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**Energy Efficiency Legislation Overview under
UNDP-GEF Project: Improving Energy Efficiency in Low-Income
Households and Communities in Romania**

**Prepared by SALANS
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1 INTRODUCTION

This report has been prepared as the first deliverable of the National Expert on Romanian Policy and Legislation (**Report**) under the UNDP – GEF project “Improving Energy Efficiency in Low-Income Households and Communities in Romania” (**Project**).

The purpose of this Report is to summarize existing key regulations passed by the Romanian regulator on energy efficiency, and to highlight specific elements of the existing regulatory framework that would require amendment, in accordance with the European Union (EU) regulatory framework, with a view to improving energy efficiency in low-income households and communities in Romania. In addition, the Report also proposes a number of paths that can be followed for implementing the regulatory amendments suggested.

Romania’s residential sector is dominated by dwellings with reduced levels of energy efficiency, and it is the low income households in Romania that experience difficulties in increasing the energy efficiency of their dwellings and in covering the high heating costs relative to their budget. Furthermore, a significant percentage of Romania’s dwellings are connected to district heating networks which are outdated and inefficient, thus providing a poor quality and expensive service. The existing legislative framework does not allow district heating customers to have a choice between monomial and binomial tariffs, which could be of assistance to vulnerable customers, in particular, as they are affected the most by high heating bills during cold season.

The Romanian Government has already initiated a number of programmes aimed at improving energy efficiency in dwellings which are currently pending. However, although different regulations use different definitions of the “vulnerable customer” concept, the Romanian regulatory framework does not include, as of the date of this Report, a definition of “fuel poverty”, which may help better target the energy efficiency national programmes. Therefore, one of the purposes of the Project is that of proposing a definition of “fuel poverty”. In addition, in consideration of Directive no. 2012/27/EU on energy efficiency, the Project will propose a draft national energy efficiency obligation for energy utilities. Furthermore, the Project will also develop a draft methodology of charging thermal energy to end users (including vulnerable customers) using monomial or binomial tariffs.

In consideration of the Project’s scope, this Report presents:

- (a) An overview of the energy efficiency legislative framework both at EU and national levels;
- (b) The concept of “public utility service”, as currently defined under existing regulations;
- (c) District heating prices and tariffs;
- (d) Existing social protection measures;
- (e) The concept of “vulnerable customer” under Law no. 123/2012 on electricity and gas;
- (f) National programmes for housing stock rehabilitation;

- (g) Relevant authorities.

2 ENERGY EFFICIENCY LEGISLATIVE FRAMEWORK

2.1 European Union legislative framework

In March 2007 EU leaders set 3 (three) essential targets for 2020: a 20% reduction in EU greenhouse gas emissions from 1990 levels, raising the share of EU energy consumption produced from renewable resources to 20%, and a 20% improvement in EU's energy efficiency. Furthermore, the Energy Roadmap 2050 presented by the European Commission in December 2011 indicates that higher energy efficiency is necessary in order to meet the 80% emissions cut target by 2050, irrespective of the energy mix chosen.

Energy efficiency in the EU is mainly regulated by the following directives: Directive no. 2012/27/EU on energy efficiency, Directive no. 2009/28/EU on the promotion of the use of energy from renewable sources, and Directive no. 2010/31/EU on the energy performance of buildings.

Please note that although the primary goal of these directives may vary, energy efficiency represents a common goal of all these 3 (three) directives.

2.1.1 Directive no. 2012/27/EU on energy efficiency

Directive no. 2012/27/EU on energy efficiency (**Energy Efficiency Directive**) lays down the minimum requirements for Member States to improve their energy efficiency. The Energy Efficiency Directive repeals Directive 2006/32/EC on energy end-use efficiency and energy services.

National Energy Efficiency Targets and Plans

To begin with, Member States shall set an indicative national energy efficiency target for 2020. As part of their efforts to meet this target, Member States *inter alia*:

- (a) Shall establish a long-term strategy for mobilizing investment in the renovation of the national stock of residential and commercial buildings, both public and private;
- (b) May set up an energy efficiency obligation scheme, or introduce energy/CO₂ taxes for reducing end-use energy consumption or financing schemes and instruments or fiscal incentives that promote energy-efficient technology or techniques and reduce end-use energy consumption;
- (c) Shall promote the energy services market; and
- (d) Shall support high efficiency cogeneration and/or efficient district heating and cooling, whenever the benefits exceed the costs.

The central government of the Member States should lead by example by renovating each year 3 % of the total floor area of heated and/or cooled buildings owned and occupied by the central government, to meet at least the minimum energy performance requirements that it has set in application of Article 4 of Directive 2010/31/EU.

By 30 April each year as from 2013, Member States shall report on the progress achieved towards national energy efficiency targets. By 30 April 2014, and every three years

thereafter, Member States shall submit National Energy Efficiency Action Plans. The National Energy Efficiency Action Plans shall cover significant energy efficiency improvement measures and expected and/ or achieved energy savings, including those in energy end-use, in view of achieving the national energy efficiency targets.

Vulnerable customers

The Energy Efficiency Directive also refers to vulnerable customers and the need of Member States to ensure their protection. The European Union's concern for vulnerable customers underpins the entire framework built by the Energy Efficiency Directive. Therefore, by way of example, Member States' energy efficiency obligation scheme may include requirements with a social aim in the saving obligations they impose, including by requiring a share of energy efficiency measures to be implemented as a priority in households affected by energy poverty or in social housing.

Although the Energy Efficiency Directive uses "fuel poverty", "energy poverty" and "vulnerable customer", the Energy Efficiency Directive does not provide explicit definitions for these notions. Only "energy" is defined as "*all forms of energy products, combustible fuels, heat, renewable energy, electricity, or any other form of energy*". Therefore, it may be argued that it may be up to the Member States to adopt in their national legislation (through the transposition process) definitions for these terms, in consideration of the "energy" definition provided in the Energy Efficiency Directive. It is also noteworthy that under the Energy Efficiency Directive "energy poverty" considers all forms of energy (*e.g.*, electricity, heat, fuel).

