

EU4Energy: Recommendations to tackle energy poverty in Bosnia and Herzegovina



Are the households in BiH exposed to energy poverty?

Do they have enough funds to cover lighting, heating, cooling and cooking costs?

The European Commission Recommendation on energy poverty (SWD (2020) 960 final) in October 2020 states that *“energy poverty is a situation in which households are unable to access essential energy services, where adequate warmth, cooling, lighting, and energy to power appliances are essential services that underpin a decent standard of living and health.”* These services are considered necessary as they are essential for social inclusion. The lack of adequate energy supply can stem from either the absence of access to power grids and fuel sources or from affordability issues. Developed countries also face affordability issues, whereas developing nations experience both affordability and access challenges.

The energy crisis triggered by the war in Ukraine is taking its toll on EU citizens, with 9.3% of the population unable to keep their homes adequately warm in 2022, a jump from 6.9% the year before, according to Eurostat (Source: Euractiv.com).

What is the current situation in BiH?

In Bosnia and Herzegovina, households with low incomes are grappling with the burden of energy costs. Moreover, underdeveloped infrastructure in certain regions restricts fuel choices, and in remote areas, the lack of an electricity grid further compounds the energy accessibility problem. A recent two-year study conducted by Swiss Caritas and Tuzla Environment and Energy Centre analyzed data from 10,044 households in six cities/towns in the Tuzla Canton to determine the extent of energy poverty and propose measures for its alleviation. The study revealed that around 43% of households spend over 15% of their incomes on energy costs, with approximately 26% allocating more than 20% and 10% spending more than 30% on energy bills. The main reasons for high energy consumption were attributed to living in old and poorly insulated buildings, using inefficient heating systems, and lacking awareness of energy-efficient practices. High energy costs affect nearly 80% of households living in single-unit family houses, making it crucial to focus on assisting the most vulnerable. The study highlighted that poorer households tend to use wood and coal for heating, which negatively impacts the environment and climate change.

Bearing in mind the increase in the price of food and other levies for the citizens of Bosnia and Herzegovina, any increase in energy prices will directly affect their ability to ensure the required level of comfort when heating the space, directly affecting their energy poverty.

Taking into account the data on the price increase of individual energy sources and the number of users of individual energy sources, below is a tabular presentation of the assessment of energy-poor households in Bosnia and Herzegovina. The data of the number of unemployed reduced to the number of equivalent households (119004.60) and the number of employees with lower income than the consumer basket (rank set at 2800 KM for two household members), reduced to the number of equivalent households (137949.67) were taken for assessment. For the classification by energy source, the geographical representation of the energy source and the increase in the cost of the energy source were taken into account.

Heating fuel	Number of household fuel	Estimate of energy poor households
Natural gas	26318.09	51390.86
Electricity	267222.7	0
Firewood and pellet	747981.9	141324.9
Heavy oil	1589.871	7708.62
Heat from industrial cogeneration including coal fired TPP	63577.97	0
Coal	37855.51	51390.86
LPG	4256.938	5139.08
TOTAL	1148803	256954.27

If income and the consumer basket are taken into account, only 63,788 households have sufficient annual income to meet their consumer needs. Based on the above, it can be concluded that energy poverty in Bosnia and Herzegovina is at a high level, and there is a risk for over 800,000 households to become energy poor in the coming period. If the possibility of an increase in electricity prices is taken into account, in that case, over 1.1 million households have a significant risk of energy poverty. As energy prices continue to rise, the number of energy poor households in Bosnia and Herzegovina is expected to increase, demanding urgent attention and comprehensive measures from the government to mitigate energy poverty across all regions.

The lack of access to adequate energy services can impact households across various income levels, highlighting the importance of addressing energy poverty beyond just income-related measures, so it is crucial to understand and address both the quality and affordability aspects of energy poverty. Ensuring the quality aspect involves providing sufficient levels of heating, cooling, and lighting, while the affordability aspect focuses on making energy services accessible at reasonable prices. Simply subsidizing costs without improving the quality of energy services, like providing moderate heating while keeping fuel prices low, will not effectively alleviate energy poverty.

Indicators used to measure energy poverty should consider these two dimensions. Two standard approaches commonly used are the expenditure approach and the consensual approach. The expenditure approach involves assessing the cost of energy in relation to household income, using their ratio to determine the level of energy poverty. Both energy and household income can be defined in various ways, allowing for flexibility in measurement. By considering both the cost burden on households and the

adequacy of energy services, policymakers can develop more effective strategies to combat energy poverty.

What can policy makers do to mitigate the risks of exposure to energy poverty?

In its Recommendations, the European Commission states that tackling energy poverty offers multiple benefits, including lower spending on health, reduced air pollution (by replacing heating sources that are not fit for purpose), improved comfort and wellbeing, and improved household budgets. Taken together, these benefits will directly boost economic growth and prosperity.

