ENERGY POVERTY

IN CENTRAL, EASTERN AND SOUTHEAST EUROPE

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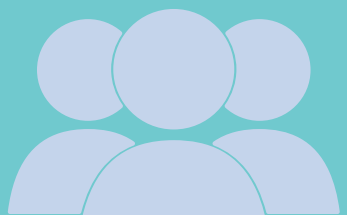
Energy poverty affects households around the EU. Millions of families are unable to secure necessary levels of energy for their homes (Bouzarovski, Petrova, 2015). Central and Southeastern European (CEE and SEE) countries have particularly high levels of energy poverty due to low incomes, high energy needs stemming from energy-inefficient housing, and limited access to diversified energy supply. These conditions derive from the legacy of the socialist-type of development in their past and an uneasy transition to democracy. Despite strong evidence on the human costs of energy poverty on the ground, these challenges have been scarcely recognised and addressed in policy.

Today CEE and SEE countries lag behind other Member States of the European Union in the context of a strong political commitment for transition to sustainable economies and a strategy to achieve net-zero emissions. With the prospect of the Renovation Wave Initiative that aims to increase the quality of the building stock, the challenges regarding energy poverty, especially in CEE and SEE countries, is essential and timely.



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CEE and SEE have higher rates of energy poverty than most of the EU

The percentage of **households "[unable] to keep homes adequately warm" is high in CEE and SEE** in comparison to Western Europe. Bulgaria (33.7%) and Lithuania (27.9%) rank highest in the European landscape, followed by other Southern and Central European countries: Greece (22.7%), Cyprus (21.9%), Portugal (19.4%), Romania (9.6%), Croatia (7.7%), Latvia (7.5%) and Hungary (6.1%) (EU-SILC, 2018). In Western Europe, Belgium (5.2%) and France (5%) have the highest ratio of households unable to keep their homes warm, while the EU mean is 7.3% (EU-SILC, 2018). **In CEE and SEE, it is common for households to heat only certain rooms, and to do so for only limited periods**. For instance, in Romania more than half of the population heats their home partially (Ministerul Energiei, 2016).

In the EU overall, 6.6% of **households have "arrears on utility bills"**, whereas in CEE countries the proportion of households who cannot afford to pay bills on time is much higher (Greece - 35,6%, Bulgaria - 30,1%, Croatia - 17,5%, Romania - 14,4% and Hungary - 11%). In comparison, the highest values of arrears in older Member States can be found in Ireland (8.6%), Finland (7.7%) and France (6.4%) (Eurostat, 2018). In Bulgaria, around 50% of the population is estimated to have difficulties in affording the costs for a normal, comfortable and healthy house (EnEffect, 2019).

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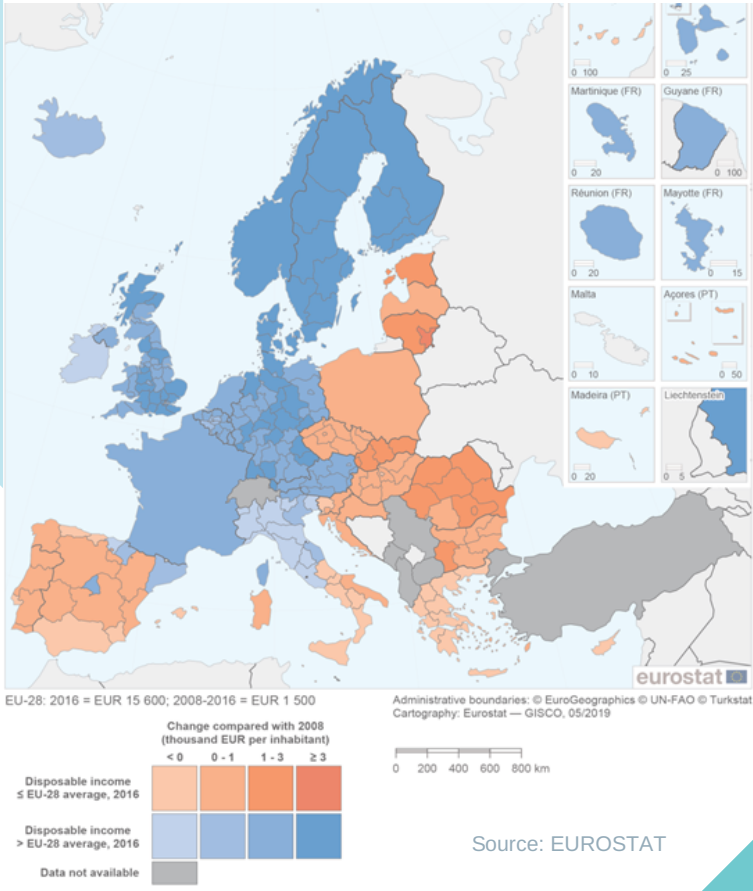
Some of the poorest regions in the EU are in CEE and SEE

