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Tackling Energy Poverty through Energy Transition

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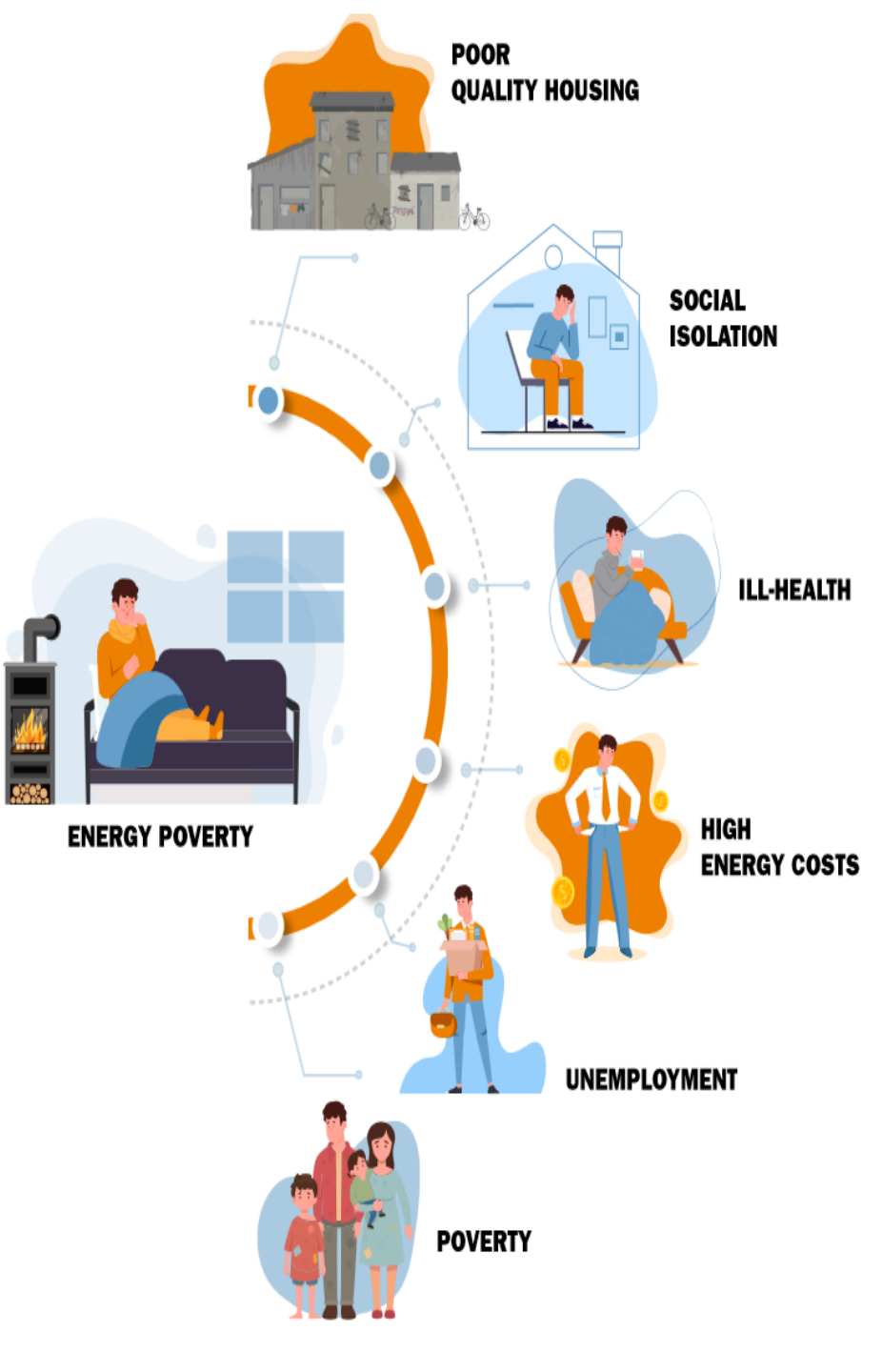
Measuring Energy Poverty and Definitions

