Context and schemes to tackle energy poverty in Europe

BULGARIA

BACKGROUND AND GOVERNANCE

BACKGROUND

Bulgaria has recorded the **highest values in Europe for most energy poverty indicators**. The country has one of the most inefficient housing stocks in Europe, high levels of income poverty and inequality.
Energy poverty is still not defined in the Bulgarian legislation, even if the NGO sector and the Economic and Social Council have been campaigning for stronger action in this domain.

The only definition relevant to energy poverty is currently contained in the Energy Act, article 66c (new -SG, 54/2012, in force from 17.07.2012):

> *"**'Vulnerable clients'** are household clients, who receive target assistance for electric power, heat energy or natural gas under the Act on Social Assistance and the acts of secondary legislation on its implementation."*

The identified group of "vulnerable consumers" includes individuals and families who are currently: receiving **targeted heating support** through the Winter Supplement Programme set in the Social Assistance Act and Regulation (approximately 256,000 households); persons over 70 years of age who live alone and earn only a pension income; below the poverty line; disabled people receiving external assistance; and families with children with disabilities.
The completion of electricity price liberalization in the household sector is delayed until a **mechanism for the protection of vulnerable consumers of electricity** is in place. Based on the National Energy and Climate Plan (NECP), this mechanism should aim to ensure a minimum quantity of electricity, other than heating needs (complementing the Winter Supplement providing aids for heating). National authorities have pinpointed nearly 500,000 people and households (1.1 million people) in Bulgaria, or up to 14% of the population, in the wider group of "vulnerable consumers" eligible for social protection in relation to electricity. Historically, the government has subsidised electricity prices. The strong protests in 2013 against the increase in energy prices show how sensitive this issue is in Bulgaria.
The Energy Act is the main pillar of Bulgaria's energy policy. It was supplemented by the Energy Efficiency Act (ZEE) to improve the country's energy efficiency policy framework and **comply with EU accession requirements**. A National Action Plan for Energy Efficiency 2014-2020 (NPDEE) has been developed to implement and monitor the planned municipal, regional, and sectoral programmes for energy efficiency. The NPDEE in the residential sector has a strong focus on multifamily buildings. Minimum energy performance standards have been defined, and necessary economic incentives and financing instruments established. It mentions the **need to provide energy-saving measures to low-income households**.
Energy poverty is not mentioned in other key strategic documents, and the 'National Strategy against Poverty and for Promoting Social Inclusion 2020' written in 2013 only mentions 'targeted heating support'.

ACTORS ACTIVE IN THE FIELD OF ENERGY POVERTY

- **No national observatory** dedicated to energy poverty, nor official responsibility as there is no official definition or goal about energy poverty.
- **Active public debate**, with for example the national discussion forum "Energy Poverty in Bulgaria", organised at the end of 2016 by the Bulgarian energy and mining forum, Institute for Market Economics and the Association of Bulgarian Energy Agencies.
- Several **research studies** in recent years (see e.g., Hajdinjak and Asenova 2019; Jeliazkova et al. 2021; Kulinska 2017)
- **SEDA** (Sustainable Energy Development Agency) has also done studies on energy poverty, as well as **EnEffect** (Center for Energy Efficiency) that makes policy recommendations, especially about policies for the renovation of buildings and related social impacts.

