referred to SVP policy briefing on Irish children’s experiences of energy poverty, Growing Up Cold, see: <https://www.svp.ie/getattachment/2cb10388-e3ca-41ef-9911-a17f252ce09c/Growing-up-in-the-Cold.aspx>

Answering the question as to the roles that various stakeholders could play, the following is pointed out by the interviewed stakeholders:

Government/SEAI:

- could help pre-finance (subsidies and loans)
- require landlords to invest in the energy efficiency and quality of their homes
- ensure no households are disconnected
- key role in making sure social welfare and the National Minimum Wage is benchmarked against the cost of living and making sure the Fuel Allowance is adequate and reaches households that need it (e.g., Households on the Working Family Payment and people who have been receiving Jobseekers' payments for less than a year – currently they don't get Fuel Allowance).
- There is a role for government and the energy regulator (CRU) to make sure costs such as the PSO levy and carbon tax don't become a disproportionately heavy burden for households in energy poverty.
- Municipalities need to invest in their properties and upgrade housing standards to the C3 BER level (which is now required by law).

As for landlords, they are very reluctant to invest in the energy efficiency of buildings (the owner-tenant split incentive). One interviewee (IR\_SH2) remarks that there are schemes designed to offer long-term leases for tenants through the city and county councils, whereby the landlord is required to assess the home – but landlords are not happy with these schemes.

One stakeholder (IR\_SH4) argues that housing providers (e.g., local authorities) should assign tenancy sustainment support to all households who need support, and their buildings should comply with a minimum energy efficiency rating.

As for the energy suppliers, they should aim for as few disconnections as possible, according to one interviewee (IR\_SH5). They should inform tenants better about all options available and be better accessible through a free phone number. Another stakeholder (IR\_SH8) adds that energy companies are obliged by the national government to collect carbon credits to mitigate CO<sub>2</sub> emissions. These can be earned by performing energy efficiency upgrades in housing or providing energy advice. And, finally, there are several NGOs and charities and community-based organisations, which work hard in providing accurate information and tailored support in applying for allowances and other schemes; budgeting support; etc.

### *3.3.3 Discussion on institutional support to address citizen needs in Ireland*

Based on the citizen interviews and stakeholder interviews that confirm several citizen interview findings, the following observations can be made.

Inefficient buildings, inadequate heating systems are at the core of energy poverty, as well as low incomes which mean the cost of energy is taking up too large a part of the monthly available budget of households. This causes a variety of problems, ranging from adverse health effects, increased stress levels, and social isolation. Moreover, these impacts negatively affect people's ability to cope and to find solutions themselves – when no room for any investment is left, when poor health is preventing people to undertake action in

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their homes themselves, and when a lack of social interactions undermines the possibility for mutual support and collective actions. Frustration, stress, and embarrassment are but a few of the negative emotions mentioned which accompany householders' experiences of energy poverty.

The stakeholder interviews show that there are various programmes and schemes in place. Citizens mention making use of some of the available support among which the Fuel Allowance, the free Electricity Allowance, energy efficiency renovations by the local authority (*e.g.*, Cork City Council) and general social welfare schemes.

At the same time, it appears that it is difficult for householders to find appropriate supports to improve the efficiency and quality of their homes, particularly if they are in private rented accommodation. This relates in part to the difficulty of finding out which programmes would apply, but it also appears that the available support programmes are not sufficient to tackle the challenge of improving (and incentivising landlords to improve) the energy efficiency and quality of the housing stock. Most schemes involve fuel allowances, or partial support, or energy coaching trajectories. As for the latter, supportive coaching is offered by several NGOs and charities that do seem to be successful in reaching energy poor households. In addition to budget and energy coaching, they provide information on available support schemes and help with finding a better energy supplier. However supportive these efforts may be, it is not sufficient if the large problems are not addressed as well.

### 3.4 The Netherlands

**Table 6 Stakeholder and citizen interviews in the Netherlands**

Reference in text*	Description
NL_SH1	Design-thinking consultancy involved in engaging energy poor households
NL_SH2	Municipality Eindhoven, policy advisor: social domain, poverty and debts services expert
NL_SH3	Energiebox: provider of energy coaching trajectories
NL_SH4	Woonbedrijf: social housing association
NL_SH5	Municipality Eindhoven: budget coaches and budget management
NL_SH6	Woonbond: interest organisation of individual tenants, tenants' organisations or tenant associations
NL_SH7	WOON!: advisor/project leader Energy coaches
NL_SH8	Kiezers & Vissers: social domain consultant, setting up and implementing energy coaching
NL_C1	Female social housing tenant (45) with a daughter (12)
NL_C2	Male (age unknown) social housing tenant
NL_C3	Male social housing tenant (63)

NL_C4	Male social housing tenant with private landlord (pensioner), lives with his wife
NL_C5	Female social housing tenant with 4 children
NL_C6	Male social housing tenant (61)

\* **NL: Netherland; SH: stakeholder; C: citizen**

### 3.4.1 Experiences of energy poverty

#### ***(Citizen interviews)***

The citizens interviewed were all tenants from social housing associations, with one exception (NL\_C4). The respondents included two single mothers, three males living by themselves and one male pensioner living with his wife.

The citizen interviews show that although the housing conditions vary, all interviewees are confronted with cold, draughts and bad insulation. One (NL\_C3) also mentioned dampness and another citizen (NL\_C5) to overheating in summer. The interviewees all would like to see that the quality and energy efficiency of their homes improved. Citizens (NL\_C3, NL\_C4, NL\_C5) state that the housing association or the landlords either take no action, or postpone actions. In one case the tenant (NL\_C5) made several improvements himself (such as double-glazing downstairs; floor and roof insulation) and also paid for these himself. However, his heating costs are still too high. Another interviewee (NL\_C2) explains that he wants to install solar PV panels and change from gas to electric, but his housing association does not approve. Several of the citizens interviewed (NL\_C1, NL\_C2, NL\_C3) get support with the management of their finances. One interviewee (NL\_C1) used to have difficulties with paying the energy bill but now a budget coach helps her to gain better insights into her financial situation. Two others (NL\_C2, NL\_C3) mention that their finances are being fully supervised. The supervisor controls their finances such that they have no idea of the full cost of their energy bill – they do not know how much they actually pay for energy.

Others (NL\_C4, NL\_C5) mention that their energy bill is very high, but they can pay the bill by not spending too much in other areas. Some (NL\_C4, NL\_C5) feel frustrated, because their landlord or housing association is not doing the energy efficiency improvements needed. Frustration also relates to a lack of choice: due to the overheated housing market and shortage of social housing stock, it is impossible to find another affordable place to rent, so when a landlord is not providing any service, the tenant has little option but to put up with it, a situation described by interviewee NL\_C4. The interviewees whose finances are taken care of by a supervisor (NL\_C2, NL\_C3), express feelings of powerlessness. One interviewee (NL\_C6) expressed strong distrust towards the government and all information that is provided by the government. As for the impact of Covid-19, only one interviewee (NL\_C1) mentioned higher heating costs resulting from the crisis.

#### ***(Stakeholder interviews)***

Interviews with stakeholders point out that there is a taboo on (energy) poverty. Feelings of embarrassment and distrust prevent people from asking for support, according to several stakeholder interviewees (NL\_SH1, NL\_SH2, NL\_SH4, NL\_SH7). One stakeholder (NL\_SH1) remarks that the topic of energy poverty is best

discussed in an indirect manner. Besides feelings of shame, stakeholders (NL\_SH1, NL\_SH7, NL\_SH8) see worry and even despair among energy poor households, when people feel they have no control and no idea how to improve their situation. When households feel that they are not being heard, this results in distrust towards the municipality or housing association. Stakeholders (NL\_SH3, NL\_SH5, NL\_SH8) point out that building trust is important and can be a challenge. They also suggest householders are more likely to discuss their situation when they feel that, for example, an energy coach is not prejudiced and when (s)he has had similar experiences (*e.g.*, having been unemployed or in a situation of indebtedness).

Stakeholders (NL\_SH1, NL\_SH3, NL\_SH5, NL\_SH6, NL\_SH7) sum up several problems that energy poor households are confronted with: financial problems (not able to pay the energy bill), lacking insulation, moisture and mould. Two stakeholder interviewees (NL\_SH6, NL\_SH7) explain that due to the current shortage in (social) housing, people have no choice but to accept houses that are in a bad state, and accept higher rents than they can afford. In addition, people often live with too many in one house. A related problem is that some landlords and housing associations are reluctant to invest in improving the quality of their properties. In such cases, behavioural changes have limited impact on the energy bill, according to NL\_SH1 and NL\_SH6. Another problem highlighted by an interviewee (NL\_SH7) is that households are not always aware how to best decrease their energy bill, making suboptimal choices, *e.g.*, not using the heater, but showering three times a day to keep warm. However, in other cases, households are very aware of the cost of energy and so use too little energy, thereby undermining their health, as NL\_SH8 points out.

### *3.4.2 Institutional support and other forms of support*

#### ***(citizen interviews)***

Some citizen interviewees (NL\_C1, NL\_C2, NL\_C3) receive (institutional) support to help them with their situation of indebtedness. This support does not target energy poverty. They state that their budget coach and financial supervisors provide good support, but that there is no attention given to energy consumption.

Several interviewees (NL\_C1, NL\_C2, NL\_C3, NL\_C5) are interested in changing their behaviour to lower their energy bills. One interviewee (NL\_C3) would like the required support for properly renovating their house. Others (NL\_C2, NL\_C2) state that the housing association should do more for them, but at the same time they have little confidence that it will. Some interviewees (NL\_C1, NL\_C2) also show an interest in becoming part of a social network where they can discuss their energy consumption and share experiences.

#### ***(stakeholder interviews)***

The stakeholder interviews point out that households try to get help to improve their situation. They ask their landlord or housing association to improve their house. There are several subsidies and support schemes available for vulnerable households – yet none of these directly target energy poverty. Some of the stakeholders (NL\_SH3, NL\_SH6, NL\_SH7, NL\_SH8) offer energy coaching services. Another type of institutional support are subsidies for home owners to improve the energy efficiency of their homes. According to one interviewee (NL\_SH6), tenants can apply for a decrease in their rent when they want to make changes to their house.

Stakeholder interviews also discuss efforts by housing associations to make their portfolio of buildings more energy efficient – these efforts are combined with the transition away from natural gas (all Dutch homes are

transiting away from natural gas, which is a significant undertaking). However, it is very costly to renovate older buildings and housing associations have shown reluctance to make the appropriate investments, according to some of the interviewees (NL\_SH1, NL\_SH3, NL\_SH5).

Stakeholders (NL\_SH1, NL\_SH3, NL\_SH6) also explained that support measures to invest in energy efficiency improvements are not very accessible to energy poor homeowners, due to various restrictions. Another thing mentioned in the interviews is the fact that most of the energy poor households are dealing with multiple problems in addition to energy poverty. It is therefore not likely that only one type of support will help resolve their situation entirely. Instead, a suite of complementary supports and measures are required.

