Dimensions of Energy Poverty in Austria

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Outline and Concept

Energy poverty

... is a multidimensional phenomenon

… cannot be measured with one single indicator

Concepts followed by indicators in Austria:

(1) Relation between household income and household energy costs

(2) (Non-)affordability and involuntary avoidance of necessary energy

In this presentation we discuss (*data sources in brackets*):

(1) Energy poverty indicators related to high energy costs and low household income (*Microcensus Energy, EU-SILC*)

(2) Non-affordability of an adequate amount of energy

Subjective evaluation (*EU-SILC, SILCexpress: How we are today*)

Low energy expenditure and low household income (*Microcensus Energy, EU-SILC*)

Arrears on utility bills (*EU-SILC*)

Characteristics of energy-poor households according to the different definitions -> please refer to the paper!

Methodological differences between data sources -> please refer to the paper!

High Energy Costs and Low Income

	Microcensus Energy		EU-SILC	
	Number of households	Share in %	Number of households	Share in %
(1) Households with above-average expenditure on energy for housing (> 140% of the median, equivalized) AND at risk of poverty	134,100	3.3%	146,300	3.6%
(2) Households with energy costs > 10% of household income	664,560	16.5%	351,000	8.6%
(3) Households with energy costs > 15% of household income	273,730	6.8%	154,000	3.8%

S: STATISTICS AUSTRIA, Microcensus „Household Energy Use“ 2021/2022, EU-SILC 2022. – Calculated at household level.

Differences due to slightly higher income and significantly higher energy costs of Microcensus Energy compared to EU-SILC.

Households that are energy-poor according to (3) are by definition also energy-poor according to (2).
(1) and (2)/(3) may or may not overlap.

Influence of threshold values!

Non-Affordability of an Adequate Amount of Energy

	Microcensus Energy		EU-SILC	
	Number of households	Share in %	Number of households	Share in %
(4) Households that are unable to keep their home adequately warm	-	-	129,500	3.2%
(5) Households that are unable to keep their home adequately warm AND at risk of poverty	-	-	37,000	1.0%
(6) Households with particularly low relative energy costs (energy costs account for < 4% of household income) AND at risk of poverty	<20,000	(<1%)	145,300	3.6%
(7) Households with particularly low absolute energy costs (< 50% of the median) AND at risk of poverty	66,970	1.7%	176,400	4.3%

