EnergyMeasures

Tailored measures supporting energy vulnerable households

D3.2 Energy poverty policy agenda and recommendations

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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**

Executive summary

Background and aim

Recent energy price surges and a growing prevalence of energy poverty are calling local, regional, national, and supra-national policy actors across Europe to action. This report proposes an agenda for policy renewal which involves recommendations for changes in the governance – the way in which policies are developed, passed, and implemented. We propose 10 governance propositions, summarised below. In the main report, detailed recommendations can be found to alleviate energy poverty in a long-term, cross-sectoral and multi-level approach in seven partnering countries (Belgium, Bulgaria, Ireland, the Netherlands, North Macedonia, Poland, and the UK) as well as the European Union as a whole.

Governance propositions

1. Align national legislation with local implementation

Energy poverty alleviation often takes place at the local level. That is why actors at the local level such as municipalities and societal organisations play a key role in implementing measures to tackle energy poverty. National policy actors need to be more sensitive to regulatory and financial barriers that hamper local action. National policy needs to better involve local authorities in national policy development, and to recognise specific challenges that relate to different local context (*e.g.,* challenges specific for rural and remote areas).

2. Stimulate collaboration between actors of different levels, sectors and domains

Energy poverty requires the collaboration of actors of different levels (local, regional, national, supra-national), sectors (market, public, civil society) and domains/departments (housing, health, renewable energy etc.). Often, even when collaborations between these actors exist, they are not well embedded in existing institutional structures and settings. Therefore, explicit attention is to be directed to cross-sectoral, multi-level collaborations to come to integral and effective approaches against energy poverty. Examples from our project include introducing or improving obligations for energy suppliers or other third parties to fun energy efficiency measures for energy poor households. Next, government recognition of the important role that energy communities could take on in energy poverty alleviation needs to translate in taking these actors more seriously. As for cross-sectoral collaborations, it is key that these does not remain one-off interactions, but become part of governance culture.

3. Focus on the mid- and longer term

Many national governments responded to the rising energy prices through short-term financial measures. The structural alleviation of energy poverty requires long-term strategies and consistency of policy instruments and eligibility criteria. These need to be anchored more strongly in national policy frameworks.

4. Build forth on the efforts of local initiatives

Different types of collaborations, actor networks and organisational models at the local level aim at addressing energy poverty. Although they are increasingly recognised as key to reach households in a situation of or vulnerable to energy poverty, their potential is not yet fully unlocked. Better support for local and knowledge intermediaries is needed here.

5. Increase accessibility and outreach of support measures

Support schemes often lack effectiveness because they are insufficiently accessible for households. Barriers for households include unawareness of the availability of support measures, overly complex administrative and bureaucratic application procedures and language barriers. What is needed is better tailored support schemes (*e.g.,* overcoming upfront-investment barriers), and support for households in accessing these schemes which also involves support to overcome institutional distrust.

6. Apply consistent and locally applicable methodologies for monitoring energy poverty

Local policy actors require knowledge on the prevalence of energy poverty within their respective area of activity to formulate effective and targeted solutions. It is key that publicly available data on energy poverty prevalence improves in quality – and that methodologies become better aligned and provide better data in terms of level of detail.

7. Develop measures that specifically target households in or vulnerable to energy poverty

Certain policies might be intended to cover the energy needs of households but overlook that the most vulnerable are excluded from benefitting from the proposed support. In order to mitigate energy poverty, measures need to be designed in a way that they are intended and accessible for households in a situation of energy poverty.

8. Embrace renewable energy generation as an alleviation measure

Renewable energy generation offers opportunities to benefit households in need. This potential is not fully exploited yet because renewable energy mainly benefits residents who are able to invest. Policy actors can facilitate the direction of advantages towards vulnerable households.

9. Recognise diversity within the target group

Households in a situation of energy poverty do not form a homogenous group. They consist of many individuals with different experiences, capabilities and needs.

10. Explore and adapt successful solutions for energy poverty mitigation

New approaches and solutions for tackling energy poverty keep coming up and being tested in various sites throughout Europe. The examples of municipalities, social housing associations and energy communities alleviating energy poverty in the Netherlands, energy suppliers financing energy upgrades in Ireland and Scotland, and the loan scheme of NGO Habidom in North Macedonia show that some creativity and an open mind can help to come to innovative solutions.

Recommendations at the level of the EU

As for the EU level, three recommendations based on EnergyMeasures work stand out.

Monitoring and evaluating the transposition of EU Directives relevant to energy poverty for each member state

As the transposition of Directives is progressing slowly and at different pace across member states, it is advised that the transposition is monitored and evaluating on a periodic basis in order to derive measures to support member states (and those striving for membership) in adopting the appropriate legislative measures.

Continue efforts to level the playing field for Energy Communities

The introduction of 'energy communities' as a legal entity by the EU has been crucial in encouraging energy initiatives that are not driven predominantly by commercial motives and that aim to generate and retain value for and within communities. Yet, further action is needed to ensure an improved level playing field for energy communities vis-à-vis commercial energy incumbents. It is key that the EU continues to monitor and ensure that national and local governments also recognise, enable and support such initiatives.

Review procurement rules that hinder municipalities

The EU rules on procurement appear to hinder municipalities in their effort to direct support towards initiatives for energy poverty alleviation. This is something that needs to be addressed so as to ensure locally effective and efficient interventions.

Glossary

Ff55	Fit-for-55
EU	European Union
EPOV	Energy Poverty Observatory
EPAH	Energy Poverty Advisory Hub
IEMD	Internal Electricity Market Directive
REDII	Renewable Energy Market Directive recast
SEAI	Sustainable Energy Authority Ireland
WP	Work Package

1 Introduction

1.1 Aim of this report

Energy poverty is increasingly acknowledged as a policy issue of high importance within the EU (Jiglau *et al.,* 2023). The energy price surges of 2021 and 2022 brought into sharp focus that the price we pay for energy is more volatile than ever. It also showed that the ones who are most negatively affected by high prices and unpredictability are households who are vulnerable to or in a situation of energy poverty. It is against the backdrop of increasing recognition *and* increasing prevalence of energy poverty that this report aims to provide guidance and perspective to policy-makers and all those who are involved in tackling energy poverty on a local and structural level. The question this report addresses is:

> *How can multi-level policy arrangements address energy poverty in a way that leads to structural alleviation to the benefit of households in a situation of energy poverty?*

The recommendations provided in this report have a two-fold purpose: They aim to foster policies and institutional arrangements that directly connect to energy poverty alleviation through addressing issues such as housing, health, income, personal capabilities and comfort of living. Beyond that, an agenda for policy renewal is presented which involves recommendations for changes in the governance – the way in which policies are developed, passed and implemented – at multiple levels so as to better reflect considerations of procedural justice, transparency and inclusiveness of the policy making process. The recommendations are developed for all participating countries (Belgium, Bulgaria, Ireland, North Macedonia, The Netherlands, Poland and the UK), with a special focus on the countries in which in-depth policy interactions took place, namely North Macedonia and the Netherlands. Next to policy recommendations and an agenda for policy renewal, this deliverable briefly reports on how the EnergyMeasures partners have contributed to policy development in their countries as part of Task 3.2.

1.2 Connections to other activities and tasks

Task 3.2 builds forth on various tasks and deliverables of the EnergyMeasures (EM) project, which is reflected in this report as well. It builds on the work done for work package (WP) 2 on household engagement, visible in the acknowledgement of the importance of household engagement or energy coaching as a measure that provides structural alleviation (yet that needs to be accompanied by other measures) in a variety of ways, is reflected in our policy recommendations as well. The perspective that policies must address the challenges as vulnerable households experience them (and not as policy-makers image households to experience them) is lent from the report from WP 1 “Citizen views on policy needs for energy poverty alleviation” (Breukers *et al.,* 2021a). The underlying normative stance that distributive and procedural justice as well as the capabilities of households to live a fulfilled, healthy, and rewarding life (recognitional justice) is still relevant to this deliverable. The WP1 report “Review of EU and national policy affecting energy vulnerabilities in the participating countries” features extensive work on the participating countries’ policy contexts with respect to energy poverty, including statistics on the prevalence of energy poverty, best practices, and a contextualisation of energy poverty in the respective countries (see Breukers *et al*., 2021b). As in that report a core principle of the work performed within this deliverable is that packages of policies need to address energy poverty in a structural manner and not only offer one-off temporary financial aids that, while

providing short-term alleviation, over time increase the target group's dependencies on policy interventions. The notion that policy can build on what is happening in practice and support innovative structural initiatives that alleviate energy poverty derives from the report "Emerging innovative governance and business instruments to address energy poverty" (Breukers *et al.,* 2023). The practical experiences of innovative initiatives offer valuable points of departure for discussing how policy can become part of locally initiated effective approaches. Connections to WP4 and WP5 relate to the contributions of the Task 3.2 work to the policy synthesis (WP5) and to the review of initiatives for the structural alleviation of energy poverty that is done as part of WP4.

1.3 Reading guide

The remainder of this report is structured as follows. Section 2 starts with the methods deployed to understand the national policy contexts and collect relevant output for formulating recommendations. Section 3 follows with the most relevant updates in policies at EU level and in the participating countries.[1] An overview of current policy instruments per country is given next to key developments in the national policy contexts. These updates can be read as a background and broad contextualisation for the governance principles and recommendations that are presented in section 4. The relevance of each governance principle is underpinned through recommendations for the countries partnering in EnergyMeasures. Section 5 outlines how the governance principles should be understood as an agenda for policy renewal and concludes with recommendations towards policy actors. As part of the work done for Task 3.2, in-depth stakeholder engagements have been organised in the Netherlands and North Macedonia as a way to co-create recommendations with relevant policy actors. The reports on these engagements are included as Appendix 2 and Appendix 3.

2 Method

2.1 Data collection

We have elaborated on how we used the inputs gathered from the EnergyMeasures project partners for the formulation of policy recommendations in the previous section. Apart from that, we have actively gathered updates and inputs from all the EnergyMeasures partners, at several occasions and in iterative rounds. Partly this was done using templates, inviting partners to fill these and where needed having additional email contact for further clarifications. At the regular project meetings, we organised working sessions with the partners to collect but also to discuss each other's inputs. This way of working resulted in a rich collection of data on which we could base our analysis. Where available, we also used relevant literature to supplement or further qualify the collected data.

[1] For a comprehensive overview of energy policies across the EU refer to https://energy-poverty.ec.europa.eu/discover/policies_en

Table 1: Data collection

Title	Section	Method
Policy update EU	3.1	Desk study
Policy updates	3.2	Inputs from all EM partners using template shown in Appendix 1 by email between August and September 2023 & discussions at working sessions at GA in Krakow and Skopje (09-Feb-2023 Krakow; 26-Sept-2023 Skopje)
Key policy developments	3.3	Inputs collected from all EM partners in several rounds, using a template as shown in Appendix 1
Recommendations & agenda for policy renewal	4.1	Inputs collected from all EM partners at working sessions at GA in Krakow and Skopje (09-Feb-2023 Krakow; 26-Sept-2023 Skopje) Relevant previous EM deliverables (from WP1, WP2, WP3)
Key policy contributions	4.2 and Appendix 4	Surveying and focus group at working sessions at GA in Eindhoven and Skopje (01-Jun-2022 Eindhoven; 26-Sept-2023 2023 Skopje)
In-depth engagements in North Macedonia and the Netherlands	Appendix 2 & 3	Interviews and dedicated workshops with relevant policy actors (see Appendices)

2.2 Data analysis

As for the analysis of the data, the policy updates were processed using the policy categorisation described in Section 3.2. Relevant policy measures were coded according to the policy domain they belong in. Relevant policy domains were derived in a manner described in section 3.2. Responses of partners regarding policy recommendations were categorised firstly, based on whether they refer to policy instruments/domains or to broader aspects of governance and secondly, based on the specific policy domain or governance aspects they refer to. Responses falling into the same sub-group (e.g. “building insulation” or “focus on the long term”) were synthesised to derive an overall governance principle valid for the partnering countries and arguably, for other European contexts. Data collected during the in-depth policy interactions in North Macedonia and the Netherlands was coded inductively with the coding software atlas.ti in order to be sensitive to and capture the relevant national, regional and local factors influencing policy-making (noted as “open coding” by Boeije, 2010). Answers that refer to similar phenomena were then grouped (“axial coding”) and compared to one another to synthesise and select the most relevant policy issues (“selective coding”).

3 Development of energy poverty policies in seven participating countries

A policy overview has been provided in Breukers *et al.* (2021b) [2]. Since then, the two biggest impacts on EU and national government policy have been the continuing response to Covid-19 as it moved from a pandemic to endemic status during 2021 and 2022 and the Russian invasion of Ukraine in early 2022. While the economic disruption caused by the war in Ukraine has heightened calls for accelerating energy transition to renewable energy, the immediate short-term impact was a sudden sharp rise in volatility in the global energy

[2] EnergyMeasures reports can be found on the project website https://bit.ly/3uK9ojs, or Zenodo Community https://bit.ly/481qbwJ

market and subsequent hikes in energy prices domestically (Jiglau *et al.,* 2023). Russia more than halved its pipeline gas supply to the EU during this period.[3] The energy price surges throughout 2021-23 led to a higher prevalence of energy poverty across the continent. Not only a rise in energy prices, also rising inflation has characterised much of 2022. Effectively, a rise in energy prices and a decrease in the (value of) incomes has led to an increase in poverty – including energy poverty. The number of households unable to keep their house adequately warm raised between 2021 and 2022 from 6.9% to 9.3% (Eurostat, 2023). These developments had large impact on legislative recognition and approaches for energy poverty throughout the EU as described in the following two sections.

3.1 Policy developments at EU level

Energy poverty had previously found recognition from the European Commission. As early as 2009 the EU acknowledged energy poverty in its legislation through the notion of "vulnerable consumers" as part of its third energy package (Ooij *et al.,* 2023). In 2016 the Energy Poverty Observatory (known as Energy Poverty Advisory Hub since 2021 or EPAH) was established. It monitors the situation regarding energy poverty in all member states, issuing reports on the most recent statuses on an irregular basis. It supports the dissemination of knowledge and best practices through reports and webinars, serves as a networking platform for initiatives across the EU and develops indicators for assessing levels of energy poverty in the member states (Noka & Cludius, 2021). Major and explicit EU policy attention to energy poverty was shown in December 2021, when the European Commission provided recommendations for a fair transition. According to this recommendation, all member states should develop indicators for assessing energy poverty and quantify the number of households subjected to energy poverty (European Commission, 2020). Several other EU policies have taken upon energy poverty as an issue.

In 2019, the *Clean Energy for all Europeans package* (or Clean Energy Package) was launched, including four laws or directives which are relevant for addressing energy poverty. The Directive on the Internal Electricity Market recast (IEMD) (EU, 2019; EU, 2022) states that energy poverty can be understood in broad terms and that each member state needs to adapt a definition fitting the national context (EU, 2018a). The IEMD obligates member states to regularly report on the status of energy poverty within their jurisdiction and develop a set of criteria to determine when a household is in a situation of energy poverty (EU, 2019). It furthermore obligates member states to take concrete measures to protect vulnerable households, for example "through adequate safeguards; prohibition of electricity disconnection in critical times; transparency regarding contractual terms and conditions; general information and dispute settlement mechanisms; benefits under social security systems; support for energy efficiency improvements; and other measures addressing energy poverty, including in the broader poverty context" (Widuto, 2023, p.6). Though the 2018 Renewable Energy Directive recast (REDII) does not obligate member states to take action, it encourages that vulnerable and low-income households can access services associated with renewable energy such as self-consumption (EU, 2018b).

In the Energy Performance of Buildings Directive recast from 2018 (EU, 2018c) energy poverty plays a peripheral role, only being mentioned as an aspect to "be taken into account" (p.76) during renovation

[3] https://www.iea.org/topics/russias-war-on-ukraine

measures. The most recent policy development on EU level is the amendment of the Energy Efficiency Directive in July 2023[4]. It places energy efficiency measures as a key solution for alleviating energy poverty (EU, 2023) which is a step further than the 2021 Energy Efficiency Directive that foresaw that member states merely link energy poverty to the issue of energy efficiency (European Commission, 2021a).

Fit-for-55 (Ff55) is the most extensive policy package on climate change mitigation and adaptation that the EU has launched in recent years (European Commission, 2021b). It features several programmes and funds and reserves a prominent role for the social dimension of the transition towards a cleaner energy system. For instance, €150 billion are made available through the Social Climate Fund to mend for the "significant social and distributional impacts that may disproportionally affect vulnerable households, vulnerable micro-enterprises and vulnerable transport users" as part of the Fit-for-55 (European Commission, 2021c).

Overall, the EU legislation have significantly strengthened member states' capacity to assess and act upon energy poverty (Bouzarovski *et al.,* 2021). The largest challenge lies in the fact that member states need to translate legislation into actionable national policy measures.