### 3.4.3 Discussion on institutional support to address citizen needs

The interviews allow us to make several observations. Even though energy poverty is a relatively new concept in the Netherlands, stakeholder interviews reveal that there is a growing acknowledgement among social housing associations and the government of the problems that result from a combination of inefficient buildings (due to age, deferred maintenance), high energy costs and limited financial resources. While there are various programmes and schemes in place targeting vulnerable households and targeting energy efficiency improvements, none are specifically targeting energy poverty. Most social housing tenants interviewed were not satisfied with the way their housing association (fails to) progress energy efficiency improvements to their homes. Being dependent on the social housing association and others (*e.g.*, when being under financial supervision) increases the feeling of a lack of control for those householders.

In addition to wanting a complete renovation of their homes, several interviewees were also interested in other supports – actionable information, coaching, and an exchange of experiences with others. According to the stakeholder interviews, the experienced needs of energy poor households that come up most often are information and money. Most of the households are unaware of what their options are, what types of subsidies they can apply for, and how to lower their energy bill. The existing (institutional) support include energy coaching trajectories.

According to the stakeholders' interviewed, energy poor households need long-term support, a bottom-up approach, and more funding. (Municipal) organisations must work together to help energy poor households. When several organisations work together, early signalling of energy poverty becomes possible and problems can be addressed earlier. Organisations that could play a role in addressing energy poverty are: social housing associations, municipalities (*e.g.*, social welfare organisations active in neighbourhoods), commercial rent organisations, and debt counselling.

## 3.5 North Macedonia

**Table 7 Stakeholder and citizen interviews in North Macedonia**

Reference in the text*	Description
NM_SH1	Municipality of Karposh (part of Skopje)
NM_SH2	Faculty of Architecture - Skopje
NM_SH3	Secondary Vocational School of Electrotechnics of the City of Skopje
NM_SH4	Timelproekt Doel – Skopje (Engineering firm)

NM_C1	Male – home owner (family of 4)
NM_C2	Male – home owner (family of 3)
NM_C3	Female – home owner
NM_C4	Female – home owner (family of 4)
NM_C5	Male – home owner
NM_C6	Female – home owner (family of 4)

\* NM: North Macedonia; SH: stakeholder; C: citizen

### 3.5.1 Experiences of energy poverty

#### **(citizen interviews)**

The citizens interviewed already have contacts with Habidom, a residential building management company and a project partner in Energy Measures.

Five of the six interviewees (NM\_C1, NM\_C2, NM\_C3, NM\_C4, NM\_C6) live in apartment complexes that date from the 1950s, 1970s or 1980s. One interviewee (NM\_C5) lives in a more recently built complex (2007). All interviewees own the apartment they live in. For these interviewees, the main problem is the dilapidated state of the buildings, especially the facades, causing problems with moisture, mould and draught. One interviewee (NM\_C1) mentioned that the facade of the building has been renewed and this resulted in a decrease in electricity costs by approximately 40% per year. Another interviewee (NM\_C4) would prefer her apartment to be connected to a central heating system – which currently is not the case. The electric heating devices that these residents use result in high energy bills. During winter, it is difficult to keep the apartments comfortably heated, and in summer there is the problem of excessive heat. Two interviewees (NM\_C3, NM\_C6) point out that air conditioning then takes up a large part of the energy bill.

Although the interviewees somehow manage to pay their energy bills, they do experience difficulties in ensuring proper heating and the payment of energy bills, as illustrated by the following quote of interviewee NM\_C6:

“We would need first of all better salaries so we can afford thermal insulating the whole building [...]. We have to be very, very careful how we spend the salary.”

When asked about the difficulties they face with paying electricity bills, another interviewee (NM\_C3) says that “most of the tenants in the building” face difficulties with the payment of bills. The fact that they are still able to pay their energy bills seems to be partly related to their contacts with Habidom. Habidom advises them on energy saving techniques, which means the interviewees are aware of their electricity consumption. Some strategies that were mentioned: using LED light bulbs; replacing defunct electric devices with more energy-efficient versions (mentioned by NM\_C2, NM\_C3, NM\_C4); using their devices as much as possible at times when power is cheaper; limiting the use of the air conditioner as much as possible (mentioned by NM\_C6).

Several interviewees (NM\_C2, NM\_C3, NM\_C4, NM\_C6) have been affected by the Covid-19 pandemic. Working at home more meant their electricity bills rose. One interviewee (NM\_C2) lost a source of income, as a result of which all bills are weighing more heavily on the available budget.

Experiences of energy vulnerability relate to health issues arising from excess moisture and mould, disturbances in housing comfort and an unpleasant smell in the house (due to a bad ventilation system). One interviewee (NM\_C1) has a daughter who experienced health problems due to excess moisture and mould. These issues disappeared once the façade was renewed. Experienced emotions expressed in interviews (NM\_C1, NM\_C5) include frustration with and distrust towards the government and the energy companies. For instance, one of the interviewees (NM\_C1) told us the following:

“The ██████████ should stop stealing from us, I can explain in detail how they do it. 2020 vs 2019 our energy consumption has increased by 25% (I do not know how) and at the same time the bills will increase by 30% while reducing the VAT from 18% to 5%.”

There is the idea that both government and energy companies only care about their own interests, not about energy poor households (something that is mentioned in several interviews, e.g., NM\_C1, NM\_C5) The energy company is distrusted as it may increase the price of energy (and as a result of that the household energy bill) without giving a valid reason for this. The municipality is considered overly bureaucratic, while the local mayor is not to be trusted according to one interviewee (NM\_C5). This interviewee also states that the construction sector, in general, is considered corrupt (the term mafia is used), undermining effectiveness and affordability of renovation projects.

Feelings of helplessness are expressed by interviewees (NM\_C1, NM\_2, NM\_C3, NM\_C4) who wish to do something about their situation but are unable to obtain the necessary financial support. Another source of frustration among interviewees (NM\_C1, NM\_C3, NM\_C5) is that some of the other residents in the apartment building do not see the urgency to improve the buildings' energy efficiency. Interviewees presume this is due to their lack of knowledge and willingness to invest.

### ***(stakeholder interviews)***

Stakeholders point out that energy poverty is widespread among Macedonian households. One stakeholder (NM\_SH4) explains how this is related to the relatively high costs of energy, outdated and inefficient heating systems, as well as the low energy performance of buildings and appliances. Energy expenditures, therefore, take a high share of already low incomes, and many low-income households cannot afford to pay energy bills. One of the stakeholders (NM\_SH1) states that not energy poverty, but poverty, in general, is the main problem. Another stakeholder (NM\_SH4) emphasises that a lack of awareness and knowledge also contributes to energy poverty, when people don't know how to reduce their energy consumption through behavioural changes. Several (NM\_SH2, NM\_SH3, NM\_SH4) emphasise that to reduce energy bills, Macedonian households resort to diverse energy saving strategies, including using alternative heating sources (for example solid fuels), increasing energy consumption at night, and decreasing appliance and lighting usage, reducing the number of heated rooms, replacing old lightbulbs with LED and replacing old electrical appliances with more energy-efficient ones. However, when it comes to renovating the construction defects in the building in which they live, they have little recourse, according to NM\_SH2.

One stakeholder involved in building renovations (NM\_SH4) points to the widespread problem of run-down facades and badly or non-insulated windows, allowing draughts to enter the house. Moreover, the use of old heating boilers that are not properly adjusted and other outdated appliances contributes to high energy consumption levels. This interviewee furthermore states that households who are at risk of poverty are unable to sufficiently heat their homes and use high-polluting materials for heating, adversely impacting people's health, their personal wellbeing and the environment. The strongest impact of the Covid-19 pandemic is felt by poor households, who already are in a precarious situation, according to this interviewee (NM\_SH4).

### *3.5.2 Institutional support and other forms of support*

#### ***(citizens interviews)***

The interviewees do not mention institutional support that they make use of, except for one interviewee (NM\_C1) referring to Habidom (which provides financial support). As for other forms of support (e.g., friends or family), interviewees mention that they sometimes discuss the energy bill with friends or family members. Not being able to heat your home sufficiently is a commonly shared experience. However, some interviewees (NM\_C2, NM\_C4) also point out that everyone has their own problems to deal with.

The interviewed citizens (NM\_C2, NM\_C3, NM\_C4, NM\_C5) mainly point to the municipality and the national government, who should introduce an energy efficiency programme that focuses mainly on people who have little to spend. Such a programme should enable households to improve the energy efficiency of their homes. One citizen (NM\_C2) adds that support in lowering the energy bill through awareness-raising and behavioural changes would be good too. In addition, some interviewees (NM\_C2, NM\_C5) propose that it would be good if institutions could refer residents to local social networks or introduce them to a community support centre so that they can receive reliable information, better understand their energy bill and share experiences.

#### ***(stakeholder interviews)***

When asked about the most pressing issue that energy poor households face, one stakeholder (NM\_SH3) argued that

"For those heating their homes with electricity, the most pressing problem is the disconnection from the grid after a certain period of failing to pay energy bills."

According to him, this even happens to many households in arrears that have set agreements with energy companies but nevertheless end up being disconnected.

Stakeholder interviewees provide several examples of institutional support that households can make use of. One example provided (NM\_SH1) is on the municipality of Karposh that started a solar panel project for low-energy households can participate in. The same municipality also introduced a programme to insulate façades. One interviewee (NM\_SH4) states that the national government has created a subsidy programme (fuel allowance) available to energy-vulnerable customers based on the number of family members and on total family income. Meeting certain criteria means they qualify for a subsidy on their monthly electricity bill. Furthermore, to reduce air pollution, the state-owned energy generation utility company provided subsidies to replace old heating stoves with inverter air conditioning units in several towns. This programme targeted

mostly low-income households as they cannot afford to provide new heating appliances on their own. The programme was available over the last two years, according to NM\_SH4.

One stakeholder (NM\_SH1) stated that programmes that permanently reduce household energy consumption are most effective and can be accomplished via (a combination of) financial, material or knowledge supports. Most of the interviewees (e.g., NM\_SH2, NM\_SH3, NM\_SH4) believe that educational support should be stepped up so that householders could do more to target energy efficiency and healthy living themselves (through behavioural change).

While the stakeholders have no information about the extent to which households make use of existing support schemes, they expect that lengthy administrative procedures present significant barriers for participation – as remarked by one interviewee (NM\_SH2). Another interviewee (NM\_SH4) adds that most knowledge about support programmes is spread by the word of mouth.

When asked about the roles that different stakeholders could and should adopt in addressing energy poverty, most interviewed stakeholders (NM\_SH1, NM\_SH2, NM\_SH3, NM\_SH4) emphasise the important role of the government – also in providing more general socio-economic support to poor households. The role of the municipality, being closest to the citizens, should be central in tackling energy poverty. A critical note was added by one interviewee (NM\_SH3) who remarked that the government should tackle the problem at its roots and not by ‘firefighting’ and ‘alibi activities’. The term firefighting might refer to measures that address the symptoms rather than the cause (e.g., fuel allowances), while the term ‘alibi activities’ seems to refer to questionable governance practices and to window dressing by the government.

