



## **INOGATE Textbook**

### **VULNERABLE CUSTOMERS AND POSSIBLE SUPPORT SCHEMES**

**2011**

**Textbook developed for the INOGATE Programme**

**“Capacity Building for Sustainable Energy Regulation in Eastern Europe and Central Asia”**

**by the**

**Energy Regulators Regional Association (ERRA)**



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ENERGY COOPERATION BETWEEN THE EU, THE LITTORAL STATES OF THE BLACK & CASPIAN SEAS AND THEIR NEIGHBOURING COUNTRIES

*This document has been prepared by ERRA. The findings, conclusions and interpretations expressed in this document are those of ERRA alone and should in no way be taken to reflect the policies or opinions of the EU.*

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## PREFACE

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*Dear Colleagues:*

I am honoured to present to you a series of regulatory textbooks prepared by the Energy Regulators Regional Association (ERRA) within the frame of its INOGATE project called “Capacity Building for Sustainable Energy Regulation in Eastern Europe and Central Asia” – funded by the European Commission. The project embraces energy regulators, ministry officials and other relevant energy industry stakeholders from Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan, Turkmenistan, Uzbekistan and Ukraine. The key objective of the textbooks is to strengthen the institutional memory of the project by recording the expertise accumulated during the activities of the project. The regulatory experience and knowledge on important topics, while extensively covered in the workshops, also calls for a written approach that provides the ability to analyze the issues in a more complex and in-depth manner.

The textbooks extensively rely on the different project programmes organised on four main themes: *(1) Renewable Energy Regulation, (2) Regulatory Implication of Energy Efficiency Policies, (3) Vulnerable Customers and Possible Support Schemes, (4) Regulatory Implication of District Heating*. The aim of the textbooks is to present a good overview of the relevant policies of the European Union (regulation, directives and targets), national action plans, and case studies if available – together with applicable policy instruments. In particular, the text tends to focus on possible regulatory concepts and regulatory tools. The information in the textbooks attempts to present not only the role of the regulators but also the role of utilities in the above four main areas and the benefits of the available policies to consumers and utilities. The publications strive to focus on the possible barriers when implementing these policies in countries with transition economies and on the potentials for removing these barriers. They are based on relevant international and European regulatory good practices while taking into considerations the current state-of-play and the opportunities of the Inogate Partner Countries, and done by coupling these factors with recommendations for good regulatory practices.

I would like to draw your attention to the possible overlapping topics between these four publications. Although, we tried to avoid any possible overlaps, since the issues are so interrelated it is impossible not to cite the same directives, policies, practices and sometimes even to draw the same conclusions. We attempted to cross-reference the textbooks in these overlapping areas but I would like to suggest that you read all four publications in order to have a complete picture.

This particular publication focuses on *Vulnerable Customers and Possible Support Schemes*. Among the Inogate Partner Countries some already introduced special elements of the social safety net for vulnerable energy consumers, but some countries have no legal background regarding the responsibility of various governmental bodies, regulatory authorities, market participants and other stakeholders regarding vulnerability, social tariffs and energy poverty. In these countries the governments keep the end-user tariff for all household customers artificially low – independently of their social situation and vulnerability status – avoiding the extreme burden on vulnerable customers. Under continuously increasing energy prices a complex picture on the international practice of identification and treatment of energy poverty and vulnerability is a useful tool for all of the Inogate Partner Countries.

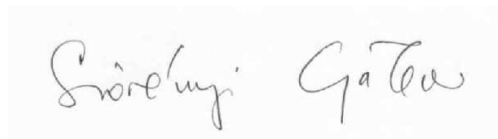
The textbook will allow for the dissemination of useful information and experiences of applied practices in the protection of energy customers, particularly of vulnerable groups. It introduces the legal framework for customer protection provided by the Third EU Energy Package. More specifically, the textbook addresses social aspects of tariff setting in light of the energy sector reforms, approaches to vulnerable customers' identification, economic and non-economic support systems, tariff and non-tariff based solutions. Furthermore, the basic concept of energy poverty and affordability are provided, as well as energy poverty reduction policies, including energy efficiency measures. The book recognizes the importance of informed and educated customers with regard to different aspects of energy market and consumer rights.

