



## **POLICY GUIDELINES**

*by the Energy Community Secretariat*

### **on identifying and addressing energy poverty in the Energy Community Contracting Parties**

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# Policy Guidelines on Identifying and Addressing Energy Poverty in the Energy Community Contracting Parties

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## 1. Introduction

### 1.1 Background and scope

Energy is essential to ensure an adequate standard of living and health. In Europe, energy poverty is a growing concern that puts the health and welfare of millions of citizens at risk. According to recent estimations<sup>1</sup>, 7.4% of European Union citizens cannot keep their homes adequately warm. In the Energy Community Contracting Parties, the share of the population unable to afford adequate heating comfort is even higher- ranging from 9.5% in Serbia to 35.8% in Albania.<sup>2</sup> The COVID-19 pandemic and the Russian invasion of Ukraine affected energy markets in an unprecedented manner, reinforcing the dramatic increases in energy prices and concerns over the energy supply. The high energy prices and soaring inflation, which is causing real household incomes to fall, are expected to significantly increase the number of energy poor households and worsen their living standards. The consequences may be particularly painful for the Energy Community Contracting Parties. Informed planning, efficient and effective measures in line with the energy transition goals and close implementation monitoring are needed more than ever to successfully alleviate energy poverty. These Guidelines are designed with a view to assist the Energy Community Contracting Parties in supporting the most vulnerable categories of energy consumers.

The document provides guidance on:

- defining energy poverty indicators at national and local level,
- defining what constitutes a significant number of energy poor households in the Contracting Parties, and
- long- and short-term measures which could be used to address energy poverty, including those covered by the relevant sections of integrated National Energy and Climate Plans ('NECPs').

In order to propose information-based and relevant solutions, the Energy Community Secretariat conducted the Study on Addressing Energy Poverty in the Energy Community Contracting Parties (hereinafter 'Energy Community Study'<sup>3</sup>). The study takes stock of already implemented policies and measures addressing energy poverty in the Contracting Parties, provides a preliminary assessment of the number of households living in energy poverty and gives recommendations for policies and measures to address energy poverty. These Guidelines are predominantly based on the findings and recommendations of the study.

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<sup>1</sup> EUROSTAT, SILC, [https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc\\_mdes01&lang=en](https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_mdes01&lang=en)

<sup>2</sup> Data not available for Bosnia and Herzegovina, Georgia, Moldova and Ukraine.

<sup>3</sup> Study on Addressing Energy Poverty in the Energy Community Contracting Parties, DOOR, EIHP, December 2021 ([https://www.energy-community.org/dam/jcr:f201fef9-3281-4a1f-94f9-23c3fce4bbf0/DOOREIHP\\_poverty\\_122021.pdf](https://www.energy-community.org/dam/jcr:f201fef9-3281-4a1f-94f9-23c3fce4bbf0/DOOREIHP_poverty_122021.pdf))

These Guidelines were developed having regard to the mandate provided in:

- the recast Electricity Directive 2019/944<sup>4</sup>, as adapted by the Energy Community Ministerial Council Decision 2021/13/MC-EnC of 11 November 2021<sup>5</sup>, and in particular Article 29 thereof, stipulating that “The Energy Community Secretariat shall provide guidance on the definition of ‘significant number of households in energy poverty’ in this context and in the context of Article 5(5), starting from the premise that any proportion of households in energy poverty can be considered to be significant.”
- the Governance Regulation 2018/1999<sup>6</sup>, as adapted by the Energy Community Ministerial Council Decision 2021/13/MC-EnC of 11 November 2021<sup>7</sup>, and in particular Article 3.3(d) thereof, tasking the Energy Community Secretariat to adapt European Commission’s guidance on relevant indicators for energy poverty<sup>8</sup> for the Energy Community.

## 1.2 Legal framework

Although discussions on vulnerable customers and energy poverty are following the evolution of competitive energy markets from the very beginning, this issue has been addressed for the first time in the Third Package of EU Internal Energy Market<sup>9</sup> legislation. Requirements of the *acquis* related to energy poverty have been further elaborated within the building blocks of the Clean Energy for all Europeans Package<sup>10</sup>. Various EU strategic documents also tackle the issues of energy poverty alleviation. To start with, a fair transition towards a climate-neutral Union by 2050 is central to the European Green Deal<sup>11</sup>, and resulted in various initiatives being launched, e.g. the Renovation Wave<sup>12</sup> with a view to boost the structural renovation of private and public buildings, thereby reducing emissions, supporting recovery and addressing energy poverty.

In its communication ‘An Economic and Investment Plan for the Western Balkans’, the European Commission proposed to expand the EU renovation wave to the Western Balkans. As per the Communication, ‘*A building renovation wave implemented with the help of the Energy Community (Secretariat) will assist the Western Balkans in decarbonisation of public and private building stock, with a strong emphasis on digitalisation and taking into account energy*

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<sup>4</sup> 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 ([https://energy-community.org/dam/jcr:4dd35c70-91d7-4219-8396-7637a0cef7c7/DirectiveEU2019\\_944.pdf](https://energy-community.org/dam/jcr:4dd35c70-91d7-4219-8396-7637a0cef7c7/DirectiveEU2019_944.pdf))

<sup>5</sup> Decision 2021/13/MC-EnC amending Annex I to the Treaty Establishing the Energy Community and incorporating Directive (EU) 2019/944 and Regulation (EU) 2019/941 in the Energy Community *acquis communautaire* (<https://energy-community.org/dam/jcr:3304cadf-c63b-433f-9636-79d9ec63b186/Decision%202021-13-MC-EnC.pdf>)