Of the 15 poorest statistical regions in the EU[1] according to household disposable income measured in PPS (Purchasing power standard per inhabitant), 13 are in Romania and Bulgaria. Also near the bottom of the disposable income list are regions in Hungary, Poland, Greece, Croatia and Slovakia (Eurostat, 2020). **Low income increases the likelihood that a household will end up in energy poverty** and limits their ability to spend on energy efficiency improvements.

[1] There are 300 NUTS 2

Figure 1. Household disposable income in 2016



Source: EUROSTAT

CEE and SEE have very high home ownership levels, but this isn't all positive

CEE and SEE member states have a much higher property ownership ratio than Western European countries. Even in owner-occupied homes, **property owners often cannot afford the costs of renovation.**

The high ownership ratio is a legacy of communism. At the beginning of the 1990s most housing units were inhabited by tenants who benefited from "giveaway" privatization programmes, where the sitting tenants were encouraged to purchase the properties through various programmes and payment schemes at low prices (European Housing Partnership, 2017). Romania leads the private property ratio with 96%, whereas Slovenia has the lowest level of private ownership in the region (67.3%) (Csiba, Bajomi & Gosztonyi, 2016).

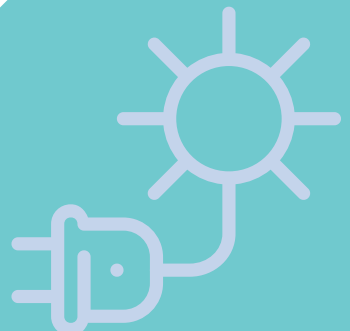
As a result of this process, many people who under normal circumstances could have never afforded to own properties, have become owners of housing facilities that they cannot afford to renovate or maintain. **For many households, taking a loan to renovate their house is not an option**, either because they are do not qualify, or because any loans would be used for other, more urgent purposes. In the case of multifamily buildings this involves common decisions between apartment owners, which is often difficult to reach due to the high degree of mutual mistrust and differing priorities across residents.

People expect action from the EU and Member States, but policy makers are not doing enough

Consumer expectations in CEE and SEE are high with regard to how European energy policies deliver for households and improve their access to affordable energy (Eurobarometer, 2019). However, **European debate, legislation and decision-making does not take into account the reality on the ground** in these countries.

Member States are not delivering on energy poverty either. There is underspending in CEE and SEE countries with only under a quarter of the targeted energy performance works in houses having been accomplished between 2014-2020 in Romania (EU, 2020), under 8% in Bulgaria and (EU, 2020) and under 2% in Hungary (EU, 2020). EU needs to do more to promote spending on energy efficiency in the housing sector and energy poverty reduction.

The Renovation Wave proposal, the new multiannual financial framework (MFF) and Recovery Funds are an opportunity to change this course.



