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# Energy poverty and the vulnerable consumer in Romania and Europe

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PRESA UNIVERSITARĂ CLUJEANĂ

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# 0. EXECUTIVE SUMMARY

Energy poverty, understood as a problem in terms of the affordability of the bill, but also in terms of the poor access to modern means to provide thermal comfort in a household, is a widespread phenomenon across the European Union, the post-communist space being mostly affected by it. Energy poverty is a major social marginalization factor, and the unaffordability of the bill or the lack of access to modern forms of energy generate obstacles in the educational and socio-economic development of individuals, being a factor contributing to the deepening of poverty and exclusion in a wider sense. In Romania, the phenomenon is not marginal, but it is underestimated, inconsistently approached at conceptual and legislative level and it is targeted by incoherent and contradictory policies. Starting from the dominant discussions on the notion and working tools applicable at international level, the report presents a radiography of the Romanian legal and public policy framework and analyzes the way in which the current approach reflects on the social reality in our country. Based on the analysis of relevant statistical data and on the field survey conducted in three counties (Bacău, Hunedoara, Teleorman), the report identifies the major faults and provides objective public policy recommendations.

The research comprises over 100 pages, the main results being presented in the second part of this abstract. The public policy recommendations are presented below.

Public policy recommendations

Authorities must **significantly adjust the heating benefits**, as short-term social protection measures, taking into account the extremely low amounts and the poor targeting of the vulnerable population. **In addition, there must be a transition towards non-financial measures for the improvement of household conditions and of consumption efficiency**.

The definition of the concept of *vulnerable customer* should take into account all the five key factors determining vulnerability: the trading behavior, the market design, the structural and access factors, the consumer's situation, the socio-demographic factors. The considerations related to age, health and income included in the current definition partly reflect the last two categories, but the set of policies derived from this definition are insufficient to effectively combat the phenomenon.

**Under the coordination of ANRE, the Action Plan on energy poverty imposed by the legislation in force must be developed.** This Action Plan must represent the mission of a team reuniting representatives of all state institutions concerned with the issue of poverty and energy efficiency. The plan must comprise three types of remedies: financial remedies (through the social assistance system or direct remedies), non-financial remedies (for example: non-disconnection) and energy efficiency (structural) remedies. Furthermore, it is important for the national action plan to clarify the methodological tools used to collect and cumulate relevant data for measuring the phenomenon, so that all the institutions involved in data processing (the National Institute of Statistics, the Ministry of Labor, the local authorities) have a unitary practice. Presently, the large discrepancies between the data provided by different institutions make it difficult to identify the real extent of energy poverty.

Energy supply regulations should be changed so that vulnerable customers with low incomes may also benefit from non-financial aids (for example: avoiding disconnection during the cold season, spreading out payments depending on the customer's ability to pay, etc.).

**For customers benefiting from social tariffs, it is necessary to rethink the framework for granting this facility** by introducing the supplier's obligation to warn the consumer after a certain period of recurrent excess of the social consumption blocks 1 and 2 or by adjusting the consumption blocks so that they are adapted to the consumer patterns of the beneficiaries.

The Ministry of Labor must develop **the criteria based on which a household customer can be classified as a vulnerable customer due to health or age**, the procedure by which a citizen can be classified this way and the manner in which this is brought to the attention of the energy or natural gas supplier. This way, the non-financial facilities provided by the legislation in force could actually be applied. The Ministry of Labor must also clearly specify in the law on the granting of heating benefits the types of supporting documents that may be required by the municipalities of the potential beneficiaries, and at the same time the ministry must require the prioritization of data acquisition by administrative means from other institutions, rather than directly from the applicants. Such measures taken to reduce red tape would also eliminate the stigmatization of beneficiaries and would reduce the significant exclusion error that we identified in the data analysis. At the same time, this would reduce the administrative costs for granting the benefits and would also reduce the risk for potential beneficiaries to abandon the process because of red tape. Obviously, such a measure would be facilitated by the urgent introduction of heating benefits into the computerized system of social benefits.

As for the access to electricity, it is necessary to develop an action plan at Government level in collaboration with local authorities (prefectures, county councils, municipalities).

**Given the complicated procedures for concluding energy supply agreements, it is necessary to simplify such procedures**, by digitizing the process where possible, and by eliminating the supporting documents concerning the ownership of households, as well as the Connection Technical Evaluation Report. At the same time, in order to avoid the aggravation of the digital divide in communities with precarious Internet access, the role of social assistants should be revised in view of their proactive intervention to guide marginalized households in accessing their rights. At the same time, the people's openness towards counseling creates an opportunity for suppliers to use community mediation services to select optimal rate plans, to solve connection and payment issues, etc.

Last but not least, we recommend **to correct the large differences between the benefit amounts depending on the type of fuel** (especially between gas/electricity and firewood), thus creating more equity between heating methods. We also **recommend to eliminate the conditioning of electricity-based heating benefits by the absence of another heating source**, so that the electricity benefit can be granted as a supplement.

Results or the research: specialized literature, European best practices, statistical data, field survey

At the level of the EU, it is estimated that up to 150 million Europeans are experiencing energy poverty, so the phenomenon is relevant for all Member States. Although not yet established by law based on a common definition, the concepts of energy poverty and vulnerable consumer are increasingly present in European debates, and the approaches are becoming increasingly institutional. The lack of a common understanding of the phenomenon leads to difficulties in exchanging best practices between countries and to the impossibility to measure the phenomenon based on the same indicators or to assess the effectiveness of intervention measures based on common criteria.

Beyond its conceptual relevance to Romania and to the European states as a whole, energy poverty has a material relevance in what the quality of life is concerned. The consumer is at the heart of the European energy policies and of the Energy Union as an active participant. The way in which vulnerable consumers are treated reflects the market's ability to offer a *fair share* to all consumers, which is an objective of the European internal market.

In Romania, the legal framework for energy poverty is provided by Law 123/2012, as the primary law, and by the ANRE regulations, as secondary legislation. **The primary law does not define energy poverty as a distinct term, but explicitly defines the vulnerable customer** as a limited category, being "the final customers belonging to a category of household customers who, due

to age, health or low income, are at risk of social marginalization and who, in order to prevent this risk, benefit from social protection measures, including financial measures".

From the perspective of public policies, Law 123/2012 binds authorities, pursuant to the European requirements of the Third Energy Package, to develop a "national action plan for energy poverty". Beyond the vagueness of the law regarding the institutions responsible for this process (the Ministry of Energy or the Ministry of Labor), the action plan has not been developed so far, which means that the issue of energy poverty in Romania lacks the required strategic approach.

In the EU, the measures adopted to protect vulnerable consumers range from limitations on disconnections for non-payment (in most jurisdictions), to social tariffs, exemptions from certain components of the invoice, pre-allocated social benefits for paying energy bills, as well as free counselling on energy saving methods. In contrast, **in Romania, the only remedies that are actually applied for the protection of vulnerable consumers are financial remedies, in the form of heating benefits or social tariffs for electricity**. Alternatively, **the Third Energy Package developed by the European Commission recommends interventions through integrated measures: financial, non-financial and efficiency measures**. Financial facilities are currently granted only to vulnerable consumers classified in this category as a result of low incomes. In the European Union, even financial benefits granted to vulnerable consumers take on more sophisticated forms – see Figure 1.

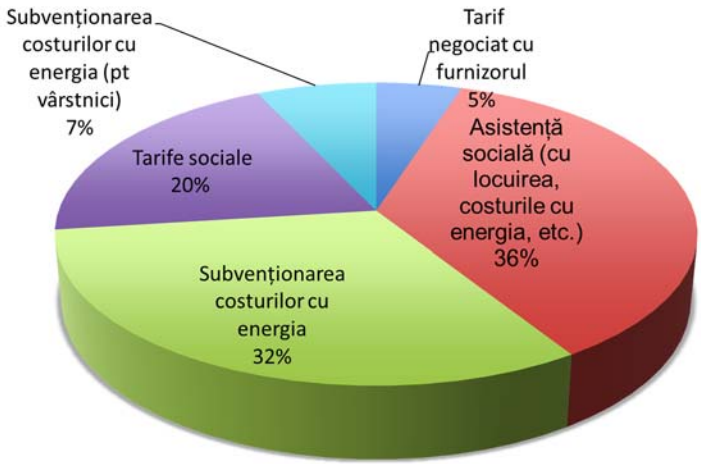



**Figure 1.** ***Share of financial measures for vulnerable consumers in the European Union (Source: Pye et al, 2015)***

Legend:

| | |
|---|---|
| *Subvenționarea costurilor cu energia (pt vârstnici) 7%* | Energy cost subsidies (elderly) 7% |
| *Tarif negociat cu furnizorul 5%* | Tariff negotiated with the supplier 5% |
| *Tarife sociale 20%* | Social tariffs 20% |
| *Asistență socială (cu locuirea, costurile cu energia, etc.) 36%* | Social support (housing, energy costs, etc.) 36% |
| *Subvenționarea costurilor cu energía 32%* | Energy cost subsidies 32% |

Non-financial facilities are restrictively applicable only to vulnerable customers classified as such due to health or age. They are detailed in the energy supply regulations issued by ANRE, but no regulation developed by the state institutions with responsibilities in the field of social policy specifies the classification criteria for age or health related reasons. Consequently, these non-financial facilities are applied irregularly and with difficulty. The wide range of non-financial facilities applied in different jurisdictions across the European Union (see Figure 2) could also be a source of good practice for Romania.

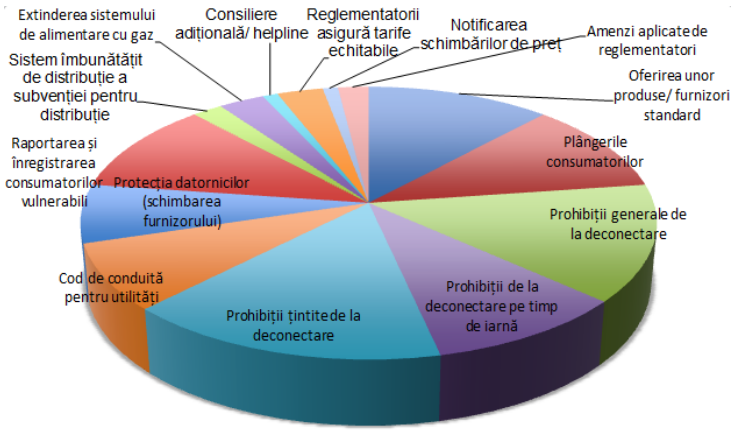



**Figure 2.** ***Share of non-financial facilities granted to vulnerable consumers in the European Union (Source: Pye et al, 2015)***

Legend:

| | |
|---|---|
| *Extinderea sistemului de alimentare cu gaz* | Extension of the gas supply system |
| *Consiliere adițională/helpline* | Additional advice/helpline |
| *Reglementatorii asigură tarife echitabile* | Regulators ensuring fair tariffs |
| *Notificarea schimbărilor de preț* | Notification of price changes |
| *Amenzi aplicate de reglementatori* | Fines by regulators |
| *Sistem îmbunătățit de distribuție a subvenției pentru distribuție* | Improved subsidy distribution system |
| *Oferirea unor produse/furnizori standard* | Provision of default products/suppliers |
| *Raportarea și înregistrarea consumatorilor vulnerabili* | Reporting on and register of vulnerable consumers |
| *Protecția datornicilor (schimbarea furnizorului)* | Debt protection (switching suppliers) |
| *Plângerile consumatorilor* | Consumer complaints |
| *Cod de conduită pentru utilități* | Utility code of conduct |
| *Prohibiții generale de la deconectare* | Disconnection safeguards - general |
| *Prohibiții țintite de la deconectare* | Disconnection safeguards - targeted |
| *Prohibiții de la deconectare pe timp de iarnă* | Disconnection safeguards – winter |

Moreover, the indicators broadly accepted in practice and literature for measuring the phenomenon and targeting the measures consider the relationship between income and energy expenditures at household level. In Romania, the only criterion used is income per household, generating an incomplete understanding of the phenomenon.

The discussion concerning energy poverty in Romania is intrinsically linked to low incomes. From this perspective, there is a tendency to exclusively associate energy poverty with poverty (measured in terms of small incomes), without considering energy poverty as an independent phenomenon, largely overlapping with poverty, but with manifestations and causes beyond the income issue. For this reason, both the public and the authorities come to associate heating benefits with social security benefits, hence the beneficiaries may suffer from various forms of marginalization in the community.

If the indicators most commonly used in Europe were to be applied in Romania[1], the number of Romanians considered in energy poverty would be up to 19%, while the heating benefits supported by the central budget presently cover less than 5% of the population – see Table 1. It should be noted that in certain cases municipalities grant additional benefits from the local budget, but there is no centralized reporting of such cases. At the same time, about 12% of Romanians benefit from social tariffs for energy, but over 40% of them do not measure their consumption correctly, so tariffs of this type put them at a disadvantage. Another phenomenon of energy poverty is the lack of formal access to electricity, as there are no current public policies to combat it. According to certain estimates in the report, given the number of households not connected to the electricity grid (estimated in spite of the conflicting and fragmented official data), the number of households built without a building permit (which, therefore, cannot be legally connected) and the data reported by suppliers concerning their losses and their own technological consumption, about 460,000 households in Romania (7% of all households) do not have access to or have informal access to electricity.

[1] Twice the national median share – 2M; Low income and high energy consumption – LIHC; hidden energy poverty – measured by M/2, half the national median.

**Table 1.** ***The percentage of households identified as experiencing energy poverty in Romania (receiving heating benefits) compared to the percentage of households identified after applying the 2M, LIHC and M/2 indicators***

| Indicator | 2013 | | 2014 | | 2015 | |
|---|---|---|---|---|---|---|
| | *% households experiencing energy poverty according to the indicator (of all households)* | *% overlap between the current beneficiaries and the ones identified based on the indicator* | *% households experiencing energy poverty according to the indicator (of all households)* | *% overlap between the current beneficiaries and the ones identified based on the indicator* | *% households experiencing energy poverty according to the indicator (of all households)* | *% overlap between the current beneficiaries and the ones identified based on the indicator* |
| Heating benefits | 7.4% | 100% | 6% | 100% | 4.6% | 100% |
| 2M | 11.9% | 14.86% | 19% | 33.33% | 12.10% | 17.39% |
| LIHC | 12.3% | 27.02% | 16.9% | 41.66% | 9.90% | 30.43% |
| M/2 | 12.2% | 24.32% | 18.7% | 16.66% | 13.5% | 32.6% |

**Source**: The data derive from the Family Budgets Survey (the National Institute of Statistics)

The table below summarizes the number of Romanians experiencing energy poverty, according to various indicators, while mentioning that there may be overlaps between populations.

**Table 2.** ***Energy poverty indicators and associated figures***

| Household category | Number | Source |
|---|---|---|
| Dwellings with no electric wiring | 287,434 | 2011 Census |
| Households benefiting from social tariffs2 | 1,014,000 (approx.) | ANRE 2016 (compared to the total number of households according to the 2011 Census) |
| Households receiving heating benefits for electricity | 8218 | Ministry of Labor 2017 |
| Households with informal access | 422,615 | Deloitte 2017 |
| Total | 1,732,267 (approx.)<br>23% of all households | |

**Note**: There is a distinction between dwellings and households, the numbers differ according to statistical data, but we shall approximate that the number of dwellings with no electric wiring is the same as the number of households, in the absence of other data on this variable in the 2011 Census.

[2] As a conservative estimate, we assume the inclusion of households receiving heating benefits for fuel other than energy (currently, there are approximately 528,000 households receiving heating benefits other than for electricity heating).

The quantification and control of energy poverty requires a continuous dialogue between the central and local authorities. There are **major deficiencies in the reporting of the data collected during field surveys at the level of municipalities and the centralization thereof** by a state authority compiling and making such data available to the institutional actors involved in the development of public policies. Except for the data concerning the amounts of benefits and the number of inhabitants in assisted households, other information provided by applicants as part of the heating benefit application does not reach beyond the municipalities. Heating benefits are the only social benefits not included in the SAFIR social benefits management information system, which poses difficulties for implementation and monitoring.

The field survey has shown that utility bill readings are limited to the amount due, most of those interviewed having difficulties in estimating their own financial needs in the household, all the more so energy consumption or energy expenditures. However, the vulnerable consumers interviewed are open to counselling, all the more as they prioritize the payment of energy bills to any other household expenditures (for example, they prefer to eat less than to be cut-off from utilities). **Where municipalities and social assistants play an active role in identifying and advising potential benefit recipients, the process is understood by the beneficiaries and perceived as being easy.** In fact, the lack of large overlaps between the counties experiencing poverty and the counties with the highest share of benefit recipients of the total population (Figure 3) demonstrates the lack of uniform implementation of the benefit granting process. However, in certain localities where the social assistance service is deficient, due to the lack of legislative clarity as to what supporting documents may be requested by municipalities, the bureaucratic burden for accessing the benefit is completely prohibitive for the most vulnerable consumers.

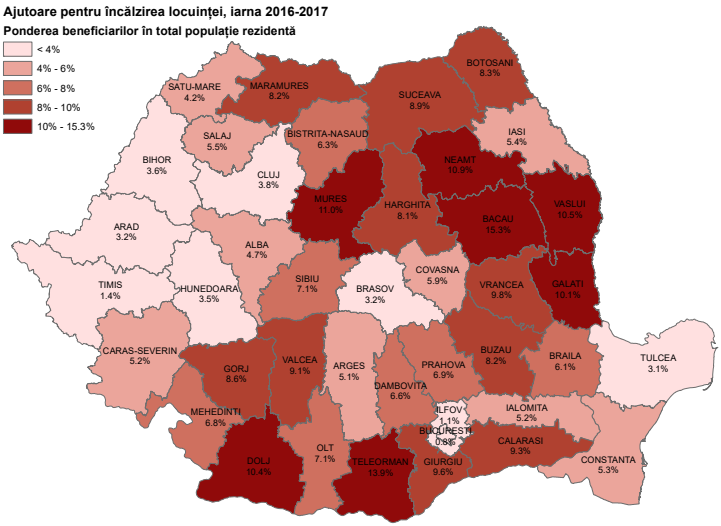



**Figure 3.** ***Share of heating benefit recipients in the total population of the county (Source: Processed from the Ministry of Labor, the National Institute of Statistics)***

| | |
|---|---|
| *Ajutoare pentru încălzirea locuinței, iarna 2016-2017* | Household heating benefits, winter 2016-2017 |
| *Ponderea beneficiarilor în total populație rezidentă* | Share of beneficiaries in the total resident population |

In financial terms, the principle of granting heating benefits is the percentage compensation of heating expenditures, depending on the income per family member, within the limit of certain average monthly consumptions. The data provided by Ministry of Labor and the data collected by the National Institute of Statistics show that **60% of the heating benefits budget covers heating with firewood, and the support for electricity-based heating represents less than 2% of the total amount**. Field records show that **firewood heating benefits are completely insufficient in relation to the needs**, amounting to maximum lei 50/month for beneficiaries with the lowest incomes, despite the fact that a family can pay up to lei 250/month for firewood. In addition, 56% of the amount of benefits granted goes to the poorest 20% of households. **Although almost a**

**quarter of the benefit amount is directed to the poorest households, with an income of up to lei 155 per family member, the data show that many of households with such incomes receive no benefits** (the last column of Table 3, even considering a underweighting of the poorest households in the Family Budgets Survey). According to the data provided by the Family Budgets Survey, it concerns the low percentage of the population that falls within income thresholds but is currently receiving benefits. In the first three steps, **less than 30% of those who should receive benefits according to the adjusted income per family member actually receive such benefits**, but we cannot be certain whether this is because they are excluded (because they own assets that exclude them), or because they do not apply for the benefit. It is also alarming that more than half of the benefits granted amount to less that lei 15/month, and the administrative expenditure for granting the benefit is most likely higher than the benefit itself.

*Table 3: Distribution of heating benefits (2014-2015)*

| Income threshold | % Thermal energy | % Gas | % Electricity | % Solid fuel | Total households (according to the Ministry of Labor) | % households (according to the Ministry of Labor) | % households receiving benefits (according to the Family Budgets Survey) |
|---|---|---|---|---|---|---|---|
| up to 155 | 8.81 | 17.09 | 1.8 | 72.31 | 177105 | 27.53 | 23.90 |
| 155.1 – 210 | 8.16 | 20.12 | 1.37 | 70.34 | 51158 | 7.89 | 34.30 |
| 210.1 – 260 | 9.98 | 21.8 | 1.92 | 66.3 | 45023 | 6.90 | 28.30 |
| 260.1 – 310 | 11.45 | 25.19 | 1.23 | 62.13 | 46284 | 7.06 | 18.20 |
| 310.1 – 355 | 12.4 | 24.99 | 0.95 | 61.66 | 39863 | 6.08 | 14.80 |
| 355.1 – 425 | 13.07 | 18.95 | 1.16 | 66.82 | 100544 | 15.25 | 12.20 |
| 425.1 – 480 | 15.43 | 22.59 | 1.1 | 60.89 | 59991 | 9.03 | 11.70 |
| 480.1 – 540 | 21.17 | 23.39 | 1.22 | 54.22 | 52735 | 7.81 | 8.00 |
| 540.1 – 615 | 30.06 | 22.79 | 1.32 | 45.83 | 50271 | 7.26 | 5.20 |
| 615.1 – 786 | 100 | 0 | 0 | 0 | 29710 | 3.17 | 2.20 |
| 786.1 – 1082 | 100 | 0 | 0 | 0 | 16226 | 1.96 | 0.80 |
| TOTAL | 19.3 | 19.19 | 1.32 | 60.18 | 668910 | 100.00 | |

**Source**: The data is provided by Ministry of Labor, Family and Social Protection and from the Family Budgets Survey 2015 (the National Institute of Statistics)

In fact, the total amount granted for heating benefits in 2017, despite the national incidence of energy poverty, is about 0.33% of the total budget of the Ministry of Labor for 2017, of approximately lei 36 billion, and is continuously decreasing – see Table 4, and only 536,080 households benefit from these facilities.

***Table 4: The total amount granted for heating benefits within the period 2014-2017***

| | | **Lei** | **euro** |
|---|---|---|---|
| bani | 2014 | 231,180,000 | 52,540,909 |
| | 2015 | 207,830,000 | 47,234,090 |
| | 2016 | 160,400,000 | 36,454,545 |
| | 2017 | 124,570,000 | 28,311,363 |
| | TOTAL 2014-2017 | 723,980,000 | 164,540,909 |

**Source**: Ministry of Labor

The structural measures for combating energy poverty imply both improving the efficiency of the housing fund and granting access to modern energy resources for isolated households. **Presently there is no assessment of the thermal insulation projects for apartment buildings, and no projects targeting individual dwellings have been implemented so far at central level.** Even for apartment buildings, the procedures are cumbersome and the program cannot be applied in many owners associations because of low incomes or the lack of trust among homeowners.

In the report, through a *customer journey analysis,* we demonstrate the differences between the contracting of energy supply services in Germany and Romania. **If a German consumer can conclude a new agreement based on a rate plan recommended exclusively online by neutral price calculators, within no more than 15 minutes, the processes for contracting energy supply services are particularly complicated on the energy market in Romania.** They involve formalities that go beyond the commercial responsibilities of suppliers, some of which concerning the granting of the building permit for a dwelling or the legality of a person's residence, rather than the process of providing a commercial service. Vulnerable consumers are particularly disadvantaged by this excessive bureaucracy.

# I. INTRODUCTION

The concept of *energy poverty* has received during the past few years more and more attention, from both the scientific and the practical perspective, as it has been translated into legislation and public policies. Almost all of the European countries have elaborated public policies meant to combat the symptoms of this phenomenon. The concept is currently also mentioned in some of the most important political documents regarding the European energy market, including the Energy Union package. Even if steps forward have first taken place only at the level of discourse, in the last few years, the concept has been integrated more and more within the institutional framework.

Still, the insufficiency and inadequacy of the available statistical data and the differences in approach among the member states - which vary from pure recognition, to concept definitions and the design of measure - have allowed for the general acceptance that the most efficient way to intervene is at the national level, where responses can take into account specific, local factors, which would, in turn, lead to more adequate instruments of intervention. At the European level, beyond its simple recognition, there are very few instruments available. The problem doesn't seem to properly fit within the sphere of the principle of subsidiarity either. There is no actual framework for this field and it is the very lack of a common understanding of energy poverty that causes difficulties in the exchange of good practices between member states, in measuring it or in evaluating the impact of alleviation programs. This has given rise to a generalized anachronism, regarding how to best approach the phenomenon, which has allowed for its galloping growth in the last few years (European Commission 2017, 4).

The subject is relevant both in the European context, where 50 to 150 million people are affected, as well as regionally. Central and Southeastern Europe are most affected, because of low living

standards, low quality housing and incomplete energy market liberalization (Househam și Mușatescu 2012). Romania has a median income per capita almost four times lower than the European average, while the energy market is in the process of liberalization. Measures must aim towards both the optimal functioning of the energy market and the adequate protection of the most vulnerable energy consumers. The phenomenon of energy poverty in Romania is not completely understood, whereas the system that proposes to solve it is rather inefficient and incoherent, being itself a factor for vulnerability at times.

Beyond its conceptual relevance, energy poverty is relevant in what regards the quality of life. The consumer, as an active participant, lies at the heart of the European energy policies and at the heart of the Energy Union. The way in which vulnerable consumers are treated reflects the market's ability to treat all consumers correctly *(fair share)*, which is a goal of the internal European market. By correctly identifying the households that are exposed to energy poverty, energy customers can be adequately helped, so that they may be able to partake in the energy market with dignity, as clients ought to be treated as an opportunity, not a burden. The way out of energy poverty would also mean having access to education, information and a clearer path out of poverty in a larger sense.

The present report has the following objectives:

- To bring clarity to the concepts of energy poverty and the vulnerable consumer, covering all of their dimensions;
- To review the European and the national legal frameworks in order to identify the main trends at the level of definitions and public policies, and the most important institutional actors involved in the process of combating this phenomenon;
- To analyze the indicators available, those recommended in the relevant literature, as well as those practiced by the European states and Romania;

- To identify those public policies that are meant to combat energy poverty in Romania and to assess their efficiency;
- To issue recommendations for the improvement of the means to address energy poverty in Romania.

The structure of the current report follows the objectives listed above. Firstly, we build a theoretical framework, meant to clarify the concepts that will be use throughout the research. The second chapter looks at how these concepts are featured in the European strategies and legislation. The third chapter reviews the legislation and the policies that have been implemented by other European states. The most substantial chapter refers to Romania. There we will look at the legislative framework, the indicators and the instruments used in public policies. Our review will be reinforced by a quantitative analysis based on official available data and a field research project conducted in three relevant counties. Finally, based on considerations from previous chapters, we will elaborate a set of short and long-term policy recommendations.

# II. THE CONCEPTUAL FRAMEWORK

## II.1. NOTIONS AND DEFINITIONS. THE VULNERABLE CONSUMER AND ENERGY VULNERABILITY.

There us no unitary approach with regard to energy poverty, neither at the level of relevant literature, nor at the level of public institutions (national or European), although it is an important concern for all modern states. This diversified approach mainly proves that the phenomenon is complex and multidimensional. Furthermore, this generates an entire diversity of indicators and public policies.

From a conceptual the point of view, the English language literature and documents make use of two different notions in particular: *energy poverty* and *fuel poverty,* which are often used interchangeably. Mușătescu et al. insists on the need to distinguish between these two notions. The impact might be at the level of public policies, as well of monitoring instruments, specific for both types. The first term refers to issues of acces to energy services that are specific to developing countries, where entire segments of the population do not dispose of modern energy sources; the second term refers to affordability, characteristic of developed countries, where the financial means to cover one's household with the needed energy are limited. In Romania's case, the second notion is also more relevant, although problems regarding the access to modern infrastructure are present in many communities. In spite of this distinction, the European documents refer particularly to *energy poverty*. The concept of *fuel poverty* isn't present in Romanian legislation or in public policy documents, whereas the notion of *energy poverty* is. Because it has been largely embraced, the notion of *energy poverty* will be used in the present report, mainly in reference to the concept of *fuel poverty,* while bearing in mind that, in Romania, having access to energy is still a problem (Househam și Musătescu 2012).

Apart from the particular tendencies offered by the national legislation or by theoreticians, the most widely accepted definition of *energy poverty* refers to *the impossibility of a household to provide energy services for itself, at affordable prices* (Brennan, Zevallos și Binney 2011) (Liddell, și alții 2012).

The concept of *energy poverty* is theoretically placed where the income and the energy expenses of a household meet. Mușătescu adds three complementary conditions: the technical under-performance of the home, the lack of access to cheap services within the context of a competitive market, the lack of an efficient/adequate heating system (Househam și Mușatescu 2012). All of these aspects are to be taken into consideration when seeking to understand how the phenomenon manifests itself in Romania. These aspects also lead the discussion towards relevant and connected topics, such as the energy performance of homes and access for isolated communities. Such a wide approach has advantages and disadvantages. Firstly, it is possible to find that the affected population is much larger. On the flip side, we might end up with results that are nationally specific, that could hardly be used for making comparisons at the European level. This is a paradox present in all European analyses, which is why standardizing among states is difficult.

Going more into depth with the attempt to understand the concepts, we find that literature identifies two ways to define the vulnerable consumer. On the one hand, vulnerability depends on the consumer's characteristics. This is the so-called *endogenous* perspective (Brennan, Zevallos și Binney 2011). On the other hand, it depends on the larger situation the consumer finds him/herself in – *the exogenous* perspective. Most often, the external conditions cannot be controlled by the consumer. (Clifton, Fuentes și Fernández-Gutiérrez 2013) Inspite of this, the external factors have a strong influence on the consumers' options. (Baker, Gentry și Rit 2005) Sometimes this influence manifests itself in some form of abuse, as the consumer finds itself to be constrained by *the market's status quo*, left without any alternatives. (Hill și Kozup 2007 ) Another perspective places the consumer's vulnerability at the intersection

between the consumer's own characteristics and the difficulties imposed by the market (Wolburg 2005). In agreement with this last idea, Stearn (Stearn 2012) offers a complex definition which somewhat overlaps with that of energy poverty, because it references ***the impossibility of having access to necessary products and services, without a disproportionate burden of effort/cost/time.*** This is where the policy-making definition offered by the European Commission in 2016 fits (London Economics, VVA Consulting and Ipsos Mori consortium 2016). It combines the endogenous and the exogenous perspectives, so as to cover all categories of consumers who find themselves in a situation of vulnerability because of demographic or sociocultural conditions, as well as conditions regarding the structure of the market. In Romania, as can be seen in the analysis of relevant legislation, the endogenous perspective is used exclusively. Consumers might be vulnerable from one perspective but not from another, respectively, they might find themselves in a situation of multiple vulnerabilities. This is why the INSGHT_E study from 2015 distinguishes between general vulnerability and energy poverty. For the first it recommends measures generally meant to protect the consumer and help him/her gain access to the market, whereas for energy poverty it proposes solutions that are of a structural nature, demanding targeted and long-lasting preventive actions. (Pye și Dobbins 2015)

The most recent approaches imply that vulnerability is not a static situation, but that any consumer can go through it at a certain time, while one or more vulnerability factors might overlap **(Griffiths and Harmon 2011)** Still, it is important to bear in mind that, due to certain economic or social-demographic conditions, there are groups in which the state of vulnerability is persistent, and where persistent intervention is needed. In Romania, we could easily reference the poorest large city neighborhoods (such as Ferentari in Bucharest or Pata Rât in Cluj-Napoca) that are inhabited in particular by Roma people. That is where intervention measures, which are meant to enhance their situation, must be comprehensive and must comprise of measures that reduce the social marginalization of these vulnerable communities and target their multiple vulnerabilities.

In what concerns the typology of vulnerability, the INSGHT_E study identifies five types of factors that determine this situation. They can be identified in all economic sectors, including energy:

**a. Commercial factors:** there are some problematic market practices, which distort the behavior of energy consumers and their capacity to choose, being able generate a state of vulnerability. Among these, the study refers to the price of reference as a distorting mechanism. Being based on incomplete information, it has a direct effect of the ability of consumers to make informed choices. The study also mentions bills, contracts or offers that cannot be understood by the clients, limiting their capacity to choose.

**b. Market factors:** the *de facto* state of the energy market, the volume of information available on the market and its lack of clarity can give rise to the feeling of an asymmetric relationship between consumer and supplier, where the first is limited in his/her capacity to make completely informed decisions; high energy prices, given an incompletely liberalized market, may have a disproportionately negative effect on the vulnerable groups.

**c. Access factors:** These factors are mainly structural in nature. Access to the energy market may be impaired in several ways: due to the absence of effective communication instruments provided by the suppliers; disconnection from the distribution network (the most exposed households are those from the rural areas); limited or conditioned access to better deals (for instance, due to not having a bank account); mandatory warranty deposits for signing a supply contract, etc.