<sup>6</sup> Regulation (EU) 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://energy-community.org/dam/jcr:e24c911e-f0f6-4f26-a152-ec79d85ee1a4/REGULATION\\_EU\\_2018-1999.pdf](https://energy-community.org/dam/jcr:e24c911e-f0f6-4f26-a152-ec79d85ee1a4/REGULATION_EU_2018-1999.pdf))

<sup>7</sup> Decision 2021/13/MC-EnC amending Annex I to the Treaty Establishing the Energy Community and incorporating Directive (EU) 2019/944 and Regulation (EU) 2019/941 in the Energy Community *acquis communautaire* ([https://energy-community.org/dam/jcr:c755f9db-f6e7-448c-9cf5-0a5f02113ae2/19thMCDecision14\\_CEP11\\_30112021.pdf](https://energy-community.org/dam/jcr:c755f9db-f6e7-448c-9cf5-0a5f02113ae2/19thMCDecision14_CEP11_30112021.pdf))

<sup>8</sup> Commission Recommendation (EU) 2020/1563 of 14 October 2020 on energy poverty (<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32020H1563&from=EN>) and Commission Staff Working Document EU Guidance on Energy Poverty Accompanying the document Commission Recommendation on energy poverty ([https://ec.europa.eu/energy/sites/ener/files/swd\\_on\\_the\\_recommendation\\_on\\_energy\\_poverty\\_swd2020960.pdf](https://ec.europa.eu/energy/sites/ener/files/swd_on_the_recommendation_on_energy_poverty_swd2020960.pdf))

<sup>9</sup> [https://energy.ec.europa.eu/topics/markets-and-consumers/market-legislation/third-energy-package\\_en](https://energy.ec.europa.eu/topics/markets-and-consumers/market-legislation/third-energy-package_en)

<sup>10</sup> [https://energy.ec.europa.eu/topics/energy-strategy/clean-energy-all-europeans-package\\_en](https://energy.ec.europa.eu/topics/energy-strategy/clean-energy-all-europeans-package_en)

<sup>11</sup> Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the regions- The European Green Deal COM/2019/640 final ([https://eur-lex.europa.eu/resource.html?uri=cellar:b828d165-1c22-11ea-8c1f-01aa75ed71a1.0002.02/DOC\\_1&format=PDF](https://eur-lex.europa.eu/resource.html?uri=cellar:b828d165-1c22-11ea-8c1f-01aa75ed71a1.0002.02/DOC_1&format=PDF))

<sup>12</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee, the Committee of the Regions ‘A Renovation Wave for Europe – greening our buildings, creating jobs, improving lives’ ([https://eur-lex.europa.eu/resource.html?uri=cellar:0638aa1d-0f02-11eb-bc07-01aa75ed71a1.0003.02/DOC\\_1&format=PDF](https://eur-lex.europa.eu/resource.html?uri=cellar:0638aa1d-0f02-11eb-bc07-01aa75ed71a1.0003.02/DOC_1&format=PDF))

**poverty.**<sup>13</sup> Furthermore, in its Staff Working Document 'Guidelines for the Implementation of the Green Agenda for the Western Balkans', the European Commission reaffirmed its commitment to expand the EU renovation wave to the Western Balkans, while adding an initiative to '*assist (Western Balkan) partners in implementing programmes addressing energy poverty in the region*'.<sup>14</sup>

In the Sofia Declaration adopted at the WB6 Meeting of 10 November 2020, the ministers of the Western Balkans 6 countries fully endorsed the Green Agenda for the Western Balkans. Among others, within the pillar 'Climate, Energy, Mobility', they expressed their commitment to '*support private and public buildings renovation schemes, secure appropriate financing and full enforcement of the Energy Performance of Building Directive (adapted under the Energy Community framework)*', as well as to '*develop programmes for addressing energy poverty and financing schemes for household renovation and providing basic standards of living*'.<sup>15</sup>

The Energy Community Contracting Parties' legal obligations regarding energy poverty correspond to those prescribed by the EU acquis to the extent the relevant pieces of legislation are adapted and incorporated in the Energy Community legal framework.

Currently, the following obligations are applicable to the Energy Community Contracting Parties:

- *Each Contracting Party shall 'take appropriate measures to protect customers and ensure, in particular, that there are adequate safeguards to protect vulnerable customers'. Such measures could be '**formulating national energy action plans, providing benefits in social security systems to ensure the necessary electricity/gas supply to vulnerable consumers, or providing for support for energy efficiency improvements, to address energy poverty where identified, including in the broader context of poverty.**' These measures should 'not impede the effective opening of the market' (Directives 2019/944/EC and 2009/73/EC<sup>16</sup>).*
- *Each Contracting Party shall 'take appropriate measures to protect final consumers in remote areas who are connected to the electricity/gas system' (Directives 2019/944/EC and 2009/73/EC).*
- *Each Contracting Party 'shall define the concept of vulnerable consumers which may refer to energy poverty and, inter alia, to the prohibition of disconnection of electricity/gas to such consumers in critical times' (Directives 2019/944/EC and 2009/73/EC). The concept of vulnerable consumers may include 'income levels, the share of energy expenditure of disposable income, the energy efficiency of homes, critical dependence on electrical equipment for health reasons, age or other criteria.'*
- *Based on a set of **criteria defining energy poverty** (established and published by the Contracting Party), 'which may include low income, high expenditure of disposable income on energy and poor energy efficiency' (Directive 2019/944), the Contracting Parties shall '**assess the number of households in energy poverty taking into account the necessary domestic energy services needed to guarantee basic standards of living in the relevant national context, existing social policy and other relevant policies, as well as indicative Commission guidance on relevant indicators for energy poverty**'. **If a Contracting Party has a significant number of energy poor households, it should develop 'a national indicative objective to reduce energy poverty'** and include it in*