Three interviewees indicated how several stakeholders could adopt a more pro-active and supportive role (NM\_SH2, NM\_SH3, NM\_SH4). Landlords are too passive. As for homeowner associations, these could also play a significant role in implementing a planned process. The homeowner associations in multi-apartment buildings, where low-income households live, could help by sharing costs or provide other ways of compensation/support to the most vulnerable households living in the building. Energy companies could do much more, and at present hardly develop any activities to support energy vulnerable or energy poor households. Finally, NGOs were identified by the interviewees as potentially providing various types of support to help low-income households such as education events, raising awareness and advocacy.

### *3.5.3 Discussion on institutional support to address citizen needs in North Macedonia*

Both citizens and stakeholders emphasise that current available institutional support is too limited and not well tailored to household needs. There is a large number of highly-inefficient multi-apartment buildings – such as those where the interviewed citizens live – in dire need of retrofitting.

The householders interviewed point towards local and central government when it comes to the support they need – to provide some form of financing to refurbish their apartment building. In addition, they would like to see government take a more active role in raising awareness about a healthy living environment, how to heat your home properly and additional possibilities to achieve a lower energy bill.

The way interviewees talk about encounters with government and other institutional actors shows that improvement is not only about the type of measures provided, but also about how institutional actors

communicate with and treat citizens. There is criticism on the limited responsiveness of government, the lengthy bureaucratic procedures and the perceived lack of interest on behalf of these actors towards ongoing situations energy poor households have to contend with. The result is that citizens do not trust their government (whether municipality or national government). A similar situation applies to the relationship between citizens and energy companies, landlords and the construction/building sector in general (where even terms such as ‘mafia’ are frequently used).

As for other (non-institutional) support needs, most interviewees mention the provision of information and behavioural change – not only to lower the energy bill but also to improve comfort and health. Community support mechanisms also merit more attention.

### 3.6 Poland

**Table 8 Stakeholder and citizen interviews in Poland**

Reference in the text*	Description
PL_SH1	City’s department for environmental protection and energy
PL_SH2	Energy utility company
PL_SH3	Municipal social services
PL_C1	Elderly man
PL_C2	Family of three (one elderly)
PL_C3	Elderly lady

\* PL: Poland; SH: stakeholder; C: citizen

#### 3.6.1 Experiences of energy poverty

##### **(citizen interviews)**

The Polish citizens among the interviewees are all elderly homeowners. They either live in a large housing estate, in a semi-detached house or a detached house with multiple storeys. The years of construction range from the 1950s to the 1980s. Most citizens are found to be content with their home or even feel attached to it.

Common problems as experienced by all citizen interviewees are mould, dampness and draughts. One interviewee (PL\_C2) places old clothes at the door to prevent draughts. While two citizens (PL\_C1, PL\_C3) explained that mould is particularly present underneath the windowsills where it forms due to degraded and insufficiently sealed windows. Another citizen (PL\_C1) mentions that the mould and dampness make her feel uncomfortable. Overheating is another issue for two citizens (PL\_C1, PL\_C2). In one case (PL\_C2) this is caused by the inefficiency of the outdated heating system:

“Since I heat with hard coal and have a very old boiler and no possibility of regulating temperatures, sometimes the house is overheated. Basically, when I feed the boiler with coal, to make sure that it will keep burning I need to put a lot and then the house heats up very quickly and very much.”

In another case, the bathroom of the resident's apartment is constantly overheated without her having control over the temperature regulation, again leading to discomfort.

While none of the citizens struggle to pay their energy bill, they all collect and closely monitor their bills. One interviewee (PL\_C3) mentions fear of increasing prices in the future. One citizen (PL\_C1) states that the system of cost division between households in her housing estate is untransparent and overly complex, urging her to pay "compensation bills" for no apparent reason. This creates distrust towards the estate management and party responsible for the cost division. A citizen (PL\_C3) explained that the house he lives in is too large for him which leads to higher heating costs. Large parts of the house remain unheated for most of the time, causing mould.

The citizens interviewed adapt their heating behaviour to decrease their energy bill by "living economically", reducing heating temperatures in winter and switching off unnecessary lighting. One citizen (PL\_C2) states that she does not know what to do to reduce her bills.

Covid-19 did not affect two of the citizens (PL\_C1, PL\_C3). The other interviewee (PL\_C2) stated that the Covid-19 crisis caused her energy bill to decrease because her relatives came less often to visit her at home, reducing the need for extra heating.

### ***(stakeholder interviews)***

None of the stakeholders interviewed had previously done work on the topic of energy poverty specifically. According to one stakeholder (PL\_SH2) this is due to the term being fairly new within public policy circles in Poland.

One stakeholder (PL\_SH1) explains a large array of problems connected to energy poverty, among which are the inability to ensure adequate thermal comfort, physical degradation of the building and bad health conditions due to microbes and mould. Energy poverty also relates to social exclusion and inheritance of energy poverty by the following generation, according to another interviewee (PL\_SH3). A third stakeholder (PL\_SH2) mentions that factors explaining the occurrence of energy poverty include rising energy prices, the inability to efficiently manage one's budget and a lack of information about managing one's energy usage more efficiently.

Elderly people are said to be especially vulnerable to energy poverty because many live-in houses that are too big for them.

The interviewees (PL\_SH1, PL\_SH2, PL\_SH3) mention several coping strategies for households that are not or hardly able to pay their bills. These include: applying for social benefits such as allowances; applying for co-funding; and reducing other expenses or postponing the payment until the next social service transfer arrives. Some households adopt more detrimental coping mechanisms, like using cheaper poor-quality fuels, building up debt, underheating, or stopping paying bills altogether.

One interviewee (PL\_SH1) mentions how Covid-19 has aggravated problems for vulnerable households through a loss of income, especially for those working in low-income sectors, and increased energy costs. These effects are further compounded by other factors contributing to poverty such as increased food prices

and the harsh winter of 2020/21. This interviewee also points out that policy support has become less accessible due to digitalisation – where support has to be applied for online.

### 3.6.2 Institutional support and other forms of support

#### **(citizen interviews)**

The citizen interviews give no indication of citizens using any form of institutional support.

The residents require financial support to afford repairs (to the windows) or renovations (such as replacing heating systems *etc.*). While financial support is seen as key enabler for housing improvements, one resident (PL\_C3) says she needs additional support to carry out the physical labour involved in performing such improvements due to her advanced age. The party responsible for providing support is in all interviewees' eyes the municipality. The housing association, the energy utility company and the national government are also seen to be able to offer support. The housing association tenant (PL\_C1) would like to know how the cost division system works, requiring more transparency from the association. Two of the residents (PL\_C1, PL\_C3) would like to be provided with information about improving energy efficient behaviour.

Two residents (PL\_C2, PL\_C3) receive support from their family in the form of food and medicine supplies or through improvements such as replacing the windows. One interviewee (PL\_C1) sometimes discusses the cost division system with her neighbours but not the energy bills. She receives no support from family or friends.

#### **(stakeholder interviews)**

Stakeholders interviewed discuss four policies supporting energy poor and/or vulnerable households.

The Low-Emission Liquidation Programme is initiated by the City of Bielsko-Biała. It co-funds the replacement of old and highly emissive heating equipment with more modern systems such as gas- and oil-fired boilers, heat pumps and connections to the district heating system. Up to 80% of costs are reimbursed with a cap at €3,800.

The Clean Air programme is a national policy that co-finances household investments that improves the air quality. This entails the replacement of old heat sources, thermal insulation of the building envelope, more complex thermal retrofitting and the installation of renewable energy sources.

The Stop Smog Programme is a national policy that specifically targets the energy poor and co-funds thermal retrofitting and the replacement of emissive and inefficient heat sources.

The energy allowance is a small monthly payment that is granted to vulnerable households upon request. In order to avail to the energy allowance, one must also be receiving the housing allowance and has to meet certain income criteria.

Some households do not even bother to apply for the allowance because it is quite small (€4.20 per month for a five-person household).

Another important support for income-poor families with dependents is the “500+” programme under which *ca.* €110 is granted monthly for each child in the family. According to one stakeholder, it improved the situation of many families in the city.

There are also educational campaigns organised by many institutions teaching householders how to use energy more efficiently.

All three stakeholders state that citizens are “moderately” or “quite familiar” with the support programmes mentioned above. They are also said to be “fairly accessible”. However, households do need support in applying for available supports, e.g., collecting the necessary documents. Currently it is difficult to evaluate how successful policies are in targeting energy poor households because the concept of energy poverty itself is quite new. A stakeholder (PL\_SH1) reports that some people committed fraud within the Low-Emission Liquidation programme by periodically reinstalling old equipment and applying for funding.

Awareness-raising campaigns were said to be successful by one stakeholder (PL\_SH1) while another (PL\_SH3) had “mixed feelings” about them: on the one hand they are necessary, on the other hand their impact is hard to evaluate.

According to one stakeholder (PL\_SH1) it is necessary to co-fund investments which improve the situation of vulnerable people. On the other hand, programmes such as the energy allowance, which co-fund people’s energy bills, are not effective because they make people dependent on the funds instead of encouraging sound budget management and the implementation of energy-saving measures. Another stakeholder (PL\_SH2) deems co-funding of bills a good solution if the criteria are clearly established.

The municipality is seen as the institution most responsible for addressing the issue of energy poverty. Interviewees (PL\_SH1, PL\_SH3) mention that it is “closest to the citizens” and can therefore come up with the best support schemes.

Changes to improve existing support mentioned by stakeholders are:

- Permanent energy counselling with special attention to energy poor households (PL\_SH3);
- 500+ programme should target income-poor households more specifically instead of “giving money to everyone” (PL\_SH3);
- The state government should introduce a legal framework for comprehensive support for energy poor households (PL\_SH1);
- Schools should become active in raising awareness about energy use and energy efficiency (SH1);
- Societal organisations such as churches and senior clubs should disseminate information among energy poor households (PL\_SH1).

### *3.6.3 Discussion on institutional support to address citizen needs in Poland*

Citizens mention that they have or would like to implement energy efficiency measures in their own home. Despite the presence of several national support programmes, which would provide the desired financial aid, no citizen refers to any of these programmes. The underlying reason for citizens not mentioning these is a subject of high interest. Whether there is a lack of accessibility to or familiarity with the programmes could inform policymakers about interventions for increasing policy effectiveness.

Householders find that the municipality is responsible for providing support for energy efficiency measures. This matches the view of stakeholders who see the municipality as being closest to the citizens.

The stakeholders have opposing views on co-funding households' energy bills for example through the energy allowance. On one hand it is estimated to lead to increased dependence and discourage action to improve their situation, on the other hand it is seen as a way out of energy poverty. The interviewees are currently capable of paying their bills and state to be in special need for renovations which permanently lower bills and increase their level of comfort. In contrast, households which have permanent and acute troubles to pay their bills might prioritise financial support for paying bills above long-term measures to improve their situation.

Energy prices in Poland are expected to increase throughout the coming years. Stakeholders as well as householders expect that this will have a severe impact on people's capability to pay their energy bills. Current experiences of households concerning paying bills should be viewed through the lens of the increasing intensity of these problems if they remain unaddressed.