National long-term renovation strategies and other instruments aimed at achieving 2030 and 2050 targets must be directed towards protecting households and empowering vulnerable consumers by helping citizens spend less on energy bills, and providing them with healthier living conditions, as well as reducing energy poverty. Along these lines, the European Commission thus recommends that their Member States do the following:

- Develop a systematic approach to liberalizing energy markets, sharing benefits with all segments of society, particularly those most in need.
- Take particular account of the respective staff working document that provides guidance on energy poverty indicators as well as on defining as to what constitutes a significant number of energy poor households. Importantly, Member States should rely on guidance from the Commission in implementing and updating their current national energy and climate plans in accordance with Article 14 of Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate Action.
- Use the indicators outlined in the Annex (of the Guidance issued by the European Commission) in their energy poverty assessments.
- In line with Recital 60 of the recast Electricity Directive, produce integrated policy solutions as part of the energy and social policy. These should include social policy measures and energy efficiency improvements that reinforce each other, especially in housing.
- Assess the distributional effects of energy transition, in particular, energy efficiency measures in a national context, as well as define and implement policies that address related concerns. Proper attention should be given to obstacles hindering investments in energy-efficient housing and the type of dwellings in most need of renovation, all in line with national long-term renovation strategies.
- Develop all necessary policies to tackle energy poverty based on meaningful and accountable processes through public participation and broad stakeholder engagement.
- Develop measures to address energy poverty that build on close cooperation between all levels of administration, enabling close cooperation between regional and local authorities on the one hand, and civil society organizations and private sector entities on the other.
- Take full advantage of the potential to deploy Union funding programs, including cohesion policy, tackle energy poverty by analyzing the distributional effects of energy transition projects and prioritizing measures targeting vulnerable groups to ensure access to support.

The energy poverty has not been addressed in BiH at the strategic level yet, but according to the National Energy and Climate Plan (NECP) draft, Bosnia and Herzegovina's objectives regarding energy poverty include ensuring adequate treatment of energy poverty and establishing suitable protection policies for vulnerable citizens. This requires securing the necessary funds for implementing a combined set of measures from various dimensions, including fiscal policies. Key goals also involve educating socially

vulnerable citizens and implementing energy efficiency measures. Protection of socially vulnerable consumers becomes crucial for a socially just transition during the establishment of organized markets, the construction of new energy production facilities, market price volatility, and the introduction of real-cost-based prices for domestic customers. Consequently, it is a priority to enact regulations that clearly define this area and establish mechanisms to secure financial resources for program implementation.

Based on these objectives, the NECP action plan outlines the following measures related to energy poverty:

- Establish a database of socially vulnerable consumers based on defined criteria - Key to developing a program for protecting socially vulnerable population categories is the establishment of a database for these categories, following pre-defined criteria;
- Establish funds and a system for collecting resources for the implementation of the program for protecting socially vulnerable consumers - The successful implementation of the protection program depends on the availability of dedicated funds for this purpose. Such funds can be sourced from budgets, donations, energy efficiency schemes, and ETS;
- Develop a comprehensive program of measures for implementing the policy for protecting socially vulnerable consumers.

These measures provide a good foundation for establishing a comprehensive system for protecting energy-poor households. However, it is also crucial to focus on preventive actions to address energy poverty risks and prevent its occurrence in Bosnia and Herzegovina. Furthermore, to develop relevant energy poverty measures, monitoring specific energy poverty indicators is essential to inform policy decision-making. Relevant indicators should be developed, and suitable institutions should be in charge of collecting data and measuring the indicators.

The long-term measures aimed at reducing the risks of energy poverty should include measures aimed at improving the energy efficiency of homes, hence reducing energy demand. Those measures are however also planned within NECP but not directly related to energy poverty reduction. A specific approach to improving the energy efficiency in energy poor homes should be adopted as a priority measure aimed at energy poverty reduction. Same is relevant to other actions aimed at reduction of energy consumption including replacement of household appliances, heating system improvements and support for renewable energy sources for energy poor homes. Implementation of those measures should be a priority for energy poor with additional financial and project management support.

The latest package of EU acquis (on electricity) which has to be adopted in BiH and is not yet adopted, covers the elements of the energy poverty. The project EU4Energy – Support of the European Union to the Energy Sector in BiH contributes to the fulfillment of the obligation of Bosnia and Herzegovina under the Energy Community Treaty, Paris Agreement and other international obligations. It also contributes to the establishment of a sustainable and competitive energy sector in line with demanding environmental and climate requirements, which will improve overall country economy and inevitably increase confidence in the energy sector for all market participants. The project activities cover the following areas of energy sector: electricity, gas, oil, coal, energy efficiency and renewable energy sources, including the security of supply, but also the areas of environment protection, infrastructure, statistics and competitiveness.

In May 2023 the EU disbursed to Bosnia and Herzegovina €63 million (90%) from planned €70 million out of total amount €500 million of the [EU Energy Support Package for Western Balkans](#) partners. This €70 million planned for Bosnia and Herzegovina is intended for supporting vulnerable families to mitigate the impact of high energy prices, as well as households and SMEs to improve energy efficiency.