Financial resources for energy efficiency measures

The Energy Efficiency Directive may also be considered as setting the main lines for raising financial resources for implementing the energy efficiency policy promoted. As such, the Energy Efficiency Directive refers *inter alia* to financing facilities from the Structural Funds and the Cohesion Fund, from the European Investment Bank and the European Bank for Reconstruction and Development, as well as national resources. These financing facilities should be structured so to contribute to a reduction in fuel poverty in households and to allow cost-effective renovations even among low and medium revenue households.

Member States may also set up an energy efficiency national fund which shall support national energy efficiency initiatives. In case Member States choose to set up an energy efficiency obligation scheme, the obligated parties under such scheme could fulfil their energy efficiency obligations by contributing annually to this fund an amount equal to the investments required to achieve those obligations.

In addition, Member States may use their revenues from annual emission allocations under Decision No 406/2009/EC for the development of innovative financing mechanisms to give practical effect to the objective of improving the energy performance of buildings used by their central government.

- 2.1.2 Directive no. 2009/28/EU on the promotion of the use of energy from renewable sources

In consideration of the 20 – 20 – 20 targets assumed by the EU, Member States have to increase the share of renewable energy sources in the energy mix, as per Directive no. 2009/28/EU on the promotion of the use of energy from renewable sources.

The use of energy from renewable sources may be increased by Member States most effectively by implementing energy efficiency and energy saving policies. Therefore, considering the close relationship between renewable energy targets and energy efficiency increase, improvements in energy efficiency help Member States to achieve more easily their renewable energy targets.

Member States are required to adopt national renewable energy action plans. These plans shall set out Member States' national targets for the share of energy from renewable sources consumed in transport, electricity and heating and cooling in 2020. These plans should be harmonized with national energy efficiency plans to consider the energy consumption reductions achieved following the implementation of energy efficiency measures.

Furthermore, Member States are compelled to submit with the Commission reports on progress in the promotion and use of energy from renewable sources every two years beginning with 31 December 2011.

2.1.3 Directive no. 2010/31/EU on the energy performance of buildings

Directive no. 2010/31/EU on the energy performance of buildings (**EPBD Directive**) promotes the energy performance of buildings considering outdoor climatic and local conditions, as well as indoor climate requirements and cost-effectiveness. On one hand, the EPBD Directive is a recast of Directive 2002/91/EC on the energy performance of buildings (which it repeals), and on the other hand, the EPBD Directive introduces further substantive amendments in the requirements for the energy performance of buildings.

Based on the EPBD Directive, Member States have the following obligations:

- (a) To set the minimum requirements for the energy performance of buildings in order to achieve the cost-optimal balance between the investments involved and the energy costs saved throughout the lifecycle of the building; the measures for reaching these minimum requirements should not affect other requirements concerning buildings such as accessibility, safety and the intended use of the building;
- (b) To apply a methodology for calculating the energy performance of buildings in accordance with the common general framework set out in Annex I of EPBD Directive;
- (c) To ensure that, whenever existing buildings (as a whole, partly, or elements of the building envelope) undergo major renovation, the resulting energy performance of the building or the renovated part thereof meets the minimum energy performance requirements, in so far as this is technically, functionally and economically feasible; “major renovation” is defined as the renovation of a building where: (i) the total cost of the renovation relating to the building envelope or the technical

building systems is higher than 25 % of the value of the building, excluding the value of the land upon which the building is situated; or (ii) more than 25 % of the surface of the building envelope undergoes renovation; Member States may choose to apply option (i) or (ii);

- (d) To prepare a list of measures and instruments promoting energy efficiency in buildings (and thus potentially contributing to reducing energy poverty) based on other regulations than the EPBD Directive; beginning with 30 June 2011, this list should be updated every three years;
- (e) To develop a system of certification of the energy performance of buildings.

2.2 Romania's national legislative framework

This section of the Report summarizes the key provisions of the main regulations on energy efficiency in Romania.

Romania's national legislative framework on energy efficiency includes regulations transposing EU directives, but also regulations developed independently, at a nation level, by the Romanian regulator.

Romania is still to transpose the EPBD Directive and the Energy Efficiency Directive. The deadline for the transposition of the EPBD Directive expired on 9 July 2012. For the transposition of the Energy Efficiency Directive, Romania has 18 (eighteen) months available, beginning with December 2012.

2.2.1 Law no. 372/2005 on the energy performance of buildings (**Law no. 372/2005**) and the transposition of the EPBD Directive

Law no. 372/2005, as in force as of the date of this Report, transposes the provisions of Directive 2002/91/EC on the energy performance of buildings. As Directive 2002/91/EC was repealed by the EPBD Directive, the latter is intended to be transposed in the national regulatory framework by means of an amendment to Law no. 372/2005. To this end, a draft amendment to Law no. 372/2005 has been submitted with the Romanian Chamber of Deputies as of June 2012. According to the information available on the official website of the Romanian Chamber of Deputies, the draft amendment was returned on 22 October 2012 by the Chamber of Deputies for further analysis to its commission for industries and services. No further updates are available as of the date of this Report as to the activity of this commission.

Although Law no. 372/2005, as in force as of the date of this Report, refers to a directive which was repealed, it is worth mentioning that the current version of Law no. 372/2005 will apply until the amendment referred to above is passed by the Romanian Parliament. Therefore, the following key provisions of Law no. 372/3005 may also be relevant from the Project's point of view:

- (a) Buildings subject to Law no. 372/2005

The minimum requirements of energy performance apply differently, depending on the category of buildings, both for new and existing buildings under renovation. Law no. 372/2005 targets both private and public properties.

The categories of buildings which are subject to energy performance requirements include: detached houses, blocks of flats, offices, educational buildings, hospitals, hotels and restaurants, gyms, trade services buildings, other types of buildings that consume energy.