STAKEHOLDERS AND SCHEMES

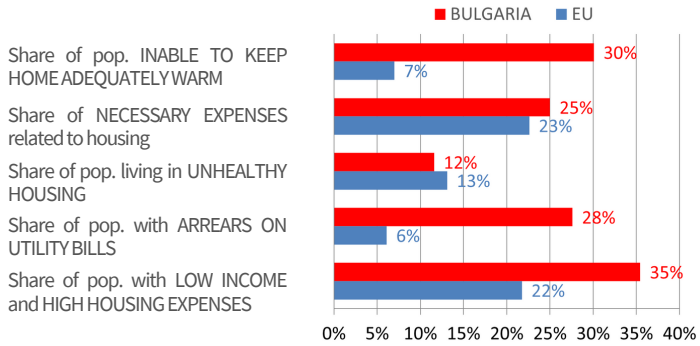
The Ministry of Labour and Social Policy manages the **aids for energy**, including the Winter Supplement Programme that provides direct financial support for vulnerable consumers during the heating season. It is also in charge of the wider social welfare matters, including the anti-poverty strategies. The Energy and Water Regulation Commission ensures the **protection of vulnerable customers**. The National Electricity Company (NEK) deals with consumers with non-payment challenges.
In a longer term perspective, measures to improve the **energy efficiency** of the homes of energy-poor consumers to lower their energy costs and improve their living comfort are implemented by the Ministry of Energy and SEDA (Sustainable Energy Development Agency, with the status of an executive agency within the Ministry of Energy). The Ministry of Regional Development is responsible for the housing sector, including the National Programme for Energy Efficiency of Multifamily Residential Buildings. Local authorities, private and non-governmental actors are developing complementary initiatives.

STATISTICS

BULGARIA

- Population : **7.0 million** (2019)
- National median equivalised income: **€4 225/year** (in current prices, 2019)
- Number of people living below the poverty line: **1.6 million** (23%) (2019)
- Climate: mainly **continental** (9 climate zones from Mediterranean to continental)
- Average annual expenses for « electricity, gas and other fuels » per inhabitant related to the dwelling): **€300 /year** (in current prices, 2019)

COMPARISON WITH THE EUROPEAN AVERAGE IN 2019



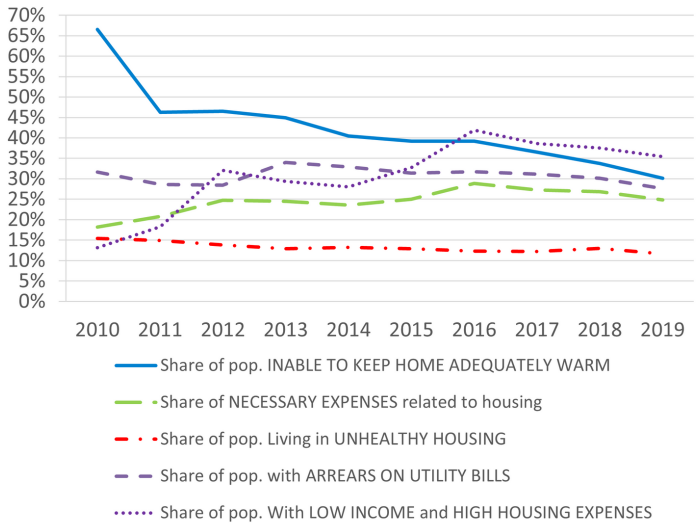
Source: Eurostat / EU-SILC

Bulgaria's values for most energy poverty indicators are the **highest in the EU. Historical and structural reasons** include: poor and energy inefficient housing stock, high levels of income poverty and income inequality, and low winter temperatures due to the presence, in part, of temperature inversions.

Electricity prices are low compared to other European countries, but high compared to Bulgarian's purchasing power.

Moreover, the nature of post-communist housing privatisation has created fragmented ownership of multi-family buildings, which makes their renovation complex.

TRENDS OVER 2010-2019



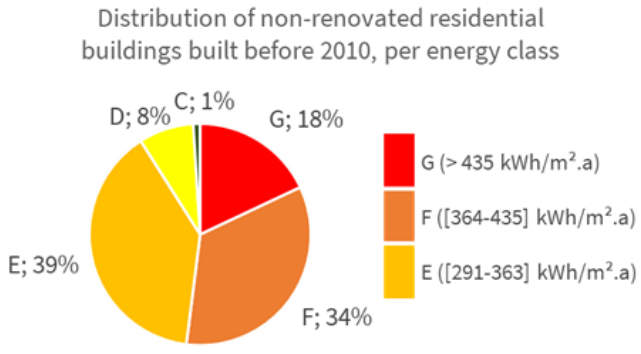
Source: Eurostat / EU-SILC

The overall drop in the share of households reporting an inability to keep the home warm may not necessarily be due to a decrease in energy poverty per se, as other indicators have remained stagnant or even increased. There may be climatic reasons (warmer winters) for the decrease in this indicator.