Various Definitions - There is no a generally accepted definition of energy poverty

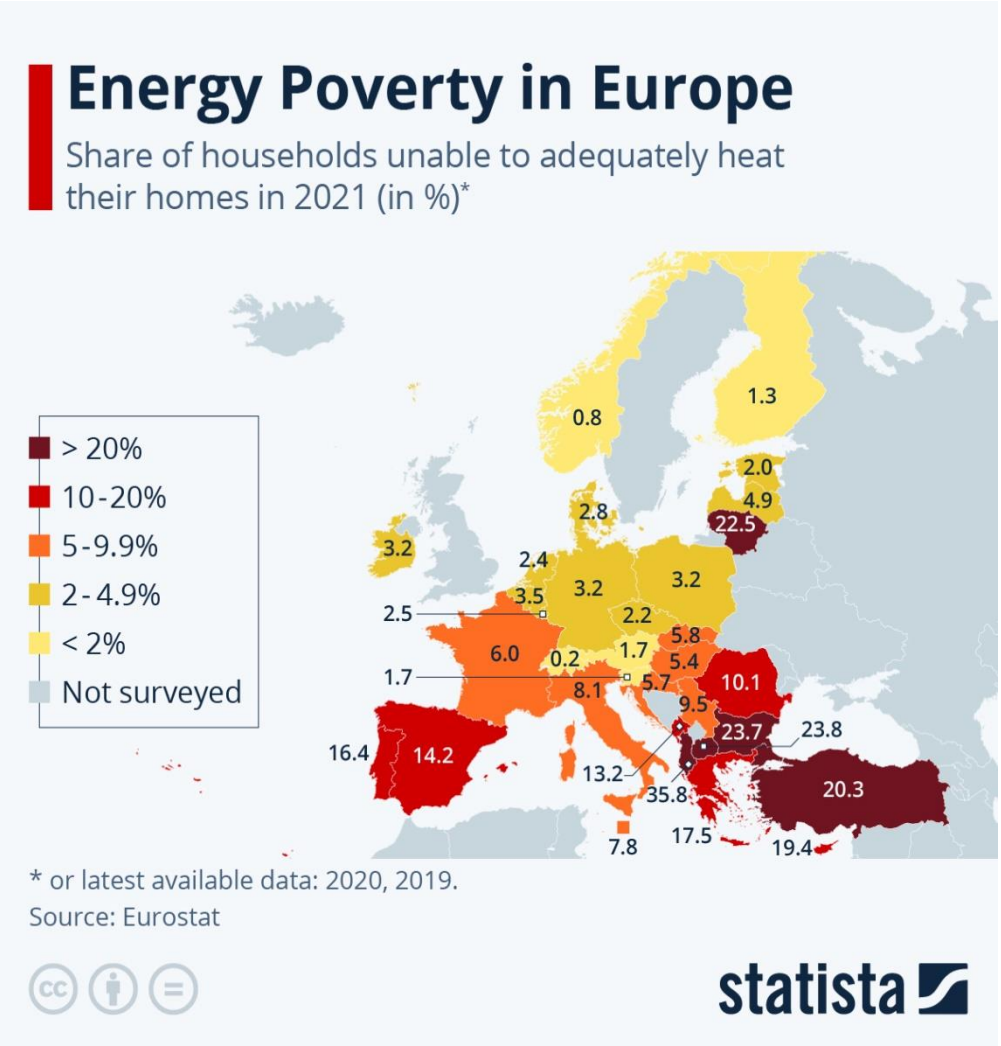
- Energy poverty refers to individuals who spend a disproportionate amount of their income on home energy costs.
- Energy Poverty exist if actual energy consumption is insufficient to achieve an adequate standard of living.
- Energy poverty occurs when a household must reduce its energy consumption to a degree that negatively impacts the inhabitants' health and wellbeing.