### 3.7 Scotland (UK)

**Table 9 Stakeholder and citizen interviews in Scotland**

Reference in text*	Description
UK_SH1	Comhairle nan Eilean Siar - The Local Government Council which serves the Outer Hebrides and which oversees the implementation of Scottish Government policy across a wide number of areas, one of which is aspects of Energy.
UK_SH2	The Energy Advisory Service (TEAS SCIO) Scottish Charitable Incorporated Organisation - The main organisation in the Outer Hebrides who deal with people in energy poverty and contribute to helping shape local and national policy to tackle the issue and its effects.
UK_SH3	Home Energy Scotland - A network of local advice centres covering all of Scotland.
UK_C1	Male, middle aged home-owner, 2 adults and 2 kids
UK_C2	Male, young (early thirties), home-owner. Household: young married couple (2 adults).
UK_C3	Male, forties, home-owner,

\* UK: United Kingdom; SH: stakeholder; C: citizen

#### 3.7.1 Experiences of energy poverty

##### **(citizen interviews)**

The interviewees are home-owners and all live in the rural areas of the Outer Hebrides. They feel attached to the place where they live, but have problems with the quality of their homes. Interviewees mention cold, dampness and (extreme) draughts.

The interviewees all would like to do something about these problems, but all point out that this is (too) expensive. One interviewee (UK\_C1) plans to replace the window frames and do something about the draught at the outside door as soon as they can afford it. However, the cost of materials, delivery here and

finding tradesmen to carry out the work is expensive and time consuming. Another interviewee (UK\_C2) recounts how it takes a long time to get the house warm because the boiler is over 20 years old. However, replacing the boiler and heating system is too costly at the moment. The third interviewee (UK\_C3) has done inquiries to assess the cost of improvements to the home, only to conclude that these are financially unaffordable. Instead, he installed LED lights, did some draughtproofing and made small changes in the way he uses energy. He lowered the temperature beyond the recommended temperature. This interviewee, who owns his home, states he would like to move to the mainland because it's less expensive to live there.

All three households use oil for heating and purchasing oil is sometimes a challenge. They explicitly have to budget for it, and two interviewees express that the oil costs press heavily on the household budget. One of the households (UK\_C2) has a second home (which is for sale) for which costs have to be incurred and this also weighs heavily on the available budget – it is stretching both their wages for the bills on both houses. Another interviewee (UK\_C3) has a monthly bill amounting to £350 for electricity and heating (electricity, coal and oil).

All interviewees try to reduce their energy bills by installing small energy-saving measures like draught strips. One household (UK\_C1) got support in this from Tighean Innse Gall (TIG), another interviewee (UK\_C2) did not receive any help with this but indicates that he is aware of local and national government sites that provide information on energy saving measures. The third interviewee (UK\_C3) states that there is no local support to help him insulate cavity walls.

As for the impact of the Covid-19 pandemic, one interviewee (UK\_C1) mentions a negative impact on work and income. Another interviewee (UK\_C2) indicates that he works in the public sector that has not been affected by the pandemic.

All three households experience fatigue due to the lack of comfort and the cold and financial pressure. Children in the family are affected by the cold as well, as pointed out by one interviewee (UK\_C1).

### ***(stakeholder interviews)***

One of the biggest challenges concerns the state of houses in the Outer Hebrides. Most of the houses were built after WWII and the solid construction does not lend itself well to many accessible insulation methods (in terms of availability, skill in redeployment and cost).

Stakeholder interviewees (UK\_SH1, UK\_SH2) explain that the age of these houses and the weather systems people are facing, coupled with an ageing population, limited resources and an increase in the rural / island cost of goods and materials needed for energy efficiency improvements all present challenges for energy poor households on the Outer Hebrides. Today, even with all the work done, 90% of island homes are in need of larger energy efficiency measures, including internal wall insulation and heating systems. Rising energy prices and low-paid work have also exacerbated energy poverty, posing a huge challenge to reducing energy poverty.

To combat energy poverty, stakeholder interviewees (UK\_SH2, UK\_SH3) take a personal approach in which a relationship of trust is built with the household. A face-to-face visit creates a faster and better rapport with the householders and allows you to gain confidence before discussing energy poverty. This allows the householder to be more open and honest with you as an energy advisor and promotes the adoption of that

advice. When discussing energy poverty, one interviewee (UK\_SH3) points out, it is important to take into account that older people in particular are very reluctant to admit that they live in poverty. It takes time to gain trust. Speaking the language (Gaelic) is an advantage here.

The most pressing problems that are mentioned by interviewee UK\_SH1 include: not knowing that help is possible; not wanting to ask for help out of pride or shame; heating one room in the house while the rest of the house is getting colder and clammy. In addition, living without heating and hot water is mentioned by another stakeholder (UK\_SH2). Moreover, this is not something that people see not escape from. One interviewee (UK\_SH3) points out that some households choose to feed their children well and keep the rest of their budget for the pre-paid energy meter.

One interviewee (UK\_SH1) states that households in the Outer Hebrides have been hit hard by the pandemic with the fourth highest increase in layoffs in Scotland, which will have a knock-on effect on households' ability to pay for energy costs.

Due to the Covid-19 pandemic, face-to-face home visits could no longer take place, while the stakeholders indicate that this is very useful for their work.

### 3.7.2 *Institutional support and other forms of support*

#### ***(citizen interviews)***

The interviewees all currently consider it too costly to improve the energy efficiency of their homes and do not seem to see any support for this. The householders interviewed do not mention any support schemes that they make use of or are aware of. One interviewee mentions that he knows that the municipality provides some energy saving advice on its website (UK\_C2). The two other interviewees (UK\_C1, UK\_C3) refer to Tighean Innse Gall (TIG) for information, energy advice and support to make their homes more energy efficient.

There is limited access to fuel allowances in Scotland. There is the Warm Home Discount (£150 paid into energy accounts for vulnerable households towards the end of each winter), and there are energy vouchers (which are discretionary and limited in availability). The three households do not receive support from others (*e.g.*, family or friends) to pay the energy bill. Two households (UK\_C1, UK\_C3) sometimes discuss the bill with others and know that they also have problems. The other household (UK\_C2) does not discuss the bill with others, assuming that others have no payment problems because they live in newer homes with better heating systems.

The three households indicate that the main barriers are a lack of financial resources to invest in improving the energy efficiency of their homes (*e.g.*, the heating system). All household would be interested in getting advice, *e.g.*, on which energy system best suits their home, but also advice about grants and government schemes available to put in a new heating system.

Other organisations besides Tighean Innse Gall that could perhaps help, according to those interviewed, are: energy companies and the local energy advisory organisation, the CnES financial inclusion team and Home Energy Scotland advisors (national Scottish Scheme to advise households, who also provide interest free loans for energy efficiency measures for those able to pay).

In addition, when asked, the interviewees express interest as well in becoming part of social networks to exchange tips and information (UK\_C1), support to deal with debt situations (UK\_C2, UK\_C3), and support to better understand the energy bill (UK\_C3).

### ***(stakeholder interviews)***

In order to solve the problems of the households, they need to know that there is support for them. Too often people do not know if they are entitled to benefits or a service that could improve their situation, so advice and signage are essential, according to one stakeholder interviewee (UK\_SH1)

There is support available on the Outer Hebrides. First of all, as one interviewee (UK\_SH1) points out, through TIG and The Energy Advisory Service, providing a variety of services that improve energy efficiency and quality of living. In addition, another interviewee (UK\_SH2) mentions the Home Energy Scotland interest-free loan scheme. This scheme provides an interest-free loan of GBP£5000, with a GBP£400 cash back scheme for households that install or replace a solid fuel heating system or existing obsolete night storage systems with high heat retention storage heaters (which receive electricity when the price is low such as at night, in the morning or afternoon and which release generated heat slowly). In addition, direct fuel allowances are available via the Fuel Bank Vouchers Schemes which are worth around GBP£100 in energy usage, according to UK\_SH1. However, the vouchers are discretionary and only 3 are available per household. Once used more cannot be claimed as they are capped. For the Outer Hebrides, GBP£100 can provide around 2-3 weeks of electricity.

Cooperation between organisations offering support to vulnerable and poor households is well organised at the Outer Hebrides. They can easily refer to each other when households have specific questions and needs.

A home visit and a customised advice service are vital in remote and rural island communities, to enable a more holistic assessment of the circumstances and what is needed, according to one interviewee (UK\_SH3). Also, because there are large differences in heating systems a one-size-fits-all solution will not work. The different organisations do a lot to reach out to households (*e.g.*, online advertising, local newsletters, etc.). However, reaching households that are most affected by energy poverty still is a challenge. Stakeholder (UK\_SH1, UK\_SH2) emphasise that the interagency work is critical to identify these households, as well as speaking to the spokespersons for each community.

As for the roles that different stakeholders could and should play, one interviewee (UK\_SH2) states that the national government could play a role in funding local energy advice agencies such as his own organisation The Energy Advisory Service SCIO which currently rely on project-based fundraising and receive no support from the government. TEAS SCIO understands local housing needs, people (literally, they speak Scots Gaelic, which, while a minority language on the mainland, is spoken by around 40% in the Outer Hebrides) and how best to deliver local services and advice. Another stakeholder (UK\_SK1) mentions that municipalities should continue to provide umbrella support and advice for agencies, continue to learn from other areas to develop local services, continue to work with the Scottish Government to help them understand challenges and potential solutions, particularly when drafting legislation, and continue to work towards innovation in energy matters related to island communities, according to this stakeholder.

Landlords should provide cost-effective and energy-effective heating systems in the homes they rent and provide homes with a Standard Assessment Procedure (SAP) rating not lower than D or E, according to one stakeholder (UK\_SH2). Housing associations could do their bit by ensuring that regardless of the condition of the house, tenants have a warm home that is not too expensive to heat, by installing efficient heating systems. For welfare workers, it is important to stay up-to-date with the help provided by The Energy Advisory Service, TIG and other help such as Home Energy Scotland that is available. Interviewees point out that many agencies support the social, financial and mental wellbeing of households and individuals:

- Tighean Innse Gall (TIG);
- Energy Advisory Service SCIO;
- CNES Financial Inclusion Service;
- Citizens Advice Scotland;
- Home Energy Scotland (HES);
- NHS Western Isles;
- Department of Works and Pensions;
- Social Security Scotland;
- Western Isles Community Care Forum;
- Western Isles Association for Mental Health;
- The Shed Project;
- Western Isles Foyer.

### 3.7.3 *Discussion on institutional support to address citizen needs in Scotland*

There are many organisations in the Outer Hebrides that provide support to poor and vulnerable households. They collaborate very well in these efforts and use a customised approach that shows recognition of the specific geographical, cultural and socio-economic dimensions of energy poverty on the Outer Hebrides.

The poor overall quality of the homes, low incomes, rising energy prices, ageing population and geographical remoteness all impact energy poverty on the Outer Hebrides. The geographical remoteness affects the availability of affordable materials and a skilled workforce. Ageing, low wages and increasing energy prices, in combination with the tendency to not talk about energy poverty problems (shame, pride), all contribute to a continuation of energy poverty despite the presence and relative success of various organisations that work to support vulnerable households on the Outer Hebrides. They provide information, do referrals, help in applying for available schemes (such as the Warm Home Discount or energy vouchers) and support in low-cost measures. However, as pointed out by both citizen and stakeholder interviewees, what is lacking is affordable solutions to improve the energy efficiency of the homes and the efficiency of the heating systems. Low wages in combination with rising energy costs (the impact of both increased due to Covid-19) create a situation in which energy poor households see no escape, no solution, resulting in feelings of helplessness and fatigue. Trade-off choices between food and heating are no exception. Underheating occurs frequently. Significant investments in the housing stock would be needed, as a more structural solution to address the situation of energy poverty.

