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EUROPE NEEDS A POLITICAL STRATEGY TO END ENERGY POVERTY



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Executive summary

During this winter of 2020-2021, hundreds of millions of Europeans are constrained to stay at home because of lockdowns and curfews instituted to contain the propagation of COVID-19. For millions of them, this means staying in poorly heated houses, which causes both discomfort and a threat to their own health.

This policy paper gives an overview of the state of energy poverty in the European Union (EU) and the way this issue is currently addressed by Member States and by the EU. While it appears that energy poverty has generally been decreasing over the last years, in 2019 there were still over 30 million Europeans who claimed to be unable to heat their home adequately in the winter.

Member States have diverse approaches to energy poverty: some tend to focus on palliative measures such as social benefits to support vulnerable households, while others adopt more preventive and curative measures that aim to improve housing energy efficiency and hence reduce the need for energy consumption. Both types of measures are needed to tackle one of the main sources of the problem, *i.e.* poor energy performance of buildings, while supporting low-income households in affording high energy bills. The COVID-19 health and economic crisis exacerbates energy poverty throughout Europe, though still at a magnitude that remains unknown due to a lack of recent data.

The EU has set over the last decade a framework to fight energy poverty with legislation, best practice sharing and financing tools to support vulnerable households and improve

energy efficiency. The Commission's recent initiative, the Building Renovation Wave, aims to accelerate the deep renovation of buildings¹ to rapidly improve their energy performance and contribute to alleviating energy poverty. And with at least 37% of the €312bn of EU recovery money given to Member States being earmarked for climate action, Member States now have the financial means to lift millions of Europeans out of energy poverty.

In this context, Member States can and should now take much more ambitious actions against energy poverty. As seen in their National Energy and Climate Plans, and in the delays in the submission of National Long-Term Renovation Strategies, energy poverty remains addressed in a fragmented or insufficient manner by most national governments. This is why the EU should now develop a political strategy to give energy poverty more visibility and priority on the agenda to finally lift millions of Europeans out of this situation. Such an endeavour requires resolute action from Europe in its broadest sense, from the EU, to the national and the local levels.

The policy paper thus suggests that the EU and its Member States should embrace a political strategy that makes the objective of lifting all Europeans from energy poverty a key component of the European Green Deal. By focusing first on providing support to energy-poor European families, this paper argues that EU policy makers can adopt tangible decisions that show, in a very concrete manner, that the European Green Deal and the European Pillar of Social Rights are also endeavours to improve the European way of life, starting with the millions of European families who currently cannot properly heat their homes. This should constitute a first political step towards addressing other facets of energy poverty: being unable to cool one's home during heatwaves, and having no proper access to daily transport services.

1. AN OVERVIEW OF ENERGY POVERTY IN THE EU

At a time when the COVID-19 pandemic is plunging more families into poverty and forcing millions of Europeans to stay at home during winter, this chapter provides an overview of energy poverty in Europe, in order to better understand this phenomenon, both before and during the COVID-19 pandemic. We will first see how energy poverty is defined, measured and what its causes and consequences are, before identifying who suffers from energy poverty in Europe.

1.1 ■ What is energy poverty?

There is currently no commonly accepted definition of energy poverty in Europe. In an academic context, the concept of energy poverty first focuses on energy consumption at home. It may therefore be considered as **"the inability of households to secure socially- and materially-necessitated levels of energy services in the home"**².

1. Deep renovation achieves a reduction in a building's energy consumption of at least 60%.

2. Petrova S. 2017. *Encountering energy precarity: Geographies of fuel poverty among young adults in the UK*, *Transactions of the Institute of British Geographers*, Volume 43, Issue 1, August.

In the context of EU policies, since 2009, European legislation has laid the groundwork to define energy poverty. With the Electricity and Gas directives, Member States had to define in their national law what a “vulnerable customer” is, which can refer to energy poverty. In 2020, as the European Commission presented its Building Renovation Wave, it issued further guidance on energy poverty insisting on the need for Member States to develop a publicly available definition of energy poverty³. In this context, the European Commission presents energy poverty as “a situation in which households are unable to access essential energy services”⁴, thus using the terms enshrined in the European Pillar of Social Rights notably aimed at ensuring that “everyone has the right to access essential services of good quality, including water, sanitation, energy, transport”⁵.

If energy poverty is linked to the more general problem of poverty, it is not solely caused by monetary deprivation. It depends heavily on housing conditions, especially the energy performance of buildings and heating systems, and therefore on the ability to properly heat or cool one’s home (part 1.2). Thus, data show that **a cold home contributes to excess mortality. Although this excess mortality occurs in winter, it depends on housing conditions more than on climate.** A cold house can also have serious health consequences, such as respiratory diseases, heart attacks, poisoning in dwellings with inadequate heating and ventilation equipment, but also psychological impacts with a deterioration of well-being and growing social isolation⁶. **The health and social dimensions of energy poverty show that the issue cannot be viewed solely from an energy perspective but requires crosscutting solutions** with social, environmental and economic impacts.

■ Indicators used to measure energy poverty

Consequently, measuring energy poverty requires a combined approach. The European Energy Poverty Observatory aims to measure, monitor and share knowledge on energy poverty, and therefore lists 28 indicators⁷ to assess the number of Europeans suffering from energy poverty.

Four primary indicators are used to determine whether a household is in a situation of energy poverty. While two indicators are based on household self-declarations regarding their access to energy services, the other two assess household energy spending. **Combining these indicators is particularly important to avoid overestimating or underestimating the extent of the problem.** The following four indicators measure the share of households:

1. Having difficulty to afford to keep their homes adequately warm. This first indicator underlines the scale of this phenomenon: in 2019, over **30 million Europeans claimed to**

3. European Commission, 2020. “EU guidance on energy poverty, accompanying the document Communication Recommendation on energy poverty”, SWD C(2020) 9600, 14 October.

4. European Commission, 2020. “Commission recommendation (EU) 2020/1563 on energy poverty”, 14 October.

5. European Institutions, 2017. “European Pillar of Social Rights”, Booklet.

6. WHO Housing and Health Guidelines. Geneva: World Health Organization; 2018. 4. Low indoor temperatures and insulation.

Source: Carrere, J., Peralta, A., Oliveras, L., López, M. J., Mari-Dell’Olmo, M., Benach, J., & Novoa, A. M. 2020. “Energy poverty, its intensity and health in vulnerable populations in a Southern European city”. *Gaceta Sanitaria*.

7. The full list of European Energy Poverty Observatory indicators and data.

be unable to afford to keep their homes adequately warm⁸. This is comparable to the entire populations of Czechia, Hungary and Austria combined.

2. Being unable to pay utility bills (heating, electricity, gas, water, etc.) on time, *i.e.* “arrears”, which is the case for 6.2% of Europeans⁹.
3. Having a high share of energy expenditure in income as 15.5% of Europeans households do¹⁰. These families are likely to live in a dwelling with poor thermal and energy efficiency, requiring more heating to reach a comfortable indoor temperature. High-income households with proportionately high energy expenditure are likely to be seen as energy poor if using *only* this indicator, hence the need for a combined approach with the two indicators mentioned above.
4. Conversely, having abnormally low absolute energy expenditure. 15.4% of European households are concerned¹¹. This indicator attempts to capture the number of low-income households who restrict their energy consumption below what is necessary due to their inability to pay their energy bills. However, if used alone, it also encompasses families who may consume little due to energy efficient housing, hence the need for a combined approach with the two first indicators mentioned above.

The European Energy Poverty Observatory furthermore presents 24 secondary indicators that contribute to studying energy poverty, such as energy prices, the number of disconnections and the quality of housing.

■ Other dimensions of energy poverty are underestimated: cooling and transport

The current general understanding of energy poverty tends to focus on humans suffering from the cold while being at home.

Energy poverty however also exists in the summer, with families unable to keep home adequately cool. This ‘summer energy poverty’ is already a matter of life and death, as recalled by the 2003 heatwave in Europe that led to more than 30,000 deaths¹². Climate change increases the frequency, intensity and length of heatwaves, thus increasing the demand for cooling, including in milder climates. Research also shows that social and economic factors play a major role in this overheating phenomenon: the risk of exposure, *e.g.*, if a household lives in a poorly insulated home located in an “urban heat island”¹³, the capacity of individuals to respond to this excess heat, as well as their sensitivity to overheating¹⁴. Vulnerable household members (*i.e.* young children, older people and chronically ill people) are parti-

8. This number is calculated based on recently published 2019 Eurostat survey data finding that 6.9% of the EU population said they could not afford to heat their home sufficiently in 2019.