I am personally very proud of these four publications and I am convinced that they will be useful and relevant not only for the purposes of Inogate Partner Countries but for many other regulators and government officials from countries with emerging economies. ERRA will do its best to promote the publications to this audience and present these textbooks to future stakeholders of ERRA.

I am also very pleased with the work of the authors. The list of authors represents internationally acknowledged experts of the specific themes, many of them are practising or former regulators which brings a special value to the textbooks. Most of the authors were involved in all of the meetings, workshops and training courses implemented under the umbrella of the project. Their participation enabled them to learn about the main regulatory features and policies of the Inogate Partner Countries. In addition, I am proud of our expert team verifying the content of these textbooks. ERRA has invited the Hungarian, the Polish, the Romanian and the Turkish regulators to appoint experts in order to make sure that the publications truly represent the current regulatory situation of the listed countries and of Europe in general. In the case of the textbook on District Heating we were fortunate to have the Finish utility, Fortum to evaluate the content. The piece on Vulnerable Customers was read and commented by select staff persons of the Energy Community. I am particularly grateful for the dedication and voluntary work of all these experts.

Finally, I would like to take this opportunity and thank the European Commission for supporting this initiative and contributing to the birth of these basic publications. I look forward to other successful joint initiatives in the future.

Sincerely:

A handwritten signature in black ink, reading "Szörényi Gábor". The signature is written in a cursive style and is centered within a light gray rectangular box.

dr. Gábor Szörényi

Chairman

ERRA

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## LIST OF ACRONYMS

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ACER	Agency for the Cooperation of Energy Regulators
CEER	Council of European Energy Regulators
CSR	Corporate Social Responsibility
ECRB	Energy Community Regulatory Board
EPEX	European Power Exchange
ERGEG	European Regulators Group for Electricity and Gas
ERRA	Energy Regulators Regional Association
ESB	Electricity Supply Board (Ireland)
FYROM	Former Yugoslav Republic of Macedonia
NRA	National Regulatory Authority
PX	Power Exchange
SSE	State supported earnings
TSO	Transmission System Operator
UCTE	Union for the Coordination of the Transmission of Electricity
UNMIK	United Nations Interim Administration Mission in Kosovo
WHO	World Health Organisation

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## 1. INTRODUCTION

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Liberalization reforms in the energy sector have been encouraged in recent years throughout the European Union and further to the East, including Inogate partner countries. In many of them, the concept of energy as a public good results in prices that are below the market value. The transition to a market based system reduces and removes “traditional” cross subsidies, implying a rise in household energy prices, which may not be affordable for certain consumer groups.

In times of energy market liberalization and energy price increases, the issue of customer protection – in particular the vulnerable ones, raises a series of issues.

First and foremost, the issue of an adequate legal framework which enables customer protection as well as efficient function of the market is of major relevance. Chapter 2 takes stock of the consumer benefits that the rules provide for in the Third EU Legislative Package for an internal gas and electricity market. It outlines the new consumer protection measures that are included in the legislation and describes the new roles and duties of regulators.

Chapter 3 describes consequences and social aspects of energy market reforms and recognizes the need to safeguard the socially and physically vulnerable customers. Chapter 4 focuses on criteria for defining vulnerable customers. They should be set at the national level, taking into account local realities and provisions with regard to income.

Liberalization and price increases question the role of regulators and governments in the formulation and implementation of customer protection policies. Different approaches to customer protection issues are provided in Chapter 5. It should be pointed out that support systems need to be applied in a targeted and restricted manner keeping the number of support beneficiaries as small as possible.

In general, an increase in energy prices causes a significant hardship for the population in terms of meeting household heat and electricity needs. Energy costs are a significant amount of income expenditure in some countries, sometimes up to a fifth of total expenditures by the lowest income groups. This may force households to switch to unhealthier or environmentally unsound alternatives, or compromise spending on food, health care, or human capital investment. Due to this, a number of people are faced with the “heating or eating” dilemma. Taking into consideration this background, Chapter 6 is dedicated to energy poverty and potentials of energy efficiency measures as a tool to mitigate its consequences.

