

## Energy poverty

Disclaimer: The graphs below show data available in the EU Building Stock Observatory: a country not represented only means data was not available for this specific country.

### Introduction

Energy poverty is a widespread problem across Europe, as between 50 and 125 million people\* are unable to afford proper indoor thermal comfort. A common European definition does not exist, but many Member States (MS) acknowledge the scale of this socio-economic situation and its negative impact translated into severe health issues and social isolation. Different terms are used to describe affected persons: fuel poor, energy poor, vulnerable energy consumers or, to a larger sense, at-risk-of-poverty or low-income people.

#### Key findings:

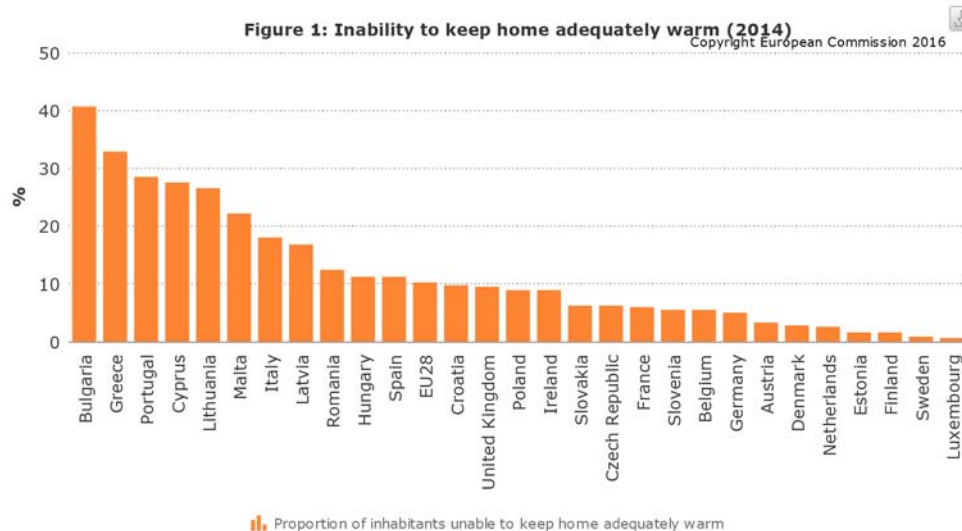
- Only four European countries (France, Ireland, Slovakia and the UK) have an official definition for energy poverty.
  - Energy poverty can be correlated with a low household income, high energy costs and energy inefficient homes and can be tackled by income increase, fuel prices regulation and energy efficiency improvements in buildings.
  - The majority of national schemes to reduce energy poverty focus on income support schemes such as fuel, heating and electricity subsidies.
  - Vigorous energy renovation measures of energy poor homes address the essence of the problem due to reduced energy costs, improved thermal comfort and better indoor air quality.
  - Among others, the United Kingdom, France, Ireland, Belgium and Romania have implemented support programmes to improve the energy performance of dwellings inhabited by low-income people and thus, often, energy poor homes. However, in most cases such energy poverty schemes mostly remain stand-alone instruments and are not integrated in a broader strategy on national or even on the EU level.
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## Possible approach to define energy poverty: Inability to keep home adequately warm

As most European countries have no official definition for the term "energy poverty", this state is often described as the "inability to keep homes adequately warm". In France, this approach has been officially adopted and therefore, the "Grenelle II" Act defines energy poverty as a situation in which a person has difficulty obtaining the necessary energy in their home to meet their basic needs because of inadequate resources or living conditions.

The inability to keep homes adequately warm is monitored by EU statistics on income and living conditions (EU-SILC) and refers to the percentage of persons from the total population who are in the state of enforced inability to keep their home adequately warm\*. The following graph presents this indicator for 2014 across all EU28 countries and as shown, Bulgaria has the highest rates of people not able to keep their homes adequately warm, followed by Cyprus, Portugal and Greece. This is a remarkable fact, since those countries are considered to have a warm climate with mild winters. On the contrary, in colder Northern countries such as Sweden, Estonia, Denmark and Finland, the percentage of the population unable to have an adequately warm home is low compared to the EU average.