The Face of Rural Energy Poverty

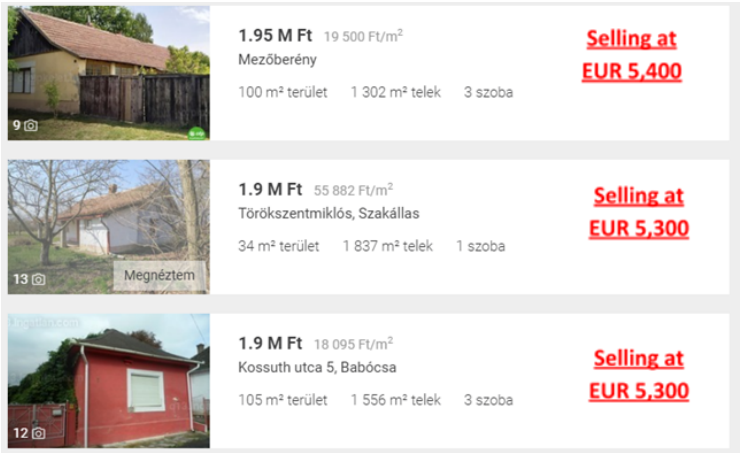
A **large share of the population of CEE and SEE live in rural areas.** While just over a quarter (28.0 %) of European citizens live in rural areas, in CEE countries the rural proportion is much higher than average, generally varying between 40% and 50%, with Lithuania registering more than 56% in rural areas (Eurostat 2015). People living in rural areas face the highest risk of poverty and social exclusion, especially in the cases of Bulgaria, Romania, Latvia, Croatia, Lithuania, Cyprus, Hungary and Poland, Greece, Spain and Portugal (Eurostat 2015) .

Rural areas have higher levels of energy poverty
European Energy Poverty Observatory (EPOV, 2019) data shows that there are twice as many utility arrears in the thinly populated areas (14.4%) as in the densely populated regions (7.9%). Poverty rates are also higher in rural areas, as is unemployment.

Houses in many rural areas are worth next to nothing

Houses in the rural areas often have a very low market value; energy efficiency improvement involving insulation and heating system upgrades can cost more than the value of the building. Investment in energy efficiency will not increase the value of a house if it is located in a place where no one wants to buy. This makes energy efficiency investment challenging in rural areas, which combine low income regions with low employment levels.

Figure 2 Market value of traditional housing in rural areas in Hungary, using examples from the online property site ingatlan.com



Rural areas have very low quality buildings

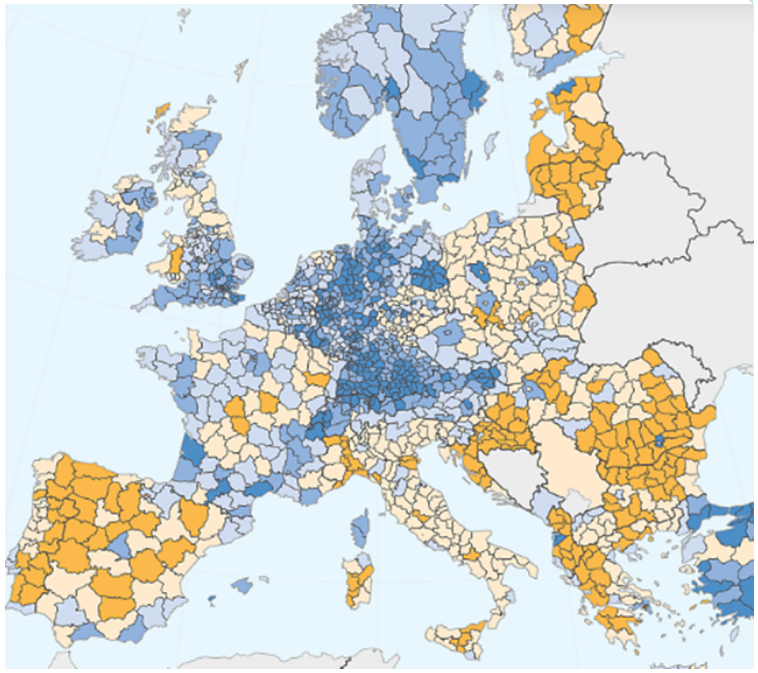
If households possess some savings, they will typically spend more on general consumption goods rather than on energy efficiency or other quality improvements.