According to EU Energy Poverty is mainly driven by 4 causes:

- a high proportion of household expenditure spent on energy
- Arrears on energy bills
- low energy performance of buildings and appliances (presence of leak, damp, rot in the dwelling)
- Inability to keep home adequately warm or adequately cool

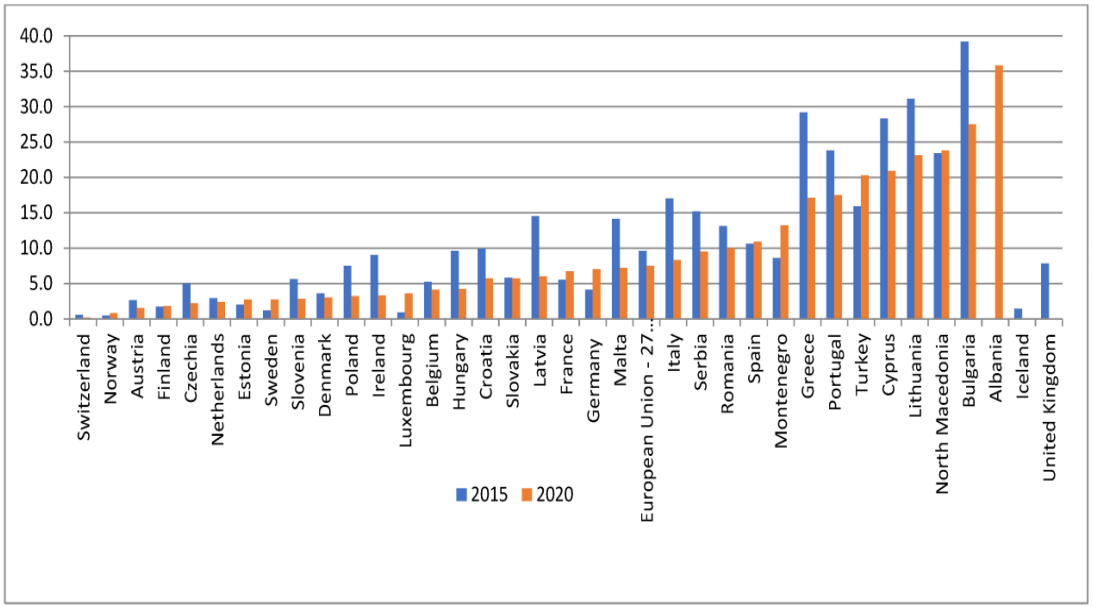

POOR
QUALITY HOUSING
SOCIAL
ISOLATION
ILL-HEALTH
HIGH
ENERGY COSTS
UNEMPLOYMENT
POVERTY
ENERGY POVERTY

Energy Poverty in SE Europe – Households

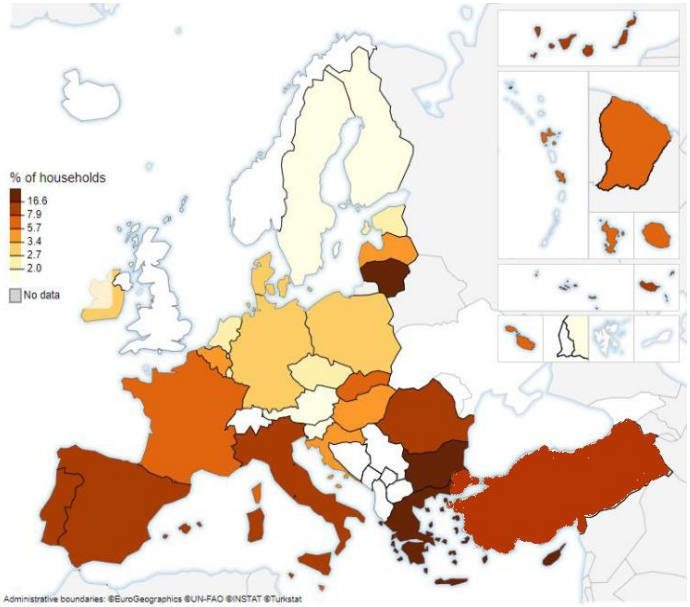


- Between 50 and 125 million EU citizens (about 10-25%) are estimated to be affected by energy poverty.
- Inflation and energy bills have been worrying many Europeans in recent years. Across the European Union, more than 40 million people were unable to heat their home properly in 2022