## 4 Discussion of findings

### 4.1 Introduction

The objective of Task 1.3 is to capture the experiences of institutional support in reducing energy vulnerability. The interviews addressed the experiences citizen interviewees have with energy poverty, their main challenges, their coping strategies, their efforts to improve their situation, whether they received any support when doing so, and the types of support they need. The explicit aim was to better understand citizen experiences – rather than a survey-based quantification of types of institutional support that households use. Therefore, a qualitative approach was used, so as to arrive at a contextualised understanding of experiences with energy poverty, experiences with institutional and other forms of support, and expressed needs for and interests in support.

Due to the Covid-19 pandemic, it was difficult to have a large number of citizen interviews in each partner country. Therefore, it was decided to also include stakeholder interviews. What we will present – in line with the objective of Task 1.3 – are the diverse types of experiences expressed across all the countries. Several of the reported experiences stood out (in varying degrees) in all countries involved. These findings are supported by stakeholder interviews and other recent studies based on citizen interviews and focus groups (Grossman *et al.* 2021; Longhurst and Hargreaves 2019).

We structure the findings using the concept of social resilience, which allows us to subsequently assess the implication for (institutional) support. In other words, based on the findings we address the question as to how energy poor households could benefit from support that enhances their social resilience – via strengthening capabilities.

The remainder of this section is organised as follows. First, we introduce the concept of social resilience, by presenting three types of resources that people draw upon to cope with difficulties. Next, we organise the findings from Section 3 using these three types of resources to identify the problems and challenges citizens have experienced. In addition, we formulate suggestions to address these challenges, and highlight the role of intermediary organisations to build social resilience.

### 4.2 Social resilience and energy poverty

Discussions in the literature on the impact of energy poverty on people's mental and physical health focusing on wellbeing relating to restricted lifestyles and social exclusion (Thompson *et al.* 2016) are confirmed by our interview findings. In addition, our interview findings reveal – in line with recent studies that focus on citizens' lived experiences – that these experiences and emotions are not a mere consequence of living in a situation of energy poverty, but that they also tend to perpetuate or aggravate this situation (Grossman *et al.* 2021; Longhurst and Hargreaves, 2019).

The concept of social resilience refers to the ability of people to cope with changes and challenges and the resources they can draw upon in doing so (Van der Haar *et al.* 2018; Putnam 2000). The interview results show how energy poverty tends to undermine people's already limited ability to cope and how it negatively

impacts their capabilities.<sup>7</sup> Not being able to cope subsequently further undermines their situation of wellbeing and limits their repertory of possible actions that they can undertake. Energy poverty affects and is affected by social resilience.

Our research reveals the ways in which energy poverty negatively impacts peoples' capabilities, which allows us to start considering how this could be and/or already is being reversed – in other words how interventions could (better) support capabilities. Our definition of social resilience is in line with the capabilities approach as developed by Amartya Sen and Martha Nussbaum (Sen 1993; Nussbaum 2011) and as developed in relation to energy poverty by Day *et al.* (2016). In these approaches, poverty in general is understood as being deprived of opportunities and capabilities and therefore results in lower levels of social resilience.

The concept of social resilience is adopted to structure our empirical findings. We distinguish between personal, collective and environmental resources (Van der Haar *et al.* 2018):

- **Personal resources and capabilities** refer to the skills and competences, as well as the motivation to make use of these (considering educational levels, income, willingness to (accept) change; trust in others and institutional trust).
- **Social resources** refer to participation in social networks, which can offer access to new opportunities that cannot be accessed individually. Participation in social networks is furthermore important for people to develop themselves – these networks can be small, local (*e.g.*, family, football club) or larger and more open (*e.g.*, religious community; neighbourhood, work environment).
- **Environmental resources** are strongly related to the physical structure and spatial distribution of services, and the quality of the direct living environment. Proximity of services, of meeting places and social spaces impact social resilience.

This division allows us to clarify the problems citizens living in energy poverty are confronted with in terms of (lacking) capabilities, specified for these three resource areas, leading to lower levels of social resilience.

### ***4.3 Strengthening capabilities, empowering citizens and the role of intermediaries***

The interviews point toward the importance of the role played by intermediary organisations, some of which already work with households (*e.g.*, NGOs, energy coaches, budget coaches, energy cooperatives, community development organisations). Their role is different from (local) government in that they appear better able to:

- provide tailored advice and support;

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<sup>7</sup> Capabilities refers to the possibilities, opportunities and capacities of individuals and groups to function and flourish (Davoudi and Brooks, 2014). Capabilities are “the actual or real opportunities to realise given functionings, whether one chooses to at any particular time or not.” ‘Functionings’ refers to ‘beings and doings’ and “can include states such as being in good health, and activities such as undertaking paid work” (Day *et al.* 2016: 258).

- build up a personal relationship;
- build trust;
- intermediate in the interactions with government, landlords, energy suppliers, *etc.*;
- collaborate with other local social networks and partners;
- support community development;
- support or start lobby/advocacy.

This finding is confirmed by a study documenting how energy poor households rely on intermediary organisations when interacting with markets (institutional systems) (Ambrosia-Albala *et al.* 2020).

Recent research shows that a personal approach, in which professionals listen to residents and consider them with empathy, creates a bond of trust (Grossman *et al.* 2021). This is corroborated by our interviews. Respondents pointed out several times that organisations that provide a personal approach are well-trusted – unlike energy suppliers or government bodies (in some cases). However, citizens are also clear in their conviction that it is the government (national and local) that is responsible for addressing the structural causes of energy poverty. Even though the types of support these organisations offer to improve their capabilities are not sufficient, they are still considered necessary and helpful.

By contrast, experiences of being treated in a disrespectful, distanced manner is likely to result in people withdrawing themselves and no longer asking for the support which they need and are entitled to. The consequence of not asking and not receiving any support can worsen people's situation which may lead to a downward spiral.

Table 10 summarises the findings in terms of the problems and challenges voiced across partner countries. The findings have been structured using the three types of resources. The table provides suggestions on how support could help address these expressed problems and needs. Various types of support are suggested. In fact many of the stakeholders interviewed are already active in providing this type of support, in different ways and to varying degrees, *e.g.*, providing information on energy saving and efficiency, information on available support schemes, making referrals to other organisations where needed, providing energy and budget coaching, helping to find a better energy supplier, helping to apply for available schemes (*e.g.*, fuel allowances), supporting with the implementation of low-cost measures. Several of these organisations work together in this with other organisations, to provide tailored support, recognising specific needs of households related to (cultural, geographical) circumstances. In the final column suggestions pertain to structural conditions that need to be addressed by government.

**Table 10: Problems in the 3 resource areas, suggested support and roles**

Problems and challenges expressed in the area of Personal Resources		Suggestions for support to address the experiences/to address the expressed needs:	Role for intermediary organisations	Role for government
Skills and competences	<b>Health:</b> ability to improve the home (DIY – repairs, insulation) – undermined by ill health	Provision of support to do the repairs	Practical support in repairs	
Skills and competences	<b>Conflict with landlord:</b> conflicts with the landlord - who won't remunerate or won't allow improvements done to the home	Pressure on the landlord to do (or pay for) the necessary improvements and repairs		Policies that incentivise or oblige landlords to improve the energy efficiency of their homes
		Pressure on landlords to collaborate with tenants that want to take action themselves	Help organise and represent tenants vis-à-vis landlords	
Skills and competences	<b>Experience with landlords:</b> not knowing your rights (or to act upon these) as a tenant, resulting in feeling powerless when the landlord refuses to take any action to improve the home	Provide intermediary support: organise and engage with tenants to inform them about what they can do and how they can get support in this. Organise tenants to enable mutual support, exchange and to strengthen advocacy (vis-à-vis government or directly towards landlords)	Help organise tenants	
Motivation; distrust	<b>Unpleasant encounters with institutional support providers:</b> being treated in a disinterested or even disrespectful undermines the motivation to seek further interactions	Provision of intermediary support to ease the interactions (Structural change; change in culture among the relevant institutions and bureaucracies (civil servants))	Intermediate	

Problems and challenges expressed in the area of Personal Resources		Suggestions for support to address the experiences/to address the expressed needs:	Role for intermediary organisations	Role for government
Skills and competences	<b>Negative experience with energy suppliers:</b> being unable to assess the offers by energy supply companies (due to either aggressive sales practices or due to a lack of understanding the offers), results in not making use of cheaper tariffs if available	<p>Provision of intermediary support to ease the interactions</p> <p>Provision of intermediary support to ensure that bills, contracts, conditions are understood</p> <p>Provision of intermediary support to choose the best offer (e.g., a new energy supplier)</p> <p>Stricter (compliance with) rules for energy suppliers and pressure on energy suppliers to support energy poor households; obligation to provide clear and easy-to-understand information that enables households to make a informed choice</p>	Intermediate Inform/help understand/educate	Policies that place requirements on energy suppliers
Skills and competences	<b>Experiences with saving energy:</b> e.g., several actions already done, but more information is sought to further enable energy saving	Tailored energy saving advice and energy coaching offered to interested households	Support in behavioural change	
Skills and competences	<b>Lack of understanding</b> due to low educational levels	Tailored energy saving advice and energy coaching offered to interested households	Idem	
Income	<b>Insufficient income:</b> too little income to pay all the bills	<p>Intermediary support in money-management (budget coaching)</p> <p>(Structural: increase (minimum) wages, pensions, unemployment incomes etc.)</p>	Budget coaching – behavioural change	Governmental legislation and policies on income (support)

Problems and challenges expressed in the area of Personal Resources		Suggestions for support to address the experiences/to address the expressed needs:	Role for intermediary organisations	Role for government
Motivation	<b>Experience of feeling trapped:</b> due to low income, high energy cost, no room to invest, etc.	Intermediary support in inventorying what is possible to improve the situation (e.g., subsidy; grants) Intermediary support in setting up community and peer-to-peer support groups	Intermediate – support households in getting support/ help navigate the institutional system  Organising/building community to enhance mutual support	
Motivation	Worries, fear and stress undermining ability and motivation: e.g., to plan ahead; to consider change; to seek help;	Intermediary support in handling the stressful situation (based on specifically expressed needs)	Support to diminish stress and worries (intermediate)	
Social networks	<b>Experience of social isolation (aggravated by Covid-19):</b> feelings of embarrassment preventing people from inviting friends and family; Not going to friends and family or pub (Covid-19) – undermining possibility to stay warm and cosy Family/friends not willing to come and visit	Provision of community spaces where people can meet (after Covid) Intermediary support in setting up community and peer-to-peer support groups See if energy advice and coaching can improve the situation to some extent Intermediary support to find out if/what support schemes are available to improve the energy efficiency of the homes and heating systems	Organising opportunity for community members to meet  Organising/building/supporting community to enhance mutual support  Behavioural change support	

