DRAFT - GENERALITIES

LEAP STEP Project - Energy Poverty

Preamble

Most of our homes are not prepared for the cold or the heat. We are still a long way from the much desired energy efficiency, which will bring us greater thermal comfort and which will allow us to considerably reduce the levels of energy poverty in the country

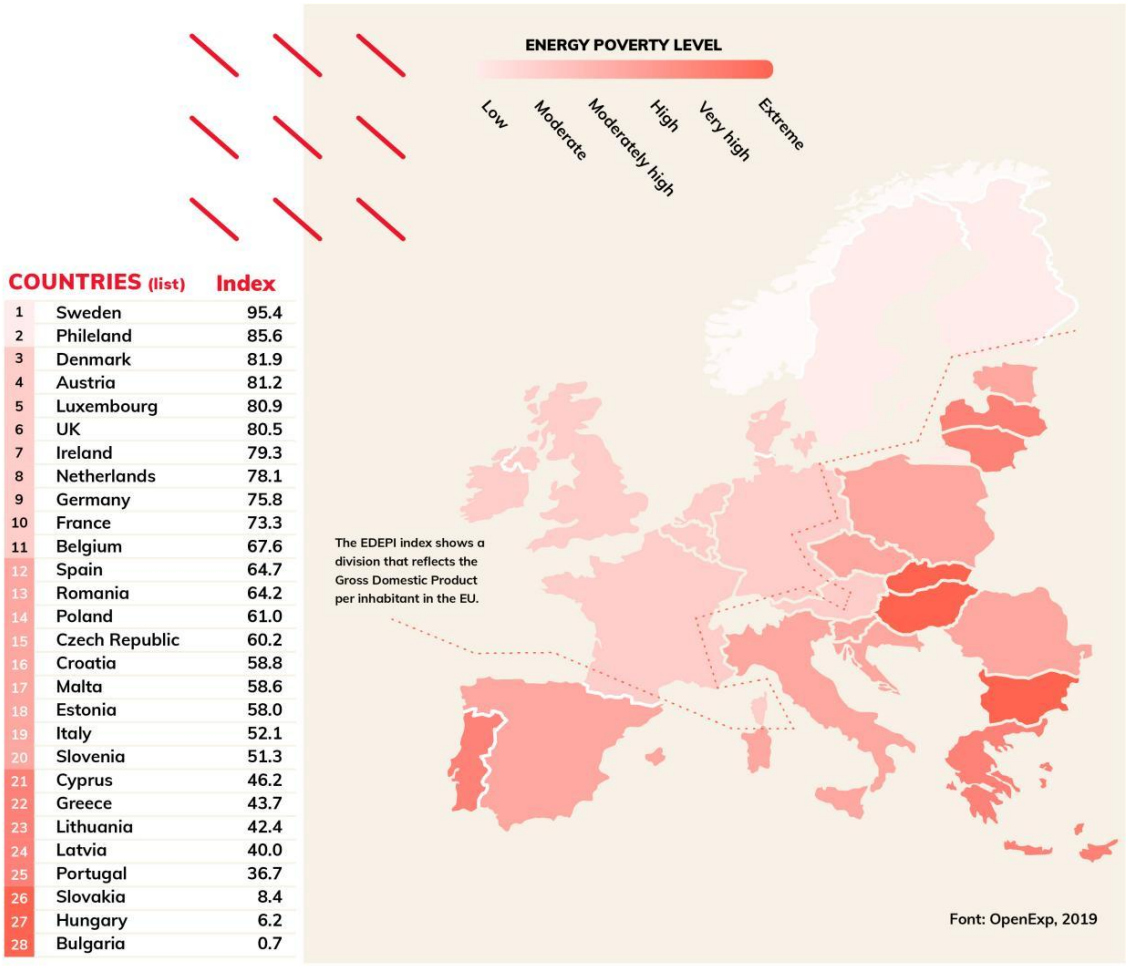
In Portugal, people still die from the cold, especially in rural areas and among the elderly population. The numbers were put forward by the Ricardo Jorge National Health Institute, in 2019, and expose a problem that seems to have no end in sight, at least in the short term: ***energy poverty***.

This is what is called "*the inability of thousands of families to cover their thermal comfort needs, to heat or cool their homes adequately*". Combined with this, the cold and humidity, which alone exacerbate chronic diseases and other respiratory or cardiovascular complications, help justify this mortality in winter.

