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POVERTY OR FUEL POVERTY?
Defining fuel poverty in Europe and Hungary

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EXECUTIVE SUMMARY

The Energiaklub has been working on the phenomenon of fuel poverty since 2009. The present document summarises the result of our previous research as well as introduces our most recent insights and calculations.

There is no accepted definition of fuel poverty in the European Union. However, while the desire for this is becoming ever more vocal, it is not clear whether a generally accepted „universal" definition could be used in every member state.

According to the most often cited definition, a household can be considered as suffering from fuel poverty should it be unable to heat sufficiently, or if more than a certain percentage of its income is spent on energy costs. In the United Kingdom – the only country in the EU to have an officially accepted definition – this value is twice the median, 10%.

Data on Hungary, previously unavailable, has now been collected within the framework of our NegaJoule2020 research project. This has made it possible to investigate the characteristics of fuel poverty in Hungary.

According to our research, Hungarian households spend on average 20% of their total income on energy costs. Half of them devote less than 17% of their income to this, the other half, however, spends more than that. So if we were to use the 10% level used in the British definition, we would have to say that 80% of Hungarian households suffer from fuel poverty. This would obviously be a nonsensical approach and would make it impossible to treat the problem. This means it is definitely necessary to narrow the definition of the phenomenon.
If we don't take the figure, but rather the methodology from the British, and count those households as energy poor where the percentage of income spent on energy costs is more than twice the median, then the fuel poverty level is defined at 34% of household income. This means between 8-10% of households, accounting for 300-380 000 Hungarian households. If we count those households which struggle with larger than average energy costs as energy poor (those spending more than 20% of their income on energy costs), then according to our data, between 37 - 40% of households fall into this category, accounting for 1.4 – 1.5 million Hungarian households.

Therefore we can say which and how many people are considered energy poor depends on where we define the threshold. Where exactly we draw this line, however, depends on us (researchers, decision-makers, etc.). So we end up a little like Winnie the Pooh and Piglet, running round and round the tree following their own footprints: what counts as fuel poverty depends on the definition, but the definition itself depends on what we want to achieve…
Defining the threshold is a question of policy-making, an act which will not be completely free of subjective policy or political considerations.

Whichever we regard as the fuel poverty threshold, data in our survey has led us to the conclusion that the households which can be called energy poor are mostly the ones in (rural) townships, in neighbourhoods with detached houses or villages, as well as households in detached houses, primarily those with a bigger floor area.
There is a larger proportion of households with single occupants, retired or unemployed members amongst the energy poor households than in the whole survey sample. In our analysis we deal separately with the question of unreliabilities stemming from the characteristics of the sample and the method of sampling in the relevant sections.

During the survey, besides analysing the data given by the respondents, we used another method to study the issue. With the help of data from our NegaJoule2020 research project we defined the annual average, theoretical energy demand of different types of homes and heating systems to heat to 20°C and provide hot water in the given household. Here we achieved similar results: it is primarily the households living in detached houses, particularly those using gas heating, for which the theoretical amount of necessary energy (would) cost too much in comparison to the household income.

According to our data, those households spending more than 34% of their income on energy, whether we use the indicated or the calculated energy costs, come almost exclusively from poor households – in total only a couple of per cent of energy poor households come from households which are otherwise *not* regarded as being in poverty. If we regard not 34% but rather 20% of the income as being the threshold for fuel poverty, then not only the otherwise poor households can be regarded energy poor, but a further 31%, those who do not count as poor based on their income.

According to our model calculations, external insulation and the replacement of windows and doors would enable the majority of those who count as energy poor to be able to escape fuel poverty, due to the large amount of savings made on energy costs. However, data suggest that substantial financial and financing obstacles stand in the way of energy efficiency investments. 75 - 85% of Hungarian households do not have any savings; 80% of those households planning energy related investments would not take out a bank loan to cover the investment costs. Hence, it seems necessary for the state to play some role in dealing with the problem.

Decision makers have two choices: either they give ongoing support to households to help them cover their energy costs, or they help households to reduce their energy costs through energy efficiency improvements. Unfortunately, the state and municipalities spend much more on benefit-type payments than on supporting investments that result in improved energy-efficiency. The latter solution provides a boost for the economy too; it creates jobs and ensures significant tax revenues for the state budget, partly through the income tax and contributions paid on labour, and partly through the VAT paid on the products purchased. A further benefit of the so-called revolving fund would be that within a particular time the state would recoup its investment.

In our opinion, thinking about fuel poverty only makes sense if it results in some measures being put into practice. In order to make the best use of taxpayers' money and to support these measures, the clear definition and demarcation of the problem is necessary in such a way that the theoretical and practical approaches remain consistent. Hence at the end of our analysis we have stated the nature and definition of fuel poverty with the aim of initiating a constructive debate amongst experts and the relevant decision-makers in the field .

In our opinion fuel poverty is a problem of both poverty (social) and energy efficiency; it effects those households which inhabit buildings with bad energetic characteristics, and – partly due to the poor efficiency – have high costs in relation to their income. Due to their unfavourable financial situation these households are unable to improve the building's energy efficiency, which would probably provide an opportunity to escape from the condition of fuel poverty.

ENERGIAKLUB's proposal for the national definition of fuel poverty

Based on the data and approach introduced in our analysis, we regard those houses as energy poor which meet each of the following three criteria:

- the annual income of the household is below 60% of the median Hungarian household income,
- the ratio of the theoretical annual energy cost of heating the house to 20 °C and providing hot water and the household's total income is more than double the median rate based on the total number of households' actual, declared data, namely 34%.
- the building has an energy performance certificate rating below F.

In the case of implementation we recommend setting up limits (per capita) for floor area, too. Furthermore, we recommend the following for state administration:

(1) Obtaining a detailed, researchable database from the Hungarian Statistics Agency and, following the data analysis, setting up a threshold of fuel poverty through cooperation between those state agencies responsible for social and energy issues.

(2) Theoretical analysis of the macro-economic effects of the different types and intensities of subsidies with the help of, for example, the AKM model.

(3) Initiating a pilot project for a defined number and type of buildings (perhaps municipality-owned), in order to investigate and monitor how much real savings can be made on energy costs by making the building shell more efficient.

(4) Developing fuel poverty reduction investment subsidy programmes and reforming the housing benefit system.