The work within EM has not focused on EU policy and legislation, yet a couple of suggestions for improvement can be pointed out. Generally speaking, climate policies need to integrally address energy poverty so that both aims can become mutually reinforcing. EU health policy also needs to integrated with these policy areas.

In terms of more concrete examples, the introduction of 'energy communities' as a legal entity by the EU has been crucial in encouraging energy initiatives that are not driven predominantly by commercial motives and the aim to generate shareholders' value, but that aim to generate and retain value for and within communities. However, it remains key that a level playing field is further improved to allow community initiatives that contribute to energy poverty alleviation to rise and thrive (examples of such initiatives and associated models are discussed in Breukers et al., 2023, pointing out a lack of policy support). It is key that the EU continues to monitor and ensure that national and local governments also recognize, enable and support such initiatives. Another example with impact on the practical level relates to EU procurement rules. Municipalities are bound by these rules, which is understandable from a perspective of accountability, yet these rules show to raise barriers for measures to alleviate energy poverty and/or to collaborate with energy communities.

In the following, the national policy frameworks of the seven partner countries of the EnergyMeasures project are presented, with a focus on the most recent updates – partially responding to the EU policy frameworks, partially responding to the direct crisis caused by the rising energy prices.

3.2 Overall description of national policy landscapes

We first provide an updated generic overview of the policies with relevance for energy poverty alleviation in the seven EM partner countries in Table 2, which indicates the different types of policy instruments and measures deployed by the partner countries. The categorisation for policy instruments as shown in Table 2, draws from two main sources: the categorisation of EC DG Energy (2020) and Breukers *et al.,* 2021b (p.10) that involves possible types of support measures including building insulation, heating system upgrades,

[4] Officially published Sep-2023: https://energy.ec.europa.eu/news/new-energy-efficiency-directive-published-2023-09-20_en

energy audits, energy bill support, information and awareness raising, and social tariffs. Additionally, types of measures that were included in Breukers *et al.,* 2023 (p.10) were considered relevant, namely: support of households through small energy efficiency measures; tailored support for households to be enabled to make use of other available support measures; and benefits from renewable energy generation, either through lower energy bills or through direct, periodic payments. Table 2 furthermore distinguishes in terms of the degree to which this selection of measures contributes to energy poverty alleviation on a structural level. Structural factors that cause energy poverty include poor energy efficiency of buildings, low incomes and high energy prices; in addition, a lack of (social and personal) resilience can be added as a factor that contributes to the continuation of energy poverty. Measures that address these factors can to a smaller or larger extent contribute to the structural alleviation instead of giving one-off or incidental support.

Support measures with structural impact include for instance renovation measures and technological upgrades to heating installations. These measures are not always directed at low-income households but that they in principle also avail for these support measures. In contrast, short-term measures are suited for maintaining a certain quality of living in times of hardship, yet they provide little outlook for improvement in the future (Bouzarovski *et al.,* 2021). Information and awareness raising measures are located somewhere in between as they can bring mid-term financial relief, *e.g.,* making more conscious choices on energy use, as well as long-term relief, *e.g.,* through being enabled to apply for a loan for energy retrofitting.

Different levels of government are involved in setting up and deploying policy instruments. In many cases the national government has a central role, with other levels of government involved in the actual implementation of concrete targeted measures. For example, the national government has the competence to implement income-related measures. However, the role of the national government is more restricted in measures that require closer involvement at the sub-national level such as offering tailored support to households or performing energy audits. In such cases, the national government depends on regional and local actors for implementation - specified in the outer right column of Table 2. In such cases its own role – if any - is to support, promote or otherwise facilitate efforts at the sub-national level. This is typically achieved through offering funds and subsidy programmes.

Table 2: Categorisation of policy instruments and partnering countries deploying respective measures

Type	Instrument	Description	EM partners countries deploying the measure	Levels of government that deploy measure
Support aiming at structural alleviation of energy poverty	Renovation/improving energy efficiency of dwellings/building insulation	Financial instruments to help invest in home renovations (*e.g.,* loans, grants).	*all*	Nat. government ESCo/DSO/energy supplier *(Ireland only*)
	Improving heating/cooling systems.	Financial instruments to improve the affordability of new heating/cooling systems.	*all*	Nat. government
	Improving efficiency of appliances or access to energy efficient appliances	Financial instruments to improve the affordability of energy efficient appliances.	*none*	Nat. government

Type	Instrument	Description	EM partners countries deploying the measure	Levels of government that deploy measure
		Devices and applications to increase efficiency (thermostat, radiators, household appliances)		
	Facilitating domestic renewable energy generation and storage targeted at vulnerable households[5]	Bridging up-front investments for vulnerable households Formulate criteria under which vulnerable households can benefit from renewable energy production. Supporting uptake of renewable energy installations or supply contracts through trusted partners	UK, BE, IE	Nat. government Reg. Government Loc. Government Social housing associations
	Benefits from communal renewable energy generation[3]	Providing co-funding to local energy initiatives aiming to address energy poverty Stimulate shift of investment culture towards green initiatives	*None*	Nat. government Reg. government Loc. Government Energy communities
Direct and short-term support measures	Social support	Financial income support to cover general living expenses such as housing, cost of living including energy costs directed at low-income households	*all*	Nat. government
	Social tariff	Lower energy tariff for low-income households	BE, NL, MK (until 2022)	Nat. government
	Disconnection protection Payment deferment	Protection against disconnection of households.	*all*	Nat. government ESCo/DSO/energy supplier
	Energy bill support	Provision of direct financial support for energy costs	*all*	Nat. government
	Supporting implementation of small energy efficiency measures	Funding or promoting of measures such installing draught strips, radiator foil, LED light bulbs etc.	NL, UK	Loc. Government, energy communities (via energy coaches)
Information and awareness raising measures	Providing generic information and awareness building	General advice and information about energy savings at home	*all*	Nat. government Reg. government Loc. government
	Supporting tailored information and awareness building	Funding or promoting one of the following Referring to other support measures (budget or debt management, energy coaching, food bank, charitable organisations etc.) Support in applying for grants, subsidies etc. Energy audits for home-specific technical and behavioural advice	NL	Loc. Government, energy communities and NGOs (via energy coaches)

[5] Vulnerable households are often excluded from implementing measures relating to renewable energy due to high pre-investments and a lack of investment opportunities. This categorisation therefore only considers renewable energy measures that are specifically targeted at vulnerable and low-income households.

What becomes apparent from Table 2 is that financial support measures are a wide-spread instrument to help households in need. This includes energy bill and income support and lower taxes on fuels and electricity. Such measures were implemented or intensified at a pan-European scale in order to mitigate the consequences of the 2021-22 price surges, inflation rates and increased costs of living (Jiglau *et al.,* 2023). These measures are accompanied by supplementary consumer protection measures such as a disconnection protection in all countries. Beyond financial support, funding schemes for improving the energy efficiency of housing have been embraced by all partnering countries. It is seen as a key measure for structurally alleviating energy poverty as set out in the *Energy performance of building recast* of the EU (EU, 2018c).

Several structural measures still receive relatively little attention, namely those that address the supply of renewable energy. In Breukers *et al.* (2023), it was discussed how energy community models for renewable energy generation can contribute to alleviating energy poverty among households by either providing energy at a transparent and non-commercial price or by providing a fairly consistent financial revenue (in case the renewable energy is sold). Energy communities can also decide to allocate surplus financial returns to insulation measures and financial aids. In both the Netherlands and Scotland, examples of innovative business models have been discussed (Breukers *et al.,* 2023).

A number of other measures are only adopted in some countries. Support of the local implementation of small energy efficiency measures is facilitated by the national authorities in the Netherlands and Scotland. A social tariff that offers additional support to households who are considered to be in a precarious situation is present in Belgium and, temporarily, in North Macedonia and the Netherlands. The following section considers the wider national context that brings new policies into life by describing the most important and salient changes (implemented and/or underway) in each of the seven partner countries.

3.3 Key policy developments in partner countries

Compared to the situation in 2021, national policies addressing energy poverty have changed in all partner countries. The developments were met with financial aids for households by national governments throughout Europe aimed at softening the impacts of the price shocks on the short term. An extensive overview of all policies of partnering countries known of at the time of writing this report can be found in Appendix 1. Below we highlight key policy developments in each partner country, in order to be able to assess the potential for policy renewal.

Belgium

Key policy development highlights[6]

- In Belgium, there is a strong emphasis in policies towards lowering the costs of energy for households. The s*ocial tariff for natural gas and electricity* stands because households who avail to it have access to additional support measures such as lump sum payments or gas supplies. Other protective measures include protection against disconnection and initiatives to roll-out pre-payment

[6] Due to partner affiliations, documentation on the situation in Brussels and Wallonia was more difficult to obtain and interpret. Therefore, the review of national policy developments mainly refers to the situation in Flanders.

meters or power limiters that help prevent or decrease debt accumulation among energy poor households.

- In 2021 the Flemish Government published their mid-term vision on energy poverty in the *Vision document energy poverty plan 2025* (Flemish Government, 2021). The vision document boosted recognition of energy poverty as a structural challenge that requires complementary policy measures. On the one hand it intends to deploy preventive measures, including stricter requirements for energy efficiency labels (energy performance certificates) of dwellings, better service provision to households through integrating informational dockets and broadening the scope of energy efficient household appliance vouchers. On the other hand, curative measures are foreseen that strengthen best practices for repaying debts and providing access to energy loans.
- Some of the subsidies for improving building quality are specifically tailored to homes with lower energetic performance or to homeowners with a limited budget. However, policy measures provide little incentives to private landlords for improving the energy efficiency of homes that they let to households which are vulnerable to energy poverty.

Bulgaria

Key policy development highlights

- The policy focus in Bulgaria has so far been on social support measures and on disconnection protection, *e.g.,* through the *Social Tariff for Electricity* and the *Heating Aid* in winter. Increasingly, attention has been paid to improving the energy efficiency of buildings. In January 2021, the Bulgarian government adopted a long-term strategy to renovate the country's building stock by 2050.
- Apart from voluntary initiatives, interviews showed that little or nothing is done to address the behavioural aspects of energy efficiency (Breukers *et al.,* 2021a). The new National Strategy to Reduce Poverty and Promote Social Inclusion 2030 may change this as it is specifically targeted at providing relevant information to low-income households.
- Since 2021 amendments in the nation *Energy Act* have been proposed which would lead to a definition of energy poor households. In building insulation policies however, no differentiation is made for vulnerable households.
- A general characteristic of the policy landscape in Bulgaria is that support measures directed at vulnerable households besides the *Heating Aid* (*e.g.,* financial aid for renovation under the *National Recovery and Resilience Plan*) are generally not implemented in a timely and reliable manner. In practice, the needs of energy poor households are therefore not addressed effectively.

Ireland

Key policy development highlights

- In Ireland, governmental support to vulnerable households still consists mostly of direct financial support such as the *Electricity Costs Emergency Benefit Scheme* and an increase in the *Fuel Allowance.*
- At the same time there is increasing funding for deep renovation measures and health. The *Energy Poverty Action Plan* (2022) reserves additional funding for energy efficiency upgrades, income support and social protection as an additional response to the energy price surges induced by the Covid-19 pandemic and the Russian-Ukrainian war. The plan also sets out near and medium-term measures providing income, social protection, and consumer protection to citizens to cope with seasonal heating requirements.
- In Ireland, a recent development has been the shift by energy suppliers to move beyond just addressing the energy bills of customers and to offer programmes whereby they also offer services providing energy upgrades to the homes of their customers. Upgrades can include improved attic insulation, upgrades to gas and oil-fired boilers, *etc*. Energy suppliers are incentivised to co-finance these energy efficiency upgrades through a state-led credit system.

The Netherlands

Key policy development highlights

- The overall policy approach is characterised by a mixture of such financial assistance measures (energy price cap, Temporary Emergency Fund Energy for vulnerable households, tax reduction on fuels) and subsidies schemes for improving the energy performance and quality of the housing stock (energy-savings mortgage loan-scheme, energy savings loan). The policy focus is, altogether, on financial assistance and on renovation measures by means of insulating homes with the lowest energy labels.
- Energy poverty became a policy issue as of 2022, clearing the path for new measures to be developed and implemented in 2022 (Van Cammeren, 2023). Between 2021 and 2022, the Dutch government adopted at least eight different policy measures to financially support households. Some measures specifically targeted low-income households, such as an increase of the energy surcharge for welfare recipients. However, most of them apply to all residents, such as a decrease in energy taxes. Studies have shown that these measures prevented approximately 400.000 households from a situation of energy poverty (Mulder *et al.,* 2023).
- The delegation of funds to municipal authorities by the national government through the *Specific Payments* has led to the country-wide deployment of energy coaches by municipalities. They offer energy efficiency services to households such as energy advice and small energy efficiency measures.

North Macedonia

Key policy development highlights

- The new *Housing Law*, a key law for promoting energy efficiency upgrades of MFABs, is being treated by the North Macedonian Government. In 2022, round tables were held to improve the capacity of the *Housing Law* to drive forward retrofitting and renovations of the housing stock at a national scale. Market actors, governmental agencies, financial experts and NGOs such as Habidom North Macedonia served as experts who have proposed significant amendments since several years now, *e.g.,* regarding stricter regulation of malpractices of building managing companies. The responsible governmental bodies have not implemented the changes at the moment of issuing this report although the recommendations for amendment were issued several times since 2021.
- Since the previous assessment in 2021 (see Breukers *et al.,* 2021), the overall institutional trust and trust in reliable monitoring and enforcement of national laws remain low, among others because of a lack of local monitoring and insufficient authorities of key stakeholders such as the Regulatory Housing Commission and municipalities (for more information see the In-depth stakeholder engagement in North Macedonia in Appendix 3).

Poland

Key policy development highlights

- As all national policy frameworks, the Polish state implemented short-term programmes for mitigating the effect of the 2023 energy price surges such as the *Shield Supplement* or the *Solidarity Shield* which, among others, froze electricity prices for residential consumers throughout 2023 at the (lower) pre-year level.
- A national definition of energy poverty has been embedded into national legislation in 2021 as part of the *Shielding Allowance* and has been confirmed in 2023 through the new *Energy Law*.
- Since 2021, the *Central Records of Building Emissions* has been established. It is a database that can be used for identifying vulnerable households. It is especially relevant for the Polish context as vulnerable households often rely on cheaper, but less efficient and hazardous energy sources such as wood or coal. The applicability of the Central Records for municipalities is currently limited due to its lack of accessibility.

UK (Scotland)

Key policy development highlights

- Immediate financial relief issued by the Scottish Government includes the *Fuel Bank Voucher Scheme* and direct payments under the *Scottish Recovery Plan* from 2021.
- The *Home Energy Scotland* programme and other related funding schemes have placed decarbonised heating in combination with insulation at their core. Other improvements targeted at low-income households include small measures such as draught proofing and renewable energy installations such as solar panels.

- The 2021 *Fuel Poverty Strategy* remains to be one of Scotland's landmark energy poverty alleviation policies. It stands out from other national strategies in that it explicitly focusses on improving the "customer journey" of vulnerable households, thereby promoting the accessibility of and awareness about existing aids among households.
- In 2022, the *Fuel Poverty Advisory Panel* was appointed. It is responsible for reviewing the national status of energy poverty. The *Fuel Poverty Advisory Panel* advised the Scottish government among others to acknowledge the essential role that local agencies play in the implementation of policy measures.

3.4 Contributions to policy development

In order to promote structural changes in policies towards an improved alleviation of energy policy, the EM project partners have actively attempted to contribute to and influence policy developments in their country - based on their expertise and the lessons learned as part of works done in EnergyMeasures. Depending on the positions and roles of the project partners, they have worked directly or indirectly with policy makers, governmental bodies and other policy domain stakeholders in their efforts to actively contribute to policy improvements. These efforts include, among others, the work performed in WP2 (Household engagements) and WP3 (Policy and practice innovation). Appendix 4 features an overview of all activities aimed at influencing key policy measures related to energy poverty. This appendix shows that partners have been active in policy contributions at all levels of government (local, regional, country, national) and across policy domains (energy policy; housing policy; renovation policy; social policy; climate policy).

4 Agenda for policy renewal, governance guidelines and recommendations

This section reports on the governance guidelines for addressing energy poverty in a structural, multi-level and practice- and experience-informed manner as well as the actionable recommendations that come forth from these guidelines that are formulated for each partner country. The recommendations and guidelines jointly form the agenda for policy renewal in the partner countries.

Next to policy instruments, the way in which policy is made, enforced and monitored and its underlying principles, also known as the *governance*, determines the character of a policy-making landscape (Bulkeley & Betsill, 2005). Governance by definition recognises that policy-making involves multiple levels, ranging from EU legislation to local initiatives. This section builds forth on this notion by introducing a set of governance guidelines for addressing energy poverty, consisting of ten governance propositions.

A series of actionable recommendations have been made for each partnering country and grouped according to the governance proposition they best adhere to. They partly refer to policy instruments mentioned in Table 2. The recommendations were formulated for the partner countries of the EnergyMeasures project.