In Romania almost 50% of the housing stock is made of old, low quality wood-based material.

In Hungary, EU-SILC (2018) data indicates that 23% of the population lives in a dwelling with a leaking roof, damp walls, floors or foundation, or rotten window frames or floor. Many of these dwellings are in rural areas.

Policy makers pay less attention to rural areas. Where **investment programmes have** been implemented for energy efficiency in housing, these **have mostly targeted urban households**. There is a general lack of national vision for the development of energy efficiency in rural and suburban areas and a lack of local capacity to develop programmes in still overly centralized state structures (Jiglau et al., 2020).

Figure 3 Crude rate of total population change, 2015



Source: EUROSTAT

A declining population in villages, due to the lack of opportunities, will result in empty houses in future. This is a challenge for large-scale renovation in areas with poor economic performance, as it is not rational to renovate buildings which will soon be abandoned.

Lack of fuel choice leads to reliance on low efficiency biomass and waste incineration for heating

I**n rural areas access to diverse and accessible heating fuels is highly limited**. In Romania, only 33% of households have access to gas and these are mainly in high-density urban or suburban localities. Over 80% of rural households (as compared to 12% in cities) are limited mainly to using wood, electricity (28.8%) or coal (19.9%) for heating (Sinea et al, 2018). In Bulgaria, rural dwellings use mostly solid fuels for heating (62.8% use firewood and 32.5% use coal), whereas the national shares are 34.1% and 19.9%, respectively (Smarter Finance for Families, 2020).

The example of Hungary shows that the problem cannot be addressed only by making fuels physically available. Despite a gas network coverage of 91.2% of localities and 72.9% of households, around 75% of the rural households use wood or other solid fuels for heating because gas is too expensive (Bajomi et al, 2020) Many lack the means to connect to the gas network or to commit to a permanent service contract due to their very low or uncertain incomes.

In Romania, **connection costs can be the equivalent of one monthly salary** (Sinea et al, 2018). At the same time, fuel prices vary across the region. However, related to the purchasing power of the population, general concerns have been raised with regard to the price factor in addressing energy poverty (Jiglau et al, 2020).

Low efficiency biomass is helping MS in CEE and SEE meet their Renewable Energy Sources (RES) targets. This **does not contribute to the energy transitions**, is not sustainable, causes high indoor and outdoor air pollution and leads to deforestation.

Generally in a deregulated market, **wood prices can soar during the high season** causing important vulnerabilities in terms of energy consumption. Households that cannot afford wood burn waste for heating. In Hungary 26% do so, including burning furniture, plastics and textiles. Most of these households are in rural areas (Hoffer, et al, 2020).

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The Face of Urban Energy Poverty

Prefabricated buildings are abundant in former socialist countries in CEE and SEE

Multifamily prefabricated apartment blocks built between the 1960s and 1980s can be found across the CEE and SEE region. 18.1% of Bulgarian dwellings are made out of concrete panels, especially common in urban areas (Jeliazkova et al, 2020). In Romania over 70% percent of urban dwellings are multifamily apartment blocks, of which the largest share were built during the communist era (World Bank, 2015). In Hungary around 12% of dwellings are in prefabricated buildings.

In Bucharest, households connected to the district heating use electric boilers as a backup in order to secure their hot water needs throughout the year given the repeated breakdowns in the system. This is an expensive alternative, but the only one available. The situation of Bucharest is especially critical in the region, with losses of around 1400 tons of water/per hour in 2020 (Nicut, 2019), along with repeated heating and hot water supply service failures during high season (Sinea, 2020).