**d. Situational factors** refer to personal conditions, permanent or temporary, due to which consumers might become vulnerable. Being exposed to aggressive forms of marketing or having a low quality home are instances of vulnerability caused by situational factors.

**e. Social-demographic factors** refer to certain personal or group characteristics (age groups, ethnicity, level of education and the kind), depending on which, some people may be more vulnerable to the transformations taking place in the energy market.

**Table II.1.** ***The factors that determine energy poverty (according to INSIGHT_E)***

| Commercial | The Market | Access | Situational | Social-demographic |
|---|---|---|---|---|
| Market practices that distort behavior | The *de facto* state of the energy market | Structural factors | Situations in which consumers become vulnerable | Personal or group characteristics |

***All of these five factors are present in Romania, as will result especially from the field research undertaken in three counties.***

The general conclusion of a study done in 2009 (Schweizer-Ries 2009)) is that, apart from all the elements specific to each country, energy vulnerability affects categories of people who meet the following social-economic factors:

- People with low income;
- People who are unemployed;
- The elderly;
- Young families/with small children, single parented families;
- People with disabilities or people who are chronically ill;
- People who live alone and/or with low income;
- People with a low level of education;
- Ethnic minority families;
- People who live in energy inefficient housing;
- Widowers.

One must bear in mind that the situation causing vulnerability can be complex in each case, being the result of several interacting factors, and which can cause multiple vulnerabilities. Judging by the way they manifest, the five categories of factors mentioned above give rise to a series of dimensions of vulnerability. The study tests five of these, among which, the most relevant in the area of energy are the last three listed below, with their respective relevant indicators:

- Having characteristics that limit the ability to maximize well-being;
- Having characteristics that limit the ability to maximize well-being;
- Having difficulty in obtaining and assimilating information:
  - The consumer doesn't feel sufficiently informed regarding prices;
  - The consumer doesn't feel informed at all regarding prices, quality and the condition of the purchased goods or services.
  - Gets his/her information only from advertising/ makes comparisons between alternatives only based on the information offered by advertising material:
  - Faces problems in comparing offers because of factors that depend on the quality of information (doesn't know where to go looking for information, suppliers don't offer enough information);
  - The consumer hasn't changed suppliers in the last five years because of reasons related to the quality of information (doesn't know how to access information that might help him/her reach a good decision);
- Inability or failure to buy, choose or access suitable products:
  - Consumers don't compare offers;
  - They have difficulties in comparing offers;
  - Due to personal reasons, consumers have difficulties in comparing offers;
  - Due tu reasons pertaining to market mechanisms, consumers have difficulties in comparing offers;
  - Due to access problems, consumers have difficulties in comparing offers;
  - Consumers don't change suppliers due to personal reasons;

- Consumers don't change suppliers due to reasons related to market factors;
- Consumers don't change suppliers due to access reasons;
- Consumers don't change suppliers due to costs associated with termination clauses in the contracts;
- Consumers don't change suppliers due to other conditions.

– Higher susceptibility to market practices, creating imbalances in market interactions:
  - Consumers feel vulnerable because of the complexity of offers, terms and conditions;
  - Consumers feel especially vulnerable due to the complexity of offers, terms and conditions;
  - Within the given market conditions, consumers have opted for the right offer.

The implications these factors have on consumers may be of considerable importance, as consumers, not knowing their real options on the market, are faced with contractual agreements with serious implications both in terms of prices, conditions and quality (either because consumers are being manipulated, or because consumer doesn't understand the information entirely). Moreover, consumers don't have access to alternatives, for various reasons they cannot choose between options, and thus have to opt for services that don't meet their needs accordingly. Services are consequently suboptimal and more expensive than they would normally be under conditions of free competition. Furthermore, access factors create conditions for market exclusion and social alienation.

The table below shows that, in the case of Romania, the highest cause of energy vulnerability is related to variables belonging the last two dimensions: the ability to buy, access or choose products that are adequate for consumers' needs (dimension 4); unfair market practices (dimension 5). The last dimension also has the highest incidence rate at EU level. In the energy sector, it surpasses 85%. The impact of causes belonging to dimension 4 are also important EU-wide.

**Table II.2.** *Incidence of vulnerability in the energy sector based on sector specific indicators*

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UE28 | 2% | 15% | 2% | 52% | 14% | 28% | 33% | 10% | 10% | 11% | 12% | 85% |
| AT | 3% | 14% | | 43% | 9% | 28% | 32% | 12% | | | | |
| BE | 2% | 16% | | 48% | 16% | 32% | 40% | 3% | | | | |
| BG | | | | 87% | 37% | | | | | | | |
| HR | | | | 52% | 23% | | | | | | | |
| CY | | | | 85% | 47% | | | | | | | |
| CZ | 1% | 16% | | 43% | 9% | 32% | 38% | 9% | | | | |
| DK | 2% | 20% | 2% | 53% | 19% | 35% | 42% | 15% | 9% | 15% | 10% | 85% |
| EE | 3% | 13% | | 47% | 9% | 35% | 36% | 17% | | | | |
| FI | 4% | 11% | | 45% | 12% | 34% | 34% | 9% | | | | |
| FR | 3% | 27% | | 76% | 17% | 41% | 47% | 10% | | | | |
| DE | 2% | 9% | | 36% | 7% | 18% | 26% | 6% | | | | |
| EL | | | | 67% | 16% | | | | | | | |
| HU | | | | 72% | 19% | | | | | | | |
| IE | 4% | 13% | | 33% | 9% | 17% | 26% | 6% | | | | |
| IT | | | | 48% | 22% | | | | | | | |
| LV | | | | 59% | 15% | | | | | | | |
| LT | 1% | 16% | 2% | 83% | 24% | 33% | 15% | 55% | 21% | 4% | 42% | 90% |
| LU | 4% | 29% | | 82% | 19% | 49% | 42% | 29% | | | | |
| MT | | | | 85% | 29% | | | | | | | |
| PL | | | | 61% | 12% | | | | | | | |
| PT | 6% | 16% | 3% | 46% | 15% | 28% | 25% | 10% | 11% | 12% | 7% | 90% |
| RO | 1% | 25% | 3% | 78% | 21% | 37% | 26% | 44% | 22% | 10% | 36% | 90% |
| SK | 3% | 21% | | 55% | 11% | 42% | 40% | 11% | | | | |

**Note**:

A. Compares deals based only on information coming from advertisements – energy sector;

B. Has problems comparing deals due to information-related factors – energy sector;

C. Has an electricity supplier and has not switched, due to information-related factors – energy sector;

D. Does not compare product deals – energy sector;

E. Finds it very difficult to compare product deals – energy sector;
F. Has problems comparing deals due to personal factors – energy sector;
G. Has problems comparing deals, due to factors related to the market – energy sector;
H. Has problems comparing deals, due to access-related factors - energy sector;
I. Has an electricity supplier and has not switched due to personal factors – energy sector;
J. Has an electricity supplier and has not switched due to market-related factors – energy sector;
K. Has an electricity supplier and has not switched due to access-related factors – energy sector;
L. Incorrect choices due to marketing practices – energy sector
**Source**: Pye and Dobbins 2015.

Understanding what defines these two dimensions is important. Romania is an exceptional case, frequently exceeding the European average on a large part of the indicators concerned. There are states with a high frequency of *low outliers.* These states register values way below the central tendency on all dimensions: Austria, The Czech Republic, Estonia, Finland, Germany, Poland and Great Britain, while states such as Romania, Croatia and Cyprus tend to have, in reverse order, a raised frequency of *high outliers.* Their registered values are much higher than the general trend.

According to the two dimensions, the study identifies the following indicators regarding the energy market, which place Romania in the position of being a *high outlier* (meaning that these disadvantages are disproportionately present on the Romanian market, as compared to the European tendency):

- Dimension 4 or the ability to buy, access or choose products that are adequate for one's needs:
  - The client doesn't compare deals (the commercial factor*);*
  - Due to access-related factors, consumers have difficulties to compare deals (the access factor*);*
  - The client Has an electricity supplier and has not switched due to personal factors (*the social-demographic factor*);
- Dimension 5 or unfair competition practices;

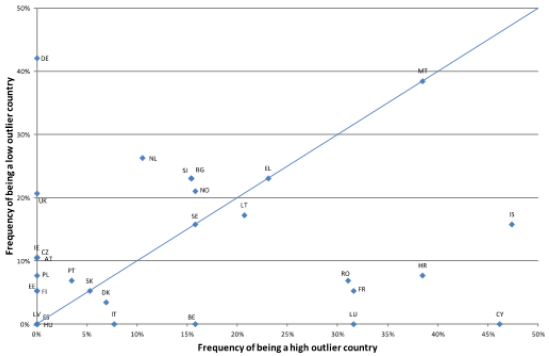
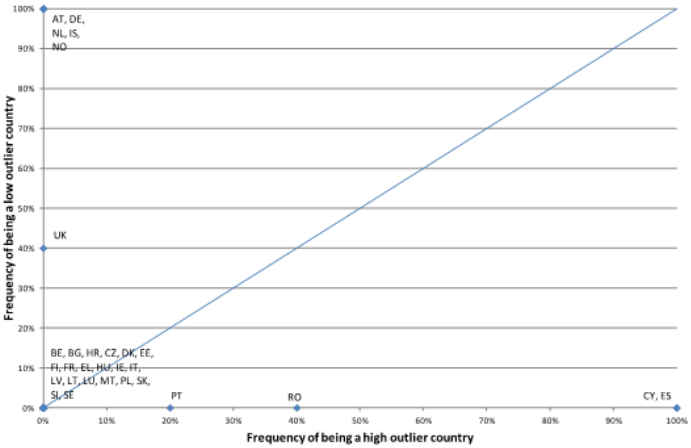



**Figure II.1.** *The frequency of high or low outliers in Dimension 4*




**Source**: Pye and Dobbins 2015.

**Figure II.2.** *The frequency of high or low outliers in Dimension 5*

## II.2. INDICATORS OF ENERGY POVERTY

Energy poverty is related to the income per household and to the cost of all energy resources consumed per household, not just the costs of heating. An ample study about the definitions used for this phenomenon has identified two types of approaches: those referring to (1) households which spend too much of their income on energy, and those referring to (2) households which spend too little on energy (Rademaekers, și alții 2016).

Energy poverty indicators are metric instruments used to evaluate and monitor the phenomenon. To determine these indicators, special attention must be paid to their ability to convey the phenomenon as faithfully as possible and to allow for comparisons over time and space. The complexity of the phenomenon, as well as its different manifestations in each country is what makes indicators very diverse. Rademaekers' study has identified and analyzed 178 usual indicators of energy poverty. In regular order, these indicators relate income to expenses (33%), refer to energy infrastructure (29%), public policies (12%), effects (12%), demographic aspects (8%) and demand for energy (6%).

These indicators have been evaluated and classified in several categories, out of which only two have been approved of: the cost indicators, and consensual indicators. *Cost indicators* take into consideration the energy expenses of households and are typically related to income. *Consensual indicators* are indicators of perception. They identify those households that consider themesves to be energy poor or related to aspects of energy poverty. Other categories, such as room temperature or those referring to the effects of energy poverty have not been unanimously agreed upon, due to the lack of statistical data and theoretical framework.

To allow for comparisons across states and time, a series of encompassing and replicable indicators had to be identified. Four such fundamental cost indicators resulted from a feasibility study: *The double median of the national share* (2M), *High costs low income* (HCLI) and *Hidden energy poverty* (HEP). In what concerns the consensual indicators, a conclusion was reached, that people's perception about the room temperature can be relevant to identify those households, which find themselves in the situation of energy poverty.

*II.2.a. Cost indicators*

**1. Energy costs that are too high:** *The double median of the national share* (2M) is a threshold indicator, which refers to the median national value of the share of energy expenses related to the available income. This indicator has been validated after having been compared with two other widely practiced and slightly similar thresholds: 10%, according to which a household that spends more than 10% of its income on energy is considered energy poor and the double median of energy expenses in absolute terms. While the latter is imprecise because it is unrelated to income, the first, a measure proposed even in Romania's Energy Strategy of 2016, has been found to be a threshold applied for its simplicity, although with deficiency, as it derives from the specific situation of poor households in 1988, in Great Britain. It is an approximation of the energy expenses of the poorest 30% of households, whereas the energy expenses of a regular household consisted of 5% of its total budget. Quite exceptionally, the threshold matched the 2M estimated by Isherwood and Hancock in 1979. However, apart from the risk that the indicator might be obsolete, its arbitrary and nontransferable character raises problems – when it was applied in Northern Ireland, in a context not much different, it caused significant errors. There, the 2M threshold was 18%. Consequently, applying the 10% threshold has resulted in an underestimation of energy poverty, with important effects on the design of targeted public policies.

In spite of criticism associated with the 2M indicator (especially that it cannot identify hidden energy poverty), it has the important advantage of allowing for readjustments that reflect annual fluctuations, in terms of income and expenses, while it can also be applied in different countries, where it can reflect the specific national circumstances. Moreover, this indicator also allows for the separate analysis of income groups. It should be applied, however, bearing in mind that it might overestimate energy poverty among the higher income groups (Thomson 2013).

**2. Available income that is too low:** *Low income/high costs* (LIHC), is the indicator developed by John Hills from the London School of Economics, according to which the percentage of the income spent on energy is above the mean value of the national threshold, while the residual income is below the official threshold of poverty. This indicator takes into account the *Minimal Income Standard*. The indicator refers to the minimum income necessary for the members of a household to be able to be actively integrated in society. In this case, energy poverty refers to the impossibility of paying energy bills from the net income leftover after paying for housing expenses and minimum living costs (expressed in terms of MIS).

This indicator is considered imprecise because of the difficulties associated to the quantification of MIS both at country level and across countries. The Minimum Insertion Income (MII), a proxy of MIS has been applied in Spain and is also present in Romanian legislation, where it will come into effect in 2018. One of LIHC's advantages is that it presents energy poverty as a phenomenon distinct from general poverty. Before it subtracts its energy expenses, a household isn't necessarily vulnerable. Furthermore, it has a greater ability to exclude high-income groups.

Both indicators mentioned above represent relative values, which relate to the national distribution of income and energy expenses. Using medians instead of means is justified by the need to avoid extreme values.

**3. Hidden energy poverty (HEP).** This indicator identifies those households that have inadequately low energy expenses. There are several reasons why such a situation can be associated with energy poverty. One example is obstructed consumption or the limited access factor which is associated to energy poverty. In order to calculate the hidden energy poverty, different thresholds have been proposed: Half of the national median of energy expenses in absolute monetary terms is the most favored indicator (M/2), due to its flexibility and comparable character. Other indicators, such as M/4 or 5 EUR are considered too low and relatively arbitrary (the latter's case).

INSIGHT_E proposes several levels of energy expenses. Poorer hidden households have spend less than 5% of their income. The Belgian barometer on energy poverty elaborates a more complex indicator, based on the M/2. This indicator groups households according to their demographic characteristics and their dimensions; it has established a pattern of consumption for each category and has isolated the households with an energy consumption behavior of M/2, thus placing them as part of the phenomenon of hidden energy poverty.

An additional way of identifying energy poverty is the consensual indicator that refers to a household's ability to warm its home sufficiently. The M/2 indicator must be applied bearing in mind that it might overestimate the phenomenon of hidden energy poverty at the level of high-income groups.

*II.2.b. Sizing income and expenses*

Cost indicators are instruments that report energy expenses, according to the income of households. Thus, the sizing of expenses and income must be as clear as possible. There are two ways to express expenses: *real* expenses (observed), respectively *targeted* expenses (how much a household ought to spend to ensure its necessary energy consumption). The literature is in agreement regarding the superficiality of the indicators based on observed data, seeing how they do not account for the consumption necessary for the optimum comfort of a household. This kind of data fits into the category of indicators that refer to ambient temperature. This approach requires careful modeling, which means very precise and specific data for each country. The only country which practices this type of model is Great Britain. The lack of data, respectively the difficulty in comparing states, make turning to observable data - a pragmatic solution (Thomson 2013). In what concerns observable data, this refers to the total energy expenses of a household (excluding transport expenses). Still, given the potential offered by a

*need to spend* approach, it could be integrated into the analysis either by support indicators or by using a consensual indicator.

In what concerns the nature of the income, the Rademaekers Report (Rademaekers, și alții 2016) proposes using the "equivalised disposable income", which seeks to standardize the net income per household, in order to make it comparable. In this regard, there are a number of conditions which must be met: it is important to define income in a way that is as encompassing as possible (to include, apart from the salary, other types of financial, social benefits, etc.); the available income does not include taxes and social contributions; the income should be used in a standardized manner by applying equivalizing coefficients for households of different sizes, based on OECD norms, as follows: the first adult has a share equal to 1, any other adult an extra share of 0.5, each child 0.3. This solution is not unanimously accepted. In spite of the fact that it allows for comparison among households of various sizes, it may distort the results by implying that larger households have smaller incomes. In practical cases such as in Belgium or Great Britain, out of the equated available income, living expenses are subtracted (rent, water-sewage expenses, taxes, etc.). However, this perspective is marginalized the literature.

Cost indicators measure the magnitude of the phenomenon of energy poverty. Its depth (or the quantification of the distance between the present situation and the energy poverty threshold) is measured with the aid of gap indicators. The results offer a clue about the financial efforts a state should make in order to remedy the situation of energy poverty.

**2M Gap** shows how much the state should subsidize the energy bill, in order for the relation between cost and income to be equal to the energy poverty threshold.

**LIHC Gap** shows how much income should increase, respectively how much energy costs should decrease, in order for the realtion to be equal to the energy poverty threshold.

**SEA Gap** shows how much energy expenses should increase per household, in order for the energy poverty threshold to be overcome.

*Consensual indicators* measure in how far energy poverty is perceived by the households themselves. This is an eminently subjective tool and it mainly identifies those consumers who consider themselves incapable of adequately heating their home, which is also one of the flaws of this indicator. An alternative would be the indicator, which reveals late payments for utility bills (systematic or not). However this also encompasses other services, apart from energy.

Support indicators are used to deepen the results reached by the main indicators of energy poverty. Main indicators offer a general measure of energy poverty and help with comparisons across states. However, they cannot capture specificities related to national or micro-national social contexts. Rademaekers identifies six types of support indicators that can help improve macro-results: 1. Demographic data, 2. Income/Cost-related information (related to the price of energy); 3. The nature of the demand for energy; 4. Related effects; 5. Infrastructure (home, access); 6. Public policies in place.

# III. DEFINITIONS, APPROACHES AND EUROPEAN INSTRUMENTS

As per the previous section, the notion of the vulnerable consumer is usually being associated with energy poverty in public policy documents and some of the relevant literature. The vulnerability of the consumer refers to the a priori conditions which, following interaction with the market, may have a negative effect on the individual's well-being. This section will follow the way in which these two concepts – energy poverty and vulnerable consumer – are transposed into public policy documents, first at the European level and afterward, in other European states.

Studies show that energy poverty is a widespread phenomenon at the European level. The EU-SILC indicators place the energy poor population at 11% of all European citizens (Pye and Dobbins 2015), which, translated into figures means 50 million citizens. A 2013 resolution of the European Parliament estimates that the number of people affected by this phenomenon in one way or another is somewhere between 50 to 150 million (European Parliament 2013). In spite of this reality, at the level of European institutions, there is no consensus as of yet regarding the definition of this phenomenon, either in what regards measuring indicators, or a unitary political approach. Moreover, in spite of the Social and Economic Council's recommendations regarding the development of a common approach framework, such a framework does not exist (European Economic and Social Committee 2013). The lack of an unanimous approach generates sporadic engagement on the part of national authorities, differences in measures and many gaps that follow thereof. On the other hand, the lack of an unanimous vision has the advantage of addressing the phenomenon depending on its specificity at each state's level. This argument is based on the EU's subsidiarity principle, in which the European Commission plays an important coagulating role.

## III.1. STRATEGIC DOCUMENTS

*III.1.a. The 2020 Strategy*

The 2020 Energy Strategy for competitive, secure and sustainable energy is a document of reference for the European strategic thought, as the first in a series of strategies which plans to place the European economy on a trajectory to decarbonisation, clean and efficient energy, with the final objective of creating a green, sustainable economy. The Strategy proposes a triple objective: reduce energy consumption, reduce carbon emissions and raise renewable energy consumption, each objective by 20%. Within the context of this triple desired goal, the consumer is placed at the center and his/her benefits essentially derive from an integrated and functional market. Consumers must benefit from safe, accessible energy, as a consequence of efficiency measures but also because of an interconnected, liquid, functional market, which can offer all necessary levers for consumer protection, including access to resources and multiple suppliers (European Commission). Energy vulnerability is mainly approached from a geopolitical point of view, without omitting the situation of the vulnerable consumer on the internal market. Beyond the inherent mechanisms of the free market, the document points to the necessity of affirmative protection measures for these consumers, especially in case of crisis, when market mechanisms may be insufficient. Commission is engaged in publishing periodic reports regarding the measures of protection for the vulnerable consumers on the energy market, underlining consumption efficiency (European Commission 2010, 13-14).

*III.1.b. The 2050 Strategy*

The 2050 Strategy is the furthest reaching prospective document of the European Union. Having been drafted in 2011, it proposes seven possible scenarios for reaching the long-term

decarbonisation objectives (80-95%, according to the levels of carbon from the year 1990) and references public policy implications.

The main conclusion of this strategy is that decarbonisation is not only possible, but already happening. All seven possible scenarios anticipate major capital initial investments, the rise in costs with an important impact on the final consumer, including household consumers and especially the vulnerable ones, at least in the medium term. Solutions must, therefore, target the cost of transition. Consequently, an integrated market is preferable to a fragmented one because the cost of transition can be distributed. However, the mix of transition must be coordinated with other states and must be adapted to national requirements, in order to avoid an excessive burden for the consumers. Moreover, it is important to consolidate the power of decision of the consumers and their access to quality services. Beyond all necessary free market mechanisms, support schemes have a great importance, especially for the most vulnerable. For them, the document recommends finding solutions at the national, as well as the local level. The document proposes financial solutions for support and measures targeted at consumption management. Energy efficiency, however, is the most recommended means of intervention. In the medium term, the measures that raise efficiency and lower consumption must, in some way, compensate for rising prices. Consequently, member states are encouraged to completely implement European legislation in the field of energy, so that vulnerable consumers might benefit from market protection and innovative solutions for energy efficiency.

Although, for the most part, the definitions found in European documents only refer to income and energy efficiency, there are some recommendations, which also target energy prices. Prices must, therefore, reflect costs. Solutions, which prevent the volatility of the renewable energy prices, and which make the market more flexible must be found, to the advantage of the consumers. This means that centralized resources will have to be integrated with local solutions (European Commission 2011).

*III.1.c. The 2030 Strategy*

The 2030 Strategy couples the 2020 objectives with the 2050 engagements and sets targets, measures and intermediary instruments that would facilitate the long-term objectives assumed. As far as its aims are concerned, ambitions have been redefined. Thus, compared to 1990, in 2030 the level of GES emissions will drop to 40%, renewable energy will rise to 27%, as will energy consumption. All the above-mentioned principles have been reconsidered and strengthened. In terms of access to energy, the strategy underlines the fact that energy-related costs might directly and indirectly influence household budgets, through the prices of goods and services that people buy regularely, especially in the context of transition to a clean energy. Energy efficiency, therefore, remains the answer (European Commission 2014).

*III.1.d. The Energy Security Strategy*

The reasoning at the heart of the European Security Strategy drafted in 2014 is the raising degree of reliance upon foreign resources, and the depletion of indigenous ones. This is even more worrysome for the Member States in our region, which sometimes depend on one single supplier. Vulnerability derives from the lack of alternatives in the context of a heavily fragmented regional market. Assumptions about the fragility of the European energy market have been confirmed by stress tests done in the fall of 2014, which have demonstrated the strong impact that an interruption in the supply of gas coming from Russia would have on the European economy, while Eastern European states would be exposed the most. The strategy doesn't specifically refer to energy poverty and its factors, but it does mention vulnerability and it comes up with short and long term solutions to protect consumers exposed. In case of a crisis caused by an interruption in the supply of gas, the strategy sees an important role for the Coordination Group in the field of natural gas and for regional plans by Member States and members of the Energy

Community, with an important accent on concerted intervention procedures in situations of risk, including measures to identify vulnerable categories. In the long run, there are five plans of action: 1) *Energy efficiency* will remain the main energy resource and opportunity; 2) *Increasing indigenous energy production* in conditions of sustainability, diversifying suppliers and transport routes, consolidating consumer position on the market; 3) *Finalizing the internal EU energy market,* both in hard (interconnectedness) and soft terms (common regulations); 4) *A unified energy diplomacy,* based on the coordination of Member States' policies; 5) *Consolidating the emergency and solidarity mechanisms* (European Commission 2014).

*III.1.e. The Energy Union*

Launched in February 2015, The Energy Union is a unifying structure, based on inter-dependency between Member States, with the goal of finalizing the objectives of the internal market, which would, in the end, deliver safe, accessible and sustainable energy as the basis for a clean economy, a dynamic, competitive and well-performing market. In this context, consumers would be the main beneficiaries as they seek to become active market participants, looking to reduce costs by taking advantage of the new conditions and technologies. Vulnerable consumers would take advantage of important protection programmes (European Commission 2015, 2). The package regarding the Energy Union addresses energy poverty in a specific way, within a subchapter of the Commission's communication of the 25th of February 2015 (European Commission 2015, 12). It defines energy poverty as being placed at the inter-section between low income, caused by a general state of poverty, and inefficient housing. Inefficient housing is mainly a result of the poor legislative framework in place.

When it comes to possible solutions, the communication proposes a combination of measures and, within this context, exclusively accentuates the financial, therefore short term ones. The price liberalization process is especially seen as the moment in which

protection mechanisms for vulnerable people must be activated. These mechanisms can be implemented in two types of policies: by means of social policies - preferably, because these policies can be easily targeted and measured, while their effects are felt quickly. The document underlines the fact that implementation must engage all levels of authority, from the national to the local. Secondly, energy policy options are also recommended, such as the social tariff. However, this option is only secondary in the order of preference, because it might produce negative externalities, by raising the costs for the all the other consumers, who will collectively contribute to finance this measure.

In a larger sense, by mentioning *the empowerement of consumers,* the communication references the importance of ensuring a general framework that favors consumers. Therefore, they must be supported in making informed decisions on the energy market, as large-scale passivity persists. In order to remedy this situation, a market framework must be created, to allow the consumer to be engaged: diversifying the suppliers, easing the process of moving from one supplier to another, implementing legislation about the protection of energy consumers, involving all levels of public authority down to the lowest one, in order for clear and complete information to reach all consumers quickly and for the most suitable instruments (including financial instruments) to be easily accessible. Installing smart technology (ranging from smart meters to whole networks) might be an additional protection instrument on the liberalized market, because it allows for data about the vulnerable consumers to be gathered and for better control over consumption.

The document also mentions vulnerability as a result of being dependent on external sources of energy, or on a single supplier, which affects some member states in particular (European Commission 2015, 2). However vulnerability is understood, energy efficiency is envisioned to be the most sustainable long-term measure, with the greatest benefits. According to this document, raising efficiency by just one percent would lead to a drop in gas imports by 2.6%. To these ends, authorities need to be involved at

regional and local level. Integrating markets and finalizing the internal market is a macro-measure that will generally lead to diminished vulnerability among consumers (European Commission 2015, 11-13). The agenda included in the Energy Union package, an initiative that the European Commission and the Member States are responsible for. According to this, measures of protection for vulnerable consumers, integrated in a *New Deal* for energy consumers, are to be implemented between 2015-2016. These measures are seen as having an impact on the internal energy market. (European Commission 2015, 3).

The second report regarding the state of the Energy Union, drafted on the 1st of February 2017, sees the problem of energy poverty as an indicator, which measures the quality of the internal energy market (European Commission 2017, 9).[3] Remarkable within this context is the fact that, at the level of the EU, poorer households spend around 8,6% of their expenses on energy and an ever increasing percentage of people from this group (23%) don't have the financial means to sufficiently heat their homes. With this in mind, Member States are advised to take well-targeted measures regarding the vulnerable consumers (European Commission 2017, 4).

In what concerns the general situation of the market and its effects on the phenomenon, the report underlines that energy prices on the retail market have gone up, in spite of the contrary tendency from the wholesale segment. In these conditions, new legislation about the electricity market, renewable energy and its competition, more innovative options and more instruments for protection, will continue to consolidate the position of the consumers and provide them with lower prices. The Energy Poverty Observer is a necessary European instrument, which will become active at the end of 2017 and which is meant to monitor the phenomenon at the European level, in order to spread good practices on the subject. (European Commission 2017, 8-14).

[3] The IM8 indicator `Energy accessibility – the percentage of energy expenses, referring to final consumption for the inferior quintillion.

*III.1.f. The Winter Package*

The winter package aims to integrate the 2050 vision, the objectives of the 2030 vision and the Paris climate change engagements. Its final goal is to generate instruments that will coordinate all of these commitments. The package underlines the need for an equitable transition for all categories of consumers, especially those who find themselves in a state of vulnerability or energy poverty.

Three main objectives can be identified, among which, two are especially relevant to our discussion, because they refer to vulnerable consumers. A crosscutting solution proposed is energy efficiency. Another priority refers to the development of renewable energy sources.

The attention paid to vulnerability is justified by the transition process to a clean economy and the need to safeguard a state of fairness for all consumers in the process. For the ordinary citizens, this means having better access to information (smart metering, clear and simple bills, simple procedures to change providers, no contract termination fees, instruments for comparing offers, smart performance certificates, better service on behalf of the suppliers), which would allow them to be active on the market.

Just like in the previous documents, the Winter Package defines energy poverty as being found at the crossroads between low income and inefficient housing. High energy bills are due to low-standard homes. The impact this has on the family budget is major. In 2014, the poorest households spent around 9% of their income on energy, which is being described as a galloping phenomenon and a situation that deviates significantly from the European norm.

The proposals made by the package in order help Member States manage this tendency are mainly in the area of energy efficiency. Member States would also be bound to report on this phenomenon and the steps taken to limit it. The instrument created by the European Commission with this purpose is the Integrated National Plan in the field of energy and climate change (INP),

together with the corresponding monitoring instruments. According to the new provisions, each Member State should send reports on indicators corresponding to the five dimensions of the Energy Union. Energy poverty is an indicator for the internal energy market dimension. The INP is, therefore, one of the instruments the European Commission intends to use in order to monitor the phenomenon EU-wide and to correlate it with models for good practices. This is also where the role of the European Observer for Energy Poverty comes in, which, based on the specific analyses, will propose mechanisms of intervention in this field (European Commission 2017, 11-16).

Also, from an energy market perspective, it was proposed that ACER be consolidated, in order for it to cope with the new challenges of the European energy market. There are several arguments in favour of this new proposal. Firstly, it is considered that the challenges on the market must be addressed at a regional level. Therefore, ACER should be able to regualte matters which cannot be managed at the national level. On the supra-national market, consumers' rights should be better protected (European Commission 2017, 12-13). The second argument is about the pace and the cost of transition. Outside of from the regional context, the transition to a clean economy will generate costs too high for consumers. On a regional market the price mechanism will operate much more faithfully, emitting real signals and being potentially smaller.

The main document of the package is completed by two annexes, which deal in depth with energy efficiency and the transition to a clean energy. From an efficiency perspective, energy poverty is seen as a necessary public policy objective. Therefore, the discussion is carried more in the context of social justice. In this sense, the document recommends the creation of programmes to target social housing. For this purpose, authorities should make use of European Structural and Investment Funds and the European Social

Fund. This solution is offered as an example of good practice based on actions of Member States, which have managed to target 1 million households in total through such type of funding.

Romania's position regarding the Winter Package[4]

Romania sees the protection of vulnerable consumers in two ways: as an obligation and as a right. It is the obligation of the Member States to recognize the phenomenon, to evaluate it and to establish appropriate intervention measures. When seen as a right, each Member State is free to decide on the actions it considers best suited, based on the levels of vulnerability and the resources available. The argument is maintained when reference is made to the right of each State to opt for the most advantageous transition mix. Moreover, energy poverty is also mentioned in the context of the energy efficiency of buildings. It is widely accepted that efficiency measures play an important role in diminishing energy poverty, while, at the same time, the need to improve the welfare of the general population is persistent .

Regarding the role of ACER, Romania recognizes its utility in managing cross-border matters at this level. However, it sees that ACER is currently unable to assume its European position as a regulator, due to its limited financing and expertise. Furthermore, the integration of markets (a feature which is in the advantage of the vulnerable consumer) doesn't depend on ACER's abilities to manage it, but on each Member State individually. Romania generally approves of the integrated national plans and reports, but it considers they should offer more flexibility.

[4] The Ministry of Energy 2017.

