

# Context and schemes to tackle energy poverty in Europe



## ROMANIA BACKGROUND AND GOVERNANCE

### BACKGROUND

Romania ranks high on the list of European countries vulnerable to energy poverty. The country faces **big challenges** in improving the energy efficiency of its housing stock and associated utility systems, while addressing income inequalities among the general population.

The <u>Romanian Law no. 123/2012</u> for electricity and natural gas defines a '**vulnerable customer**' as

"A final customer belonging to a category of household customers who, for reasons of age, health or low income are at risk of social exclusion and to prevent this risk, benefit from social protection measures, including financial ones."

The protection of vulnerable customers is in two orders, Order 64/2014 for electricity and Order 29/2016 for natural gas, with more detailed criteria specifying who is considered 'vulnerable customer'. The Law no. 123/2012 also obliges the Romanian government to draw up a national action plan on energy poverty. The regulation on vulnerable customers aims to develop public heat insulation programmes for buildings in communities affected by energy poverty.

Romania does not have an official definition of energy poverty, although <u>Law 196/2016</u> on the minimum inclusion income states that: "Energy poverty is defined as the impossibility of the vulnerable consumer to meet their minimum energy needs for the optimal heating of the home during the cold season". However, there is a limited likelihood that this piece of legislation will enter into force.

## **CSD research on energy poverty in Romania**

The <u>Centre for the Study of Democracy (CSD)</u> is a think tank founded in 2006 by the Faculty of Political Sciences of Babeş-Bolyai University in Cluj-Napoca.

In 2017, it led a **research project** supported by ENEL about energy poverty and vulnerable consumers in Romania. This project had the following objectives:

- Clarify the concepts of energy poverty and the vulnerable consumer, with all their dimensions;
- Review the legislative frameworks in EU Member States, to identify definitions of energy poverty, the main institutional actors and the types of policies implemented to tackle energy poverty;
- Assess energy poverty, and analyse the efficiency of policies tackling energy poverty in Romania;
- Issue recommendations for improving the means of tackling energy poverty in Romania.

This resulted in two reports (<u>CSD 2017</u>; <u>Murafa et al. 2017</u>). This provided a basis for **further developments**, including the <u>EnPower project</u> (2019-2021) (see Good practices), further research resulting in a new report on <u>energy poverty and buildings</u> and several policy briefs (e.g., on <u>energy poverty in urban areas</u>, links between the <u>housing market and energy poverty</u>, <u>financing opportunities to tackle energy poverty</u>).

The **reduction of energy poverty** is an objective mentioned in several strategic documents, including the <u>National Energy</u> and <u>Climate Plan</u> (NECP, 2020) and the Energy Strategy Proposal. This proposal aims to reduce the number of citizens living in energy poverty, via the improvement of social protection mechanisms and the implementation of energy efficiency programmes. It also intends to decrease the number of households without **access to alternative sources of energy**. The proposal addresses the need for cost effective and sustainable upgrades of heating systems in rural areas.

Up to now, energy poverty has mainly been addressed through **financial support for low-income households**. According to the <u>National Strategy for Social Inclusion and Reduction of Poverty for 2015-2020</u> and the resulting <u>Strategic Action Plan for 2015-2020</u>, policies aimed directly at reducing poverty and enhancing social inclusion operate across several fields: social assistance and social security rights, energy poverty, employment, education, health, social participation, and social services. Moreover, one of the key objectives of the proposed <u>Romanian Energy Strategy 2020-2030</u> with a perspective to 2050 is the "protection of vulnerable consumers and the reduction of energy poverty", emphasizing **price accessibility** as "one of the main challenges of the energy system and a strategic responsibility".

The main legislation for **energy efficiency** in Romania is <u>Law 121/2014 on energy efficiency</u>, amended and completed by Law 160/2016, which transposes the Energy Efficiency Directive (2012/27/EU). The main purpose of the law is to establish a coherent legislative framework for supporting energy efficiency and achieving relevant national targets.

## STAKEHOLDERS AND SCHEMES

The <u>Ministry of Energy</u> collaborates with the <u>Ministry of Labour and Social Protection</u>, which is responsible for preparing the national action plan on energy poverty. The <u>Ministry of Development</u>, <u>Public Works and Administration</u> is in charge of the renovation programmes.