9. Eurostat, SILC, [ilc_mdcs07] for EU27 in 2019 (estimated).

10. Eurostat, 2015, based on the Household Budget Surveys.

11. Eurostat, 2015, based on the Household Budget Surveys.

12. De Bono, A. *et al.* 2004. “Impacts of Summer 2003 Heat Wave in Europe”, United Nations Environment Programme, *Environment Alert Bulletin*.

13. An urban heat island is a phenomenon that occurs in urban areas due to the density of buildings and surfaces that absorb the heat leading to higher temperatures than in surrounding areas.

14. Thomson, H., Simcock, N., Bouzarovski, S. and Petrova, S., 2019. “Energy poverty and indoor cooling: An overlooked issue in Europe”. *Energy and Buildings*, Volume 196, pp. 21-29, SSN 0378-7788.

cularly at risk¹⁵. Summer energy poverty is thus increasingly threatening to human lives as Europe's ageing population is more at risk of suffering from heat¹⁶.

Furthermore, **numerous European households are struggling to meet their mobility needs**. The general concept of "transport poverty" can cover difficulties such as the inability to afford transport, poor access to and lack of motorised transport modes and infrastructure, and hence goes beyond transport energy poverty¹⁷.

Although having distinct causes and consequences, these different aspects of energy poverty are intertwined. In some countries, the low quality of housing leads to thermal discomfort in both winter and summer, and high energy expenditures throughout the year. Another study highlights that many people might give priority to transport expenses (to go to work for example) and reduce other spending first, including domestic energy use.¹⁸

The rising consequences of climate change and the implementation of policies to mitigate it highlight the need to address all dimensions of energy poverty.

1.2 ■ Who suffers from energy poverty in Europe?

■ The main causes of energy poverty, further worsened with the COVID-19 crisis

Energy poverty is in general caused by three main factors: the poor energy performance of dwellings, high energy prices and low household income¹⁹.

■ The poor energy performance of buildings

The European housing stock is in a poor thermal condition. Half of the EU building stock was built before 1970 and has a **low energy performance**²⁰. Countries with milder winters (e.g. Portugal and Malta) where buildings are not designed for cold winters and therefore have low energy efficiency (e.g. poor insulation) have a higher excess winter mortality than countries with energy efficient housing and cold winters²¹. Their inhabitants often experience discomfort at home in times of extreme temperatures, including summer.

15. Madrigano, J.; Ito, K.; Johnson, S.; Kinney, P.L.; Matte, T. 2015. "A Case-Only Study of Vulnerability to Heat Wave-Related Mortality in New York City (2000–2011)". *Environ Health Perspect.* 123, 672–678.

16. IEA, 2018. "The Future of Cooling".

17. Various terminologies used in literature are presented by Lucas, K. et al. 2016. "Transport poverty and its adverse social consequences". In *Proceedings of the institution of civil engineers-transport*, Vol. 169, No. 6, pp. 353–365. Thomas Telford (ICE Publishing).

18. Mattioli, G., Lucas, K., & Marsden, G. 2017. "Transport poverty and fuel poverty in the UK: From analogy to comparison". *Transport Policy*, 59, 93–105.

19. Bouzarovski, S., & Petrova, S. 2015. "A global perspective on domestic energy deprivation: Overcoming the energy poverty–fuel poverty binary". *Energy Research & Social Science*, 10, 31–40.

20. Anagnostopoulos, F. and De Groot, M. 2016. "Energy Performance of the Housing Stock" in Csiba, K. (ed.), *Energy Poverty Handbook*. The Greens/EFA group of the European Parliament.

21. Table 1 from Tom Fowler, Rosamund J. Southgate, Thomas Waite, Ruth Harrell, Sari Kovats, Angie Bone, Yvonne Doyle, Virginia Murray. 2015. "Excess Winter Deaths in Europe: a multi-country descriptive analysis", *European Journal of Public Health*, Vol. 25, 2, April, pp. 339–345.

Buildings account for 40% of energy consumption and 36% of greenhouse gas emissions in the EU²². According to the European Building Performance Institute, 97% of buildings²³ need to be renovated to reach the highest energy efficiency standards that are required for nearly zero-emission buildings. Meanwhile, energy renovation rates are still around 1% per year, with only 0.2% of the building stock being deeply renovated (i.e. renovations that reduce the energy consumption of the building by at least 60%)²⁴.

■ Low income: link between energy poverty and income poverty

Energy-poor households are very often low-income households. They have monetary constraints to afford energy bills on a daily basis, and to invest in long-term improvements, for instance in energy efficiency measures and more performing heating equipment. They often also live in energy-inefficient housing that is more affordable but implies higher energy expenditure. However, energy poverty and income poverty do not fully overlap (figure 2 on the four indicators by income decile). For instance, a low-income household can live in a well-insulated building and hence have low energy expenditure. This shows that low-income does not necessarily lead to energy poverty.

■ Rising energy prices

Finally, high energy prices for the final consumer can contribute to energy poverty. For instance, inflation-adjusted electricity prices for EU households increased by 17% between 2008 and 2020, including as a result of national politicians' choice to increase taxes on electricity²⁵. Such energy price increases can intensify energy poverty, but energy prices play a far smaller role than housing efficiency and household revenue.

FIGURE 1 ■ Illustration of the main causes of energy poverty



22. European Commission, DG ENER data, accessed on 12.12.2020.

23. BPIE, 2017. 97% of buildings in the EU need to be upgraded, Publication.

24. European Commission, 2019. Comprehensive study of building energy renovation activities and the uptake of nearly zero-energy buildings in the EU, November.

25. Eurostat, 2020. "Electricity price statistics", accessed on 19.01.2021.

■ The compounding effect of the COVID-19 crisis

Measures undertaken by governments to curb the COVID-19 pandemic have had a massive impact on the European economy. Despite the short-time work schemes in place in EU countries, company failures have led to permanent job losses, causing an increase in unemployment in the EU²⁶. **The pandemic also threatens to plunge more households into poverty.** Precarious workers, who are more and more numerous since 2008²⁷, are particularly at risk. Furthermore, the pandemic has led to a sharp drop in employment and hours worked and it is affecting workers' income, job security and the employment prospects of young people entering the labour market²⁸.

Meanwhile, lockdown measures force people to stay at home, thus leading to more heating and electricity use and hence to higher energy bills, especially in the winter²⁹. This can represent a growing burden for many Europeans, in particular for families already struggling to pay their bills, restricting their energy use or living in poorly insulated housing.

According to the European Foundation for the Improvement of Living and Working Conditions, in July, 34% of survey respondents in Europe reported that their financial situation was worse than before the pandemic and 44% indicated that their household cannot make ends meet.³⁰ With decreasing income and rising utility bills, more and more Europeans are devoting an increasingly large part of their budget to fixed costs. An alarming figure is the growing number of households receiving food aid, for example in France, food distributions jumped by around 30% between September 2019 and September 2020³¹. **This impoverishment affects new publics: students, temporary workers, but also self-employed entrepreneurs and artisans, potentially increasing the number and diversity of people who can suffer from energy poverty³².**

■ Micro-level: Data on types of households that are found to be most affected

Although energy poverty has many faces, it mainly affects low-income Europeans³³, as shown in figure 2.

26. Source: Eurostat, 2020, unemployment data, October.

27. Weber, T. 2020 "Economic downturns expose the vulnerability of a growing number of precarious workers", EUROFOUND, 21 April.

28. International Labour Organization, 2020. "Youth & COVID-19: Impacts on jobs, education, rights and mental well-being", Survey report 2020.

29. Although the price of electricity and gas declined during the epidemic (due to low energy demand and collapsing oil prices), this reduction did not benefit households, as it only concerns the energy component of gas and electricity tariffs, and therefore applies to a lesser part of the final bill. French DSO ENEDIS observed a 4% increase in household electricity consumption over spring 2020 –ONPE, *Tableau de bord de la précarité énergétique*, 2020.

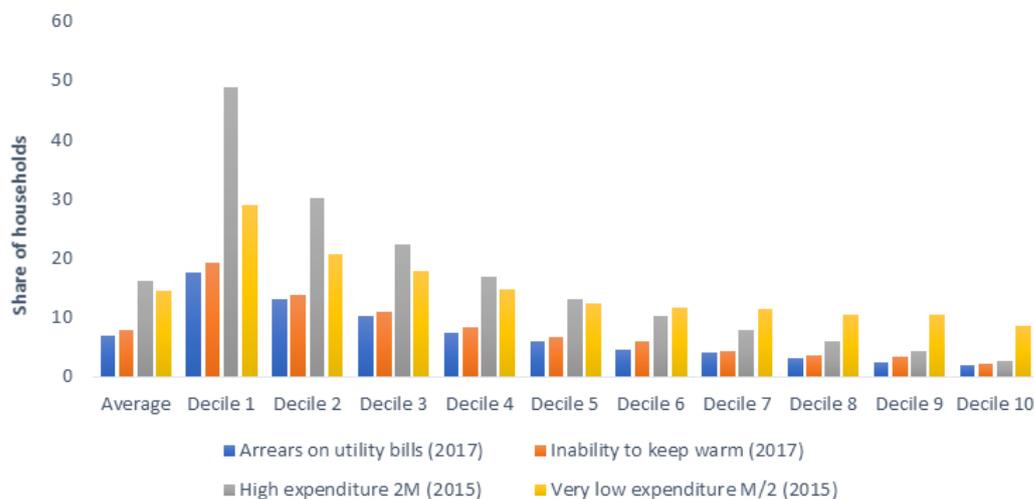
30. Eurofound, 2020. "Living, working and COVID-19", COVID-19 series, Publications Office of the European Union, Luxembourg.