## III.2. RECOMMENDATIONS, RESOLUTIONS, EUROPEAN DIRECTIVES

Generally, European documents deal with the subject of energy poverty. The 2009 Third Energy Package approached the problem as part of the wider topic regarding the protection of the energy consumer, and within the context of the liberalization and interconnectedness of the energy market. This package of measures fundamentally assumes that the design of the market must place the consumer at its core. Consumers should, therefore, be much more engaged, responsible and able to make informed decisions. The document recognizes the importance of the phenomenon in the region and sets a series of directions for intervention. The main principle underlying the recommendations is subsidiarity. Member States should be the main intervening actors, setting up action plans and other targeted or general strategies that should be active at the national level.

The package recommends integrated measures: Member States must ensure and protect the continuous access to resources for vulnerable people, especially in situations of crisis (among these, people from isolated areas represent a distinct category). In this respect, the State is bound to define the vulnerables consumer and to make sure that they benefit from protection. Financial measures include a combination of social benefits and energy efficiency programmes. The European Commission must be notified about all measures undertaken. In the wider consumer protection context, the documents also recommend other intervention mechanisms, such as: market prices, supplier transparency, smart metering etc. Apart from their general ourcome, they are thought to also have a positive impact on the status of the vulnerable consumer (Directives 2009/72/EC al. 53 and art. 3/7,8 and 2009/73/EC al. 50 and art. 3/7 and 8, from the 13th of July 2009, regarding the common rules for the internal electricity and gas market).

Specifically in the field of energy efficiency, in 2006 Commission adopted an action plan, within the larger context of saving more

energy as the main source of energy security in the EU. However, the plan doesn't make any reference to energy poverty per se. This is why, in 2010 the European Parliament proposed a Resolution in which it recommended the revision of the 2006 action plan to include energy efficiency as a solution to combat energy poverty. Following this, Directive 2010/31/EU from the 19th of May 2010 states that energy efficiency is the primary way to reduce energy poverty. Moreover, all actions adopted by Member States in this direction must be reported to the European Commission, along with all other financial (subventions, different systems of lending etc.) and non-financial measures (reducing legal or market barriers, free technical assistance etc.). The Directive on energy efficiency 2012/27/EU, from the 25th of October 2012, goes into more detail, while it correlates investments to enhance the efficiency of buildings with energy poverty and also recommends using structural and cohesion funds in this regard.

Legally speaking, European Parliament resolutions are not mandatory, however, in keeping with the spirit of European treaties, their importance should not be ingored, due to their ability to set a precedent. With regard to energy poverty, the European Parliament Resolution refered to above, and others mentioned further on, played an important role in setting the standards on the subject.

Parliament generally embraces a wider definition of the vulnerable consumer. In a Resolution from the 22nd of May 2012, on the consolidation of the rights of vulnerable consumers, the European Parliament identified this category of consumers specifically. Thus, the interaction between the individual characteristics (education, social and financial standing, the degree of access to computers and market practices etc.) and the external market environment could render entire groups of consumers in a risk situation. It should be noted that vulnerability is a dynamic phenomenon, which can affect every consumer at some point. European Parliament proposes that Commission and the Member States face this phenomenon head-on, by finding comprehensive

political and legislative solutions, while considering the diversity of its forms of manifestation (European Parliament 2012). As a result, in its communication from the 15th of November 2012, which refers to the functioning of the internal energy market, European Commission assumes a mission for itself: it will support Member States to define and determine the sources of energy poverty, to design solutions and to harmonize national approaches, by exchanging good practices.

Another Resolution of the European Parliament, from the 14th of March 2013, recommends that a social dimension be introduced in the roadmap 2050 and that specific measures to target energy poverty be identified. These recommendations mainly refer to low income households. In order to remedy their situation, the resolution proposes two types of measures, in particular: improving the energy capacity of households and awareness-raising campaigns, aimed at changing the consumption behavior of the population (European Parliament 2013b).

So far, energy poverty has been considered a form of vulnerability, however, a later document issued by the European Parliament took a step forward and called it *a source of social marginalization*. This took place within the context of a discussion about social housing. The document replicates the discourse of the energy sector and finds that, in what concerns the policy approach aimed at improving the condition of poor households, the best solution is to engage with this topic in a subsidiary manner. **The document defines the phenomenon as being found at the intersection between low income, low quality heating systems, low household energy efficiency and high energy costs.** What is more, it establishes a direct link between having access to energy and human dignity, respectively human welfare. It recommends defining the phenomenon on the basis of common parameters; however, these must be adjusted to the national conditions, in order to include the aspects having to do with national specificities. Moreover, it

proposes evaluations based not only on cost parameters, but also on a qualitative ones, taking into consideration how people behave and their consumption tendencies. On top of that, it recommends updating the criteria about energy efficiency and decent living conditions.

Throughout this entire process, the role of national market regulatory authorities is fundamental, especially when considering that measures to address energy poverty, are mainly designed to accompany the process of market liberalization. Within this context, another Resolution of the European Parliament, from 2013, particularly recommends integrated measures (comprising of financial support, prevenition of disconnections, national/regional endowments funded by suppliers, education programmes and legislation to generate a more rational consumption, long-term financial instruments to target energy efficiency of homes). Apart from the above, the Resolution recommends using structural and cohesion funds to make housing more efficient. Moreover, it emphasizes the importance of information campaigns, regarding the available funds and facilities, to target consumers, as well as public officials, who ought to become more sensitive to the phenomenon of energy poverty. Thirdly, it requests that Member States develop national databases on energy poverty (European Parliament 2013).

Beyond a strictly national approach on energy poverty, in the opinion of the Economic and Social Committee, the European Union needs better coordination on the subject. This should include a common definition and common instruments, taking into account the differentiated implementation at the level of each Member State, based on its specific problems. This would imply efforts on behalf of Member States to coordinate the institutions responsible, the policies, the work method and the instruments and, beyond that, the exchange of good practices. The document recommends that energy poverty be a priority and that any policy in this direction be coupled by rigorous evaluation programmes (European Economic and Social Committee 2013).

Among the mechanisms that reduce energy poverty, the following are recommended:

- informing and educating vulnerable consumers about the importance of efficient consumption and about their options on the market;
- creating local one-stop shops for vulnerable consumers, to help them access all relevant resources; the respective officials should be able to manage cases of vulnerability in a manner that is adequate to the particularities of each case;
- elaboration of clear measures for suppliers, to guarantee supply during the winter months or in crisis situations, or to regulate more strictly their behavior on the market;
- elaboration of financial insttruments, based on European funds, in order to make housing more efficient;
- production of energy from decentralized, renewable sources;
- elaboration of real estate regulations that would prohibit renting homes, which do not fit into certain efficiency standards.

# IV. DEFINITIONS AND POLICIES ADOPTED BY VARIOUS EUROPEAN MEMBER STATES

## IV.1. VULNERABILITY AS DEFINED BY NATIONAL LEGISLATIONS

Understanding vulnerability, as detailed above, from the perspective of the consumer's profile and market behavior, but also considering external factors involved, is central to grasping all sides of the phenomenon, the effects on the population, and to finding solutions best suited for different categories of vulnerable consumers. However, beyond this prospect, it is important to understand how the phenomenon is defined within the legal framework of each state. A 2015 ACER study contains an overview of the definitions offered in the legislation various Member States for the concept of energy poverty/fuel poverty. It states that there are two main ways to define it: *explicitly* (the criteria is precisely identified within the law) or *implicitly* (the criteria is not laid down by the law but it is incorporated in the welfare system, such as in the form of eligibility criteria). The majority of explicit definitions refer to low income, health issues, age limits, special needs, etc. The ACER Report stresses that, in spite of the nuances, the way in which energy poverty is defined has no bearing on the number of people affected by energy poverty. However, it is possible that the way in which the definition is constructed might have an impact on the public policy and on the institutional framework in place (ACER/CEER 2015).

**Table IV.1.** ***Explicit definitions of the concept of vulnerable customers – 2014***

| Jurisdiction | Explicit concept of vulnerable customer |
|---|---|
| Belgium | Art. 2 of the Ministerial decree of 30 March 2007 states:<br>For the purposes of this decree, the "protected low income or vulnerable customers" is understood to be defined as in the sense of article 20 section 2 of the law of 29 April 1999 relating to the organization of the electricity market, amended by the law of 1 June 2005:<br>A. Any end customer who can prove that they or any other person living under the same roof benefits from a decision to grant assistance in the form of: |

| | |
|---|---|
| | • a social integration allowance granted by their municipality's CPAS (public social welfare center) in accordance with the law of 26 May 2002 concerning the right to social integration;<br>• guaranteed income for elderly persons, according to the law of 1 April 1969, instituting a guaranteed income for elderly persons and the income guarantee for the elderly (GRAPA) in accordance with the law of 22 March 2001;<br>• a disability allowance following a permanent incapacity to work or a disability of at least 65%, in accordance with the law of 27 June 1969 relating to the granting of disability benefits;<br>• an income replacement allowance for the disabled, under the law of 27 February 1987 on disability allowances;<br>• a social integration allowance for disabled persons of categories II, III or IV, in accordance with the law of 27 February 1987 relating to disability benefits;<br>• an elderly person assistance allowance, in accordance with articles 127 et seq of the law of 22 December 1989;<br>• an attendance allowance according to the law of the 27 June 1069;<br>• financial social assistance allocated by a CPAS to a person listed in the aliens' register with a permanent residency permit and who, due to their nationality, cannot be considered as having the right to social integration.<br>B. If they are in categories 2, 3, 4, 5, 6 and 7 mentioned in point A, the beneficiary of a waiting allowance, whether it is a guaranteed income for elderly persons, disability, or attendance allowance, which is allocate to them by the CPAS. |
| Bulgaria | Vulnerable clients are household clients who receive target assistance for electric power, hear energy or natural gas under the Act on Social Assistance and the legislative normative instruments on its implementation. |
| Finland | According to Article 103 of the Electricity Market Act: If the default on payment is caused by the user's financial difficulties that he has run into because of serious illness, unemployment or some other special cause, principally through no fault of his own, the supply of electricity may be cut at the earliest two months after the due date of payment. The same applies to the Natural Gas Market Act (Chapter 4 Article 5). |
| France | A person is in energy poverty when they have difficulties in their accommodation to ensure their necessary energy supply to satisfy their basic needs because of the inadequacy of their incomes or their living conditions. |

| | |
|---|---|
| Great Britain | Consumers who are significantly less able than the typical consumer to protect or represent their interests in the energy market; who are significantly more likely than a typical consumer to suffer detriment, or for whom detriment is likely to be more substantial. The needs of the following particular groups of consumers must be taken into account: of pensionable age that have a disability, that are chronically sick on low incomes, or living in rural areas. |
| Greece | 1. Low-income households suffering from energy poverty.<br>2. Customers who themselves, or their spouses or persons who live together, rely heavily on a continuous and uninterrupted power supply due to mechanical life support.<br>3. Elderly people over 70 years old, provided they do not live together with another person who is younger than the above-mentioned age.<br>4. Customers with serious health problems, especially those with severe physical or mental disability with intellectual disabilities, severe audio-visual or locomotive problems, or with multiple disabilities or chronic illness who cannot manage their contractual relationship with their supplier.<br>5. Customers in remote areas, especially those living on non-interconnected islands. |
| Hungary | Any person or a person who lives in the same household, who receives old age allowance, is entitled to receive supply of active age, receives housing benefits, receives nursing fee, receives child protection allowance, receives homemaking support, is a foster parent, and has a contractual relationship with the National Asset Management Zrt. Only one person can be considered vulnerable at one location. |
| Ireland | A vulnerable customer is a household customer who is (a) critically dependent on electrically powered equipment, which shall include, but is not limited to life-protecting devices, assistive technologies to support independent living and medical equipment or (b) particularly vulnerable to disconnection during winter months for reasons of advanced age or physical, sensory, intellectual or mental health. |
| Italy | There are two definitions of vulnerability (in electricity), depending on economic and/or health conditions.<br>Economic: in this case vulnerability is measured by a specific indicator, named ISEE (equivalent economic status indicator). It states the general economic conditions of a family taking into account family income, assets, the number and type of families.<br>Health: a customer that requires electricity-powered life-support equipment with severe health problems and disease (with a medical certification) is considered vulnerable without limitations referred to income. |

| | |
|---|---|
| | In addition, vulnerable customers in the gas sector are utilities and activities relating to 'public service, including hospitals, nursing homes and rest, prisons, schools and other public and private facilities that perform an activity' recognized as a public service. |
| Lithuania | Vulnerable electricity customers are households or persons who receive financial social support under the national laws (Information System of the Social Support for the Family). Vulnerable gas customers are households and consumers consuming up to 20 thousand cubic meters of gas/year. |
| Netherlands | A consumer for whom ending the transport or the supply of electricity or gas would result in very serious health risks for the domestic consumer or a member of the same household if the household customer is regarded as vulnerable, and thus disconnection is not permitted, unless a case of fraud has been proved. |
| Poland | According to the Polish Energy Law Act, a vulnerable consumer is "a person (to whom) a housing allowance is granted within the meaning of Art. 2.1 of the Act of 21 June 2001 on Housing Allowances (Dz. U. of 2013. Pos. 966), which is a party to a comprehensive agreement or contract of sale of electricity and resides at the place of electricity supply". |
| Portugal | According to Portuguese law, customers are considered economically vulnerable individuals if they are in socio-economic situation of low income and have the right to access to the essential service of energy supply. For this purpose, people are considered who are in the following situations (under social security programs):<br>a) solidarity supplement for the elderly;<br>b) social inclusion income;<br>c) social unemployment subsidy;<br>d) first level of child benefit;<br>e) social pensions due to disabilities.<br>Economically vulnerable end customers have to meet all of the following supply criteria: the beneficiary of the social security program has to be the electricity supply contract holder; electricity consumption is exclusively for domestic use in permanent housing; supply is at a low voltage with a contracted power of up to 4,6 kVA. Each economically vulnerable end customer can only benefit from the social tariff at one consumption point. |
| Romania | The final customer belonging to a category of residential customers, which due to age, health or low incomes risk social marginalization and, in order to prevent this risk, benefit from social protection measures, financial measures included. Social protection measures and the selection criteria are established by normative acts. |

| | |
|---|---|
| Slovenia | A vulnerable customer is a household who, due to their financial circumstances, income and other social circumstances and living conditions, in unable to obtain an alternative source of energy for household use that would incur the same or smaller costs for essential household use. |
| Spain | According to the 10th Transitory Disposition of the Electricity Law 24/2013, vulnerable customers with a right to apply for a social tariff are:<br>• consumers over 60 years old, pensioners, persons with permanent disability and widows, and who receive the minimum amounts applicable for such people;<br>• consumers with large families (i.e. 3 or more children);<br>• consumers who are members of a family unit with all members unemployed;<br>• consumers who are natural persons with contracted power less than 3 kW in their residence. |
| Sweden | Vulnerable customers are defined as persons continuously incapable to pay for the electricity or natural gas that is transferred or delivered to them for purposes which are outside business activities. This consumer is protected by the Social Welfare System. |

**Source**: CEER Database, National Indicators (2015)

**Note**: Belgium: for gas, Article 2 additionally states: C. The social tariff is applicable to tenants living in an apartment building where heating and natural gas are provided by a shared central system, where the accommodation is rented as social housing by a housing society. France: Note that this is a definition of energy poverty.

**Table IV.2.** ***Measures to protect vulnerable customers in the EU - 2014***

| **Protections** | **Electricity** | **Gas** |
|---|---|---|
| A) Limitations or disconnection due to non-payment | AT, CY, GR, FI, FR, GB, HU, IE, IT, LU, LT, NL, RO, SI, SE | AT, BG, EE, GR, FI, FR, GB, HU, IE, IT, LU, NL, RO, SI, SE |
| B) Special energy prices for vulnerable customers (also known as social tariffs) | BE, CY, GR, ES, FR, GB, PT, RO | BE, FR, GB, PT |
| C) Free basic supply with energy; please specify amount of free energy in KWh | GR, IE | IE |
| D) Exemption from some components of final customer energy costs (e.g. energy price, network tariffs, taxes, levies, etc.) | AT, CZ, FR, IT | AT, CZ, EE, FR, IE |

| | | |
|---|---|---|
| E) Additional social benefits to cover (unpaid) energy expenses (non-earmarked financial means) | AT, CZ, DE, FR, HU, NO, SE | AT, CZ, DE, FR, HU, NL, SE |
| F) Earmarked social benefits to cover (unpaid) energy expenses | AT, DE, FI, GB, HU, IE, NO, PL, SE | AT, DE, FI, GB, HU, IE, PL, SE |
| G) Free advice on energy saving for vulnerable customers | AT, FR, HU | AT, FR, HU |
| H) Replacement of inefficient basic appliances at no cost to vulnerable household | FR | BE, FR |
| I) Financial grants to replace inefficient appliances | AT, CY, FR | AT, FR |
| J) Right to deferred payment | CY, FR, HU, LT | FR, HU |
| K) Other | AT, DK, GR, HU, IE, LT, MT | AT, DK, HU, IT, LT, SI |

**Source**: CEER Database, National Indicators (2015).

**Note**: Results based on data from 29 jurisdictions.

In Greece, the free basic energy supply includes 300 kWh/month for certain sub-groups of vulnerable customers according to recent social policy measures. In Ireland, the Department of Social Welfare has a scheme for persons over the age of 70. They are entitled to either free gas or electricity credit up to the value of 35 euros.

## IV.2. ENERGY POVERTY FACTORS FROM A REGIONAL PERSPECTIVE

### *IV.2.a. Favorable conditions and factors*

The literature identifies a series of conditions that determine the occurrence and development of energy poverty. These conditions can be split into at least six categories. Depending on the circumstances, these categories have particular manifestations at the level of each country or sub-country unit. They can be (1) *structural conditions* (e.g. past or present economic and political regime:

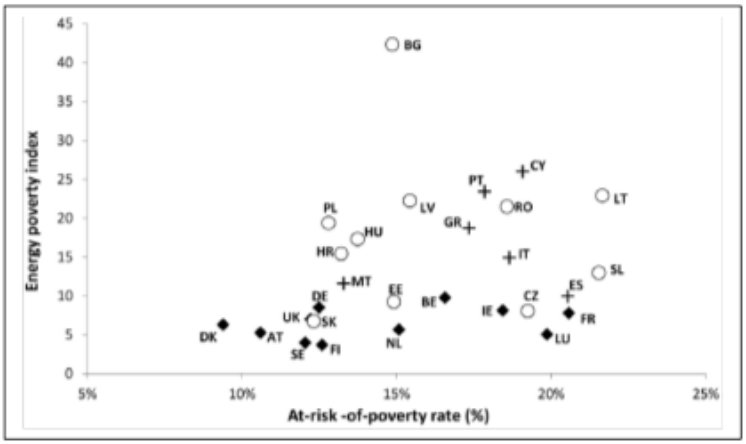
apartment buildings with a very low degree of energy efficiency or district heating, etc.), (2) *conditions related to the market* (e.g. the degree of liberalization: the consumers' inability to access information), (3) to *the natural environment* ( e.g. climate conditions), (4) *macroeconomic* (e.g. the state of the economy: lack of intervention within the energy system), (5) *economic conditions* (e.g. family budgets: the low living standard of the population) and (6) conditions related to *public policy* (e.g. social or energy efficiency policies: lack of coherent public policies). Apart from these general conditions, there are also specific factors that determine certain characteristics of the phenomenon at the regional/national/subnational level. These can be related to the state of the physical infrastructure, to specific demographic characteristics, public policy, etc. (Rademaekers, et. al 2016).

*IV.2.b. Specific aspects of energy poverty at the regional level*

At the European level, the literature identifies two geographic clusters based on the principle of the divide between center and periphery, where the center consists of the members states which form the core of the EU, the economic stronghold of the Western and Northern states. This is where the phenomenon is present only marginally and only at the level of certain disadvantaged demographic groups. The second category refers to CEE states and states from the Southern part of the continent. Here, energy poverty is a more comprehensive problem as it cuts across several social strata, manifesting itself in larger numbers. Romania fits into the latter group. The cluster is itself heterogeneous, due to national factors. We shouldn't expect uniformity among subnational regions or cities either. What is more, in this area, where the level of energy poverty is way above the European average, is a much stronger correlation between poverty, in general, and energy poverty in particular. Romania showcases such situation. According to some authors, in the region, the structural factors of energy poverty are predominant. In former communist states, the infrastructure inherited, the quality of the buildings, the non-competitive prices, the unsustainable

energy mix and the legal and social situations, determine a framework, which favors energy poverty (Bouzarovski and Herrero 2015).

It is also worth analyzing how economic transition has impacted the energy welfare of the population in these countries. Transition to market economies has randered institutional adjustments much faster than urban transformations or the adaptation of social practices. This has generated certain limits and nefarious effects (Sýkora and Bouzarovski 2012). One of the clearest effects have been caused by the evolution of energy prices. Despite comparatively lower absolute energy prices, the living standards of the population[5] rander energy much more expensive for Eastern European households. The poverty rate is also generally rising. In Romania, over the past new years poverty has been on a decreasing trend. (Bouzarovski și Herrero 2015).




**Source**: (Bouzarovski și Herrero 2015, 7)

**Figure IV.1.** ***The percentage of those who are at risk of poverty, in comparison with the energy poverty index. The average for EU states, in the case of both variables, between 2003–2013.***

[5] In Romania, the price for household electricity consumers (0.20 PPS) is above the European average (approximately. 0.16 PPS), while the poverty risk indicator is the highest (approximately 23%). On the other hand, the gas price (under 0.05) is below the European average. Between 2007 and 2013 the evolution of prices in Romania, as compared to the tendency of other EU Member States, has not been significant (Bouzarovski and Herrero 2015).

According to some authors, the rise in prices has been caused not just by the trends on the global fuel market, but also by privatization, market liberalization and related reforms applied in these economies, as they were designed and coordinated by international financial institutions and national Governments within the first few years after the regime changes and afterwards. The processes involved in reforming inefficient structures and economies and in preventing the collapse of the energy system at large, have also generated undesirable side-effects impacting consumer welfare (Fiorio and Florio 2008). Despite all these, one can also note important positive effects of liberalization. One such example is the incrase of the market actors. Another can be the progressive liberalization of the prices. Legislative and public policy limitations remain and are important. There is also steady popular resistance to change and its associated costs. These factors combined have produced incomplete adjustments, generating nothing but a vicious circle. The financial crisis and its repercussions in terms of energy welfare of the population is also notable (Bouzarovski și Herrero 2015).

Energy transition, however, took place beyond the process of post-Communist transformations. It can also be mentioned when referring to the current European objectives on decarbonisation. The implications of decarbonisation policies are less evident in the region, largely due to the unfinished implementation. Yet, existing research and impact studies have determined clear repercussions of these norms on consumer prices. Such mechanisms are the ETS system (Aatola, Ollikainen și Toppinen 2013), or the costs of renewable investments, etc. They are directly reflected in the bills of the consumers. The prices of energy intensive goods have an indirect impact on bills. (Bouzarovski și Herrero 2015) Direct measures affect the poorest households disproportionately (Poltimäe și Võrk 2009) especially in this region, where the urban population uses more electricity, which is comparatively more expensive. (Bouzarovski și Herrero 2015)

*IV.2.c. The captive vulnerable consumer*

An issue regarding energy poverty, specific to the CEE region, is "the captive vulnerable consumer". The profile if this type of consumer is determined by a specific structural problem: buildings from the Socialist era made from prefabricated material, which receive thermal energy from district heating plants. Consumer behavior is also specific: households consume too much, which affects their budgets disproportionally, generating debt. Consequently, the debt is transferred to the suppliers in the form of costs, limiting their ability to make investments. A vicious circle is, thus, created.

Another consequence has to do with the lack of meters, bills depending on the size of the apartment, which means that, compared to other types of homes, the costs per square meter per person are much higher. Moreover, the technical conditions of the apartment buildings allow for massive heat loss, variable temperatures in different apartments and levels and overheating in the summer (*summertime fuel poverty*). Structural improvements on the building depend on the common decision of all households in one flat. The heating alternatives, such as central heating, or thermal insulation, are limited and extremely inefficient in the long term because of the costs associated and the conditioning imposed by the homeowners association.

The accumulation of arrears is a current phenomenon that is hard to control by the supplier, who cannot make the decision to disconnect consumers when they don't pay the bills, because there is only one supply line for all the households in the building. Thereupon, the rise in debt takes its toll on the supplier, whose investment capacity becomes limited. Thus, the infrastructure grows old, heat losses within the network become more common affecting the budgets of the consumers, who are already vulnerable, etc. The vicious circle caused renders beneficiaries and suppliers both captive. (Tirado-Herrero and Ürge-Vorsatz 2012)

In Romania arrears have reached important dimensions in the early 2000s (0,25% of GDP), with possible macroeconomic effects, which is why the reduction of arrears has become a point of negotiation with the IMF (Tirado-Herrero and Ürge Vorsatz 2012). This phenomenon is still ongoing, leading to ample public and cross-institutional discussions at the beginning of every cold season. This raises the need of better understanding this segment of consumers, in order to identify targeted solutions that will remedy their situation. The topic is sensitive even at the macro level, when discussing regional geopolitical relations concerning the external energy reliance and its effects on the disruption of gas due to regional conflicts. The captive consumer represents a particularly vulnerable category in this discussion as well (Kovacevic 2009).

To conclude this section, it is important to also point out the fact that traditionally these economies have not publicly admitted to the problem of energy poverty. Yet, the issue is slowly making its way onto the public agenda due to its ramifications and the European debates on the topic. Consequences are important and can no longer be ignored as they have social outcomes, such as the increase of poverty and the marginalization of certain groups, health effects (Marmot Review Team 2011), consequences related to climate change (Hills 2012) or even the distortion of options regarding the energy mix (Bouzarovski and Tirado-Herrero 2015). And the possible outcomes cannot be limited to the above.

## IV.3. APPROACHES AND DEFINITIONS AT THE LEVEL OF DIFFERENT EU STATES

From a general perspective, The European Commission's study regarding the vulnerability of consumers establishes typologies for states based on their understanding of energy poverty. This categorization is based on two main criteria: their strategic approach to consumption vulnerability, respectively the number of measures which target the vulnerable consumer. With regard to Romania, the main conclusion is that the country has a wide approach to

vulnerability, whereas there is a limited number of targeted intervention measures. Generally speaking, the country has a very high vulnerability rate, which is also sensible in the energy sector.

**Table IV.3.** ***Country grouping based on the main elements of the national approach to consumer vulnerability***

| | Range of sector-specific measures | Limited number of measures |
|---|---|---|
| Broader strategic approach to vulnerability | Finland<br>Hungary<br>Ireland<br>Poland<br>United Kingdom | Czech Republic<br>Romania |
| No strategic approach to vulnerability | Belgium<br>Bulgaria<br>Cyprus<br>Denmark<br>Estonia<br>France<br>Greece<br>Italy<br>Malta<br>Norway<br>Portugal<br>Slovenia<br>Spain<br>Sweden | Austria<br>Croatia<br>Germany<br>Iceland<br>Latvia<br>Lithuania<br>Luxembourg<br>Netherlands<br>Slovakia |

**Source**: Pye and Dobbins 2015

Beyond the strategic approach and the related measures in place, formal definitions are also important. According to the European legal standards, Member States must define their energy market's vulnerable consumers, without offering any clear guidelines for such an endeavor. Therefore, to the above, another important distinction between Member State can be added, resulting from the way in which energy vulnerable consumers are being understood. Most definitions (approx. 40% of states) do not refer to the costs of energy but to the beneficiaries of welfare programmes. Some states, however, only mention certain groups of vulnerable in this category, whether they are suffering from a poor state of health,

or various disabilities, etc. Yet others identify in their definitions certain socio-economic groups determined by age, income or other characteristics. As shown below, only three states mention accessibility as an indicative.

**Table IV.4.** ***Categories of definitions offered by member states regarding vulnerable consumers***

| **Definition Type** | **Member State (MS)** | **No. of MS in category** |
|---|---|---|
| Energy affordability (low income / high expenditure) | FR(2), IT, SE | 3 |
| Receipt of social welfare | BG, CY, DE, DK, EE, FI(1), HR, HU, LT, LU, MT(4), PL, PT, SI(3,6) | 14 |
| Disability/health | CZ, NL, SK, IE | 4 |
| Range of socio-economic groups | AT, BE, ES, GR, RO, UK(5) | 6 |
| Not available/Under discussion | LV | 1 |

1. Although term not officially recognized.
2. Under definition of energy poverty.
3. Also includes disabled individuals.
4. Also has health and income categorizations.
5. Based on the OFGEM definition, not the national fuel poverty definitions.
6. According to the concept for the protection of consumers fulfilling conditions of energy poverty, new definition and indicators will be based on social (economic) criteria.

**Source**: (Pye and Dobbins 2015)

The table featured below shows all definitions practiced by the Member States, which are grouped into five categories: A) an explicit definition that refers to the personal characteristics of the consumers; B) an explicit definition which refers to situational circumstances; C) an implicit definition within the social system or the legislative framework in the energy sector; D) there is no definition; E) another definition.