The <u>Romanian Energy Regulatory Authority</u> (ANRE) approves the energy prices and tariffs, and ensures the protection of the vulnerable customers.

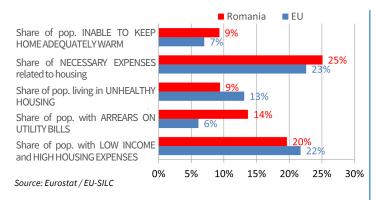
**Utilities** play an important role in the provision of electricity as a public good. Energy suppliers establish informal channels with their customers to increase payment rates.

## **STATISTICS**



- Population: **19.4 million** (2019)
- National median equivalised income: €3 855/year (in current prices, 2019)
- Number of people living below the poverty line: **4.6 million** (24%) (2019)
- Climate: mainly continental (five climate zones from Mediterranean to subarctic)
- Average annual expenses for « electricity, gas and other fuels » per inhabitant related to the dwelling): €270 /year (in current prices, 2019)

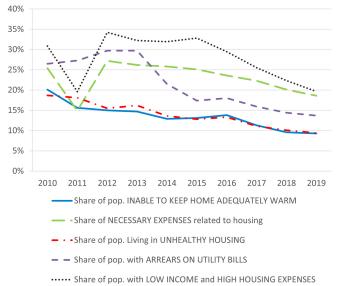
## COMPARISON WITH THE EUROPEAN AVERAGE IN 2019



Romania has a mixed performance on energy poverty indicators compared to the EU. On many indicators, the Romanian level is close to the European one. The largest differences are in the share of people living in unhealthy housing: 9% (better than the 13% in the EU); and the share of the population with arrears on utility bills, which is much higher in Romania (14%) than the EU average (6%). Romania dwellings have a specific energy consumption

Romania dwellings have a specific energy consumption 45% higher than the EU-average (as of 2018, ODYSSEE), especially due to high heating needs (cold climate). Combined with a median income well below the EU median and growing energy prices (especially gas), this can explain the higher share of population with bill arrears.

## TRENDS OVER 2010-2019



Source: Eurostat / EU-SILC

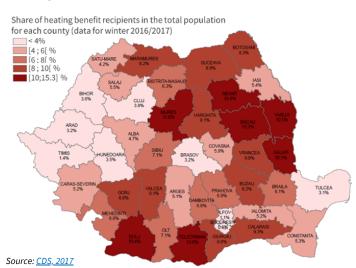
Although the share of households at risk of poverty rate has been increasing over 2010-2019 (+2.2 points), Romania experienced a significant improving trend in indicators related to energy poverty, and get closer to EU-levels.

Romania has made a concerted effort in improving and renovating existing building stock via programmes partly funded by the EU, which may have contributed to this reduction of energy poverty (EPOV, 2020).

The share of people with bill arrears on utility bills has been divided by two since 2010, showing the importance of the existing financial support policies for vulnerable households, and the efforts made by utilities in this field.

Yet, the progress made is lower for the poorest income categories: the share of the population with high housing expenses has fallen by 2.5%/year over 2010-2019 for the poorest (1st quintile), against a drop between 12 to 23%/year for the other income categories.

## **NATIONAL DATA**



A study done in 2017 by the Centre for the Study of Democracy (<u>CSD</u>, <u>2017</u>) has pointed the **local disparities**, not only in terms of income or poverty levels, but also in terms of **access to the heating benefit**. They found a mismatch between the counties experiencing poverty and the counties with the highest share of benefit recipients in the total population.

The actual access to the heating benefit can depend on the effectiveness of the local social assistance service and whether the municipality and social assistants play an active role in identifying and advising eligible households. The **complexity of the rules** could indeed create an **administrative barrier** discouraging the most vulnerable households.

The study also pointed the discrepancies in the data provided by different institutions making it difficult to assess the real extent of energy poverty.

