

Heating degree days

Definition

The indicator refers to how much (in degrees) and for how long (in days) outside air temperature was, respectively, higher/lower than a specific «base temperature» (or «balance point»). They are used for calculating the energy consumption requirements to heat and cool buildings to thermal comfort standards.

Numbers

In 2024, the need for heating a given building was approximately 23% lower and almost four times higher to cool than in 1979.

Finland had the highest average annual HDD value (5 139), while for Malta, the value of this index was 293.

Cyprus had the highest average CDD (1010.96), and the lowest values for this index were calculated for Norway (0.05).

Additional insights in the EPAH report: [“Energy Poverty National Indicators: Uncovering New Possibilities for Expanded Knowledge”](#)

Limits

It is used to estimate the heating and cooling energy demand of buildings.

It is valuable to compare energy needs that only depend on climate conditions.

It does not consider the specific characteristics of the building stock across countries and regions.

It can be used to calculate energy needs, consumption and expenditure necessary for thermal comfort.

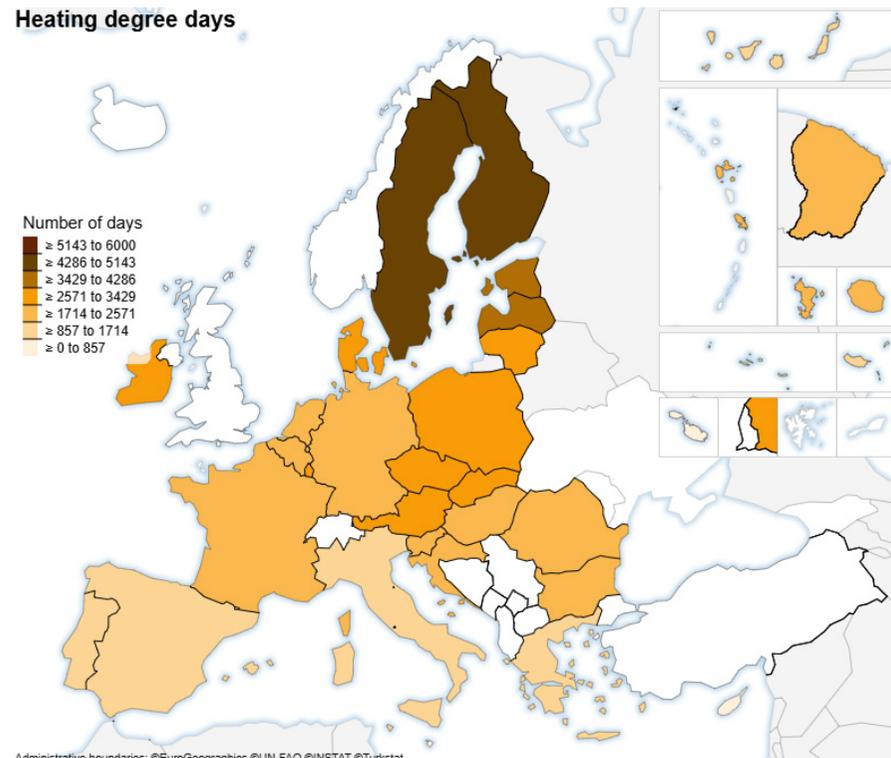
It does not capture in detail changes at the hour scale.

It should be cross-compared with other building energy efficiency indicators and as energy affordability and inability to maintain thermal comfort.

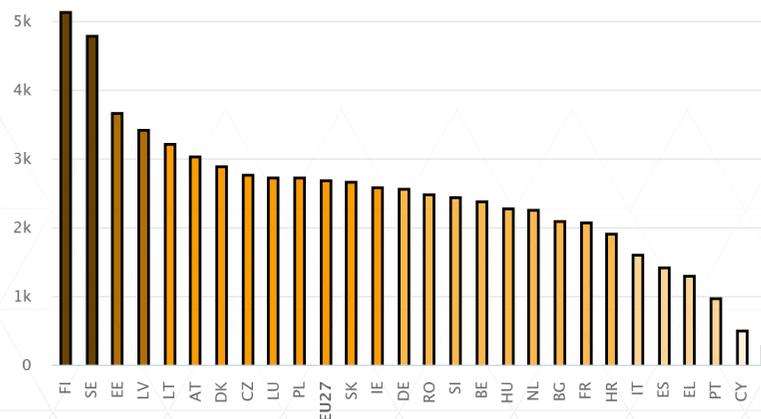
Example

If two households live in similar well insulated homes in regions with different heating degree day values, the one living in the milder winter climate region will likely be less vulnerable to energy poverty.

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Administrative boundaries: ©EuroGeographics ©UN-FAO ©INSTAT ©Turkstat



Unit: Number of days | Source: Eurostat | Last update: 2024

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