**Table IV.5.** ***Intervention measures for vulnerable consumers in EU member states***

| Member state | Cat. | Definition of vulnerable consumers |
|---|---|---|
| Austria | C | The concept of vulnerable customer is implemented through a series of protection mechanisms for clearly identified groups of people/households according to social security and energy laws. |
| Belgium | A, B | Flanders: Cf. national definition of „sociale maximumprijs". In Flanders, vulnerable customers are those customers that are entitled to get the social tariff.<br>Brussels: The Brussels region applies the definition of vulnerable consumer such as defined in the Directive. The categories recognized by the national Government as vulnerable ones are also recognized in the Brussels Region. The Brussels Region recognizes two extra categories of customers as vulnerable: 1) which are recognized as vulnerable customers by local public aid centers and 2) ones that meet certain criteria defined in the regional legislation in term of revenues and number of persons composing the household and whom are on that basis recognized as vulnerable customers by the Brussels regional regulator. For the two additional categories recognized in the Brussels Region the 'statute' of vulnerable customers is linked to a limitation of power supply and is limited in time and ceases once the customer has paid off his debt to his supplier.<br>Federal: The definition of the concept of vulnerable customers is implicitly recognized by the energy law / or social security system in my country; The energy law / legal framework explicitly states what groups of customers are regarded as "vulnerable" based on personal properties of customers (disability). |
| Bulgaria | C | Social Assistance Law through Ordinance No. RD-07-5 as of 16 May 2008 for provision of targeted benefits for heating is given once a year to persons or families whose average monthly income in the last six months is lower or equal to differentiated minimum income; these citizens are eligible for heating benefits according to Art. 10 and 11. From July 2012, vulnerable customers are defined in the Energy Act. |
| Croatia | C | In its valid and effective wording, the Energy Act does not define 'vulnerable customer'; for consumers who can be regarded as 'socially disadvantaged', certain measures for their protection and support for their rights are provided for at the level of generally applicable legislation in the domain of social security law. |

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| Cyprus | A, B, C | The definition of vulnerable customers is determined in a Ministerial decree (CEER 2013). Additional public assistance is provided to recipients to satisfy special needs, including "heating 170 euro per annum". Recipients include persons with disability and medically confirmed patients treated abroad for a period not exceeding six months; persons with disability studying in an educational institution in Cyprus or abroad (for a period not exceeding by more than one year the normal period of their course) to obtain qualifications that will help them become independent of public assistance; and persons under the care of the director of the Social Welfare Services (SWS) when they become 18 years old and enroll in an educational institution in Cyprus or abroad in order to obtain qualifications that will help them become independent of public assistance. |
| Czech Republic | | There is a legal term "protected customer" such as hospitals and ill people dependent on life-support equipment. |
| Denmark | C | There are no specific provisions regarding vulnerable consumers in energy law; instead this issue is dealt with in social legislation. However the principal of universality exists where every citizen has a right to social assistance when affected by a specific event. Various schemes in existence for short and longer-term support to unemployed, social security for the non-working. |
| Estonia | C | A household customer to whom subsistence benefit has been awarded pursuant to section 22(1) of the Social Welfare Act: A person living alone or a family whose monthly net income, after the deduction of the fixed expenses connected with permanent dwelling calculated under the conditions provided for in subsections 22(5) and (6) of this Act, is below the subsistence level has the right to receive a subsistence consumption of foodstuffs, clothing, footwear and other goods and services which satisfy the primary needs. |
| Finland | B, C | In the energy market act there are defined in connection to the disconnection of the electricity. Also in the constitution there is a concept of basic rights and social security legislation defines the target groups. |
| France | B | Special tariffs are reserved for households with an income below or equal to a threshold of entitlement to supplementary universal health cover. These tariffs are available for both electricity and natural gas consumers. From the end of 2013, these social tariffs were further extended to cover all households with an annual reference fiscal income per unit (revenu fiscal de reference) lower than |

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| | | EUR 2,175. The number of households benefiting from the social tariff is expected to increase from 1.9 million to 4.2 million, equivalent to 8 million people. |
| Germany | C | Vulnerable customers eligible for support are in line with the social security system (CCER 2013). Additional support is provided in terms of consumer protection in line with the Third Energy Package. |
| Greece | A, B | Groups of customers defined under the Energy law:<br>(a) The financially weak customers suffering from energy poverty.<br>(b) Customers who themselves or their spouses or persons who live together, rely heavily on continuous and uninterrupted power supply, due to mechanical support.<br>(c) Elderly who are over seventy years old, provided they do not live together with another person who is younger than the above age limit.<br>(d) Customers with serious health problems, especially those with severe physical or mental disability, with intellectual disabilities, severe audiovisual or locomotion problems, or with multiple disabilities or chronic illness, who cannot manage their contractual relationship with their supplier.<br>(e) Customers in remote areas, especially those living at the Non Interconnected Islands. |
| Hungary | A, B, C | Vulnerable customers shall mean those household customers who require special attention due to their social disposition defined in legal regulation, or some other particular reason, in terms of supplying them with electricity. |
| Ireland | A | A vulnerable customer is defined in legislation as a household customer who is:<br>(a) critically dependent on electrically powered equipment, which shall include but is not limited to life protecting devices, assistive technologies to support independent living and medical equipment, or,<br>(b) particularly vulnerable to disconnection during winter months for reasons of advanced age or physical, sensory, intellectual or mental health. |
| Italy | A | Several measures aim to protect customers (vulnerable household customers, utilities, activities relating to 'public service', including hospitals, nursing homes and rest, prisons, schools and other public and private facilities that perform an activity recognized of public service as well as household customers that require electricity-powered life-support equipment with severe health problems). Italian decrees establish the "social bonus" (a social support |

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| | | program) defined by the Government for the benefit of electricity customers whose annual income does not exceed a certain threshold (set up by the law and certified by equivalent economic situation indicator, that takes into account income, assets, the characteristics of a family by number and type). The "social bonus" is a discount (annual amount fixed the same in the free market or in the enhanced protection regime) of the electricity bill each year, dependent upon the use, number of people in the family and climate zone. |
| Latvia | D | There is no clear definition of vulnerable consumers yet, but plans exist to introduce several measures to inform and support vulnerable consumers. |
| Lithuania | D | The persons to whom according to the procedure established by the laws of the Republic of Lithuania, social support is granted and/or social services are provided, can be defined as socially vulnerable customers. The list of socially vulnerable customers and the groups thereof and/or additional social guarantees, related to supply of electricity, which are applied to such customers or their groups, are set by the Government or its authorized institution. Developing the definition (list) of vulnerable consumers is currently under discussion. |
| Luxembourg | C | All consumers are de facto considered as potentially vulnerable in Luxembourg. |
| Malta | C | Vulnerable consumers are supported through social policy. Recipients of social security are eligible for support. |
| Netherlands | A | Legislation states that a household consumer for whom ending the transport or the supply of electricity or gas would result in very serious health risks for the domestic consumer or a member of the same household is regarded as vulnerable, and thus disconnection is not permitted, unless a case of fraud has been proved. |
| Poland | C | The energy law states that vulnerable customer of electricity is a person who is eligible for housing allowance (income support) because the level of its income is lower than a certain degree. That means that the concept of vulnerable customers is based on poverty. |
| Portugal | C | The concept is defined in the energy sector law and corresponds to that of economically vulnerable customers, which correspond to people receiving certain social welfare subsidies (social security system) with some contract limitations (e.g. contracted power). These customers have access to a social tariff. |

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| Romania | A, C | Vulnerable customers are defined as household consumers with low income within the limits laid down in the Ordinance 27/2013. |
| Slovakia | D | The concept for the protection of consumers fulfilling conditions for energy poverty was in preparation in 2013. Act on Energy Industry defined vulnerable household electricity customer as a strongly disabled person and whose vital functions are depending upon the offtake of electricity and uses electricity for heating. The DSO keeps records of vulnerable customers and can disrupt electricity distribution only after previous direct communication of these electricity customers with the DSO. |
| Slovenia | C | Social support is provided to households through a minimum income to households/individuals without an income or an income below the official level. |
| Spain | A, B | The concept of vulnerable customers has only been defined so far for electricity customers. Vulnerable customers should fulfill at least one of the following criteria: a large family or a family where all members are unemployed; be low voltage consumers (less than 1kV) with contracted demand lower than or equal to 3 kW; or a pensioner older than 60 years with a minimum level pension. Vulnerable customers' electricity tariffs are reduced by means of a "social bonus", which sets their tariffs at the July 2009 level. As of December 2012, 2,544,170 customers were defined as vulnerable. |
| Sweden | E | Vulnerable customers are defined as persons who permanently lack ability to pay for the electricity or natural gas that is transferred or delivered to them for non-commercial purposes. |
| United Kingdom | A, B | OFGEM have defined vulnerability as when a consumer's personal circumstances and characteristics combine with aspects of the market to create situations where he or she is:<br>- significantly less able than a typical consumer to protect or represent his or her interests in the energy market; and/or<br>- significantly more likely than a typical consumer to suffer detriment, or that detriment is likely to be more substantial. |

**Source**: (Pye and Dobbins 2015)

Two more approaches should be distinguished, when speaking about policy based solutions. Namely, one should differentiate between protection measures for the vulnerable energy consumers and more ample measures for managing the phenomenon.

**Table IV.6.** ***Member State definitions of energy and fuel poverty***

| Member State | Energy/fuel poverty definition | Definition metric | Status |
|---|---|---|---|
| Austria | Households are considered at risk of energy poverty if their income is below the at-risk-of-poverty threshold and they simultaneously have to spend an above-average percentage of their household income on energy. | Proposal to use multiple indicators: household income, housing expenses, energy costs; information about past due bills, disconnections, installations of pre-paid meters, etc.; subjective indicators, such as permanent household financial difficulties. | Unofficial definition under consideration. |
| Cyprus | Energy poverty may relate to the situation of customers who may be in a difficult position because of their low income as indicated by their tax statements in conjunction with their professional status, marital status and specific health conditions and therefore, are unable to respond to the costs for the reasonable needs of the supply of electricity, as these costs represent a significant proportion of their disposable income. | Share of income spent on energy. | Official definition. |
| France | Definition according to article 11 of the "Grenelle II" law from 12 July 2010: Is considered in a situation of energy poverty "a person who encounters in his/her accommodation particular difficulties to have enough energy supply to satisfy his/her elementary needs, this being due to the inadequacy of resources or housing conditions". | A quantitative threshold is missing. | As a result of no quantitative threshold, the definition is not sufficiently operational. |

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|---|---|---|---|
| Ireland | Energy poverty is a situation whereby a household is unable to attain an acceptable level of energy services (including heating, lighting, etc.) in the home due to an inability to meet these requirements at an affordable cost. | Spends more than 10% of its disposable income on energy services in the home. | Official national definition. |
| Italy | A family is vulnerable when more than 5% of income is spent for electricity and 10% for gas. | As stated in the definition - spending 5% of income on electricity and 10% on gas. | Unofficial definition proposed by regulator. |
| Malta | Energy poverty: inability to achieve a necessary level of energy services in a household. Fuel poverty: mainly linked to inability to achieve the necessary level of fuel use for heating homes (i.e., if the household were to spend on the necessary fuel, then it would fall below the poverty line). | Currently only using the EU-SILC indicator for share of population unable to keep the home adequately warm. Proposals to include subjective feedback from consumers through household budgetary surveys and compare energy consumption across sectors. | These are unofficial definitions proposed by NGO. |
| Slovakia | Energy poverty is defined as a condition when average monthly household expenditures for the consumption of electricity, gas and heat, represent a significant share of the average monthly household income. | According to the concept for the protection of consumers fulfilling conditions of energy poverty, issued by the Regulatory Office, the Statistical Office provides information on average monthly household expenditure for energy consumption and household income. A household can be considered as energy poor if disposable monthly income is lower than the minimum monthly disposable household income threshold. | The threshold is currently a proposal. |

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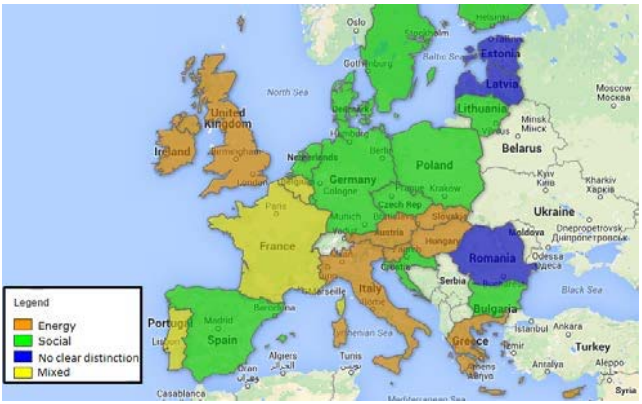
| | | The threshold is published on the website of the Ministry of Labor, Social Affairs and Family of the Slovak Republic, the Regulatory Office for Network Industries and on message boards of labor, social affairs and families, municipalities and municipal authorities. | |
| UK (England) | A household to be fuel poor if i) their income is below the poverty line (taking into account energy costs); and ii) their energy costs are higher than is typical for their household type (DECC 2013). | Low income, high consumption (LIHC). Two criteria include i) fuel costs are above the median level, and ii) residual income net of fuel cost spend is below the official poverty line. This applies in England, while other constituent countries use the 10% threshold metric.<br><br>Note that England continues to report the 10% threshold metric for comparison, which is that a fuel poor household is one which needs to spend more than 10% of its income on all fuel use to heat its home to an adequate standard of warmth (21 degrees Celsius in the living room and 18 degrees Celsius in other rooms, as recommended by WHO. | Official national definition. Proposed target to ensure that as many fuel poor homes as is reasonably practicable achieve a minimum energy efficiency standard of Band C, by 2030 (DECC 2014b). |
| UK (Scotland) | A household is in fuel poverty if, in order to maintain a satisfactory heating regime, it would be required to spend more than 10% of its income (including Housing | The definition of a 'satisfactory heating regime' as per Wales (below) | Official national definition. Target is that as far as reasonably practicable, fuel poverty will be eradicated by 2016. |

| | | | |
|---|---|---|---|
| | Benefit or Income Support for Mortgage Interest) on all household fuel use (Scottish Executive 2002). | | |
| UK (Wales) | Fuel poverty is defined as having to spend more than 10 percent of income (including housing benefit) on all household fuel use to maintain a satisfactory heating regime. Where expenditure on all household fuel exceeds 20 percent of income, households are defined as being in severe fuel poverty (Welsh Assembly Government 2010). | As stated, the definition of a 'satisfactory heating regime' recommended by the World Health Organization is 23 degrees Celsius in the living room and 18 degrees Celsius in other rooms, to be achieved for 16 hours in every 24 for households with older people or people with disabilities or chronic illness and 21 degrees Celsius in the living room and 18 degrees Celsius in other rooms for a period of nine hours in every 24 (or 16 in 24 over the weekend) for other households. | Official national definition. Target is that as far as reasonably practicable, fuel poverty will be eradicated amongst vulnerable households by 2010, in social housing by 2012 and by 2018, there would be no-one in Wales living in fuel poverty. |
| UK (Northern Ireland) | A household is in fuel poverty if, in order to maintain an acceptable level of temperature throughout the home, the occupants would have to spend more than 10% of their income on all household fuel use (DSDNI 2011). | 'Acceptable' level as per WHO 'satisfactory heating regime' | Official national definition. |

**Source**: Pye and Dobbins 2015.

## IV.4. MEASURES AGAINST ENERGY POVERTY AT THE LEVEL OF CERTAIN EUROPEAN STATES

Even if a definition is important, its nature does not have a direct impact on the success rate of the policies enacted. It does, however, set the footing for the measures adopted and the design of the "energy policy defence system". Based on the state actors involved, we could identify two categories of states, even though this distinction is not necessarily clear. There are states with a focus on social matters. Here energy poverty is a direct effect of low incomes and thus of a general state of poverty. There are also states, which focus on energy policies. The following map identifies these two categories: states that have social policies (green), states that have energy policies (orange). Yet, another category combines these two types of policies (yellow). A fourth category, which doesn't clearly distinguish between the two types of policies is also available, as is the case of Romania.




**Source**: Pye and Dobbins 2015

**Figure IV.2.** ***Member States, differentiated by the types of policies against energy poverty***

Regarding the process of formulating energy poverty definitions, the INSIGHT_E study captures three interesting aspects.

First, it looks at the number and types of actors involved in the process, pointing out, among others, the principle of collaboration, as it is applied in Austria, which involves a large spectrum of stakeholders who are part of an annual conference on the topic. (European Economic and Social Committee 2013) Secondly, the study singles out the distinction between poverty in general and energy poverty in particular, all the way down to the level of intervention mechanisms. It offers Bulgaria as an example. There, the distinction is irrelevant. Intervention is mainly based on financial support schemes. In the contex most socio-economic indicators are way below the European average. Thirdly, it also makes the case for mobility costs as part of the discussion on energy poverty, even thought this approach is largely marginalized in literature.

Beyond defining, measuring energy poverty is in and of itself an important aspect being key to targeting and monitoring the phenomenon. The same report (Pye and Dobbins 2015) offers a series of examples of measurement. Three of them will be discussed here.

In 2001, **Great Britain** formulated a strategy for the eradication of poverty by 2010. The affected households were identified based on the 10% indicator, together with a temperature standard of 21 degrees in the living room, respectively 18 degrees in other rooms. Based on these criteria, when designing the measures related to energy impoverished households, elderly people, children, disabled persons or people suffering from other chronic illnesses were given priority. The instrument was later refined, in order to avoid the effects of price volatility, by introducing two new indicators: LIHC and the energy poverty interval.

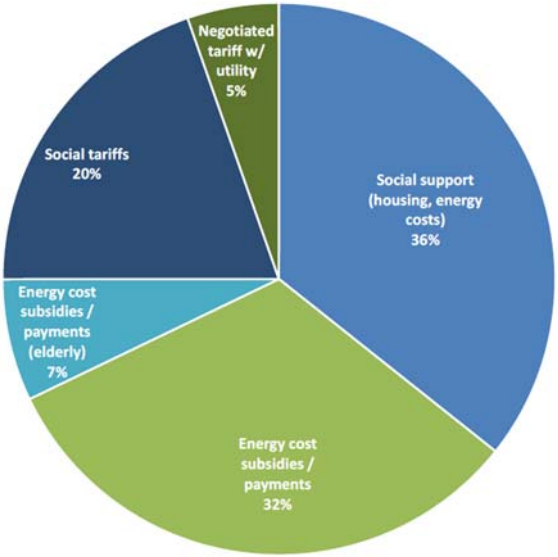
**Ireland** uses the 10% indicator. However, bearing in mind that some groups might be more affected than others, the measurement instrument also embraced a number of support indicators to capture these differences. Therefore, a household was considered to be severely energy poor if it spent within one year more than 15% of its available budget on energy services, and extremely energy poor if the spent amount was larger than 20%. Based on these criteria, the level of energy poverty in 2009 was over 20%. Within this group more than 70% were severely or extremely poor.

In **France,** the national observer for energy poverty recommends using three indicators. Energy efficiency is relevant for preventive measures. By using this indicator policy makers aim to reduce the percentage of income that is spent on energy costs. The 10% indicator is only applied to the first three income deciles, in order to target best those who are more in need. The LIHC (*low income high cost*) indicator measures the amplitude of the phenomenon. By using it authorities aim to improve the financial situation of the affected consumers. A heat indicator is used to capture people's perception about the thermal comfort offered by their home. In France the affected population exceeds 20%, based on these indicators.

When designing measures against energy poverty, it is important to distinguish between two types of impacts: For short term outcomes the vulnerable consumers can benefit from measures of protection and other facilities that would improve their access to resources. Long-term structural measures aim at the improvement of the quality of housing and of the consumption behaviour. It is worth adding that the inventory of measures against energy poverty active in EU Member States at the moment comprises four types of instruments: financial measures, additional non-financial measures, measures regarding the enhancement of energy efficiency and information measures. Non-specific measures can also be identified. (Pye and Dobbins 2015)

*IV.4.a. Financial measures*

The INSIGHT_E study (Pye and Dobbins 2015, 45-50) concludes that financial measures are the main intervention tool in the case of 40% of the EU Member States. These measures are usually financed from the social security budget, through the general welfare system and in rare cases, through direct payments to the beneficiaries. The main actor in administering this type of support is the Government, through its national or local agencies. Examples are laid out below :




**Source**: (Pye and Dobbins 2015, 46)

**Figure IV.3.** ***Share of different measures in the category financial intervention***

One of the advantages of financial aid is the access to short-term means of support, which are mainly justified, when speaking of processes of transition such as is the transition to the free market. Their role is to avoid costs too high to bear by the population, especially by that segment of consumers that is most vulnerable. Although financial aid is the norm when intervening against energy poverty in most EU Member States, there is consensus about the need to reduce such benefits while gradually introducing programs that aim at structural reforms, which are much more sustainable and have much better results.

Structural programs are particularly favored by the Nordic States or by the Netherlands. It is considered that financial measures have a limited impact, that most of the time they reach those groups who are comparatively better off, as was concluded after implementing a program in Croatia in 2008, in which compensation

was offered for the rising price of electricity. Therefore, financial measures are considered to be *blanket measures,* being less targeted, not reaching those who are truly in need, particularly the *outlier* segments of the population, which are most entitled to them. Usually, it is the consumer that must apply for financial aid in order to benefit from it. Many of the following obstacles have been observed to interfere in the process: the lack of access to information, not meeting the deadlines, the likelyhood of randomness and bias in the selection process administered by public servants, excessive conditionality and contradictory criteria, complicated bureaucratic processes aggravated by the lack of education of the applicants, etc. All these and others have the potential to turn the application process into a costly and time-consuming endeavor for the claimant. Thus, different European authorities recommend a permanent improvement of these instruments, so that obstacles will be reduced as much as possible and the coverage ratio will be as great as it can be, such that the social groups that are most entitled to benefits receive the remedies they need. In order to exemplify these efforts, we will refer to a few cases below.

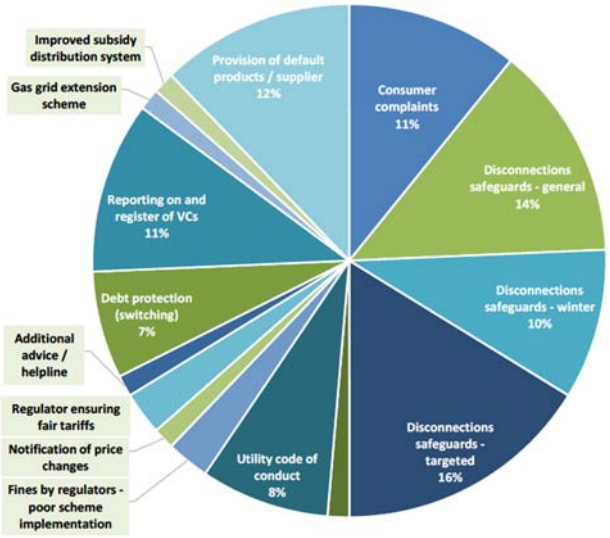
In **Belgium,** all suppliers must offer social tariffs. Social tariffs are prices, which automatically exclude taxes on supply services. Moreover, the unitary price must stay below a certain level. The definition of the vulnerable consumer entitled to be protected by such a measure takes into consideration a number of criteria. Thus, all the households, in which at least one of the members benefits from disability aid, falls below the poverty line, is elderly, is an immigrant or lives in social housing with gas heating, etc. qualify as vunlenrable. Despite the complexity of this measure, it is being amply criticized for its arbitrariness and its inability to targeted the vulnerable consumers enough.

In **France,** the targeted population must benefit *a priori* from medical insurance in order to qualify for energy poverty related benefits. Consequently, many are excluded from the system, because they do not possess an insurance. Moreover, the amount granted is usually below 8 euros, which is lower than needed to cover energy expenses. The amount only aims to cover the consumption of gas

and electricity, strongly favoring gas. What is more, is that people who are slightly outside the range of eligibility are even more affected, as they qualify automatically as contributors to the budget for heating aid. This system has been amply criticized by the French Agency for Energy (ADEME), which proposed that a flat-rate amount be introduced, together with a redesign of targeting mechanisms. The National Mediator in the field of Energy also proposes an integrated approach by introducing an energy audit for all consumers under the poverty line. As a result, beneficiaries would be entitled to use the heating benefits either to pay their energy bill or to improve the energy performance of their homes.

*IV.4.b. Non-financial measures for consumer protection*

This category of measures is among the most heterogeneous, because they vary from market to market. They are fundamental in 20% of the Member States and are used in 80% of these countries. Among the exeptions count Bulgaria, Croatia and the Czech Republic. Just like the above-described financial tools, these types of measures qualify as short-termn measures and are particularly important during transition periods, as additional means of protection for the energy poor population. The most important actors involved in the process of identifying and implementing them are the regulatory authorities and the utilities companies. In countries such as Belgium, Ireland, Luxembourg, Sweden or Great Britain, suppliers are heavily involved in designing the regulatory framework on non-financial protection. The protection measures against generalized disconnection or disconnection in special circumstances (such as during winter time) are the most common among these measure. Some states grant the right to switch suppliers even in cases of excessive debt (Denmark, France, Luxembourg, Great Britain). In some countries national regulators impose on suppliers equitable tariffs for the vulnerable or other market-related rules, respectively sanctions on companies who fail to implement the protection schemes provided by the law (Pye and Dobbins 2015, 48-50).

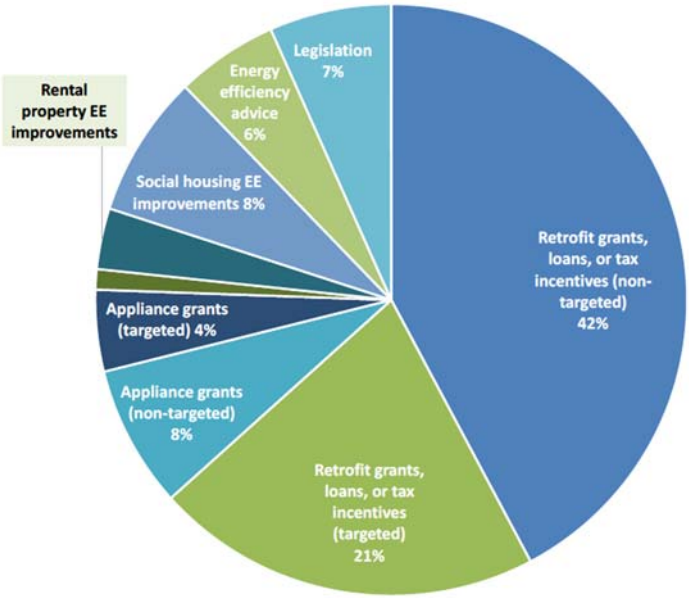



**Source**: Pye and Dobbins 2015

**Figure IV.4.** ***Share of different measures in the category consumer protection***

*IV.4.c. Measures for enhancing energy efficiency*

The intervention measures for enhancing energy efficiency are also a heterogeneous category. For 30% of the Member States they represent a priority tool to reduce energy poverty. Despite being unanimously considered the most effecting tools for combatting energy poverty, in practice, most of the time, they do not target those who are most in need. (Pye and Dobbins 2015, 50-55).




**Source**: Pye and Dobbins 2015

**Figure IV.5.** ***Share of different measures in the category energy efficiency***

The types of measures and the institutions that implement them are some of the most diverse. **Belgium** implements a project since 2014 aimed at reducing energy consumption in low income households. The program is implemented by the federation of enterprises who are active in the environmental sector together with the local authorities and system operators. Those who have been unemployed for a longer period of time receive training to become energy audit experts. Their services are important as they are requested by the system operators, who have to make 25.000 such audits every year. (Pye and Dobbins 2015)

A similar program is underway in **Germany.** It is financed by the Ministry of Environment and the Federal Energy and Climate Protection Agency. There are a number of social and economic benefits to these measures: reprofessionalization of individuals,

reduction of unemployment, creation of jobs, as well as a wide scale of cooperation between stakeholders, to count just a few. Auditors could also be a solution for the most poor and closed communities, as they are better accepted and can act as mediators. (Csiba, Bajomi and Gosztonyi 2016)

On the other hand, **Croatia** implements a less targeted program, which targets homes with a high potential for improvement in what concerns energy consumption. Subsidies are offered by the local authorities, from an environmental protection and energy efficiency fund, where more than 80% of the investments aim to make energy consumption more efficient and to introduce renewable resources to the household model of consumption (Csiba, Bajomi and Gosztonyi 2016).

**France** has been carrying out a grant programme for tenants since 2010, which aims to improve the buildings' energy capacity by 25%. The program is run by the central Government and the National Housing Authority, is implemented at the level of every county. It is co-financed by public funds and utilities companies (83%-17%). Despite criticism for being mainly implemented in the rural area, where only a small part of the population rents, fine-tuning the programme has been difficult. However, it was extended to co-owners and non-resident owners, in order to improve targeting (Csiba, Bajomi and Gosztonyi 2016).

The model applied by **the Netherlands** involves labeling rented homes by degrees of efficiency, just like home appliances. Initially, the programme only included social housing but the private renting market was added later. The objective consisted of reaching an average energy quality of grade B of this housing facilities by 2020, which would correspond to saving 33% of the energy consumed. Increasing the price of rent is only permitted after thermal rehabilitation. At the same time, the homeowners associations must guarantee that the living expenses (including rent and energy costs) will not rise after rehabilitation. A program which exclusively targets social housing has the renters pay the equivalent of their energy bills to the association, which then uses this amount to pay for quick and standardized rehabilitation. (Csiba, Bajomi and Gosztonyi 2016, 156-157)

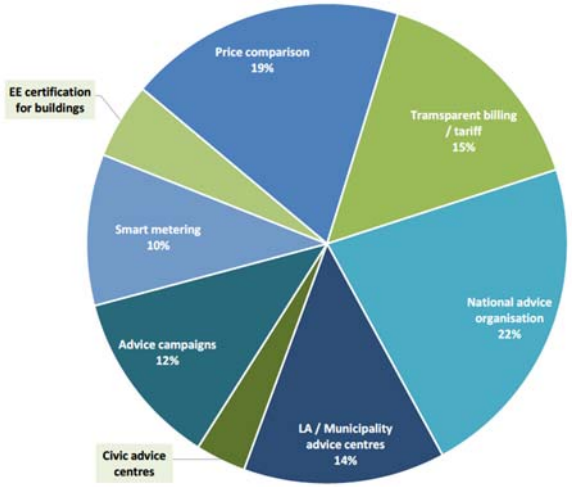
Rehabilitation programmes have been implemented all over Eastern Europe, mainly with European grands. However, they are little targeted and their impact is little observed.

In most cases regarding thermal rehabilitation for homes reimbursement plans are in place. They may be themselves obstacles for households trying to access such opportunities, due to the lack of liquidity. Therefore, finding solutions that would remove these obstacles and facilitate access is particularly important. Public Private Partnerships can be a feasible solution. The REELIH programme of Habitat for Humanity that runs in several Eastern European states is a good practice in this regard. It aims to co-opt the effort of as many actors as possible (starting with public authorities, home-owners associations, financial institutions, etc.), in order to find solutions for the rehabilitation of homes. Another example is the partnership between nine local North-Eastern English local authorities and British Gas in the Warm-Up North project, which has lead to the rehabilitation of over 4.000 homes in 2015. Designing financial programmes based on advance payments, or zero interest loans for people below the energy poverty line could also be a solution. An important role is played by the public policies and how they have been designed; the more flexible they are and the more capable they are to adapt to contexts and examples offered by good practices, or to new funding solutions (including European funds), the higher are their chances to have an impact on energy poverty. (Csiba, Bajomi and Gosztonyi 2016, 170-171)

*IV.4.d. Information and awareness measures*

Information and awareness measures are particularly important in the transition process to a free market economy but also in its functionaing. The study shows that most information mechanisms can be identified on the liberalized markets. Transparency depends on a certain political culture and the way in which a state's civil society understands to become involved in the market as equitable stakeholders. An important example about the

involvement of civil society is Great Britain. The following graph shows the information measures most practiced around the EU. (Pye and Dobbins 2015, 55-56)




**Source**: Pye and Dobbins 2015

**Figure IV.6.** ***Share of different measures in the category information and awareness***

The most widely practices measure of information and awareness across Members States is counseling. This isn't just a way in which consumers receive information on how to improve their consumption rate, it is also an attempt to understand consumption behavior and to identify long-term solutions for communities. Counseling is either offered by private organizations or by public authorities and it can be implemented both on a large and small scale. In both cases, the protection of personal data is important.

Such projects have been largely implemented. ACHIEVE in Great Britain is a 1.5 million euro project based on a 67-37% co-financing scheme between Intelligent Energy for Europe and other private organizations. As a result of this programme approx. 2.000 homes have been evaluated, resulting in an average of 150 Euro in

savings per home and 320 kg of CO2 reduction. There are also projects, which only address the very poor communities, whose problems are not being addressed by the existent blanket public policies. Many of these projects also offer technical solutions and consultancy for debt reduction. Energy Advocacy Renfrewshire from Scotland is a consultancy/mediation project which developed a referral system for energy poverty, integrated with other services. With little over 120.000 pounds, 1.000 homes have been evaluated and important annual savings have been made by implementing efficiency measures or by settling debts with suppliers. (Csiba, Bajomi and Gosztonyi 2016, 173)

Most often, the problem of information is associated with smart metering. Smart meters could be an important source of information about energy and a tool for self-regulation. They can be an important source of information for the regulating authorities and for the suppliers as well, allowing for a better identification of energy poverty and its factors. However, it is essential to prevent situations of self-disconnection as they have been observed in countries like Great Britain, by appropriately regualting the minimum consumption level and other factors that lead to self-disconnection. An example for this could be the program that was implemented in Germany, the 1000 Watt Solution, in which smart meters were installed with a guaranteed threshold of a minimum 100 Watts in a social housing complex, after four disconnection notices due to non-payment, the latter notice was accompanied by an NGO's offer for consultancy in debt management (Pye and Dobbins 2015, 56).

# V. ROMANIA

This chapter approaches the case of Romania in detail, focusing on three main dimensions: analysis of the legislation, data analysis, and field research. The purpose of the chapter is to provide a broad picture of the legal framework and of a set of public policies currently applied in connection with energy poverty. In addition, we address the problem of measuring the phenomenon, pointing out both the indicators that we currently use to quantify energy poverty in Romania and the image we get by applying the aforementioned indicators. In the last part, we present in detail the results of a field research conducted in three counties in Romania, the conclusions offered along this chapter being the basis of the recommendations at the end of the report.

## V.1 THE ROMANIAN LEGISLATION REGARDING ENERGY POVERTY AND THE VULNERABLE CONSUMER

*V.1.a What does the primary law (123/2012) say about the vulnerable consumer and energy poverty?*

Law 123/2012 on energy and natural gas, with subsequent additions and amendments, does not define energy poverty as a distinct term, but it defines the vulnerable consumer:

*Vulnerable consumer* – the final consumer belonging to the category of household consumers who, for reasons of age, health or low income, is at risk of social exclusion and who, to prevent that risk, benefits from social protection measures, including of financial nature. Social protection measures, as well as the eligibility criteria for these, are established by normative acts.

The primary law does not address the vulnerability of energy consumers strictly from the perspective of heating, but it can involve "social exclusion" also due to the lack of access to electricity or the impossibility to pay the electricity bill.

The primary law also includes an article (Art. 64) dedicated to the protection of vulnerable consumers, stating that:

- Vulnerable consumers enjoy benefits regarding the energy supply service and network access.
- It is forbidden to disconnect vulnerable consumers from the electricity distribution network, including in energy crisis situations.

However, the types of benefits for the protection of vulnerable consumers, apart from the financial ones, "shall be determined by the National Authority for Regulation in the Energy field (ANRE)."

The primary law raises only two points regarding energy poverty, placing in the responsibility of the Ministry of Energy the implementation of the "national plan of action in cases of energy poverty" in title II of the Law, the one regarding Natural Gas. In title I of the Law, with respect to Electricity, the similar task of drafting a plan is the responsibility of the Ministry of Labour, in collaboration with the Ministry of Energy. **The difference between the two titles represents, most likely, a legislative error, since there is just one document, not two. Although the law dates back from 2012, at the time of this research (January 2017), this action plan has not been elaborated/published/adopted.**

*V.1.b. What does the secondary legislation issued by the ANRE state about vulnerable consumers?*

The ANRE details the benefits for the protection of vulnerable consumers in two orders, one for electricity and one for natural gas.

Vulnerable consumers of electricity

The ANRE establishes the benefits granted to vulnerable consumers of electricity in the Regulation for supplying electricity to final consumers, approved by Order no. **64/2014 of the President of the ANRE.**

The Regulation resumes the definition of the vulnerable consumer, providing details in addition to the primary definition. Therefore, a household consumer (of electricity) is considered vulnerable if:

a) they have low income, established by state institutions with social protection attributions;

b) at the place of consumption lives an elderly person with health problems who requires continuity of supplying the home with electricity or other special conditions relating to the provision service.