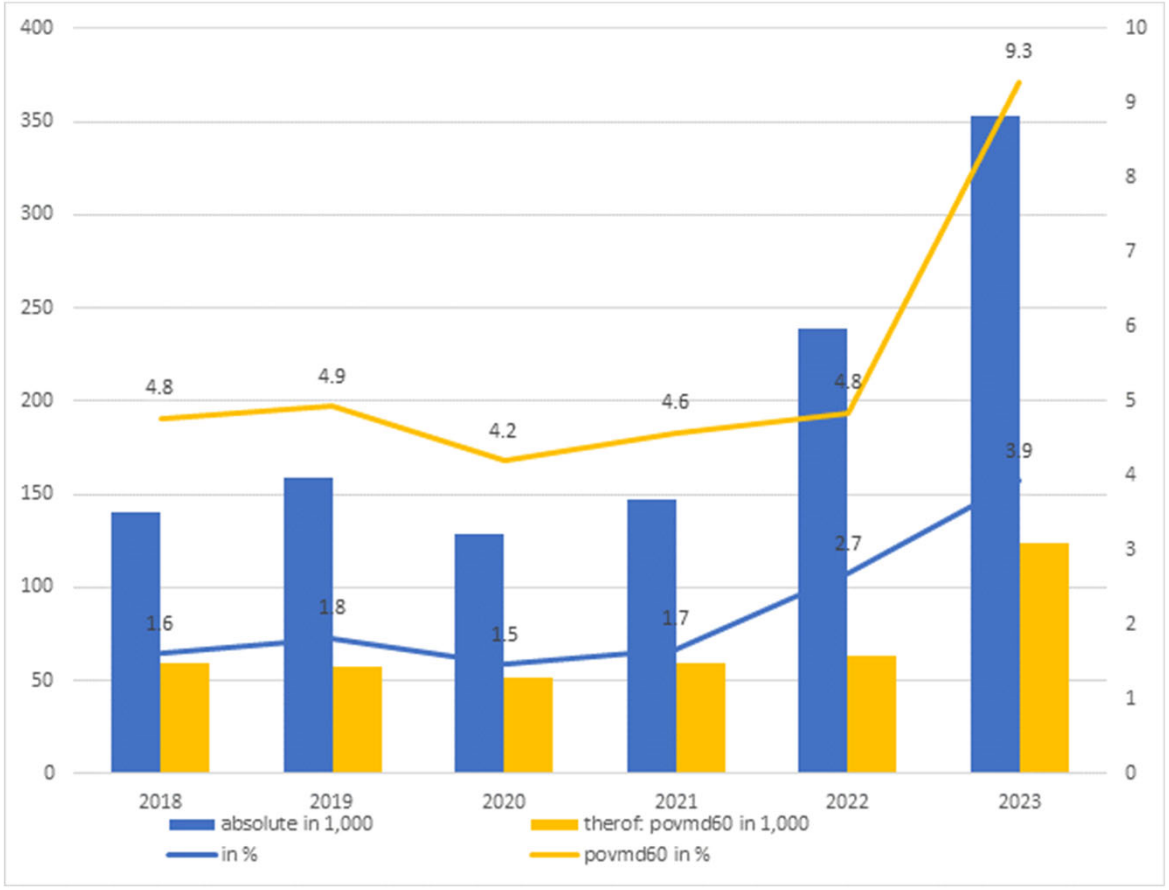
S: STATISTICS AUSTRIA, Microcensus „Household Energy Use“ 2021/2022, EU-SILC 2022. – Calculated at household level.

Households that are energy-poor according to (5) are by definition also energy-poor according to (4).
Indicators (4)/(5) and (6)/(7) may or may not overlap. Again: influence of the threshold values!

Additional possibility (no energy poverty indicator in the strict sense):
(8) “*Since (recent month, last year) have you ever been unable to pay utility and maintenance costs (such as electricity, gas, district heat and repairs) on time due to financial difficulties?*”