31. Rey-Lefebvre *et al.* 2020. « Covid-19 : la crise sanitaire a fait basculer un million de Françaises et de Français dans la pauvreté », *Le Monde*, 6 October.

32. ENGAGER, 2020. *Call for Action* on European Energy Poverty, for more data on the immediate impacts of COVID-19 on energy poor households in Europe, May.

33. Here low-income households refer to the 1st income quintile of the population.

FIGURE 2 ■ Share of households in energy poverty in EU28, according to income decile and the primary indicators of energy poverty



Source: *Third pan-EU energy poverty report of the EU Energy Poverty Observatory*³⁴, based on EU-SILC and HBS

Low-income households at risk of poverty³⁵ are diverse: low-paid workers, benefit recipients, people with longstanding limitations due to health problems, poor pensioners, young adults.

Women are generally more likely to be affected by energy poverty, although current data do not allow us to quantify to which extent³⁶. As they have a longer life expectancy and smaller pensions than men, older women have a particularly higher risk of suffering from energy poverty³⁷. Single-parent families are particularly exposed to the risk of poverty in the EU and they are mainly headed by single mothers (11% of all adults with dependent children were single women and 3% were single men in 2019)³⁸. Research also points to different experiences of energy poverty by gender with women having a disproportionate role in dealing with the situation, in particular in the way they experience or react to energy deprivation (e.g. more efforts to save energy, emotional strain protecting children, feeling of shame)³⁹. It goes along more general energy inequalities observed between genders such as different energy practices⁴⁰.

³⁴. Bouzarovski S, Thomson H, Cornelis M, Varo A and Guyet R, 2020. *Towards an inclusive energy transition in the European Union: Confronting energy poverty amidst a global crisis*, Publications Office of the European Union, Luxembourg, ISBN 978-92-76-19635-8, EU Energy Poverty Observatory.

³⁵. The risk of poverty and social exclusion is not strictly dependent on a household's level of income, as it may also reflect joblessness, low work intensity, working status, or a range of other socio-economic issues. Eurostat, 2020. "Living conditions in Europe – poverty and social exclusion", Statistics explained, October.

³⁶. Indicators developed at EU level to measure energy poverty cannot be disaggregated by gender.

³⁷. Eurostat, 2020. "Gender pay gap statistics", accessed on 12.01.2021.

Eurostat, 2020. "Closing the gender pension gap?", accessed on 12.01.2021.

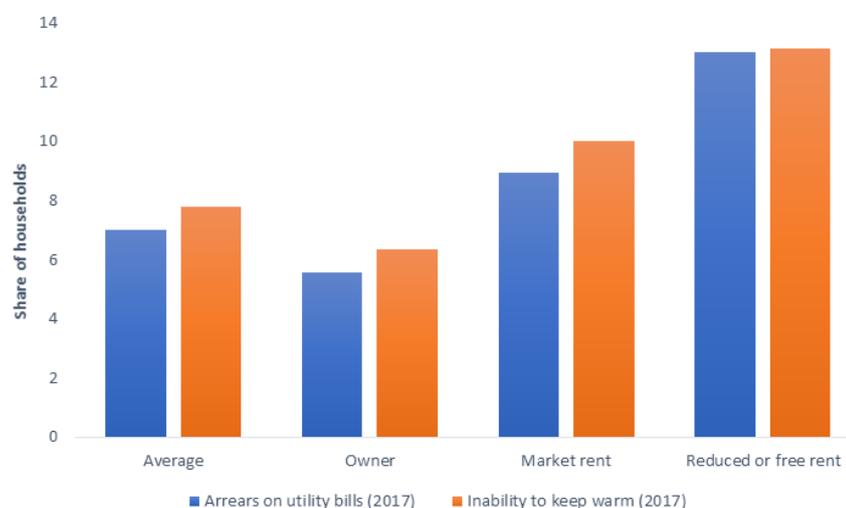
³⁸. Nieuwenhuis, R., 2020. *The situation of single parents in the EU*, European Parliament.

³⁹. Petrova, S., & Simcock, N. 2019. "Gender and energy: domestic inequities reconsidered". *Social & Cultural Geography*, 1-19.

⁴⁰. Standal K. et al. 2018. *D 4.3 Synthesis Report on the case study From Consumer to Prosumer*, ENABLE.EU.

Households living in free or reduced-rent housing, which includes social housing and housing for which the effective rent is set by law, are more affected by energy insecurity (figure 3). Families who rent private accommodation are also affected: **over a fifth of tenants in the EU declare having difficulty heating their home in winter and paying their bills**⁴¹. Tenants can also struggle to implement energy efficiency measures as their owner might not be willing to⁴². Families who own their homes are on average less affected by energy poverty in the EU, however this hides significant differences between Member States as countries have different ownership situations. For instance, Romania and Hungary have over 90% of dwellings that are occupied by owners so energy-poor households are mainly owners.⁴³

FIGURE 3 ■ Share of households in energy poverty in the EU28, according to the primary indicator of energy poverty disaggregated by tenure group



Source: *Third pan-EU energy poverty report of the EU Energy Poverty Observatory*⁴⁴, based on EU-SILC

■ Macro-level: Data by country

Counter-intuitively, while winters are colder in Northern Europe, it is in Southern Europe that energy poverty is more severe. The map of Europeans declaring that they cannot maintain an adequate temperature in their homes (figure 4, see also annex for data by Member State), one of the main indicators to measure energy poverty, testifies to this asymmetry, with a few exceptions (e.g. Lithuania). This has led some researchers to speak of a geographical and social “energy fracture” running through the EU, which results in a higher proportion of households in the least developed Member States being unable to meet their basic energy

⁴¹. This figure includes reduced and full market rates.

⁴². For instance ENABLE.EU research on heating and energy poverty: Csutora M. *et al.* 2018. *Synthesis report on the Heating & cooling case study*, ENABLE.EU.

⁴³. EU-SILC survey, ilc_lvho02, 2019.

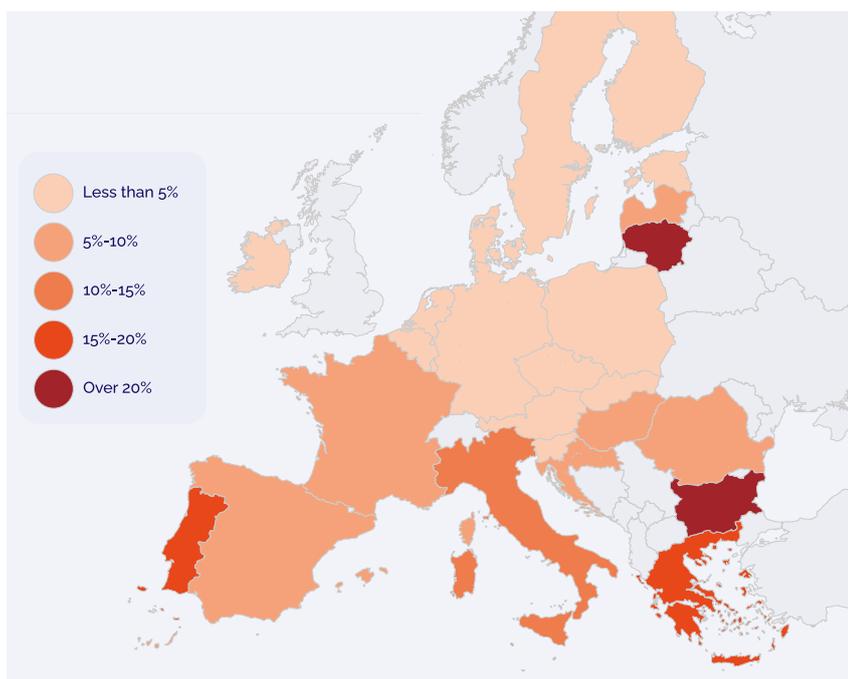
⁴⁴. Bouzarovski S, Thomson H, Cornelis M, Varo A and Guyet R, 2020. *Towards an inclusive energy transition in the European Union: Confronting energy poverty amidst a global crisis*, Publications Office of the European Union, Luxembourg, 2020, ISBN 978-92-76-19635-8, EU Energy Poverty Observatory.

needs⁴⁵. Bulgaria, Lithuania, Greece, Portugal and Cyprus are the countries with the highest share of the population declaring they have difficulties maintaining an adequate temperature in their home. This is due to both high electricity / gas prices and an above average risk of poverty, as it is the case in Portugal, Greece, Italy, Bulgaria and Latvia. However, there are countries where poverty rates and electricity prices are below average, such as Cyprus, Slovenia and Hungary, countries particularly affected by substandard housing. In addition, the absence of central heating and inefficient heating systems can lead to higher energy expenditure and cause difficulties for families to keep their home adequately warm in winter. **This underlines the key role that housing plays in energy poverty, which cannot be reduced to a form of monetary poverty.**

Yet, even in North-western Europe, energy poverty is a reality: 3-4 million people in France and about 2 million Germans are unable to keep their home adequately warm in the winter according to Eurostat data⁴⁶.