## **NATIONAL POLICIES**

## POLICIES FOR ENERGY ACCESS, BUILDING RENOVATION AND ENERGY EFFICIENCY

	SCHEME	TARGET (RESULTS)	Other information
Energy access	Heating benefits (since 2011; direct support to vulnerable consumers).	Benefits <b>for different fuels</b> (district heating, natural gas, solid fuels, or electricity when single heating type) granted to households who cannot cover from their own means the cost to heat their home to an adequate temperature, and whose income is within the limits set by law. <b>Applications</b> are <b>managed by the municipal social services</b> (local disparities in the actual access to the benefits, see CSD, 2017). The benefit is <b>paid once for the cold season</b> : in 2021 from €2 to €100, depending on the energy type and income level (amount increased compared to previous years). Annual budget of about €30 million. <b>From 2022</b> , this will be complemented with the <b>monthly 'energy supplement'</b> (from €2 to €10/month according to the energy type), expected to be granted to 400 000 people (€23 million planned for 2022).	Funded by the State (Ministry of Labor and Social Protection) and local budgets. Paid by the National Agency for Payments and Social Inspection (for network energies) and by the municipalities (for wood, coal and heating oil).
	Social tariff of electricity (2006- 2018).	Final providers of electricity were required to provide clients the social tariff, upon request, if their average income per family member is below the national minimum wage. Around 11% of the households benefitted from this tariff in 2016. It was a <b>progressive</b> tariff: very low rate for the first 2 kWh/day (€0.04/kWh in 2017), then higher rate for the next kWh/day (€0.09/kWh in 2017) and beyond again a higher rate (€0.18/kWh in 2017) (the average domestic price of €0.07/kWh was in 2017). The social tariff was criticized, as customers were not well informed when exceeding a threshold.	The social tariff was ended by July 2018 (process of market liberalization). It has been replaced with a "safety-net contract on universal service", criticized to be higher than the market conditions.
Renovation and energy efficiency	Thermal rehabilitation of apartment blocks (since 2009).	Grants for <b>owners' associations</b> for the renovation of apartment blocks built before 2005, with the objective to <b>reduce their calculated heating consumption below 100 kWh/m².year</b> . Eligible actions include insulation of the building envelope, improvement of the heating and domestic hot water systems, and RES systems. Since 2019, the <b>national grant</b> covers <b>60% of the renovation costs</b> (from the State budget and EU Cohesion Policy Funds). <b>Local authorities</b> may provide an <b>additional financing, up to 30%</b> , through loans or grants, and with conditions that may depend on <b>social criteria</b> .	Managed by the Ministry of Development, Public Works and Administration. Energy audits required to define the renovation projects.

The regulation for vulnerable customers ensures the continuous electricity supply when health issues require electric equipment. Over 2010-2016, a scheme provided a <u>State guarantee and subsidised interest rate for bank loans</u> for thermal rehabilitation, to help owners' association finance owners' contributions to the rehabilitation of apartment blocks.

## **COMPLEMENTARY INITIATIVES**

TYPE OF INITIATIVE	EXAMPLE(S)
Regional Operational Programme (2014-2020)	Thermal rehabilitation of blocks of flats, under a wider programme for improving energy efficiency in public buildings, residential buildings and public lighting.
DH upgrading and fuel switching programme	A €150 million scheme to enable DH systems to build and switch to renewable energy sources (direct grants from EU funding). This can help for the heat price to be more stable and affordable.

# Zoom on: National programme 'First light'

The Romanian parliament proposed the programme First Light in 2021, to be co-financed from EU funds as part of an Operational Programme of the 2021-2027 period. The scheme is to give a **voucher** of 7,000 Lei (about €1475) to **low-income households not yet connected to the electricity grid**, and identified by the local authorities.

The voucher can be used to purchase a **RES system** (e.g., solar PV, small hydroelectric or windmill) or to pay the cost of **connection to the grid** when feasible and more cost-effective. Participants will also be informed about the other measures available against energy poverty.

The Ministry of Energy estimated that 50,000 **Romanian households** would be without electricity, whose almost 7,000 living in isolated homes far from any electricity network.