- The situation is even more severe in some of the South-Eastern European (SEE) countries. It is estimated that in SEE countries about 30% of households are struggling with energy poverty.
- Poor construction materials, poor insulation and poor maintenance, old, inefficient and poorly maintained heating systems and domestic appliances
- re-settlement programs would be needed
- In SEE countries, the share of households not attached to the electricity grid is higher than in Western Europe. It is hard to address energy poverty with measures for improving energy efficiency, so alternative programs for ensuring access to electricity would be needed

Energy Poverty Related to the Inability to Keep Home Adequately Warm

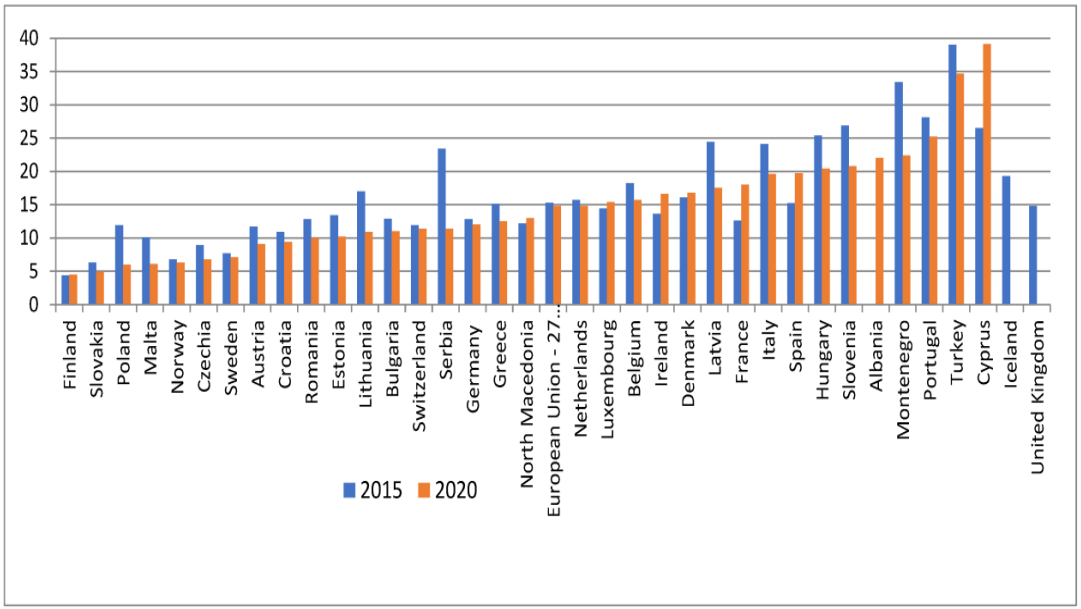


Percentage of the population that is unable to keep home adequately warm in European countries during 2015 and 2020. Source: Eurostat