While the number of EU households who were unable to keep their home adequately warm decreased since 2010 (from 9.5% in 2010 to 6.9% in 2019), with a particularly striking reduction in Bulgaria (-54.74 %), **current estimates on EU energy poverty focus too narrowly on winter conditions, giving a partial view of who can be considered as energy-poor.**

FIGURE 4 ■ Share of population not able to keep their home adequately warm



⁴⁵. Bouzarovski, S. and Tirado Herrero, S. 2019. "Energy poverty in Central and Eastern Europe: Understanding the European Union's core-periphery divide" in *Post-Socialist Urban Infrastructures*, London: Routledge.

⁴⁶. Rough estimates based on 2018-2019 Eurostat data. The French Energy Poverty Observatory (ONPE) considers that "a person who experiences particular difficulties at home to have necessary energy supply to satisfy his/her basic needs because of the inadequate resources or housing conditions is in a situation of energy poverty". It also uses a "perceived cold" indicator showing that 14% of households –i.e. over 9 million people– were cold for at least 24 hours in their dwelling last winter (box 1).

Source: Jacques Delors Institute, based on Eurostat, SILC [ilc_mdcs01] for EU27, 2019 data.

Although data on cooling issues in Europe are limited⁴⁷, the European Domestic Energy Poverty Index⁴⁸ shows that most **Member States have equivalent or higher shares of households that struggle to keep their house sufficiently cool in summer rather than warm in the winter.** Those households are concentrated in Southern, South-eastern and Baltic regions—where the GDP per capita often falls below the EU average. In 2012, half of the population in Bulgaria declared their dwelling was not comfortably cool in summer, followed by around 35% in Portugal, Malta and Greece. On the other hand, less than 10% of the population was concerned in the UK, Ireland and Sweden⁴⁹.

The European Energy Poverty Index also brings together data related to the share of transport energy expenditures of low-income households, and access to and affordability of public transport⁵⁰. While limited, this data still suggests **that differences in transport-related difficulties are significant throughout the EU depending on policies led in each country.** For example, Finnish and Irish policies encouraged the construction of individual houses far from urban areas and offer limited access to public transport. For most low-income households in Hungary and Bulgaria, public transport is too expensive for regular use. On the other hand, in Spain, Luxembourg and Cyprus, the price and access to public transport make it an accessible option for the majority of households⁵¹. A study conducted in France identified that 21% of households could be considered as energy poor when it comes to transport (as compared to 18% for domestic poverty in this study) while governmental data provides an estimate of 10.2% of households based on the share of income they devote to energy to commute⁵². The French Yellow Vests protesting rising fuel prices also shows that **energy expenditure for transport can also be an important burden for vulnerable households.**

Even if the population of some Member States suffer from energy poverty to a greater extent that citizens in others, no Member States are spared by this phenomenon. In addition, the COVID-19 pandemic, which affects all EU countries, threatens to increase the share of energy poor Europeans by increasing their financial difficulties and forcing them to stay in unhealthy homes.

47. The last pan-European survey collecting air conditioning data is the EU-SILC 2012. Source: [ilc_hcmp03].

48. This indicator is computed as a geometric mean of the metrics assessing causes and symptoms of domestic energy poverty including the share of energy expenditures out of total expenditures, the share of the population unable to keep their homes warm in winter and/or cool in summer as well as the share of the population living in dwellings with leaking roofs, damp walls and rot in window frames. <https://www.openexp.eu/european-energy-poverty-index-eeipi>.

49. Eurostat: latest data from 2012.

50. Openexp, 2019. *European Energy Poverty Index: Assessing Member States' progress in alleviating the domestic and transport energy poverty nexus*.

51. Saheb, Y. et al. 2019. "European Energy Poverty Index (EEPI)", *OpenExp report*, January.

52. Berry, A. 2018. "Measuring energy poverty: uncovering the multiple dimensions of energy poverty", Working paper. Data based on the national strategy for the ecological transition towards sustainable development 2015-2020.

2 ■ WHAT MEMBER STATES AND THE EU ARE DOING TO TACKLE ENERGY POVERTY

In the energy transition, policy-makers have a comprehensive set of policy tools to move from a system based on the inefficient use of fossil fuels towards the development of a system based on the efficient use of renewable energy sources. Such transition comes at a cost that depends on the approach favoured in public policy: policy-makers can decide to increase taxes on fuel or to invest in priority in building renovation and public transport for instance. Yet, as the Yellow Vests in France and the 2013 protests in Bulgaria (box 2) have illustrated, policy-makers have to bear in mind that a minor increase in the price of energy can severely impact the daily lives of millions of households already struggling financially. This raises the need for a socially-fair transition that is based on measures improving the living conditions of the most vulnerable households.

2.1 ■ EU Member States have different approaches to energy poverty

Despite all Member States being affected to a different extent by the phenomenon, energy poverty is still a blurry concept in many of them with no clear definition and hence often a lack of concrete measures and resources to address the issue. National approaches to energy poverty also vary depending on their political culture.

■ Social vs energy; palliative vs. preventive approaches to energy poverty

There is a divide between Member States that consider energy poverty mostly as a social issue and those that see it as being also an energy policy concern. Several Northern European countries such as Denmark, Estonia, Finland, Germany, Luxembourg, the Netherlands, Slovenia and Sweden tend to see energy poverty as part of poverty more generally and thus a social challenge that fully remains in the scope of national policy. On the other hand, some Member States have an approach that is more balanced, framing the issue as both an energy and social matter. Spain, for instance, considers energy poverty as a consequence of an insufficient income level that can be aggravated by having energy-inefficient housing⁵³.

These different approaches to energy poverty call for different solutions. Countries with a social approach will mainly rely on **palliative measures to support low-income families with their energy bills, for instance through social tariffs**. Countries with an energy approach will prefer **preventive measures** considering that the main problem is the poor energy performance of buildings and appliances and will thus invest in **energy efficiency improvements**. Some countries such as Spain, Belgium and France have adopted **a mix of both approaches** considering that energy poverty is an energy performance issue that mainly concerns low-income households. They therefore rely on **energy efficiency measures targeting vulnerable consumers first**.

⁵³. Spanish National Strategy against Energy Poverty 2019 – 2024, 2019.

■ National examples

While this paper does not provide an analysis of all national approaches to energy poverty, this section shows examples of four Member States with different perspectives. The first box shows the cases of Spain and France where energy poverty is acknowledged by the government and society, e.g. with an observatory and a structured network of stakeholders acting to help affected households in France, and a five-year roadmap in Spain. The second shows the case of Bulgaria where energy poverty is significant, especially due to the poor energy performance of the building stock. We also show Germany's approach that considers energy poverty within the scope of social policy only.

BOX 1 ■ Comprehensive approaches to energy poverty, the cases of France and Spain

Several Member States developed comprehensive strategies and toolboxes to better understand and address energy poverty, for instance by defining it and measuring its extent, designing an action roadmap, financing and assistance schemes and sharing best practices.

■ Spain

7.5% of the Spanish population reported being unable to keep their home adequately warm in 2019. National analyses based on the four indicators used by the European Energy Poverty Observatory estimated in 2017 that 3.5 to 8.1 million citizens might be in a situation of energy poverty.

Spain appears to be particularly active on this issue with the implementation of a National strategy against energy poverty for 2019-2024 that aims to halve the number of energy-poor households by 2025 with a minimal target of at least 25% on all indicators used to measure energy poverty.

The strategy is based on a consultative process with different stakeholders (incl. civil society, energy companies, academia and local authorities). Its design builds on an analysis of the different indicators, an overview of best practices from surrounding countries and on existing related measures in Spain (e.g. strategies against exclusion and for a just transition).

