

Energy poverty Protecting vulnerable consumers

SUMMARY

Between 50 million and 125 million people in the EU are at risk of energy poverty – unable to keep their homes warm or pay their bills. The underlying causes are generally considered to be low incomes, high energy prices and poor energy efficiency of the living space, with market conditions and social environment also playing a role.

The EU deals with this issue most directly through the Electricity and Gas Directives, which require Member States to define vulnerable customers in their energy market and protect them. The Directives do not include a common EU definition of energy poverty. But the European Commission suggests it could be defined as households spending too much – possibly twice as much as the average – on energy products, and households that have difficulties in paying their energy bills. Member States use various measures to fight energy poverty, including payments through their general social systems, social energy tariffs, limitations on disconnection due to non-payment, improvements in energy efficiency, better information and protection of vulnerable customers.

However, a number of studies warn that, without robust energy efficiency measures, EU energy and climate policy could increase the risk of energy poverty, primarily due to the costs of financing the transition to renewable energies through utility bills. The Parliament has warned about this danger and has recently asked the Commission and the Member States to introduce a winter heating disconnection moratorium, as well as no interest credits for energy efficiency improvements and renewable energy investments for low income households.



In this briefing:

- Context and definition
- EU policy
- Implementation in the Member States
- The interplay of EU energy and climate policy and energy poverty
- Position of the European Parliament
- Stakeholders' views
- Next steps
- Main references

Context and definition

Energy poverty in the EU

According to the Buildings Performance Institute Europe, using data from Eurostat, between [50 million and 125 million](#) people in the EU are at risk of energy poverty: around 54 million cannot afford to heat their homes in winter, and roughly equal numbers are behind with their electricity and gas bills or live in damp and leaky homes. Many cope by spending less on food, heating only some rooms in their homes or during only parts of the day, wearing multiple layers of clothes inside, cutting down on artificial lighting and even using their TV sets as a source of light, or simply accumulating debt.¹ The consequences of living in cold homes are numerous, leading to an excess number of winter deaths, respiratory problems, increased hospitalisations, greater incidences of mental diseases, as well as negative effects on social life, relationships and education of children.

Energy and fuel poverty

The term 'energy poverty' is used differently when referring to developing or developed countries. Studies on energy poverty in developing countries most often refer to lack of access to electricity (see for instance [International Energy Agency](#)), while in developed countries it usually refers to ability to afford the energy one needs. The UK officially uses two different terms: 'energy poverty' for the developing world, and 'fuel poverty' for developed countries. This is however not always followed in [academic articles](#). To complicate things further, the EU uses these terms in a different way altogether: 'fuel poverty' for inability to afford necessary energy in general, and 'energy poverty' when it comes to the internal market for electricity and gas.

Energy poverty is more prevalent in central and eastern Europe, where it rose dramatically with the end of state subsidies for energy and increased poverty in general in the 1990s. More than [40% of people in Bulgaria](#) were not able to keep their homes warm in 2014, and 32.9% were behind with their bills. But the problem exists in all EU Member States: it is not limited to colder climates, but is widespread in the south of the EU in Spain, Portugal, Italy, Greece and Cyprus, as well as in well-off countries like the UK and Ireland (based on data from the [Buildings Performance Institute Europe](#) study). According to the [European Fuel Poverty and Energy Efficiency](#) project, groups most at risk are retired and unemployed people, the working poor, those on welfare, elderly and disabled people and single parents.

A combination of three factors is generally considered to be at the root of energy poverty: low income, high energy prices and poor energy efficiency of the living space. Other personal or market conditions, as well as the social environment, can lead to energy poverty. A detailed list of possible 'drivers' of energy poverty can be found in [Annex 4](#) of the 2013 Vulnerable Consumer Working Group guidance document on vulnerable consumers.

Poverty vs energy poverty

There is some debate surrounding the question of whether energy poverty is an issue separate from poverty in general or a subset of it. In 2012 the UK [Energy Poverty Review](#) conducted for the UK government noted that there is considerable overlap between people on low incomes and those who are energy poor. However, it concluded that the issues are not the same because of the key influence of energy efficiency: some households are less able to pay for heating than others with the same level of income, mainly due to considerable differences in the energy efficiency of their homes. Moreover, high energy bills can push some people into poverty.