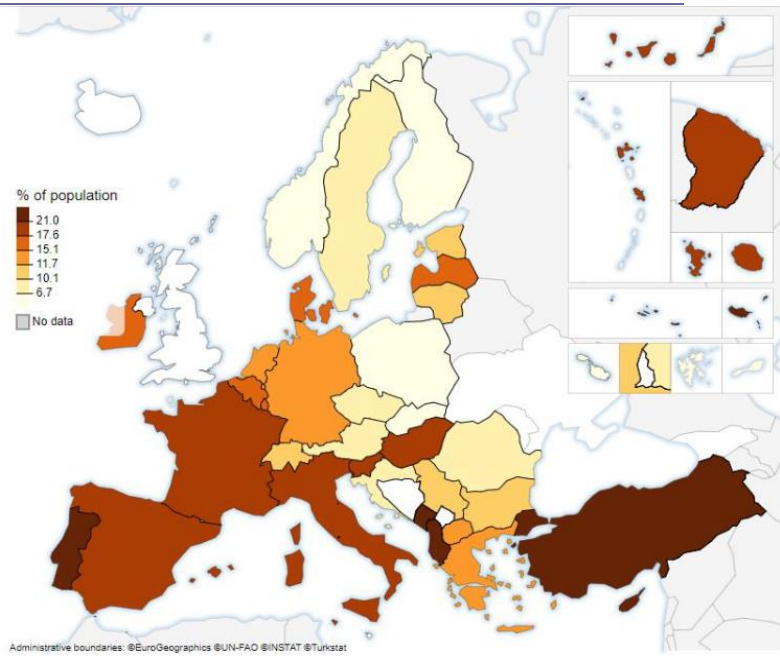


Map showing the inability to keep the home adequately warm (2021) (Source: European Commission, Energy Poverty Advisory Hub)