<sup>13</sup> [https://ec.europa.eu/neighbourhood-enlargement/system/files/2020-10/communication\\_on\\_wb\\_economic\\_and\\_investment\\_plan\\_october\\_2020\\_en.pdf](https://ec.europa.eu/neighbourhood-enlargement/system/files/2020-10/communication_on_wb_economic_and_investment_plan_october_2020_en.pdf)

<sup>14</sup> [https://ec.europa.eu/neighbourhood-enlargement/system/files/2020-10/green\\_agenda\\_for\\_the\\_western\\_balkans\\_en.pdf](https://ec.europa.eu/neighbourhood-enlargement/system/files/2020-10/green_agenda_for_the_western_balkans_en.pdf)

<sup>15</sup> [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_20\\_2051](https://ec.europa.eu/commission/presscorner/detail/en/ip_20_2051)

<sup>16</sup> [https://energy-community.org/dam/jcr:004b3ca7-fa52-4633-875e-8ac1b2cea021/Directive\\_2009\\_73\\_GAS.pdf](https://energy-community.org/dam/jcr:004b3ca7-fa52-4633-875e-8ac1b2cea021/Directive_2009_73_GAS.pdf)

its integrated national and climate plans ('NECP'), together with *'the policies and measures, which address energy poverty, if any, including social policy measures and other relevant national programs.'* Finally, Contracting Parties shall include in their integrated national energy and climate progress report information on progress towards the national indicative objective to reduce the number of households in energy poverty, quantitative information on the number of households in energy poverty, and, where available, information on policies and measures addressing energy poverty (Regulation EU 2018/1999).

- *'In designing policy measures to fulfill their obligations to achieve energy savings, Contracting Parties shall take into account the need to alleviate energy poverty in accordance with criteria established by them, taking into consideration their available practices in the field, by requiring, to the extent appropriate, a share of energy efficiency measures under their national energy efficiency obligation schemes, alternative policy measures, or programmes or measures financed under an Energy Efficiency National Fund, to be implemented as a priority among vulnerable households, including those affected by energy poverty and, where appropriate, in social housing'* (Energy Efficiency Directive 2012/27/EU, as amended by Directive (EU) 2018/2002).

## 2. Definition and indicators of energy poverty

To assess the number of households in energy poverty, the Contracting Parties need to develop and publish a definition of energy poverty. The legislative framework does not provide a generally applicable definition, taking into account the diversity in the Contracting Parties. However, Directive 2019/944 specifies that the criteria for defining energy poverty may include low income, high expenditure of disposable income on energy and poor energy efficiency. It also highlights that domestic energy services needed to guarantee basic standards of living have to be provided. Based on these principles each Contracting Party shall develop its own set of criteria based on the drivers of energy poverty in its own jurisdiction and consider affordability and essential energy services in its own national context.

In the framework of the Energy Community Study, a working definition of an energy poor consumer was developed: ***'An energy poor consumer is a consumer who cannot secure adequate warmth, cooling, lighting, and energy to power appliances necessary for essential services that underpin a decent standard of living and health'***.

Selecting the right indicators for measuring energy poverty is paramount for correctly identifying the population suffering from energy poverty. This process must consider context, scale and data availability. Having in mind the multi-dimensional nature of energy poverty, applying a combination of indicators would better capture the extent of poverty in the Contracting Parties. In this context, the Guidelines introduce indicators discussed within the European Commission's Recommendation on energy poverty<sup>17</sup> as well as those proposed by the Energy Community Study.<sup>18</sup>

The European Commission has developed a combination of relevant indicators to estimate the

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<sup>17</sup> European Commission (14 October 2020). Commission Recommendation on energy poverty ([https://ec.europa.eu/energy/sites/ener/files/recommendation\\_on\\_energy\\_poverty\\_c2020\\_9600.pdf](https://ec.europa.eu/energy/sites/ener/files/recommendation_on_energy_poverty_c2020_9600.pdf))

<sup>18</sup> [https://www.energy-community.org/dam/jcr:f201febd-3281-4a1f-94f9-23c3fce4bbf0/DOOREIHP\\_poverty\\_122021.pdf](https://www.energy-community.org/dam/jcr:f201febd-3281-4a1f-94f9-23c3fce4bbf0/DOOREIHP_poverty_122021.pdf)

extent of energy poverty in the EU Member States, each of which sheds light on a different dimension of the energy poverty phenomenon. All indicators are categorized into four different groups:

- a) **Indicators comparing energy expenditure and income:** Indicators quantifying energy poverty by looking at the energy expenditure of households in relation to their available income,
- b) **Indicators based on self-assessment:** Indicators assessing energy poverty by asking households directly to what extent they feel able to afford energy (e.g. ability to keep home adequately warm in winter and cool in summer),
- c) **Indicators based on direct measurement:** Indicators measuring physical variables to determine the adequacy of energy services (e.g. room temperature), and
- d) **Indirect indicators:** Indicators designed to measure the energy poverty situation through related factors, such as arrears on utility bills, number of disconnections and housing quality.

For all EU Member States, indicators are derived from harmonized EU data collections, including the **European Union Statistics on Income and Living Conditions (EU-SILC)**, the **Household Budget Surveys (HBS)** and **statistics on energy prices and final energy consumption**. Indicators for the EU Member States are available from the Statistical Office of the European Union (EUROSTAT) and the European Energy Poverty Observatory.<sup>19</sup> The Annex to Commission's Recommendation on energy poverty<sup>20</sup> provides the list of indicators recommended to EU Members States.