Problems and challenges expressed in the area of Personal Resources		Suggestions for support to address the experiences/to address the expressed needs:	Role for intermediary organisations	Role for government
			Intermediate – help navigate the institutional system	
Social networks	<b>Experience of peer-to-peer support:</b> overall highly valued and important for both physical and mental relief	Intermediary support in setting up community and peer-to-peer support groups Make visible how peer-to-peer exchange can help by having peers act as ambassadors (and supporting them in taking on that role)	Organising/building/supporting community to enhance mutual support  Building community to enhance mutual support	
Social networks	Experience of not being able to stand up against the landlord: not being part of an effective network of tenants	Ensure visible and effective advocacy to improve tenants' situation. Actively engage tenants in this on a regular basis  Provide intermediary support: organise and engage with tenants to inform them about what they can do and how they can get support in this. Organise tenants to enable mutual support, exchange and to strengthen advocacy (vis-à-vis government or directly towards landlords)	Mobilise community members to voice concerns collectively  Set up and/or support tenants' organisation to have a stronger voice	
Social networks	<b>Lack of collective action:</b> Negative experiences with	Provision of support to help home owners in engaging their neighbours	Intermediate (help owners	

Problems and challenges expressed in the area of Personal Resources		Suggestions for support to address the experiences/to address the expressed needs:	Role for intermediary organisations	Role for government
	neighbours that do not want to collectively invest in improving energy efficiency		in engaging other owners)	
Social networks	<b>Stated interest in community support:</b> to address problems collectively (e.g., improving your home); receive support in finding the right information	Intermediary support in setting up community and peer-to-peer support groups Support the development of community support networks	Organising/building/supporting community to enhance mutual support	
Energy efficiency of the homes	<b>Bad quality of homes and systems:</b> inefficient homes and heating systems	Support investments in inefficient homes Intermediary support to improve the ability to finance these investments Stricter norms and requirements to meet certain standards for different groups of owners	Intermediate: find new opportunities that help finance investments	Government policy and legislation; Government funding/investments
Access to services	Experience of not being able to claim services and support	Efforts to reach energy poor households through other service provision channels at local and neighbourhood levels	Intermediate – across sectors	
Spatial distribution	Rural remoteness	Efforts to reach energy poor households through other service provision channels at local and neighbourhood levels	Face to face advice for remote households	

The table shows the important role that intermediary organisations can play in building and strengthening resilience as a way to decrease and counter energy poverty. The following types of activities have been identified:

- Practical support in repairs;
- Direct support to diminish stress and worries (intermediate);
- Mobilise householders and supporting (or organising) them in voicing concerns collectively (e.g., vis-à-vis landlord);
- Organising, building, and supporting community to enhance opportunities for householders to meet, exchange experiences, and enable mutual support;
- Mediate between households and (institutional) actors;
- Intermediate – support households in getting support/ help navigate the institutional system;
- Intermediate (help owners in engaging other owners);
- Inform/help understand/educate;
- Support in behavioural change (energy; budgeting);
- Intermediate: find new opportunities that help finance energy efficiency investments.

Clearly, behavioural change support is only one of the activities. Looking at household engagements from the perspective of building social resilience, rather than from a behavioural change perspective, would be more in line with the support needs expressed by citizens and with what is happening in practices.

The interview findings strongly suggest there is value in taking a broader approach – beyond behavioural change. Policymakers should therefore recognise that many organisations that assist energy poor households do *much more* than providing energy behavioural change support. Support to build capabilities is not only relevant to empower energy poor households in addressing energy poverty, but also in tackling other challenges (e.g., indebtedness, social exclusion, institutional distrust). Both formal and more informal institutional support mechanisms need to take this into account. Intermediating, then is about collaboration vertically between geographical and policy-related scales, as well as horizontal collaboration across domains of policy and expertise.

Questions that arise and that will be addressed in subsequent work in the EnergyMeasures project include:

- Which organisations are well-positioned to adopt an intermediary role and in what ways? (e.g., what about energy cooperatives; housing associations?)
- What do these intermediaries need to be able to fulfil their role - in terms of national and local government support and recognition?
- To what extent do they fill a gap created by government withdrawal from the social domain?

Another challenge is that even though in some cases (e.g., the Outer Hebrides (UK); the area around Cork (Ireland) and in Belgium – area Turnhout) there are several organisations that (work together and) provide support, still it remains a challenge to actually reach and engage the target groups – an issue discussed in Deliverable 1.1 previously (Dunphy 2020). People are often not aware of the (local) support that is available.

## 5 Conclusions.

This report started with the following overarching questions:

- What are the experiences of citizens faced with energy poverty?
- What are the experiences of citizens with policy and or (other types of) institutional support (in alleviating energy poverty)?
- How can interventions better take into account the specific needs of energy poor households?

### 5.1 Recap of overarching questions

#### 5.1.1 *What are the experiences of citizens faced with energy poverty?*

The experiences have been described in Section 3 and listed in table 9 in Section 4. These resonate with what has been reported in earlier studies. What stands out are the similarities across countries.

#### 5.1.2 *What are the experiences of citizens with policy and or (other types of) institutional support (in alleviating energy poverty)?*

A common denominator among the diverse experiences is that, except for fuel allowances, citizens/respondents do not make extensive use of institutional support. Available support in terms of energy/fuel or income allowances are important as they decrease the risk of (further) indebtedness and related worries and fears. However, this form of support does not address underlying structural causes of energy poverty, nor does it improve peoples' capabilities. In this context it is significant that they did express interest in support to help them improve their situation themselves (in addition to structural measures like investment support, requiring or incentivising landlords to improve buildings, and increasing income support.

#### 5.1.3 *How can interventions better take into account the specific needs of energy poor households?*

The interviews reiterate well-known phenomena: the energy inefficiency of buildings manifests itself in adverse housing conditions such as cold, heat, draughts, dampness, mould, condensation etc. (Bouzarovski 2014). The interviews also confirmed that a combination of low-income levels, rising energy costs, sometimes exacerbated by Covid-19 (e.g., loss of income and higher energy costs), undermines proper access to basic energy services and/or the ability to invest in improving energy efficiency. The need for changes in underlying structural conditions that perpetuate energy poverty has been pointed out by citizens and stakeholders alike. The need for investments in improving the energy efficiency of homes and heating systems, policies to increase levels of income (support) in relation to the rising costs of energy and costs of living, are examples of potential structural interventions that meet these needs.

## ***5.2 Relevance for subsequent work***

The combination of citizen and stakeholder interviews has shown that next to the aforementioned policy support needs to address structural causes, there is also a need for a wide range of other supportive activities and interventions. A significant category of interventions targets social resilience – of which ‘behavioural change support’ is only one part. In fact, the most decisive work that various organisations perform is to bridge the gap between households’ daily realities and the institutional world of policy and legislation – to mediate between system and lifeworld. In contrast to ‘system’ actors, intermediary organisations can move within the lifeworld and operate according to its dominant logic: the communicative rationality that focuses on sharing experiences and reaching mutual understanding. At the same time though, the members of these organizations can navigate the system, its specialised instrumental rationality of policy programmes and government regulations, and the power dynamics involved in dealing with government officials. Precisely the characteristics that make the system appear intimidating and impenetrable to many citizens.

The importance of intermediation for social resilience is the starting shot for subsequent work. WP2 is about household engagements – the core of the EnergyMeasures project - and the conclusions of this deliverable underline the need to consider and clarify how consortium partners that engage with the households can transcend mere behavioural change, and make it part of a broader portfolio aimed at bolstering resilience (in line with D1.2 which also states the importance of broadening up a behavioural change approach to address also the more structural and contextual conditions that affect energy poverty (Dunphy *et al.* 2020). Such a portfolio would include direct practical support to implement measures, mediating between households and institutional actors, providing support in dealing with the institutional system, providing support in community building *etc.*). It has become clear that these types of activities are not additional to behavioural advice but that they are equally important to enable long-term improvement. We should therefore foreground them in our programme design and evaluation. We therefore intend to take the perspective of social resilience in identifying and assessing relevant existing and new supportive practices, in Task 1.4 (policy and support inventory) and WP3 (policy and practice innovation).

## 6 Bibliography

- Ambrosio-Albala, P., Middlemiss, L., Owen, A., Hargreaves, T., Emmel, N., Gilbertson, J., Tod, A., Snell, C., Mullen, C., Longhurst, N., & Gillard, R. (2020). From rational to relational: How energy poor households engage with the British retail energy market. *Energy Research & Social Science*, 70, 101765. DOI: 10.1016/j.erss.2020.101765
- Breukers, S., Agterbosch, S., and Mourik M. (2020) De energietransitie: wie kunnen, willen en mogen er meedoen? *Beleid en Maatschappij* 2020 (47) 4. DOI: 10.5553/BenM/138900692020047004001
- Bouzarovski, S. (2014). Energy Poverty in the European Union: Landscapes of Vulnerability: Energy Poverty in the European Union. *Wiley Interdisciplinary Reviews: Energy and Environment*, 3 (3): 276-89. DOI: 10.1002/wene.89
- Day, R., Walker, G., & Simcock, N. (2016). Conceptualising Energy Use and Energy Poverty Using a Capabilities Framework. *Energy Policy*, 93 (7): 255-264. DOI: 10.1016/j.enpol.2016.03.019
- Davoudi, S., & Brooks, E. (2014). When Does Unequal become Unfair? Judging Claims of Environmental Injustice. *Environment and Planning A*, 46(11), 2686–2702. DOI: 10.1068/a130346p
- Dunphy, N. (2020) Review of Methods of Identifying Energy Poor Households. Deliverable D1.1 for the H2020 EnergyMeasures project.
- Dunphy, N., Quinlivan, L., Lennon, B. (2020) Guidelines for integrating behaviour change approaches while engaging energy poor. Deliverable D1.1 for the H2020 EnergyMeasures project.
- Georgiev, G. (2015). Bulgarian Housing. Status and Prospectives *Procedia of Economics and Business Administration*. ISSN: 2392-8174, ISSN-L: 2392-8166
- Grossmann, K., Jigla, G., Dubois, U., Sinea, A., Martín-Consuegra, F., Dereniowska, M., Franke, R., Guyet, R., Horta, A., Katman, F., Papamikrouli, L., Castaño-Rosa, R., Sandmann, L., Stojilovska, A., & Varo, A. (2021). The critical role of trust in experiencing and coping with energy poverty: Evidence from across Europe. *Energy Research & Social Science*, 76, 102064. DOI: 10.1016/j.erss.2021.102064
- Haar, M. van der, Beyen, C., Blanken, M., Dagevos, J., Mulder, R., Paenen, S., & Vinckx, K. (2018). *Monitor Sociale Veerkracht*. Tilburg: Het PON/Telos
- Habermas, J. (1981). *Theory of Communicative Action Vol. 2 – Lifeworld and System: A Critique Of Functionalist Reason*, (trans. Thomas McCarthy), Boston: Beacon Press.
- Longhurst, N., & Hargreaves, T. (2019). Emotions and fuel poverty: The lived experience of social housing tenants in the United Kingdom. *Energy Research & Social Science*, 56, 101207. DOI: 10.1016/j.erss.2019.05.017
- Middlemiss, L., & Gillard, R. (2015). Fuel poverty from the bottom-up: Characterising household energy vulnerability through the lived experience of the fuel poor. *Energy Research & Social Science*, 6: 146-154.

