

Energy vulnerability of residential consumers

Abstract

When countries are forced to use a poverty line assume that such a decision combines the lack of resources of individuals and the financial capacity of the state to grant aid. It is not claimed that such a support is addressed to all the poor, nor that he pulls all out of poverty. There is no sufficiently grounded methodology to set the threshold of “the poorest of the poor.” In addition to raising prices, the European directives included some social policy recommendations to protect vulnerable household consumers, the poorest of the poor, by asking Member States to define this social category and to establish clearly the laws national social support. Romania uses a procedural methodology established for the provision of heating aid by a policy decision: a grid based on a poverty line set by the government (615 lei / person in 2013) and a procedure for testing the costs.

Keywords: electricity, energy consumers, prices, standard of living, scenario

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Introduction

Establishing an energy poverty threshold through a political decision and in relation to it determines who is poor and to what degree. Added to this is the testing of the property of other goods that can be used to produce income or can be sold, not presenting conditions necessary for a minimum decent standard of living.

It is significant that in all countries the official adoption of a poverty threshold, including an energy poverty threshold, is avoided. International institutions use some poverty thresholds: 1 dollar per person/day or 3 dollars, but these are used only to compare countries with each other and to classify them, less to be used as a basis for some political measures.

The method developed in RIQL (the threshold of a decent standard of living and the threshold of survival) allows a more accurate estimation of poverty. Currently, if we consider the threshold of a decent living, the proportion of people below this threshold could be around 50%.

When countries are forced to use a poverty line, they politically adopt a procedural threshold without substantial justification, assuming that such a decision combines the lack of resources of individuals (an obvious factor) and the financial capacity of the state to provide aid. It is not claimed that such support is addressed to all the poor, nor that it lifts everyone out of poverty. The wording is often used that the system addresses “the poorest of the poor”, not all the poor and aims to improve the situation of the poorest, which is actually correct, just insufficient.

Methodology

There is no sufficiently substantiated methodology to establish the threshold of the “poorest of the poor”. The European directives, in addition to the price increase, also included in their package some social policy recommendations for the protection of vulnerable household consumers, “the poorest of the poor”, requesting the member states to define this social category and clearly establish through legislation national social support.

These directives represent a change in energy policy. Romania uses a procedural methodology established by political decision to grant heating aid: a grid based on a poverty threshold established by the government (615 lei/person in 2013) and a means testing procedure.¹

Currently, in the case of aid for natural gas, electricity and wood, coal and petroleum fuels, the maximum limit of average monthly

net income per person (single person or family member) must, in principle, be no more than 800 lei.²

Initially, the estimates regarding the number of vulnerable consumers in Romania amounted to 4 million beneficiaries (households), which meant almost 50% of the population. The introduction of means testing, more precisely property testing, the number of vulnerable households was reduced to 0.8 million out of 8.36 million household consumers of electricity and gas, i.e. 10% of the country’s population. Therefore, the remaining consumers, over 7 million, had to adapt to the new prices. We can wonder if there is a pure coincidence that once again the heating aid, after a huge administrative effort, manages to identify approximately 10% heating aid beneficiaries, a fateful figure for social support in all European states, including Romania. The huge variation in the number of beneficiaries of heating aid is due to the introduction of the “means test”, i.e. the assets owned (housing, land, car, tractors, etc.).

The heating aid is more generous than the social aid dedicated to “the poorest of the poor”. In 2020, the monthly amount of the Guaranteed Minimum Income was set by law at 1,056 lei, while the first decile of income per person in the same year was below 2,053.53 lei/month (NIS, Statistical Yearbook of Romania 2020).³

The timetable for the phasing out of regulated electricity tariffs for household consumers

- I. July 1, 2013: 10%;
- II. December 31, 2017: 100%.

Under these conditions, a possible scenario of energy prices in Romania in 2017/18 will be approximately those of the probable European average: 0.227 Euro for electricity.