Art. 57 of the aforementioned regulation states again that state institutions with powers over social policy shall lay down "criteria for the classification of a household consumer in the vulnerable consumer category for reasons of low income, the benefits and the implementation thereof" and communicate them to the provider. All these also determine if a household consumer is vulnerable for reasons of health/age, transmitting the inclusion in the category to the provider. **The regulation does not mention the financial means of protecting vulnerable consumers specifically.**

The regulation specifies the non-financial measures which the network operator takes to protect vulnerable consumers, but only for those vulnerable for reasons of health or age. **The regulation (otherwise, no other law) does not provide any means of non-financial protection for household electrical energy consumers, vulnerable due to low income.**

For vulnerable consumers for reasons of age or health, the network operator shall take measures such as minimising planned disruptions, making it a priority to solve unplanned disruptions in the network area where such consumers live, as well as ensuring additional sources to the place of consumption where a person "whose life is conditioned by medical device powered by electricity" resides.

Vulnerable consumers of natural gas

The analogue regulation for the natural gas sector, namely the Regulation on providing natural gas to final consumers, approved

by Order no. 29/2016, also mentions the category of vulnerable consumers (Section 2, Articles 8 and 9).

The reasons for classification in a situation of vulnerability are the same as in the case of vulnerable consumers of electricity, namely low income or age/health. The criteria for falling in both categories of vulnerability are, as in the case of final consumers of gas, established by "state institutions with attributions in the field of social protection".

Unlike the regulation in the field of electricity, the one in natural gas is more complete. Therefore, it expressly provides the two types of benefits granted to vulnerable consumers for reasons of low income: financial and non-financial ones. The financial benefits are also specified in detail, namely benefits for home heating with natural gas and monthly billing of natural gas consumption, on the basis of reading/autoreading, during the winter months. The provider has the obligation to notify the system operator about the list of vulnerable clients for reasons of low income, received from the state institutions with attributions in the field of social protection.

Financial facilities granted to customers vulnerable due to age/health are ensuring access to customer service center through means tailored to that person's vulnerability, monthly billing of consumption only the basis of actual consumption, read or autoread (but only at the request of the vulnerable consumer), the transmission of all information materials in a format "compatible with most programs to read the documents, and the color of the fonts used must be in contrast with that of the background".

Vulnerable consumers for reasons of age/health, both to gas and electricity, may choose to appoint a third party to maintain the relationship with the provider.

## V.2. HOW ARE VULNERABLE CONSUMERS PROTECTED BY FINANCIAL INSTRUMENTS?

We consider that the operationalization of financial instruments is done by two means: 1) heating benefits, respectively 2) social tariff of electrical energy. As noted above, both the primary law and secondary legislation issued by the ANRE specify that the state welfare institutions determine both the amount of these benefits, as well as the criteria to receive them. The regulation of supplying natural gas expressly states that financial facilities are represented by heating benefits. The regulation for the supply of electricity does not specify this.

We consider, therefore, that social protection measures of financial nature are represented, mainly, by the so-called heating benefits. They are regulated by the GEO 70/2011, with subsequent amendments and additions.

Moreover, regarding the electricity used for general purposes, not only for heating the dwelling, consumers with an average net monthly income per family member smaller than or equal to the minimum wage may benefit from the social tariff, regulated by Order no. 176/2015 of the ANRE. Although the Order does not expressly consider this tariff as being a facility granted to vulnerable consumers, we shall consider it such a measure, even if it is enacted by the energy regulator and not by social welfare institutions.

Other financial measures are not provided by the legislation in force.

### *V.2.a. How does the heating benefit system work?*

Compared to the definition of the vulnerable consumer from the primary law, the legislation governing heating benefits comes with an additional indication, namely that into the category of vulnerable consumer, falls the "single person/family who is unable to maintain the dwelling in adequate temperature conditions, namely a temperature of 21°C" and whose income limits are placed within certain thresholds stipulated by the law.

It should be noted that, in the GEO 70 or in the implementing regulations, there is no mechanism by which the limit temperature of 21°C is proven/tested. The questionnaires which must be filled in by applicants for benefits do not request this information either.

Benefits are granted regardless of the form of heating: centralized heating, natural gas, solid fuels (wood, coal), or electricity (when the dwelling has no other forms of heating). Electricity has been included as an eligible fuel to be subsidized later, in the GEO 27/2013.

The principle of granting these benefits is that of proportional compensation of heating expenses depending on the income per family member, up to certain monthly average consumption. Therefore, the higher the income per family member (within certain maximum eligibility thresholds, varying depending on the fuel used), the smaller the compensated proportional amount.

To exemplify, in the case of consumers using for heating the thermal energy supplied in the centralized system, the maximum income threshold that allows the granting of benefits is of RON 786 monthly per family member in the case of families, and RON 1082 in the case of single persons. All these limits (income, proportional compensation and the amount of the effective benefit) may be updated annually, by Government decree. The legislation does not provide, however, an updating methodology. In the case of the largest incomes (between RON 615 and RON 786 per family member), compensation is of 5%, increasing up to 90%, for incomes below RON 155 per family member. In the case of single persons, it goes up to 100% compensation. The maximum monthly amount of the benefits varies according to the number of rooms in the home and the temperature zone in which it is located (the counties of the country being divided into three zones of temperature) and also according to the price of the gigacalory in the locality. The actual benefit is also calculated according to the local price of the gigacalory, the proportional compensation being granted both from the local budget, as well as from the central budget. The income thresholds and percentages of compensation shown above are those from the

state budget, any possible benefits from the local budget being added to them.

It should be noted that, as shown from the field research, different amounts offered for different heating methods lead to significant inequities. Thus, in the 2017-2018 cold season, if a family is heated with wood or charcoal, it can receive an amount equivalent to a maximum of RON 54/month, while one that is heated with electricity will receive a maximum bill compensation of RON 240/month, and one that is heated with gas a compensation not exceeding RON 260/month. The amount of RON 54/month for heating with wood is totally insufficient, since heating a single room costs up to RON 200/month. At the same time, at an average consumption of 150 cubic meters of gas per cold season for a 60 m2 two room dwelling, the monthly average bill would be of approximately RON 232/month, at an average supply price, excluding VAT, of RON 114/MWh (the average at the beginning of 2017). Therefore, the maximum compensation would cover 100% of the costs of heating in the case of heating with gas and only about 25% of the average costs with wood for the cold season.

The mechanism for granting benefits is one that, in most cases, involved the providers (of thermal energy, electricity, natural gas). Thus, only in the case of heating with wood (or other solid fuels), recipients receive benefits in the form of cash. In this case, the source of funds remains the state budget, managed by the Ministry of Labour, Family and Social Protection, but through transfers to local budgets.

At the request of the territorial agencies of ANPIS, town halls are obliged to carry out social investigations to verify the veracity of the data included in the statements. These investigations shall be conducted for at least 60% of the beneficiaries of the right to heating benefits.

The GEO 70/2011 is supplemented by implementing regulations, namely the GD no. 920/2011. Implementing regulations detail issues such as the format of the request that applicants must submit, a list of goods which constitute grounds for refusal of

assistance, the process through which the mayors grant the benefits, including the number of days for their communication, etc. Also, the regulations provide the manner in which local authorities can approve heating benefits from their own budgets, within a maximum amount. The norms detail (Art. 11-12) the manner in which the actual amount and the maximum monthly amount for thermal heating benefits are calculated, taking into account that the gigacalory price varies from locality to locality, as well as how the lodgers associations calculate the consumption and keep records of the benefits, including deadlines and means of communication with providers on these topics. Other articles from norms detail the process in the case of solid fuel benefits and natural gas benefits. There are the rules and provisions relating to the communication flows between town halls and territorial ANPIS agencies, and the manner in which social investigations shall be carried out by the town councils (application of Art. 30 of the emergency ordinance).

In practice, as highlighted by the field investigation, as well as by studying the websites of the various town councils, there is significant room for discretionary requirements from mayors regarding the documents they may request applicants to provide in order to have access to benefits, which is likely to discourage the access of many vulnerable consumers to this form of protection. The GEO 70/2011, with subsequent amendments and additions, mentions that "with the purpose of enacting the right, the mayors request documents attesting the componence of the family and the revenues of its members, as well as documents on the dwelling or goods owned by them, including in other administrative-territorial units" (Art. 14(4)). At the same time, however, the law specifies that such documentary evidence can be directly requested from benefit applicants or from other public institutions, on the basis of protocol of cooperation. In practice, they are always directly requested from vulnerable consumers, hindering their way to accessing benefits.

For example, the city hall of the Sector 5 in Bucharest requires vulnerable customers applying for heating benefits no less than 15 types of documents, including, for those requesting benefits for

electricity-based heating, "a document to show that they had been disconnected from the centralized heating system", although in the case of this type of heating the law obliges the mayors to conduct a social investigation to determine the source of heating. The Bacău city hall, for example, requests only 9 types of documents, the income being proven, for instance, among other, by a bank statement on the personal account.

There should be noted, at the same time, another element completely detrimental to escaping poverty. Merit scholarships of students with good results in school can be taken into account, according to the interpretation of the law offered by some town halls, to establish thresholds of income which entitle (or not) the family to social assistance, in spite of amendments to the Law 416/2001 (defining what is included in incomes for qualification) by the GEO 93/2016.

Another significant element is the fact that heating benefits are the only types of social benefits not included in the unique information system for the management of social benefits (SAFIR), as pointed out by representatives of some of the town halls included in our field research as an element that hampers the work of social assistants as part of the system of granting such benefits. In addition, the absence of computerization allows certain city halls to require, in a discretionary manner, documents which are hard to obtain by vulnerable consumers. For example, the city hall of Sector 6 requests applicants residing legally within other administrative-territorial unit not only a statement issued by the town hall of residence showing that the applicant has not applied for being granted such benefits (which is required by other city halls), but also a statement of income for the previous fiscal year issued by the Administration of Public Finance in that locality, and a tax certificate issued by the Directorate General of Taxes and Local Taxes.

In fact, since the law does not clearly mention what type of documents can be requested by city halls, they are often overzealous, affecting the accessibility to this form of support in a negative manner. The websites of certain town halls even mention that "other documents, as appropriate" may be required.

**Table V.1.** *The distribution of benefits according to income thresholds, depending on the type of fuel for the 2015-2016 cold season*

| Income threshold | %ET | %Gas | %Electricity | %solid fuel | Total households (acc. to M. Of Labour) | % households (acc. to M. Of Labour) | % households receiving benefits (acc to ABF) |
|---|---|---|---|---|---|---|---|
| up to 155 | 8,81 | 17,09 | 1,8 | 72,31 | 177105 | 27,53 | 23,90 |
| 155,1 – 210 | 8,16 | 20,12 | 1,37 | 70,34 | 51158 | 7,89 | 34,30 |
| 210,1 – 260 | 9,98 | 21,8 | 1,92 | 66,3 | 45023 | 6,90 | 28,30 |
| 260,1 – 310 | 11,45 | 25,19 | 1,23 | 62,13 | 46284 | 7,06 | 18,20 |
| 310,1 – 355 | 12,4 | 24,99 | 0,95 | 61,66 | 39863 | 6,08 | 14,80 |
| 355,1 – 425 | 13,07 | 18,95 | 1,16 | 66,82 | 100544 | 15,25 | 12,20 |
| 425,1 – 480 | 15,43 | 22,59 | 1,1 | 60,89 | 59991 | 9,03 | 11,70 |
| 480,1 – 540 | 21,17 | 23,39 | 1,22 | 54,22 | 52735 | 7,81 | 8,00 |
| 540,1 – 615 | 30,06 | 22,79 | 1,32 | 45,83 | 50271 | 7,26 | 5,20 |
| 615,1 – 786 | 100 | 0 | 0 | 0 | 29710 | 3,17 | 2,20 |
| 786,1 – 1082 | 100 | 0 | 0 | 0 | 16226 | 1,96 | 0,80 |
| TOTAL | 19,3 | 19,19 | 1,32 | 60,18 | 668910 | 100,00 | |

**Source** The data come from the Ministry of Labour, Family and Social Protection and the Family Budget Survey (NIS) 2015

The table above shows a few aspects that help assess the impact of the system of granting heating benefits. With respect to the distribution of benefits depending on the type of fuel, 60.18% of the total sum goes to the households that heat with solid fuels (especially wood). Their proportion is highest in the lower thresholds, progressively dropping towards the threshold of RON 615. The very low share of electricity benefits is noteworthy. Although it is the most favorable as degree of compensation, as

shown above, it is, at the same time, difficult to access, since applicants must demonstrate that electricity is the only form of heating. As proven by the field research, electricity is often a complementary heating method when wood heating or the centralized system of heating fails to ensure a reasonable thermic comfort. Moreover, applicants from rural areas are virtually forced to have access exclusively to the least favorable method of compensation, for wood heating, since most households are historically equipped with stoves, used also for cooking, thus disqualifying them from accessing electricity-based heating benefits.

27.53% of benefits go to the poorest households. We also notice the decrease of percentage for the following thresholds, followed by a sharp rise for the RON 355.1-425 interval, at 15%, after which it reverts to a decrease towards the last income thresholds. This increase for the aforementioned interval corresponds to an increase of the amount of benefits for heating with solid fuels.

At the same time, comparing data from the Ministry of Labour to those collected through the Family Budget Survey (the last two columns) shows a big discrepancy in terms of the amount of the benefits and the percentage of households that receive these benefits, in particular in the case of the first income threshold. More specifically, 26.48% of total benefits offered by the Romanian state go to 0.8% of households. Even after the elimination from the analysis of households and benefits corresponding to last two income thresholds (over RON 615), the variation is not changing, and over 28% of the amount of benefits reach only 5.59% of households in the first threshold, up to RON 155.

Also, for the last two income thresholds, which correspond only to those who receive a subsidy for centralized heating, the amount of benefits is very small, but the number of households benefiting is very high.

The last column shows that most households receiving benefits are located in higher income thresholds, over RON 310, a finding that corresponds to the previous study conducted by the World Bank in 2013.

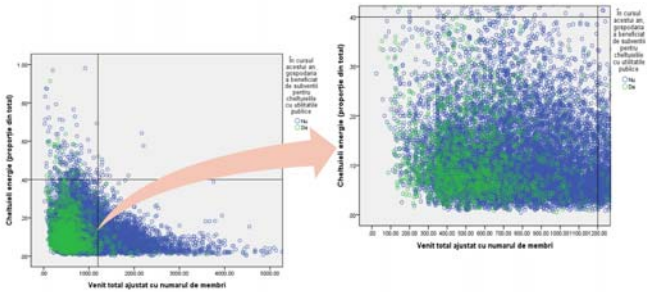



**Figure V.1.** ***The distribution of benefits on the basis of household income and share of expenditures with energy (acc. to ABF 2013)***

This chart shows that benefits are headed mostly towards poor households, but which are also the most inefficient in terms of energy costs dimensioning in relation to their own incomes. In other words, the cloud of green dots upwards shows that most benefits do not go to those with the lowest incomes, but to those who spend too much on energy relative to their earnings. This income area corresponds to higher income thresholds, over RON 310, who stood out and in the previous table as being those which gather the largest proportion of benefits.

*V.2.b. Developments in heating benefits over the past four years*

An analysis of data centralized by the Ministry of Labor for the last four cold seasons (2013/14-2016/17) shows a decreasing trend in the amounts granted by the Romanian state for heating benefits.

On the one hand, the actual number of granted benefits has dropped by over 35% during the last four years, but the total amount of benefits granted has decreased by 46%. So it is not just the number of benefits that decreases, it is also the average amount of benefit granted by the Romanian state per household, from RON 27.91 in 2013/14 to RON 23.23 in 2016/17. The main explanation for the decrease in the number of households that qualify to receive heating benefits lies in the increase of the incomes of the population, considering that the minimum wage has risen from RON 800 at the beginning of the 2013/14 cold season, to RON 1250 at the start of the

2016/17 season, while the income thresholds used to calculate the amount of benefits has not been updated since 2011, after the entry into force of the GEO 70/2011, when the minimum wage was of RON 670.

Together with the decrease in the number of benefits and the amounts granted by the state, we also notice a significant increase of the share of benefits for solid fuels, which grew from 57.74% to 66.53% over the four years analyzed. Also, significant drops for thermal energy and gas benefits are also noticed. Most of those who are left outside the heating benefit scheme, who were in the higher income thresholds and who were pushed outside the scheme by increasing incomes, received benefits for these two types of fuel. On the other hand, only half of the money for the year 2017 is going out to wood heating, when two thirds of the files are processed for wood.

**Table V.2.** ***The share of the number of files for each type of fuel in the period 2013-2017***

| | | ET state | Gas | Electricity | Wood |
|---|---|---|---|---|---|
| file percentage | 2014 | 18,10 | 22,72 | 1,43 | 57,74 |
| | 2015 | 16,92 | 22,42 | 1,24 | 59,40 |
| | 2016 | 15,16 | 20,17 | 1,38 | 63,27 |
| | 2017 | 14,33 | 17,59 | 1,53 | 66,53 |

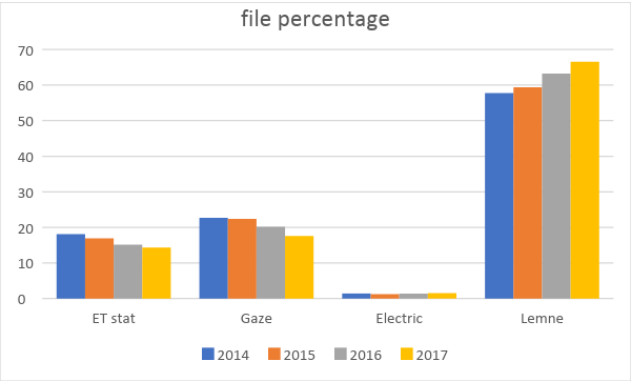



**Figure V.2.** ***The share of the number of files for each type of fuel in the period 2013-2017***

**Table V.3.** ***Number of benefits granted for each type of fuel in the period 2013-2017***

| | | ET state | Gas | Electricity | Wood | Total |
|---|---|---|---|---|---|---|
| number of benefits | 2014 | 149.963 | 188.200 | 11.864 | 478.271 | 828.298 |
| | 2015 | 131.240 | 173.941 | 9.663 | 460.641 | 775.485 |
| | 2016 | 96.467 | 128.388 | 8.825 | 402.576 | 636.256 |
| | 2017 | 76.855 | 94.310 | 8.218 | 356.697 | 536.080 |
| | | 454.525 | 584.839 | 38.570 | 1.698.185 | 2.776.119 |

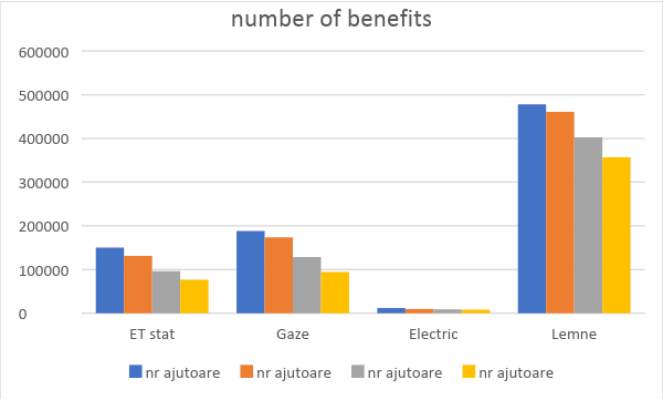



**Figure V.3.** ***Number of benefits granted for each type of fuel in the period 2013-2017***

**Table V.4.** ***The percentage of people receiving heating benefits for each type of fuel in the period 2013-2017***

| | | ET state | Gas | Electricity | Wood |
|---|---|---|---|---|---|
| people percentage | 2014 | 15,73 | 24,02 | 1,29 | 58,94 |
| | 2015 | 14,11 | 24,50 | 1,15 | 60,22 |
| | 2016 | 12,22 | 21,72 | 1,28 | 64,76 |
| | 2017 | 11,31 | 18,28 | 1,51 | 68,88 |

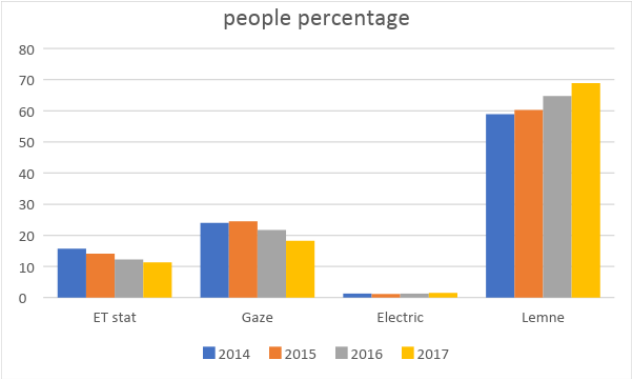



**Figure V.4.** ***The percentage of people receiving heating benefits for each type of fuel in the period 2013-2017***

**Table V.5.** ***The number of people receiving heating benefits for each type of fuel in the period 2013-2017***

| | | ET state | Gas | Electricity | Wood | Total |
|---|---|---|---|---|---|---|
| number of people | 2014 | 321.665 | 491.325 | 26.503 | 1.205.285 | 2.044.778 |
| | 2015 | 267.161 | 463.967 | 21.846 | 1.140.284 | 1.893.258 |
| | 2016 | 186.271 | 330.937 | 19.547 | 986.615 | 1.523.370 |
| | 2017 | 141.584 | 228.746 | 18.910 | 861.785 | 1.251.025 |

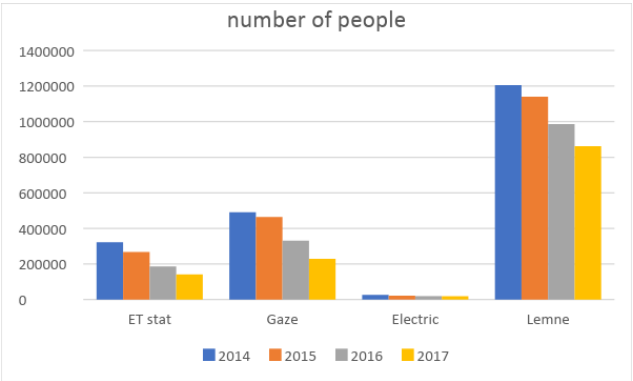



**Figure V.5.** ***The number of people receiving heating benefits for each type of fuel in the period 2013-2017***

**Table V.6.** ***The percentage of the money granted for each type of fuel in the period 2013-2017***

| | | ET state | Gas | Electricity | Wood |
|---|---|---|---|---|---|
| money percentage | 2014 | 23,12 | 35,88 | 2,05 | 38,93 |
| | 2015 | 20,13 | 34,61 | 2,17 | 43,07 |
| | 2016 | 17,12 | 32,79 | 2,41 | 47,65 |
| | 2017 | 24,37 | 24,44 | 1,68 | 49,49 |

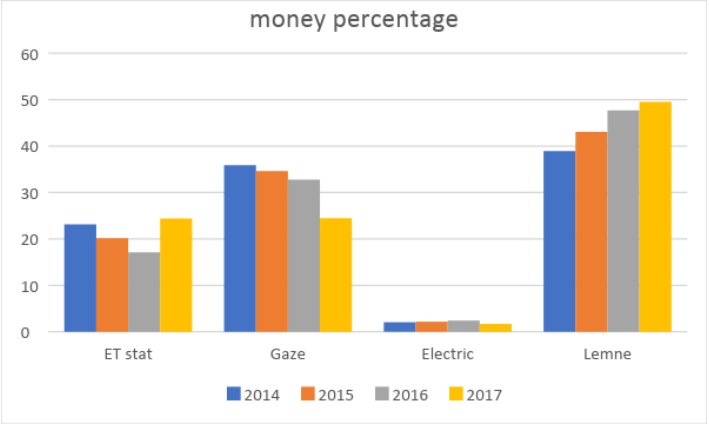



**Figura V.6.** ***The percentage of the money granted for each type of fuel in the period 2013-2017***

**Table V.7.** ***Total amount granted for heating benefits in the period 2014-2017***

| | | RON | Euro |
|---|---|---|---|
| Money | 2014 | 231.180.000 | 52.540.909 |
| | 2015 | 207.830.000 | 47.234.090 |
| | 2016 | 160.400.000 | 36.454.545 |
| | 2017 | 124.570.000 | 28.311.363 |
| | TOTAL 2014-2017 | 723.980.000 | 164.540.909 |

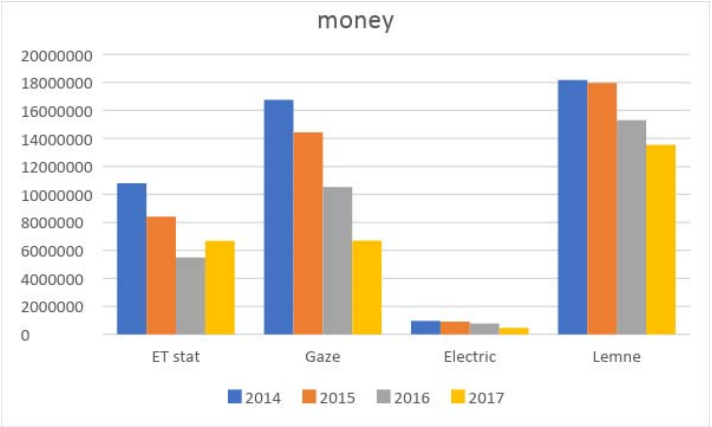



**Figure V.7.** ***The total amount granted for heating benefits for each type of heating fuel during the period of 2014-2017***

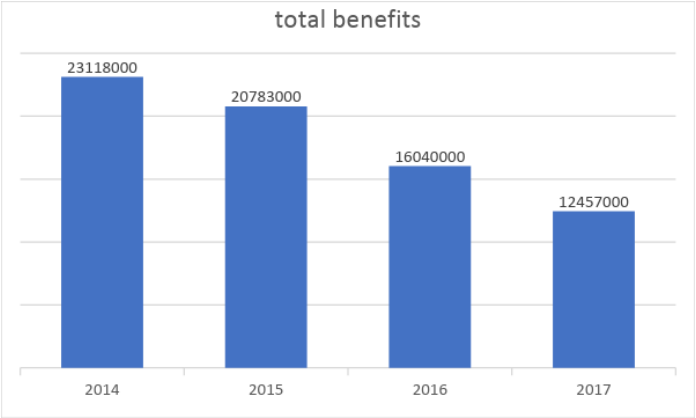



**Figure V.8.** ***Total amount granted for heating benefits in the period 2014-2017***

*V.2.c. How would energy poverty in Romania look measured with cost indicators?*

**Table V.8.** ***The proportion of those identified as being in energy poverty in Romania (receive heating benefits) compared to the proportion of those identified following the application of 2M, LIHC and M/2 indicators***

| Indicator | 2013 | | 2014 | | 2015 | |
|---|---|---|---|---|---|---|
| | % house-holds in energy poverty acc to indicator (of the total households) | % overlap between the actual beneficiaries and those identified by indicator | % house-holds in energy poverty acc to indicator (of the total households) | % overlap between the actual beneficiaries and those identified by indicator | % house-holds in energy poverty acc to indicator (of the total households) | % overlap between the actual beneficiaries and those identified by indicator |
| Heating benefits | 7,4% | 100% | 6% | 100% | 4,6% | 100% |
| 2M | 11,9% | 14,86% | 19% | 33,33% | 12,10% | 17,39% |
| LIHC | 12,3% | 27,02% | 16,9% | 41,66% | 9,90% | 30,43% |
| M/2 | 12,2% | 24,32% | 18,7% | 16,66% | 13,5% | 32,6% |

**Source**:The data come from the Family Budget Survey (NIS)

The three indicators show similar proportions of households that are in poverty, but significantly more than the proportion of those currently receiving heating benefits.

The correlation between the indicators used above to count households that are in energy poverty and the indicator based on the number of those currently receiving heating benefits is small for all indicators. In other words, the category of households currently considered in energy poverty on the basis of granting heating benefits overlaps in a small measure with the category of households identified as being in energy poverty, according to each of the three indicators. Moreover, as the table above shows, a small proportion of households identified as energy poor according to each of the three indicators are currently receiving heating benefits. The largest overlap is in the case of the LIHC indicator, the largest for 2014.

As regards the rural/urban distribution, the first indicator (2M) identifies nearly two-thirds (64,8%) of households in energy poverty in urban areas, while the other two in large proportion (82% for M/2 and 71% for LIHC) in rural areas. LIHC and M/2 indicators illustrate a problem of low incomes, more commonly found in rural areas. In

the case of LIHC, low incomes and large energy expenditures. In the case of M/2, low incomes and reduced expenses. Another possible explanation for these results may be the quality of dwellings. Large energy expenditures in urban areas may arise from the fact that dwellings (especially old ones) are not yet brought to an optimal level of energy efficiency. Indicator 2M does not illustrate that much an issue of low income, but rather of inefficiency.

According to data from ABF, the low proportions of the population that fall within the income thresholds, but who are currently receiving heating benefits are surprising. On the first three levels, under 30% of those who should receive benefits **according to the income adjusted per family member are actually receiving them.** The proportion decreases as you move into the higher income thresholds. On the other hand, we cannot know the reason why those who do not receive the benefits are excluded. We only know that the proportion of the two quadrants with question mark in the table below is 100%- the proportion of the first quadrant. In the example shown, 76,10% of households with incomes falling in the first income threshold are not receiving benefits, without us knowing if that happens because they are excluded or because they do not request the benefit. If they are not requesting it, we assume it is a communication problem at the local level. The entitled persons either do not know that they can receive benefits, or they do not know the procedure. It is also possible that city halls do not inform the people affected by poverty well enough that they are eligible for benefits, which shows major problems of efficiency of the system of benefits caused by poor implementation at the local level.

| They fall within the income, they request benefits and they receive | They fall within the income, they request benefits and they do not receive them (due to the exclusion list or bureaucratic flaws) | They fall within the income, they do not request benefits and they do not receive them |
|---|---|---|
| E.g. 23,90% in the first income category according to ABF 2015 | No info | No info |

*V.2.d. The social energy tariff - another financial benefit granted to vulnerable consumers*

Final providers of electrical energy are required to provide clients the social *tariff, upon request, if their average income per family member is below the national minimum wage.* Although the law does not specify that the social tariff is granted based on including the clients in the vulnerable category, according to the definition of this category from the Law 123, we consider the social tariff to represent a means of financial support of vulnerable customers as well. Here is how it works:

Household consumers with an average net monthly income per family member smaller than or equal to the national minimum wage may require the provider to apply this tariff, "on the basis of documentary evidence annexed to the request" (Order 176/2015 of ANRE). The consumption from the billing period is successively allocated in three installments: 1) in the first installment it is considered 2 kWh/day for each day of the billing period; 2) in the second installment is considered to be 1 kWh/day additionally to the first installment for each day of the billing period; 3) in the third installment, the difference between the actual consumption and the consumption included in the previous installments. The three installments have significantly different tariffs. Thus, for the Installment 1 (so for a maximum of 62 kWh/month if the month in question has 31 days), the tariff is RON 0.1954/kWh, for Installment 2 (so for maximum 31 kWh consumed per month) is 0.4690 RON/kWh, and everything that goes into Installment 3, so all that exceeds 94 kWh/month to be charged with RON 0.9246. These values are established periodically, usually annually, the last order in this sense being the ANRE Order 176/2015. They represent the value of the final electricity tariff, to which are added the cost of green certificates, the contribution for high efficiency cogeneration, VAT and excise. Therefore, they contain the costs with the acquisition of electricity from wholesale markets, which should be done, according to ANRE regulations, not only at a regulated price, but also at a competitive price (the so-called CPC component).

The general procedure for granting the social tariff is a very old one, regulated by Order no. 38/2005 of the ANRE. Therefore, the social tariff is granted only for the place of consumption where the consumer has his / her stable residence (so it cannot be granted for holiday homes or other type of secondary residence). At the time of the issuance of this order, consumers who wished to continue to benefit from a social tariff or to switch from another tariff to the social tariff had to submit to the provider a declaration on their own average monthly income per family member. These were to be sent by the providers to city halls, obtain their validation, then were to be returned on an index basis. Even afterwards, although the city hall has no responsibility for validating the citizens' incomes, consumers who want to switch from another tariff to the social tariff have to submit to the provider an income declaration validated by the city hall (art. 15 of the order). The obligation to communicate the change of income, which entails the failure to comply with the social tariff, rests with the consumer. The law provides penalties for the consumer who has unlawfully benefited from the social tariff, namely the recalculation of the bill at another tariff (CD type of monome) for the whole period when they have unfairly enjoyed this benefit. The legislation does not provide who, when and how should this verification be performed. The order also mentions that the social tariff is recommended to be chosen only if the consumer has a monthly consumption of less than 90 KWh.

According to the ANRE, in 2016 approximately 12% of all household clients of electricity providers on the regulated market benefit from the social tariff, namely about 1.01 million households.