They are arguably also applicable to other national and regional contexts within Europe although a comprehensive review of policy landscapes of all EU and European countries is outside of the scope of this deliverable. Recommendations are based on the responses of partners, workshop data, accounts of the experiences of residents and practitioners as shown in Breukers *et al.* (2021a) and Section 2.

A set of governance principles for structurally alleviating energy poverty is derived from the contributions of partners. These principles are valid across a number of countries, although their relevance, meaning and applicability varies depending on the respective national contexts. The recommendations that follow from these principles therefore differs per partnering country. Ten governance propositions are outlined below, supported with experiences from the seven partnering countries and country-specific recommendations.

4.1 Align national policies with local implementation

General argument

The harmonisation between national policy-making and local implementation is organised differently in each European country. Differentiating factors include the degree of decentralisation of the policy-making and the implementation process and the competences, budget and authority of public authorities at different levels. Yet overall, national policies and budgets need to take account of what municipalities are able and willing to achieve with respect to national policy measures. Breukers *et al.* (2021b) pointed towards the fact that municipalities have a crucial role in reaching vulnerable households because they are in closer proximity to them and are more aware what is required to reach households in the respective local context in terms of resources, skills, expertise, and regulatory space in policy making.

Key challenges of aligning national policy-making and local implementation lie in setting out aims that are feasible *and* ambitious, harmonising timelines of national and local procedures*, e.g.,* being sensitive to the impact of electoral periods on policy effectiveness, and alignment in national and local rules and regulations. While decentralisation can be effective to build capacities at the local level for alleviating energy poverty, it can also result in inequalities between municipalities, *e.g.,* through citizens getting more or less support depending on the municipality. Moreover, increased decentralisation bears the risk of overburdening municipalities with administrative procedures and consequential staffing problems. As shown in the examples below, misalignments across policy-levels force local stakeholders to creatively collaborate with other local actors.

Recommendations for partnering countries

Remove regulatory barriers at the local level

The national government provided municipalities in the **Netherlands** with a three-phased *Specific payment* to alleviate energy poverty at a local level. The budgets that were too small to take structural measures such as renovation, too large to refuse and came with many regulatory strings attached. For instance, the budget needed to be spent within a relatively short time frame causing problems for municipalities in organising these budgets in an effective manner. Municipal staff was also reported to often lack the technical, legal and bureaucratic expertise to spend the funds in an effective manner (van Tilburg *et al.,* 2022). As a result, short term measures were predominantly implemented rather than longer-term structural approaches. Appendix

2 outlines the case of the Municipality of Eindhoven which found creative ways to spend the *Specific Payments* in a structural way by collaborating with local stakeholders – in this case social housing associations.

Municipalities in **Bulgaria** are in need of more leeway to freely direct their budgets towards the attraction of private capital to boost the building renovation rates. Municipal energy efficiency funds have been discussed occasionally, but there is still no practical realisation.

The regulatory barriers faced by municipalities partly come forth from EU legislation on public procurement which knows several restrictions on how local authorities are deemed to spend public funds. The alignment of national policies and local implementation thus also need to be facilitated by EU legislation and coordinated by the national government in collaboration with municipalities. On a regional level, national governments need to facilitate the exchange of knowledge and expertise among municipalities, especially so that small municipalities can benefit from the existing experience and body of knowledge.

Involve local authorities in policy development

City authorities in **Poland** implement energy efficiency measures for buildings owned by them, while having the ability to create their own assistance/financing programs for vulnerable households. At the same time, they act as intermediaries between the recipient of support funds and the state institution, *e.g.,* by facilitating the process of applying for funds from the *Clean Air program*, through coordinating the operation of consultation and information points under an agreement with the financing institution. As such, the Polish Government strongly depends on local authorities for making the national housing stock more energy efficiency under its *National Urban Policy*.

To strengthen cooperation between local and national authorities, a multilevel governance is needed. The representatives of local level should know that their opinion is desired and welcomed by the national level, *e.g.,* in the development of new programmes. This kind of dialogue offers great opportunities in the development of future structures to support the fight against energy poverty. However, the willingness of the central government to cooperate in this way needs to be more visible.

Recognise challenges for rural area

Installation of energy efficiency products is more expensive in rural **Scotland**. Trained installers are in shorter supply, which means delays and higher costs. There have been very few installations of energy efficiency in remote rural areas compared to cities in the last three years. This means that areas of high fuel poverty are not fully supported to deliver what is needed to improve energy efficiency. The national policy in Scotland is to support area- based schemes but many are failing due to higher costs, less trained staff and capacity to deliver. In the case of Scotland, a policy approach that is more sensitive to the local context is needed in order to structurally mitigate energy poverty in rural areas.

Bolster municipal authority on retrofitting and housing

Under the current *Housing Law*, municipalities in **North Macedonia** have no authoritative power as they can only report violations of building managing companies and homeowners' associations to the Regulatory

Housing Commission. In order to accelerate retrofitting of multi-family apartments, they need to be enabled under the new *Housing Law* to enforce measures such as imposing fines when detecting that regulations are violated. In **Belgium** the *confirmation test* regulation should be made obligatory. This would require homeowners under the supervision of municipalities to upgrade their home to minimum quality standards for homes, improving the living circumstances for tenants.

4.2 Stimulate collaboration across actors, policy domains and departments

General argument

Energy poverty is a complex issue that requires the involvement of actors from policymaking, the market and civil society. In addition, its relevance stretches across several domains, including health, in-door comfort, climate, education and gender (see Jiglau *et al.,* 2023; van Maurik *et al.,* 2023; Middlemiss *et al.,* 2023). The multi-dimensional character of energy poverty necessitates that multiple departments within and beyond public authorities collaborate with each other. Social housing associations for example have a strong mandate on housing, making them a natural partner to collaborate with on energy poverty policies. The same goes for energy suppliers who can have high impact on shaping and implementing policy alleviation measures. In practice, such connections are still rarely made because policymaking often takes place within silos, discouraging inter-departmental, cross-sectoral collaboration. These interdependencies across actors, policy domains and departments require new collaborations and mutual acknowledgements between policy actors.

Recommendations for partnering countries

Obligate energy suppliers to fund energy efficiency measures

Ireland is progressing to develop a state-led approach to include market actors and especially energy suppliers in structurally addressing energy poverty under the *Energy Efficiency Obligation Scheme*. The methodology consists of energy suppliers and their consultants claiming energy credits for energy efficiency projects, both for residential buildings and businesses. A schedule of energy credit values is agreed by the Sustainable Energy Authority Ireland (SEAI) and annual targets are set for Obligated Parties. The SEAI also apply a higher energy credit rating for energy poor homes to encourage energy suppliers to address this. The scheme contributes significantly to the delivery of Ireland's energy saving target under the revised EU Energy Efficiency Directive (see EU, 2023). The scheme also supports the delivery of Ireland's broader national climate ambitions.

Currently, there is a working group made up of energy supplier representatives and the SEAI to plan and agree a methodology and targets for going forward. With energy suppliers achieving their existing targets, the new energy credits and targets will be more robust. Supports[7] will include deeper measures including

[7] The collaboration of the Irish EnergyMeasures partners with an energy company in Ireland to deliver what might be termed medium scale measures (heating controllers, attic insulation, boiler upgrades) *etc*. can be seen almost as pilot of direct implementation of such activity. This activity which will be reported more fully in Q1 2024, involves working with at the energy company to help them devise a bespoke support programme for energy poor households that both complemented and supplemented the small-scale measures provided by EnergyMeasures. This type of programme is an example of a practice innovation (for both public and private organisations), which could be promulgated through appropriate policy supports.

improved attic insulation, upgrading to high-efficiency heating systems, *etc*. This will involve higher energy credits and incentives to be provided for targeting energy poor households and is very attractive to the government in achieving its climate action targets; rather than simply paying cash credits on household bills. This form of leveraging investment capacity from the market is recommended to be investigated by other countries too, and in fact the Energy Efficiency Directive (EED) recast requires member states to achieve energy savings, partially through targeting households in energy poverty with energy efficiency measures (EU, 2023; Martini, 2022; Sunderland and Thomas 2022).

Recognise energy communities

An upcoming development in the **Netherlands** is the phenomenon of energy communities addressing energy poverty through small energy efficiency measures, knowledge-building and advice and various financial measures (Young & Halleck Vega, 2023). More than 100 of 700 registered Dutch energy communities are addressing energy poverty making them a meaningful actor for alleviating energy poverty. A thorough description of such cooperative initiatives can be found in Breukers *et al.,* 2023. It is crucial however that policy makers and (semi-)public entities recognise this potential value and impact that a collaboration with energy communities could bring for alleviating energy poverty.

Stimulate cross-departmental collaboration

In Eindhoven, **The Netherlands**, the municipal departments of sustainability and social welfare collaborated with each other in order to communicate more coherently and effectively towards households in energy poverty. The outcome of this collaboration was among others a flyer that referred interested households to services of both departments. The municipality further collaborated with societal partners, such as the *Energiebox*, and social housing associations in order to reach the target group more successfully. Such partnerships are far from common because the organisational culture and aims of these actors vastly differ. In **Poland** for instance different programmes for thermos-modernisation and more efficient management appliances are poorly coordinated by the responsible public departments. In **North Macedonia**, municipalities do not have any authority with regards to housing because they fall under the jurisdiction of the Ministry of Local Governments, while housing is treated by the Ministry of Housing, Transport and Communications. Cross-departmental approaches for reaching out to vulnerable households as seen in Eindhoven can be seen as good practices.

Integrate social housing and health

In **Belgium**, the urgency of coupling the policy domain of housing to energy poverty became apparent. In Belgium, only 6% of the housing stock consists of social housing. The situation in **Bulgaria** is similar with only 4% of social housing stock. In the latter case the absence of an up-to-date national strategy for housing aggravates the situation. Other countries such as **Scotland** and **Ireland** have already set out concrete aims for increasing the amount of social housing.

Across all partnering countries it has been emphasised that the issue of health needs to be integrated more strongly in policies regarding energy poverty and energy efficiency (also see van Maurik *et al.,* 2023). Although the government of **Scotland** aims at supporting this ambition, it has yielded no national policy to

do so. This indicates the major challenge of integrating a new policy domain into existing (bundles of) domains such as energy efficiency.

4.3 Focus on the mid- and longer term

General argument

In responding to global energy price spikes and higher costs of living, national governments chose to support households with measures for financial relief and consumer protection (see table 2, Section 3.2). While these measures went a long way for preventing many households from falling in a situation of energy poverty (see *e.g.,* Mulder *et al.,* 2023), long-term solutions such as energy efficiency renovations, renewable energy installations and commercial pricing regimes moved to the background. D3.1 features an account of how communal energy can consistently lower prices for households and thereby reduce the prevalence of energy poverty (Breukers *et al.,* 2023).

Recommendations for partnering countries

Offer structural and consistent support measures

Following the price shock of 2021-22, policy measures that address energy poverty on a longer term are needed such as the implementation of renovation strategies, measures to secure sufficient levels of income and ways to reorganise the energy supply. The governance of energy poverty in **Bulgaria** suffers from policies that are implemented in a campaign-like manner that are "cosmetic" in the sense that they seem to address the issue while in fact, support is insufficient to book considerable impact. In such a case, the formulation and implementation of long-term strategies and visions on energy poverty is advised. In **Belgium**, homeowners in the private market need to be given a policy perspective for the longer term on how the housing stock is intended to be upgraded from energy label F to D.

In addition, support should be available under consistent requirements and conditions for eligibility which now happens insufficiently in **Scotland (UK)** and the **Netherlands**. Otherwise, information held by local authorities, local intermediaries and households becomes outdated which in turn requires to invest into costly and partly ineffective information dissemination and awareness-raising campaigns.

Other partnering countries have had some advancement in creating policy measures for the longer term. Examples include the **UK's** *Area based scheme* and the *House pass* in **Belgium** that stores key data of a home and requires new homeowners to renovate within a period of five years.

View energy as commons, not as commodity

EU recognition of energy communities can be understood as a recognition of energy generation, distribution and supply as something that is not commercial (a commodity) but rather something that can and should be governed by residents and actors from civil society without the implicit aim of financial profits (commons). In the **Netherlands** evidence emerged that community energy might indeed decrease costs of energy services to households in the future through supplying energy to citizens through electricity from renewable sources

and district heating (Breukers *et al.,* 2023) (see for instance the *local4local*[8] initiative). The question to explore in future by policy actors is how the energy system needs to be designed to facilitate community energy. It begins with the recognition that energy communities are a central actor in the future energy system that can hold a solution to structurally mitigate energy poverty in the long term. It is up to policy makers at the national level to transpose EU legislation on community energy into national policy frameworks and recognise community energy as a long-term solution for decreasing energy prices.

4.4 Build forth on the efforts of local initiatives

General argument

Different types of collaborations, actor networks and organisational models at the local level aim at addressing energy poverty. These networks of actors typically engage in partnerships with other societal and public organisations in order to reach the target group effectively (Bouzarovski *et al.,* 2023). Among the local actors engaging in such arrangements are energy communities, municipalities, social housing associations, not-for-profit consultancy enterprises, expertise centres, community centres, welfare and charitable organisations. The advantage of such local initiatives is that they often provide values to the target group that are difficult, costly or simply impossible to realise single-handedly by national authorities. Such values go beyond financial aid and include awareness raising, capacity building, tailored advice and the implementation of small measures to improve the energy efficiency in people's homes (EPAH, 2021). To unlock the potential of local initiatives in alleviating energy poverty they require recognition and funding.

Recommendations for participating countries

Support and deploy local and knowledgeable intermediaries

In **Poland,** the **Netherlands**, **Scotland, Ireland, Belgium** and **Bulgaria,** local initiatives and intermediaries play a key role in disseminating information among households, offering support that is tailored to the specific households' needs and overcome the barrier of distrust among residents towards state authorities. The Eco advisors in **Poland** (also started to be active in **North Macedonia**) offer well-tailored advice to households and are available for different types of households. In **Belgium** the *energy cutters* fulfil this task although they are reported to suffer from a lack of structural funding. In **Bulgaria** specialised NGOs take it upon themselves to inform households about available support measures. Especially promising in this respect is the concept of a *one-stop shop* which households are referred to receive administrative and technical advice. In the **Netherlands,** energy coaches are deployed by energy communities and municipalities (see Schneider *et al.,* 2023 for an in-depth study of energy coaches' effectiveness) as well as so-called *fixing brigades* who implement multiple small energy efficiency improvements in homes without a charge.

Despite the large potential, these local initiatives have in reaching households and their frequently reported capacity bottlenecks (see Bouzarovski *et al.,* 2023), state funding rarely reaches them. Among others, the Scottish Government (**UK**) does not fund face-to-face energy advice through local advisors although they are recognised as important partners in reaching vulnerable households. Instead, a state-wide information

[8] Further information about *local4local* can be found at https://bit.ly/3RuVDOB

programmes with generic information is funded. In **Ireland** national policymaking even undermines societal initiatives that are trusted by residents, through only allowing energy efficiency measures to be performed by selected contractors.

In order to unlock the potential of local initiatives, scale up promising approaches and increasingly offer tailored and accessible services to households, national policymakers are advised to recognise the value that local initiatives have in reaching out to households and structurally fund their efforts. State authorities could for instance invest more heavily in courses to train local intermediaries in energy consultancy services or altogether provide ongoing financial support to promising initiatives.

4.5 Increase accessibility and outreach of support measures

General argument

Policies targeting (energy) poverty, or any domain related to it, are typically not formulated by the target group itself, but by policy-making stakeholders. The lived experience of households remains underrepresented (also see Breukers *et al.,* 2021b). Support schemes often lack effectiveness because they are insufficiently accessible for households. Barriers for households include not being aware of what schemes are available, complex administrative application processes and language barriers. In order to make support measures accessible to those who are in need of them, the current dominant processes of policymaking must be changed. Next to *what* a support measure tries to provide to householders, it must be thought of explicitly *how* the given measure is accessed by householders. Because effective policies must be formulated and implemented with the situation of the target group in mind, the inclusion of members of the target group itself or representatives is advisable.

Recommendations for participating countries

Overcome pre-financing barriers

The largest recurring barrier for low-income households to benefit from support addressing structural causes of energy poverty, *e.g.,* housing, energy supply, is pre-financing. Subsidy programmes for energy efficiency renovations, renewable energy installations and heating installation upgrades often require a pre-investment by households after which the remainder of the costs are reimbursed. This pre-investment is often too high for households in a vulnerable situation. In **Poland,** subsidy schemes must be better tailored to these households by offering solutions to bridge the pre-financing gap. This is also reported to be an issue in **Belgium**. Upfront investments are too high for lower income groups in **Bulgaria**, too. Vulnerable households will benefit most when such upfront costs are eliminated, with the possibility that loans are repaid after, *e.g.,* renovation works have been completed.

