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European energy divide: exploring determinants and dynamics of energy poverty

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Disclaimer

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This task has allowed SPES research partners to measure energy poverty and its determinants in European Member States and in selected partner countries using latest available EU-SILC data. Report also investigates the persistence of energy poverty and provides findings with important policy implications.

This deliverable contains original unpublished work except where clearly indicated otherwise.

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Abstract

During the energy transition process certain vulnerable groups will not be able to secure the appropriate level of energy services and will be exposed to energy poverty. Energy poverty can be related to significant negative development outcomes of a country in terms of its economic growth rate, income inequality, access to education and healthcare. The aim of this report is to identify parts of Europe that are more exposed to energy poverty as well as to identify socioeconomic and demographic groups that may lack resources to protect themselves from the costs of the energy transition (e.g. rising costs in electricity, fuels). This report contributes to the scarce literature on the drivers and dynamics of energy poverty in Europe.

Data from the European Survey on Income and Living Conditions between 2017 and 2020 are used to provide latest estimates of the energy poverty and its determinants by looking at socio-economic, demographic, and housing characteristics. We use subjective self-reported measure of energy poverty defined by the Energy poverty index which is calculated as the weighted sum of self-reported perception of (1) difficulty heating their home adequately warm, (2) paying utility bills and (3) poor housing conditions. Dynamic aspects of poverty are further investigated since distinction between short-term and persistent poverty might require different policy instruments. Energy poverty persistence exists among households that have been energy poor in a current year and at least two out of three previous years. The study reveals significant disparities among European countries in terms of prevalence and persistence of energy poverty.

Nevertheless, in most countries prevalence of energy poverty rises with the increase in the size of the household, share of low-educated, unemployed people and inactive people due to health issues in the household. Countries with higher energy poverty are also the ones with higher rate of households that persistently live in energy poverty. Short-term measures like energy subsidies can provide a temporary relief, while promotion of the energy efficient housing is needed to lift households permanently out of energy poverty.



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