The strategy develops four areas of action with concrete measures:

1. Improve the knowledge of energy poverty (e.g. solid data, transparency, better understanding of consumer energy costs)
2. Improve the response to the current energy poverty situation (e.g. design of subsidies, consumer protection in extreme weather events)
3. Structural changes through renovation to reduce energy poverty (e.g. retrofits, focus on social housing, support to replace energy-inefficient appliances)
4. Develop methods to protect consumers and to raise social awareness (e.g. support for practitioners to identify energy-poor households, visibility campaigns, informative webpage)

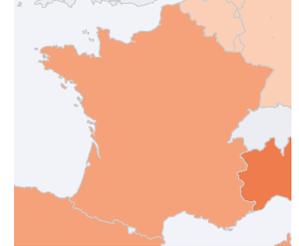
While the effectiveness of the plan cannot be assessed yet, it sets a complete framework to tackle several aspects of energy poverty.

Sources ■ Eurostat, 2020. *EU Energy Poverty Observatory, Member State Report – Spain, 2020*.
Gobierno de España, 2019. *"Estrategia Nacional contra la Pobreza Energética 2019-2024"*.



■ France

The French Energy Poverty Observatory (ONPE) uses a “perceived cold” indicator showing that 14% of households –i.e. over 9 million people– were cold for at least 24 hours in their dwelling last winter. Additionally, between 2019 and 2020 with the COVID-19 crisis, the share of French households declaring that they restrict their energy use to avoid higher bills grew from one-third to half of households.



While the box concerns France as a whole, this map is limited to Metropolitan France and does not represent French overseas territories

France has been actively tackling energy poverty for a decade. A network of energy poverty stakeholders called RAPPEL was founded in 2007 to create an exchange platform for professionals, to share information and tools to fight energy poverty and to inform authorities about the situation. Energy poverty was then defined in 2010 and led to the creation of the National Observatory (ONPE).

When it comes to palliative measures, France relied for a long time on social tariffs which had the drawback of funding only electricity and gas expenditure, leaving behind vulnerable households using heating oil and wood and thus targeting only 40% of energy poor households. Since 2016, the country has provided social support in the form of *Chèques énergie* (energy vouchers). This financial support is allocated to low-income households to either pay energy bills or contribute to funding renovation work. While the vouchers brought significant improvement to the scope of the scheme, criticism against this scheme showed many people do not use them and that the amounts are negligible to fund renovation works.

Habiter Mieux (Living Better) is a programme in France for low-income families, which has been in place since 2010 to finance renovation work to improve energy efficiency. Depending on the household’s incomes and dwelling energy performance, the programme provides financial support for low-income owners by funding up to half of renovation work costs and offering a premium for the energy savings. Access to the scheme for the targeted households is facilitated by its local management and identification level (e.g. through local organisations, utilities and authorities) and support from an advisor who helps with the energy diagnostic of the dwelling and identification of other available support schemes for the household. The programme is managed by the National Housing Agency (ANAH) on behalf of the State and can be supported by local funding.

An assessment by the French Court of Auditors highlighted that the programme managed to perform 81% of its 300,000 planned renovations over the 2010-2017 period with energy efficiency gains of about 40% in renovated dwellings (vs. an objective of 30%). The scheme benefitted above all very low-income households (over 70% of the cases). Nonetheless, some pitfalls still hinder the full potential of the programme: frequent reviews of the budget allocated to the programme and of the amounts that households can receive; low improvements in the energy efficiency and poor quality of renovation work in some dwellings. The investment programme for 2018-2022 aimed to devote €1.2bn to *Habiter mieux* in order to renovate about 7 million energy-inefficient dwellings by 2025. Latest developments are positive: in 2019, over 150,000 dwellings were renovated with ANAH support, an increase of 65% compared to 2018.

Starting in 2020, the French government modified the scheme to create a unique premium scheme called *MaPrimeRénov’*. It merged a tax credit available for all and premiums for low-income households. Allocation is based on planned energy performance improvements and households’ income to benefit mainly low-income households.

The French measures are regularly assessed and improved thanks to the thriving environment of civil society actors. At the same time, the ONPE highlights that in 2019 improvements in energy efficiency and heating systems were offset by growing energy prices. Energy poverty thus remains a pressing issue with slow rates of renovation.

Sources ■ Eurostat, 2020. *EU Energy Poverty Observatory, Member State Report – France* ■ ANAH ■ *Cour des comptes, 2018. Le programme « Habiter mieux » de l’Agence Nationale de l’Habitat (ANAH), Communication à la commission des finances du Sénat, February* ■ *Décret n° 2020-26 du 14 janvier 2020 relatif à la prime de transition énergétique* ■ Agence Nationale pour l’Information sur le Logement ■ ONPE, *Tableau de bord de la précarité énergétique – édition 2020, 2021.*

BOX 2 ■ Bulgaria, a high rate of energy poverty

Bulgaria experiences high energy poverty levels with numerous households restricting their heating use to pay lower bills and unable to invest in energy efficiency measures. 30% of them were unable to keep their home adequately warm in 2019, although this share has fallen dramatically from 70% of the population in 2005. On the other hand, 19% of Bulgarian households had arrears on their utility bills in 2005, a share that increased to 30% in 2018.



In addition to a housing stock that has a poor overall energy performance, energy costs are a significant expenditure in many Bulgarian households' budgets. Even if they remain low, electricity and district heating prices have been rising over the last years and incomes are still low compared to the EU average.

Energy affordability is thus a main concern in Bulgaria. A significant rise in energy prices in 2012 led to mass protests in February 2013 after the population experienced high energy bills throughout the winter. The protests ended with the government's resignation. Seeing the consequences of a rise in energy prices, decision-makers have been reluctant to make changes to a centralised and regulated energy system that maintains artificially low energy prices.

While an electricity market liberalisation process is ongoing throughout the EU, Bulgaria explains in its National Energy and Climate Plan (section 2.2) its intention to protect vulnerable households: "Before the process of full liberalisation of the electricity market commences, a mechanism for protection of vulnerable consumers of electricity will be implemented" including financial and non-financial measures. Financial assistance is also provided through income support for low-income households. Heating expenditure of vulnerable households is supported through financial allowances in winter and exceptional support if they carry extra costs (e.g. heating equipment repair).

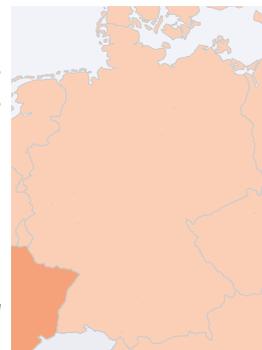
When it comes to renovation measures, a National Programme for Energy Efficiency of Multi-Family Residential Buildings launched in 2015 aims to improve the energy performance of residential buildings to at least class C so that households can benefit from energy cost reductions and better comfort at home. Eligible associations of owners can apply for financial and organisational support that covers 100% of renovation work costs. The programme renovated over 36,000 dwellings in 2018. Households could also benefit in 2005-2019 from the Residential Energy Efficiency Credit Line (REECL), a facility developed with the European Commission and the European Bank for Reconstruction and Development that provided loans and grants for energy efficiency projects (through credit lines for banks).

However, these programmes do not specifically address the most vulnerable consumers who already struggle in affording their energy bills and can thus carry hardly any costs for energy efficiency measures. With a significant share of the population suffering from energy poverty, existing measures remain insufficient to structurally address the problem.

Sources ■ Eurostat, 2020; *EU Energy Poverty Observatory, Member State Report – Bulgaria* ■ Hajdinjak, M., & Asenova, D. 2019. *Sustainable Energy Consumption and Energy Poverty: Challenges and Trends in Bulgaria*. In *Energy Demand Challenges in Europe* (pp. 115-126). Palgrave Pivot, Cham. ■ *Integrated Energy and Climate Plan of the Republic of Bulgaria 2021-2030* ■ Ministry of Regional Development and Public Works, 2019. "36,545 dwellings in a total of 511 multifamily residential buildings were renovated in 2018", accessed on 15.01.2021 (in Bulgarian) ■ Economidou, M. et al., 2019. *Accelerating energy renovation investments in buildings*, Joint Research Centre ■ <http://freecf.org>.

BOX 3 ■ Germany, energy poverty as a purely social issue

Germany has a rather low share of people suffering from cold at home with 2.5% of the population being unable to keep their home adequately warm in 2019. Still, this represents about 2 million people. Additionally, Germany had above EU average percentages of households with either a high share of income spent on energy expenditure (17.4% of households in 2015) or unusually low energy expenditure (17.4%). The cost of electricity in Germany is high and contributes to the risk of energy poverty among low-income households. 4.8 million disconnection threats occurred in 2019 with 290,000 households experiencing electricity cuts.