Abolish barrier of unawareness and lack of information

Apart from pre-financing, a large barrier for vulnerable households to access available measures are administrative and unawareness barriers. Households in a situation of energy poverty who have limited time and resources to invest into informing themselves about which measures they are, whether they are relevant

for them and which steps need to be taken in order to apply for the measure. In **Poland**, insufficient information among residents is the main downsides of current policies and programmes. It is also seen that people who could benefit from the programs and subsidies, are not engaged. The procedures are too difficult for them and they lack knowledge. Because it is hard to reach such households, specific action must be taken to overcome these barriers. Partners in **Bulgaria** recommend the implementation of active and professional communication campaign at national and local level. In **Belgium**, partners recommend to implement the governance principle of "automation of rights" to overcome obstacles related to unawareness and complicated procedures. Under this principle, administrative data is used to automatically enrol those eligible individuals and families. In that way, more households avail to existing programmes without taking the risk of investing valuable time in information gathering and applications for uncertain support.

Another solution for reaching a larger group of vulnerable households is to review criteria of existing measures to allow for more beneficiaries. In **Belgium**, a review of criteria is recommended for the social tariff for natural gas and electricity.

4.6 Apply consistent and locally applicable methodologies for monitoring energy poverty

General argument

Without knowing which households are in a situation of energy poverty and how high the prevalence is in certain areas it is difficult to design appropriate measures for tackling energy poverty at a local level. In recent years an increasing number of methodologies for assessing energy poverty prevalence has been formulated, based varying definitions of energy poverty (Koukoufikis & Uihlein, 2022). Publicly available data is often based on assessments on the supra-national and national level while data for the local level are either not existent or not accessible due to privacy regulations. This brings the challenge that the data is not specifically valid for local contexts which makes it difficult for local authorities and societal actors to come up with appropriate measures.

Recommendations for partnering countries

Establish data base and methodology for identification of energy poverty

Methodologies and databases must be in place that assess the prevalence of energy poverty in local contexts. Such databases are absent in **Bulgaria**, **North Macedonia**, **Poland** and **Ireland**. The **Netherlands** can be considered a frontrunner in this respect. The *Netherlands Organisation for Applied Scientific Research* (TNO) in collaboration with the *Central Bureau for Statistics* measures energy poverty prevalence at local level, including at the district and neighbourhood level (see van der Sangen, 2023). Such fine-grained data and the local knowledge on energy poverty that it facilitates can be used among others to offer tailored support to vulnerable households, *e.g.,* through automatically granting certain rights and provisions based on an assessment of the local and individual circumstances.

4.7 Develop measures that specifically target households in or vulnerable to energy poverty

General argument

Certain support measures are intended to support households in a situation of energy poverty but in practice support households that are considered to belong to the "middle class" and are often not in immediate need for support. This includes policies that subsidise electricity use, grants with pre-financing requirements or loans for retrofitting measures with relatively high interest rates. Overall, there is a tension between on the one hand broadening the scope of support measures to ensure that all households in need receive them, and on the other hand, providing support to households who do not belong to the targeted group. To overcome this tension, policy actors should carefully consider who benefits the most from certain measures and how this aligns with the intended impact.

Recommendations for participating countries

Create affordable tariffs for low-income households

In **Bulgaria**, all domestic consumers are eligible for an electricity price that is subsidised by the national government. Typically, high- and middle-income households have a relatively higher energy consumption. Thereby, an unproportional part of the subsidy finances the energy consumption of households who are commonly not in a situation of energy poverty. In **Ireland** and **the UK** social tariffs that differentiate between income levels of households are absent. By introducing a social tariff, such as the one in **Belgium**, households in need can be targeted more directly.

Tailored loans to the need of low-income households

In **Belgium**, subsidies are reported to benefit the middle-class more than low-income households. This is for example true for subsidies on electric vehicles which are unaffordable for low-income households due to high pre-financing costs as well as high additional costs during the usage phase (e.g. for insurance, charging, taxes etc.). Loans to households provided by the Government of **Ireland** for implementing energy efficiency measures at home have an interest rate of 6%. This is too high for households in a situation of energy poverty, excluding them from making use of such subsidy schemes. In both cases it is recommended to assess support measures *ex ante* in terms of their estimated effect on different income groups and adapt them towards the needs of the most vulnerable in order to allocate scarce public funds towards those who are require support the most direly.

4.8 Embrace renewable energy generation as an alleviation measure

General argument

The push of the EU towards reaching a CO_2 emission reduction of 55% in 2030 implies that renewable energy will continue to receive great attention by national policy makers. The simultaneous promotion of community energy and fight against energy poverty call into question in how far revenues from renewable energy generation are used to address energy poverty. As shown in Table 2, the alleviation of energy poverty through renewable energy generation is only deployed by national authorities in **Scotland (UK)**, **Belgium** and **Ireland**

and can be considered a fairly new policy approach. We argue that the potential of renewable energy generation to mitigate energy poverty has not been fully recognised yet and much less implemented into policy-making frameworks. An extensive account on how renewable energy generation can contribute to energy poverty alleviation can be found under the case study of energy cooperatives in the Netherlands in D3.1 (Breukers *et al.,* 2023).

Recommendations for participating countries

Bridge pre-investment barrier for renewables

Upfront investments into renewable energy installations are too high for lower income groups in **Bulgaria**. In addition, renewable energy production is associated with specific administrative barriers that prevent households with limited time, knowledge and trust to participate. The pre-investment barrier also refers to energy communities in the **Netherlands** who aim to alleviate energy poverty. They depend on external funding because capital from residents might not suffice in areas where energy poverty is relatively prevalent (also see section 4.1 for role of community initiatives). Access to support schemes for renewable energy sources, as well as to setting up energy communities is to be encouraged as a policy measure in Bulgaria, the Netherlands and beyond.

Use renewable energy to aid remote households

In **Scotland (UK)**, residents of detached houses are in a particularly precarious situation because they are often located in a rural area with higher relative electricity supply costs, the energetic quality of housing is on average lower and because they are often of a relatively higher age and have higher requirements for a healthy and comfortable indoor climate. Domestic energy production would help this group because it would make them more autonomous from the main electricity grid and provide a consistent energy supply. Policy makers in Scotland should therefore consider developing measures specifically targeted at detached housing that is located in rural or remote areas.

Learn from best practices

Promising approaches and advancements for integrating renewable energy into the policy package can be found in several partnering countries. The continuation of the *Energy company obligation* in the **UK** includes the instalment of PV panels and air-source heat pumps in vulnerable households. The SCI, a national state body in **Ireland**, foresees the installation of PV panels as part of a free energy upgrade under the *Warmer Homes* programme. The *LEKP 2.0* regulation in **Belgium** now also links renewable energy generation to vulnerable households. We recommend that policy actors consider what is needed in their respective context to promote the uptake of renewables for energy poverty alleviation, using the cases from Ireland and Belgium as inspirational material.

4.9 Recognise diversity within the target group

General argument

It is tempting to see "households in a situation of energy poverty" as a homogenous group of people who live in a financially precarious situation, aggravated by poor housing quality. The reality however looks different. Not only does the experience of energy poverty and what it actually *means* to households on the geographical context (Jiglau *et al.,* 2023) – the situation differs *per individual*. The differentiating factors across households include demographic characteristics (gender, age, type of education and household composition), the housing arrangement (tenancy or ownership) and personal capabilities (mental and physical health, language proficiency, literacy, social network, institutional distrust) (Middlemiss *et al.,* 2023). All these factors shape the individual situation of energy poverty. Effective support measures need to take this diversity into account or otherwise run the risk of excluding already marginalised and misrecognised groups. In practice it is unfeasible to single out each different factor linked to energy poverty and tailor policy measures towards it. A promising starting point would be to differentiate between tenants and homeowners because this difference is easily observable and has high impacts on the type of measures households can implement.

Recommendations for participating countries

Differentiate between tenants and home owners

Support measures for renovation in **Belgium** are currently mostly directed at homeowners and social housing tenants. Renovation of dwellings in the private rental market lacks tools and funds. This leaves households renting in the private market with relatively lower housing quality, accompanied by decreased thermal comfort and higher relative energy costs. The *Energy efficient Scotland* programme on the other hand has allocated funding to owners of private-rented housing in **Scotland** to perform energy efficiency upgrades. It is recommended that countries which do not make a distinction between the private rental market and other forms of tenancy/ownership to strongly consider such differentiated approaches.

In **Bulgaria**, another form of diversity needs to be recognised. Typically, support measures such as renovation grants are provided to multi-family apartment buildings, while very few such funds exist for single-family residential buildings, leaving households in such dwellings at a relative disadvantage. Here too, increased recognition should be given to a group that potentially falls outside of the reach of current measures due to the housing type they occupy.

4.10 Explore and adapt successful solutions for energy poverty mitigation

General argument

Support measures targeting energy poor households are a relatively new phenomenon in most countries, while our understanding of what energy poverty is and how it should be addressed is continuously changing. In this dynamic discourse it is crucial to keep an open mind for novel approaches to understand, talk about, measure and mitigate energy poverty. Energy poverty takes different shapes in different contexts. However, energy poverty is defined by traits that are distinct and common throughout Europe, such the inability to make adequate use of energy services and the dependency of households on institutional arrangements for

support. Because of these commonalities, national and regional governance arrangement addressing energy poverty can learn from each other's challenges and successes. For policy actors as well as local intermediaries it can therefore be beneficial to keep an open mind for novel perspectives on energy poverty.

Recommendations for participating countries

Among the unconventional, yet highly promising approaches to address energy poverty are the obligation of energy suppliers to finance energy retrofitting measures of low-income households in **Ireland** and **Scotland** (see Section 4.2), the inclusion of health in measuring energy poverty (also Section 4.2), and approaches that use (revenues from) renewable energy generation to aid households in need in the **Netherlands** (see Section 4.8). Policymakers and practitioners in other countries are encouraged to consider to which extent and under which circumstances these approaches or elements of them may be applicable in their respective area.

5 Concluding remarks and an agenda for policy renewal

5.1 An agenda for policy renewal

This report presented an update of the key developments in partnering countries and at EU level. Based on the expert opinion of the partners who are part of the EnergyMeasures project, their engagements with policy actors in their countries at various levels of governance, in-depth interactions with policy actors in two countries (NM and NL), extensive documents reviews and previous work performed in the EnergyMeasures project, we formulated governance guidelines with ten propositions for alleviating energy poverty in a structural way:

1. Align national policies with local implementation.
2. Stimulate collaboration across actors, policy domains and departments.
3. Focus on the mid- and longer term.
4. Build forth on the efforts of local initiatives.
5. Increase accessibility and outreach of support measures.
6. Apply consistent and locally applicable methodologies for monitoring energy poverty.
7. Develop measures that specifically target households in or vulnerable to energy poverty.
8. Embrace renewable energy generation as an alleviation measure.
9. Recognise diversity within the target group.
10. Explore and adapt successful solutions for energy poverty mitigation.

Together these propositions form a foundation for an agenda for policy renewal. The application of these guidelines led to country-specific recommendations for alleviating the structural causes of energy poverty (as elaborated in section 4 of this report). Although these recommendations and underlying governance guidelines are based on the experience of partners in seven specific countries, we argue that they probably have merit in other national, regional, and local contexts not treated in this report. At the same time, it is noted that lessons from other European countries and even with regions in the partnering countries have been left out and would be a valuable addition to the governance guidelines and recommendations provided

herein. We conclude this report with two additional key considerations for an agenda for policy renewal in tackling energy poverty.

5.2 Imbalance of social and techno-economic solutions

Currently, approaches of EU member states for addressing energy poverty are techno-economic in nature. Energy poverty is mostly linked to renovation and in terms of mode of governance, subsidies are the most important type of policy instrument (Stojilovska *et al.,* 2022). While a strategy for improving the energetic quality of the building stock is inevitable for overcoming energy poverty, the focus on financial incentives should not come at the cost of social innovations. Within this report, several such initiatives have been presented, including collective approaches by energy cooperatives in the Netherlands or the deployment of trusted and knowledgeable intermediaries at the local level in Scotland (UK). These approaches reach beyond the triangle of energy poverty drivers - income levels, the energy efficiency of the housing stock, and energy prices. They recognise personal capabilities as a driver for energy poverty such as literacy, personal health, social contacts and (mental) resilience.

The experiences from member states underpin that such a multi-dimensional approach is necessary to reach households in need, and not only those who can afford to keep themselves informed about support measures and prioritise the improvement of their daily situation. A multi-dimensional approach also allows policymakers to make strategic links across policy domains, and stimulate cross-departmental collaboration. Such is the case in Poland where health is increasingly seen as closely linked to the experience of energy poverty. Overall, socially centred and techno-economic alleviation measures should be in balance in order to solve the structural causes of energy poverty while reaching those households who are most in need of support.

5.3 Justice perspective in energy poverty policymaking

A criterion for effective and socially just policies underlying all policy measures is attention for social justice. The concept of energy justice assesses social justice through asking “which actors count and are considered relevant in policymaking?” (*justice through recognition*), “who gets to make the decisions and who is represented during decision-making?” (*procedural justice*) and “who benefits and who carries the costs within the energy system?” (*distributional justice*) (Jenkins *et al.,* 2016). Experiences from partners in the seven countries showed that support measures could benefit from integrating these justice principles more strongly during the development and implementation process.

Following the principle of justice through recognition, it is for instance crucial to acknowledge the situation vulnerable households are in and that ‘business-as-usual’ approaches to reaching out to them are often ineffective. Underlying reasons are that households do not trust governmental agencies (Kaufmann *et al.,* 2023) and are in need of tailored support in order to benefit from many subsidy schemes (Schneider *et al.,* 2023). This implies that public authorities and departments are not capable of single-handedly reach all households in need but depend on the involvement of societal partners. By recognising the lived experiences of households, governmental agencies can come to dignified and effective approaches for addressing energy poverty.

With regards to procedural justice, policies targeting energy poverty should be developed in a transparent and inclusive way allowing stakeholders to meaningfully participate in the process (Bouzarovski *et al.,* 2021). In practice this means policy development and implementation are to take place in close collaboration with societal stakeholder, civil society organisations, and representatives of the targeted groups in order to ensure effectiveness and fairness. Without the involvement of these representatives, policy measures run the risk of serving the interest of the majority of stakeholders, which cannot speak for households in a situation of energy poverty.

Recognition and just representation of the target group also affects distributional justice. When certain support measures are designed to serve the interest of a majority, marginalised and low-income groups are left out and sometimes even put at a relative disadvantage. This form of distributional injustice could be observed among others in the Bulgarian policy subsidising electricity prices, thereby allocating proportionally larger benefits to middle- and high-income groups, or in the Belgian subsidy scheme for the purchase of electric vehicles. Through recognising the lived experiences of households and involving these in the policy-making process, networks of policy actors can open up avenues to alleviate energy poverty that are aligned with the interest of households in a situation of energy poverty. We conclude with two quotes[9] to illustrate this plea.

"*I sometimes wash the ceiling and walls in the bedrooms to take the black stains off. I don't think it's very healthy. But they always come back. Yes, we do open our windows regularly, but that doesn't help*."

Daan (Belgium)

"*I think [the government] should be really responsible, if they expect us to cut back and be greener. Sustainable energy, they should make the effort to do that. They also have to provide the means for people to do that. They have our taxes, they should be using them in a way that helps us all to become more sustainable, and that's where the money should be going into, I think*."

Caitlyn (Ireland)

[9] Quotes from interviews with citizens in Breukers *et al.* (2021a). Respondents' names have been altered to protect identities.

6 References

Boeije, H. R. (2010). *Analysis in qualitative research*. London: Sage Publications Ltd.