The minimum requirements of energy performance do not apply to:

- (i) Buildings and monuments which are included in constructed areas protected by law, or which have a special architectural or historical value, or buildings which would be unacceptably transformed, if subjected to energy performance requirements;
 - (ii) Buildings used as places of worship or other religious activities;
 - (iii) Temporary buildings set to be used for periods of up to 2 years situated in industrial areas, workshops and non-residential buildings in agriculture with low power consumption;
 - (iv) Residential buildings which are intended to be used less than 4 months per year; and
 - (v) Independent buildings with a usable area of less than 50 m².
- (b) Energy performance certification of buildings

The energy performance certificate of a building is valid for 10 years from its issuance date. This certificate is issued to the owners of the categories of buildings mentioned above, which are constructed, sold or rented.

These certificates shall include reference values provided in the technical regulations that allow consumers to compare and assess the energy performance of the building. These certificates are accompanied by recommendations to reduce costs by improving the energy performance of the building.

In case of buildings with a usable area over 1,000 m², owned by public authorities, the certificate must be displayed where it is accessible and visible to the public.

- (c) Improving the energy performance of buildings

Law no. 372/2005 establishes also the performance of regular inspections of boilers and air conditioning systems, and of technical assessments of heating devices and heating systems by independent technical experts.

2.2.2 Law no. 153/2011 on measures for increasing the architectural-environmental quality of buildings (**Law no. 153/2011**)

Law no. 153/2011 requires holders to rehabilitate their properties which, due to their advanced level of degradation, can represent a threat to the health, the life, the physical integrity and safety of people, the quality of the environment and the urban public spaces.

Such holders must, by their own initiative, take steps to rehabilitate the structure and the architecture of the building's envelope. In case of failure to do so, the local authorities must notify the holders about their obligations.

The following buildings are exempted from the application of Law no. 153/2011:

- (a) Buildings subject to technical expertise which are included in the 1st class of seismic risk, whose holders are obliged to take measures in order to reduce the seismic risk of the building;
- (b) Thermally rehabilitated buildings and under rehabilitation after the entry into force of this law, and blocks of flats included in the multiannual local programs for thermal rehabilitation;
- (c) Buildings and ensembles filed or pending classification, under the law, as historical monuments.

The rehabilitation works contemplated by Law no. 153/2011 may consist of: the repair / restoration of masonry / exterior wall; the repair / restoration of exterior finishes such as plastering, painting, paint, tiles and the like; the repair / restoration of the coating system; the repair / restoration of exterior carpentry and functional exterior elements such as balconies, bay windows, and cornices.

The local public authorities must conduct an inventory of the buildings targeted by Law no. 153/2011, and establish priority action areas. Following such inventory, the mayor notifies the holders of the buildings about their obligations under Law no. 153/2011. The holders are compelled to reply within 60 (sixty) days of receipt of notification and inform the local public authorities about their consent for undertaking the works.

These works have to be fulfilled within 12 months from the date of receipt by the owner of the notification sent by the mayor. In certain cases, this 12 months term may be extended.

The cost for design and the execution of the intervention works are covered by the holders of the buildings. Exceptionally, the local administrative authorities can partially or fully participate in the costs of this type of interventions, within the limit of the local budget funds approved annually for this purpose. These special situations are represented by the lack of financial ability of the holders to perform these intervention works or in case of intervention works at the buildings located in constructed areas which are protected or in the historic centers of the cities, and the resorts, towns, tourist areas, climatic and balneal-climatic.

2.2.3 Ordinance no. 22/2008 on energy end-use efficiency and energy services (**Ordinance no. 22/2008**)

Ordinance no. 22/2008 transposes Directive 2006/32/EC on energy end-use efficiency and energy services, which was repealed by the Energy Efficiency Directive.

Although Ordinance no. 22/2008, as in force as of the date of this Report, refers to a directive which was repealed, it is worth mentioning that the current version of Ordinance no. 22/2008 will continue applying until the Romanian regulator makes a decision on the transposition of the Energy Efficiency Directive and its implications on Ordinance no. 22/2008. Therefore, the following key provisions of Ordinance no. 22/2008 may also be relevant from the Project's point of view:

(a) Targeted categories

Ordinance no. 22/2008 applies to: providers of energy services, energy distributors, distribution system operators, energy retail companies, final consumers, and the armed forces, except for material used exclusively for military purposes.

(b) Measures for improving energy efficiency

The measures for improving energy efficiency include:

- (i) Economic operators consuming energy more than 1,000 tons of oil equivalent are compelled to conduct an annual energy audit and to prepare energy efficiency improvement programs that include measures on short, medium and long term;
- (ii) Economic operators consuming annually energy between 200 and 1,000 tons of oil equivalent per year are required to establish every two years an energy audit;
- (iii) Final consumers must perform any action which normally leads to a verifiable improvement of the energy efficiency, which can be measured or estimated;
- (iv) Managers of public property buildings must take measures for the efficient use of heating and air conditioning systems, and the use of measurement and control energy consumption;
- (v) Local authorities in towns with a population greater than 20,000 inhabitants are obliged to draw up programs to improve energy efficiency, which include short-term measures and long-term measures (3-6 years);
- (vi) The companies and central and local government units, which own more than 25 vehicles, are required to develop monitoring programs and management of fuel consumption for vehicles owned.

The ordinance establishes the obligation for final consumers of electricity, of natural gas, heating and/or cooling services and of urban domestic hot water to have individual meters purchased at competitive prices which reflect precisely the consume of energy.

(c) Financial and fiscal incentives

Ordinance no. 22/2008 also proposes a number of incentives for the promotion and support of energy efficiency measures. By way of example, funds may be allocated towards subsidizing programmes and measures to improve energy efficiency and to promote a market for energy efficiency improvement measures. These measures include the promotion of energy auditing, financial instruments for energy savings and, where appropriate, improved metering and billing information.

2.2.4 The Transposition of the Energy Efficiency Directive

The transposition of the Energy Efficiency Directive can be achieved either by means of an independent regulation, or by means of an amendment to existing regulations, for

example Emergency Ordinance no. 22/2008 on energy end-use efficiency and energy services. Therefore, as in the case of the EPBD Directive, the Energy Efficiency Directive could be transposed by means of an amendment to Emergency Ordinance no. 22/2008 on energy end-use efficiency and energy services.