Nonetheless, the German Federal government does not recognise energy poverty as an issue per se. It considers the issue within the scope of poverty more generally and thus relies fully on a social approach to support low-income households. This approach differs at the regional and local level where some initiatives aim to alleviate energy poverty. For instance, the North Rhine-Westphalia (NRW) region has a project entitled "NRW combats energy poverty" that builds on the cooperation of the consumer advice centre (*Verbraucherzentrale*) and energy suppliers to advise vulnerable consumers and secure their energy supply.

Following an inquiry on energy poverty from members of the federal parliament in 2019 stating that there is an increasing number of electricity and gas disconnections in German households, the Federal Ministry for Economic Affairs and Energy replied that there is no valid definition of energy poverty and that Germany has minimum security benefits that help fight poverty in general and guarantee decent subsistence, including energy needs. While the government works to make energy affordable, it argues that individuals can also act by changing suppliers, adopting energy-saving behaviours and investing in energy efficiency.

Basic social benefits, *i.e.* social assistance and income support for job-seekers, are monthly sums calculated based on an evaluation of expenditure on standard needs, including among others an electricity share. Households are generally protected from disconnections, also through regional and local measures to support energy bills (*e.g.* Hannover) or to limit power supply (*e.g.* Cologne).

An expert study commissioned by the Ministry analysing interruptions of electricity supply supports that protection from disconnections is generally well ensured by welfare state instruments. It found that low-income households are mainly concerned by such cuts but not only as about half of disconnected households receive benefits from the minimum income schemes (*i.e.* social assistance and income support for job-seekers). The study hence argues that electricity cuts cannot only be seen as the result of income poverty or energy efficiency issues but need to be considered in connection with for instance poor planning competence and critical life events (*e.g.* health or family problems). A case-by-case examination is generally performed with the energy supplier and the social benefit provider when relevant to find a solution, *e.g.* an interest-free loan for the consumer to pay back arrears.

Advisory schemes, such as the *Stromspar-Check* (electricity saving check) project, are also developed to support low-income households with energy-saving advice and tools. Developed by the Caritas Association and the Association of Energy and Climate Protection Agencies in Germany, the scheme trains long-term job-seekers to advise households on their electricity use and on climate protection action. Since 2008, over 320,000 households have benefited from the programme with estimated savings per household of €100 to €250 per year.

Several energy efficiency programmes are implemented by the central government to renovate buildings (*e.g.* loans under the CO₂ Building Renovation Programme) and improve building heating conditions (*e.g.* grants under the Energy Efficiency Incentive Programme) but they do not target energy-poor households.

In 2015, the federal government considered the introduction of a climate component in housing subsidies for low-income households to facilitate access to energy efficient dwellings with higher rents but lower energy costs. With the implementation of a national CO₂ price in 2021 that will lead to higher heating costs, the government decided to introduce a climate component in housing benefits for low-income households to compensate for the growing energy price. Over 600,000 households should receive on average an additional €15 per month.

Sources ■ Eurostat, 2020; EU Energy Poverty Observatory, Member State Report – Germany. ■ Bundesministerium für Wirtschaft und Energie, 2019, Antwort der Bundesregierung auf die Kleine Anfrage [...] Ausmaß und Auswirkungen der Energiearmut, Bundestagsdrucksache 19/8879 ■ Stromspar-Check website; Economidou, M. et al., Accelerating energy renovation investments in buildings, Joint Research Centre, 2019 ■ Verbrauchszentrale NRW, Das Landesprojekt, NRW bekämpft Energiearmut, accessed on 18.01.2021 ■ Heindl, P. and Lösche, A. 2016 Analyse der Unterbrechungen der Stromversorgung nach §19 Abs. 2 StromGW. Gutachten im Auftrag des Bundesministeriums für Wirtschaft und Energie, ZEW ■ Stromspar-Check, "Bundesumweltministerin Svenja Schulze startet Stromspar-Check aktiv", Pressemitteilung, 2019, accessed on 08.01.2021 ■ German Federal Government, "Klimaschutzpaket. Mit Wohngeld entlasten", 2020, accessed on 08.01.2021.

■ The role of local initiatives

Concrete actions against energy poverty are often led at the local level with support of national and European funding. Numerous municipalities together with local NGOs, businesses, energy suppliers and network operators implement schemes to support vulnerable households, e.g. energy audits and advice, energy efficiency improvements and renovation support (cf. Box 3 for some examples of local initiatives in Germany and box 4).

One recurring challenge in addressing energy poverty is to clearly identify the households that suffer from energy poverty. **Local level action is particularly useful to leverage the existing local civil society actors who are already engaging with local citizens**, especially those who are the most likely to be at risk of energy poverty (e.g. soup kitchens, local Red Cross, association supporting single-parent families, youngsters or the elderly, etc.).

BOX 4 ■ Successful initiatives

The Papillon Project was launched in a local community in Flanders by a social worker who witnessed the situation of energy-poor families. In cooperation with the company Bosch, he developed a concept for appliance rental so that low-income families can use energy-efficient appliances for a low monthly fee compared to inefficient old appliances that lead to excessive bills. Bosch provides the appliances and assistance throughout their lifetime. The programme is now being scaled up.

Sources: Bouzarovski, S. and Thomson, H. 2019. "Transforming energy poverty policies in the European Union: Second annual report of the European Union Energy Poverty Observatory". Report, November.

Energy Advice Points in Barcelona: developed by the City Council of Barcelona and coordinated by the Spanish non-profit consultancy Ecoserveis and the social organisation ABD, this scheme provides advice on energy rights and energy efficiency to all inhabitants. It reaches around 20,000 vulnerable consumers each year through eleven Energy Advice Points located in all neighbourhoods of the city. Since the start of the public service in 2017, 100 agents, mainly long-term unemployed people, have been trained to identify energy-poor households and provide them with specific support to improve their situation (i.e. advice to reduce energy consumption and to access financial support). In some cases, agents visit the dwellings to provide low-cost equipment.

*Source ■ Information provided by Marta García from Ecoserveis 2021 ■
ABD-FABD-Ecoserveis, EU Energy Poverty Observatory, 2018. EU Energy Poverty Observatory Case Study: Energy Advice Points, Report.*

2.2 ■ What the EU does to fight energy poverty

In accordance with the subsidiarity principle, most public policies that tackle energy poverty are decided by Member States, regions and local entities. Yet, the Commission has been active to articulate various tools that support national and local actions to lift Europeans out of energy poverty: experience sharing, legislation, funds and enabling tools like the recent Building Renovation Wave.

■ Experience sharing on energy poverty to inform decision-makers throughout the EU

Launched in January 2018, the **EU Energy Poverty Observatory** is a Commission initiative designed to help Member States in their efforts to fight energy poverty by providing a platform for knowledge and best practices exchange. Its combination of metrics gives a useful

basis for data collection and measurement at EU level. Data, research findings and real-world experience gathered on the platform are used by the European Energy Poverty Observatory to provide best practices, training and guidance for policy-makers⁵⁴. Soon to be launched as a follow-up to the Observatory, the energy poverty advisory hub will work with municipalities and provide operational support to implement mitigation measures⁵⁵.

Meanwhile, **Interreg Europe supports local and regional governments** in sharing their public policy experience and solutions and through financial support for interregional projects. The Social Green project⁵⁶ for instance gathered mainly municipalities and energy agencies in six Member States to **identify local policy instruments** to green the social housing sector while tackling energy poverty. Their work shows how different regions can learn from one another to tackle similar challenges.

The Commission also plans to launch an **Affordable Housing Initiative** to provide technical support for social housing projects. It should involve the renovation of 100 lighthouse districts that will set an example for replication⁵⁷.

■ Legislative measures to encourage Member States to act

On the legislative side, the EU provided a first basis to shed light on the challenge of energy poverty in 2009 by **requiring all Member States to define “vulnerable customers”** in the national context, a concept “which may refer to energy poverty” and to take action, including “to address energy poverty where identified”⁵⁸. While all Member States did define and identify measures to support vulnerable customers, generally they did not develop a clearer framework for energy poverty.

Ten years later, the **Clean Energy for all Europeans Package**, with the Governance of the Energy Union Regulation and revisions of the Energy Performance of Buildings Directive and of the Energy Efficiency Directive (EED), has put further emphasis on the need to accelerate building renovation and to take targeted action to tackle energy poverty.

The objective of these EU regulatory measures to protect vulnerable consumers and to encourage energy efficiency investments is to provide a flexible yet efficient framework so that national, regional and local governments can adapt them to their conditions.