The Energy Community Study recommended that Contracting Parties monitor the level of energy poverty through a set of so-called **primary indicators**:

- a) **Energy burden:** Share of energy costs in the household disposable income,
- b) **M/2 indicator:** Share of households with absolute energy expenditure below half the national median,
- c) **2M indicator:** Proportion of households with a share of energy expenditure in income more than twice the national median share,
- d) **Arrears on utility bills:** Share of the population unable to pay on time utility bills (heating, electricity, gas, water, etc.) for the main dwelling due to financial difficulties within the last twelve months,
- e) **Ability to keep home adequately warm:** Share of the population not able to keep their home adequately warm, and
- f) **Condensation, leaking roof, rot in windows or doors:** Share of population with a leak, damp or rot in their dwelling.

The proposed indicators are based on data gathered through either EU-SILC or HBS. **While HBS surveys are carried out by all Contracting Parties, the EU-SILC survey is currently available only for some of them.**

In addition to the primary indicators, the study also proposes collecting data on **secondary indicators**. The secondary indicators are used to monitor the development of some variables that affect the level of energy poverty and should be available for all Contracting Parties.

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<sup>19</sup> [https://energy-poverty.ec.europa.eu/energy-poverty-observatory\\_en](https://energy-poverty.ec.europa.eu/energy-poverty-observatory_en)

<sup>20</sup> [https://ec.europa.eu/energy/sites/ener/files/recommendation\\_on\\_energy\\_poverty\\_-\\_annex.pdf](https://ec.europa.eu/energy/sites/ener/files/recommendation_on_energy_poverty_-_annex.pdf)

Table 1 below provides an overview of the proposed indicators, including the information on their current availability in the Contracting Parties.

Table 1: Energy poverty indicators proposed for the Energy Community Contracting Parties

Primary indicators	Source	Availability
Energy burden	HBS	all CPs
M/2 indicator	HBS	all CPs
2M indicator	HBS	All CPs
Arrears on utility bills	EU SILC	Albania, Kosovo* <sup>21</sup> , Montenegro, North Macedonia and Serbia
Inability to keep home adequately warm	EU SILC	Albania, Kosovo*, Montenegro, North Macedonia and Serbia
Condensation, leaking roof, rot in windows or doors	EU SILC	Albania, Kosovo*, Montenegro, North Macedonia and Serbia
Secondary indicators	Source	Availability
Level of household electricity prices	EUROSTAT	all CPs
Level of household gas prices	EUROSTAT	all CPs
Average monthly net wages	National Statistics Offices	all CPs
Annual unemployment rates by gender and aggregated	World Bank	all CPs
Share of population living below USD 1.9 per day	World bank	all CPs

The data on indicators listed above can be further disaggregated, thus enabling Contracting Parties to identify the households in poverty more precisely. For example, all indicators can be disaggregated by **income decile** and **degree of urbanisation**. The latter dimension may be important, as recognised by Directive 2019/944, which requires Contracting Parties to protect customers in remote areas. The indicators ‘inability to keep homes adequately warm’ and ‘arrears in energy bills’ can also be disaggregated by **tenure type** (owned/market rented/reduced or free rent) and by **dwelling type** (i.e. detached/semi-detached house or apartment). Disaggregation of data may help with designing assistance to households that is better targeted and tailored to their specific needs.

<sup>21</sup> Throughout this document, this designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Advisory Opinion on the Kosovo declaration of independence.

Where applicable and possible, **disaggregated data should be collected for the indicators**, based on the following characteristics:

- Income decile,
- Degree of urbanisation,
- Size and composition of household,
- Employment status,
- Age and presence of disabilities,
- Tenure type (owned/market rented/reduced or free rent), and
- Dwelling type (i.e. detached/semi-detached house or apartment).

Finally, **it is proposed that the indicators are calculated regularly by the national statistics offices, according to the methodological guidebook published by the Energy Poverty Observatory<sup>22</sup>.**

### 3. Identifying the significant number of households in energy poverty

In the framework of the Energy Community Study, the number of energy poor households was estimated by using the results of two main statistical surveys: HBS and EU-SILC. While all Contracting Parties carry out HBSs, not all of them conduct EU SILCs. Consequently, a complete comparative analysis across all Contracting Parties is not possible at this moment.

The study estimates the potential number of energy poor by giving a range based on a lower and upper bound. The **lower bound** represents the proportion of the population that reports being **unable to keep their home adequately warm**, while the **upper bound** represents the proportion of the population that **spends either too much (2M) or too little (M/2) on energy** (the upper bound is the sum of households that meet the 2M and M/2 criteria). The study thus uses three indicators to measure the extent of energy poverty, namely (1) the inability to keep the household warm (based on EU-SILC data), (2) the 2M indicator and (3) the M/2 indicator (M2 and M/2 indicators based on HBS data). The indicators are calculated for the first four deciles i.e. below average households in terms of income. Given that the estimation of the significant number of households in energy poverty is based on a statistical sample rather than the actual number of households that are energy poor, it must be highlighted that the obtained shares represent only an approximation of the magnitude of the energy poverty problem.