Nevertheless, there is disagreement on this point because living in energy inefficient homes could be considered a consequence of low incomes. For instance, the Committee of the Regions [concluded](#) in 2014 that energy poverty is an aspect of poverty in general. However, it agreed that, at EU level, it was more practical to deal with it within the context of energy policy because the EU has competencies in this policy area, while social policy is a capacity of Member States.

Issues with defining energy poverty

Most studies calculate an 'energy poverty index' using three Eurostat [Statistics on Income and Living Conditions](#) (SILC) measures: [inability to keep home adequately warm](#); [living in a dwelling with a leaking roof, damp walls, floors or foundation, or rot in window frames of floor](#), and [arrears on utility bills](#).

For policy purposes, expenditure-based indicators are more common. This is the approach taken in the Commission's 2010 Staff Working Document on '[An Energy Policy for Consumers](#)', which suggests that a common EU definition would not be appropriate, but that a possible definition could be 'households that spend more than a pre-defined threshold share of their overall consumption expenditure on energy products' – with the threshold being 'double of the national average' – or those 'that have (or have had in recent times) payment difficulties or are in arrears with energy bill payments'.

There are a number of choices to be made when formulating such a definition. One is whether to consider the share of actual energy consumption or the necessary energy consumption.² Energy-poor households tend to spend less on energy than necessary to keep the home warm and may be spending less than the threshold, but still live in cold homes.³ On the other hand, necessary consumption is a concept that is difficult to measure without detailed data on the energy efficiency of housing stock.

Equally, the question arises as to whether a fixed share should be used (like 10% of income in the 2001 UK definition) or a share relative to median or average consumption. [Critics](#) say that the relative measure could mask the energy poverty arising from a surge in energy prices. Also problematic is how energy expenses are calculated as a proportion of income: before or after other housing costs are included? With or without taking account of social benefits? Taking into account the number of people living in the household or simply measuring all households? The same goes for defining 'energy'. As can be seen in the following section, the Commission's definitions refer only to gas and electricity, while studies show some households using other energy sources (e.g. fuel oil or district heating) can also suffer from energy poverty.⁴

How difficult it is to use a set of objective indicators to identify the energy poor was shown by a 2000 UK study:⁵ 28% of low income households spent more than 10% on energy, but only 16% felt they could not adequately heat their homes. Moreover, half of the 16% were spending less than 10% on energy. But even leaving the identification to the poor themselves is not a solution: according to another study, some households are reluctant to say they are energy poor because they do not realise they are or do not want to be stigmatised.⁶

All of this points to the need for more standardised data and a common EU definition, a problem which has been raised by the European Parliament (in [2015](#) and [2016](#) resolutions), the [Insight E study](#) conducted for the Commission, as well as the European Economic and Social Committee (opinions [TEN/420](#) of 14 July 2010 and [TEN/516](#) of 18 September 2013) and the Committee of the Regions ([2014](#) opinion).

EU policy

In the context of existing EU legislation, energy poverty refers only to access to electricity and gas under the 2009 Directives, and not to other types of energy such as district heating, coal or heating fuel. The Commission's Staff Working Document on '[An Energy Policy for Consumers](#)' proposes a distinction between 'fuel poverty', to be used for inability to afford energy in general, and 'energy poverty' to be used in the context of internal energy market legislation.

Energy poverty is explicitly mentioned in the EU Directives [2009/72/EC](#) and [2009/73/EC](#) concerning common rules for the internal market in electricity and natural gas respectively. The Directives require Member States to 'develop national action plans or other appropriate frameworks to tackle energy poverty' and to define and protect 'vulnerable customers'. This can be done through a series of measures including prohibition of disconnection of gas and electricity in critical times, through social benefits or by providing energy efficiency improvements.