-> 2.5% of households had arrears on utility bills in EU-SILC 2022

Non-Affordability to Keep Home Adequately Warm 2018-23

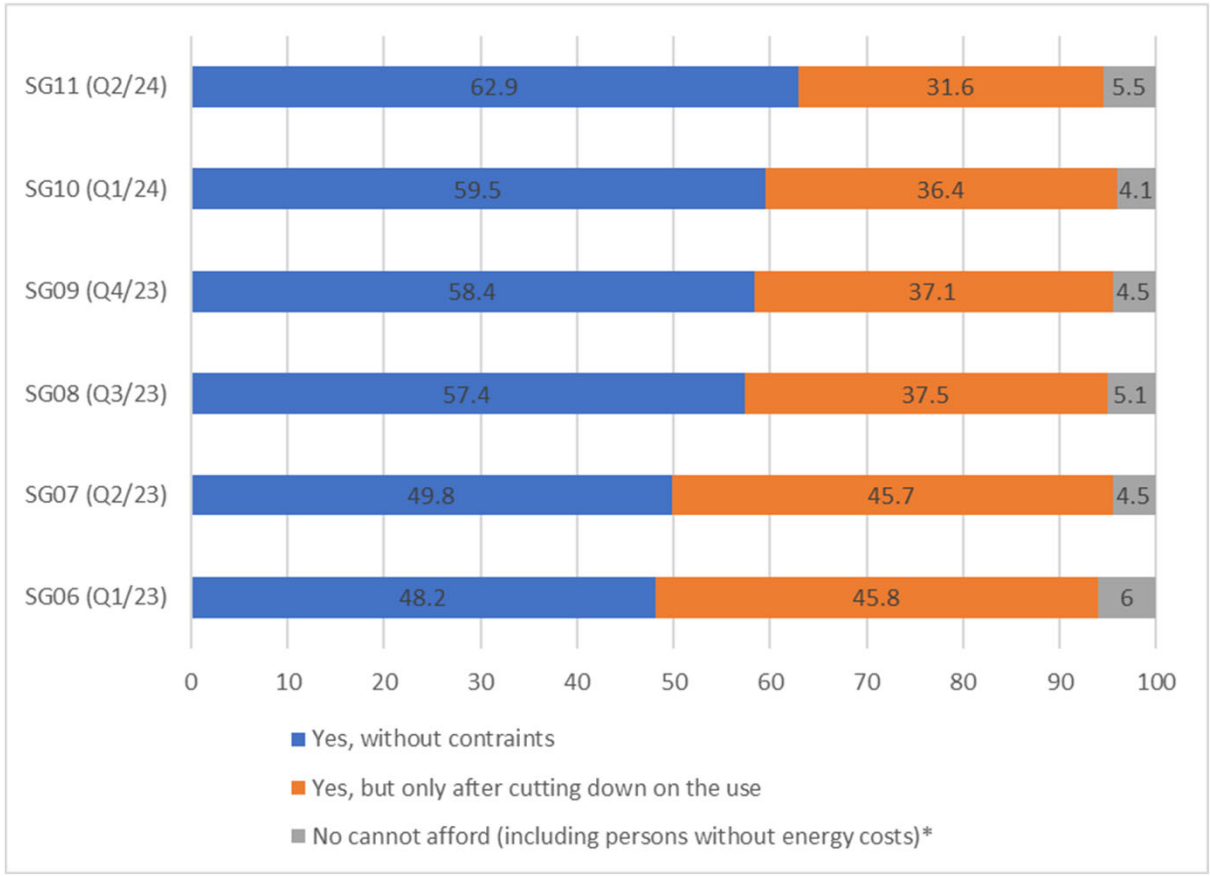


"Can your household afford to keep your house/your flat adequately warm?"

- ❑ *Yes*
- ❑ *No*

S: STATISTICS AUSTRIA, EU-SILC 2018-2023. – Calculated at personal level. Standard error and confidence interval on the example of 2023 (total numbers): SE 0.4, 95%-confidence interval between 3.2% and 4.7% or between 288,000 and 419,000 persons.

Quarterly Data on Affordability of Household Energy 2023-24



"When you think of all energy your household needs for the use of heating, warm water, cooking, cooling, lights and appliances: Could your household afford the necessary energy in the past quarter?"

- ❑ *Yes, without constraints*
- ❑ *Yes, but only after cutting down on the use*
- ❑ *No cannot afford*

S: STATISTICS AUSTRIA, Survey of the social consequences of the crisis ("SILCexpress: How we are today"). – Calculated at personal level, persons aged 18 to 74 years. *Only few cases without energy costs, thus they are not shown separately.

Way Forward

New developments in EU

First results on household energy efficiency in EU-SILC 2023

New-policy needs module “Energy and the environment” in EU-SILC 2025

New developments in Austria

Austrian Coordination Office for Combating Energy Poverty https://kea.gv.at/en/

Interdisciplinary forum to combat energy poverty (with STAT)

Austrian Energy Poverty Definition Act (in review) for statistical recording and for determining target groups for support measures, with defined indicators (Microcensus Energy, EU-SILC)

Definition of national indicators for Energy Efficiency Directive EU2023/1791, article 8

Conclusions

Measuring energy poverty requires several indicators

Several data sources can be considered, but different results are the consequence

The threshold values must be carefully considered

National circumstances must be considered (different needs for heating, cooling….)

Flexibility is necessary to react to changing conditions (e.g. high electricity costs, rising costs for cooling)

Some (few) EU-wide harmonized indicators would be important

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