A global problem

According to the "European Union Observatory on Energy Poverty", more than 50 million European families live in energy poverty, and this is a problem that the European Union wants to solve.

Analyzing Europe's ranking in terms of energy poverty, it becomes clear that the countries that traditionally occupy the top of the table in terms of other wealth indicators are also those that occupy the top half of this table, as is the case of Sweden, Germany and France.



	COUNTRIES (list)	Index
1	Sweden	95.4
2	Phileland	85.6
3	Denmark	81.9
4	Austria	81.2
5	Luxembourg	80.9
6	UK	80.5
7	Ireland	79.3
8	Netherlands	78.1
9	Germany	75.8
10	France	73.3
11	Belgium	67.6
12	Spain	64.7
13	Romania	64.2
14	Poland	61.0
15	Czech Republic	60.2
16	Croatia	58.8
17	Malta	58.6
18	Estonia	58.0
19	Italy	52.1
20	Slovenia	51.3
21	Cyprus	46.2
22	Greece	43.7
23	Lithuania	42.4
24	Latvia	40.0
25	Portugal	36.7
26	Slovakia	8.4
27	Hungary	6.2
28	Bulgaria	0.7

Figure 1. European Domestic Poverty Index (EDPI) shows that most European countries have energy poverty rates ranging from "moderately high" to "extreme" in low-income households.

A very energy poor Portugal

Although this reality is not just Portuguese, our country is far from looking good at a European level: as it is possible to confirm in the previous table, Portugal appears at the bottom of the table, in 25th place, as one of the countries with the highest level of energy poverty in Europe. Published in 2016 in the "Journal of Public Health", based on statistics between 1980 and 2013, a ranking of excess winter mortality in 30 European countries (which, however, does not only refer to energy poverty as a cause), revealed Portugal in 2nd place, just behind Malta, with an average increase of 28% in deaths occurring between December and March, compared to those that occur in the warmer months. Yes, because heat waves in summer are also associated with an increase in the number of deaths, but in winter the effect tends to last longer.

"*When we talk about **thermal comfort**, we talk about a concept that is cultural and even subjective: two different people have different thermal sensitivities. Despite this, the World Health Organization (WHO) has stipulated a thermal comfort standard, in temperature ranges between 18.º C and 21.º C, in winter, and 19.º C and 23.º C. , in the summer. If the space is in these ranges, it is at structural thermal comfort*".

This does not happen in the vast majority of the Portuguese housing stock. Why?

"*According to the study that EDP requested from ISEG, the first conclusion drawn is that 75% of national buildings do not have thermal insulation conditions. In other words, to guarantee this range of thermal comfort, people have to resort to heating and cooling devices, when this would be unnecessary or greatly reduced if the homes had a different construction quality. It all starts there*".

Furthermore, in Portugal there is no culture of air conditioning the house at comfort levels – the most common thing is to first resort to several layers of clothing, blankets when you are on the sofa in winter and fans in summer. Therefore, most homes in Portugal do not even have equipment to air-condition the house (and not just one or two specific rooms) efficiently.

A vicious circle of poverty

As Portugal is not one of the coldest countries in Europe - it is, in fact, very far from it - we now understand why it is colder in our territory than in other countries with much lower temperatures. According to the same study, 22.5% of the Portuguese population, almost a quarter - practically three times the European average - recognizes that they are in a situation of energy poverty - they do not have the financial means to heat their home in winter and keep it cool in winter. summer.

"*Let's say that the majority of economically poor people are also energetically poor, but we also came to the conclusion that there are people who are not economically poor, but are energetically poor. And, there is a point at which I will have to invest so much money in energy qualification measures for housing, to get out of thermal discomfort, which makes me economically poor*".

How to solve the problem of energy poverty

Measures to combat energy poverty are divided into three groups:

- ✓ consumer protection measures, such as deferred payment contracts and protection against disconnection;
- ✓ measures to support the price or income of families, such as the Social Tariff or the granting of subsidies in the cold months; and
- ✓ measures to reduce needs, including energy efficiency.

This integrated vision, however, is not yet the reality in Portugal, which has "the Social Tariff as its only policy to combat energy poverty", being one of the five EU countries that only have one measure. Belgium is the EU country with the highest number of measures, having three measures from each of the three groups (nine in total).