According to data offered by ENEL, for the counties they cover, the proportion of households which do not size their consumption according to the consumption installments specific to the social tariff is, on average, over 42%. This is the percentage of clients who benefit from the social tariff who exceed the consumption corresponding to installment 1, and over 16% exceed the consumption corresponding to installment 2, entering the highly sanctioning tariff corresponding to the third installment.

**Table V.9.** ***The proportion of beneficiaries of social tariff exceeding installments 1 and 2 of consumption***

| County | Exceedings Installment 1 | Exceedings Installment 2 |
|---|---|---|
| GIURGIU | 37,8 | 16,3 |
| CARAS-SEVERIN | 38,1 | 18,9 |
| HUNEDOARA | 38,3 | 15,7 |
| ARAD | 38,8 | 18,2 |
| TIMIS | 41,7 | 20 |
| BUCHAREST | 43,2 | 16 |
| ILFOV | 43,8 | 22,5 |
| TULCEA | 44,9 | 21,3 |
| CALARASI | 45,2 | 22,3 |
| IALOMITA | 45,5 | 21,6 |
| CONSTANTA | 47 | 21,6 |

**Note**: The figures represent the percentage of total vulnerable clients (social tariff beneficiaries) from that county.

*V.2.e. How do the two benefits interact: heating benefits and the social tariff?*

Since the social tariff is extremely sanctioning for cases where consumption exceeds approximately 90 KWh, it would be harmful to consumers who use with electrical energy for heating during winter. In the case of those who use electrical energy exclusively for heating and receive heating benefits, since they fall in the revenue levels specified in the GEO 70/2011, the Order 176/2015 of ANRE finds the solution to avoid the automatic application of penalty tariffs (namely Installment 3, of the social tariff, almost double as any other non-vulnerable household applicable tariff). Therefore, to those clients benefiting from both forms of support "is applied the regulated tariff of monome type, with reservation (CR)" for the electricity consumed during the cold season, except where clients request in writing to the providers to apply the social tariff. At the end of the cold season, defined as the maximum of five months in which consumers enjoy

heating benefits, consumers are automatically switched back on the social tariff, this provision, however, not existing in the regulation specifically.

From the perspective of energy poverty measurement, the number of households enjoying heating benefits and of those who benefit from the social tariff is useful in attempting to quantify the number of people in energy poverty. We established to consider both types of measures - heating benefits and the electricity social tariff - as indicating a situation of vulnerability caused by income. Here comes the first nuance, namely that both measures apply to households, not individuals. If in the case of benefits, the Ministry of Labour collects information about the number of persons of a household receiving the benefit, in the case of the social tariff, the ANRE does not hold such information. Moreover, the social tariff may indicate different degrees of vulnerability, namely that the simple fact of being a beneficiary represents a type of vulnerability, but exceeding the first or the second consumption installment indicates an even greater vulnerability, given the higher costs compared to the low income justifying granting this type of tariff.

Moreover, we cannot add the number of people on heating benefits to the number of those on the social tariff because there are no interactions between the two categories. We have established above that the social tariff and the electricity heating benefits are mutually exclusive, but neither of these two numbers can be added. Only the category of those who receive heating benefits for electricity is separated from any other category of benefit or tariff. For the rest, the social tariff can coexist with heating benefits for the other type of fuel. It is not clear how big is the overlap of those who receive heating benefits (except electricity) with those receiving social benefits. In extremis, there is the possibility that most of those receiving benefits to be included in the three or four times more numerous majority of those benefiting from the social tariff, or, on the other hand, it is possible there is no overlap between the two. At the same time, the social tariff only applies to electricity, and not those who are in poverty relative to other types of fuel; the common element is the low income.

Finally, a study by Deloitte Romania from 2017, using data provided by a market study of the European Commission, calculates the number of households that have difficulties in paying their electricity bill at 1.411.409. The number is nearly 400.000 higher than households on the social tariff and of households receiving electrical heating benefits (approximately 1,02 million households).

## V.3. WHAT DOES THE LAW ON THE MINIMUM INCLUSION INCOME BRING NEW?

Law 196/2016, concerning the minimum inclusion income, was adopted in October 2016, aiming at reforming the welfare system in Romania, through the simplification and rationalisation of the granting of benefits, including of the current "heating benefit", renamed "housing supplement". In fact, the law does not bring substantial changes in the way the current system works, in the sense that the net revenues per family member (together with a list of goods whose possession leads to exclusion) is still the main criterion based on which a person is entitled to benefit from the housing supplement. It is still granted through providers, with the exception of wood, potential beneficiaries being required to follow same path of going to the town hall and filling in an application. Also, the benefit is still granted through the decision of the mayor, for all four types of fuel for which heating benefits have been granted so far. Very important, the new system will be effective only starting with April 2019.

The maximum amount of the income per family member which, once exceeded, prevents the citizen from being granted the benefits, is similar to the current one. Therefore, all applicants with net average monthly income adjusted up to RON 600 (RON 800 for single people over 60 years old) shall be granted the housing supplement. The adjustment is done according to certain equivalence coefficients. A single family member has coefficient 1, any additional member, either adult or child, adding 0.5. Thus, a family with two parents and two children qualify for the housing

supplement if it has a maximum total monthly income of RON 1500 (in this calculation, certain types of income are not included -see below). There are certain amendments to the law on VMI in favor of the beneficiaries, for instance, in calculating qualification thresholds, the income from labor agreements or other legal forms of employment, up to RON 400/family, is not taken into account. Also excluded from the calculation of the threshold is any form of social income such as amounts received as social benefits, the state children's allowances, study scholarships, amounts received as a day laborer, amounts received as a result of training activities, amounts received occasionally from certain natural or legal persons, etc.

As in the current system of heating benefits, and in the case of VMI, local authorities will be able to provide additional compensation, but only for centralized heating, the law failing to mention the steps and maximum values of the additional compensation offered by local authorities.

**Table V.10.** ***Differences between the current and the legal framework for granting heating benefits***

| | The current system of heating benefits (GEO 70/2011 and implementing regulations) | The new VMI (the law 196/2016) |
|---|---|---|
| The definition of the vulnerable consumer | single person/family who is unable to maintain the dwelling in adequate temperature conditions, namely at 21°C and whose incomes are placed within the thresholds provided at art. 7 par. (1) | the household consumer, single person/family who is unable to ensure from their own budget the full coverage of expenses relating to heating the dwelling and whose incomes are placed within the thresholds provided by the present law |
| The maximum average monthly income which allows the qualification | RON 786/month/family member | RON 600/month/first family member. RON 300/month/each additional family member, adult or child. |
| | RON 1082/month/single person | RON 800/month/single person |
| Calculation of average monthly income - inclusions. | All the income of members, such as rights of state social insurance, unemployment insurance, alimony, indemnities, allowances and permanent benefits. | All non-taxable incomes, as well as those remaining after the application of the tax share, legal obligations in relation to the alimony of children/adults. |

| | | |
|---|---|---|
| Calculation of the average monthly income - exclusions. | Social benefit (acc. to the law no. 416/2001), scholarships, social grants, support granted through the program „Bani de liceu” "money for high school" | The amounts received as social benefits, children's allowances, state benefits for agricultural activities, grants intended to support children's education, amounts received as a day laborer, amounts received as a result of participation in vocational training programs, the amounts received on an occasional basis.<br><br>Amounts obtained from labor agreements (or the equivalent), up to a maximum of RON 400/family member. |
| Goods that lead to exclusion from receiving the benefit | Any other building or living space outside the residential home | The implementing regulations have not been developed yet. |
| | Any means of transport > 1600 cmc | |
| | Tractor, combine | |
| | Oil press, grain mill | |
| | Woodworking machines (e.g., log saw, chain saw, etc.) | |
| | Bank deposits > RON 3000 | |
| | Lands within built-up areas > 1000 sqm in urban areas and 2000 sqm in rural areas | |
| | Lands outside built-up areas larger than 1-5 ha, depending on the area of residence (plain, hill, mountain), and the number of members/family | |
| | More than 3 cattle/5 pigs/20 sheep or goats/15 families of bees | |
| Benefit amounts | Max. RON 240/month for electricity<br>Max. RON 262/month for natural gas<br>Max. RON 54/month for solid fuels | Max. RON 240/month for electricity<br>Max. RON 260/month for natural gas<br>Max. RON 80/month for solid fuels<br>The reference value for centralized heating according to the gigacalory value (determined at the level of the UAT) and the average consumption calculated depending on the type of housing (Annexes 1 and 2 to the GEO 70/2011) |

## V.4. HOW ARE VULNERABLE CONSUMERS PROTECTED THROUGH NON-FINANCIAL INSTRUMENTS?

As mentioned in section I, the primary law states that the ANRE regulates non-financial means for the protection of vulnerable customers, who should receive "benefits regarding the ensurance of the service provision." It is forbidden to disconnect them from the network, including in crisis situations.

Analyzing the ANRE regulations (section II above), we have concluded that for vulnerable consumers for financial reasons, both of gas and of electricity, there are no non-financial means of protection, in the sense of the prohibition of disconnection or facilitating the access to the supply service. For those who are vulnerable for reasons of health or age - having no legislation detailing the specific criteria for establishing this type of vulnerability - ANRE regulations provide non-financial benefits, as well as reducing interruptions, transferring the invoice in an accessible format, etc. However, in the absence of a procedure to identify them, with name and surname, based on clear criteria specified, providers cannot apply such non-financial facilities.

### *V.4.a. Dwellings with no access to electricity, the National Electrification Program and the procedure of the connection*

Lack of access to electricity should be acknowledged as a form of energy poverty. Bearing in mind that in Romania there are approximately 100.000 households without electrical energy (according to a Government decree proposal launched in public debate in 2012, by the Ministry of Economy), we consider that the current legislation concerning the electrification of households should be evaluated.

The last National Electrification Program was approved in 2007 by government decree (GD no. 328/200) and covered the interval 2007-2009. The leadership of the program was ensured by a governmental commission, and the effective management by the

Ministry of Administration and Internal Affairs. On 15 May 2006, in accordance to the aforementioned decree, there were 67.738 non-electrified households, at the level of the entire country, the identified solution being that of connecting them to the electricity distribution network, with the exception of isolated rural localities, where the decree mentions as a solution the use of independent generators. The wide majority of them were in rural and partially electrified localities, and the rest in rural, completely non-electrified localities or in urban communities that require extensions. Out of these, 41704 households were in the distribution perimeter covered by Electrica, and the rest in private perimeters. The unit cost of the connection to the network is, according to the normative act, between RON 10.000 and 240.000, depending on the location. The program management unit, located in the Ministry of Administration, should have facilitated the construction of electricity networks for connecting such localities from different funds (local budgets, state budget, distributor funds, sources derived from bank loans and European loans). The decree also contains a plan of action, for each month, for the purpose of calculating the necessary amount of financing of the works. Local councils were the ones responsible for coordinating the achievement of investments, with the consultation with the distribution operators in the area. Distribution operators were responsible for the annual elaboration of a study regarding the electrification stage of the rural areas, including the necessary works and investments, also identifying off-grid solutions, from renewable sources, where the classical solution of the energy supply is financially sustainable.

In 2012, Government subjected to public debate another Government decree concerning the National Program of Electrification, mentioning that in Romania there are 98871 non-electrified households, thus with approximately 30.000 more than five years ago. The difference from the previous Government decree is not explained. About two thirds of these are in partially non-electrified rural localities, most of them in the Electrica SA portfolio. This time, the unit cost calculated as necessary for connecting is

RON 11.000 per dwelling, unlike the estimated costs in the previous Government resolution, far superior, and the origin of the difference is unclear.

Thus, based on these figures, the cost of electrification for the entire country is roughly RON 1 billion. The program implementation unit is the Romanian Agency for Sustainable Development of Industrial Zones, under the Ministry of Economy. The Government decree was promoted in public debate in August 2012, it was never adopted, and the aforementioned agency was disbanded by Government Emergency Ordinance at the end of the same year, its attributions being taken over by the Ministry of Economy. The electrification strategy resumes the same technical solutions identified by GD 328/2007, and a breakdown of the budgeted amounts for all years until 2016, inclusively, also exists.

ANRE regulations regarding the connection of individual dwellings to the power distribution network (Order 59/2013) states that where there is an electric distribution network at less than 100 meters from the owner's property limit (within certain power limits requested), the distributor is obliged to carry out an electrical connection to the network, conducted in accordance with the technical regulations in force. Connections are to be paid by the user and any works to strengthen the network for the purpose of taking over the new user are made at the expense of the distributor. If the distance is greater than 100 meters, the distributor has an obligation to communicate to the user the proceedings made for the expansion of the distribution network for the electrification of the locality or for the expansion of the distribution networks in that area, including the schedule of the works. They shall be financed by both the distributor and the local authorities.

Art. 51 of the law 123/2012 describes the process of electrification of localities and the expansion of the electrical distribution networks. Thus, local authorities are those who, on the basis of the approved regional development and zoning plans, must request the extension of the network, and the distribution network operator is obliged to fund this action. The distribution operator

shall have 60 days to assess the feasibility of the investment, following the request received from the local authorities, in accordance with a methodology approved by ANRE. If the extension is not justified from an economic perspective, the distribution operator may suggest the co-participation of local authorities, with local and state budgets, following the notification of the ANRE. The economic indicators determining if an investment is considered feasible or not are included in the aforementioned ANRE methodology (approved by ANRE Order 75/2013). The co-participation proposal is sent by the distributor to local authorities, who have 60 days to decide whether they accept it. If the proposal is not accepted by the authorities, the process is suspended and the investment shall not be made. The feasibility study itself is performed at the expense of the public authority. If the investment is effective, in accordance with the mentioned methodology, or where the local authority is committed to financing in the case of an initially inefficient investment, then the expansion plan is included in the distributor's annual program of investment and/or in the medium term development plan.

It should be noted that, in addition to the number of dwellings without access to electricity mentioned above - 67738 in 2006, 98871 in 2012 respectively - the data provided by the Census of Dwellings from 2011 may be taken into account, where 3,4% of total conventional dwellings at national level appear as not being equipped with electrical installation, i.e. 287434 dwellings. This category of dwellings may also include dwellings with no access to the network (located in the non-electrified or partially electrified localities), but it is unclear what is the level of overlap between the two.

*V.4.b. The interruption of the power supply for non-payment*

A household that benefits from electricity may have the service stopped, according to law, in the case of non-payment. Household consumers within the regulated market benefit from a framework

contract, which clearly stipulates the conditions of disconnection. Thus, the procedure for disconnection may not start earlier than 30 days after the due date of payment, according to the same order of ANRE 88/2015. 35 days after the due date, in case of non-payment, the provider is required to notify the client about the upcoming disconnection, distinctly from the invoice, and is able to request to the distributor to interrupt the power supply after 50 days from the due date of the invoice, but no sooner than 15 days after the date of the notice. Therefore, between the notice and the actual discontinuation notice there must be minimum 15 days. The supplier shall be entitled to terminate the contract and to proceed against the consumer for the amounts due only if the debts are not paid within 15 days from the date of the disconnection. It is important to mention that these aspects that protect the consumer apply to all household consumers on the regulated market, not just to those who benefit from the social tariff.

Even for household consumers who have willingly left the regulated market, there are provisions concerning the disconnection for non-payment (Regulation of Supply, approved by order ANRE no. 64/2014). For these consumers there is no grace period of 35 days from the due date, as there is for regulated consumers, yet there still is a grace period agreed with the provider, according to the contract. Also, the provider must still offer a notice with minimum 15 days prior to the disconnection term provided in the contract. The disconnection will occur in this case at least four working days after the expiry of the period for payment set out in the notice. If the consumer pays after the expiration of the term in the notice, they confirm the payment to the provider, and the provider must notify the distributor the following day not to conduct the actual disconnection, if the latter had not yet proceeded. The provider decides the date of termination in the event of non-payment, and only after one year from termination it is allowed to dismantle the connection facility elements from the client's residence. Every time, the costs related to the disconnection and re-connection are incurred by the consumer.

*V.4.c. The interruption of the power supply for unauthorized interventions on the equipment*

The regulations in force also provide the manner of disconnecting in case of intervening on the equipment with the purpose of electricity theft, tampering with the meter, etc. In the event of finding such cases, the distributor takes the following steps:

- notifies criminal investigation bodies,
- interrupts the alleged illegal connection,
- installs possible enhanced anti-fraud systems,
- after establishing the responsibility of the end consumer through a definitive court ruling, it interrupts the power supply, if the consumer fails to comply with the court's decision regarding the payment (only in the case of interventions on the connection equipment for the purpose of connecting the power supply under conditions other than those laid down in the technical connection endorsement. In the case of an interention which leads to the supply of a place of consumption not connected to network or for which there is no ongoing contract, the distributor interrupts the power supply, along with notifying criminal investigation bodies).

According to the law 123/2012, in the case of holding a contract, failure to grant access to distributor representatives to equipment and "a third party using the power distribution/transport network elements in other purposes than those provided in the electrical energy legislation without concluding a contract in this sense with their rightful owner" represents a contravention, is punished with a fine from RON 1000 to 2000 and the household is investigated on the ground by police officers and gendarms, together with the representatives of the distributor.

At the same time, damaging or blocking the operation of the meter shall constitute a criminal offence and shall be punished with

imprisonment from three months to two years or by a fine. The use of clandestine installations for the purpose of direct connection to the network or for bypassing measuring equipment is also a criminal offence and shall be punished with imprisonment from six months to three years or by a fine. However, these latter acts, which constitute a criminal offence, and not a contravention, may only take place in compliance with the law (for example, through a search warrant issued under the law).

## V.5. HOW PRECISELY CAN WE MEASURE ENERGY POVERTY IN ROMANIA?

There may be three categories of dwellings that do not benefit from electricity:

- Unelectrified dwellings (no network access) - 98.871 in 2012 (unofficial figure)
- Dwellings which do not have electrical equipment - 287.434 (2011 Census)
- Dwellings with network access and with electrical equipment, but not connected for reasons of documents or insufficient income – unclear figure

The category of dwellings with network access and electrical equipment, which are informally connected to the network, must also be considered. A study from Deloitte Romania 2017 estimates the number of households who have unauthorized access to the network at 422.615, i.e. 5,7% percent of the total at national level, the Bucharest-Ilfov region having the largest number, about 63.000.

Therefore, in an attempt to measure energy poverty (from the perspective of access to electricity) in Romania, we can make an estimate putting head-to-head the figures associated with the categories among which overlapping cannot occur in practice. The number of households which are not fitted with electrical equipment (so they cannot be connected) can be added to the number of

households benefiting from the social tariff (formal network connection), to the number of households receiving benefits for electricity (connected to the network formally) and to the number of households which are informally connected to network.

**Table V.11.** ***Categories of households affected by energy poverty from the perspective of access to electricity and associated figures***

| Household category | Number | Source |
|---|---|---|
| Dwellings with no electrical equipment | 287.434 | 2011 Census |
| Households benefiting from the social tariff* | 1.014.000 (approx) | ANRE 2016 (relative to the total number of households in Census 2011) |
| Households receiving heating benefits for electricity | 8218 | The Ministry of Labour 2017 |
| Households with informal access | 422.615 | Deloitte 2017 |
| Total | 1.732.267 (approx) 23% of total households | |

**Note**: There is a distinction between dwellings and households, their numbers differ in statistic data, however we will approximate that the number of dwellings lacking electrical equipment is identical to the number of households, in the absence of other data on this variable in the 2011 Census.

* we assume that includes households that have heating benefit for other type of fuel than electricity

Over these numbers we can overlap the category of those households with heating benefits for other type of fuel than electricity, which, for the 2016-2017 season means 527.862 households. We can assume intuitively that there is a large degree of overlap between this category and that of households benefiting from the social tariff, without electrical installation or with informal access to electricity, but we cannot know the level of overlap.

Obviously, these calculations must taken with precaution, involving different sources, different years and different methods of calculation. Also, these calculations do not take into account the benefits received from local budgets, in kind or cash, which are not centralized for all localities that provide such benefits. And between the category of beneficiaries of benefits from the local budgets and

the above there may be large overlaps, especially since the predominant criterion is the low income, but we cannot know exactly the overlapping level.

## V.6. OBSERVATIONS ON ENERGY POVERTY FROM FIELD RESEARCH

*V.6.a. Research methodology: Qualitative interviews applied in three counties with the highest number of recipients of various heating benefits*

The field research was carried out during the period 10-20 May 2017 by a team of eight people - six field operators and two coordinators, CSD members, experienced in conducting field research.

For the field work we selected three counties - Bacău, Hunedoara and Teleorman. A team of two operators spent a week in each county. Bacău county was ranked first in the cold season of 2015/2016 for the total number of benefits granted, for wood benefits in particular, and third place for heating benefits for gas. Teleorman and Hunedoara occupied the top two to places for heating benefits for electricity, with a considerable advantage for Teleorman (four times more heating benefits for Teleorman as compared to Hunedoara).

In the absence of data or the distribution of benefits at county level, the first interviews in each county were conducted with the heads the County Agencies for Social Affairs (AJPIS). The objective of this first step was to gather information regarding the most problematic regions in the county, the benefits allocated during the previous cold seasons, the relation between recipients and the local authorities, the perception regarding the legislative framework in place (including modifications referring to VMI). The localities selected for further research in each county have been chosen based on the results achieved from the interviews with the head officers of AJPIS. Therefore, in all three counties, we selected not only the county capital cities, but also localities from from smaller urban areas or the rural areas. In each of these localities, interviews were

conducted within the local administration: mayors, deputy mayors or social workers, depending on their availability; and homeowners. 38 interviews conducted in total.

The localities were the following (in brackets are mentioned the number of interviews conducted with homeowners in each county and locality, respectively):

- In Bacău county (11): Bacău (4), Comănești (2), Letea Veche (2), Sărata (3).
- In Hunedoara county (13): Deva (2), Brad (4), Lupeni (2), Petroșani (5).
- In Teleorman county (15): Alexandria (9), Necșești (2), Vitănești (4).

*V.6.b. Interviews with the County Agencies for Social Affairs. The benefits of a stable legal system.*

We will refer to each of the three interviews with AJPIS heads without mentioning the name of the county.

AJPIS 1

The head of AJPIS 1 welcomes the stability of the system of granting heating benefits, which is beneficial both for the authorities involved in the process and for the beneficiaries.

"On the heating benefits there have not been radical changes to confuse us. People know the system very well."

Also, the importance of the electronic system is mentioned. For other social benefits, the fact that that all beneficiaries are listed in the system and their situation can be reviewed at any given time (although there are some limits to this system as beneficiaries do not always report changes in their situation within the time limit requested). For heating benefits, however, the fact that only one person in the household submits the application, and that only some city halls register these benefits in their own electronic database, makes it difficult to monitor households. There is no integrated

perspective on all benefits requested by and handed out to households. The law on VMI would arguably allow a better electronic monitoring of recipients, but problems could arise from the management of the electronic system.

"It is important how the electronic system will look like for the VMI. The regulations with regard to how the system will be run are important. The documentation requested from applicant is alright, it will be simpler to apply, there shall be one single folder for all types of benefits per applicant. But I'm worried about the capacity of the administrative-territorial units, of city hall staffs, to manage the system. Qualified staff is needed. Human resources are needed, and those who work as social assistants are few. It is simpler with the heating benefits, since the files are submitted once. But all the time investigations are needed. For that, social assistants must go and assess households, people are not at home... and sometimes there is just one person."

"Heating benefits are not uploaded to the electronic system […]. It is the only social benefit that does not show up in the electronic system. AJPIS does not have the database of the household members, but only of the individual applicants. The city administration possesses the databases with those receiving heating benefits, about 20% of the administrative-territorial units. As we have no access to the computer system, we cannot know whether other people in the household already receive other type of social benefits or not."

The difficulties with human resources in city halls are mentioned not only from a numerical perspective or from the perspective of the work volume, but also from a training perspective.

"Specializing social workers is important. They are engaged, but many do not have the necessary training [...]. In addition, the activity of social assistant within local administrations is subordinated to mayors, secretaries, accountants."

The absence of control over how the recipients of heating benefits for wood spend the money they receive re-emerges as a deficiency of the system. The head of AJPIS 1 also highlights a problem with regard to the benefits allocation calendar.

"The money is not used to buy firewood. During communism, there was a wood share. The value of the wood should be granted. Most money comes only in January or February. It takes time to submit the correct documents, and to process them... That process should start sooner, in September, so that the money can be granted in October. After the money is handed out, many do not even buy wood with it. I would go with a benefit in kind, the mayor should be the one who manages the process, make a timely projection...how many would need wood…. First, he should provide a cubic meter to everyone and then hand out the difference."

AJPIS 2

The head of AJPIS 2 highlights a deficiency rarely pointed out while assessing the legal framework in place. The legislation refers to households as being the target units for heating benefits, whereas, in reality, we encounter many cases where households are formed of individuals who do not belong to the same family, as defined by the family code.

"The intention of the Legislator was to take into consideration the family as the target group, where this type of benefit is granted. Here is an aspect that is perhaps to be reviewed [...], because the terms are defined differently in different laws. One needs to start from the family code. Under some laws all persons living in a household are considered, not just the family. When thinking of a benefit things should be accommodated accordingly. Among the many situations possible, one may find that perhaps several generations live in one and the same household. In this household there might be one holder who receives benefits for all the inhabitants. What I am saying, is that the target group must be defined consistently everywhere."

The effort to inform the population about the procedure for granting benefits and possible legislative changes is made at the level of AJPIS.

“Such information campaigns have been carried out permanently. At the beginning of the season I sent information to the city administration. They sent it further to the people, I even issued a press release. From time to time I organized meetings with representatives of all administrative-territorial units where, I presented all sorts of changes in the legislation in this field, so that the people can be informed. The administrative-territorial units had to pass on the information. The media has disseminated the information as well."

AJPIS 3

The head of AJPIS 3 pointed out the difference between inhabitants of individual households and those in apartment blocks, claiming that the system for granting benefits makes it difficult for those living in a house to switch from a wood-based heating system to another type of fuel. An argument involves the high connection costs:

"Those who live in an individual house need a larger sum to connect to gas than those living in an apartment. A house needs approx. RON 4000 to be connected, whereas an apartment about RON 2800-3000."

"If the person lives in a house, you are practically forcing them to heat the house with wood."

The head of AJPIS 3 recommends an amendment to the legal framework in place, such that the requirement regarding the allocation of heating benefits for electricity only under the condition that electricity is the only source of heating, should be eliminated, pointing out that "anyone has a stove, but unless they are connected to the gas network, they will receive benefits only for wood". This change would be to the advantage of the beneficiaries.

"For wood, or even if you do not use wood, you get RON 250 for all the five months of the cold season. For electricity it can go up to RON 240 each month, depending on the consumption."

The head of AJPIS 3 highlights the important role played by social assistants from the local administration and the fact that the county is at the top of the charts for the number of benefits offered due the efficiency of the assistants.

"In October we issue a memorandum to local authorities of the 97 municipalities, which is displayed in every city hall. Social assistants know all families with problems and they can guide them toward these benefits. I do not think you can find ten families in any municipality who do not know they can access a certain type of benefit. People are interested in any penny. You know that we are at the top with regard to the allocation of benefits..."

At the same time, there are discussions regarding the limited human resources available at AJPIS level. "We only have four inspectors for the 97 municipalities. Other counties have nine inspectors and fewer localities, and fewer social cases". It should be noted that reference is made to the inspectors from the local administration, not to the social assistants at the level of each local administration.

The head of AJPIS 3 mentions the fact that benefits for wood are usually supplemented from local budgets, with around RON 150 per case, leading to a total benefit of RON 400/applicant. But he also highlights the fact that the administration has no leverage with regard to how the amount is really spent.

"They receive the money and say: <<look, we have debts, we have other priorities...we had to get a school bag for the child…>>. The truth is ... After making all these expenses on things they need for their families, they are left without wood or coal. Up until the year 2000, these payments were made in kind. Wood or coal would be given to everyone. Here it was mostly wood. In some cities it still happens this way, instead of giving out RON 150 in cash, they give them wood. This is based on a mayor's decision. But normally, Government sends the money, we transfer it to the treasury of the local administration and then to the beneficiaries. After that, who controls it? Nobody. In my opinion, It would be much better to give them in kind. Just as with the EU benefits, with milk or oil. Then, you would be sure they have wood for heating."

The main conclusions from the AJPIS interviews:

- There is high uncertainty with regard to how benefits are being spent by the beneficiaries: if the sums granted for wood are really used for that purpose. There is a proposal for the benefit to be granted in kind.
- Gaps and inaccuracies of the legal framework (different definitions for family/household) have been identified.
- The absence of an electronic system for heating benefits is making it difficult to monitor the problems in the field accurately.
- The stability of the system has been noticed as a positive element that allows both the authorities and the beneficiaries to set up a routine on managing procedures.
- There is a good relationship with suppliers and the local administration with regard to the administration benefits for gas and electricity. This derives from the stability of the system.
- The key role and the good faith of the social assistants, but also their hierarchical dependence within the city administration; their heavy work load and sometimes their insufficient training to cope with complicated social situations.
- The need to eliminate the legal requirements for the heating benefit for electricity to be made conditional upon proof of the lack of any other sources of heating: if a household owns a stove, even if it is not connected to the gas network, it can no longer receive heating benefits for electricity, being thus obliged to use only wood.

*V.6.c. Interviews in city halls*

General observations: Better information leads to a better coverage of benefits

All local authorities claim to have a good communication with other state institutions with which they are in direct contact for

granting the benefits, in particular with AJPIS or directly with the Ministry of Labour. Also, except for a city hall in Hunedoara, the communication with utility providers is assessed as positive and easy.

Also, all city halls argue that the population is efficiently informed with regard to the periods when benefit applications are submitted, the required documents, the conditions under which social investigations are conducted. A good relationship with the local press is also mentioned, but also the fact that information travels directly between people. It should be noted once again, though, that we are dealing with top ranking counties in terms of the number of heating benefits, and the assumption that the good level of information concerning the procedures is one of the factors explaining the large number should be confirmed by research for the counties with small number of benefits as well.

Another overall conclusion drawn from the interviews with local authorities is the tendency to associate the procedure and social context in which the benefit is granted with those specific to social benefits. Thus, often negative remarks appear in reference to the recipients, such as "some have become used to the benefits", "... there are those who receive the money cash and use it to drink", "some will never get out if this situation, they are used to this since they were small". It must be said, however, that such attitudes, in the case of counties covered by our research, are not dominant in the behaviour of the authorities in practice. There is no indication that the procedures would be applied selectively, depending on personal prejudice.

More local autonomy in the implementation of measures to improve the efficiency of buildings would generate creative, community-oriented, solutions

The funding schemes for the thermal insulation of apartment buildings are criticized for three reasons: 1) the required consent of all tenants from an association, 2) the share of contribution that remains in the responsibility of tenants, 3) the intervention limited only to renovating the exterior, without other interventions for the rehabilitation of the building.

The interview conducted at a town hall in Bacău county illustrates these problems.

"There are always problems occurring between the neighbours. The residents don't want to cooperate with each other, and if only one refuses, then the entire project is cancelled. Many don't have the money for their own contribution, so they refuse. Then, many have already done reparations from their own money, without authorization, and then they will no longer want to contribute to a collective project. When restoring a building, the water network should be improved, with complete cleaning of the stairwell, changing doors, windows, roofs, repairing roofs because many are ruined, to rehabilitate basements and then to put up solar panels for each apartment block for hot water free of charge. This way, we reduce costs. But residents are not willing to cooperate. We would like to pilot this on ten apartment blocks, then the others will come."

The interview at a city hall in Teleorman illustrates the difficulties posed by the *lack of cooperation between the tenants within an association.*

"The procedures for European funding put you in a difficult position. All the money should be given through European funds or even the entire local contribution should come from the city hall. If a single tenant is not involved, the entire project is cancelled. And many have already done that by themselves. You have to take down what they put up, whether it is with or without authorization, as the project may require another type of material than the one already used. And then not very many people want to renovate through the project of the association, companies do not want to get involved. It takes a very good organization at the level of associations of tenants. The funding program has many shortcomings."

In Alexandria we meet an interesting measure on the part of local authorities, formalized through the Local Council Decree 80/2017, which updates an earlier decree, from 2012. The town hall offers aid in the form of materials for making dwellings more efficient. For this aid, a potential beneficiary shall submit an application to the city hall and a team composed of a social worker and an

employee of the city hall with expertise in assessing dwellings shall go the applicant's residence. A household may submit only one application per year, and within a period of 60 days proof should be presented that the aid was used for the right purpose. The aid is granted on the basis of low income, of maximum RON 400 per family member or maximum RON 800 for single people.

"Based on an application, one goes in the field with an expert assessing the dwelling and indicating what interventions are needed and the materials bought by the city halls are provided. A sum of money is calculated depending on need and the materials are taken to the dwelling. Residents only need to deal with the manual labor. We cannot know if they even use the materials for the dwelling, maybe they sell them. But the following year, if they ask for them again, we go and see if repairs have been made. And we do not provide them if repairs have not been made. They must do the work by themselves, we cannot go with the construction company because it would involve a tender. We do not have a project that we can apply for individual dwellings."