Bouzarovski, S., Damigos, D., Kmetty, Z., Simcock, N., Robinson, C., Jayyousi, M., & Crowther, A. (2023). Energy justice intermediaries: Living Labs in the low-carbon transformation. *Local Environment*, *28*(12), 1534-1551. https://doi.org/10.1080/13549839.2023.2238747

Bouzarovski, S., Thomson, H., & Cornelis, M. (2021). Confronting energy poverty in Europe: A research and policy agenda. *Energies*, *14*(4), 858. https://doi.org/10.3390/en14040858

Breukers, S., van Duren, M., Young, J., van de Ven, D., & Boekelo, M. (2021a). *Citizen views on policy needs for energy poverty alleviation.* A research output of the EnergyMeasures Horizon 2020 project. https://doi.org/10.5281/zenodo.6869444

Breukers, S., Young J., Lennon, B., Stanisheva, T., Tzanev, D., & Whitington, B. (2023). *Emerging innovative governance and business instruments to address energy poverty.* A research output of the EnergyMeasures Horizon 2020 project. project. https://doi.org/10.5281/zenodo.10257980

Breukers, S., Young, J. & Ajdini, O. (2021b). *Review of EU and national policy affecting energy vulnerabilities in the participating countries.* A research output of the EnergyMeasures Horizon 2020 project. https://doi.org/10.5281/zenodo.6869333

Bulkeley, H., & Betsill, M. (2005). Rethinking sustainable cities: Multilevel governance and the 'urban' politics of climate change. *Environmental politics*, *14*(1), 42-63. https://doi.org/10.1080/0964401042000310178

EC DG Energy (2020). *Member States Reports on Energy Poverty 2019. EU Energy Poverty Observatory*. Luxembourg: Publications Office of the European Union. Available at: https://data.europa.eu/doi/10.2833/81567

EPAH (2021). *Tackling energy poverty through local actions – Inspiring cases from across Europe.* Energy Poverty Advisory Hub. Brussels: Energy Poverty Advisory Hub. https://bit.ly/3GqZnKu

EU (2018a). Regulation 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action. https://bit.ly/486tTW1

EU (2018b). Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast). https://bit.ly/4a8YRi3

EU (2018c). Directive 2018/844 of the European Parliament and of the Council of 30 May 2018 amending Directive 2010/31/EU on the energy performance of buildings and Directive 2012/27/EU on energy efficiency.. Online available at: https://bit.ly/47NHpy4

EU (2019). Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU (recast). https://bit.ly/3NeL53w

EU (2022). Consolidated text: Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU (recast). Document number: 02019L0944-20220623. Available at: http://data.europa.eu/eli/dir/2019/944/2022-06-23

EU (2023). Directive of the European parliament and of the council on energy efficiency and amending Regulation (EU) 2023/955 (recast). https://bit.ly/414C0jv

European Commission (2020). Commission Recommendation (EU) 2020/1563 of 14 October 2020 on energy poverty. Publication number: C(2020) 9600 final. European Commission, Brussels. Online available at: http://data.europa.eu/eli/reco/2020/1563/oj

European Commission (2021a). Proposal for a directive of the European parliament and of the council on energy efficiency (recast). European Commission, Brussels. Online available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021PC0558

European Commission (2021b). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 'Fit for 55': delivering the EU's 2030 Climate Target on the way to climate neutrality. https://bit.ly/3t8busM

European Commission (2021c). Proposal for a Regulation of the European Parliament and of the Council establishing a Social Climate Fund COM(2021) 568 final, 2021. European Commission, Brussels. Online available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021PC0568

Eurostat (2023). Inability to keep home adequately warm – EU-SILC survey. Online available at: https://ec.europa.eu/eurostat/databrowser/view/ILC_MDES01/default/table?lang=en

Flemish Government (2021). BIS-VISIENOTA AAN DE VLAAMSE REGERING. Online available at: https://assets.vlaanderen.be/image/upload/v1669105223/Visienote_aan_de_Vlaamse_Regering_armoedeplan_po9avb.pdf (*in Dutch*)

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

Jiglau, G., Bouzarovski, S., Dubois, U., Feenstra, M., Gouveia, J. P., Grossmann, K., Guyet, R., Herrero, S.T., Hesselman, M., Robic, S., Sareen, S., Sinea, A. & Thomson, H. (2023). Looking back to look forward: Reflections from networked research on energy poverty. *iScience*, 106083, 1-22. https://doi.org/10.1016/j.isci.2023.106083

Kaufmann, M., Veenman, S., Haarbosch, S., & Jansen, E. (2023). How policy instruments reproduce energy vulnerability-A qualitative study of Dutch household energy efficiency measures. *Energy Research & Social Science*, *103*, 103206. https://doi.org/10.1016/j.erss.2023.103206

Koukoufikis, G., & Uihlein, A. (2022). *Energy poverty, transport poverty and living conditions - An analysis of EU data and socioeconomic indicators*. Luxembourg: Publications Office of the European Union. https://doi.org/10.2760/198712

Martini, E. (2022). In depth: energy poverty coverage in EED and EPBD recast proposals. *ENPOR* (website). Online available at: https://www.enpor.eu/in-depth-energy-poverty-coverage-in-eed-and-epbd-recast-proposals/

Middlemiss, L., Stevens, M., Ambrosio-Albalá, P., Pellicer-Sifres, V., & van Grieken, A. (2023). How do interventions for energy poverty and health work? *Energy Policy*, *180*, 113684. https://doi.org/10.1016/j.enpol.2023.113684

Mulder, P., Batenburg, A., & Dalla Longa, F. (2023). Energiearmoede in Nederland 2022. *Een actuele inschatting op nationaal en lokaal niveau*. The Hague: TNO.

Noka, V., & Cludius, J. (2021). *Energy vulnerability and energy poverty: Experience and approaches in the EU*. Working Paper #9. Freiburg: Oeko-Institut. https://bit.ly/484hlOW

Ofgem (2023). *Energy Company Obligation (ECO3) Final Determination Report*. https://bit.ly/3RtJk59

Ooij, C. van, Batenburg, A., Nguyen, N.C., Straver, K. (2023). Energy Poverty: A Science and Policy State of Play. Publication number: P10119. TNO, The Hague.

Schneider, P. T., van de Rijt, A., Boele, C., & Buskens, V. (2023). Are visits of Dutch energy coach volunteers associated with a reduction in gas and electricity consumption? *Energy Efficiency*, *16*(5), 1-15. https://doi.org/10.1007/s12053-023-10116-6

Stojilovska, A., Guyet, R., Mahoney, K., Gouveia, J. P., Castaño-Rosa, R., Živčič, L., ... & Tkalec, T. (2022). Energy poverty and emerging debates: Beyond the traditional triangle of energy poverty drivers. *Energy Policy*, *169*, 1131-81. https://doi.org/10.1016/j.enpol.2022.113181

Sunderland, L., Thomas, S. (2022) EU Policy Guide. The Energy Efficiency Directive Energy Savings Obligation and Energy Poverty Alleviation. ENSMOV project and SocialWatt project. https://bit.ly/419wBrd

van Cammeren, A., (2023) *Analysis of the emergence of energy poverty policies in the Netherlands and Flanders between 2018 and 2023* (Master's thesis). Radboud University, Nijmegen.

van der Sangen, M. (2023) *CBS and TNO map household energy poverty*, CBS Statistics Netherlands. Available at: https://bit.ly/3RsNVTZ

van Maurik, R., Mulder, P. & Verstraten, P. (2023). *Gezondheidskosten en energiearmoede*. Publication number: P10209. The Hague: TNO. https:// bit.ly/3sZG6Nf

van Tilburg, X., Straver, K. & van Ooij, C. (2022). Energiearmoedebeleid in stroomversnelling. Publication number: P12229. The Hague: TNO.

Widuto, A. (2023). *Energy poverty in the EU.* European Parliamentary Research Service. Publication number: PE 733.583.

Young, J. & Halleck Vega, S.M. (2023). *Energy communities alleviating energy poverty in the Netherlands – measures, barriers and future potential.* Working paper of the Urban Economics Group, Wageningen University & Research.

Appendices

Appendix 1: Policy updates in partner countries

Belgium (Flanders)

Table 3: Selected national and supra-regional policy measures in Belgium (Flanders)

Selected measures	Type of measure	Organisation	Target groups	Start year	Source
Vision document energy poverty plan 2025	Strategy related: Disconnection protection, social support, Building insulation	Federal government (Flanders)	Various	2022	Government of Flanders (2023a)
Disconnection protection during winter (Brussels, Flanders, Wallonia)	Disconnection protection	Regional governments	Indebted households	Unknown	EC DG Energy (2020)
Electricity and gas fund	Social support	National government, Local government (OCMW)	Indebted households (eligibility is defined by municipality)	2002	BE_SH1
Social Heating Fund	Social support	National government	Vulnerable, low-income, indebted households	2005	EC DG Energy (2020)
Energy and renovation grants (Brussels, Flanders and Wallonia)	Building insulation, Heating system	Regional governments	No specific target group	2004	EC DG Energy (2020)
Grants for social insulation projects for rental buildings	Building insulation	Regional governments Grid operator	Vulnerable households, Private tenants, social housing	2016	EC DG Energy (2020)
Social tariff for natural gas and electricity	Social tariff	National government	Vulnerable households	2004	EC DG Energy (2020)
Emergency Purchase Fund	Financial assistance	Federal government (Flanders)	Income-poor homeowners	2020	Belga (2020) Government of Flanders (2023b)
Rental and Insulation Preemie	Building insulation	Federal government (Flanders)	Low-income households	2022	Government of Flanders (2023c)
Corona charter	Disconnection protection, payment deferral	National government	Low-income & vulnerable households	2020	FEBEG (2021)
Bundle of measures on energy prices surges (VAT reduction & lump sum payments)	Social support	Federal government (Flanders)	All, focus on households eligible for s*ocial tariff for natural gas and electricity*	2022	FOD Economie (2023a) FOD Economie (2023b)
Minimal supply of natural gas	Social support	Federal government (Flanders)	Households eligible for social tariff for natural gas and electricity	2022	Government of Flanders (2023d)
Energy label upgrade preemie	Building insulation	Federal government (Flanders)	Owners of homes with low energy quality	2022	Government of Flanders (2023e)
Interest-free renovation fund	Building insulation	Federal government (Flanders)	Homeowners who recently purchased a home with low energy label	2023	Government of Flanders (2023f)

Bulgaria

Table 4: Selected national policy measures in Bulgaria

Selected measures	Type of measure	Organisation	Target groups	Start year	Source
Social tariff for electricity	Energy bill support	National government	Vulnerable households	Under consideration[10]	EC DG Energy (2020)
Heating aid in winter	Energy bill support	National government	Low-income households	1999	EC DG Energy (2020)
Monthly allowance	Social support	National government	Vulnerable & Low-income households	1999	EC DG Energy (2020)
One time support	Social support	National government	Vulnerable & Low-income households	1999	EC DG Energy (2020)
Program for financing single measures for energy from renewable sources	Renewable energy	National government	All apartment owners, including vulnerable and low-income households	2022	Partner contribution (EcoEnergy)
Program for energy efficiency in the multifamily building stock	Building insulation	National government	All apartment owners, including vulnerable and low-income households	2022	Partner contribution (EcoEnergy)
Urban Development Fund: low-interest credit for renovation of single-family buildings	Building insulation, Renewable energy, Heating system	National government via "Regions in Growth" operational programme	Owners of single-family buildings	2021	Partner contribution (EcoEnergy)
Operational programme "Environment" and LIFE+ Project "Bulgarian Municipalities Working Together to Improve Air Quality"	Heating system	National government	Owners of single-family buildings in selected cities with air quality problems	2018-2024	EC DG Energy (2020)
Integrated Energy and Climate Plan of the Republic of Bulgaria	Building insulation, heating system	National government	All relevant entities	2020	Government of Bulgaria (2021a)
Long-term National Strategy to Support the Renovation of the National Building Stock of Residential and Non-residential Buildings until 2050	Building insulation	National government	Owners and tenants of residential and public buildings	2021	Georgiev *et al.* (2021) Government of Bulgaria (2021b)
Recovery and Resilience Plan of Republic of Bulgaria for co-financing improving national housing stock's energy efficiency	Building insulation	National government	No specific target group	In development	Georgiev *et al.* (2021)
National Strategy to Reduce Poverty and Promote Social Inclusion 2030	Social support, Information and awareness	National government	Low-income households	2020	EC DG Energy (2020)

[10] To be implemented after full liberalization of electricity market

Ireland

Table 5: Selected national policy measures in Ireland

Selected measures	Type of measure	Organisation	Target groups	Start year	Source
Better Energy Warmer Homes (BEWH)	Building insulation, energy audits, household appliances	National government	Low-income households	2000	Partner contribution (UCC, EA)
Better Energy Communities Scheme (BEC)	Efficiency improvements to homes	National government	Low-income households	2012	Partner contribution (UCC, EA)
Fuel Allowance & Household Benefits Package	Energy bill support	National government	Low-income households	1988	Partner contribution (UCC, EA)
Social Housing Retrofit Programme	Building insulation, Heating system	National government, regional government	Social housing	2013	Partner contribution (UCC, EA)
Code of Practice for Energy Suppliers	Disconnection protection	National government	Vulnerable costumers	-	Partner contribution (UCC, EA)
Warmth and Wellbeing	Deep energy efficiency improvements to homes	National government	Low-income households, particularly people living with chronic respiratory conditions	2016	Partner contribution (UCC, EA)
Electricity Costs Emergency Benefit Scheme	Financial support	National government	Low-income households, pensioned customers	2022	Partner contribution (UCC, EA)
Additional Needs Payment	Financial support	Community Welfare Service (CWS)	Low-income households, not already in receipt of a social welfare payment)	2022	Partner contribution (UCC, EA)
Energy upgrade schemes facilitated by energy suppliers	Retrofitting measures	National government & Energy suppliers	Low-income households in need of home upgrades	Forthcoming	Partner contribution (UCC, EA)

Netherlands

Table 6: Selected national policy measures in the Netherlands

Selected measures	Type of measure	Organisation	Target groups	Start year	Source
Energy savings covenant rental sector	Building insulation, Heating system, Renewable energy	National government	Social housing	2008	EC DG Energy (2020)
Incentive scheme to improve energy performance of social housing	Building insulation, Heating system, Renewable energy	National government	Social housing	2014	EC DG Energy (2020)
Disconnection protection households	Disconnection protection	National government	Vulnerable households	2018	EC DG Energy (2020)
Electricity tax reduction for basic needs	Energy bill support	National government	No specific target group	2011	EC DG Energy (2020)
Guide on energy subsidies	Information and awareness	National government	No specific target group	Unknown	EC DG Energy (2020); Nederlandse Schuldhulproute (2023)
RREW	Building insulation Information and awareness	National government	Municipalities	2021-2022	RVO (2021)
Energy-savings mortgage loan-scheme	Building insulation	National government	Vulnerable home owners including elderly, low-income and indebted	2020	PAW (2021); Dutch Government (2023a)
Energy savings loan	Building insulation	National government	Vulnerable home owners including elderly, low-income and indebted	Revised in 2023	Nationaal Warmtefonds (2023); Dutch Government (2023b)
Energy price cap	Social tariff	National government	All households, especially with relatively high energy costs	2022	Dutch Government (2023c)
One-off lump sum payment under Temporary Emergency Fund Energy for vulnerable households	Energy bill support	National government	Vulnerable households with very low income	2022-2023	Dutch Government (2023d)
Tax reduction for fuels	Transport	National government	All households	2022	Dutch Government (2023e)
National Plan Energy system	Strategy	National government	-	2023	RVO (2023)
Specific payment (SPUK) energy poverty (3 tranches)	Information, small energy saving measures, large energy saving measures	National government	Vulnerable home owners including elderly, low-income and indebted	2022-205	RVO (2023)
Specific payment National Insulation Programme 2022, 2023 and 2024	Larger energy saving measures (insulation)	National government	Home owners with low income and low energy labels	2022-2025	RVO (2023)

North Macedonia

Table 7: Selected national policy measures in North Macedonia

Selected measures	Type of measure	Organisation	Target groups	Start year	Source
Program for subsidising the consumption of energy	Social support	National government	Households in social protection	2010 - 2013	Stojilovksa & Zuber (2013)
Law on Social Protection[11]	Social support	National government	Vulnerable households	2019	Government of North Macedonia (2019)
Program for protection of vulnerable energy consumers for 2021	Social tariff, disconnection protection	National government	Vulnerable households	2021 - 2022	Government of North Macedonia (2020a)
Program for promotion of renewable energy sources and stimulation of energy efficiency in the households for 2021	Heating systems, building insulation, renewable energy	National government	Low-income families	2021	Government of North Macedonia (2021)
Energy Law (adopted in 2018)		National government	Energy consumers and market	2018	Government of North Macedonia (2018b)
Housing Law	Building insulation			2010 (New version currently under consideration)	Partner contribution (Habidom MK)

Poland

Table 8: Selected national policy measures in national policy measures in Poland

Selected measures	Type of measure	Organisation	Target groups	Start year	Source
Energy lump sum	Energy bill support	National government	War veterans	2012 active	EC DG Energy (2020)
Energy allowance	Energy bill support	Local government	Low – income households who avail for housing allowance	2014 active	EC DG Energy (2020)
Energy Advisors -National consultancy support system for the public sector, the residential sector and enterprises in the scope of energy efficiency and RES	Information and awareness	National government	No specific target group	Unknown	EC DG Energy (2020)
Energy Poverty Act	Social tariff, Building insulation, Heating system	National government	Vulnerable households	Included in NECP, any news so far	Partner (PNEC) contribution
Stop Smog Programme	Energy bill support, heating system, building insulation	National government	Vulnerable households	2018 active	Partner (PNEC) contribution
Housing supplement	Social support	Local government	Low-income households	2002	Partner (PNEC) contribution
Energy supplement for vulnerable recipient	Energy bill support	National government	Low-income citizens	2014	Partner (PNEC) contribution
Special purpose allowance	Social support	Local government	Anyone who has been affected by a natural/ecological disaster	2004	Partner (PNEC) contribution
Energy voucher	Energy bill support	Local government	Low-income citizens	2022	Partner (PNEC) contribution
Information board dedicated to the energy poor	Information and awareness	National government	Anyone	Unknown	Partner (PNEC) contribution
Development of CEEB database	Information and awareness	National government	Anyone	2020	Partner (PNEC) contribution
Introducing a new institution to coordinate every program that is related to energy poverty	Coordination process	National government	Anyone	Under development	Partner (PNEC) contribution
Creating group of advisors	Information and awareness	Local government	Anyone	Unknown	Partner (PNEC) contribution
Thermo-modernization bonus and grant (project THERMO)	Thermo-modernization	National government	Investors	2023	Partner (PNEC) contribution
European Funds for Infrastructure, Climate, Environment (pol. FEnIKS)	Thermo-modernization, heating system improvement, automation	National government	Anyone but preferably low-income citizens	2021	Partner (PNEC) contribution
Clean Air 2.0 (update 2023)	Building insulation, Heating system	National government	Physical persons – owners or co-owners of single-family residential buildings	2018	EC DG Energy (2020)