Prefabricated building raise special challenges in mitigating energy poverty There is a diversity of challenges related to prefabricated structures. There are high consumption inefficiencies and losses. In many countries, the dominant mode of heating in prefabricated housing is district heating which leaves consumers captive, with little or no choice for changing the heating system (Tirado Herrero and Ürge-Vorsatz, 2012). Consumers are eventually trapped in a self-reinforcing cluster of low incomes, high consumption, soaring prices, lack of investment, high politicization, and degrading energy systems with debts accumulating all along the energy chain. Under these circumstances, households are forced to employ various coping solutions.

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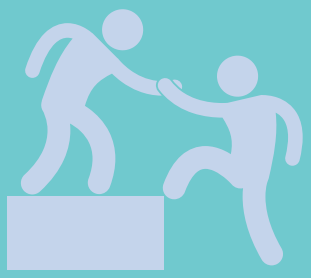
Energy Poverty and Roma

More Roma live in CEE than in other parts of Europe. Around 6 million Roma live in the EU. The Southern and Central Eastern European states have the most numerous communities. Romania hosts, in absolute numbers, the largest group of Roma citizens, consisting of anywhere between 1 and 2 million people (World Bank, 2015).

In former communist countries, Roma vulnerabilities have been exacerbated by the process of transition to democracy which involved their economic and social disempowerment and the limited political and administrative engagement (Teschner et al, 2020). Due to lower levels of education and social skills, the Roma were the first to lose their jobs after the fall of communism. In addition to this, the subsequent economic crises only deepened their previous situation of precarity.

Many Roma live in extreme energy poverty (Teschner, 2020) in low-efficiency and, at times, improvised and over-crowded dwellings. These homes are isolated in deep poverty pockets of otherwise thriving cities, or at the margins of rural communities, restricted by an impossibility of connecting to the grid, and to using or paying for public utilities (World Bank, 2015).

Roma face multiple forms of deprivation. In countries such as Bulgaria, Hungary, and Romania, Roma poverty rates are between 4 to 10 times higher than that of their non-Roma fellow citizens (World Bank, 2015). If Roma fall in extreme poverty, there are fewer opportunities available for social mobility (ERRC, 2002, World Bank, 2015).



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Around 100 000 people, most of them Roma, live in the Ferentari district of Bucharest. Between 30% to 70% of their households cannot keep their homes adequately warm during winter and 50% cannot afford to pay their utility bills (Teschner et al, 2020).

The landfill on the outskirts of Cluj-Napoca, Romania, hosts up to 2 000 people with little economic opportunity (Badita, Vincze, 2019). Some of them have been evicted from the city center in social houses, and others have erected unauthorized huts with no access to water, sewage and electricity. **Informal consumption is common practice** (Teschner et al, 2020).

In Hungary 55% of Roma face severe material deprivation with lower housing quality than for the rest of the population (Central Statistical Office, 2016). 81% of Roma heat their households using firewood (FRA and UNDP, 2012).

Access to energy or heating benefits requires possession of property and identification documents. Roma individuals feel disenfranchised, abandoned, distanced from the bureaucratic process they do not understand, and often lack legal documentation of identity and place of residence. The energy relationship with suppliers and authorities is one of conflict (Teschner et al, 2020).

Similar living conditions exist across the CEE and SEE region for Roma.

Acting on energy poverty is more important than ever at the time of COVID-19

Recent accounts point to the minimal levels of understanding of energy poverty in CEE and SEE at all levels of decision-making in the European Union and the insufficient reflection of these regional patterns in legislation. The previously existing energy poverty divide (Bouzarovski and Tirado Herrero 2017, Bouzarovski and Petrova 2015) persists and risks expansion as **the current coronavirus crisis affects the most vulnerable of us the hardest** (CSD, 2020). COVID 19 has settled the focus of the EU priorities on recovery, without cutting short all the previously assumed objectives in the context of the Green Deal and other sustainability goals.

At this point, the European Union finds itself in a moment of challenge and rather of opportunity including regarding energy poverty. **Challenging this potential point of rupture between European policy priorities and the realities on the ground in CEE on the topic of energy poverty is momentous and a necessity.**

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