

Energy poverty is a significant social and economic problem that affects the quality of life for many households. However, the complexity of the issue translates into difficulties in measuring the scale of the phenomenon, and the lack of consistent measurement methods affects the ability to formulate effective policies to reduce the number of energy-poor households. Research by the Polish Economic Institute, which categorizes energy poverty into income poverty, structural poverty, municipal poverty, and hidden energy poverty, indicates that depending on the classification used, between 3% and 30% of households can be considered energy-poor. This study proposes to examine "heating season poverty" as a dimension of energy poverty that allows for more precise classification of energy-poor households experiencing financial difficulties particularly during the winter season when, in addition to electricity bills, additional heating costs are incurred.

In the existing literature, expenditures on energy and heating are often combined, which, in the author's opinion, complicates the verification of whether a household is genuinely energy-poor. It should be noted that some households do not have problems covering their monthly electricity bills for daily activities but face financial difficulties in winter when heating bills (especially if they have inefficient heating sources, poorly insulated buildings, or if energy commodity prices rise due to unfavorable market conditions) are added. Conducting such research (during the winter) will allow for better identification of households that truly need help. An additional value of the study is the ability to identify households that are likely not energy-poor, as if they manage during the most challenging period, they should not have problems with electricity bills throughout the year.

The proposed project will not only increase knowledge about heating season poverty, contributing to the development of the theory of energy poverty, but its results can also form the basis for actions to reduce the scale of the phenomenon and improve the socio-economic situation of the region's residents. It is worth noting that such a study can serve as a basis for further research in other regions, and the conclusions developed during its implementation can generate added value for residents of other areas.

Furthermore, the study seems particularly important at this point in time due to the fact that from May 1, 2024, the anti-smog law will be in force in Małopolska, banning the use of the lowest quality boilers, known as "kopciuchy". Despite this, there are still about 50 000 lowest quality stoves in use in the province. The reluctance to replace them, at least among a certain group of households, may be due to financial issues. It is also worth noting that seven years ago it was estimated that there were about 300 000 stoves requiring replacement, suggesting that a significant number of people have changed their heating source recently. Therefore, it seems important at this point in time to verify what the impact of this change has been on the material situation of residents. The issue of stove replacement is still relevant because according to new regulations, class 3 and 4 boilers must be replaced by the end of 2026, so the timing of the study corresponds with the actions being taken by households in the region.

The main objective of the project is to develop the concept of heating season poverty, distinguishing it from the fuel poverty used in the UK and Ireland, and demonstrating its usefulness in measuring energy poverty. The second, equally important goal is to study the scale of the phenomenon and propose recommendations to reduce it in the Małopolska region. To achieve the research goal, surveys and interviews with selected households will be conducted. The expected outcomes of the project include publications expanding the proposed concept and many important pieces of information, such as the identification of problems, analysis of needs, and evaluation of existing programs that can be used by policymakers in formulating public policies.