Energy poverty is also mentioned in Directive [2010/31/EU](#) on the energy performance of buildings, which says that better energy efficiency of buildings could potentially help reduce energy poverty; Directive [2012/27/EU](#) on energy efficiency, according to which investments in energy efficiency can help prevent fuel poverty and should be a priority in energy-poor households, while Member States can require that vulnerable customers benefit from energy efficiency efforts within energy obligation schemes. Energy poverty is also addressed in several Commission communications including [Delivering a New Deal for Energy Consumers](#), [Making the internal energy market work](#), [Energy roadmap 2050](#) and the [Energy Union Strategy](#).⁷

Implementation in the Member States

A 2015 [study](#) conducted for the Commission by the energy think-tank Insight Energy (Insight E) shows that 22 Member States had a definition of vulnerable customers in 2015, but only seven linked it explicitly to energy poverty. This has not, however, been shown to influence the level of protection. A state-by-state overview of measures is available in the [appendices](#) of the study. Most Member States use more than one type of measure to protect vulnerable customers.

A 2015 [study](#) conducted for the European Parliament concluded that the Member States have found it difficult to define energy poverty in a way that can easily be measured or acted upon, so most of the funds are currently not being well spent. It argued that a combination of short-term and long-term measures would work best, but that for many Member States this was too expensive. A solution could be found in a revision of the EU structural development funds, especially the Regional Development Fund.

Social payments

According to a 2015 [report](#) by the Agency for Cooperation of Energy Regulators (ACER) and the Council of European Energy Regulators (CEER), 12 Member States support vulnerable customers in the electricity market through higher general social benefits or direct energy cost payments, and 11 Member States do this for gas customers. While crucial, this is only a short-term remedy. According to the Insight E study, it should preferably be a transitional measure that is combined effectively with longer-lasting energy efficiency programmes.

Social tariffs for energy

Reduced energy prices for vulnerable citizens are used in 14 Member States for electricity and 10 for gas, with non-eligible consumers covering the cost of these tariffs. This measure can take the form of special energy prices for vulnerable customers, exemption from taxes, levies or network tariffs, or free basic supply of energy (up to a certain amount). The Commission explicitly mentions the option of 'solidarity tariffs' or discounts on energy bills in its [Energy Union strategy](#), however it prefers aid to be provided through the general welfare system rather than through price reductions. The Insight E study considers this a short-term solution, which does not solve the underlying problem, but might put in an unfavourable position those citizens who are just above the income threshold and therefore ineligible for the social tariff, yet are still obliged to finance it for other consumers and thus pay higher prices.

Limitation on disconnection

One of the most widely used measures is limiting disconnections due to non-payment of gas and electricity bills, which in 2014 was in place in 15 Member States according to ACER/CEER. Various options exist, from forbidding disconnections altogether, to forbidding disconnections of vulnerable groups or not allowing them to take place during winter. Limiting disconnections is explicitly mentioned in the 2009 Gas and Electricity Directives as a possible way to protect vulnerable customers, but is not mandatory.

Improving energy efficiency

All Member States have some types of programmes for energy efficiency. However, these are not always oriented towards the energy poor. These programmes can include grants, loans, or tax incentives for building renovations, improvements of social housing, grants to replace inefficient appliances and even free replacement of inefficient basic appliances for vulnerable households (e.g. in Belgium and France).

The 2010 Commission [Staff Working Document](#) considers greater energy efficiency one of the most effective long-term measures for lifting people out of energy poverty. However, more energy-efficient homes [do not always mean 'warm homes'](#) – although it does take more severe cold weather to push these households into energy poverty.⁸ As with building renovations in general, these measures are also difficult to implement in rented properties because the owners have little incentive to invest in energy efficiency improvements that would mainly benefit tenants. And sometimes they are not in the tenants' interest either, as such improvements can, depending on national legislation, prompt an increase in their rent.

Additional information and consumer protection

A number of Member States use measures to inform vulnerable people in order to allow them to better manage their consumption. Such measures include allowing the switching of suppliers even when people are in debt, organising advice centres to help customers make a better decision on suppliers and to learn about saving energy, and more transparent energy billing.