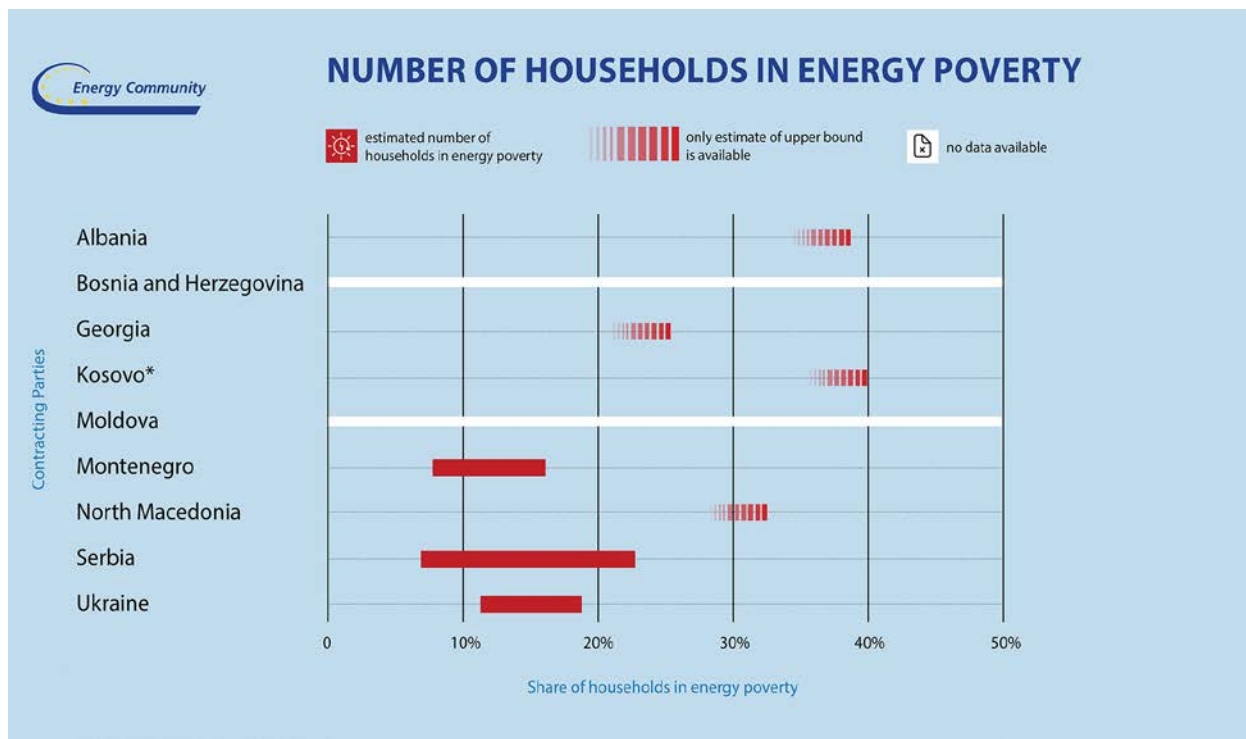
The results of preliminary assessment of number of households in energy poverty can be found in figure below.

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<sup>22</sup> EU Energy Poverty Observatory, *EPOV Indicator Dashboard: Methodology Guidebook*, May 2020, available at [https://energy-poverty.ec.europa.eu/system/files/2021-09/epov\\_methodology\\_guidebook\\_1.pdf](https://energy-poverty.ec.europa.eu/system/files/2021-09/epov_methodology_guidebook_1.pdf)



Figure 1 The estimated number of households in energy poverty in the Contracting Parties in 2019 (in %)



Source: EIHP, DOOR calculations for the Energy Community Study

In general, for some Contracting Parties, data was not provided for the purpose of conducting the study, although statistical data would have been available for EU-SILC and/or HBS surveys (Table 2). In these cases, an estimate was made based on publicly available data.

In **Albania, 37% of all households declare that they cannot keep their homes adequately warm**. The value of 37% can be considered as an upper limit for the estimated number of energy poor households in Albania, as disaggregated data that would enable calculation of the indicator for the first four deciles was not provided. Information required for the calculation of the lower limit was also not available. Equivalent assessments were conducted for Georgia, Kosovo\* and North Macedonia. **The calculated upper bound for energy poor households in Georgia is estimated at 24.6% and in North Macedonia at 33%. With 40%, Kosovo\* shows the highest percentage of households that cannot keep their homes adequately warm.** As in the case of Albania, the lower bounds for these three Contracting Parties could not be estimated.

For Montenegro, Serbia and Ukraine, disaggregated data for calculation of EU-SILC and HBS was provided<sup>23</sup>, therefore, the upper and lower bounds could be calculated as follows:

- **Montenegro: between 8% and 15%,**

<sup>23</sup> In Ukraine, the national statistics office *Ukrstat* collects data and calculates indicators based on a methodology similar to the one applied by EUROSTAT.

- **Serbia:** between 7% and 22%,
- **Ukraine:** between 13% and 18%.

For **Bosnia and Herzegovina** and **Moldova**, no information was provided on either the EU-SILC (not available) or the HBS (available but not provided for the study). Due to the lack of relevant publicly available statistical information, the study does not provide an estimate of the number of energy poor households for both countries. Nevertheless, taking into account the findings on the drivers of energy poverty analysed in the framework of the Energy Community Study, such as macroeconomic development, energy consumption and prices and energy efficiency, it can be assumed that **energy poverty levels in these two countries are similarly significant as in other Contracting Parties.**

For the Contracting Parties that provided micro-data for the HBS and EU-SILC surveys—Montenegro, Serbia and Ukraine, the proposed indicators were measured by income deciles and various household socio-economic characteristics. It was found that, in general, **low-income groups** (60% below the national median), **single people with/without dependent children** and **adults over 65 years** of age are more affected by energy poverty. Few data were available to capture the differences between urban and rural populations.

Article 29 of Directive 2019/944 clearly stipulates that '*any proportion of households in energy poverty can be considered significant*'. Nevertheless, for well-designed and targeted policy measures, that are to be included in the NECPs, it is very important to establish criteria and indicators for assessing the number of those households. Such an assessment should be based on verifiable data and put in national context. **The Contracting Parties are recommended to apply at least one of the primary indicators provided in Table 1, preferably M2 and M/2 indicators (HBS) or the indicator pointing out to households unable to keep their home adequately warm (SILC)** Again, a combination of all suggested primary and secondary indicators, accommodated to the specific circumstances in each Contracting Party, would inform on the extent of energy poverty in the best way.