The scale of housing renovation is still rather low, even though over 2016-2020 more than 1900 multi-family buildings (representing close to 130 000 dwellings) have been renovated to meet at least a C energy class (see data in MURE).

Limited support is available for the improvement of energy efficiency and living conditions for households living in individual family homes (mostly in peripheral urban or rural areas and smaller towns) as well as informal housing, where ethnic minorities are concentrated. Some of the greatest vulnerabilities are present in the latter - an issue specific to Bulgaria, entangling energy poverty with wider forms of social exculsion and marginalisation. Non-payment challenges also reach record high rates in informal settlements.

NATIONAL DATA



Source: Long Term Renovation Strategy 2020

The Long Term Renovation Strategy (LTRS) of 2020 highlighted that 91% of the non-renovated residential buildings have an energy class **between G and E** (conventional primary energy consumption higher than 291 kWh/m².y).

The LTRS also analysed that the value of the **metered heating consumption is about twice lower than the conventional one** needed to reach the normative indoor temperature. The main reasons for this are the presence of uninhabited dwellings (more than 20% of the dwellings in inhabited buildings), the unheated common parts of residential buildings and restriction behaviours (lower indoor temperature than the norm in heated rooms).

NATIONAL POLICIES

POLICIES FOR ENERGY ACCESS, BUILDING RENOVATION AND ENERGY EFFICIENCY

	SCHEME	TARGET (RESULTS)	Other information
Energy access	Winter Supplement Programme (WSP) (since 2008): direct aid to cover heating expenses.	Only existing programme providing support for vulnerable households: **direct financial support** towards their district heating bills, electricity, coal briquettes, or wood. The Programme only functions **during the heating season** (November–March). Eligibility is based on a **set of conditions** related to income, property and health status, marital status, age, job employment, etc. This defines 17 risk groups with **differentiated heating benefits**. In practice, all households earning less than the guaranteed minimum wage for 6 months are eligible, plus some families above this line (about 256 000 households in total). Households need to apply and provide the evidence of their eligibility. The aid has been granted to about 220 000 households (about **7.5% of Bulgarian households**), as a one-time payment in advance in cash for the entire heating season (about BGN 500, i.e. **€255 for the winter** 2020/2021).	Established by the Law on Social Assistance and administered by the Ministry of Labour and Social Policy. Benefit based on the equivalent of 500 kWh of electricity per month, applying the electricity prices at the beginning of the heating season.
	Social tariff for electricity (to be confirmed, implementation is delayed).	Tariff foreseen to cover up to 100 kWh of electricity per month per household using district heating (or natural gas heating for domestic water), or up to 150 kWh per person/household using an electric water heater, beside the heating needs. Approximately **70% of the electricity price** (about 33% of the final cost for the vulnerable customers, including network charges and VAT).	A significant proportion of vulnerable customers will fall below the proposed threshold of 150 kWh per month.
Renovation and energy efficiency	National Program for Energy Efficiency of Multifamily Residential Buildings (since 2015).	Financial support (grant up to 100% of the eligible costs) not only for the energy efficiency measures but also for structural works, preparation of technical projects and construction supervision, and the costs associated with obtaining the necessary authorization documents. It also fully covers the costs to establish the technical characteristics of the building, including the preparation of a technical passport and energy audit. No social criteria for eligibility, only criteria related to the buildings and the requirement to achieve at least a C energy class after renovation. However, the occupants of the old multifamily buildings include low-income and vulnerable households. 1921 multi-family buildings (128 439 dwellings) renovated over 2016-2020, for total investments of BGN 1932 million (€988 million), delivering energy savings estimated to 922 GWh/year (source: MURE database).	Citizens directly apply for the programme, but municipalities are fully responsible for the administration of the programme on their territory. Various implementation challenges.

COMPLEMENTARY INITIATIVES

TYPE OF INITIATIVE	EXAMPLE(S)
POWERPOOR: Support programmes/schemes for energy poor citizens to encourage the use of alternative financing schemes. (example of a European project implemented in Bulgaria)	Design, development and implementation of pilot energy poor support programmes/schemes led by a network of certified Energy Supporters and Energy Communities.
Plovdiv Energy Agency and Schneider Electric, joint project offering personalised advice and energy-saving devices.	Enables vulnerable households to raise awareness around energy efficiency, conservation and energy costs.