\* [http://ec.europa.eu/eurostat/statistics-explained/index.php/EU\\_statistics\\_on\\_income\\_and\\_living\\_conditions\\_\(EU-SILC\)\\_methodology\\_-\\_economic\\_strain](http://ec.europa.eu/eurostat/statistics-explained/index.php/EU_statistics_on_income_and_living_conditions_(EU-SILC)_methodology_-_economic_strain) ([http://ec.europa.eu/eurostat/statistics-explained/index.php/EU\\_statistics\\_on\\_income\\_and\\_living\\_conditions\\_\(EU-SILC\)\\_methodology\\_-\\_economic\\_strain](http://ec.europa.eu/eurostat/statistics-explained/index.php/EU_statistics_on_income_and_living_conditions_(EU-SILC)_methodology_-_economic_strain))



Sources: Eurostat [Notes](#)

## Share of households' expenditure on electricity, gas and other housing fuels

In the United Kingdom, according to the first official definition (1991), which is still unofficially used in other countries, "a household is said to be fuel poor if it needs to spend more than 10% of its income on fuel to maintain an adequate level of warmth". Therefore, the share of households' expenditure covering their energy costs is another important indicator to point out energy poverty. For most European countries the share of expenditure exclusively used for heating is not available, however, Eurostat provides data on the share of households' expenditures on electricity, gas and other housing fuels.

Property owners are mostly not obliged to provide potential buyers or tenants with information on energy costs. However, in some countries, like Denmark and Sweden, energy cost information from the previous billing period is handed over between owners and tenants. In other cases, all energy costs are included in the rent and, therefore, not visible to the tenants\*.

\* Public Consultation on the Evaluation of Directive 2010/31/EU: <https://ec.europa.eu/energy/sites/ener/files/documents/MJ-02-15-954-EN-N.pdf> (<https://ec.europa.eu/energy/sites/ener/files/documents/MJ-02-15-954-EN-N.pdf>)

**Figure 2: Share of households expenditure on electricity, gas and other housing fuels in 2012**

Unit: %

Below 3.5    3.5 to 4.2    4.2 to 5.8    5.8 to 6.8    Above 6.8

Sources: Eurostat  Notes

### Arrears on utility bills

High energy costs and/or low household income often force people affected by energy poverty to fall behind on the payments of their utility bills. The indicator "arrears on utility bills" is monitored by Eurostat and refers to the percentage of persons from the total population who are in the state of arrears on utility bills, expressing the enforced inability to pay on time their utility bills due to financial difficulties.

In 2014, as shown in Figure 3, Greece, Bulgaria, Croatia and Romania had the highest percentages of people falling behind on their payments. At the other extreme, in the Netherlands, Sweden, Luxembourg and Austria, the payment of utility bills is a problem for only a small percentage of the total population. Eurostat data shows that, there is a strong correlation between the percentage of people living at-risk-of-poverty and the percentage of people falling into arrears\*.

\* BPIE, "Alleviating fuel poverty in the EU" <http://bpie.eu/publication/alleviating-fuel-poverty-in-the-eu/> (<http://bpie.eu/publication/alleviating-fuel-poverty-in-the-eu/>)

Sources: Eurostat  Notes

### Conclusions: Indicative energy poverty indicators in the EU 28

Despite the fact that there is no common European definition, both the scale of the problem and the severe health impacts caused by energy poverty are widely recognised. Data from Eurostat can be used to estimate the scale of the problem, indicating the major threat for a significant proportion of the European population. Across MS, numbers and percentages of affected persons vary significantly. It is striking that energy poverty is less of an issue in various colder countries than in warmer ones. Apart from differences in relative income and socio-economic situations, an additional explanation can be found in the fact that a colder climate means that energy efficient dwellings become much more of a necessity, with progressively tougher building standards introduced over the years as technologies develop. As shown in the following graph, over the past years the housing conditions have not been improved and as a consequence the households' ability to have an adequately warm indoor environment and to pay their utility bills has not improved.

Sources: Eurostat  Notes