As this problem is transversal to a large part of the Portuguese population, the Government's intervention is urgent and should not be limited to the Social Tariff for electricity and gas, with automatic discounts on the bills of economically vulnerable consumers, financed by energy producers. Especially because reducing the price of the invoice in this segment of the vulnerable population does not solve the underlying problem, which is in the construction of buildings.

"*Insulating facades, roofs, doors and replacing windows with efficient ones. Long-term building energy qualification programs are needed to reduce the number of dwellings that promote energy poverty. The Social Tariff is not enough*".

"Social Tariff is important as it provides relief to families' budgets, but it is an incomplete instrument in combating energy poverty as it does not address the problem at its origins. A more structural way of solving the problem involves investing in the quality of construction of houses and in energy efficient equipment.

These measures reduce the need for air conditioning, meaning that a price support measure, such as the Social Tariff, may be lower every year, or even unnecessary".

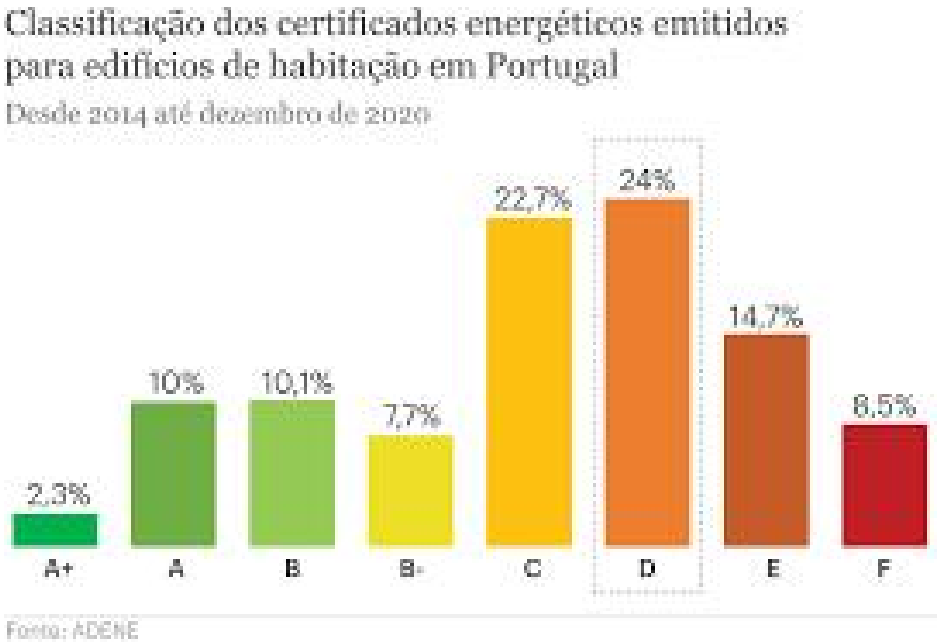
Hence, the recent initiative of the Portuguese Government, **More Sustainable Buildings**, is a positive step, as it includes a series of benefits and support for the Portuguese to make their homes more efficient.

In search of energy efficiency

If the legal minimum for a new home is energy class B- (on a scale from A+ to F), it can be said that the minimum level of construction quality in terms of energy efficiency is located in this parameter and also in that of the standard of thermal comfort that the WHO defined. This means that 75% of the Portuguese housing stock is inefficient from an energy point of view, with a rating of C or lower.

Towards *carbon neutrality* in 2050, European Union Member States will have to double the rate of building renovation by 2030. The objective is for greenhouse gas emissions from buildings to be reduced by 60% in 2030, compared to to 1990 levels. To this end, the European Commission presented the "**Renovation Wave**", with the main strategic lines to accelerate the renovation of buildings. In parallel, the Recovery and Resilience Mechanism – a financial instrument created to support the economic recovery of Europe post-Covid – also provides support aimed at energy efficiency in Member States.

Additionally, countries are also obliged to monitor their energy poverty situation and introduce specific measures to combat it.



3 PASSOS

CALAFETAGEM DE JANELAS

seria possível reduzir 6% do gap ao longo de 10 anos, representando um custo de 9 milhões de euros

ISOLAMENTO DE COBERTURAS

seria possível reduzir 25% do gap ao longo de 50 anos, representando um custo de 95 milhões de euros

AR CONDICIONADO

(EM 50% DAS DIVISÕES DA HABITAÇÃO)

seria possível reduzir 73% do gap ao longo de 20 anos, representando um custo de 324 milhões de euros

= REDUZIR O GAP EM 91%