United Kingdom (Scotland)

Table 9: Selected national policy measures in the UK and Scotland (for devolved issue)

Selected measures	Type of measure	Organisation	Target groups	Start year	Source
UK					
Energy Company Obligation	Building insulation, Heating system	Supra-national government, Energy suppliers	Low-income households Vulnerable households	2013	EC DG Energy (2020)
Decent Homes Programme	Building insulation, Heating system	Supra-national government	Social housing	2000	EC DG Energy (2020)
Winter Fuel Payment	Energy bill support	Supra-national government	Pensioners	1997	EC DG Energy (2020)
Cold Weather Payment[12]	Energy bill support	Supra-national government	Households on social benefits, Low- income household	-	EC DG Energy (2020)
Warm Home Discount	Energy bill support, Information and awareness	Supra-national government, Energy suppliers	Households on social benefits, Low- income household	2011	EC DG Energy (2020)
Scotland					
Fuel Poverty (Targets, Definition and Strategy) Act	Building insulation, Heating system, Energy audits, Energy bill support, Information and awareness	National government	Vulnerable households	2019	Scottish Government (2019a)
Fuel Poverty Strategy	Building insulation, Heating system, Energy audits, Energy bill support, Information and awareness	National government	Vulnerable households	2021	Scottish Government (2021a)
Home Energy Efficiency Programmes for Scotland: Area Based Schemes	Building insulation, heating systems, renewable energy generation	National government	Vulnerable households	2013	Scottish Government (2019b)
Warmer Homes Scotland	Building insulation, Heating system, renewable energy generation	National government (via Home Energy Scotland)	Private sector (renter or owner-occupier), vulnerable households	2015	Home Energy Scotland (2020)
Energy Efficient Scotland	Building insulation, Heating system	National government	Housing sector	Under consideration	EnergyMeasures (2021)
Interest-free Loan Scheme	Building insulation, Heating system	National government (via Home Energy Scotland)	Home owner-occupier	Unknown	UK_SH2
Fuel Bank Voucher Scheme	Social support	National government	Vulnerable households	Unknown	UK_SH1
Scottish Recovery Plan	Social support	National government	Low-income households	2021	Scottish Government (2021b)

[2] In Scotland the *Cold Weather Payment* has been replaced by the "Cold Spell Heating Assistance" in 2020/21. Both schemes work in a similar way (O' Brien, 2020).

References for policy updates

Belga (2020). Meer dan 300 woningen gerenoveerd via Noodkoopfonds (In Flemish). https://bit.ly/3TaoZCP

Dutch Government (2023a). Staatscourant van het Koninkrijk der Nederlanden (In Dutch). https://bit.ly/4a3rHQJ

Dutch Government (2023b). Staatscourant van het Koninkrijk der Nederlanden (In Dutch). https://bit.ly/47Mt7NZ

Dutch Government (2023c). Prijsplafond voor gas, stroom en stadsverwarming (In Dutch). https://bit.ly/3RpBcCq

Dutch Government (2023d). Hoe vraag ik de energietoeslag 2022 aan van ongeveer € 1.300? (in Dutch). https://bit.ly/3GrsH3o

Dutch Government (2023e). *Lagere accijns op brandstof* (In Dutch). https://bit.ly/4803BV3

EC DG Energy (2020) Member States Reports on Energy Poverty 2019. EU Energy Poverty Observatory. Luxembourg: Publications Office of the European Union. https://data.europa.eu/doi/10.2833/81567

FEBEG (2021). 'Corona-charter': Energieleveranciers in actie om hun klanten te ondersteunen tijdens de coronacrisis (In flemish. https://bit.ly/46RpepW

FOD Economie (2023a). *FAQ - Eenmalig forfait van 80 euro voor personen die recht hebben op het sociaal tarief voor elektriciteit* (In Flemish). https://bit.ly/46Kll5O

FOD Economie (2023b). Verwarmingspremie van 100 euro (In Flemish). https://bit.ly/3R0feo4

Georgiev, Z., Gaydarova, E. & Nikolova, N., (2021) *Bulgaria. Baseline Assessment Report. POWERPOOR 'Empowering Energy Poor Citizens through Joint Energy Initiatives'*. SOFENA, Sofia Energy Agency.

Government of Bulgaria (2021a). *Integrated Energy and Climate Plan of the Republic of Bulgaria 2021–2030* (In Bulgarian). https://bit.ly/3R8vALJ

Government of Bulgaria (2021b). *Bulgarian Long-term Renovation Strategy* (In Bulgarian). https://bit.ly/3NcqcWE

Government of Flanders (2023a). *Energiearmoedeplan* (In Flemish). https://bit.ly/3NccOSs

Government of Flanders (2023b). *Ondersteuning van noodkoopwoningen* (In Flemish). https://bit.ly/3TaJ2kJ

Government of Flanders (2023c). Huur-en-isolatiepremie (In Flemish). https://bit.ly/417wb4F

Government of Flanders (2023d). *Minimale levering van aardgas voor wie prepaid heeft* (In Flemish). https://bit.ly/3uHBk7w

Government of Flanders (2023e). *EPC-labelpremie bij energierenovatie (Fluvius)* (In Flemish). https://bit.ly/3t5s1Oo

Government of Flanders (2023f). *Renovatiekrediet met rentesubsidie (bij energierenovatie na aankoop)* (In Flemish). https://bit.ly/47EfW1J

Government of North Macedonia (2018a). *Energy Development Strategy* (In Macedonian). https://bit.ly/47yxOLf

Government of North Macedonia (2018b). *Decree For Promulgation of The Energy Law*. (08-3424/1). https://bit.ly/417MiPI

Government of North Macedonia (2019). *Law on Social Protection* (in Macedonian). *https://bit.ly/3uQ8AcE*

Government of North Macedonia (2020a). *Program for protection of vulnerable energy consumers.* Official Gazette of the Republic of North Macedonia (14/2021).

Government of North Macedonia (2020b). *Law on Energy Efficiency* (in Macedonian). https://bit.ly/3sZI405

Government of North Macedonia (2021). Programme for promotion of renewable energy sources and stimulation of energy efficiency in the households for 2021 (in Macedonian). https://bit.ly/3Ncci6Y

Home Energy Scotland (2020). *Warmer Homes Scotland: in detail*. https://bit.ly/4a6IWk1

Karpinska, L., & Śmiech, S. (2020). Conceptualising housing costs: The hidden face of energy poverty in Poland. *Energy Policy*, 147, 1118-19. https://doi.org/10.1016/j.enpol.2020.111819

Nationaal Warmtefonds (2023). Energiebespaarlening (in Dutch). https://bit.ly/417LV7M

Nederlandse Schuldhulproute (2023). *Hoge energieprijzen*. Available at: https://geldfit.nl/gids/energie/ (*in Dutch)*

RVO (2021). *Regeling Reductie Energiegebruik Woningen* (in Dutch). https://bit.ly/46HrHDe

RVO (2023). *Nationaal plan energiesysteem* (NPE) (in Dutch). https://bit.ly/49ZwP8B

Scottish Government (2019a). *Fuel Poverty (Target, Definition and Strategy) Act*. https://bit.ly/4a7C7P8

Scottish Government (2019b). *Home Energy Efficiency Programmes for Scotland Delivery Report 2017/18*. https://bit.ly/482R4As

Scottish Government (2021a). *Tackling fuel poverty in Scotland: a strategic approach*. https://bit.ly/47FFkUt

Scottish Government (2021b). *Priorities of Government statement – 26 May 2021*. https://bit.ly/4801lNz

Stojilovksa, A., & Zuber, S. (2013). *Energy poverty in Macedonia*. Konrad Adenauer Stiftung/Analitika.

References to interviews with stakeholders

BE_SH1	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
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 help shape local and national policy to tackle the issue and its effects.

Appendix 2: In-depth stakeholder engagements: The Netherlands

As for the in-depth stakeholder engagements in the Netherlands, the focus has been on the local level, the city of Eindhoven more specifically. Several Dutch reports and notes have been shared with all participants and are available on request.[13]

Workshop with Eindhoven Municipality (2022)

In March 2014, an online workshop was held with the municipality of Eindhoven. Two councillors and seven municipal officers (both from the domain of Sustainability (where energy transition policy is developed) and the domain of Social Policy) participated. Aim of the workshop was to jointly explore the interest in developing a middle-and longer-term vision on energy poverty alleviation and if and how we could organise further workshops and interactions to support this. Both the councillors explicitly underwrote the importance of a cross-sectoral approach to energy poverty alleviation and encouraged the further elaboration towards a shared municipal vision on energy poverty alleviation. Participants brought up several examples where cross-sectoral collaboration can be deepened (from the operational to more tactical and strategic collaborations). A shared municipal vision was considered a good way to help ensure that budgets are also used in a targeted and well-coordinated way in the longer term. It was emphasized that in such a vision, the target group is key: "*What are the experienced needs of households in energy poverty."* as a question that needs to be asked over and again.

It was discussed how the Social Policy domain mainly offers financial short-term support, complemented by debt counselling as a longer-term approach. From the Policy Domain Sustainability, it was proposed that attention should go to an improved involvement of households in EP in the energy transition (as a mid-and longer-term focus). The conversation also zoomed in on the role that the "Sustainability Pact" could play. This Pact is a collaboration between Eindhoven Municipality and the four social housing associations in Eindhoven. It was pointed out that the latter can help to identify and reach a large part of the targeted groups (since around ¾ of households in EP live in social housing). The other ¼ is diverse and much more difficult to reach (*e.g.,* tenants on the private market; home-owners in EP; students). Ideas to reach these groups were briefly discussed as well.

A successful approach in EP alleviation should combine elements that help to unburden the targeted groups, as well as building capacities to enhance the resilience of this group. The latter aspect was to be part of a longer-term approach, meaning that households in a situation of energy poverty should be able to participate in the energy and sustainability transition in such a way that it improves their living and housing situation. Based on this workshop, several ideas were proposed:

- Collaboration within the Sustainability Pact (see above).
- Continue with supporting the collaborations between different policy domains at municipal level (including connections to the Municipal Steering Group Integral Health).
- Exploring how energy suppliers can contribute to EP alleviation.

[13] Contact sylvia.breukers@duneworks.nl

Based on this workshop, a first 'Draft Vision Document'[14] was written by the involved EM partners, and shared with the participants and other relevant municipal actors.

Several events have worked to lose momentum with this positive initiative: municipal elections, the advent of a new council with new councillors: an acceleration and heightening of (national) policy pressure to implement short-term direct relief measures for households in the course of 2022; and staffing challenges. This all resulted in a focus on short term measures and solutions to alleviate energy poverty.

Hence, this initiative, although it has contributed to conversations between domains and between levels at municipal level, was not continued as envisaged and hoped. However, a year later, an opportunity arose to look into one of the ideas discussed in this first workshop, namely starting and deepening conversations within the Sustainability Pact.

Workshops with the Sustainability Pact (2023)

In the Sustainability Pact, Eindhoven municipality, four social housing associations (Trudo; 'thuis; Wooninc; and Woonbedrijf) and tenants (the PEK, a platform of tenant councils) work closely together with the aim to accelerate the improvement the housing stock and buildings in the city of Eindhoven. Their aim is to share resources, knowledge and skills, to bundle experiments and try out innovative solutions. Within this pact, a working group on energy poverty was started in 2021. This working group has successfully organised and implemented the so-called 'Klusbussen' – mini-vans that go into various neighbourhoods to offer support and small energy efficiency measures (and directly help in realising these). Because national support measures, implemented through the municipalities, are subject to various requirements and (procurement) rules, it is difficult to effectively and efficiently allocate these resources. Yet the members of the working group on energy poverty found ways to start up this concrete initiative that contributes to energy poverty alleviation in and around Eindhoven.

The members of this group, one of whom represents Eindhoven Municipality in the EnergyMeasures project, expressed the felt need to also work on the development of a longer-term vision that can guide the collaboration within the working group and that can also support and feed into the visioning work within their own organisations. All to arrive at a streamlined, collaborative and effective approach in energy poverty alleviation. It should be noted that this working group also meets regularly with representatives of tenants and highly values the advice of citizen-experts in the development of ideas for interventions.

With a small and dedicated group from the Energy Poverty Working Group, an in-depth trajectory was started to develop a longer-term vision on energy poverty alleviation among social housing tenants in Eindhoven. This core team included policy advisors and project leads from the 4 social housing associations as well as a project leader from Eindhoven municipality. In addition, the programme managers of the Sustainability Pact were involved and/or invited, as well as municipal officers from the social policy domain.

Preparatory meetings

In June and July 2023, two meetings were organised to discuss if and how we could help support a visioning trajectory.

[14] Both this document and the workshop report are available in Dutch from the author

- 21.06.2023: online meeting to discuss the main themes and possible approaches towards developing a longer-term vision. Topics and themes were identified, an interactive back-casting approach was proposed by DuneWorks and considered appropriate.
- 07.07.2023: online meeting to present an interactive back-casting process design, collect feedback and assess the commitment from the working group members.

Backcasting workshop session 1:

- 21.09.2023 physical workshop meeting in Eindhoven where the basic ingredients of a desired future vision were developed by the working group participants. Afterwards, DuneWorks elaborated this into a future story.

Backcasting workshop session 2:

- 15.11.2023 – physical workshop meeting in Eindhoven, where the story was shared; after that, the participants co-created a roadmap towards that end-vision, with attention to the milestones, roles and collaborations. Afterwards, Duneworks elaborated the roadmap.

Backcasting workshop session 3:

At the moment of writing, the final step is yet to take place (December 13th 2023), which includes a writing up of the future vision, the roadmap and action plan in such a manner that it will support the conversation with the 'directors' of the Sustainability Pact (who both participated in the first workshop) and within the partners' organisations, with the aim to receive the mandate to take the first steps of the roadmap so as to increase their impact and effectiveness in the alleviation of energy poverty in Eindhoven.

As such, this visioning exercise is envisaged to have a strategic impact affecting processes within the Sustainability Pact and within the respective organisations of the participants – by feeding in attention for energy poverty in other ongoing policy and strategic processes (e.g. energy transition; housing; health).

Evaluation

Evaluations after both physical meetings among the participants showed their appreciation for the back-casting meetings, allowing them to take a step outside of the day-to-day orientation to consider the longer term – something they usually do not have/find the time for. In addition, while the future image/story was rather generic, during the road mapping the participants were well able to draft a path with concrete actions and collaborations towards that imagined future, thereby clarify the focus that the working group should take in the coming years. The fact that the 5 key persons from the energy poverty working group were present at each online and physical meeting, furthermore shows their ongoing commitment to ensure that the short-term decisions and allocations of yearly budgets fit with a longer-term vision on how to structurally alleviate energy poverty.

Appendix 3: In-depth stakeholder engagements: North Macedonia

The stakeholder engagements have taken two forms in North Macedonia. First of all, 6 interviews were conducted with key policy actors by Habidom. Next, based on several online discussions with Habidom and based on the interview results, it was decided to organise a policy stakeholder workshop.

Interviews

Interviews were held in June and July 2023 with policy actors from the Housing Group for Residential and Business space at the Macedonian Chamber of Commerce (MK1); Habitat Macedonia, national organization affiliated with the global poverty housing network Habitat for Humanity International (MK3); a professor of Civil Law (MK4); the Housing Regulatory Commission (MK5); and the Ministry of Transport and Communication (MK6). An analysis of these interviews has been made. The key challenges are briefly summarised below. Interviewees are referred to with the abbreviation "MK#".

Challenge #1: Malpractices by building managing companies

It is not uncommon that licenced building managing companies engage in malpractices such as misappropriating funds (e.g. charging for fake services, embezzling funds), not issuing invoices in a transparent manner, manipulating decision-making processes and not being available to building owners 24/7 (MK1; MK3). This can be accounted to a lack inspection of how current laws are being enforced (MK1).

Part of the underlying problem is that "the Housing Law puts management companies in a very bad position. Because it doesn't give them any powers while it demands a lot from them. The managers have mainly responsibilities - to collect the money from the owners for the ongoing maintenance of the building, to pay the electricity bills, to pay for the service of the elevator, the water pump, the cleaning etc... Their duty is to manage the financial matters of the building, to make annual plans for building maintenance, etc. And they don't have any powers." (MK2).