In the transposition process of the Energy Efficiency Directive, the Romanian regulator could also consider introducing in the transposition document a unitary definition for “vulnerable customer” (irrespective of the heat source used, *e.g.*, district heating, gas, electricity) and a definition for “fuel poverty”. The Romanian legislation currently uses two relatively different definitions for “vulnerable customer” (for further details, please see sections 3.2 and 4.1 of this overview).

A report analysis conducted under the Project proposed a definition of “fuel poverty” based on the previous experience of other EU Member States in defining this concept. As such, fuel poverty may be defined as “*existing in any households that simultaneously suffers low income and high energy costs, where high energy costs are not directly measured, but rather are indicated by either: (i) lack of access to reasonably priced energy sources, or (ii) a dwelling with poor thermal performance*” (Househam and Musatescu, 2012). To complete this definition, the Romanian regulator would have to set thresholds for each of the criteria indicated in the proposed definition.

2.2.5 Fiscal facilities under Romanian Fiscal Code

Local authorities may grant property tax exemption or reduction over a period of minimum 7 years starting from the first day of January of the year following completion of the rehabilitation works for owners of houses, apartments in blocks, and of buildings that have covered themselves the costs of rehabilitation works, according to the recommendations made by an energy auditor or mentioned in the energy performance certificate.

Property tax exemption for a period of 5 consecutive years may be granted also for the owners who execute rehabilitation works in accordance with Law no. 153/2011.

3 THE CONCEPT OF "PUBLIC UTILITY SERVICE"¹

Although the Romanian legislative framework does not include a definition of “fuel poverty” and uses inconsistent definitions of “vulnerable customer”, the concept of public utility service is defined as of 2006. The definition of “public utility service” acknowledges the right of access to public utility services (including district heating) to every person, irrespective of his/her income.

The concept of “public utility service” seems to have gained an increased attention in Romania once Law no. 51/2006 on public utility services was passed. A “public utility service” is seen as a public service of general interest, having *inter alia* the following specifics: it has social-economical implications, it addresses public interests and utilities, it has a permanent and continuous operation regime, it may be a monopoly, it is structured and operates at local level, it is set-up, organized and coordinated by the local public authorities, it operates based on economic efficiency principles, it can be undertaken by public or private operators, it follows the principle

¹ Law no. 325/2006 on district heating service and Law no. 51/2006 on public utility services.

“the beneficiary pays”, and the recovery of the exploitation and investment costs is achieved through regulated prices and tariffs or special taxes.

Building on this general framework on “public utility services” introduced by Law no. 51/2006 on public utility services, Law no. 325/2006 on district heating service is dedicated to regulating the main aspects of district heating services in Romania (*e.g.*, contractual framework between local public authorities and district heating operators, rights and obligations of local public authorities and district heating operators, types of heat prices).

Therefore, the Romanian regulator has introduced the concept of district heating being a public utility service, with a permanent and continuous operation regime, rendered at regulated prices.

4 DISTRICT HEATING

Considering the significant percentage of dwellings in Romania connected to district heating networks and the regulation of district heating as a public utility service (accessible to every person, irrespective of income), this section of the Report looks at district heating tariffs and prices.

District heating in Romania is viewed by many (customers and experts alike), for various different reasons, as a legacy of the communist regime. The memories of the bad quality district heating services seems to be haunting the cities and towns of Romania until this very day, somehow shifting the attention from the energy efficiency potential and the lesser environmental impact (one generator, one source of pollution, a scheme much easier to control) of this system.

In addition, the poor quality district heating service has led to massive disconnections from the district heating networks, thereby reducing the economies of scale which are a must for the efficiency of district heating networks.

4.1 District heating tariffs and prices

District heating is a public utility service provided at regulated prices.

Regulating district heating tariffs and prices is a very complex and time consuming operation, involving ANRE/ANRSC, local public authorities and district heating operators.

As Romania is moving away from its subsidies and regulated prices policies, the methodologies for determining district heating tariffs and prices have incurred numerous changes over the last three – four years. This section seeks to summarize the main principles governing these methodologies as in place on the date of this overview.

4.1.1 Relevant authorities

ANRSC and ANRE are involved in the setting of district heating tariffs and prices, depending on the type of technology used for generating heat. ANRE sets the heat prices if the district heating operator uses cogeneration (in addition, ANRE also sets the regulated prices for gas and electricity). *Per a contrario*, ANRSC sets the heat prices for those operators using boilers only. In addition, ANRSC also approves the heat transport, distribution, and supply tariffs.

Once ANRE/ANRSC sets the heat prices based on the costs and revenues information provided by district heating operators², the local public authorities approve the heat prices actually charged to the population. Local public authorities may approve heat prices actually charged to the population lower than the heat prices set by ANRE/ANRSC. Whenever this is the case, local public authorities have to cover from their local budgets the difference between the prices set by ANRE/ANRSC and the prices approved for actually being charged to the population³.

Furthermore, local public authorities may use resources in their budgets to cover losses incurred by district heating operators in rendering district heating services.

Although these prerogatives of the local public authorities may be considered as being meant to support the population and the district heating operators, it should be carefully assessed in practice how the local public authorities are actually making use of these prerogatives. For example, it should be assessed whether/to what extent local public authorities may make use of these prerogatives depending on their political agenda with a view to gaining population support in election years. Furthermore, it should also be assessed whether/to what extent such prerogatives may act as a disincentive for district heating operators to improve the energy efficiency of the district heating service (since prices are anyway below those approved by ANRE/ANRSC and losses are anyway covered from the local budgets).

Based on the results of such assessments, the district heating tariffs setting methodology and the local public authorities' prerogatives herein indicated should be amended, if the case, to reduce political immixture and to encourage energy efficiency.

4.1.2 Methodology used for setting district heating tariffs

For setting district heating tariffs and prices, Romania uses a cost-plus tariff regulation. Such regulation has been traditionally praised for being easy to implement, but simultaneously, criticized for not promoting efficiency, as it encourages operators to overstate costs, as an increase in costs translates into an increase in profit. Energy efficiency investments are not encouraged.

