



METHODOLOGICAL EXPLANATION

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FUEL POVERTY

This methodological explanation relates to the data releases:

- Fuel poverty, Slovenia, 2018 (experimental statistics)



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1 PURPOSE

The purpose of publishing the data is to assess the extent of fuel poverty in Slovenia.

The data are published as experimental because the methodologies for calculating indicators for estimating the extent of fuel poverty and the set of indicators for monitoring fuel poverty have not yet been finalized.

The key statistics published are indicators relating to household income, their energy expenditure and housing conditions.

2 LEGAL BASIS

- [Annual Programme of Statistical Surveys \(LPSR\) \(only in Slovene\)](#)
- [National Statistics Act \(OJ RS, No. 45/95 and 9/01\)](#)

3 UNIT DESCRIBED BY THE PUBLISHED DATA

The unit described by the published data are private households in Slovenia.

The main observed features are household income, energy expenditure and housing conditions.

4 SELECTION OF OBSERVATION UNIT

Observation units are households.

The release is based on the calculation of data collected by sample surveys.

5 SOURCES AND METHODS OF DATA COLLECTION

SURS's own sources (data already collected from other statistical surveys) were used for the release, namely data from:

- Household Budget Survey (HBS) and
- Living Conditions Survey (EU-SILC).

In these surveys, data are collected:

- with a combination of personal interviewing, household expenditure diaries, administrative and other databases and sources within SURS

- (HBS),
- with a combination of personal interviewing, telephone interviewing, administrative and other databases and sources within SURS (EU-SILC).

More information on the methods of data collection is given in the methodological explanations of individual surveys (see chapter Other methodological materials).

Data for the release are not obtained from administrative sources.

6 DEFINITIONS

Fuel poverty

There is no internationally adopted definition of fuel poverty.

As part of the preparation of the National Climate and Energy Plan, SURS, together with representatives of the School of Economics and Business and the Ministry of Infrastructure - Energy Directorate, proposed the following definition of fuel poverty:

Fuel poverty is a situation in which a household is not able to afford to keep its dwelling adequately warm (and other energy services - domestic hot water, lighting, etc.) at reasonable cost.

Fuel poverty is caused by low income, prices of energy sources and their consumption, which depends on the energy efficiency of dwellings and the behaviour of people in the household.

Household

A household is any family or other group of persons living together and sharing their income to cover the basic costs of living (accommodation, food, other consumer goods, etc.), regardless of whether all members live all the time at the place where the household is located, or some of them live for a longer time (up to 6 months) at another place in Slovenia or abroad due to employment, schooling, or any other reasons.

Income

The calculations are based on annual disposable household income (income in cash). Disposable household income in cash includes net incomes of all household members (employee cash or near cash income, including supplement for meals and transport to work, cash benefits or losses from self-employment, pensions, unemployment benefits, sickness benefits, education-related allowances, family allowances and social benefits, interests, dividends, regular inter-household cash transfers received) less regular interhousehold cash transfers paid and regular taxes on wealth, including compensation for the use of building land. To income in cash calculated in this way, part of income in kind (benefit for the use of company car for private purposes and the value of withdrawals from a business by a self-employed person) is added.

Energy expenditure

Energy expenditure includes expenditure on electricity, gas and other fuels. Data do not include expenditure on motor fuels.

At-risk-of-poverty threshold

The at-risk-of-poverty threshold is defined as 60% of median equivalised disposable income of all households using the OECD modified equivalence scale.

The at-risk-of-poverty threshold for any household is calculated by multiplying the threshold for a one-person household by the number of equivalent adult members in that household.

Equivalence scale

In order to be able to compare the level of living for different households, we have to take into account their size and structure. For this reason, we use equivalence scales, which take into consideration the economy of scale. We have used the OECD modified scale for the calculation of the income and energy expenditure per equivalent adult member. The scale gives to the first adult in the household weight 1, to every other person aged 14 or more weight 0.5 and to children under 14 weight 0.3.

INDICATOR DEFINITIONS

Low absolute energy expenditure is the share of households whose absolute energy expenditure is below half of the national median (source: HBS).

High share of energy expenditure in income is the share of households whose share of energy expenditure in income is more than twice the national median (source: HBS).