## GOOD PRACTICES

EnPower - Mitigating GHG Emissions through energy poverty alleviation in Romania (research; 2019-2021)

Funded by the European Climate Initiative (EUKI) of the German Ministry in charge of environment, collaboration between Babes-Bolyai University, Adelphi and the municipality of Cluj-Napoca.



**Objective:** Develop **tailored solutions** to energy poverty alleviation **for local policy** 

**frameworks**, through research focused on the links between energy poverty and the reduction of GHG emissions.

**Approach: Review and integration of available data** to identify households at risk of energy poverty and buildings with energy savings potentials.

**Survey** of 826 households to investigate **behaviours**, **values**, **and attitudes** related to energy consumption and services, taking into account socio-demographic and economic variables.

An interactive <u>online map</u> has been developed to raise awareness on energy poverty among relevant public and private actors. It is meant as an **information tool** for the **targeting** of energy poverty alleviation projects and policies.

**Results:** The <u>findings</u> have been presented to the local Cluj-Napoca government and used to train the stakeholders at several <u>workshops</u>.

The findings showed that energy poverty is spread out across the city, and **not clustered** in certain areas as expected.

The results include recommendations about **how to** address data issues at local level for assessing energy poverty and targeting schemes to tackle it.

## Improving Energy Efficiency in Low-Income Households and Communities in Romania (2011-2016)

Project mostly funded by the Romanian State (Ministry of Development, Public Works and Administration), with technical assistance of the United Nations Development Programme – Global Environmental Facility.





**Objective**: Tackle energy poverty by overcoming the barriers to the implementation of energy efficiency measures among poorer households and communities.

**Approach:** Defining **technical specifications**, stimulating the development of a **market for local products and materials** for building insulation, and **building capacities** for implementing energy efficiency measures in the poorest regions.

**Results: 826 professionals** were **trained. Two local materials** that can produced by local workforce in the poor communities were identified and promoted.

The technical documentation and **demonstration projects** for the renovation of apartment blocks helped the **improvement of further renovation programme**. It showed how renovation can be a cost-effective to tackle energy poverty.

Moreover, the project put **energy poverty issues on the political agenda** and facilitated dialogues among various public institutions. It also included **information and awareness activities**, including the development of 50 information nodes providing information on energy efficiency in 28 countries.

## Examples of energy efficiency schemes developed by an energy company to tackle energy poverty (2019-2022)

Schemes developed by CEZ Vânzare (electricity supplier created after the reorganisation of the former Roumanian monopoly Electrica, with more than 1.3 million customers), as part of the Horizon 2020 project SocialWatt.





**Objective:** SocialWatt provides 8 **energy companies** in 8 countries with technical support to develop, adopt, test and spread **innovative schemes to alleviate energy poverty**. In Romania, CEZ Vânzare aims at helping 24,000 energy poor households, in the top five Romanian cities and with an emphasis on the two poorest (Craiova and Drobeta-Turnu Severin).

**Approach**: After an **analysis of the context** of energy poverty in the country, a first step was to **identify households at risk of energy poverty** (with the <u>SocialWatt Analyser</u>). The second step was to **define schemes tailored to the national conditions** (<u>SocialWatt Plan</u>). The third step will be to **monitor the results** of these schemes (<u>SocialWatt Check</u>).

**Results**: CEZ Vânzare has prepared four schemes, with a budget of €191,000 over 2020-2021 for the actions focused on energy poor households.

**Helping Hand**: a competition campaign organised with an NGO to provide communities with a grant to finance the best solutions to tackle energy poverty, targeting regions with higher levels of energy poverty.

**Smarter Home**: thermostats offered to 2,000 households (including 350 in energy poverty) who will pay for them through monthly instalments without interest.

**Renovate Your Home**: energy-saving LED bulbs given for free to 11,000 energy-poor households.

Information and communication: information and education campaigns for children and households, tailored to each target age group, to promote energy-efficient behaviours.

#### **Information sources** (see also the documentation annex)

- Ministry of Labour and Social Protection
- Romania's <u>National Energy and Climate Plan</u>
- Centre for the Study of Democracy
- Sinea et al. (2021). Energy poverty in buildings in Romania.
- Vornicu (2021). <u>Addressing energy poverty through</u> construction and renovation.