## Local dimension of energy poverty

The above-discussed indicators are primarily collected at the national level, aiming to produce comparable data between countries. They are essential to grasp the various dimensions of energy poverty but do not capture local realities. The nature of energy poverty differs at the regional and local level and even between municipalities. Therefore, the selection of indicators that take into account the specific context of local conditions and groups should be of utmost importance to decipher the vulnerability situation in a given country.

Assessing energy poverty at the local level should take into account individual circumstances ranging from local heating and cooling needs, demographic factors such as age and gender, the energy market and corresponding energy prices, energy efficiency of homes and appliances, infrastructure and availability of energy sources. This is further evidenced by the Covenant of Mayors for Climate and Energy in Europe, which, with the support of EPAH and the Joint Research Centre, recently proposed a set of indicators to assess and monitor energy poverty at the local level. They propose a flexible approach with 60 indicators from six different categories, namely climate, socio-economic factors, facilities and housing, mobility, policy and regulatory framework, participation and awareness raising.<sup>24</sup> These indicators provide options for defining, quantifying and addressing energy poverty issues at the local level. Thanks to the variety and diversity of the indicators, municipalities are advised to choose the most tailored indicators to their context and possibilities.

Most local energy poverty assessments reach their limits when it comes to the availability of adequate micro-level data. For improving the situation with micro-level data, HBS<sup>25</sup> and EU-SILC<sup>26</sup> should be conducted at a smaller local unit, such as at the administrative level. The same applies to census data, which usually contains data on socio-economics, building stock and equipment characteristics. In addition, an EPAH study published in 2022 suggests that energy performance certificates (EPCs) could become an essential data source for the collection of building and equipment characteristics.<sup>27</sup> In this context, the Contracting Parties should guarantee that municipalities become responsible for managing EPCs for buildings in the coming years. In this way, the data can be disclosed for research purposes or for energy poverty assessments by municipalities. Finally, it is important to stress that local studies can shed light on the local energy poverty situation by conducting surveys or interviews at the local level. These studies would allow the selection of locally relevant indicators, ranging from self-perceptions of cold or warmth to building characteristics and data on energy behaviour and coping strategies.

<sup>24</sup> Presentation “Defining and measuring energy poverty”. (2021). Covenant of Mayors. Available at: [https://energy-poverty.ec.europa.eu/system/files/2021-11/The%20energy%20poverty%20approach%20of%20the%20Covenant%20of%20Mayors\\_Miguel%20Morcillo\\_EPAH%20launch%20event.pdf](https://energy-poverty.ec.europa.eu/system/files/2021-11/The%20energy%20poverty%20approach%20of%20the%20Covenant%20of%20Mayors_Miguel%20Morcillo_EPAH%20launch%20event.pdf).

<sup>25</sup> Currently given at the national or NUTS2 level

<sup>26</sup> Provided at the NUTS2 level.

<sup>27</sup> Bringing Energy Poverty Research into Local Practice: Exploring Subnational Scale Analyses (2022). Energy Poverty Advisory Hub. Available at: [https://energy-poverty.ec.europa.eu/discover/practices-and-policies-toolkit/publications/bringing-energy-poverty-research-local-practice-exploring-subnational-scale-analyses\\_en](https://energy-poverty.ec.europa.eu/discover/practices-and-policies-toolkit/publications/bringing-energy-poverty-research-local-practice-exploring-subnational-scale-analyses_en)

## 4. Policies and measures to reduce energy poverty

### 4.1 Background and current status

There are two main types of measures for alleviating causes and consequences of energy poverty:

- Measures aimed at increasing household income and protecting against utility disconnections (short-term measures), and
- Measures aimed at decreasing energy-related expenditures (long-term measures).

The first group of measures focuses on increasing total household income and protects households from utility disconnections such as gas, electricity, and/or district heating networks. Such measures are generally considered **short-term** measures as they affect primarily the consequences of energy poverty. This approach includes typically direct financial support - deductions on monthly energy bills, direct financial allowances, or financial transfers with the aim of lowering the overall energy bill burden for households, and protection against utility disconnections. The main items in this group of measures are:

#### A. Protection

- Protection against utility disconnections in case of non-payment
- Provision of minimum energy supply

#### B. Price regulation

- Social tariffs
- Pre-paid meters

#### C. Direct financial support

- Various models of support for paying energy bills and increasing income

The second group of measures is typically focused on decreasing household energy consumption, such as improving the energy efficiency of dwellings and household appliances. Such measures are generally considered to have a **long-term** impact in that they address the causes of energy poverty. Based on this approach, the challenge lies in the fact that many energy poor households spend less energy than needed and require higher overall consumption of energy if the standard of quality and quantity of energy services is to be met. On the other hand, typical energy policies aimed at improving energy efficiency are focused on subsidizing energy efficiency improvements subject to applicants providing proof of energy and emissions savings. The fact that many energy poor households underspend on energy means that most of the public energy efficiency financing schemes are unavailable to the energy poor. The reason for this is that in typical energy efficiency schemes applicants are expected to demonstrate energy savings and/or reduction of emissions. But as energy poor households underspend on energy, implementing energy efficiency schemes will generally not result in a decrease in energy consumption but rather the level of energy consumption remains mostly unaffected, whereas the quality of service improves.