- Middlemiss, L., Gillard, R., Pellicer, V., & Straver, K. (2018). Plugging the Gap Between Energy Policy and the Lived Experience of Energy Poverty: Five Principles for a Multidisciplinary Approach. In C. Foulds & R. Robison (Eds.), *Advancing Energy Policy* (pp. 15–29). Springer International Publishing. DOI: 10.1007/978-3-319-99097-2\_2
- Nussbaum, M. C. (2011). Capabilities, entitlements, rights: Supplementation and critique. *Journal of Human Development and Capabilities*, 12(1), 23-37. DOI: 10.1080/19452829.2011.541731
- Putnam, R.D. (2000). *Bowling alone: The collapse and revival of American community*. New York: Simon and Schuster.
- Sen, A. (2009). Capabilities and well-being. In: M. Nussbaum & A. Sen (Eds.), *The quality of Life*. Oxford: Clarendon Press. DOI: 10.1093/0198287976.003.0005
- Thomson, H., Snell, C., & Liddell, C. (2016). Fuel poverty in the European Union: a concept in need of definition? *People Place and Policy Online*, 10 (1): 5-24. DOI: 10.3351/ppp.0010.0001.0002.

## Appendix 1: Interview guideline

### Introduction

This document is intended to provide guidance to the project partners in preparing, doing, and reporting back on the interviews that are to be held with citizens and other stakeholders. The purpose of these interviews is to gain insight in the specific experiences of energy poverty in the different countries, and in the ways in which policy can/should best provide support, according to citizens that are in a situation of energy poverty.

The textbox below summarizes what the Description of Works (the EnergyMeasures Proposal) summarizes the activities under Task 3.1

#### **Task 1.3: Citizens' views on policy needs [M1-M6]**

Task Leader: DUNE | Other contributors: UCC, EA, PON, KAMPC, PNEC, HABI, ECOE, TIG

This task seeks to collect a diversity of perspectives from citizens in local communities from the EnergyMEASURES participating countries. The objective of this task is to capture their experiences of institutional support in reducing energy vulnerability. The focus will be on households at risk of energy poverty, who will be engaged through a variety of methods including interviews, surveys and focus groups.

#### **D1.3 Citizen views on policy needs for energy poverty alleviation (M8 – May 2021)**

### Overarching questions:

The main questions that this task seeks to address in our view:

- What are the experiences of citizens faced with energy vulnerability/poverty with policy and or (other types of) institutional support?
- How can interventions better take into account the specific needs of energy poor households?

### Connection to other tasks/WPs/Activities

The findings as reported in D1.3 will be used as additional input (next to D1.2) for the engagement approach in WP2.

## Method of inquiry

### *interviews*

The Covid-19 situation makes face-to-face contact with households impossible in most partner countries. This is a missed opportunity for we would have preferred face-to-face interviews visiting people in their homes (enabling observation of the home-situation as well, and making a natural flow in the dialogue easier). However, we now have decided to do online/phone interviews, not only with citizens but also with other stakeholders' organisations that works directly with energy poor households. The reason for not opting for focus groups is that we are dealing with sensitive information; an online focus group with citizens might be difficult to start with (e.g., when we have engaged with households, and trust has been built, this might be different).

An open approach using semi-structured interviews is also considered more suitable compared to a survey approach with closed questions, for two reasons.

First of all, the experiences, circumstances and existing interventions or forms of policy support may be very different in the different partner countries, and we while all partners may have already ideas about e.g., the main challenges that energy poor households face and the support that they would consider most useful, we could also be surprised by unexpected answers that give us new insights. An open interview approach allows room for 'surprise'. Second, while a survey may give information on whether people find something desirable or not, it does not give us insight in *why* respondents find this. To get answers on the why-questions, interviews are suitable.

Due to the Covid-19 restrictions, we are not able to go into neighbourhoods, have informal talks at the kitchen table or in public places in the neighbourhood. We think that, considering the limitations and considering how the restrictions will impact on the number of respondents that we are able to recruit, it is a good idea to also have some interviews with stakeholder organisations that directly work with energy poor households, to also hear from them about the specific challenges of these households, their needs and how this all has been affected by Covid-19.

T1.3 attempts to draw conclusions on citizen views on policy needs. T1.4 provides an overview of existing policies affecting energy vulnerability and energy poverty. Some of the stakeholders' interviews for T1.3, might also have relevant information for T1.4 – e.g., on the current policy context. So that is something to keep in mind as well.

### *Interviews with citizens and stakeholders*

We hope to collect interview results from all partner countries, but we also have to be realistic and consider the budget that partners have available. In Poland, North Macedonia, UK and Bulgaria we have one partner, in the other countries two. So in the countries with only one partner, all the interview work has to be done by one partner.

### *Recruitment*

We propose that 3 to 6 Interviews are held with stakeholder organisations directly working with energy poor households. (e.g., municipality; housing association; NGO; charity; social worker; energy coach; energy utility)

The exact number depends on your time budget and possibilities. It is important that these organisations know and work with households, so please be sure about that. It may be the case that the person you approach needs to get permission from her/his superiors so keep in mind that this may take some time.

You can also interview your own organisation if it qualifies the criterium of working directly with energy poor households. In that case you can fill in the interview template yourself, or interview a colleague. This first interview then also serves as a test to see how well the interview template works and if any changes are needed.

As for interviews with citizens/households, we propose 3 to 8 interviews (depending on the available time budget and ease/difficulty in finding households). These are energy poor households that may or may not be also engaged as part of WP2. They can also include households that have been able to improve their situation to some extent already – e.g., because of their engagement with the consortium partner. If more members of the households want to participate in the interview, that is fine.

### *What's in it for them?*

The organisations that you interview are probably interested (to some extent at least) in the project and can be invited to stay involved (e.g., subscribe to the newsletter – do we have one?)

As for the citizens you interview, it can be more diffuse. At the end of you interview you can explore together if and how this person would like to stay involved or not. We discussed giving the respondents a little gift (e.g., an energy saving gadget) but have decided against doing this from the project budget (policy officers' rules).

In teams we have made an Excel where you can fill in which respondents you plan will interview. That allows us to get an overall overview of the number of interviews planned and the diversity in types of stakeholders interviewed.

We assume that you are all able to recruit respondents based on earlier contacts with stakeholder organisations and with households. Stakeholder organisations might help you to get in touch with energy poor households, or with other relevant stakeholder organisations. The same goes for citizen-respondents.

This snowball method entails that the respondents are asked to help you in suggesting other potential respondents (e.g., people that they know). This is best asked at the end of the interview.

Before the interview, you make sure that:

- You have the relevant contact details
- The respondents have your contact details
- You have the consent form, information about EnergyMEASURES and other info available for the respondent
- You make an appointment for an interview (by phone/online/skype)
- It is clear how long the interview will take (e.g., one hour on average but it depends on the time availability of the respondents of course – so ½ hour is ok as well)
- Some people may want to read the questions in advance so that they can prepare themselves a bit. That is fine – you can cut and paste the main questions from the format in an email
- As for the interviews with citizens it is made clear to them that no information will be used in such a way that it can be traced back to them as individuals. The interview report will be anonymised
- For the interviews with the organisations, this is probably not necessary

### *Semi-structured interview approach*

We have developed 2 interview templates that present the interview questions to be asked. One template is for the interview with the stakeholder organisations, the other one for the interviews with citizens.

While we ask you to try and ask all of the questions, in a semi-structured interview approach:

- You try to have an interesting conversation (for both sides), which means that you have a ‘natural’ flow in the conversation – in a way that fits you
- You decide on the order in which the questions are best asked
- You can also add questions that come up during the interview.
- If some questions are irrelevant, not appropriate or not suitable for another reason, you can choose to leave them out
- Also you may add your own questions if interesting issues pop-up.

### *Planning and conducting the interviews*

As for the planning of interviews, we suggest that you first interview the stakeholder organisations and then the households. Some of the answers from the stakeholders may provide additional information or context

which helps to improve the formulation of the questions asked to the households. In addition, the stakeholders may provide you with information on existing policy support.

Therefore, we ask you to try:

- To do the interviews with the stakeholder organisations as well as the reporting back on these interviews in February
- To do the interviews with the citizens in March (as well as the reporting back on these interviews)

By the end of February, we can discuss together if the interviews held so far give rise to review the interview template for the households/citizen.

### *Conducting the interviews*

Some of our partners have conducted many interviews, for others this is a new thing. Our suggestions below can offer some help. Some suggestions are especially relevant when interviewing citizens. In case you have questions or remarks, do not hesitate to contact us (e.g., [sylvia.breukers@duneworks.nl](mailto:sylvia.breukers@duneworks.nl))

- Introduce yourself clearly (who are you)
- Thank the respondent for taking some time to have this talk
- Take some time to explain the reason for the interview (see annex 1 for background information), state that you would have preferred to have it face to face etc. Ask the respondent if he/she has questions already.
- Be clear about how much time it will cost (e.g max 1 hour, but probably shorter)
- Ask permission to record if you want to and tell them that your ask that because listening and writing at the same time is difficult for you.
- Ask if the respondent would like to get the interview report afterwards (some people may want to read and agree to the report before it can be used)
- Take time to (re-read your questions, to order your own thoughts when needed)
- Self-evidently – be respectful. Try to add reciprocity – the respondent shares (sometimes very personal and difficult) experiences, you give something back by expressing your interest, by being a good listener.

Probing:

- it is important to give the respondent room to answer (a moment of silence may feel uneasy but it allows the respondent to think and answer; the same goes for a moment of silence to invite a further elaboration or second thoughts)
- Sometimes you need to rephrase a question or leave a question to ask it at a later moment.
- It is a good idea to ask additional ‘Why?’-questions ( e.g., ‘Could you elaborate a bit on that?’ or “Could you explain why that is important to you?” or ‘Could you give an example of that?’ or ‘Could you explain that a bit more?’) in order to get people to elaborate and when people elaborate on things, sometimes additional relevant issues come up.
- A good way to structure your own thoughts is to summarise what the respondent has said. ‘So if I understand you right, you are saying that .....’

Prompt questions:

Prompt-questions are questions to invite the respondent to further comment on something relevant (and it is up to you as interviewer to decide on that). In the template prompt-questions are added, but you might think of additional ones yourself.

## Interview report and your analytical notes

- Take notes during the interview – in case you cannot or do not want to record the interview, try to get an additional person to sit with you and make the notes during the interview so that you yourself can concentrate on listening.
- In case you notice that the respondent get emotional, please note that as well
- You can transcribe the interviews – that means that you listen back the recorded interview and write everything down. If you do not have the time for that, make sure that you do make an elaborate report.
- It is highly advisable to take notes directly after the interview to ensure that you do not forget important aspects
- It probably works best to first write down the report of the interview in your own language, and then translate it (google translate can save you some time here but you need to check the translation of course)
- We would like to get back from you as elaborate reports as possible, in English. These reports show what the respondents answered, *not your analysis* of the answers. (the interview reports are the empirical material and form the basis for an analysis).