The interplay of EU energy and climate policy and energy poverty

Although a number of synergies between EU climate policy and eradication of energy poverty are possible, they have not always been achieved in practice. On the one hand, improved energy efficiency of housing could help reduce greenhouse-gas emissions (GHG), but renovation is a fairly slow process. On the other hand, energy efficiency

gains, individual renewable energy production and liberalisation of the internal energy market are supposed to bring a reduction in prices for citizens, even if in many parts of the EU this has not happened. In fact, according to the 2015 ACER/CEER [report](#), between 2008 and 2014 retail electricity prices for households increased at an annual rate of 4%, whereas gas prices increased at a rate of 2.6%. The prices for industry grew more slowly on average, at the rate of 2.6% for electricity and 0.7% for gas, and have generally been lower: in 2014 households paid 1.7 times more for electricity than industry and 1.9 times more for gas. According to the report, the growth in the final price was primarily driven by network charges, taxes and levies, including renewable energy sources (RES) charges.⁹ In some Member States RES charges tripled in 2014 compared to 2012, and in some they now constitute a significant part of the total electricity price (e.g. 20.5% in Germany, 18.9% in Italy, 17% in Portugal).

A number of studies warn that, unless strong energy efficiency measures are put in place, climate change policy can increase the risk of energy poverty,¹⁰ mainly due to the funding of carbon reduction programmes through utility bills. [Experts](#) have been warning that this way of financing the energy transition is highly regressive, because an increase in energy prices affects the poor more than those who are better off. In addition, the poor face a 'double penalty', since they pay for RES subsidies through their energy bills but cannot benefit from producing renewable energy themselves because of high up-front investment costs. A solution could be to improve the energy efficiency of their homes and appliances, but without some kind of financial aid these are also usually out of reach of the energy poor. Even the EU goal of overall reduction in energy consumption could in itself lead to higher prices due to lower demand. The Committee of the Regions [suggests](#) a possible solution might be establishing cooperatives or similar organisations for generation of RES, as well as support for energy production for individual needs, such as photovoltaic panels.

On the other hand, improved energy efficiency in energy-poor households might not necessarily lead to a significant reduction in energy consumption and thus to lower GHG emissions. These households often use less energy than they need, so lifting them out of energy poverty would entail only modest consumption savings.

Because of these concerns, the European Economic and Social Committee opinions on energy poverty suggested that any proposal on energy policy should take into account energy poverty and analyse the impact of these policies on various types of consumers.

The position of the European Parliament

In its April 2016 [resolution](#) on meeting the anti-poverty target in the light of increasing household costs, the Parliament called on the Member States and the Commission to 'build bridges between social policy and energy policy', and to introduce a winter heating disconnection moratorium, as well as provide microcredits with no interest charges to low-income households for energy efficiency and renewable energy investments, and boost energy efficiency investments in social housing.

In its December 2015 [resolution](#), 'Towards a European Energy Union', the Parliament asked the Commission to present a communication on energy poverty, which would include a definition and indicators of energy poverty, and be accompanied by an action plan on its eradication. It emphasised that energy is a public social good and that energy poverty should be one of the indicators against which the success of the Energy Union

should be assessed. It stressed that decarbonisation should not result in higher energy costs and elevated levels of energy poverty.

In its March 2013 [resolution](#) on the Energy Roadmap 2030, the Parliament warned that the decarbonisation strategy could in some Member States cause 'a massive increase in energy poverty' and therefore the situation of these countries should be taken into account. It asked the Member States to protect households from rising energy bills, and suggested that one of the ways to address energy poverty would be combining energy efficiency measures and renewable energy solutions for heating and cooling.

Stakeholders' views

The European Consumer Organisation ([BEUC](#)) underlines that it is the responsibility of Member States to ensure they have an appropriate policy mix (social or energy policy) in place to inform and support vulnerable consumers. There is a need to understand better the circumstances and conditions leading to energy poverty and how vulnerable customers could be better informed of the options available to them, and better engage in the market.

The European Environmental Bureau ([EEB](#)) says that energy is not a standard commodity and everybody should have access to it. It calls for national strategies for eradication of energy poverty and suggests that vulnerable households should benefit from cost-effective energy-efficiency measures, especially better insulation.