It would be advisable for technical and financial experts to conduct financial modelling exercises to determine the ratio between (i) the costs actually incurred by district heating operators for heat generation/transport/distribution, and (ii.1) the heat prices actually set by ANRE/ANRSC, on one hand, and (ii.2) the heat prices further on approved by local public authorities for being actually charged to the population, on the other hand.

4.1.3 Invoicing and payment of district heating prices

District heating companies can invoice and owners' associations/individual customers can pay heat bills based on actual monthly consumption OR district heating companies can invoice based on actual monthly consumption and owners' associations/individual

² Methodology of 03/06/2008 for setting electricity prices sold by producers based on regulated agreements and for the setting of heat prices delivered from cogeneration plants, as published in Official Gazette no. 472 of 26/06/2008.

³ Ordinance no. 36/2006 concerning some measures for the operation of district heating systems.

customers can pay heat bills in instalments during a reference period of 12 (twelve) months, as approved by decision of local councils⁴.

To the best of our knowledge, the legislation currently in place does not clearly regulate specifically the population's possibility to choose between monomial and binomial tariffs. This is not to say that either ANRE/ANRSC might have passed orders regulating such possibility. Please note that in practice it may be quite challenging keeping track of the legislative activity of these authorities.

Emergency Ordinance no. 70/31 August 2011 for regulating means of social protection during the cold season abrogated Emergency Government Ordinance no. 5/2003 awarding aid to population for the heating of the dwelling, and certain facilities for the payment of heat bills. The latter ordinance specifically regulated the population's possibility to choose between monomial and binomial tariffs. Nevertheless, although this latter ordinance was abrogated, the legislation issued for its implementation appears to be still in force (*e.g.*, Order no. 41/2005 for approving the implementation of binomial tariffs by heat suppliers). This situation may be due *e.g.*, to the Romanian regulator losing sight of having to also abrogate such secondary legislation, or the Romanian regulator considering the secondary legislation implicitly abrogated once the emergency ordinance was abrogated.

In case an assessment has not already been performed, it would be advisable for the Romanian regulator to assess the pros and cons of using monomial versus binomial tariffs. The assessment should consider, on one hand, the district heating operators' need to cover their significant fixed costs irrespective of heat consumption, and, on the other hand, the need to support population in better coping with high heat bills during the cold season. The assessment should also look into potential structures of binomial tariffs.

The assessment's results should then be transposed in legislation.

4.2 District heating 2006 – 2015 – warmth and comfort⁵

In order to increase the energy efficiency of the district heating networks and improve the quality of the service, the Romanian Government developed the programme "District heating 2006 – 2015 – warmth and comfort".

This programme is intended to contribute to the rehabilitation:

- (a) of the district heating system, the local public authorities being the sole beneficiaries of the programme which also have to perform the investments, and not the district heating operators they own; or
- (b) of the blocks of flats connected to the district heating network, the owners' associations being the beneficiaries.

The programme is conceived at country level and the management is undertaken by a unit within the Ministry of Interior and Administrative Reform. The unit has a variety of attributions

⁴ Emergency Ordinance no. 70/31 August 2011 for regulating means of social protection during the cold season.

⁵ Government Decision no. 462/2006 for the approval of the programme "District heating 2006 – 2015 – warmth and comfort" and the set up of the unit for the project management, as republished in Official Gazette no. 556 of 23/07/2008, Part I.

ranging from monitoring the public procurement procedures, supervision of the investment's implementation to management of the relationship with the financial institutions.

To the best of our knowledge, the results of this programme to date are debatable. In practice it has been claimed that this programme was conceived at a too bigger scale to be manageable, and that sufficient funds were not allocated to make the programme work.

5 SOCIAL PROTECTION MEASURES AND THE CONCEPT OF “VULNERABLE CUSTOMER”

The Romanian Government passed in August 2011 the Emergency Ordinance no. 70/31 August 2011 for regulating means of social protection of vulnerable customers during the cold season, through a monthly financial aid covering a certain percentage of heat bills. These means of social protection would be covered from the state budget. In addition to these means of social protection, local public authorities may decide to award: (i) monthly subsidies for covering the difference between the heat generation/transport/distribution/supply prices and local heat prices charged to the population, (ii) monthly financial aid, in addition to those granted from the state budget, (iii) both of these monthly subsidies and monthly financial aid.

A vulnerable customer is defined as the single individual/family who cannot ensure a minimum 21 degrees Celsius temperature in their home, and whose net income per family member is of RON 786 (in case of families), and RON 1,082 in case of single individuals.

The intensity of the financial aid may range between 90% - 10% of the district heating bill depending on the level of income. The value of the district heating bill cannot be based on a consumption exceeding the monthly average consumption indicated in the ordinance, which is defined as the heat (Gcal) needed for ensuring a minimum 21 degrees Celsius indoor temperature per apartment type/dwelling, in accordance with the temperature zones listed in the ordinance.

Population using gas for heating their homes is granted a fixed sum to support them in covering the gas bills. These set amounts vary in accordance with the income thresholds considered.

It is noteworthy how the financial aid is set differently, depending on the heat source used. For district heating, the financial aid represents a percentage of the district heating bill, which may well be a “moving target” within the limits set by the ordinance (*i.e.*, a minimum 21 degrees Celsius indoor temperature per apartment type/dwelling, in accordance with the temperature zones listed in the ordinance). On the other hand, the financial aid for population using gas represents a fixed sum, irrespective of the dwelling type and/or temperature zone (*e.g.*, it is possible for a person living in Targu Mures, for example, to use more gas for ensuring 21 degrees in his/her dwelling than a person living in Constanta where there may be milder temperatures during the cold season).

Therefore, the effectiveness of these social protection measures should be assessed and the Romanian regulator could consider a system whereby the social protection measures are unitary, irrespective of the heating source used. Such unitary approach may also help introduce competition between district heating and gas heating sources, and therefore increase the energy efficiency of the district heating service, on one hand, and of the gas supply service together with gas fired heating devices, on the other hand.