The calendar for the gradual elimination of regulated prices for final customers is presented in Law no. 123/2012 of electricity, a law that transposes European Directives 72/2009 and 73/2009 on the single energy market into national legislation. To reach these new prices, the prices in Romania, if our calculations are correct, for electricity they will have to increase by 210%. There will therefore be more than double increases, a real shock for the population (Table 1).

As can be seen, in a short period of time (2012 - 2017/18) there is a shock of the increase in energy prices, probably the last price increase by political decision. The price shock will be borne by the economy, but also by family budgets. The impact on the poor segment of the population is very difficult to bear.

Table 1 Scenario of what can happen by aligning prices at the European level: electricity

	Electricity		
	2012	2017*	Increase compared to 2012
EU 28	0.195	0.227	116.40%
Romania	0.108	0.227**	210.20%

Assuming that the consumer price will be equal to the average of the EU 28, equalized on a European market.

An annual increase of 1.1%, as in the period 2012-2014.

The impact of the increase in energy prices on the standard of living

The effect of the increase in energy prices on real poverty, determined with the minimum consumption basket, decent, becomes

very visible. We will use the minimum consumption basket, decent, developed at RIQL (Adina Mihăilescu), differentiated between urban and rural. We kept the same prices of other goods and services, introducing only the increase in energy prices. In fact, the impact of the increase in energy prices is greater, to the direct costs, the indirect costs are added, through the increase of practically all products, incorporating the new energy costs.

Consumption expenses by chapter, including housing maintenance expenses, were evaluated at the level of December 2016, 2018 and 2021, comparing with NIS data from the first quarter of the current year 2022.

I took as a typical example the family of two employees with two children. The analysis is carried out on two types of families, urban and rural, between which there are currently substantial differences (Table 2).

Table 2 Urban: The consumption basket corresponding to the minimum decent living for the family of two employees with two dependent children, in December 2016, 2018, November 2021

Curent Number	Specification	Minimum decent basket 2016	Minimum decent basket 2018	Minimum decent basket 2021
		For a family of two employees with two children % and value in lei	For a family of two employees with two children % and value in lei	For a family of two employees with two children % and value in lei
1	Food	48.0 – 1,102.0	40.7 – 1,106.0	40.1 – 1,211.0
2	Clothing	6.6 – 151.4	5.6 – 152.0	5.0 – 151.0
3	Housing equipment	3.4 – 78.0	2.9 – 78.3	4.8 – 145.0
4	Transport	7.7 – 176.8	6.5 – 177.4	0.7 – 21.2
5	Cultural services	2.6 – 59.7	2.2 – 59.9	1.9 – 57.4
6	Personal hygiene	3.1 – 71.2	2.6 – 71.4	4.8 – 145.0
7	Clothing/footwear repair and maintenance services	0.7 – 16.0	0.6 – 16.1	4.4 – 132.8
8	Housing expenses*	17.5 – 401.8	30.0 – 844.5	30.0 – 906.0
9	Medicine expenses	1.4 – 32.1	1.2 – 32.3	0.7 – 21.1
10	Safety fund	9.0 – 207.0	7.7 – 207.4	7.6 – 229.5
Total		100.0 – 2,296 lei	100.0 – 2,715 lei	100.0 – 3,020 lei

In the housing expenses chapter, postal and telecommunications expenses were also included, respectively stationery expenses.

Source: RIQL database with the consumption basket calculated by Adina Mihăilescu.