[Eurelectric](#), representing the EU electrical industry is against an EU definition of energy poverty and prescribing policies against it. It argues that social policy is the best way to fight energy poverty and that the aid should come from general state budgets, instead of being subsidised through utility bills in the form of social tariffs. The same applies to energy-efficiency measures. This approach would be more progressive as it would be financed through the general taxation system, while energy prices would be determined by the market. [Eurogas](#), representing the EU gas industry, is equally of the opinion that energy poverty is a welfare issue. It does not in principle support social tariffs, but would agree that some Member States can introduce such measures, provided that they are narrowly targeted to customers with low income. It expressed a strong opinion that gas is not an essential service, as it can be substituted by other fuels, so is strongly against special provisions for geographically remote customers.

[Eurocities](#) warn that cities already tackle energy poverty, but could use help from the national and EU level, and finds zero-interest loans to be especially helpful for energy-efficiency improvements in low-income households. Eurocities also considers district heating systems and schemes for collective negotiation of prices with energy providers to be useful measures.

Next steps

The Commission will look to include a social dimension in the upcoming reviews of the Energy Efficiency Directive, Energy Performance of Buildings Directive and forthcoming legislation on a new energy market design. According to the Commission Vice-President for Energy Union, Maroš Šefčovič, the Commission also plans to make the financing of energy-efficiency improvements through European Structural and Investment Funds easier, including for social housing and for consumers with limited resources.

Main references

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EU Fuel Poverty Network [website](#).

Ryan Walker, Harriet Thomson, Christine Liddell, '[Fuel poverty](#)', 2012.

Endnotes

- ¹ A UK study showed that 87% of low income households kept up with their bills, but typically they cut back on non-essentials, food and heating. 65% of those who saved on heating were also saving on food, and 59% of those who saved on food were saving on heating (W. Andreson, V. White, A. Finney: '[You just have to get by': Coping with low incomes and cold homes](#)', 2010). See also K.-M. Brunnera, M. Spitzerb, A. Christanell: Experiencing fuel poverty. '[Coping strategies of low-income households in Vienna/Austria](#)', 2012.
- ² The latter approach was adopted in the 2001 [UK definition](#) of energy poverty, which was the first in the legislation of an EU Member State and which is now therefore well researched. The UK Fuel Poverty Strategy defined energy poor households as those that would need to spend more than 10% of their income on energy, including on keeping their home adequately warm. The 10% of income was very close to double the median energy expenditure at the time and this was similar to the definition supported by the Commission in its Staff Working Document.
- ³ This was true for half of energy poor households in the UK, according to R. Moore, '[Definitions of fuel poverty: Implications for policy](#)', 2012.
- ⁴ This has been criticised by [Insight E](#) and the [Committee of the Regions](#) for instance.
- ⁵ C. Waddmas Price, K. Brazier, W. Wang: '[Objective and subjective measures of fuel poverty](#)', 2013.
- ⁶ U. Dubois, From targeting to implementation: '[The role of identification of fuel poor households](#)', 2013.
- ⁷ See EPRS briefings on '[New Deal for Energy Consumers](#)' and the '[Energy Union](#)'.
- ⁸ See also: W. Anderson, V. White, A. Finney, '[Coping with low incomes and cold homes](#)', 2013.
- ⁹ See also the 2014 Commission '[Communication on energy prices and costs in Europe](#)'.
- ¹⁰ R. Petrova Hiteva, Fuel poverty and vulnerability in the EU low-carbon transition: the case of renewable electricity, *Local Environment*, 2013, Vol. 18, Number 4, pp. 487-505; D. Üрге-Vorsatz, S. Tirado Herrero, Building synergies between climate change mitigation and energy poverty alleviation, *Energy Policy* Vol. 49, 2012, pp. 83-90; L. Chester & Al. Morris, A new form of energy poverty is the hallmark of liberalised electricity sectors, *Australian Journal of Social Issues*, 2011, Vol. 46, Issue 4, pp. 435-459.

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