6 THE CONCEPT OF "VULNERABLE CUSTOMER" IN THE NEW ELECTRICITY & GAS LAW NO. 123/2012

In addition to the concept of "vulnerable customer" defined by Emergency Ordinance no. 70/31 August 2011 for regulating means of social protection of vulnerable customers during the cold season, the Electricity & Gas Law no. 123/2012 passed by the Romanian Parliament in July 2012 introduces a new definition of "vulnerable customer". Thus, the vulnerable customer is defined as the final customer, included in the household type customer category, who, for reasons of age, health or low income, is at a risk of social marginalization, and who, for preventing such risk, benefits from social protection measures, including financial measures.

ANRE determines the facilities which can be awarded to the vulnerable customers, except for the financial aid.

These customers cannot be disconnected from the network, including during energy crisis.

Furthermore, the Romanian Government has reserved itself the prerogative to resolve, with the approval of the Competition Council, on the set up of a solidarity fund for the financial support of vulnerable customers. The fund would be fuelled through the Robin Hood tax envisaged to be introduced by the Romanian Government.

In the context of electricity & gas markets liberalization (and corresponding estimates of prices' increase), a Robin Hood type tax would be meant to tax the increase in the operators' revenues as a result of market liberalization.

7 NATIONAL PROGRAMMES FOR HOUSING STOCK RETROFITTING

For the purpose of increasing the energy efficiency of the housing stock and for supporting households in this respect, the Romanian authorities have launched a number of programmes aimed at assisting households in the rehabilitation of their housing stock.

This section of the Report summarizes the main programmes

7.1 Government Emergency Ordinance no. 18/2009 for the increase of the energy performance of blocks of flats (GEO no. 18/2009)

The programme promoted by GEO no. 18/2009 targets increasing the energy efficiency in:

- (a) Blocks of flats built according to projects designed between 1950-1990;
- (b) Individual housing units owned by national persons;
- (c) Social housing (blocks of flats and individual housing units) owned or managed by local councils.

7.1.2 Local programmes drafted by local public authorities

Local public authorities are compelled to draft local programmes concerning the increase in the energy performance of the housing stock. For the implementation of these local programmes, local coordinators identify the blocks of flats eligible under this programme, and inform the homeowners' associations which have to approve

participating in the programme with the vote of all their members. Finally, a mandate agreement is signed between the homeowners' association and the local coordinator, allowing the local coordinator to manage the rehabilitation works.

7.1.3 Eligible rehabilitation works

The eligible rehabilitation works are:

- (a) thermal rehabilitation of the building envelope;
- (b) thermal rehabilitation of heating systems;
- (c) the installation, if necessary, of alternative systems of energy production from renewable sources - solar thermal, solar electric panels, heat pumps and / or biomass boilers, including their purchase - in order to reduce energy consumption from renewable conventional and emissions of greenhouse gases and for which the applications were not approved for financing by "The program regarding the installation of heating systems using renewable energy, including replacing or complementing traditional heating systems", under the emergency Ordinance no. 196/2005 on the Environmental Fund.

7.1.4 Funding sources

The funds for this programme may come from the state and local budgets, and the owners' associations' funds for repairs. Alternatively, structural and cohesion funds may also be used, provided that the owners' associations' contributions do not fall below 10% of the value of the works.

Upon request, within the budget, the local public authorities may support the homeowners' associations by advancing the 10% of the value of the works. The amounts thus paid will then be recovered by the local public authorities by charging the thermal rehabilitation tax to the property owners for 10 (ten) years. Certain owners such as disabled persons, war veterans, and retired persons on low income are exempted from this tax.

7.2 Casa Verde Programme⁶

Casa Verde Programme⁷ was initiated in Romania in 2010, and aims to reduce pollution by funding the installing of heating systems that use renewable energy. The scope is that of replacing the traditional methods (such as burning wood and fossil fuels) used to produce thermal energy for domestic use.

⁶ Order of the Minister of Environment and Forests no. 950 of June 17, 2010 approving the Funding Guide of the Program for installation of heating systems using renewable energy, including replacing or supplementing traditional heating systems; Order of the Minister of Environment and Forests no. 1223 of August 11, 2010 amending the Funding Guide of the Program for installation of heating systems using renewable energy, including replacing or supplementing traditional heating systems, approved by Order of the Minister of Environment and Forest no. 950/2010; Order of the Minister of Environment and Forests no. 1741 of October 20, 2010 approving the Funding Guide of the Program for installation of heating systems using renewable energy, including replacing or supplementing traditional heating systems – beneficiaries: administrative units, public institutions and religious establishments.

⁷ The official name of the program is *Program for installation of heating systems using renewable energy, including replacing or supplementing traditional heating systems*, the program being popularly called "Casa Verde".

This Program targets both individuals and legal entities (*i.e.*, administrative units, public institutions and religious establishments). Casa Verde Programme is funded by the Environmental Fund, which allocated for this programme 735 billions RON.

7.2.1 Casa Verde Programme for natural persons

(a) Beneficiaries

Casa Verde Programme is intended only for the benefit of natural persons domiciled in Romania who own the property where the heating systems will be installed. The property in question must not be the subject of pending litigation, restitution claims or expropriation proceedings.

(b) Fundable projects

Casa Verde Programme funds the installation of new heating systems using renewable energy, but also for replacing/supplementing conventional heating systems (*e.g.*, installation of solar panels; installation of heat pumps; heating units using vegetable/agricultural/forestry waste and residues).

An applicant may submit, during one session of funding, only one project, but within the same project two types of the above mentioned installations may be cumulated.

(c) Award procedure

If the funding file is approved, a funding agreement is concluded between the applicant and the Environmental Fund's Administration, valid until the completion of the project for installation of renewable energy systems, but not more than 12 months from its signature date.

The funding awarded shall have to be returned if the funded projects (i) are not used according to their established goal, or (ii) are sold, during the project's development or within one year of its completion.

(d) Eligible expenses

Casa Verde Programme covers the expenses incurred by the beneficiary for:

- (i) purchase of equipment necessary for new renewable energy systems or for replacing/complementing classical systems;
- (ii) installation and commissioning of the system;
- (iii) Value Added Tax (VAT).