Under the Energy Union Governance Regulation, Member States have to submit **National Energy and Climate Plans** (NECPs) presenting how they will align with energy and climate objectives. NECPs **should include an assessment of energy poverty** and if the number of households in this situation is found to be significant, the Member State should present adequate measures to address the problem. However, the Commission’s assessment of the NECPs highlights that several Member States do not confront the issue sufficiently and that

⁵⁴. Sareen, S. and Thomson, H. (eds), 2019. “Moving beyond the state of the art in energy poverty measurement”, ENGAGER. Cf. EU Energy Poverty Observatory, *Guidance for policy-makers*, consulted on 18.12.2020.

⁵⁵. The European Commission (DG ENER) launched a *Call for tenders* in early 2020 for “Providing Technical Assistance to Municipalities Implementing Sustainable Solutions with the View to Alleviating Energy Poverty”.

⁵⁶. Interreg Europe, *Social Green project*; Cf. the integrated self-assessment report, accessed on 15.01.2021.

⁵⁷. European Commission, 2020. *Renovation Wave Communication*, 14 October.

⁵⁸. Article 3 of Directive 2009/72/EC concerning common rules for the internal market in electricity, 13 July 2009.

Member States mostly have a systematic approach to tackle energy poverty instead of a targeted action plan⁵⁹.

An analysis performed by the EU Energy Poverty Observatory rated the extent to which NECPs addressed energy poverty based on 13 criteria, such as whether energy poverty is recognised and defined by the Member State, and the type and number of measures that are presented to deal with the issue⁶⁰. The Belgian, Spanish, followed by the French and Lithuanian NECPs emerge as the most comprehensive in the way they approach energy poverty although there are still gaps to be addressed in their strategies. On the other hand, several countries do not recognise nor do they define energy poverty in their NECP and they present a limited number of measures implemented to deal with this issue. These countries are mainly those that have a purely social approach to energy poverty and that have a low number of households that might be suffering from energy poverty: e.g. Denmark, Estonia, Germany, the Netherlands and Sweden have less than 3% of their population being unable to keep their home adequately warm in 2019 and they do not recognise energy poverty as a distinct phenomenon in their NECP.

Additionally, as part of the Energy Performance of Buildings Directive requirements, Member States were supposed to submit **national long-term renovation strategies** by March 2020 and half failed to deliver them –still by the end of 2020⁶¹. These strategies are also key to addressing energy poverty at the national level.

■ Financing action against energy poverty

The EU also provides financial resources to alleviate energy poverty through various programmes, e.g. the Intelligent Energy Europe (IEE; closed since 2013) and European Structural and Investment Funds (ESIF). Through Horizon 2020 for instance, the EU has funded several **research programmes** testing innovative solutions to fight energy poverty⁶².

Larger projects have also been supported by the European Investment Bank (EIB) and its different activities. The **European Local Energy Assistance (ELENA) facility** developed by the EIB and the European Commission has been running since 2009 with €180 million awarded to energy efficiency projects in buildings and transport mobilising a total of €6 billion in investments⁶³. The facility provides expert assistance in setting local projects, encourages larger aggregated projects to reduce transaction costs and aims to build experience for future projects. The EIB has also created a financial instrument –the **Smart Finance for Smart Buildings initiative**– that uses EU grants as guarantees to encourage private investments in the renovation of residential buildings and help 3.2 million families out of energy

59. European Commission, 2020. *An EU-wide assessment of National Energy and Climate Plans*, 17 September.

60. This short overview is based on an extensive analysis of how energy poverty is addressed in NECPs that can be found in Bouzarovski S., Thomson H., Cornelis M., Varo A. and Guyet R., 2020. "Towards an inclusive energy transition in the European Union: Confronting energy poverty amidst a global crisis", EU Energy Poverty Observatory.

61. European Commission, 2020. "Energy performance of buildings: Commission calls on THIRTEEN Member States and THE UNITED KINGDOM to submit their national long-term renovation strategies", 3 December.

Assessment by BPIE of submitted long-term renovation strategies, September 2020, accessed on 18.12.2020.

62. For example the H2020 STEP and ASSIST projects.

63. European Investment Bank, 2019. *Solutions for energy efficiency – 10 years of European Local Energy Assistance (ELENA)*. EIB's website. In 2019, there were 44 energy efficiency projects, 5 sustainable residential projects and 6 transport projects ongoing.

poverty⁶⁴. The Commission also plans to increase access to private financing for building renovation with the upcoming Renewed Sustainable Finance Strategy⁶⁵.

With the COVID-19 crisis, the EU adopted a historic recovery package: the so-called Next Generation EU (NGEU) recovery plan that will provide a sizable stimulus allowing the EU for the first time to act as a macro-economic stabilizer. €312.5bn of the €750bn NGEU budget will be channelled to Member States via a **Recovery and Resilience Facility** (RRF) in the form of grants. Each Member State will have to submit a national Recovery and Resilience Plan that should be approved by the European Commission before RRF money is granted to the Member State. In its Annual Sustainable Growth Strategy for 2021, the Commission launched the European flagship **'Renovate'** that presents building renovation as an investment priority to be funded under the RRF⁶⁶.

■ Enabling tools to address energy poverty politically: the Renovation Wave

The **European Pillar of Social Rights** proclaimed by EU institutions in 2017 is a set of rights to ensure equal opportunities, fair working conditions and social protection to citizens. Among its 20 key principles, the Pillar should provide everyone with access to essential services of good quality, including energy and transport⁶⁷. An action plan to implement the Pillar of Social Rights is expected in the first months of 2021 and should be an opportunity to include stronger action against energy poverty.

The **Renovation Wave** presented by the von der Leyen Commission should be a major step forward, setting a framework to accelerate the deep retrofit of energy-inefficient buildings in Europe with the aim to renovate 35 million building units by 2030. Published in October 2020, the strategy plans to at least double renovation rates and improve renovation quality to reach higher energy efficiency standards. It should break down barriers to renovation, such as the difficulty to mobilise funding and organise the work, and the reluctance to carry out a long process. The communication identifies three priorities for building renovation, namely worst-performing buildings to eradicate energy poverty, public buildings (e.g. schools that can also be relevant investment priorities in the recovery period⁶⁸) and the decarbonisation of heating and cooling systems.

Building on existing tools, the Renovation Wave puts forward a comprehensive strategy made of regulations, targeted funding and technical assistance tools to enable a transformation of the landscape of renovation. It also includes measures to make the construction ecosystem more sustainable, to create green jobs, improve training opportunities for workers and to address energy poverty.

The Commission published at the same time a **list of recommendations** to the attention of Member States to fight energy poverty. They should, among other measures, assess the distributional effects of the energy transition, use more public participation means to develop

64. Tankler, A. 2019. "Our clean energy projects", European Investment Bank, 14 November.

65. European Commission, 2020. "Renovation Wave Communication", 14 October.

66. European Commission, 2020. "Renovation Wave Communication", 14 October.

67. European Commission, *The European Pillar of Social Rights in 20 principles*, accessed on 07.01.2021.

68. Pellerin-Carlin, T., Eisl, A. and Magdalinski, E. 2020. "Overcoming COVID-19 crises by building a clean and resilient Europe". Policy Brief, April.

energy poverty policies, improve the coordination between different levels of administration and better identify and target low-income households⁶⁹.

Several organisations working on energy poverty⁷⁰, including the Climate Action Network, the ENGAGER COST Action Network and national organisations, analysed the measures implemented in six Central-Eastern Member States and are not convinced by the efficiency of the EU's approach to the fight against energy poverty. While willing to deal with this problem, the EU mainly provides guidelines for Member States rather than significant financial incentives to renovate or coercive measures for countries to take action. They conclude that with the responsibility to tackle energy poverty lying mainly with individual countries, the Renovation Wave might have limited positive impacts if no stronger measures are taken.

Numerous soft tools, policies and recommendations already exist at EU level to encourage Member States to take action against energy poverty. As seen with the insufficient coverage in NECPs and missing long-term renovation strategies, **current European provisions to fight energy poverty lack coercive force**. While Member States are all affected differently, concrete action throughout Europe to alleviate energy poverty would have a tremendous impact on the living conditions of millions of Europeans, improve public health and help Europe reach its new climate targets. On top of the current recommendations formulated by the Commission, the EU should thus show its commitment to lifting Europeans out of energy poverty, especially in times of COVID-19 crisis, by trying a different approach: putting the topic high on the political agenda and focusing on the *politics* side of the issue.

⁶⁹. European Commission, 2020. "EU guidance on energy poverty, accompanying the document Communication Recommendation on energy poverty", SWD C(2020) 9600, 14 October

⁷⁰. LIFE Unify, 2020. "Tackling energy poverty through National Energy and Climate Plans: Priority or empty promise?".