Inability to keep home adequately warm is the share of households that financially cannot afford to keep their homes adequately warm (source: EU-SILC).

Arrears on utility bills is the share of households in late payment of utility bills (water, sewage removal, refuse removal, electricity supply and heating costs; rent and mortgage refund are not included) (source: EU-SILC).

Low income and high energy expenditure is the share of those households whose income is below the at-risk-of-poverty threshold and at the same time pay above-average energy expenditure (source: EU-SILC and HBS).

Equivalent disposable income and equivalent energy expenditure, taking into account household size (OECD equivalence scale), were included in the calculation of this indicator.

The at-risk-of-poverty threshold was set at 60% or less of the median income.

The median of expenditures was used as the average value in determining above-average energy expenditure. Expenditures significantly exceeding the

median expenditure were considered as above-average energy expenditures. A threshold of 140% median was used, based on an absolute difference of 40 percentage points between the average income and the at-risk-of-poverty threshold (60%), which in this case is added to the average energy expenditure.

7 EXPLANATIONS

7.1 CLASSIFICATIONS

Data on energy expenditure are broken down into the categories of the European Classification of Individual Consumption according to Purpose (ECOICOP) – Regulation (EU) 2016/792 of the European Parliament and of the Council of 11 May 2016 (CELEX320160792).

7.2 DATA PROCESSING

DATA EDITING

Already edited data from individual surveys were used to calculate the indicators.

WEIGHTING

Weighted data from individual surveys were used to calculate the indicators.

SEASONAL ADJUSTMENT

No seasonal adjustment was used in the calculation of the published indicators.

7.3 INDICES

Indices were not calculated.

7.4 PRECISION

The precision for the indicators was not calculated.

7.5 OTHER EXPLANATIONS

For calculating the indicator "low income and high energy expenditure", the basic microdata source is data on households and persons from the EU-SILC (Living Conditions Survey). Data from the HBS (Household Budget Survey) are linked to them. The link between the EU-SILC and the HBS is based on the following link variables: disposable household income, household type and

household tenure status.

8 PUBLISHING

- Experimental statistics (Energy, Energy production and consumption):
»Fuel poverty, Slovenia, 2018«.

9 REVISION OF THE DATA

9.1 PUBLISHING OF PRELIMINARY AND FINAL DATA

We publish only the final data.

9.2 FACTORS INFLUENCING COMPARABILITY OVER TIME

In the field of estimating the extent of fuel poverty in Slovenia in the 2012–2016 period, the Statistical Office calculated the share of available income that households spend on energy in dwellings. We started from Boardman's definition (Source: Boardman, B. (1991). Fuel Poverty: From Cold Homes to Affordable Warmth. London: Belhaven Press), according to which households that spend more than 10% of their income on adequate warming of dwelling and other energy services are considered as fuel poor. This approach has quite a few drawbacks. It is based on the former specific situation in the United Kingdom, the data do not show whether a household also has an adequately warm dwelling, households with insufficient energy expenditure are excluded, and households with high incomes that would be difficult to consider as fuel poor are included.

Due to the mentioned shortcomings, in 2021 we used a new approach to estimate the extent of fuel poverty in Slovenia in experimental calculations, using several different indicators.

The experimental data published in 2021 are thus not directly comparable with the previously published ones.

10 OTHER METHODOLOGICAL MATERIALS

Methodological materials on SURS's website are available at <https://www.stat.si/statweb/en/Methods/QuestionnairesMethodologicalExplanationsQualityReports>.

Questionnaire (only in Slovene):

- Household Budget Survey (HBS)

theme: Quality of life, sub-theme: Household expenditure

- Living Conditions Survey (EU-SILC)

theme: Quality of life, sub-theme: Living conditions

Quality report for the survey:

- Household Budget Survey (HBS)

theme: Quality of life, sub-theme: Household expenditure

Methodological explanations:

- Household Budget Survey (HBS)

theme: Quality of life, sub-theme: Household expenditure

- Living Conditions Survey (EU-SILC)

theme: Quality of life, sub-theme: Living conditions

- Income, poverty and social exclusion indicators

theme: Quality of life, sub-theme: Income, poverty and social exclusion