The main measures from this group that directly target energy poor households include the following:

- A. Energy efficiency improvements
  - Energy retrofitting of buildings, including replacing windows and doors, and replacing energy inefficient household appliances with more efficient ones
- B. Heating system improvements
  - Replacing the main heating source with more efficient, environmentally friendly and affordable types of heating
  - Modernization and expansion of heating systems
  - Implementation of heating systems where not available
- C. Implementation of low-cost energy efficiency measures including energy counselling
  - Installing simple and low-cost energy efficiency measures such as draught-proofing of windows and doors and LED lighting
  - Undertaking simple energy audits and providing information on rational and efficient energy use
- D. Support for renewable energy sources (RES)
  - Incentives for installing photovoltaic panels
  - Incentives for installing solar-thermal collectors

All Contracting Parties have already implemented some short-term measures aimed at alleviating energy poverty. In most cases, this refers to direct financial support schemes to the most vulnerable customers, typically from the socially vulnerable categories. In addition, some Contracting Parties have certain non-disconnection schemes in place. **Especially in the light of the current supply insecurities and the dramatic increases in energy prices, short-term measures are of utmost importance to directly relieve the financial situation of households. However, the current measures are primarily aimed at alleviating the consequences of energy poverty, rather than addressing its root causes. They are a good short-term approach, but not sufficient to reduce the energy poverty in the long-term.**

With respect to **long-term measures for reducing energy poverty**, most Contracting Parties already implement the majority of these long-term measures at a national or local level, but **these measures are not targeted towards energy poor households**. The only exception is North Macedonia, where part of the assistance in the form of energy efficiency and promotion of renewable energy programmes is directed towards vulnerable consumers.

The number of households covered by existing measures varies significantly between Contracting Parties. Table 3 shows the proportion of households covered by current measures and the total estimated funding allocated to energy poverty measures.

Table 2: Beneficiaries and funds currently allocated to measures against energy poverty in the Contracting Parties

Contracting Party	Households (HH)			Financial support	
	Total	Recipients	Share	Total EUR	EUR per HH
Albania	734,080	213,000	29%	22,205,000	104
Bosnia and Herzegovina	918,002	69,268	8%	12,323,386	178
Georgia	1,112,026	208,033	19%	11,796,231	57
Kosovo*	333,666	36,648	11%	4,500,000	123
Moldova	903,118	227,000	25%	Not available	Not available
Montenegro	192,814	19,200	10%	2,707,412	141
North Macedonia	716,682	Not available	Not available	973,606	Not available
Serbia	2,397,827	74,665	3%	9,762,088	131
Ukraine	14,731,716	6,000,000	41%	41,210,000	7

Source: Energy Community Secretariat, based on the Energy Community Study

#### 4.2 Recommendations for short-term measures

For the immediate relief of vulnerable consumers, in particular during periods of high energy prices, the following short-term measures are recommended to the Contracting Parties:

##### A. Protection against disconnection

Protection against disconnection measures do not require significant financial resources to be implemented, yet they provide notable benefits for vulnerable consumers. It is important to note that protection against disconnection does not mean that vulnerable households are given a waiver for their energy bills: rather, it implies that in case of financial hardship such households are given the opportunity to postpone payments for consumed energy. Protection against disconnection in wintertime is very effective and should be implemented as a minimum.

##### B. Direct financial support

Direct financial support can be implemented at a local or national level and can be funded by local or state budgets. Direct financial support is possible in terms of directly deducting monthly bills by a given monetary amount or by providing a certain amount of kWh free of charge to beneficiaries. It can also be delivered directly in terms of fuel, as allowances which can be used on any fuel, or by financing household energy expenditures. The measure can be delivered monthly, seasonally, annually, or as onetime support under special circumstances. Direct financial support can ease the energy burden for vulnerable households and can also decrease the stress of “heat or eat” and similar existential dilemmas.

The disadvantage of the direct financial support measure, in addition to having a weak impact on alleviating the main causes, is that it represents a long-term burden on the state/local

budget. In addition, financial support disincentivizes households to behave efficiently in terms of energy consumption.

The implementation of **social tariffs** is recommended only if they are well defined for vulnerable groups. **It is not recommended that Contracting Parties intervene in the energy markets by directly influencing energy prices, particularly not by regulating energy prices for all households.** Keeping energy prices below market levels reduces competition, limits consumer choice and makes energy efficiency measures less likely to be implemented. Limited implementation of social tariffs for well-defined vulnerable groups has a less negative impact compared to blanket price regulation. However, defining sources of financing for covering the difference between market prices and regulated prices requires attention in order to ensure that such measures do not result in market distortions.

#### *4.3 Recommendations for long-term measures*

Energy efficiency improvements should be the principal measures for alleviating energy poverty and are associated with several crucial positive impacts. The main benefit of energy efficiency improvements is that they contribute to decreasing energy consumption and improvements in health and well-being. It also contributes to local economic growth and combating climate change. Economic growth can be felt locally through increased provision of energy efficiency services which means more opportunities for local businesses and more jobs. Economic growth also stems from a decreasing dependency on energy imports and households increasing spending on other goods and services. A decrease in energy consumption results in lower CO<sub>2</sub> emissions, thus mitigating climate change. Energy efficiency retrofits of buildings leads to increases in property values. Finally, the cheapest energy is energy that is not consumed.

Energy efficiency improvements aimed at mitigating energy poverty should be targeted at both the production and consumption chain. They should include energy efficiency retrofits of buildings (entire building's envelope), replacement of household appliances, improvements to distribution systems and energy efficiency improvements to production units, including fuel switching. Energy efficiency can also lead to a reduction of energy prices, through decreased demand and a lesser need for upgrading the grid and building of new production capacities.

The long-term measures for addressing energy poverty provided below should be considered when designing the NECPs or any other relevant national or local policies. More details on the elements and costs of recommended measures are available in the Energy Community study on alleviating energy poverty.

### **C. Energy retrofitting of buildings**

General energy retrofits of buildings, which comprise installing thermal insulation on the entire building's envelope and replacement of windows and doors, result in significant energy savings and quality of life improvements. This measure can be implemented partially (segment by segment) or through measures including all segments: windows and doors, walls, roof and floor.