At the same time the requirements for gaining a license are relatively weak. MK5: "The managing company should engage 3 employees out of which 1 should be a lawyer or an economist, and two are high school graduates. It has also to deposit 5,000 euros in Macedonian denars to its account and it has to pay 150 euros fee to the Housing Regulatory Commission for a license that will be valid for 5 years."

When reports of malpractices of building managing companies reach the Housing regulatory commission and it is not in power to immediately act. It forwards the complaints to the municipal inspectors of which there are only 4 for the whole of Skopje (MK1). The law also does not give inspectors the authority to execute punitive measures*, e.g.,* giving a fine (MK1). The inspector must propose to the regulatory commission to have the licence revoked in case the manager does not meet basic criteria such as enough employees (MK5).

Challenge #2: Systemic lack of funds

Building managing companies that do act in the best interest of tackling energy poverty face the barrier of the Collective decision-making in homeowners' association which seldomly results in effective implementation partly because there is a general lack of disposable income of households. In general, the lack of funds on a systemic level is a major barrier for increasing the building stock's energy efficiency.

Currently, energy efficiency measures must be paid through the homeowners' association's reserve fund. The Housing regulatory commission sets the minimum amount of monthly fees for contributing to this fund at 0.5 denar per m^2. This amount to €0.80 per month for a 100m^2 apartment which is too low for housing improvement investments (NM5). While residents can volunteer to pay a higher monthly fee, this runs into similar barriers of unanimous decision-making than described under challenge 4.

Challenge #3: Weak institutions through maldistribution of responsibilities

In general, governmental institutions in MK are relatively weak. Part of the problem is the maldistributions of responsibilities between governing authorities. Because collective housing falls under the jurisdiction of the Ministry of Transport and Communication, municipalities have no authority to inspect or intervene in the activities taking place in multi-family buildings. Therefore, the compliance to legislative measures lacks monitoring (inspections, audits) and enforcement (fines). This makes the role of building managing companies complicated because people make adaptations to the buildings structure at their own will. This can come at the costs of safety and security (enclosing or stealing fire protection equipment, knocking down walls in apartments) (MK1; MK2).

Officially, the Housing regulatory commission does not have authority on the topic of energy efficiency, only on improving residents' living conditions (MK5). MK5: "According to the law, the Commission has several powers, but it does not perform all of them for a number of reasons. First and foremost because some of our powers are in conflict with other laws. In fact, the powers that belong to us according to the Housing Law are opposed to the Law on Real Estate Cadastre." MK6 does not see that the Housing Law should address issues of energy efficiency measures because this is regulated in the Property Law.

Challenge #4: Unanimous decision-making is obstructive

The implementation of energy efficiency measures strongly depends on the collective decision-making process within homeowners' associations. A 100% unanimous vote is needed to pass a decision. In practice, homeowners often do not agree. This is for example because certain measures benefit residents on the upper floors more than on the ground floor (maintaining elevator) or vice versa (repairing a leaky roof) (MK1).

In many cases, apartments owners are simply not able to financially support a certain measure: "Some of the apartment owners were socially disadvantaged, people with very low family pensions. It is an old building, there are cases, for instance, that a husband died, his wife was left alone, and there is no chance for her to participate financially in the repair of the facade." (MK2). Currently, conflicts are solved through legal institutions which is time-intensive and costly (MK3).

Conclusion

To conclude, the interviews have shown that what is lacking is follow-through policies, as policy makers are concerned that stakeholders will object. In addition, uncertainties about the new Housing Law help to undermine enthusiasm to take on renovations. The municipality is strongly affected by this, because it is located between homeowners and national legislation.

A specific problem is the lack of trust that citizens have in building management companies, this relates to the occurrence of malpractices in this sector. However, those building management companies that do provide good services and that help alleviate energy poverty also suffer from this lack of trust. A national certification scheme could remedy the situation. Another problem that relates to the renovation of multi-family apartment buildings is the current ineffective decision-making within associations of homeowners, as a result of which investment in energy efficiency improvement are not made.

Workshop

Several discussions were held with Habidom about the exact focus that the workshop with policy actors should have. It was decided to start with an inspiration session where Habitat for Humanity North Macedonia (Habidom is part of this organisation), and EM partners Eneffect (Bulgaria) and PNEC (Poland) present successful and/or promising approaches in the alleviation of energy poverty. The workshop took place adjoining the General Assembly (27-Sep-2023), so as to ease the participation of some of the EM partners.

After the inspiration session with Q&As, two break-out sessions followed. The aim was to discuss how energy efficiency improvements to alleviate energy poverty can be more successfully implemented in North Macedonia. The two break-out groups zoomed in on the following two topics:

How can residents be made aware and informed about the benefits of energy efficiency renovations in the face of institutional distrust?

How can municipalities better support the implementation and monitoring of energy efficiency measures?

The expectation was that the break-out sessions would help generate ideas on how to improve the implementation of effective interventions that help alleviate energy poverty in North Macedonia. In addition, an improved understanding of one's own and each other's roles in delivering improvements, was expected. Finally, since all participants have close connections to policy making or are policy makers at a national level, it was expected that both ideas from the break-out session as well as inspiration from the other presentations will find its way to the policy arena.

Participants to the workshop included seven policy actors from North Macedonia and nine EnergyMeasures partners. The North Macedonian policy actors were from the Department of Housing, Ministry of Transport and Communications; the Ministry of Economy; the Ecology and Energy Efficiency Sector, Municipality of Karposh; MFI Horizonti; and Habitat for Humanity Macedonia.

Break out session 1: lack of (institutional) trust

The group's guiding question for the discussion was:

Interviews show that among residents, there is a lack of trust that keeps them from investing in/participating in energy efficiency improvement efforts. How can is this issue of distrust best addressed?

1. Challenge: (institutional) distrust and resulting lack of active participation by citizens

There is a lack of information on the value of energy efficiency, which contributes to a lack of trust. There is a lack of promotion of energy efficiency through law or events/programmes. The low prices for energy are

also not helpful to move people towards considering energy efficiency – yet that is now slowly changing with rising energy prices. Yet, overall, people are not encouraged at all to invest or to take a loan to finance their investment.

In addition, there is also an aspect of mentality that relates to a lack of trust: people easily feel resistance when something is offered to them. They suspect that there is a catch. If renovations do take place but are not quick or well-paced, questions easily arise about the motivations of the project leaders triggered by widespread experiences with malpractices in the building and renovation sector.

Fear of disruption is also a factor that withholds people from embarking on a renovation trajectory. This disruption then includes the risk that things do not proceed the way they should.

A problem that relates to the lack of engagement by residents is that within a single building, one can have very diverse groups of home-owners in terms of their socio-economic status. One group that is particularly vulnerable is that of pensioners. They have special needs and are suffering from energy poverty the most and their pension is not sufficient to cover for heating costs. They often live on their own with no social safety net for them and they have no possibility nor an incentive to be engaged in energy efficiency improvements. Although this is not related to trust directly, it can be argued that having diversity in terms of investment capability and in terms of needs and interests within a single multi-apartment building is not helpful to get residents engaged on the basis of trust.

2. Pathways for possible solutions

Policy actors in the North Macedonian context need to look more carefully at how they present solutions. These should be solutions to problems-as- experienced-by-the-home-owners. This is also called a 'solution-driven approach'. The idea of a 'diagnosis phase' as proposed in the presentation by Izabela Kuśnierz from PNEC is a good idea as it allows for a focus on the solutions for problems that people actually experience, and it allows to address the social aspects explicitly and at the outset. In that way messages and information about actual investments needed can take place later in the process.

What also helps to improve trust is a very clear and transparent overview of the financial model and how the investment is earned back. This works better when you deal with detached homes. When dealing with multi-apartment buildings, this can be difficult, especially when the apartments share one heating system/use district heating.

In any case it is essential to recognise the diverse situations that people are in, and accordingly ensure that there are differentiated financial supports, subsidies, technical and social supports available. Municipalities can play an important role here, *e.g.,* by providing management support, for instance via a one-shop-stop (the examples of Gabrovo and Burgas with their energy offices offer inspiration here).

Making the results of interventions (*e.g.,* renovations) visible to all residents can help a lot to get other residents enthusiastic which is another lesson from the approach by the municipality of Bielsko-Biała (Poland).

3. Role of other actors to improve the situation

➔ national government; municipalities; building management companies; other intermediary organisations

The roles of municipalities has been touched upon above and the Polish and Bulgarian presentations can offer inspiration as well. In any case, an active role of a municipality in providing information and active differentiated support – e.g. through one-stop-shops – is important to improve trust that people have in institutions. In addition, it is suggested that national government reaches out to municipalities to learn from their experiences – learn from the ways in which municipalities try and implement measures to alleviate energy poverty.

Over the past year, the Ministry of Energy has neglected the issue of energy efficiency somewhat, because of the energy crisis and staffing problems. The provision of direct short term-oriented support to alleviate energy poverty was prioritised over more structural measures. Now this is slowly changing. It is crucial that the national government connects energy efficiency to other policy domains – such as social policy and health. Multiple programmes should be integrated and the national government should take a stronger lead in this.

Financial service providers need support to be able to effectively help low-income households to invest. All levels of government are needed to support this, and the funding can be allocated via intermediaries such as Habidom, or MFI Horizonti. Habitat already works with revolving funds, yet on a limited scale. With the help of all levels of government this needs to upscaled. The national government should contribute to larger revolving funds. In addition, the national government needs to ensure that 'non-bankable actors' (the most vulnerable home owners) actually become eligible to take a loan from such revolving funds. The mentioned financial service providers have the expertise to help these groups. Not only in urban areas with lots of multi-apartment buildings, but also in rural areas where home owners have no way to invest in better heating or home improvements themselves.

4. What interesting models, practices and approaches from other countries could be useful to consider for the North Macedonian context?

As mentioned above, both the one-stop-shops in Burgas and Gabrovo, as well as the example of the municipality of Bielsko-Biała that very actively engages with its citizens, are examples of models and practices that can contribute to a more effective energy poverty alleviation.

Break out session 2 on the role of municipalities

The group's guiding question for the discussion was:

How can municipalities better support the implementation and monitoring of energy efficiency measures?

1. Challenge: Lack of expertise, financial resources and corruption

In order to approach possible answers to this question, a problem description was first undertaken, starting from the question: What is currently hindering municipalities to better support implementation? Listing existing obstacles, the participants agreed that there was a lack of resources in the municipal administrations. Not only in terms of financial resources, but also in terms of qualified personnel. In competition with private-sector players, municipalities would have difficulties recruiting personnel with the necessary expertise.

Doubts were also raised as to whether qualified personnel necessarily had to be employed locally in municipal administrations, or whether there might not be other ways of bringing expertise and know-how to communities and municipalities. One of the participants used a metaphor for this: If you want to sell gasoline, you don't have to be a petrochemist.

What remained uncontested: Wherever the necessary energy efficiency expertise is located in terms of personnel - the municipalities lack access to this expertise. Also, there was unanimity on the issue of lack of financial resources to support energy efficiency measures in municipal administrations.

Corruption was cited as a further structural problem. It stands in the way of the implementation of political projects at various governance levels, and accordingly also affects the field of energy efficiency.

In addition, there is often a lack of political will at various levels to implement longer-term goals. Short election periods, political populism and the opportunism of individual political actors would hinder the implementation of important structural changes.

2. Pathways for possible solutions

When asked about possible ways to improve the situation, a fundamental and basically banal principle was mentioned first: Namely, compliance with laws that apply anyway (rule of law). Non-compliance with laws and rules was mentioned as a major factor in the failure to achieve goals in the energy sector. However, there were no concrete cases or examples mentioned.

Another component that could contribute to a better and more targeted implementation of energy efficiency measures is to continue to raise awareness among all stakeholders. From residents to homeowners, businesses, municipalities and regional governance bodies. However, it was also noted that while awareness never hurts and awareness raising always sounds good, it is basically only a precondition for actual engagement and effective policy processes.

3. Role of other actors to improve the situation

→ national government; municipalities: building management companies

Looking at three main groups of actors involved (national government, municipalities, building management corporations) and the question of what they could do to improve the situation, the importance of generally applicable regulations and open access to consulting services and support programs at the national level was emphasized.

It was noted that without binding commitments to energy retrofits, it would be difficult to persuade homeowners to make continuous improvements to the energy performance of their buildings in the long term. It was said, that here is simply a lack of incentives.

A lack of political determination to pursue energy efficiency as an overarching goal at various levels was repeatedly characterized as the cause of the failure to make much progress in this area. Repeatedly, one participant in the discussion mentioned that it was a question of whether the current political system of North-Macedonia was even suitable for successfully addressing fields such as energy efficiency. Although the other participants acknowledged that there are structural deficits (corruption, populism, distribution of competencies) that contribute to the problem, they also criticized that the general criticism of the system is too broadly based to offer meaningful approaches in the search for solutions to concrete problem areas such

as energy efficiency. ("If the political system as a whole is the problem, the political system as a whole must be changed"). However, the general tenor is that this does not mean that any progress has been made in the area of energy efficiency.

Policy recommendations for North Macedonia

Based on the engagements with policy actors in North Macedonia, and informed by EnergyMeasures partner Habidom, a building management company that is directly involved in the (WP2) household engagements and thus also regularly engaging with householders in a situation of energy poverty or vulnerability, we can formulate policy recommendations as follows (also included in Section 4 of the main document).

Policy recommendations coming from interview series

First of all, the interviews have shown that policy makers need to be firmer in following through with policy implementation. Implementing stricter standards, certifications and other rules and ensuring enforcement of these is a basic requirement for institutional trust to be restored.

In addition, the rules for decision-making of multi-family apartment buildings could be made more effective, however care should be taken for those residents (*e.g.,* pensioners) that have the least ability to invest.

Malpractices by building companies

- The new Housing Law should give stricter regulations on the way building managing companies operate. (MK1, MK3, MK6). They should be restrained from engaging in malpractices through higher safety deposits and should calculate and communicate invoices in a transparent manner. This includes regular inspection and enforcement of these regulations (MK1; MK3).
- Regulations should give some authority to the building managers: "In Macedonian apartment buildings, a neighbour leaves garbage in front of the door, it stays there for three or four days, but no one has the authority to punish him. Neither the manager nor the Supervisory Board. At least the managers should be given some authorities. If they manage the buildings, they should also be given powers." (MK2)
- A publicly accessible template of an agreement on mutual rights and duties can help to create transparency and commitment on what and how the manager needs to manage (MK6).
- A managing company should not be the initiator of an energy efficiency project, *i.e.,* obtaining a loan etc. because that would pose a conflict of interest (MK6).
- Install a supervisory board. Homeowners association can establish a supervisory board that oversees and controls the activities of the building managing company. The supervisory board should be in close contact with the apartment owners and communicate in an efficient manner, *e.g.,* via digital apps (MK2). The Supervisory board can make itself count in decision-making by if all residents have agreed that the board's signature is required for the implementation of measures.

Strengthen governmental institutions

- Train inspectors and building managers to inspect more often, more thoroughly and more efficiently (MK1) and try to increase the number of inspectors (currently there are 11 in the whole of MK) (MK4).
- Delegate authority to municipalities/distribute authority among the appropriate governing institutions. Involve the Ministry of Local Self-governance in drafting the housing law because the relationships between home owners fall into their portfolio (MK2). "Perhaps the Ministry of Labor and Social Policy should take some responsibilities in the area of socially disadvantaged households" (MK2).

Unlock funding

- Use municipal funds. The municipality can be asked to financially support renovations. MK2 suggests to set up a solidarity fund for the apartment owners from which small repairs can be paid. A barrier to regulate the provision of municipal funds is that municipal officials have a practice of creating political favour for promising subsidies to groups of residents. A regulated municipal funding would make such practices less effective (MK2).
- "Habitat Macedonia has its own REE Revolving Fund and for many years provides soft loans to both managing companies and homeowner associations." (MK3). The loans for energy efficiency, repair of the houses, roofs, etc. given to the apartment owners through the building management companies. Because Habidom has limited financial capacity municipalities also need to fund measures for apartment owners (MK2). MK3: "*…in order for this opportunity to become widely accepted it is important to build nation-wide awareness process, followed by subsidies that are to be introduced by the central or local governments.*"

Policy recommendations from break-out sessions

Information and awareness

- Improve and intensify the information provision on the value of energy efficiency
- Ongoing awareness raising among all stakeholders (residents, homeowners, businesses, municipalities, regional governance) – as a precondition for actual engagement and effective policy processes.
- Enabling generally applicable regulations and open access to consulting services and support programs at the national level

Addressing malpractices through rule-of-law enforcement and clear commitments

- Take measures to counter malpractices in the building- and renovation sector to restore trust
- A stronger compliance with existing laws should be prioritised (through enforcement and sanctions) is needed to tackle the structural problem of corruption which affects all governance levels and which undermines energy sector goals as well.