3 ■ RECOMMENDATIONS FOR A POLITICAL STRATEGY THAT CAN LIFT EUROPEANS OUT OF ENERGY POVERTY

A political strategy: Europe needs a strong narrative and a coalition on energy poverty

The main novelty brought by President von der Leyen to the EU is the presentation of a coherent and comprehensive political strategy under the name of 'European Green Deal'. In this section, we argue that **including the issue of energy poverty as a component of the Green Deal's political strategy and narrative would strengthen the political coalition that supports the Green Deal**, and could lead to the adoption of policies that **improve the life of millions of EU citizens**.⁷¹

The political success of the European Green Deal rests on a **political coalition** able to gather support from a majority of EU Commissioners, EU parliamentarians and Member States representatives at the Council of the EU.⁷² **Seriously addressing energy poverty would strengthen such a coalition in all three EU institutions:**

- Inside the Commission, addressing energy poverty would be a way for the EU to show that its EU Pillar of Social Rights leads to tangible decisions that concretely improve the lives of Europeans, and would be a way for the European Commission to politically follow through on the recommendations it published in October 2020 (*cf.* Part 2.2.).
- Inside the Parliament, addressing energy poverty would likely gather support from MEPs coming from countries where energy poverty is most severe (*e.g.* Greece, Bulgaria), as well as from MEPs who value social justice (including social-democrats) and family values (including Christian Democrats).
- Inside the Council of the EU, while some national governments may be reluctant to consider energy poverty as a policy priority for the EU (*e.g. cf.* Box on Germany), others (*e.g.* Bulgaria) can see in such EU action a way for the EU to play its role in helping EU nations to solve these problems.

Inside those three institutions, addressing energy poverty is an opportunity to widen the existing coalition that supports the European Green Deal by including non-energy policy makers, especially those dealing with social affairs⁷³, family, health and housing.

To cement such a political coalition, a narrative should be elaborated to show how lifting Europeans from energy poverty can and should become a key objective of the European Green Deal.

⁷¹. This section builds on the conceptual framework presented by Michael J. Graetz and Ian Shapiro in *The Wolf at the Door*, The Menace of Economic Insecurity and How to Fight It. They detail six building blocks of an effective distributive policy: (i) building an effective coalition, (ii) developing immediate goals around which the coalition can organize (iii) crafting compelling moral narratives (iv) finding leaders (v); create or find the resources that will make policy innovation feasible; and (vi) incorporate mechanisms to anchor those immediate goals once they are achieved, to prevent future generations from overthrowing or undermining them.

⁷². Pellerin-Carlin, T., Vinois, J.-A. 2020. "Making the Green Deal a European Success: Coalition, Narrative, Flagships", Policy Brief, February.

⁷³. Recent examples include the December 2020 [European Parliament Social Affairs Committee on decent housing](#) (2019/2187(INI)).

First, this can be framed as part of the 'just transition' narrative that is already part and parcel of the Green Deal.⁷⁴ Building upon the often repeated motto to 'leave no one behind', EU politicians may underline that the current polluting energy system is actually leaving millions behind: those 30 million Europeans who suffer from cold at home in winter as a result of building inefficiency, but also those who cannot cool their homes during heatwaves, or those who cannot afford the access to basic mobility services. Lifting those families from energy poverty can therefore feed into the European Green Deal's promises that Europe, after the successful implementation of the Green Deal, will be better, fairer, than what Europe is today.

Second, in order to gather support from specific segments of European societies, a powerful energy poverty narrative could tap into the importance of family values for many Europeans. Indeed, in the political sphere, one should not only build on a rational wording but also on emotions and values that can lead to actions. When we go beyond the statistical categories used to understand energy poverty, as we did in this paper, we can simply think about energy poverty as being about families suffering from cold even at home. We therefore suggest framing energy poverty also as a challenge to traditional family values, where parents are able to provide their children the care and security they need. Such framing is likely to be politically consensual, and might also be a useful way for Europe's Christian-Democrats to frame the challenge of energy poverty under their own terms.

In the end, such a narrative could lead to a very simple sentence that can serve both as a narrative and as a long-term policy goal: **ensuring that 'not a single European family is cold at home'**. The current COVID-related restrictions furthermore open a sombre window of opportunity as Europeans are being increasingly encouraged or forced to stay at home this winter, regardless of their current heating situation.

Such coalition and narrative should lead to the pursuit of concrete proximate goals that can serve as milestones to reaching the overarching goal. Such proximate goals can be embedded as components of already existing EU policy tools, such as:

- The forthcoming review of the EU Energy Performance of Buildings directive, where energy poverty can be specifically addressed, with for instance objectives to make all social housing buildings highly efficient, thus ensuring that all Europeans who live in social housing are protected from energy poverty.
- The EU Research and Innovation Mission to make 100 cities climate-neutral by 2030, as focusing first on energy-poor households can be a tangible way for cities to ensure that their poorest inhabitants are the first to benefit from the green transition.
- Specific research and innovation projects supported by European Union's Horizon Europe programme. This might include projects aimed at developing renovation solutions to the benefit of specific groups of Europeans (e.g. single-parent families), or at specific moments where Europeans might be more eager than usual to change (e.g. parents who are about to have their first child, people who are moving from one house to another).
- Develop metrics and indicators that allow EU, national and local policy-makers to understand other types of energy poverty, esp. summer energy poverty and transport poverty.⁷⁵

⁷⁴. One example of such a narrative is European Commission Executive Vice-President for the European Green Deal Frans Timmermans who declared that "If we leave citizens or regions behind, the transition will not happen. The transition will happen in a fair way or it will not happen, because people will then not accept it." in a discussion panel at the [Katowice European Economic Congress](#), 2020.

⁷⁵. Such endeavour can be part of the need for more accurate indicators to help European policy-makers understand and tackle poverty. Damon, J. 2020. « [Lutte contre la pauvreté en Europe: bilan mitigé, propositions nouvelles](#) », Institut Jacques Delors, Juin.

- The May 2021 Social Summit in Porto, co-organised by the European Commission and the Portuguese Presidency of the Council of the EU can be a relevant setting for political announcements of such concrete proximate goals⁷⁶.

Finally, **any coalition needs leadership**. This can take the form of collective leadership, building all the already existing work of social and green NGOs, as well as the work of academics or existing European Parliament groups (such as the ITRE Committee or the Green New Deal Intergroup). Yet a degree of individual leadership would help make energy poverty a key EU policy priority in this decade. Such leadership could be taken by existing leaders of the European Green Deal, such as European Commission President Ursula von der Leyen, or by political figures who are seeking pro-European ideas for their forthcoming 2021-2022 national electoral campaign, such as the leaders of the German Christian Democrats (CDU/CSU) who can use a 'family values narrative' and existing German experience at the sub-federal level (*cf.* Box on Germany); or French President Emmanuel Macron who can build on France's already existing policy toolbox (*cf.* Box on France) and role as President of the EU Council during the first semester of 2022, when the EU legislative changes on building renovation (e.g. Energy Performance of Buildings Directive) are likely to be on the Council's agenda.

FIGURE 6 ■ A political strategy against energy poverty



⁷⁶. More about the [Social Summit in Porto](#).

CONCLUSION ■

In the midst of the COVID-19 crisis, winter conditions and the continuation of lockdown and curfew measures, millions of Europeans must stay in poorly heated buildings. This worsens the pre-existing situation of energy poverty, and leads to increasing discomfort and poorer health conditions for at least 30 million Europeans.

During the last decade, the EU has set a framework to fight energy poverty with legislation, best practice sharing and financing tools to support vulnerable households and improve energy efficiency. The Renovation Wave aims to accelerate the deep renovation of buildings that can contribute to alleviating energy poverty. Using this existing toolbox, as well as the recent advances in deep building renovation, the European Union can now concretely help lift all Europeans out of energy poverty. Such an objective would be politically desirable as it would broaden the political coalition that supports the European Green Deal. It would also concretely improve the lives and health of those millions of Europeans who suffer from energy poverty.

To that end, this paper argued that the EU and its Member States now need a political strategy that builds on a large coalition, a narrative and concrete goals that make the objective of lifting all Europeans out of energy poverty a key component of the European Green Deal. ■

ANNEX

TABLE ■ Share of population unable to keep home adequately warm

MEMBER STATE	%
EU27	6,9
Belgium	3,9
Bulgaria	30,1
Czechia	2,8
Denmark	2,8
Germany	2,5
Estonia	2,5
Ireland	4,9
Greece	17,9
Spain	7,5
France	6,2
Croatia	6,6
Italy	11,1
Cyprus	21,0
Latvia	8,0
Lithuania	26,7
Luxembourg	2,4
Hungary	5,4
Malta	7,8
Netherlands	3,0
Austria	1,8
Poland	4,2
Portugal	18,9
Romania	9,3
Slovenia	2,3
Slovakia	7,8
Finland	1,8
Sweden	1,9

Source: Eurostat, 2019



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