Energy Poverty Related to Low Energy Performance of Buildings

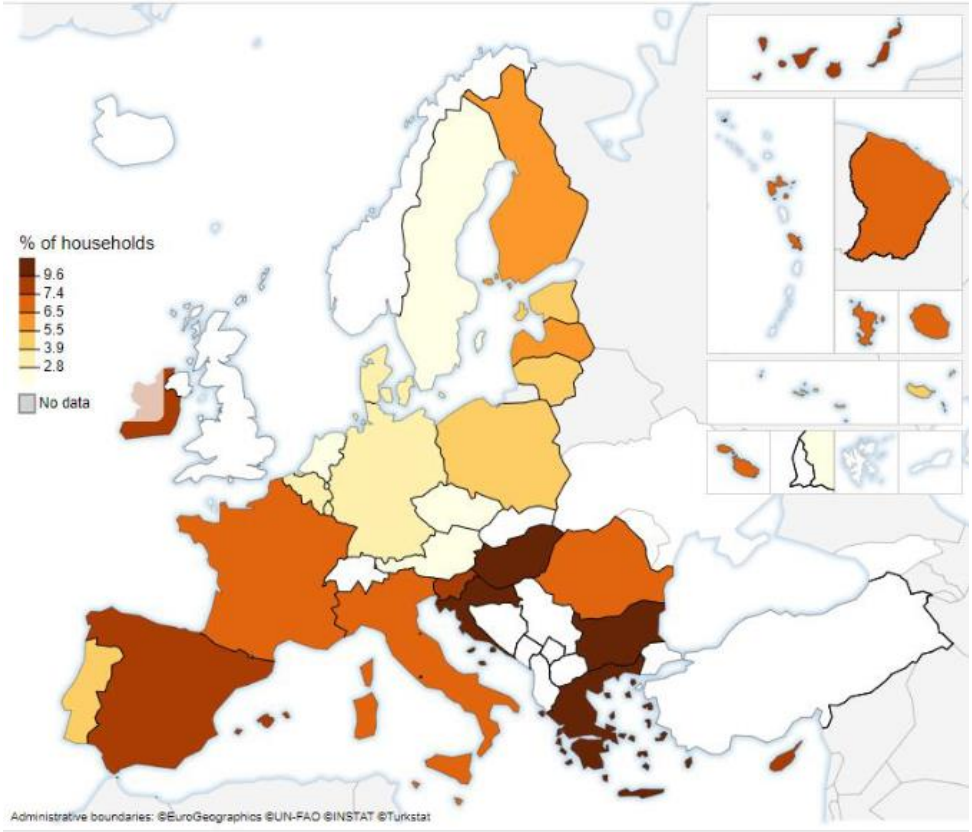


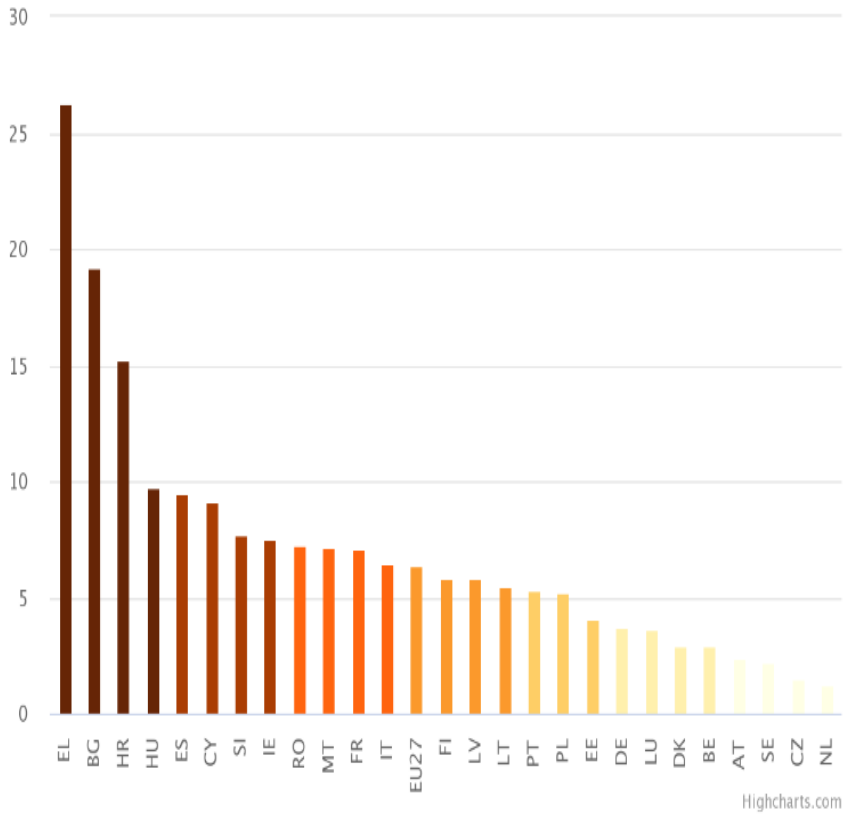
Percentage of the population living in a dwelling with a leaking roof, damp walls, floors or foundation or rot in window frames or the floor in 2015 and 2020. Source: Eurostat