- You can use the templates in the Annex II, write down the respondents' answers for each question and send us back these templates.
- In addition to the reports, you're asked to write your interpretative notes, remarks, remaining questions etc. and to briefly discuss your results considering the main questions:
  - What are the experiences of citizens faced with energy vulnerability/poverty with policy and or (other types of) institutional support?
  - How can interventions better take into account the specific needs of energy poor households?

### **Analysis of results and writing of the deliverable**

DuneWorks collects all English interview reports back and will conduct the analysis. Partners that are interested in helping out with this task are very welcome to do so.

We will share in-between versions with the partners and one of the partners will be asked to act as an internal reviewer.

## Appendix 2: Interview templates stakeholders and households

### Template interviews citizens/households

TEMPLATE INTERVIEWS CITIZENS/HOUSEHOLDS	
	Your name and organisation:
	Name of respondent: <span style="float: right;">City/town:</span> Household composition (nr of people, adults, children, elderly): Date of interview: Online/offline:
	Consent form signed:
1.	The housing situation and living circumstances
	<ul style="list-style-type: none"> <li>- (Where do you live?)</li> <li>- How do you like living here? What is your opinion about your home? About the street, the neighbourhood? Are you planning to stay there the years to come? Why (not)?</li> </ul>
	Prompting – continuing with questions on experienced problems:
	<ul style="list-style-type: none"> <li>- Experiences with draught, cold, dampness, and/or overheating during hot summer days</li> </ul>
	<ul style="list-style-type: none"> <li>- How do these experiences affect your day-to-day life? Please give some examples</li> </ul>
	<ul style="list-style-type: none"> <li>- How do these experiences affect the day-to-day life of other members of the household? Examples?</li> <li>-</li> </ul>
	<ul style="list-style-type: none"> <li>- Have you tried to do something about these experiences (if possible at all)? Examples? How did that work out? Was it successful or not? Why? How come?</li> <li>-</li> </ul>
	<ul style="list-style-type: none"> <li>- Are you home -owner? Tenant? Who is your landlord?</li> </ul>
	<ul style="list-style-type: none"> <li>- In case you rent, has the landlord undertaken actions to improve the indoor climate? If so, how? Successful? If not, why not?</li> </ul>
	<ul style="list-style-type: none"> <li>- In case you own your home, what are the main difficulties you face when trying to improve the situation?</li> </ul>

	- Characteristics of the building: type of building; built in what year/decade; do you know if it has an energy label;
2.	In relation to any challenges and problems mentioned in 1, which ones are most pressing?
	What would you need to be able to solve these problems? What type of support?
	From whom would you need support (or collaboration) to help you solve these problems?
3.	Paying the energy bill
	<p>Do you know what you pay monthly for electricity (and/or gas)?</p> <p>Do you face difficulties paying this energy bill? Could you elaborate a bit?</p> <p>Prompts: since when; how often is it a challenge; what other bills place major burden on your monthly budget.</p> <p>Do you (sometimes) have to make choices that you would rather not make in order to be able to pay the energy bill? (e.g., skip a hot meal; lower the temperature; get rid of appliances; other ??)</p>
4.	Effort to decrease the energy bill (saving energy; changing supplier; small investments?)
	<p>Have you tried to lower your energy bill?</p> <p>If so, how? (e.g., saving energy; changing supplier; small investments) Please elaborate.</p> <p>Prompts: Did you receive any support in this? If so from whom/ what type of support, was it helpful, why (not)?</p> <p>Do you have enough information about ways to lower your energy bill? Information about actions for saving energy, but also information about where to get support from organisations.</p>
5.	Covid-19
	<p>Has the Covid-19 situation impacted your situation and if so, in what ways?</p> <p>Prompts (e.g., loss in income; higher energy bill due to being at home with more people all of the time; more difficulty to get support if needed; other ....)</p>
6.	Other stakeholders and their roles
	Which organisations should/could provide a helping hand for your situation and in what ways?

	<p>Prompts, for instance, do you think that your landlord should support you? If so, in what way?</p> <p>Repeat – if relevant, the question with (a selection) of the following:</p> <ul style="list-style-type: none"> <li>- Landlords</li> <li>- Housing association</li> <li>- Community welfare workers</li> <li>- Municipality</li> <li>- Energy company</li> <li>- Other.....</li> </ul>
7.	Contact with peers (sharing experiences; taking collective action)
	Do you discuss the energy bill with neighbours or friends?
	Do you know if/how others have difficulties keeping their homes comfortable and paying their bills?
	Are there ways in which your friends, family or neighbours provide support to you or the other way around? Please elaborate
8.	Actions to improve the situation
	<p>We have some examples of ways to support you to improve the energy-related situation of your home.</p> <p>Please tell us for each of these if and how it could be useful for your situation?</p> <ul style="list-style-type: none"> <li>- Support with lower the energy bill through changes in behaviour</li> <li>- Support to improve the housing situation</li> <li>- Support to address situation of being disconnected</li> <li>- Support to address situations of indebtedness</li> <li>- Support in becoming part of local social networks (that help out each other with information, tips)</li> <li>- Support in finding your way to community support centre</li> <li>- Support in getting access to reliable information and get support to better understand the energy bill, ways to change suppliers and when that is a good idea or not</li> <li>- Other...</li> </ul>
9.	Summary
	<ul style="list-style-type: none"> <li>- To summarise, based on the above, we can draw a picture of the type of challenges you consider most pressing: <i>summarise</i></li> <li>- As for whom/which organisation(s) would be best suited to provide support: <i>summarise</i></li> <li>- As for the type of support you would most need/appreciate: <i>summarise</i></li> <li>- Is there anything you would like to add to the above?</li> </ul>

10.	Is there anything you would like to add to what we have talked about?
11.	Would you be interested in staying engaged with the EnergyMeasures project? ( <i>discuss how that should be done</i> )
12	(if needed: Would you know someone that we could also approach for an interview?)
	Thank you and if needed agreement on sharing the interview report with the respondent

### Template interviews stakeholder organisations

	TEMPLATE INTERVIEWS STAKEHOLDER ORGANISATION
	Name of EnergyMEASURES partner:
	Name of respondent: Name of organisation: Date of interview: Online/offline:
	Consent form signed:
1.	Organisation and their involvement with energy poor households
a	- How does your organisation work to address energy poverty?
b	- What type of support does your organisation offer to energy poor households? Please elaborate: - Since when? - How does it work, what impact? - Challenges and solutions? - What lessons have you learned?
c	- What kinds of households do you work with?  <u>Prompt-questions</u> (= when you invite the respondent to further comment on something (s)ne has not mentioned yet but which might be relevant):

	<p>What can you say about their living and housing situation:</p> <ul style="list-style-type: none"> <li>- Characteristics of the buildings they live in: type of building; built in what year/decade; energy label.</li> <li>- Quality of living – in these homes and in the neighbourhood?</li> <li>- Are they home-owners – tenants (what sort of land-lord)?</li> <li>- Issues in these houses related to physical characteristics of the buildings (e.g draught, cold, dampness, heat stress in summer)</li> <li>- Issues related to other causes (e.g., relation with landlord; household situation; low incomes; (threat of) debts; social problems; other....)</li> </ul>
2.	View on the experiences of energy poverty
a	- Does your organisation discuss energy poverty with households? If so, how is this raised with the householders?
b	- How is the difficulty-to-pay-the-energy-bill raised (or not) in conversations with households?
c	- What are the most pressing problems of that energy poor households are confronted with (your view/experience)?
d	- How are these problems connected to other problems (e.g., social-economic; problems related to indebtedness) in your view?
e	- How do households/citizens talk about the ways in which different problems relate to each other (e.g., health; housing situation; social relations; stigma; stress; etc)?
3.	Support for energy poor households in more detail
a	- How do households cope – what are their coping strategies? Please elaborate/provide examples
b	- What options to these households have to improve their situation? What options do they <i>not</i> have?
c	- What do households need to solve these problems? To what extent is that support available? (please elaborate)
D	<p>- What types of (policy) support is currently available for energy poor households that you know of?</p> <p>Prompts (e.g., bring in as examples or use to clarify the answers):</p> <ul style="list-style-type: none"> <li>- Consider subsidies; educational/informational support; national, regional, local schemes?            Consider:           <ul style="list-style-type: none"> <li>- Financial support – what type? (Addressing situations of indebtedness; support to pay the energy bill)</li> <li>- Financial coaching (e.g., saving money via the energy bill)</li> <li>- Energy coaching (e.g., behavioural change advice, in combination with low-cost measures)</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>- Social support (becoming more involved in local social relations; providing mutual support, exchange experiences; combat social isolation)</li> <li>- Information and education (incl access to reliable information and get support to better understand the energy bill, ways to change suppliers and when that is a good idea or not)</li> <li>- Support in paying the energy bill – please elaborate</li> <li>- Support to improve efficiency of the home (e.g., insulation or low-budget measures)</li> <li>- Support to improve the efficiency of appliances (e.g., leasing whitegoods that are more energy efficient)</li> <li>- Donations</li> <li>- Loans</li> <li>- Other:.....</li> <li>-</li> </ul>
e	<ul style="list-style-type: none"> <li>- How familiar are households with these forms of support?</li> <li>- How accessible is this support?</li> <li>- To what extent and in what ways do energy poor households make use of the policy-related support discussed in d? Why?</li> </ul>
4.	Evaluation of the different forms of support
	<ul style="list-style-type: none"> <li>- Which forms of support are considered successful and why? Since when is this form of support available for the households?</li> </ul>
	<ul style="list-style-type: none"> <li>- Which forms of support are not successful in your view?</li> </ul>
	<ul style="list-style-type: none"> <li>- What could be improved or changed in order to arrive at policy support that better fits their needs?</li> </ul>
5	<b>Impact of Covid-19</b>
	<ul style="list-style-type: none"> <li>- How has the situation of energy poor households been affected by the Covid-19 situation?</li> </ul>
	<ul style="list-style-type: none"> <li>- What are the impacts of Covid-19 on the way in which your organisation works with energy poor households?</li> </ul>
	<ul style="list-style-type: none"> <li>- What are the impacts of Covid-19 on available policy support?</li> </ul>
6.	Role of various stakeholders
	<p>Which organisations should play a role in supporting energy poor households in your view? How? (please elaborate):</p> <p>Prompt-questions:</p> <ul style="list-style-type: none"> <li>- What role could or should national government take?</li> <li>- What role or responsibility do landlords have in your view?</li> <li>- What about the role of housing association?</li> <li>- How can community welfare workers support energy poor households?</li> <li>- What role should the municipality have?</li> <li>- What role do energy companies have in supporting energy poor households?</li> </ul>

	<ul style="list-style-type: none"> <li>- Are there NGOs that support or should support energy poor households?</li> <li>- Other societal organisations?</li> </ul>
7.	Is there anything you would like to add to what we have talked about?
8.	Would you be interested in staying engaged with the EnergyMeasures project? ( <i>discuss how that should be done</i> )
9.	(if needed: Would you know someone that we could also approach for an interview?)
10	Thank you and if needed agreement on sharing the interview report with the respondent