Rural: Structure of the minimum decent living basket for a farming family with two dependent children, December 2016, 2018, November 2021

Curent Number	Specification	Minimum decent basket 2016	Minimum decent basket 2018	Minimum decent basket 2021
		For a family of two employees with two children	For a family of two employees with two children	For a family of two employees with two children
1	Food, from which:	48.0 - 888.0	40.7 – 891.3	45.2 – 1,022.9
	- bought food	17.6– 325.6	14.9 – 326.8	17.7 – 400.6
	- self-consumption food	30.4 – 562.4	25.8 – 564.5	27.5 – 622.3
2	Clothing	6.6 – 122.1	5.6 – 122.6	6.0 – 135.8
3	Housing equipment	3.4 – 62.9	2.9 – 63.1	1.7 – 38.5
4	Transport	7.7 – 142.4	6.5 – 143.0	3.3 – 74.7
5	Cultural services	2.6 – 48.1	2.2 – 48.3	2.0 – 45.3
6	Personal hygiene	3.1 – 57.4	2.6 – 57.5	2.7 – 61.1
7	Clothing/shoe repair and maintenance services.	0.7 – 12.9	0.6 – 13.0	0.7 – 15.8
8	Housing expenses*	17.5 – 323.8	30.0 – 656.5	30.0 – 678.9
9	Medicine expenses	1.4 – 25.9	1.2 – 26.0	1.4 – 31.6
10	Safety fund	9.0 – 166.5	7.7 – 167.1	7.0 – 158.4
Total		100.0 – 1,850 lei	100.0 – 2,188 lei	100.0 – 2,263 lei

In the housing expenses chapter, postal and telecommunications expenses were also included, respectively stationery expenses.

Source: ICCV database with the consumption basket calculated by Adina Mihăilescu.

The forecasted increase in energy prices from 2016 to 2018, respectively 2021, while the prices of other goods and services remain constant, produce structural changes in the minimum consumption baskets (Table 3).

Table 3 The impact of the increase in energy prices on poverty thresholds and the cost of housing maintenance: Urban

	Minimum decent threshold				
	2016	2018	Nov-21	2018 compared to 2016	November 2021 compared to 2016
Poverty line	2,296	2,715	2,825	118.20%	123.00%
Maintenance expenses/ total	401.8= 17.5%	814.5= 30.0%	847.5= 30%	202.70%	210.90%

The impact of the increase in energy prices on poverty thresholds and the cost of housing maintenance: Rural

	Prag minim decent				
	2016	2018	Nov-21	2018 compared to 2016	November 2021 compared to 2016
Poverty line	1,850	2,188	2,263	118.30%	122.30%
Maintenance expenses/total	323.8= 17.5%	656.5= 30.0%	678.9=30.0%	202.80%	209.70%

- The poverty thresholds increase substantially due to the increase in energy prices in the 2016-2018 time frame: the decent threshold, with 118.2% in urban and 118.3% in rural areas. In the time interval 2016-November 2021, the decent threshold increases by: 123.0% in urban areas and 122.3% in rural areas. An important segment of people are thrown into a situation of poverty.
- The share of maintenance expenses in total household expenses increases substantially. In the standard family considered by us, a family of two adults with two children in urban and rural: in the minimum decent basket the share of maintenance expenses increases from 17.5% to 30.0%, then until the end of 2021, the share increases by 8.2% in rural areas and by 6.9% in rural areas.
- The structure of family budgets is changing, pushing it towards an even more accentuated model of poor structure. Only the increase in incomes (primarily wages) could compensate, to what extent, the effect of energy prices will be seen.

Conclusions

The energy transition in Romania, which will be accompanied by a sharp increase in energy prices and probably, indirectly, in others as well, generates a massive process of impoverishment. The impoverishing impact of the increase in energy prices can be clarified if we compare the normative consumption structures developed by the RIQL with the real average family structure calculated by the NIS.

The structure of the real consumption identified by the NIS actually reproduces the structure of the minimum decent life consumption established by the RIQL. This overlap suggests that more than half of the population in 2016 was below the minimum decent standard of living. The significant uncompensated increase in energy prices is likely to impoverish the population, to push an important part of the population into poverty.

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Conflicts of interest

There are no conflicting interests declared by the authors.

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References

- Home heating aid. Emergency Government Ordinance no. 70/2011 regarding social protection measures during the cold season. Information - help for home heating cold season. 2022.
- RIQL database 1989-2022. Bucharest; 2022.
- Press release No. January 7 / 11, 2022. NIS, Romania; 2022.