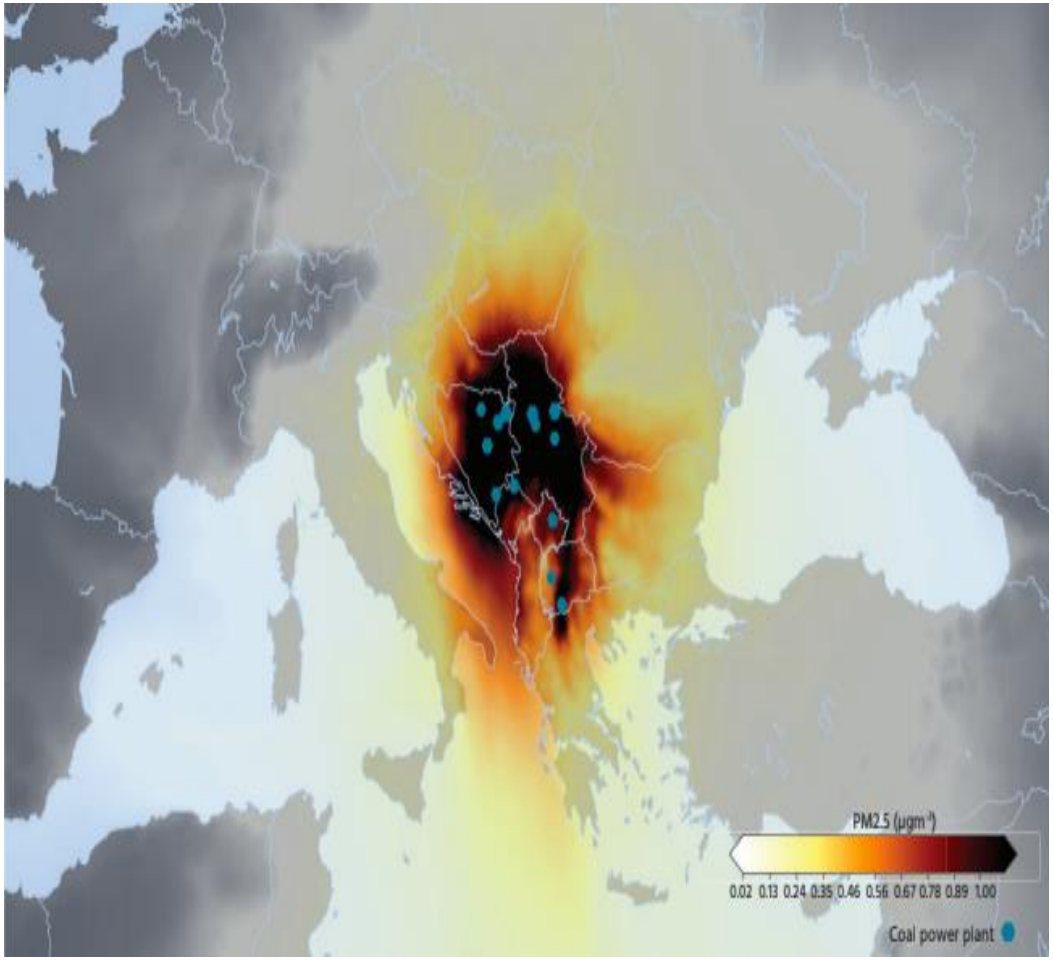
Map of the population living in a dwelling with a leaking roof, damp walls, floors or foundation or rot in window frames or the floor (2020)(Source: European Commission, Energy Poverty Advisory Hub)

Arrears on Utility Bills. Households that have been unable to pay the utility bills (heating, electricity, water, gas etc) (Source: European Commission, Energy Poverty Advisory Hub)





Energy Poverty in SE Europe – Coal Power Plants



- 16 coal power plants in the western Balkans cause as much pollution as the 250 plants active within the European Union.
- Kostolac B in Serbia and Ugljevik in Bosnia-Herzegovina produce a quarter of all sulphur dioxide emitted by all coal plants throughout the continent.
- In 2022, dust emissions from coal plants of Bosnia and Herzegovina, Kosovo, North Macedonia and Serbia increased compared to previous years
- In SEE countries, the share of households not attached to the electricity grid is higher than in Western Europe. It is hard to address energy poverty with measures for improving energy efficiency, so alternative programs for ensuring access to electricity would be needed

Energy Poverty and Energy Transition

Energy Transition will have major consequences on our prosperity and how this is distributed. The joint discussion of issues related to energy poverty and energy transition will facilitate the transition process and will lead to environmental and socioeconomic benefits and will help alleviate energy poverty.

- The last 2 years the new RES installed capacity lowered electricity prices by increasing the number of hours in which renewables supplanted more expensive fossil-fuel sources.
- Renewables since 2021 reduced wholesale electricity prices in the EU by 8 per cent in 2022 and 15 per cent in 2023. In absolute terms, these cost savings will amount to around €95 billion by the end of this year.
- Over longer timescales, renewables will not just reduce energy prices but also make them more stable.
- This shift not only brings economic benefits but also a geopolitical dividend.

- The energy transition could worsen the problem of Energy Poverty because households have to invest in energy saving and sustainable technology
- Negative effect that renewable energy sources for electricity might have on energy poverty. The costs required to support renewables' technologies are often transferred to the consumers as surcharges, something that could lead to more intense energy poverty issues.
- many households affected by energy poverty face multiple barriers when trying to access EU funds and subsidies.
- energy poverty has increased in the EU since 2010 in general, even though energy transition does not have an extreme impact on poverty and socioeconomic inequalities.
- Potential impact that energy transition and electrification in transportation sector might have on fuel poverty.

Thank you for your attention

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