A single mayor, in Bacău county, mentions the investments in renewable energy as a response to the difficulties of supporting the efficiency of housing.

"There is a budget issue when we speak of insulation. We need funds, we cannot afford it from the local budgets. Currently we are looking for solutions to make some investments in renewable energy, solar energy."

Additional aid at the local level, although granted after incoherent practices, can represent creative solutions for vulnerable beneficiaries

Another form of aid from the local budget in Alexandria, through the same aforementioned City Council Decree, is giving one ton of firewood, in kind, to wood heating benefits recipients. This measure is connected to the fact that beneficiaries do not have the financial possibility to connect to the gas network, so they are confined by low incomes to continue to use wood.

"The city hall grants one extra ton of wood for each beneficiary, with money from the local budget. Quantities are for a limited period, from what is removed from trees over the summer. Or, if needed, we purchase from the forest fund. Approximately 1000 people are benefiting. They are not connected to the gas network, they do not have the money to connect."

Also, the city hall grants temporary aid as well, for persons in difficulty of paying their bill and who are in danger of being disconnected.

"We help those in difficulty with money from the local budget, to prevent them from being disconnected."

Another example of an investment at the local level with the aim of reducing the expenditure occurs in Sarata, in Bacău County, where the city hall is trying to extend the gas network, a project seen as an investment to reduce the amount of benefits granted for wood (now there are over 400 benefits for wood). At the time of the interview, the tender had been resumed several times, but no one presented a proposal.

These examples show, however, that such measures are taken by city halls on their own, depending on local budgets, on local interest to such issues, on the goodwill of administrative elites, or on the creativity of the local administration. Examples of good practice are not transmitted through an institutionalized channel from one city hall to another, so that other local administrations can implement or adapt them.

Employment and income growth as explanations for reducing the number of benefits and as long-term solutions

In the long run, however, the energy efficiency measures of dwellings or investments in renewable energy are not mentioned as a way of eradicating poverty. Generally, all city hall representatives point to the income growth as method to reduce benefits.

"In the long run, employment is needed. Some have become used to this, to benefits."

"In the long run, only employment and accepting to work [are the solutions]. The heating benefit is not conditioned by the work hours for the benefit of the community (such as the social benefit)."

Moreover, the increase in income in recent years is given as the reason for the reduction of the number of heating benefits recipients, but the legislative changes that have tightened the conditions for granting the benefit are also mentioned.

"The income has increased. Five years ago there were about 1000, now there are approximately 300 beneficiaries."

"There are fewer because the income has increased and they do not meet the conditions. Some have gone to work."

"The changes of recent years have also reduced the number of beneficiaries. In 10 years we went from over 3000 to 400. The criteria are more stringent."

The computerisation of heating benefits is needed. The anticipated legislative changes through the introduction of VMI must be handled carefully, since there is a resistance and lack of capacity for implementation at the local level

As regards the legislative changes in respect of heating, we have followed both an evaluation of the changes which have occurred over the last decade, and the perception of the changes that will occur with the introduction of VMI.

Representatives of city halls mainly highlight positive aspects, but also some negative issues concerning the changes in recent years. Clarification of the procedures and the criteria according to which the heating benefit is granted are the reasons most often mentioned.

"(*Compared to social benefits)* Heating benefits are alright, because they are also granted to those whose income is certainly small." *(rural town hall*)

"It's good that all the money for wood is transferred at the same time." (*urban city hall*)

"It was hard when benefits could be requested without documentary evidence." (*urban city hall*)

The manner of granting the money is referred to as a problem both in the case of benefits for wood (the uncertainty that the money is spent for firewood) and in the case of gas and electricity, for which the problematic communication with the providers is sometimes raised.

"It would be better and safer to give that benefit in kind. But we cannot prove that the money is not used for wood, the amount is small anyway. RON 290 is not even enough for a ton of wood." (*urban city hall*)

"People came to us to complain that subsidies appeared late on the invoice. The system is cumbersome. Something is not right in the collaboration between the providers and us. Sometimes the subsidies appear with a three month delay on the invoice." (*urban city hall*)

"Changes in recent years have loopholes, all laws leave room for interpretation." (*urban city hall*)

As regards the changes anticipated by the introduction of VMI, the authorities differentiate between the effects on applicants and the effects on the activity of city halls.

"VMI helps individuals, not us, the workers."

"We are waiting for the implementing rules for VMI. We understood the idea, to make it simpler for the people, but it is confusing for us."

"At VMI it will be simpler for people, there will be fewer documents. But it will be harder to monitor. So far they would come every three months with the paperwork, with the VMI they will come only once a year. Within this interval, maybe they go to work abroad, we cannot know."

"Simplification through VMI are stupid."

We also sought to obtain the views of the authorities who implement the legislation and are experiencing the realities in the field, about the changes that they would consider necessary to make the system for granting heating benefits more efficient, so that they reach all the people who truly need this support and to ensure that the process can be managed more easily.

A category of proposals is moving toward conditioning the heating benefit on the work for the benefit of the community, as it happens in the case of social benefits, as illustrated by the following example:

"Priority should be given to those with small pensions, the disabled, for others it should be conditioned by work. If they worked,

there would be fewer who would request benefits. It takes serious investigations and verifications. Now the benefit is granted too easily." (*urban city hall*)

A special proposal refers to the need to introduce an ***electronic system***. Moreover, the usefulness of a computer system also emerges from the case in Alexandria, where such a system has already been implemented at the local level.

"The lack of a centralized database is obvious. People are sent after many papers and we are not able to verify the information. People declare many things at their own risk. Through an electronic system, we would identify the recipients from the very start. It would ease the procedure a lot." (*urban city hall*)

"We are used to it, the routine is good, there is also computerization. The people are ready, we have a service that handles only checking folders." (*urban city hall*)

The need for ***additional human resources*** appears only once in the case of an urban city hall in Hunedoara county where nine social workers are currently hired.

"We should be more social workers, sometimes we cannot cope." (*urban city hall*)

The close relationship with the communities contributes the proper functioning of the system, but the lack of uniform monitoring and reporting favors the appearance of discrepancies between the locality and the county level

All interviewed city halls mention the good knowledge of the community, which allows the rapid identification of potential beneficiaries, but also the opportunity to begin investigations where there are suspicions that the file may contain erroneous information.

"We conduct investigations where there are suspicions, we know well the circumstances." (*Letea Veche City Hall*)

"Most would request the benefit for electricity, because the amount is higher. There are applicants who do not declare all income, but we find them through investigations. Either not all members are declared, or the disability benefit is not mentioned, in order to fall within the income limits. Anyway, for electricity we are required to

make social inquiries. We go and find that they have no heaters, that they are disconnected, that they are not connected to centralized heating, that they have no stove. " (*City Hall Of Petroșani*)

In the few cases of rejections of applications for benefits, the reason is, most often, the income which is too high. At Vitănești, Teleorman County, only six files have been rejected (and 790 approved for 2016-2017), because the income exceeded the benefit thresholds. Among these, specific items on the list of exclusions are mentioned, as well as "possession of machines". From the interviews it can be inferred that there is good will on the part of the authorities to grant aid to those who request it, the surveys being taken mainly as a result of complaints from neighbours or following some inconsistencies observed in the files. But the absence of a system for reporting the situations of exclusion and a centralization of all cases allows the existence of a dose of arbitrary in the way the criteria are applied for exclusion from one city hall to another.

*V.6.d. Interviews in households*

The interview guide for families started from items that are included in the standardized questionnaire used by the INS for data collection in the Family Budget Survey. Items have been adjusted for the specific dynamics of an interview. Through interviews, we aimed to identify the extent of information concerning income (including benefits), tariffs or pricing plans, to behaviors inside the household, the relationship with the city halls, with social workers or heating fuel providers, as well as the features and amenities of the dwelling. Thus, respondents were asked questions in connection to the following aspects:

The monthly income of the household, the monthly amount of bills, as well as the amount of the heating benefit received (where applicable) to find out if the family is aware of the sums necessary to cover the bills.

The procedure for granting benefits and the relationship with the authorities involved - if there are difficulties in completing the

benefit application files, how is the interaction with social workers from the city hall.

Relationship with providers - the ability to understand the bills, possible payment delays or disconnections, if there was advice from the provider for understanding the pricing plan choice and possibility to be advised.

Household behaviour - certain hours where consumption is higher and the availability of adaptive behaviour, expenditure priorities within the household, the relationship with neighbours or tenants association.

The features and amenities of the dwelling, possible refurbishment works or to increase energy efficiency, construction materials, year of construction, the quality of the assets in the dwelling.

General observations

Some issues arise from interviews, which are useful to the social context in which to place the discussion on energy poverty in Romania. Most of those interviewed have ***difficulties in properly assessing their own financial needs in the household***. About half of the respondents were able to estimate the current income sources, including the benefits received. But, to the question linked to the amount needed to cover all the needs in the dwelling without the need for loans, we have received very few concrete answers with sums resulting from rigorous calculations. Some answers were rather rough estimates, and some people have no estimate at all.

With respect to electricity consumption, only two respondents from nearly 40 were able to show the number of kilowatts consumed in a month, though this information is present on the bills. ***Reading the bills is limited to the amount to be paid. In addition, with respect to the questions related to household appliances that consume the most, most of the responses were based on the time interval in which they operate (usually they point to the fridge, maybe the TV).*** Only one person pointed out that they understand the need to invest in household appliances which are energy

performant. So there are difficulties in assessing the electricity consumption in the dwelling and how the consumption translates into the amount of payment.

In relation to local authorities (in the case of requesting benefits) or with suppliers, respondents were generally open to be advised. The social workers are considered to be a source of support for the completion of the procedures involving the city halls. Sometimes even mayors are being mentioned as being supportive. In general, any advice that would result in lower payments (by receiving subsidy or through more favourable pricing plans) is welcome. Throughout the interviews, the respondents who have a better level of understanding of the procedures and of their own needs are easy to notice.

We will now present some specific issues identified through interviews, starting with placing the energy poverty in the wider context of the phenomenon of poverty and the issue of trust in social relations and in the relations with the authorities and providers, passing then to the procedure for granting benefits and the relationship between energy poverty and quality of dwellings.

Utility bills as priority

Through the interviews we gathered information on how households with financial difficulties prioritize their utilities payments compared to other expenses in the dwelling. There are two different categories of respondents: single persons or families where there are health issues or where there are no health issues. This second category is divided in two: single persons or families where there are no dependent children and families where there are dependent children. A better knowledge on the side of the suppliers of the specifics of each household on the basis of these minimal criteria may help in anticipating problems relating to paying bills or may help in elaborating some better adapted price plans.

Where there are health problems, purchasing medicine (with one exception among our respondents) tends to become a priority compared to paying bills.

"I do cleaning, how I can, where I can. The child allowance helps. It's hard. I have also been sick. I had to not pay water and trash to take my medicine." (*Alexandria, apartment block, electricity benefit)*

"I give most of the money on medicine, I underwent surgery. The only free treatment that I received was for TB, but a vitamin, whatever, I have to take on my own money. They don't give free pills anymore. " (*Bacău, apartment block, without benefits*)

Where there are no health issues, paying bills, especially those of electricity, is a priority.

"You know how people are when they get the money, they pay the electricity bill, not to be disconnected. The thing is that if they cut off electricity and you have a refrigerator, everything spoils ... So it's the priority. " (*Alexandria, apartment block, electricity benefit)*

"- Does it happen that you are not able to buy food because you had bills to pay?

-Yes, it happens a lot of times." (*Brad, apartment block, wood benefit*)

"Are there situations when you can't buy food because you had to pay bills?

-There have been. There are shortcomings... Especially with the school books of the girls." (*Alexandria, apartment block, electricity benefit)*

"You have never been in a position to be disconnected from the electricity network?

-No, no, no! " (*Alexandria, apartment block, electricity benefit*)

"-Have you been in a situation where you didn't pay utility expense or bills?

-Never. We paid what we had to pay and we would see what was left." (*Brad, house, wood benefit*)

"-Could you pay your rent every month?

-No, I still have debts with rent now.

-But have you ever been disconnected from electricity?

-No. There I did everything possible. I am behind on the rent, but the rest... I paid these." (*Lupeni, apartment block, wood benefit*)

"-Have you ever been disconnected for non-payment?

-No, from my pension I pay for electricity.

-Do you sometimes borrow money to pay the bills?

-No! If I don't have money, I don't eat ... " (*Letea, house, wood benefit*)

"During winter we use methane very much. The heater. Others... rather than giving it on medicine, better give it on gas. With electricity, the same. Depends on the season and the outside temperature." (*Petroșani, apartment block, gas benefit*)

"There have been days when I couldn't afford to buy food so I can pay the bills. And I would go to my mother's to get food. But there were no days without food. I can't. I prefer not to get gas for the gas tank." (*Petroșani, apartment block, without electricity, without benefits*)

"-Were you ever unable to pay your bills on time?

-I am behind on last month's rent and this month's, because I had to pay the electricity. This month I don't pay the electricity and I am going to pay the rent. That's it, this is how we do it, the rent is high, I'm paying in euro. " (*Bacău, apartment block, without benefits)*

"-Due to the lack of financial resources, did you have difficulties in pay your bills, expenses?

-No, that no, if I don't pay, what will I do?" (*Letea, house, wood benefit*)

Where there are dependent children, the necessary costs for their care become priority, at the expense of the bills.

"The money is enough for about everything, but it's difficult. For children nothing is missing, but for us it's harder. " (*Alexandria, apartment block, electricity benefit*)

"It's true that it's an expense, but your child is never an expense that is weighing on your mind. Even if I have to sell everything I have. If she's smart, let her finish school. I agree to her making a future for herself. Her future is more important than wealth. For us, time has passed." (*Alexandria, apartment block, benefit for electricity*)

"- So far you have never had electricity debts?

-No! I have not paid rent since I forgot when, I accumulate debts...

-Do you have trouble in buying groceries as well?

- I was left a day or two, but not really. Not really... " (*Vulcan, apartment block, no benefits, family with 7 children)*

"-Due to the lack of financial resources, has your household ever been unable to pay current expenses on time?

-Yes, a lot of times ... " (*Lupeni, apartment block, without benefits*)

"- Have you ever been in a position to be disconnected due to non-payment?

-I was behind with the energy, but they have never cut it off.

-But on what specifically do you spend most of the money?

-Mostly on food and children." (*Bacău, clay house, wood benefit*)

"-Have you had trouble paying your bills on time?

-Yes, of course.

-Have you ever been disconnected for non-payment?

-Yes, they cut off the electricity.

-But on what specifically do you spend most of the household money?

-On rent, mostly. On food, on what the children need in school." (*Bacău, clay house, without benefits*)

"-What appliance consumes most power in your home? The TV?

-The fridge. Because I could not get a class A one. But I will get one, when my daughter finishes school and it is going to be easier." (*Alexandria, apartment block, electricity benefit*)"

Low confidence (among neighbors, in relation to the authorities) represents an opportunity for suppliers to intervene through counseling

A problem that appears as relevant in several interviews is linked to trust, from several perspectives. The most common is the lack of trust and cooperation with neighbors, illustrated especially in answers to questions about thermal insulation of apartment blocks. Where they exist, interventions are primarily individual, around their own apartment. There is, however, an important nuance. The majority of respondents claiming lack of trust in their neighbors refer to them as to a collective actor, the neighbors, but at the same time it indicates a close relationship with a neighbor they can trust or with whom they help each other.

"-I've insulated on the inside, next to the window. On the outside it's too expensive.

-Did you discuss insulation with the neighbors?

-No, each makes it individually, I don't have 40 million.

-20... (son intervenes)" (*Alexandria, apartment block, electricity benefit*)

"The neighbors don't care about anyone else. They've only helped when my husband died." (*Alexandria, apartment block, benefit for electricity*)

"-Are the neighbors younger than you? How do you get along? How are they coping? What do they say about insulation?

-There are both younger and older. They have large pensions, they have children who help them. I too was talking about insulation, the city hall would give me some money, but it's still not enough. When I went there, they gave me 150, but that was not enough for the work, and I can't save it (labor costs were estimated at RON 400 and had to be covered individually).

-And if more of you agree?

-No, no. Nobody says "let's do it". Some neighbors gave money and they put gas, they have salaries, they came from the countryside. The others, who are abroad, renovated their apartments.

-And they don't ask you?

-No, cause I am too old to them. They could, but now ... Who would take me... " (*Alexandria, apartment block, electricity benefit*)

Another important perspective regards the relationship with utility providers. On the one hand, the general lack of trust extends to them as well, which is the reason why the idea of deepened communication, including advice for selecting more appropriate pricing plans is rejected, such as the case below:

"I am 62 years old and I don't really trust anyone. People are as they are. I'm an old-fashioned woman. I have my calculations. And I'm not complaining to anyone, no one helps me. Why would I complain?" (*Alexandria, apartment block, electricity benefit*)

On the other hand, the distrust in the suppliers may have come from lack of understanding of the bill or the way in which adjustments operate, as shown in the following examples:

"We have a contract with (provider name) for five years. It says that you pay less, but who knows what it offers you. Excuse me... but they are a bunch of liars. I don't need (counseling...). I pay less for a month or two, and then more. " (*Deva, house, without benefit for 2016-2017)*

"-Do you have difficulties in understanding bills?

-They do trick you, to hell with them. Is there anything fair these days?" (*Letea, house, wood benefit*)

There are, however, cases in which good communication with suppliers is given as a reason to prevent disconnection or other sanctions for people who have difficulties paying. Most of those interviewed who receive benefits for gas and electricity understand how subsidies can be identified on the invoice, and problems of understanding invoice, where they exist, are not placed in the supplier's fault. In other words, it is important for providers to constantly transmit the message to clients who are in situations of vulnerability and who may encounter difficulties in paying the bill that there is understanding in relation to their situation and that in the relationship between the two parties operates a presumption of good faith. Apart from traditional methods of communication with the clients (call center, information desks), proactive measures to establish relationships with vulnerable consumers are welcome. It must be said, however, that none of the respondents who do not benefit from benefits for electricity (who would not be eligible) has indicated that it was actively guided by the provider in the choice of the social tariff. It is unlikely that neither of the respondents, however, should benefit from this tariff plan, so it is possible for providers to overcome such clients without having to explain them clearly so even if its clients consent by signing the contract.

"The bill is a bit over 300, but I must give only 85, because two hundreds go on the subsidy. We pay up to RON 100." (*Alexandria, apartment block, electricity benefit*)

"-Did you encounter any situation where you were not able to pay your electricity bill?

-Oh my, many times...

-Did they disconnect you?

-No, because I pay half the bill, for them to see that I'm in the process of paying. And I compensate with the following month. And it is possible to cover the total sum in time, within 30 days.

-Are you having trouble with the bills? You don't understand them well, do you ask for help to read them?

-I sometimes go to the neighbors." (*Alexandria, apartment block, benefit for electricity)*

"-Have you been in a situation where you couldn't pay expenses?

-Yes. Many times.

-Have you ever been disconnected?

-So far it has not happened to me. There is collaboration, kindness. We can postpone the payment or you can talk to the directors and a postponement is done. There is still kindness and they are looking for solutions not to be disconnected. I was never confronted with the situation when the man comes to cut it off. As long as you have good will and you partially pay, it can be fixed. (*Petroșani, apartment block, benefit for gas*)

Heating benefits: satisfying processes and amounts to gas and electricity, shortcomings with heating benefits for wood

One of the main points targeted in the interviews with the families in the three counties refers to the procedure of granting heating benefits. The purpose of this section was to identify the following elements:

- perception of families with regard to the application procedure and the granting of benefits (though it is easy to understand if there are families who do not submit their application because they do not understand the procedure),

- what are the reasons why some of the applicants do not have their application approved,
- if beneficiaries are pleased with the manner of receiving benefits or if they would prefer other options,
- especially in the case of recipients of benefits for solid fuels, if the money is truly used for buying wood.

A general remark that emerges from all the interviews with people who have requested heating benefits (regardless of whether they received it or not) is that the procedure does not raise difficulties. Most respondents, especially those requesting benefits every year, are familiar with the procedure, do not have difficulties in obtaining the required documentation and, in case on uncertainties, they are sure they can ask for the help of social workers. These cases, selected from the top counties in receiving benefits, support the argument that the high number of benefits is explained not only by the fact that the need would be higher than in other parts of the country, but especially by the effectiveness of social workers (and the local authorities as a whole) to identify and guide potential beneficiaries to the procedure of requesting benefits (an aspect that emerges from interviews with AJPIS directors). In order to be certain about this conclusion, it would be necessary to have a thorough research in counties with a small number of benefits as well, to see whether the need in those counties is lower or if the relationship between the authorities and potential beneficiaries is deficient. Moreover, in order to assess the needs in every county (especially to make a correlation between the material status of families and the quality of dwellings with the number of benefits), statistic data representative at county level would be necessary, however the data offered by INS through the Family Budget Survey are representative only at the level of development region.

The number of cases in which the heating is requested, but not granted, is somewhat reduced in our sample of consumers (only five), of which only one, in Deva, was excluded based on the

exclusion list, in combination with an increase of income (due to the minimum salary wage) compared to the past years. The others have been excluded solely due to increased income, but in these cases as well there is the problem of sizing electricity expenses compared to the total income of the household.

With respect to the manner of granting the benefits, interviews with families who receive them show that the current procedures are generally accepted by recipients. On the one hand, for thermal energy, electricity and gas, the beneficiaries are pleased with the fact that the benefit is granted in the form of deductions applied directly on the invoice, which spares them an additional step in the relationship with the authorities. Further on, beneficiaries admit that benefits granted directly in cash might be used for other necessities in the household: those receiving the benefit directly on the invoice are satisfied because they are not tempted to use it on something else, while those receiving benefits for wood admit that they often spend the money on something else than on wood. Last but not least, the recipients of benefits for wood are satisfied(with two exceptions) that all the money is give at once, because it's a larger sum of which they can spend more, and would not want that money to be broken down on a monthly basis.

"-A few years ago, money was given and it used to happen that some would not pay. Now, each client has a barcode.

-Do you prefer the old form?

-No, the current one! Because I also sometimes spend the money on something else (referring to food)." (*Alexandria, apartment block, benefit for electricity*)

"I receive only the benefit for electricity, I don't receive other benefits. The subsidy is RON 80. Anyway, it came in handy. I do not have heat, I only have a radiator. I would turn it on, turn it off, turn it on, turn it off, due to the cold, cause I would warm up. Look here (shows bills*) once 80, once 90, look at what is written here.* I would go with the envelope and it would be reduced." (*Alexandria, apartment block, benefit for electricity*)

"-Would you prefer another method for receiving the money? To have it handed to you?

-No, no! It's very good as it is!" (*Alexandria, apartment block, benefit for electricity*)

"If it gets in your hands, you use it elsewhere." (*Alexandria, apartment block, electricity benefit*)

"-Would you prefer a different form of receiving the money for wood?

-You talk about wood for heating... That's good as well.

-Wouldn't you prefer to receive the money monthly?

-No, because that would mean RON 58 per month. You can't even cover the transport of a wagon of wood. Not to mention the quantity of wood." (*Brad, house, wood benefit)*

"-Would you prefer to receive money for wood in a different manner? For example, to give it each month of the cold season?

-It would be good. Because we would buy other things, as we don't really have money... " (*Vulcan, house, wood benefit)*

"-Would you prefer a different form of receiving the money?

-No. It is very good. I don't get an advantage if the money comes in cash, I just go and give it to the gas company. This way, I receive the invoice, I receive subsidies and pay the difference. It's much easier, the money is transferred much faster, in my opinion. " (*Petroșani, apartment block, gas benefit)*

"-Do you use the money for wood strictly on wood?

-No, because we need to get food to the children, and clothes. I must pay the rent." (*Deva, block with 3 households, wood benefit*)

"-It is good like this, to be given all the money cash? Would you like to receive wood instead of the money?

-The money is better, because we manage easier. Because with the money we buy food, something for the kids... " (*Vulcan, house, wood benefit*)

Energy efficiency, sustainable solution to existing vulnerability

Another purpose of the interviews was to show how the low efficiency of buildings is fueling energy poverty. The interviews illustrate the need to better understand energy efficiency issues, taking into account not only the difficulties in warming the dwelling in the cold season, but also the the need to cool the dwelling in the hot season.

"-Is it hot in the summer?
-I'm alright, but it's hot. It's too hot. I have no roof... (she is living on the last floor and points to problem with the roof, which should be fixed) (*Alexandria, apartment block, benefit for electricity*)

"During the summer it's very hot, the sun reflects in the windows almost all day. During winter it's nice with the radiator." (*Alexandria, apartment block, benefit for electricity*)

"The sun reflects in the window, so 2-3 months we're in the sauna. It's super hot." (*Alexandria, apartment block, electricity benefit*)

A general remark that emerges from interviews is that the existence of heating benefits is associated with dwellings in a rather precarious state. Also, the families aware of their own income and expenditure in the household, capable to estimate the income needed taking into account the needs of the household, are the same who knew better the characteristics of the dwelling (construction material, exact area, year of construction), and who would want or even have made efforts to bring improvements to the dwelling in order to reduce costs and to ensure a greater thermal comfort. On the other hand, the respondents who did not know the characteristics of

dwellings very much are the same who would limit the approach to income. Optimisation of the dwelling is not seen as a priority or as an investment, the perception being rather that just the increase in income would be sufficient to solve the problems related to paying the bills.

"-Is the apartment block insulated?

-Yes. Alongside our apartment, it is insulated on the interior and on the exterior. We insulated it (on the outside). About four years ago, or so. 2012. And on the inside in 2009.

-Were the expenses reduced following the insulated?

-Yes, they were reduced after we did the exterior as well, before it was 600-700 (he/she had previously mentioned that currently, the invoice is RON 500 in the winter time)." (*Alexandria, apartment block, benefit for electricity*)

"-Do you know the material the house is made of? Is it brick?

-It's very old. I don't even know.

-During the winter is it cold inside the house?

-Yes, it's very cold, the rooms are big, it's very cold.

-Do you intend to thermally insulate the house?

-Of course I would want to. Did you see the house from the outside? But if he gave me this house with so many debts... (taken over from the former partner) I can't afford it. Do you think that with four children I want to sit in this cold, as I don't even have any carpets... No, because if I had the possibility... but I don't." (*Vulcan, house, wood benefit*)

Some interviews illustrate the fact that wood heating, especially correlated with a bad state of the dwelling, is not sufficient and it is necessary to use an additional source of heating.

"-If you didn't have a stove with woods, would you have another heating source?

-Yes, I have this radiator when it's really cold. And I pay, whatever I pay..." (*Vulcan, house, wood benefit*)

"-If you didn't have the stove, would you have another heating source?

-It's warm here if I turn on the radiator, but in the kitchen, on the other hand... " (*Vulcan, house, wood benefit*)

*V.6.e. Conclusions of the field research*

From these three categories of interviews, several conclusions can be drawn to form a solid argument in favour of our final policy recommendations. Generally, the field research confirmed a number of initial assumptions drawn from the desk review of the legislation and databases. It also allowed us to discover new nuances that help us better understand the effects that public policies have in practice.

The discussion on energy poverty in Romania in intrinsically connected to low income. From this perspective, there is a general temptation to associate energy poverty exclusively with poverty, as a general phenomenon (measured by low income), without looking at energy poverty as an independent circumstance that has important overlaps with poverty, but the manifestations and causes of which lie outside the discussion on income. For this reason, heating benefits end up being associated in the public perception, and in that of the public authorities, with social benefits, whereas their recipients are stigmatized accordingly and pushed at the edge of society.

There are significant differences between the amounts of energy benefits granted depending on the type of fuels households use. This difference has an impact on the behaviour of potential beneficiaries, but also on that of the authorities. There are beneficiaries who try their best to obtain heating benefits for electricity, because the monthly amount money can be up to four times higher than that granted for other types of fuel. On the other hand, authorities are bound to make inquiries, which can lead to exclusions. In many cases did the social assistants identify dwelling with additional

heating sources. This is also one of the important explanation for the low number of benefits allocated for electricity. At the same time, the amount granted for wood, of RON 290, is very small compared to the needs of a household for an entire cold season. Therefore, either larger expenses are needed for wood, or the revision of the system, so that additional sources of heating can be integrated. In either situation, the expenses of a household grow substantially. The short term solution would be to stop conditioning the benefit for electricity on the lack of other heating source.

Two secondary issues can be associated at this point. Firstly, the fact that local authorities are bound to carry out social surveys for any application for heating benefits for electricity in order to eliminate situations of non-compliance. Secondly, a discussion on the efficiency of heating appliances used in households is needed, in terms of consumption and effectiveness. For example, the replacement of old stoves with new ones, with better efficiency, can cut costs for wood in a household, even if the type of fuel used is not changed.

The procedures for receiving benefits are generally well perceived as they are. In our research we have especially dealt with recipients of wood and, in a smaller proportion, of electricity and gas benefits. In the first situation, the perception that cash payments are often used to meet other household needs, is confirmed. In the second situation, when benefits are invoice deductions, the fact that the beneficiary is not a part of the process, is viewed positively due to the simplicity of the system, but also due to the fact that it overcomes some of the faults of the wood benefits allocation system.

On the other hand, there is the idea that cumulation of public policies designed to combat the phenomenon promotes certain problems. They do not lead to the disappearance of the sources of the problem, the decrease in the number of benefits is due to the increase in income in recent years, especially the increase in pensions and the minimum wage. On the other hand, connections to natural gas, where necessary, involve rather large costs either for tenants, either for local authorities. The need to demonstrate that electricity is

the only source of heating in the dwelling hampers access to this type of benefit, although the electricity consumption to supplement heating in the dwelling is great. The social tariff (although not approached in this field research) does not contribute to solving this issue connected to electricity, because a larger consumption leads to very high costs.

The relationship between the institutions involved in the process of granting benefits is usually a good one, which is especially relevant in the case of these three counties, where the system is very used due to the large number of requests. Also, the relationship between state authorities and utility providers is seen as positive. This being the case, a better information system to document households on a constant basis would be an optimal source of support. Through digitalization the pressure for additional human resources would be smaller, at least because the need to constantly perform investigations in the field would be reduced.

The relationship between beneficiaries and authorities is also perceived to be a good one. Social assistants are considered to be a support and a source of information for potential beneficiaries, which confirms the assumption that the large number of benefits from a county does not necessarily indicate that the problems are greater there, but that the process of communication with the authorities is presumably better.

The relationship between recipients and utility companies is perceived as a good one as long as communication channels made available by utility companies are efficient. Communication between beneficiaries and providers can prevent disconnections, even when alternative solutions such as individually negotiated pricing plans in relation to vulnerable clients or even counselling are being sought.

Energy efficiency and energy poverty meet rather coincidentally in policy. At the level of local authorities, investment in efficiency measures in buildings usually fall within the framework of European funding, with its limitations, as there are no resources at the local level to start projects on their own. The limitations of funding, together with the lack of trust and a cooperative climate

within associations of tenants, make energy efficiency measures rather an exception. Also, there is no framework to allow access to funds for the rehabilitation of dwellings and individual housing. However, where the residents have made interventions on their own, the impact at the level of the invoice was visible. Furthermore, there is a legal possibility to implement local means of combating poverty through energy efficiency measures. The example from Alexandria, where an expert evaluates the dwelling, indicates the necessary interventions and makes a calculation of the necessary money and equipment for interventions, is a model of good practice that could be taken over by local authorities with more generous budgets. However, the legislative limitations are visible in this case as well, because the process of effective intervention in the dwelling cannot be completed by the city hall in the absence of public procurement procedure.

Interventions at the level of education and customer behavior are also important. The majority of respondents have difficulties in assessing their current income, the necessary income, the household expenses, the specific expenses on energy or the consumption. On the other hand, there is a willingness to accept the counseling, so this question of education can be seen as education through schools or as the education offered by the authorities to persons with whom them come into contact or by suppliers to consumers (vulnerable or not) on their own behavior in order to limit household consumption and hence costs.

Last but not least, we note great deficiencies in relation to the reporting of data collected at the level of municipalities and their centralisation by an authority of the state, as well as with respect to their availability to institutional actors involved in the development of public policies. With the exception of data related to the amounts of benefits received and the number of inhabitants of the households for which the benefit is granted, other information provided by applicants as part of the application for benefits does not get further than the city hall. In conjunction with the existence of an information system, such information could provide a more detailed image about

the state of dwellings, energy expenditures relative to income, items related to behavior or situations that lead to the rejection of the files. This aspect is even more important if we note that there is no unified approach of city halls. Beyond the legal framework, the reality in the field is shaped also by the fact that city halls that have a certain freedom of movement for finding their own intervention measures locally, or the possibility that some city halls demand additional documents (as the case of Ferentari) to applicants or the possibility that the whole process be negatively influenced by poor communication between city halls and the community. Such situations can be identified through field research, but, in the absence of rigorous reporting and centralization, there are certain problems that may occur in a systematic manner on the ground which are not visible. Similarly, examples of good practice can be found through such qualitative research, but they are not known to the other city halls that could adapt them, nor to decision makers at the central level or by the media and the public.