ZOOM ON: municipal Energy Efficiency Network (EcoEnergy)

EcoEnergy was initiated by 23 Mayors and gather now 51 of the 256 Bulgarian municipalities, for mutual support and activities related to local sustainable energy policies. It is a supporting structure of the Covenant of Mayors and implements several energy-related projects funded by European Programmes. One of their key activities is the decrease of their energy costs, and the support for increase of energy efficiency in the municipalities, but no direct measurement of energy poverty. They are mentioned as a good example for energy campaigning targeting households in the context of energy conservation.

GOOD PRACTICES

ACHIEVE (Action in low-income Households to Improve Energy Efficiency through Visits and Energy diagnosis) (IEE ; 2011-2014)

Project implemented in Bulgaria, France, Germany, Slovenia and United Kingdom

Objectives: developing **structural solutions** to tackle energy poverty, identifying **simple but effective measures.**
Approach: long-term unemployed, volunteers and students were mobilized and trained to develop a large-scale energy advisory service with **home visits and low-cost energy saving actions** provided for free to low-income households facing difficulties with their energy bills. Support to local actors to develop action plans for longer-term solutions.
Results: 301 households visited in the Bulgarian pilot (Plovdiv area), average savings close to 600 kWh/y (€54/y) from devices with an average cost of €30 per households. Set up of a local network of actors tackling fuel poverty.

Sofia Municipality campaign to replace solid fuel stoves (subsidy scheme ; since 2014)

Project first co-financed from the EU LIFE project funds and then by the Operational Program Environment (85% funding from the Cohesion Funds, 15% from the State)

Objectives: reducing **air pollution** due to old and inefficient solid fuel stoves.
Approach: Free **replacement of solid fuel stoves** (mostly used by low-income households) with eco-stoves (natural gas, electricity, pellets or district heating). Campaigns led by the municipalities that apply for the programme.
Results: Stoves replaced for more than 5000 households. Programme then extended to six other cities with a budget of about 57 million euros for 2019-2023, as part of the measures for the improvement of city air quality.

REACH (Reduce Energy Use and Change Habits, IEE - Intelligent Energy Europe programme ; 2014-2017)

Project implemented in Bulgaria, Croatia, Macedonia and Slovenia.

Objectives: enabling **energy-poor households** to take action and save energy; establishing **energy poverty as an issue** that demands tailor-made structural solutions at local, national and EU level.
Approach: **assessing energy poverty** (see Bulgaria report), involving policy makers and preparing national **policy recommendations**, **training** local actors to provide support to energy poor households
Results: 400 households supported in the pilot project in Plovdiv, Bulgaria, with average energy savings of 570 kWh/year (€42/year) for an average cost of €29 for four energy saving devices per household.

FIESTA (Family intelligent Energy Saving Target Action, IEE ; 2014-2017)

Project implemented in Bulgaria, Croatia, Cyprus, Italy and Spain.

Objective: helping **families with children**, and especially vulnerable households, to save energy, acting on consumption behaviour and purchasing decisions for heating and cooling systems.
Approach: **Energy Help Desks** in 14 cities providing free **energy audits** and specific support measures including **workshops** for schools, social housing residents, cooling solutions retailers & installers; home energy efficiency lotteries; consumer purchasing groups.
Results: 3 partner cities in Bulgaria, achieving 515 energy audits, 62 workshops, triggering energy efficiency investments of €387 000 for energy savings of 488 MWh.

Information sources (see also the documentation annex)

- Website of the Ministry of Energy
- Website of SEDA
- Dragomir Tzanev, (2020). Energy Poverty in Bulgaria Analysis and Policy Recommendations.
- Jeliazkova, M. & Minev, D. (2020). Bulgaria: Poverty Watch 2020.
- Kulinska, E. (2017). Defining Energy Poverty in Implementing Energy Efficiency Policy in Bulgaria.
- Lenz, N. V., & Grgurev, I. (2017). Assessment of energy poverty in new European Union member states: The case of Bulgaria, Croatia and Romania.