(e) Awarded amounts

The amounts granted to Casa Verde Programme's beneficiaries are fixed, in consideration of the type of heating system installed:

- (i) up to 6,000 RON for installing solar panels;
- (ii) up to 8,000 RON for installing heat pumps;

- (iii) up to 6,000 RON for heating units fueled with vegetable/agricultural/forestry waste and residues.

The amount approved can not be supplemented, the beneficiary having to ensure the completion of the project from its own resources.

7.2.2 Casa Verde Programme for legal entities

Administrative-territorial units, public institutions and religious establishments can be beneficiaries of Casa Verde Program for legal entities.

Unlike the program for natural persons, for the assessment of the funding file, certain scoring scales are used, taking into account, among other, the cost-benefit ratio of the project proposed for funding.

For legal entities, funding for renewable energy systems is granted as a percentage and not a fixed sum, amounting to 90% of the total cost of the project; however, this amount can not exceed 2 billion RON.

7.3 Energy retrofitting of residential buildings

As of 30 June 2010 the Romanian Government adopted a support scheme for the increase in the energy efficiency of housing stock⁸.

The scheme offers Government guarantee and subsidized interest for loans contracted for the thermal rehabilitation of housing stock. Owners' Associations and owners of single-family housing may thus benefit from favourable credit conditions for thermal rehabilitation of housing stock built and handed over by the end of 2000.

7.3.1 Beneficiaries

The beneficiaries of the support scheme can be: Owners' Associations (non-profit legal persons) or owners of single-family housing (natural persons).

7.3.2 Eligibility conditions

In order to benefit from the support scheme, a series of eligibility conditions must be met by the beneficiary, the housing stock and the envisaged rehabilitation works, as follows:

The Owners' Association is eligible if: (i) each member of the Owners' Association does not owe more than two outstanding and unpaid instalments of his share of the expenses of the Owners' Association during the last three calendar months prior to eligibility assessment by the financier, and (ii) the general meeting of homeowners, legally constituted, decided to contract the credit with the vote of at least 90% of its members.

The owner of single family housing is eligible provided that he/she does not have more than two utility bills outstanding and unpaid (electricity, natural gas or water/sewage) within the past three months prior to the eligibility assessment by the financier.

⁸ Government Emergency Ordinance no. 69/2010 regarding the thermal rehabilitation of housing stock financed by bank loans with Government guarantee, and Government Decision no. 736/2010 for the approval of the Implementation Rules of Government Emergency Ordinance no. 69/2010 regarding the thermal rehabilitation of housing stock financed by bank loans with Government guarantee.

The beneficiary must also comply with the conditions set by the financier's lending rules.

At their turn, both the financier and the constructor have to comply with certain eligibility criteria.

7.3.3 Housing

The housing stock has to be built and handed over by the end of 2000.

7.3.4 Eligible rehabilitation works

The following types of works are eligible:

- (a) thermal insulation of the building envelope and related facilities (*e.g.*, thermal insulation of exterior walls, roof insulation);
- (b) building repairs, if necessary, replacement/acquisition and mounting of the block/entrance central heating, respectively the central heating of a single-family residence and its related facilities;
- (c) installation, if appropriate, of alternative systems for partially/totally providing energy for heating water, lighting and/or heating.

7.3.5 Financing structure

Beneficiaries have to pay from their own sources 10% of the value of the rehabilitation works. The remaining 90% is financed through bank loans in Lei, with Government guarantee and subsidized interest. The loan contracted by the beneficiaries is 100% guaranteed by the National Credit Guarantee Fund for Small and Medium Enterprises (FNGCIMM), in the name and on behalf of the State.

The loan (maximum 90% of the value of works) cannot exceed the following thresholds: 1.850 EUR per room, Lei equivalent, including VAT, for loans requested by Owners' Associations and 7,400 EUR, equivalent in Lei, including VAT, for funding requested by individuals, for single-family-type housing.

The local public authorities may decide to finance the thermal rehabilitation works for a maximum amount of 30% of the value stipulated in the general estimate.

The repayment period of bank loans with Government guarantee and subsidized interest cannot exceed five years.

8 RELEVANT AUTHORITIES

At central level, the Ministry of Economy, Trade and Business Environment plays a key role in the development of Romania's energy policies, while the Ministry of Regional Development and Public Administration is responsible for the governmental policies on housing, residential buildings, thermal rehabilitation of buildings, real estate and urban planning management and development. The National Regulatory Authority for Energy (ANRE) and the National Authority for Community Services (ANRSC) are the independent regulators of the electricity & gas sectors, and, respectively, of the district heating service. Local public authorities have an essential role in the implementation of energy efficiency in Romania.

8.1 Ministry of Economy, Trade and Business Environment

The Ministry of Economy, Trade and Business Environment develops the regulatory and institutional framework for the energy sector (including energy efficiency) in Romania. It is also in charge with the transposition of EU directives targeting the energy sector.

8.2 Ministry of Regional Development and Public Administration

The Ministry of Regional Development and Public Administration initiates, finances and/or manages/implements, under the law, development programmes and projects of national, regional and local interest in the areas of housing and thermal rehabilitation of buildings.

8.3 National Regulatory Authority for Energy

ANRE is designed to be the independent regulator of the Romanian energy sector (*i.e.*, electricity, heat and gas), under the control of the Romanian Parliament. ANRE is fully financed from its own revenues.

ANRE's attributions include:

- (a) Award/amendment/suspension/cancellation of *e.g.*, cogenerated electricity & heat generation licenses, or authorizations;
- (b) Approval of regulated prices and tariffs and methodologies for determining such tariffs and prices;
- (c) Drafting secondary legislation;
- (d) Determine the facilities which can be awarded to vulnerable customers, except for financial aid;
- (e) Develop the energy efficiency legislative framework;
- (f) For cogenerated electricity and heat – determining the regulated prices considering the gradual liberalization calendar, for the cogenerated electricity sold based on regulated agreements; determining the framework agreements for the sale-purchase of electricity on the regulated market;
- (g) Incentives schemes – approves the incentives schemes (and corresponding secondary legislation) and monitors their implementation.