These measures can be implemented as single measures, but **integrated energy retrofits** should be aimed to harness the full saving potential. This includes the building envelope improvement as well as the energy efficiency improvements of the production units including fuel switching and use of RES where appropriate.

#### **D. Replacement of household appliances via the ‘old for new’ scheme**

Inefficient and old household appliances result in inadequate energy services and high energy consumption. Old appliances are often unsafe and do not provide the intended quality of service. Replacing household appliances (refrigerators, washing machines, etc.) leads to a decrease in energy consumption and offers better quality of service. In that way, it reduces energy bills and CO<sub>2</sub> emissions while improving the quality of life. The ‘old for new’ principle is of key importance and has the goal of helping the beneficiary forfeit the old appliance and acquire a new efficient one. This approach is necessary to prevent households having both appliances which would result in higher energy consumption.

#### **E. Heating system improvements**

Many energy poor households lack adequate heating systems. The homes are often heated partially meaning that there is only one heating source. Many rely on burning low-quality fuelwood, coal and, in some cases, even trash. Low quality fuelwood furnaces have adverse impacts on health due to pollution from indoor particles and local outdoor pollution. Thus, making improvements to heating systems is one of the key measures for alleviating energy poverty. This specific measure comprises the following sub measures:

- **Improving energy efficiency of systems:** Replacing existing systems with the same type of system with better efficiency, i.e. replacing traditional fuelwood stoves with new higher efficiency biomass furnace or stove. This type of measure can be particularly applicable in rural areas where there might still be a high prevalence of traditional biomass (fuelwood use) and where alternative fuel sources might be too costly or unavailable for vulnerable groups. The use of this measure should be limited to the most energy-vulnerable consumers and should be considered as a measure of last resort);
- **Modernization and expansion of the heating system:** Replacing the entire heating system with a more adequate one. For example, the replacement of heating from separate heating sources by installing a centralized household heating system);
- **Fuel switching:** Switching fuel from fossil energy to renewable energy sources.

#### **F. Energy advice and low-cost energy efficiency measures**

Education and raising awareness are important aspects of mitigating energy poverty. Education along with energy audits and low-cost energy efficiency measures have proven to be a good first step. This measure is relatively easy to implement, provides instant relief to some of the poor households and offers insight into the reality of living in energy poverty in a targeted area based on collected data. Simple energy audits have proven to be a good approach to acquiring the necessary data on the presence of energy poverty. This measure usually consists of either energy audits and advice or low-cost energy efficiency measures, or a combination of the two. Good examples of low-cost energy efficiency measures are draught-proofing of windows and doors, LED lighting, timers for electric boilers, water saving showerheads and similar.

#### **G. Support for use of renewable energy sources**

Energy poor households seldomly have access to renewable energy sources other than traditional biomass, which is often unsustainable. The use of fuelwood in energy-poor homes



is commonly accompanied by indoor air pollution, low efficiency and heating limited to individual heating sources.

Measures incentivizing the use of renewables for the energy poor offer numerous benefits. These measures improve the quality of life, ensure a steady source of revenue, empower households and help achieve national climate and energy targets while reducing social and energy vulnerability.

These measures include providing support for installing photovoltaic panels and solar-thermal panels and could be implemented as stand-alone measures or in combination with heating system and energy efficiency improvements.

## 5. Summary of recommendations

1. When developing criteria for assessing the levels of energy poverty in line with Energy Community legislation, the Contracting Parties should take the following definition as a point of departure: *'An energy poor consumer is a consumer who cannot secure adequate warmth, cooling, lighting, and energy to power appliances necessary for essential services that underpin a decent standard of living and health'*.
2. To monitor the extent of energy poverty, the Contracting Parties are invited to take into account the primary and secondary indicators outlined in Chapter 2 of this document, disaggregating relevant data to the extent possible to allow a more precise identification of the energy poor households.
3. The indicators of energy poverty should be calculated regularly by the national statistics offices according to the methodological guidebook published by the EU Energy Poverty Observatory.
4. To identify a 'significant number of households in energy poverty', the Contracting Parties are recommended to apply at least one of the primary indicators provided in Table 1 (Chapter 2), preferably M2 and M/2 indicators (HBS) or the indicator pointing out the number of households unable to keep their home adequately warm (SILC). Nevertheless, a combination of all suggested primary and secondary indicators, tailored to the specific circumstances in each Contracting Party, would inform on the extent of energy poverty in the most accurate way.
5. The energy poverty assessment on national level should be accompanied by a similar process on local level in order to capture the magnitude of the problem more precisely and allow for adequate and well targeted measures.
6. Policies and measures for reducing energy poverty should be developed and included in the NECPs of the Contracting Parties. Policy solutions should include both social policy measures and energy efficiency measures. Chapter 4 of these Guidelines lists the measures that should be considered in this respect.
7. In the light of the current dramatic increases in energy prices, the proposed short-term measures are of utmost importance to directly relieve the financial situation of poor households. It is crucial to limit the implementation of such measures to the vulnerable and poor population, so that the market liberalization and energy transition processes are not jeopardized for the benefit of all citizens, including the poor.

8. The development of policies and measures for reducing energy poverty should be transparent and inclusive, supporting meaningful participation of all relevant stakeholders.
9. Policies and measures for addressing energy poverty should be designed and implemented in close cooperation between all levels of administration and involve civil society organisations and private sector, as appropriate.
10. The Contracting Parties are invited to cooperate with the Energy Community Secretariat's Centre for Alleviating Energy Poverty, established with the purpose of collecting information, providing advice and serving as a platform for cooperation between all relevant stakeholders across Europe and beyond on the issues related to energy poverty.

Vienna, 29 August 2022

A handwritten signature in cursive script that reads "Artur Lorkowski".

Artur Lorkowski  
Director