- Articulate nationally a stronger commitment to longer-term goals and a structural approach towards energy poverty alleviation as a counterweight to short-termism of current politics
- Binding commitments to retrofits for homeowners to persuade them to improve the energy performance of their buildings

Tailored and differentiated supports

- Take the problems-as-experienced-by-the-home-owners as a point of departure in devising and communicating solutions; this means also taking the time for a proper diagnosis of how people experience problems related to energy poverty
- Recognise the diverse situations of people and differentiate communication and support accordingly

Improve transparency and visibility

- Improve transparency in the models that show investments needed and how the investment is earned back
- Make results and good examples widely visible to residents to help them in taking a decision

Strengthen the role of municipalities

- Acknowledge the crucial role that municipalities play in reaching residents and in providing targeted, tailored and trustworthy information and support (*e.g.,* municipal one-stop-shops)
- For municipalities to better support implementation, they need to have more financial resources for energy efficiency support measures and (access to) energy efficiency expertise and know-how.

National structural funding

- National government should take on longer-term policy support to improve energy efficiency of buildings and can do so in several ways, yet it should take account of experiences and needs of municipalities. National government could take the lead in setting up/replenishing revolving funds, in collaboration with intermediary organisations such as Habitat and Horizonti and in collaboration with municipalities, so that trusted and substantial funding is provided also to those that have no possibility to invest at all, whereby trusted intermediaries help getting the necessary renovations or heating improvements done.

Appendix 4: Policy contributions

Table 10: Policy contributions Belgium

Belgium
Energy policy:
National: Enforcement on minimal energy standards
National housing policy:
Federal level • SAAMO has advised in favour of the re-adoption of interest-free renovation loans for vulnerable groups (this instrument has been terminated) • KampC raised the need for paying attention to EP when developing one-stop-shop concepts into practice – in a project related interaction with the Flemish Agency for Energy and Climate • SAAMO organises a monthly gathering where people in energy poverty discuss their experiences and needs with various stakeholders, including politicians, government officials, the Flemish energy market regulator, the federal Energy Mediator, etc. Based on their lived experience they advise the policy stakeholders on how to better tailor policy to their needs and capabilities. • SAAMO published a brochure What to do about energy poverty: practice and policy https://bit.ly/3RAGETj. (2021, in Dutch), listing policy recommendations, good practices of local initiatives, unique experiments and describing the situation from the point of view of socially vulnerable people. We distributed this brochure among policy makers (e.g. members of Flemish parliament), field workers, etc. • When the energy crisis started, SAAMO gave advise on the energy measures of our federal government and talked to the responsible government agencies and administrations. • SAAMO warned for perverse effects of the so-called 'discouragement rate for non-protected customers, which the involved partners took seriously. • SAAMO applied a poverty test on the changes to the social protection measures which describe how to handle customers who have financial problems – addressed to government (sept-dec 2021) • SAAMO informs & encourages members of our parliament to ask critical questions in parliament. • SAAMO realised an extension for a bonus for new appliances from only purchase to rental of an appliance as well, starting from the 1st of April 2022. (Papillon – social rental project) • SAAMO organises yearly a campaign on minimum energy delivery during winter (VREG-SAAMO)) see https://bit.ly/3Rh6pXr • In August 2022, they advised the Flemish government how to handle the energy crisis.
Housing policy
SAAMO actively lobbies for more social housing – also as climate mitigation policy
Renovation policy:
SAAMO actively advises in favour of an Emergency Purchase Fund. In addition, it has argued for a more collective renovation approach (instead of individual) through e.g. coordination teams, collective subsidies etc.
Anti-poverty policy / Energy poverty policy:
National: • SAAMO has provided advise in view of a revision and extension of the social tariff (differentiated tariff that is income-dependent rather than the same for all), in diverse gremia and this is ongoing work • SAAMO has advised for enforcing the conformity certificate for renting • SAAMO has advised in for freezing renting price if a home has bad label (not allowing the rent to increase in that case) • In 2022, SAAMO gave input for the Flemish Action plan on Poverty Reduction, the Poverty Barometer and the Decennium Goals. • In February 2022 SAAMO gave feedback on the Covid-19 measurements from the federal government, they were invited for a round table conversation with the government on the 10th of March 2022.

Table 11: Policy contributions Bulgaria

Bulgaria
Energy policy:
National: - Amendments of the Energy Act providing definitions for energy communities and energy poverty. The definition on energy communities was influenced by a broad public discussion with participation of EcoEnergy and EnEffect, and case studies developed in partner municipalities Burgas and Gabrovo. The energy poverty definition was done with direct involvement in the relevant consultation bodies (see below). - Active involvement in the public discussions on the new generation NECP (which is not yet submitted) to the EC, official position on the "Strategic vision for the development of the electrical energy sector" published by the national government Regional: n/a Local: - Seminars and trainings for municipal energy experts and homeowners in the Municipalities of Gabrovo and Burgas held throughout this period. - Meetings with local authorities, municipal experts, HOAs and homeowners in the Municipalities of Gabrovo and Burgas – throughout the period. - Development of Sustainable Energy and Climate Action Plans for Sofia and Gabrovo, energy efficiency and renewable energy strategies of Sofia and Burgas (among other cities). - Declarations on behalf of Bulgarian mayors (nearly 100) supporting the further development of the sustainable energy and climate policies (2022, 2023) Evidence of policy citations/references: National conference of the Association of Bulgarian Energy Agencies – dedicated to energy communities definition. Local plans published on the cities' websites Links to declarations and media articles covering them
National housing policy:
National: The developments in this area in Bulgaria have practically stopped since 2017, when the last version of the National Housing Strategy was blocked after passing through public consultation process. The issue has been continuously raised by EnEffect on various occasions, most recently on a podcast for the Bulgarian National Radio to be published today (26.09.2023) and during a 3-day training session for active policy makers (mostly deputies to the National Parliament) in June 2023. The issue was also very strongly raised in the discussions regarding the national Long-term Renovation Strategy, published in 2021. Regional: n/a Local: Local governance has minimal capacities and obligations regarding the housing policies. The issue is tackled in the discussions regarding the national housing strategy. Evidence of policy citations/references: Links to interviews
Renovation policy:
National: - April 2022 - June 2022 EcoEnergy became a founding member of the Renovate Bulgaria initiatives (EnEffect is the current vice chair and elected as chair for 2023), and EnEffect also is a member of the Commission on Energy Efficiency and Energy Poverty at the National Green Deal Council; - 2022: EnEffect organized a high-level seminar on the EPBD recast with participation of MEP Radan Kanev and Vice Premier Borislav Sandov (April, Sofia and online); Press conference "Over 70% of Bulgarians want to renovate their homes. Is there a state policy for this?" (June, Sofia and online); Clean energy for people (June, online); - 2020 – up to now: Annual EcoEnergy Conferences with dedicated sessions on energy poverty; Annual National Conferences of the Association of Bulgarian Energy Agencies featuring a panel on just transition and energy poverty measures; co-organization of 8 National Roundtables for financing of sustainable energy and RES; - November 2021: Energy Poverty Policy Brief (published by EnEffect); - 2020 – 2022: Official statements on the National Recovery and Resilience Plan, on the Long-term renovation strategy, and on the Sustainable Development Strategy up to 2030 with a horizon to 2050. Promoting building renovation as key part of the National Recovery and Resilience Plan and preparing and publishing official positions to all versions of the current renovation programme, leading to allocation of more than 1 billion Euro to building renovation programme, and to transformation of the previous renovation support programme, providing 100% grants to a very limited number of recipients, towards a more sustainable financing mechanism. The activities include organisation and participation in dozens of events on the topic, active participation in the Commission for Energy

Efficiency and Energy Poverty at the National Green Deal Council, individual meetings with all (ever changing – 5 governments within the duration of the project) ministers, deputy ministers and heads of directions at the responsible Ministry of Regional Development and Public Works, either individually or as part of broader coalitions, including the newly formed "Renovate Bulgaria", numerous media interviews and publications, including in the biggest national TV and radio stations. Regional: n/a Local: Significantly increased interest towards the national renovation programmes in the target cities of Gabrovo and Burgas – the total applications exceed 4 times the financial resource allocated for these cities, as all EnergyMeasures-supported households also applied. This was achieved through the support to the activities of the newly-established one-stop-shops in Burgas and Gabrovo, organisation of numerous capacity building events for various groups of local stakeholders, interviews and publications in local media Evidence of policy citations/references: Statistics from the applications to the national energy efficiency programme, statistics from the visits in the local one-stop shops, media articles, website publications, social media publications
Anti-poverty policy / Energy poverty policy:
National: Adoption of an energy poverty definition for the purposes of additional support for participation in renovation programmes and protection of vulnerable households after the liberalization of the electricity market for domestic users in 2026. Supported through the dedicated research on the topic, multiple publications, presentations at dedicated events, and active participation in the Commission for Energy Efficiency and Energy Poverty at the National Green Deal Council. Still more work to be done, as the regulations for the practical application are not adopted. Regional: n/a Local: Local housing and energy poverty policies are hardly possible in Bulgaria, so the support happens through the local engagement actions for participation in the national programmes supporting building renovation and small-scale renewables. Evidence of policy citations/references: Publications, presentations, media articles

Table 12: Policy contributions Ireland

Ireland
Energy policy:
National: Irish partners[15] regularly engage with the Sustainable Energy Authority of Ireland (SEAI), Age Friendly Ireland, national NGOs (Alone, Threshold, MABs, *etc.*), political parties, the Commission for Regulation of Utilities (CRU). Regional: Irish partners have worked with the Southern Regional Assembly on a range of topics including energy. Local: Irish partners liaise with local authorities in Dublin and Cork. In addition, it works with local housing associations providing research supports and engaging with collaborative work where applicable.
National housing policy:
National: The Irish partners, particularly Energy Action, have contributed significantly with national government departments and presented/hosted numerous national and international conferences on the topic. Regional: n/a Local: The Irish partners work with local authorities, housing associations, and other interested partners on a range of themes including energy poverty, housing, *etc.*
Renovation policy:

[15] The Irish partners consist of UCC and Energy Action. Following the departure of Energy Action from the project, their activities were continued by Charles Roarty through PNEC.

National: n/a
Anti-poverty policy / Energy poverty policy:
National: UCC has produced an edited volume on the lived experience of energy poverty in the Global North and the Global South and issues around identification and measuring energy vulnerability in both contexts. The book, titled *Living with Energy Poverty* *Perspectives from the Global North and South*. UCC is actively promoting findings from the book with government departments, national and regional bodies.
Other policy domain …….
National: Irish partners have been leveraging the work they have conducted for EnergyMeasures to enable novel policy/practice supports for energy vulnerable households. One such initiative involves working with a national energy supplier to action a programme supporting eligible energy vulnerable customers with energy upgrades for their home (*e.g.*, attic insulation) free of charge.

Table 13: Policy contributions North Macedonia

North Macedonia
Energy policy:
National: Habitat for Humanity Macedonia, founder of Habidom, was involved in writing the energy policy for the country. May suggestions have been included in the law.
National housing policy:
National: same as previous: only this time Habidom gave suggestions to Habitat to be presented Law is not into force yet
Renovation policy: -
-
Anti-poverty policy / Energy poverty policy:
-

Table 14: Policy contributions Netherlands

Netherlands
Energy policy:
National: 2x presentation Min of Internal Affairs Presentation for the Ministry of Internal Affairs in June of 2022 regarding energy poverty and the struggles the municipality is facing with regards to developing a long approach. The Ministry was asked to make changes to their policies in order for the municipalities to execute policy better. (Eindhoven Municipality) Presentation for the VNG (Vereniging Nederlandse Gemeenten) about the energy poverty approach of the municipality of Eindhoven in July 2022. This translated into policy recommendations that were shared amongst all municipalities in The Netherlands and with BZK (Eindhoven Municipality) Regional: Presentation for policy makers in the Province Noord-Brabant (on municipal level and provincial level) about the energy poverty approach in Eindhoven in January 2023 with policy recommendations to include an energy poverty strategy in all city renewal projects. (Eindhoven Municipality) Interview asked for by Province of South Holland to inform their policy formulation (focusing on energy communities that aim to alleviate energy poverty) – lessons shared based on workshop T3.1. (DuneWorks)

Local: 14.03.2022: Online meeting with policy actors from Eindhoven Municipality: discussing need and possibilities of cross-sectoral collaboration for a long-term strategy.
National housing policy:
-
Renovation policy:
-
Anti-poverty policy / Energy poverty policy:
National: same as above: 2x presentation to BZK Regional: Kwartiermakerschap with RES/province Many municipalities asked for help and inspiration Local: Presentation to the council (on paper and live) Collaborations with social domain Letter to the council (EH) with lessons learned from the past year Various forms of research dissemination that directly target policy makers (Het PON-Telos) Policy workshop Eindhoven Municipality and social housing associations last week (EH municipality; DuneWorks)

Table 15: Policy contributions Poland

Poland
Energy policy:
Local: Contribution to Bielsko-Biala's SECAP. According to the actions included and detailed in this document, there is a commitment to better identify households at risk of energy poverty. A responsible and key unit in this regard has been designated: Municipal Social Assistance Centre. As part of the implementation of this measure, it is planned to: - a targeted allowance aimed at energy-poor families, - advice and minor energy-saving improvements, - thermo-modernisation measures. This measure is a continuation of the already implemented project EnergyMeasures: Until the end of the December SECAP should be institutionalized by city council (next City Council meeting - 21st of December, 2023)
National housing policy:
-
Renovation policy:
Regional: Recommendations to the draft financing programme "Regional Programme European Funds for Małopolska 2021-2027" as part of the public consultation. It was pointed out that the projected financing should support deep, model thermo-modernisation of buildings, with a particular focus on educational campaigns aimed at building users and fitting into a long-term strategy of sustainable energy management/climate protection/air protection of the city/municipality
Anti-poverty policy / Energy poverty policy:
European: International Annual Conference on Energy Poverty in Warsaw. Organised by the Energy Poverty Advisory Hub (EPAH) and the Directorate-General for Energy (DG ENER) of the European Commission in collaboration with the City of Warsaw and with the support of the Committee of the Regions and the Polish Network Energie-Cités (PNEC) National: PNEC has also become a member of the 'Council of Experts' in the large, nationwide initiative 'Citizens' Meeting on Energy Costs'. This included multiple local Citizens' Narratives on Energy Costs and one large nationwide Citizens' Panel recommending a citizen's voice on how to tackle energy poverty. PNEC's task was to give its opinion on the recommendations developed, taking into account its previous experience. 2023: PNEC organized a seminar session on the energy poverty and the possible solutions with participation of municipalities' representatives and National Fund for Environmental Protection and Water Management
Other policy domains:

European: presenting recommendations from local authorities at energy poverty conference 2023 "Tackling EP for a just transition" organized by the European Economic and Social Committee, July 19th 2023 East – European: exchanging experiences, sharing ideas and best practices of the CoM Signatories in energy poverty, sustainable energy development and adaptation to climate change policy as well as at getting to know local development initiatives and strengthening cooperation. The activities of Bielsko-Biała were presented to guests from East European countries, as well as energy and environmental policies in force in Bielsko-Biala. National: PNEC organised webinars on technical assistance to tackle energy poverty for local administration, civil societies, NGOs, regional government.

Table 3: Policy contributions UK (Scotland)

UK (Scotland)
Energy policy:
Scottish government heat and buildings strategy for which TIG provided evidence to the consultation 2021/2022 TIG sought to influence policy at a local (island), municipal and national level. NZET Committee Local Government Inquiry Local: Uist Local Energy Plan – throughout 2021 to November 2022 (monthly meetings). Energy Support Unit established in Isle of Lewis – November 2022.
National housing policy:
Local: TIG is reviewing the draft local heat and energy efficiency strategy
Renovation policy:
Local: See previous
Anti-poverty policy / Energy poverty policy:
Regional: We are working with energy action Scotland on helping support policy development in Scotland. UCC and Energy Action are speaking at the energy action Scotland annual conference, which is developing policy Local: Local Energy Resilience Group – TIG established a local group made up of citizens advice, financial inclusion team of the authority, food banks and TIG. The energy resilience group were able to draw down funding from Scottish Government to support energy poor vulnerable households during Covid-19 crisis. Poverty Action Group of the Outer Hebrides Community Planning Partnership (statutory body) – quarterly meetings from September 2020 to date.
Other policy domain
<u>National:</u> Just Transition Commission, national policy steering group towards a Just Transition in Scotland – 11th October 2022. (. The evidence given to the Just Transition Commission will be used as part of their consultation with multiple actors across Scotland, forming the basis of their next report. The evidence to the Just Transition Commission was at a crucial moment in Scotland in the development of advising the Scottish Government on their net zero plans as well as meeting the requirements of the Fuel Poverty Act) Local: Climate change strategy of the Outer Hebrides. We are asking for behavioural change advise to be added to policy