8.4 National Authority for Community Services (ANRSC)

ANRSC is the regulatory authority for the district heating public services. It licenses the undertaking of district heating activities, supervises the compliance of the operators with the relevant legislation and issues secondary legislation. ANRSC shares its prerogatives with ANRE in the case of cogenerated heat. ANRE licenses, regulates and supervises cogeneration, while the supervision of the transport and distribution of the cogenerated heat falls within the duties of ANRSC.

Although the licensing procedure can represent a means for ANRE/ANRSC to control the quality of the district heating service, the extent to which ANRSC/ANRE can make use of this prerogative in practice is questionable. District heating is a monopoly and the cessation of

service, especially because of lack of third party competition in the heat generation segment, may be problematic mainly due to social and political considerations.

8.5 Local Public Authorities⁹

Local public authorities play an important role both in the management of the district heating service and also in some of the programmes for the rehabilitation of the housing stock (such as the programme supported by Government Emergency Ordinance no. 18/2009 for the increase of the energy performance of blocks of flats).

Local authorities are both owners of district heating networks and authorities in charge with setting up, organizing, monitoring and controlling district heating services. The prerogatives of local authorities include energy planning, establishment of district heating zones, tariff regulation and drafting, implementation and supervision of metering programmes.

District heating zones could represent a point that the local public authorities could focus more in terms of increasing energy efficiency and reducing fuel poverty. As discussed at UNDP ‘Fuel Poverty National Roundtable’ held in December 2012, the local public authorities should still work towards fully implementing the “one condominium, one heating system” principle in practice. Therefore, the Romanian regulator could assess the opportunity of introducing into the legislation more stringent rules for implementing district heating zones.

9 CONCLUSIONS

Following the analysis of the energy efficiency legislative framework both at EU and national level, the table below summarizes (without being exhaustive and without being a substitute for the information provided in the body of the overview) the most relevant regulations (in our view), currently in place, for each section of this overview together with our recommendations for their amendment that could help improve energy efficiency and alleviate fuel poverty in Romania.

Based on the previous experience of other EU Member States in defining the “fuel poverty” concept, the Project proposes that “fuel poverty” is defined as *“existing in any households that simultaneously suffers low income and high energy costs, where high energy costs are not directly measured, but rather are indicated by either: (i) lack of access to reasonably priced energy sources, or (ii) a dwelling with poor thermal performance”* (Househam and Musatescu, 2012). As this definition requires thresholds for each of the criteria indicated, the Project will further assist the Romanian regulator in setting the thresholds required for making the definition operational.

⁹ Law no. 325/2006 on district heating service.

No.	Laws/regulations/norms	Issues	Amendment Recommendations
1)	<p>Law no. 123/2012 on electricity and gas</p> <p>Ordinance no. 70/2011 for regulating means of social protection during the cold season</p>	<p>The two regulations use two relatively different definitions of “<i>vulnerable customer</i>” for district heating, gas used for heating, and electricity.</p>	<p>The two definitions should be harmonized, if possible. Furthermore, secondary legislation should be developed with a view to addressing the fuel poverty faced by these vulnerable customers.</p>
2)	<p>Methodology of 03/06/2008 for setting electricity prices sold by producers based on regulated agreements and for the setting of heat prices delivered from cogeneration plants, as published in Official Gazette no. 472 of 26/06/2008</p> <p>Ordinance no. 36/2006 concerning some measures for the operation of district heating systems</p> <p>Emergency Ordinance no. 70/31 August 2011 for regulating means of social protection during the cold season</p>	<p>These regulations do not fully promote energy efficiency in district heating and competition between heat sources.</p>	<p>The Romanian regulator could consider amending these regulations as to:</p> <ul style="list-style-type: none"> - Move away from a cost-plus tariff setting methodology; - Ensure that any subsidies awarded to district heating companies reward energy efficiency investments; - Introduce binomial tariffs; - Level the playing field between different heat sources by offering the same level of support to population, irrespective of the heat source used.
3)	<p>Law no. 51/2006 on public utility services and Law no. 325/2006 on district heating service</p>	<p>Third party competition in heat generation is not sufficiently regulated, but merely stated as a general principle.</p>	<p>Penalties for local public authorities failing to make use of their legal prerogatives (as listed in the <i>Issues</i></p>

No.	Laws/regulations/norms	Issues	Amendment Recommendations
		District heating zones are not sufficiently implemented in practice.	section) could be introduced to give effect to these prerogatives.
4)	Law no. 372/2005	It currently transposes Directive 2002/91/EC on the energy performance of buildings, which repealed by the EPBD Directive.	Law no. 372/2005 should be amended as to transpose the EPBD Directive. The contemplated amendment could also introduce the concept of “fuel poverty”.
5)	Ordinance no. 22/2008	It transposes Directive 2006/32/EC on energy end-use efficiency and energy services, which was repealed by the Energy Efficiency Directive.	Ordinance no. 22/2008 should be amended as to transpose the Energy Efficiency Directive. Furthermore, the Romanian authorities could consider introducing the definition of “fuel poverty” by means of the amendment transposing the Energy Efficiency Directive.
6)	GEO 18/2009	It does not provide for the obligation of the Romanian local authorities to report the progress achieved in the implementation of the local programmes for the increase in energy efficiency.	GEO 18/2009 should be amended to indicate such obligation on behalf of local public authorities.



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10 ASSUMPTIONS

This legal overview should be read based on the following assumptions: (i) the views expressed here are ours and may differ from the views taken by Romanian public authorities and institutions, (ii) this overview is based upon laws in force in Romania as of the date hereof and specifically mentioned herein, and any change in those laws (whether by legislation, prevailing interpretation or otherwise) may affect the information in this overview, (iii) this overview is not intended to serve as a legal opinion on any of the points addressed, (iv) this overview should not be considered to address all aspects of the points raised or to consider all potential consequences, (v) the district heating and energy efficiency regulatory framework is still developing in Romania - many laws are unclear, constantly changing and evolving, and sometimes even inconsistent, (vi) our considerations as to the implementation in practice of the regulatory framework herein referred to are not meant to be in any way relied upon.