This research provides a clearer view on the relationship between energy poverty, on the approach of the phenomenon through heating benefits or on the relationship between the main institutional actors that come into contact with the phenomenon. However, the research has some limitations that should be mentioned, but which are transformed in opportunities for further research. First, the research does not represent a complete picture of energy poverty at the general level of the three counties. Things can be different in other municipalities, and the problems they face or the type of intervention may vary even within the same county.

The chosen counties are similar to each other in the sense that they are among the top ranked by the number of heating benefits offered. The conclusions arising from this research should be checked in the case of counties with lower ranking positions. Ideally, the data gained from the field research based on information aggregated at the level of the Ministry of Labor and Welfare should be correllated, at the level of the localities and counties included in the research, with statistical data regarding incomes and expenses,

but these are not the available at the level of the National Statistics Institute, because the samples used in the Family Budget Survey are not representative at the county level.

From this research we have not obtained any information about certain categories of vulnerable consumers, such as those living in unelectrified households or those who do not have access to electricity due to the absence of some documents. These elements are necessary in order to have a clearer image on energy poverty in all its forms of manifestation.

## V.7. THE NEED TO SIMPLIFY THE CONTRACTING PROCEDURE

One of the advantages brought by energy market liberalisation is the ability of the consumer to choose a provider they prefer to minimize energy costs and to maximize the benefits following the consumption. This involves several elements, including: the existence of several providers who compete freely on the market, offering services that are transparent, supporting the consumer to compare the available options; facilitating the process of concluding/termination of the contract and the transfer to another supplier; reducing the costs and time of transfer.

These facilities are anchored in the principles of the internal energy market and refer to a consumer who benefits from fair treatment on a dynamic market, in which all usual or occasional processes (connecting to the change of housing or transfer to a provider) are much faster, easy to follow and clearer for the consumer, helping them in taking the correct decisions for themselves. As shown in the above study, such a market framework comes in support of consumers, while a much too complex contracting process can be translated into factors of disadvantage, with a strong impact particularly on the most vulnerable of the consumers. Other disadvantages may be added to this, as well as few market alternatives, respectively aspects regarding the

commercial behaviour of providers (opaque communication, lack of instruments for comparing offers, complicated information, etc.).

On the energy market in Romania, contracting/recontracting processes of power supply services are particularly complicated, involving formalities exceeding the commercial powers of providers, who need to ask for an entire set of documents to authorize the connection of a household to the network. Some of them are rather related to authorizing the construction of a dwelling or the legality of a person's residence, and less process to the process of providing a commercial service. There are a number of drawbacks stemming from this system: the duration of the process until the connection, the bureaucratic burden on the potential client and the administrative burden of the provider, the difficulty of some consumers who cannot provide proof of some documents (whether it be identity documents, property or other technical documents concerning the living space), etc. We offer below, as an example, the entire connection process, as presented on the webpage of a randomly chosen provider in Romania.

We have done a comparative research, through which we tried to identify what are the practices in other markets in the European Union and particularly on the markets in which the process of liberalisation is more advanced, starting from the premise that a simplification of the system is possible and it brings benefits. We had talks with representatives of the regulatory authorities of the markets, but also of some big suppliers from different countries, such as Germany, France, United Kingdom. We also searched and tested the tools that are used to request contracting a power supply service. We offer as an example a randomly chosen instrument of contracting services for the supply of electricity in Berlin. Note that the instruments with similar characteristics are used in other countries as well. We selected a random example by typing in the Google search engine "electricity connection Berlin". We obtained the following result, in which we enter data of a dwelling in the city.

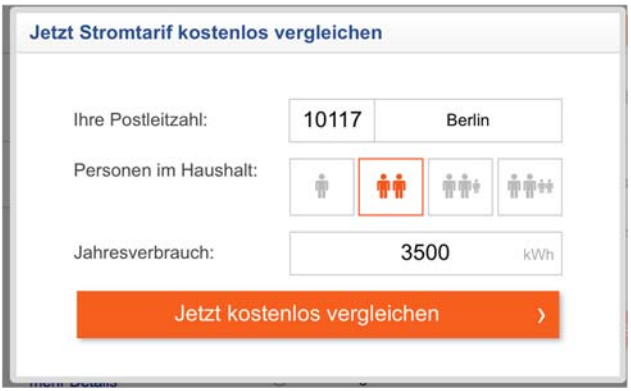
An electricity contract in Berlin. Total time: 10 minutes, exclusively online

The process is similar to the demand for Internet services via optic fiber or car insurance. The tool provides at least three neutral, safe suppliers, price comparison tools on the basis of data entered into the system:

- Check24
- Verivox
- Preisverlgeich
-

Step 1: the introduction of basic data in a price comparison tool. (1 min.)

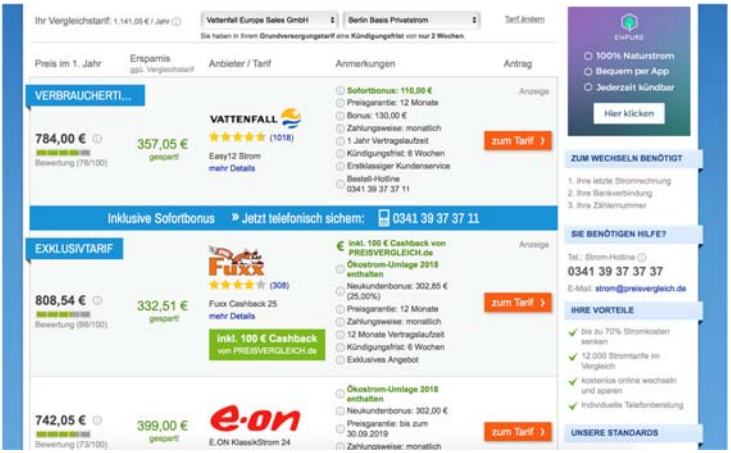
Pop-up window whereby the postal code and the number of members in the household are requested. The site provides preset guidance options to each category.




Step 2: verification of a price comparison tool. (5 min)

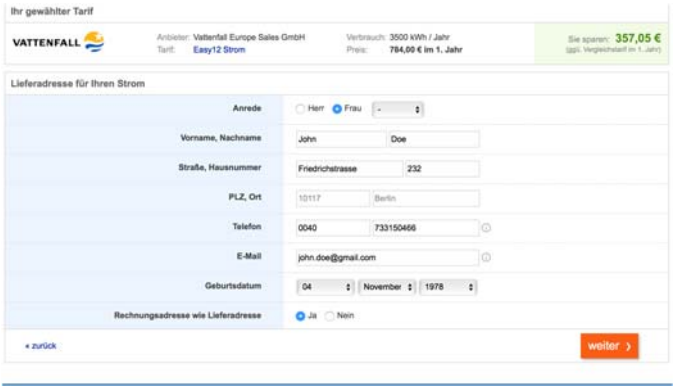
The tool offers the facility of some additional options (e.g. only tariffs without collateral, tariffs including the initial bonus for

changings providers, tariffs with guaranteed price, etc.). The prices quoted are annual. All terms of the contract are clearly listed.




Step 3: choosing the desired tariff (2 min)

On the basis of price and other features, the applicant chooses a tariff and introduces their personal data (last name, first name, phone number, address, date of birth).

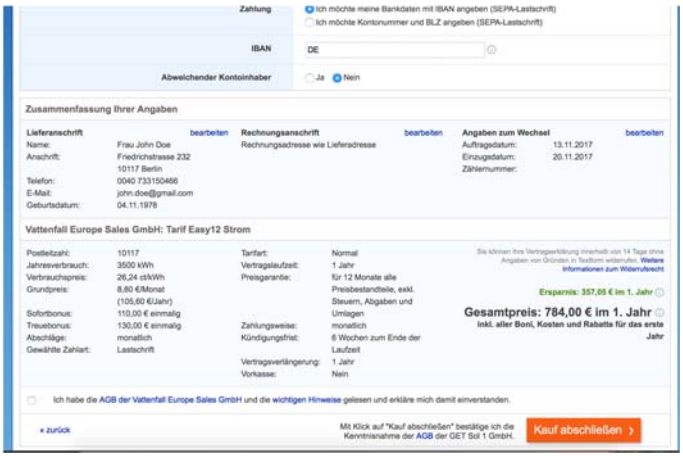


The applicant may specify whether they previously had another supplier (the only information that must be communicated is its name, and no other details such as code, etc.) or if the applicant intends to leave their home in the near future.

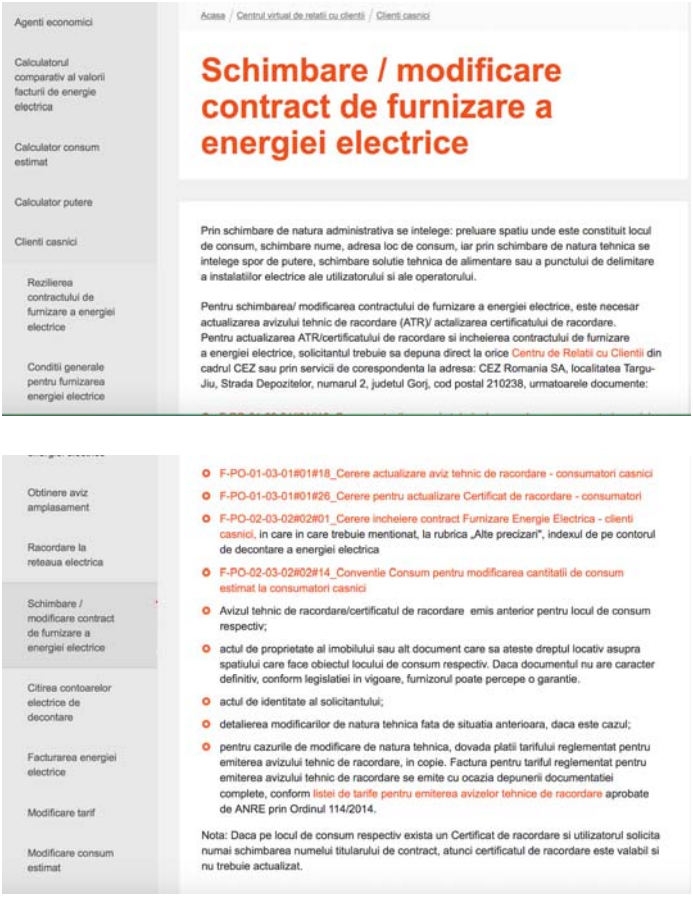
Step 4: entry of bank account data and completing the transaction. (2 min)

In a dialog box the bank account data is introduced.

In a separate column, synthetic, full service which the applicant is about to purchase is displayed, including all options that they selected above, personal data, as well as the characteristics of the tariff (frequency of payment, term of the contract, the bonus amount, etc.) and the total price per year. After checking the box on accepting the contractual terms and conditions, the applicant concludes the contract with one click on the button relating to the completion of the process.




In comparison, here is how the list of documents required by law to a consumer from Romania looks like, taken from the website of one of the major providers of electricity.




**Source**: (CEZ Romania, 2017)

In addition to the example in Germany, in the United Kingdom we encountered options by which the applicant, whether it be for an existing customer or a new customer, may indicate if they are in a situation of difficulty to pay their bills. This is not the only means of identifying persons found in a position of vulnerability. Once the request has been submitted, the applicant is contacted by the

customer service of the company, which suggests various arrangements, including packages which include an energy audit of the dwelling and renovation and insulation solutions, energy efficiency all the way to the replacement of facilities or of household appliances (Dewbery, 2017). Although the limits of such an approach are obvious (lack of funding being the main challenge), the system is based on an integrated approach between energy efficiency, decarbonisation and welfare ensured at the legislative level. The United Kingdom, through a 2014 provision, taken on to bring the entire fund for dwelling to a standard C minimum of efficiency. The provision is implemented through a number of mechanisms made available to companies or local authorities to carry out programmes to combat poverty through energy efficiency solutions. The ECO scheme (Energy Company Obligation) is a mechanism which operates throughout the country and can be accessed by energy suppliers to help energy poor households improve consumption efficiency. Similar mechanisms operate and the level of the regions and are accessible to companies or local authorities, either to charitable organizations: Home Energy Efficiency Programme for Scotland (HEEPS) in Scotland, Warm Homes Program in Wales, Northern Ireland Sustainable Energy Partnership (NISEP) in Northern Ireland, Warm Homes Fund made available by the national network operator.

As shown by these examples from Germany and the United Kingdom, providing energy is a commercial service like any other, and simplification and transparency are possible and widely practised, being for the benefit of the consumer and the supplier alike. Additional documents required for contracting in Romania (identity documents, deeds, etc.) do not have to be required to the consumer who wishes to connect. Simplification of procedures would allow unrestricted access for everyone to energy services.

# VI. POLICY FOLLOW-UP

Based on theoretical considerations, strategies, recommendations and best European practices, on the analysis of the legislation and the field situation in Romania, we summarize, in this section, the main issues identified during the research and we will expose a set of recommendations.

## VI.1. SETTING THE CONTEXT AND IDENTIFYING PROBLEMS

*VI.1.a. Poor definition of the vulnerable consumer*

Currently, the law 123/2012 defines the vulnerable client as "the end client belonging to a category of household customers who, for reasons of age, health or low income, are at risk of social exclusion". It is necessary to clarify or replace the concept of social exclusion in the definition. The law 123/2012 does not relate to the definition given by the law 116/2002 and its implementing regulations, which state that social marginalization is a "peripheral social position, the isolation of individuals or groups with limited access to economic, political, educational and communicative resources of society. " In addition, the same legislation makes a distinction between persons at risk of social exclusion and the socially marginalized. The risk is given by an income per family member below the national minimum income.

The law 196/2016, which introduces the minimum inclusion income (VMI) and which will enter into force on April 1 2019, defines the vulnerable client as "the household client, single person or family who cannot provide from their their own budget full coverage of heating expenditures for the dwelling and whose income falls within the limits provided for in this law ". It should be noted, however, that the definition given by the law on VMI does not replace the definition from the law 123, but the one in the GEO

70/2011, so we will still have at least two definitions, in two different normative acts, which do not coincide.

Currently, the definition of the GEO 70/2011 links low income to the failure to ensure the minimum temperature of 21 degrees Celsius in the dwelling, without having specified any mechanism through which the authorities involved in the granting the heating benefit can check to see if there are difficulties with ensuring these temperatures. In turn, this definition does not take into account the norms used in constructions as regards the necessary heat, which by SR 1907 establish that in living rooms the temperature should reach 20 degrees Celsius. Connecting energy poverty to temperature in the household is present in several European countries (see tables in chapter IV), but standards are generally unitary throughout the legal framework.

Another problem in the current definitions given by the Romanian legislation is the exclusive focus on heating the dwelling during the cold season, completely neglecting other factors such as cooling the dwelling (especially in the summer), ventilation (quality of the air in dwelling) or lighting electricity consumption of household appliances, some of them obsolete, which can generate significant costs to consumers. Linking poverty energy legislation with the legislation on the energy performance of buildings and energy efficiency as a whole (mainly the laws 121/2014 and 372/2005) would ensure an integrated vision on these issues.

These elements are derived from the difficulties of quantifying energy poverty. There are several indicators of some faces of energy poverty which operate in practice: the number of those receiving heating benefits, the number of those who benefit from the social tariff for electricity, the number of unelectrified households, the number of households which are not fitted with electrical installation, the number of households with informal access to electricity, the number of households with difficulties to pay bills. However, they cannot be correlated or assembled into a single indicator that gives a complete picture or a total figure, because there may be some overlapping between the categories.

*VI.1.b. The absence of a National Action Plan (NAP) to combat energy poverty*

Title I and title II of the law 123/2012 differ with regard to those responsible for drawing up the National Action Plan in terms of energy poverty. For natural gas (Art. 102, letter n) is responsible the Ministry of Energy, and for electricity (Art. 6, letter r) is responsible the Ministry of Labour, in collaboration with the Ministry of Energy.

*VI.1.c. Poor collection of data relating to vulnerable consumers*

The complexity of the phenomenon of energy poverty poses obvious challenges with respect to the accurate measurement and quantification of its size, as number of people affected and in respect of the costs involved in fighting it. The large number of actors that should be involved in quantifying adds an additional challenge, as it involves a continuous process of coordination and reporting between institutions. These challenges are part of the explanations identified for a poor collection of data on vulnerable consumers and the people in energy poverty in Romania.

At the same time, most institutions already involved are aware of the need to measure the phenomenon and already collect useful data for a clear picture of it. Their approaches are not, however, unitary. Each has a vision of a single aspect of the problem, without any institution having an overall view from which to be derived solutions to combat the phenomenon in the long run. For example, the Ministry of Labour rigorously centralizes the data on heating benefits granted from the state budget. City halls keep records of additional benefits from the local budgets. The ANRE centralizes data from providers regarding social tariffs. MDRMAPFE holds data on the Housdwellinging fund, the expenses incurred for energy efficiency (both from state or local budgets as well as European funds). The INS also collects statistical data relevant to the measurement of the phenomenon of energy poverty through investigations such as ABF and EU SILC.

However, these institutions do not communicate with each other to exchange data or to analyze them in a common manner. This results in the absence of any real assessment of the measures implemented to combat energy poverty or to enhance energy efficiency. For example, the fact that the number of households receiving heating benefits has halved in the last four years might be regarded as a major reduction of poverty, but the decrease is due, in fact, primarily to an increase of the minimum income. Also, there is no assessment of the benefits brought by thermal insulation programs for blocks. The amounts invested, from local budgets, from the state budget or from European funds for thermal insulation programs are known, but it is not clear what impact they had on the level of heating bills. Also, the body of energy auditors holds the expertise needed to conduct substantial assessments of dwelling fund, following a well established methodology that takes into account the characteristics and facilities of each household, which would allow the collection of a significant volume of data that could be linked to the data on household income, but energy performance certificates are not mandatory under the law 159/2013, unless in the case of a house sale or rental or in the case of the acceptance of newly constructed buildings.

## VI.2. RECOMMENDATIONS

1. At the level of **Parliament**, amendment of the law 123/2012, so as to provide for the following:

1.1 Redefining the notion of "vulnerable" client in an integrated manner and the introduction of "energy poverty" in such a way as to reflect the complexity of the phenomena.

The definition of vulnerable customer should take account of all the five key factors that determine vulnerability: commercial behavior, market design, structural and access factors, the situation of the consumer, socio-demographic factors. The reasons of age,

health and income, from the current definition, reflect in part the last two categories, and the set of policies derived from this definition is insufficient to effectively combat the phenomenon.

The definition of energy poverty should take into account the following three dimensions: energy expenses, large bills and poor energy efficiency of dwellings.

### 1.2 Redefining the role of the ANRE as coordinator of the National Action Plan on energy poverty

In the package on Energy Union, energy poverty is an indicator covered by the second dimension relating to a fully integrated internal energy market. Moreover, the Winter Package gives energy poverty a transnational that must be managed at the level of regional or European market through the intervention of a supranational market authority. The institution considering regulating the Romanian energy market in an objective manner and therefore has the ability to facilitate the collaboration of all relevant market actors is the ANRE.

Starting with the provisions concerning the obligation of member states to elaborate NAP on energy poverty, we propose that the ANRE to be provided for by law as the coordinator of the process of elaboration of this document and its reporting at European level. In the context of European norms in force, the document must be submitted regularly to the European Commission. Also, once the Winter Package will have entered into force, the items in the NAP could be included in the National Plan integrated to the second dimension, on the corresponding indicator.

Beyond the fundamental principles of the functioning of the market and the way in which the consumer must be protected, the NAP must have an executive character. Starting from a correct definition of the vulnerable consumer and energy poverty, it should present a comprehensive analysis of the vulnerability of energy in Romania, a map of energy poverty based on complete data and an instrument of measurement-monitoring that can be used periodically,

an inventory of existing measures and a tool for assessing their cost and impact, and to identify all actors involved and their responsibilities, respectively to describe all protocols of communication between institutions on issues of energy poverty and vulnerability, to propose public policy solutions, the necessary instruments and mechanisms of intervention, to identify possible sources of funding. The NAP will have to be integrated and should consider financial and non-financial solutions with an increasingly serious concern for those for energy efficiency, but also solutions for information and innovation. The NAP will thus be the reference document, so as to prevent the occurrence of discrepancies in the case of later changes in legislation. In this situation, it should be updated regularly to provide an actual record of the phenomenon and to contribute to refining public policy the instruments of implementation, in order to support the principle of effectiveness of spending public money.

The NAP should be the collective effort of all relevant institutions so that the approach to be as complex as possible: the Ministry of Labour for social welfare, the Ministry of Energy for targeted solutions for energy policy, the Ministry of Development for strategies for improving the dwelling fund, the ANRE for aspects connected to the regulation of actors ' behaviour on the market, in the context of liberalisation and compliance with the European norms in this field. The involvement of supplier companies (after the Great Britain or France) or of local authorities, which can in turn deliver measures to protect vulnerable customers in the field of energy, is also necessary. Coordinating the positions of the actors may be achieved through extensive consultations (following the Austrian model mentioned in Chapter 4). These consultations could also integrate relevant NGOs, respectively representatives of consumers.

Therefore, from the perspective of the role of the ANRE, the law 123 should be amended in three main points:

- Mentioning the fact that the ANRE is responsible for drawing up the National Action Plan for combating energy

poverty, in an integrated manner and through the involvement of other actors, such as the Ministry of Labour, the Ministry of Energy, representatives of providers and distributors, representatives of civil society organizations with expertise in the field, representatives of consumers.

- Mentioning the fact that the ANRE is the institution which must coordinate the process of identifying/measuring/ centralization of data about vulnerable consumers, with the involvement of the relevant central, county and local authorities (city halls, AJPIS, etc.) and in direct connection with the providers. Also, the law should clearly specify that the data collected (except personal data) must be open in nature, and in particular those relating to the expenditure of public funds, such as those for heating benefits or those for thermal insulation of blocks.
- Mentioning the fact that the ANRE forwards the NAP to the European Commission and that this document is a fundamental tool concerning poverty and the energy vulnerability in Romania, both for reporting on Integrated National Plans as well as for the identification of all strategies and intervention programs in the field.

I.3 Redefining the role of the Ministry of Labour in relation to the intervention tools with respect to poverty and energy vulnerability

We recommend placing the responsibility with the Ministry of Labour to determine the criteria by which a household consumer may fall in the category of vulnerable consumers or those affected by energy poverty. The criteria shall take into account the full definition of the vulnerable consumer, based on the five main factors: commercial, market, structural, contextual and socio-demographic. At the same time, the criteria for energy poverty should take into account the indicators which consider the income of households in relation to energy expenditure.

II. At the level of the **ANRE**, as the agency that elaborates secondary legislation with impact at the level of the energy poverty phenomenon:

II.1 The amendment of regulations for the supply of electricity and natural gas

Currently, other protection measures than financial ones, in the form of financial benefits, are not provided.

We recommend changing the regulations so as to provide integrated intervention measures in order to remedy energy poverty and the protection of consumers who are in a situation of vulnerability. These measures should include non-discriminatory financial, non-financial and energy efficiency solutions. At the same time, the situations in which the behaviour of providers is of nature to discriminate between consumers should be avoided. In this sense, we recommend that the ANRE to consider introducing in the criteria for granting licenses conditions relating to the protection of vulnerable consumers, but also the creation of instruments for monitoring the market behaviour of providers, with focus on energy vulnerability.

A minimalist approach in relation to the disparities identified in the legislation and implementing regulations would be amending regulations for the purpose of introducing non-financial benefits for vulnerable consumers on account of income, especially some that can be easily implemented by providers, as well as the prohibition to disconnect during the cold season or payment installments.

II.2 The modification by ANRE of Order 38/2005 concerning the social tariff

Currently, the status of beneficiary of the social tariff is almost never reviewed in practice, the clients failing to fulfill their obligation to notify the provider in case of a change of income, and the providers having no obligation to request such an update. Although installment 1 is frequently exceeded, (first 60 kWh per

month) and installment 2 (next 30 kWh per month), resulting in falling a higher tariff (installment 3), the provider does not have the obligation to notify the client upon the repeated exceedance of the kWh threshold accepted for the social tariff and so neither to advise them to opt for another tariff. Moreover, the order of 2005 is anachronistic by the requirement that local authorities approve the income statement, which is impossible to put into practice.

As a minimal approach to correct these deficiencies, we recommend modifying the order for:

Eliminating the obligation of city halls approving income statements.

Obliging the provider to notify the consumer if the consumer exceeds installment 1 and switching to the monomial (unless amendments to resize or remove current installments will be introduced).

Resizing consumption installments and cutting costs for the purpose of extending the first installment, with a special tariff targeting those with low income and high consumption.

III. At the level of the **Ministry of Labour**, the amendment of GEO 70/2011 (as amended by GEO 27/2013) and the implementing regulations for the purposes of eliminating from the procedure for granting the heating benefit for electricity the obligation of the applicant to demonstrate that this is their only source of heating (art. 10 (4) of GEO 27/2013), since these data may be institutionally accessed and/or determined by social inquiry - mandatory in the case of heating benefits for electricity. This provision could allow local authorities to make difficult the procedure for granting benefits and thus to discourage potential beneficiaries to follow it, when there are benefits that do not come from local budgets, but from the state budget. Moreover, the new law on VMI does not solve this problem either, art. 27 being formulated in general terms.

We also recommend to amend art. 14 (4) and (5) of the GEO 70/2011 in the sense of mentioning a clear list of supporting documents that city halls may request, as well as a prohibition to request additional documents, in order not to discourage potential

beneficiaries. Art. 14 (5) can be modified in the sense of asking city halls to obtain data on applicants, primarily through administrative channels, through protocols of collaboration with other institutions, and only then, in the absence of the ability to obtain such information in this manner, to be requested directly from applicants.

GEO 70/2011 should also be amended for the purpose of increasing the percentage of the ISR that determines the maximum amount received by a dwelling that uses solid fuels for heating, in order to ensure equity between methods of heating.

The Ministry of labour should also introduce heating benefits in the benefit management information system, SAFIR, in order to ensure uniform implementation of this system.

IV. At **Government** level

IV.1 The development of a plan of action to resolve the problems of access to electricity, through cooperation with local authorities (prefectures, county councils, city halls).

Currently, there is no clear statement about the number of unelectrified dwellings, with no connection to electricity or with no electrical installation in the dwelling, this problem being derived both from the poor cooperation between authorities and from the absence of clear criteria for data collection.

The plan drafted at the level of the Government should include the following measures:

- Continuation of the Ministry of Energy approach for an open database covering the situation of municipalities with unelectrified dwellings (an approach initiated by the Ministry several years ago, by collecting data from county councils, however, but which remained incomplete and untranslated in any official document).
- Establishing a clear distinction between the causes of the lack of access to electricity and organizing the database on the basis of these criteria: 1) physical access to the network,

2) inability of the household to afford the cost of electrification in spite of network proximity, income reasons, 3) impossibility to connect the household because of lack of papers, 4) absence of electrical installation in the dwelling.

- In the case of communities where unauthorised interventions to the power network were noticed, implementing various programs carried out by local authorities and providers to identify and remedy the causes that determine this kind of intervention, up to individualized solutions for categories of households.
- Simplifying bureaucratic procedures for the conclusion of contracts for the supply of electricity, in the sense of making contracting digital, the removal of the supporting documents relating to the ownership of the dwelling and the previous Technical Connection Endorsement.
- The establishment of mechanisms for collaboration between local authorities and providers to identify solutions for isolated or precarious communities, so local authorities can benefit from the expertise of suppliers in identifying flexible and affordable solutions and new technologies.

IV.2. Drafting concrete measures to determine energy expenditure reduction

These measures should be integrated and should aim at climate commitments, of energy efficiency and implementation of new technologies, flexible and performant, as well as the development and promotion of public and private financing tools, innovative, flexible, and affordable, to implement such measures (the British model).

This roadmap can be materialized through a joint effort of several ministries, as follows - optimisation of buildings + consumer behaviour.

- Ministry of Development - Dwelling Fund evaluation - both of the blocks of dwellings and individual dwellings - with emphasis on households prone to a situation of vulnerability (low income, old buildings) with the support of energy audit organizations for the purpose of assessing the energy performance of buildings. The process can be coordinated at the level of MDRMAPFE, with the involvement of local authorities, following the example given by the Alexandria city hall. Given that the procedure for granting energy performance certificates of dwellings is well considered, it can provide information and recommendations on interventions needed in the evaluated households, including lighting installations, household appliances efficiency and efficiency of individual apartment heaters, etc.
- Ministry of Labour - drafting a social benefit scheme that takes into account both short-term benefits (as the current heating benefits), as well as benefits for housing renovation, based on the assessment made by the Ministry of Development. The Ministry of Labour can play an important role in the training of social workers, so they are aware of the dimensions of energy poverty and vulnerability in order to more proper identifications of these phenomena, the non-discriminatory counseling of possible beneficiaries and guiding them towards possible options.
- Ministry of Energy - interventions for innovation that can target information campaigns regarding replacing the equipment with low efficiency, choosing performant ones, most efficient methods for wall insulation, etc.
- Ministry of Education-information campaigns in schools and universities for long-term awareness with regard to the impact of household behavior on energy consumption and energy costs.

V. A special category of **long-term** recommendations concern the behavior of electricity and gas providers on the market, in their relationship with customers and in relation with the ANRE and other relevant actors for the development of public policies aimed at aspects of energy poverty.

Improving the communication between providers and clients can solve the problems of implementing the social tariff for electricity. Suppliers hold data on the monthly consumption of each client and may assume the role of informing the customers about exceeding installment I, with preferential tariff.

As shown by the field research as well, the level of information of consumers regarding the tariff plans which they have at their disposal on the part of "traditional" providers in the region or new suppliers to enter the market following liberalization is very low. For example, beneficiaries of the social tariff do not know that switching to a free market provider leads to the loss of this benefit. On the other hand, consumers want to be better advised in choosing the pricing plan that suits them best, depending on their income. Moreover, in addition to existing tariff plans, providers can think of flexible pricing types, which take into account patterns of household behaviour. *The optimisation of customer advisory mechanisms for selecting an optimal tariff plan, especially in free market conditions, could be an advantage for big providers, which could limit the migration of some clients to new providers, with attractive offers in terms of price, but that may involve higher risks for consumers (especially for the vulnerable who might be attracted by lower prices).*

Even in the absence of legislative changes to coerce providers to adopt a more proactive behavior towards customers, suppliers can jointly elaborate a code of good practice regarding market behaviour, especially in relation with vulnerable clients. Such a code of good practices can establish, for example, the fact that providers undertake to inform clients on the social tariff regarding exceeding installments or not to disconnect clients considered vulnerable on the basis of income.

Another measure that can be taken by common agreement by providers is the establishment of an energy efficiency fund either public, funded from the state budget, or private, funded by private providers through a percentage of the profit (after the Brazilian model where providers transfer to this type of fund 0,5% of their profit) for investments mainly in the areas affected by energy efficiency, or to bring the national dwelling fund at the minimum efficiency standard C, which implies targeting investments to the poorest households. Administering this fund lies either with the Government, for the public fund, or with providers who contribute to the fund, in the case of the private one, but the investment objectives may be established jointly with the Government, through the Ministry of Energy.

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Centrul pentru Studiul Democraţiei (CSD) este un think-tank înființat în anul 2006 în cadrul Departamentului de Ştiinţe Politice, Facultatea de Ştiinţe Politice, Administrative şi ale Comunicării, Universitatea „Babeş-Bolyai" din Cluj, în cadrul căreia funcționează ca centru de cercetare acreditat. CSD a dezvoltat, de-a lungul timpului, proiecte de cercetare și analize cu precădere din perspectivă comparată, cu o importantă componentă aplicată, pe teme ca: democratizare, migraţie, politici energetice, etnicitate, educaţie civică, design instituțional sau comportament electoral. Echipa de cercetare a centrului reunește cadre didactice și de cercetare din cadrul Departamentului de Ştiinţe Politice al FSPAC, colaboratori de la alte facultăți din cadrul UBB, profesori din universități partenere din străinătate și studenți doctoranzi din cadrul departamentului de Ştiinţe Politice.

Sărăcia energetică, înțeleasă ca o problemă de suportabilitate a facturii, dar și ca acces deficitar la mijloace moderne de asigurare a confortului în locuință, este un fenomen răspândit la nivelul Uniunii Europene, spațiul postcomunist fiind afectat cu precădere de acesta. Sărăcia energetică este un factor important de marginalizare socială, iar lipsa de suportabilitate a facturii sau de acces la forme moderne de energie generează obstacole în parcursul educațional și socio-economic al indivizilor. În România fenomenul nu este marginal, dar este subestimat, abordat lacunar la nivel conceptual și legislativ și este vizat de politici incoerente și contradictorii.

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