Empowering consumers with focus on customer education will ensure that not only are consumers better off as a result of market opening and competition, but are aware of the benefits of a competitive market. The relevance of customer education and awareness is elaborated in Chapter 7.

For the purpose of this textbook, the terms consumer and customer are used interchangeably.

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## **2. THE THIRD EU LEGISLATIVE PACKAGE ON ENERGY AND CUSTOMER PROTECTION**

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Ensuring secure, safe, sustainable and reliable energy supplies to all consumers in the European Union at affordable prices has been one of the main objectives of European energy policy. Completing the development of the internal energy market is one of the main strategies to reach these objectives. The internal market contributes strongly to the objectives of security of supply as well as improving efficiency. Furthermore, the prospect of a large EU market for electricity and gas with common rules is a strong incentive for new investment.

The process of opening up EU energy markets to competition started some ten years ago bringing EU citizens and industries many benefits: more choice, more competition; all in an effort to keep prices low, improve service and security of supply. Since July 2004, small-business customers in all EU countries have been entitled to switch their supplier for gas and electricity. Since July 1, 2007, all consumers in the EU have the right to choose their supplier for electricity and gas. They are also entitled to transparent and clear terms in contracts and protection from misleading practices and misinformation by suppliers.

Independent national regulatory authorities (NRAs) have been established in each EU country to ensure that suppliers and network companies operate properly and provide their services in a transparent and non-discriminatory manner. Based on yearly reports by the national regulators and sector inquiries, the European Commission is monitoring the market closely, identifying obstacles and shortcomings.

As a number of shortcomings were identified in the EU's attempt at establishing a truly open and competitive energy market, the Third Legislative Package for an internal EU gas and electricity market was adopted by the European Parliament and the Council in July 2009. The Third Package is expected to strengthen the energy market, give consumers more protection and provide the benefit of companies offering competitively priced gas and electricity, while offering companies the chance to compete on a level playing field.

### **Third Legislative Package\* for an internal EU gas and electricity market is composed of:**

- Regulation 713/2009/EC of the European Parliament and of the Council of July 13, 2009 establishing an Agency for the cooperation of Energy Regulators,
- Regulation 714/2009/EC of the European Parliament and of the Council of July 13, 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003,
- Regulation 715/2009/EC of the European Parliament and of the Council of July 13, 2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005,
- Directive 2009/72/EC of the European Parliament and of the Council of July 13, 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC (hereinafter: Electricity Directive),
- Directive 2009/73/EC of the European Parliament and the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC (hereinafter: Gas Directive).

\* [\*Official Journal of the European Union L 211, 14 August 2009\*](#)

The Third Package came into force on September 3, 2009; EU Member States had 18 months to transpose the Gas and Electricity Directives into national law from this date. The deadline was extended for one year in regards to the obligations pertaining to unbundling of transmission activities. Different from the other Inogate partner countries, the Third Package will also become effective in Moldova and Ukraine with an extended transposition deadline of 2015.<sup>1</sup>

The main objective of the legislative package is to put in place the regulatory framework needed to make market opening fully effective. This includes putting the rights of citizens at the centre of the market opening process with strong obligations on Member States to protect vulnerable energy consumers. In this context, the Third Package introduced a range of measures focusing on three key areas:

- the functioning of retail markets,
- role of regulators,
- customer protection.

## **2.1 The functioning of retail markets**

Pursuant to Articles 41 and 45 of the Electricity and Gas Directives respectively, Member States must ensure that the roles and responsibilities of energy undertakings, for example distribution and transmission system operators and suppliers, as well as customers are defined with respect to contractual arrangements, commitment to customers, data exchange and settlement rules, data ownership and metering responsibility. In order to facilitate new entry into the market and to enhance consumers' understanding of their local market, Member States must define the roles and responsibilities of all market players.

In this context, Member States shall also ensure transparent information on applicable prices and tariffs and on contractual terms and conditions, facilitate supplier switching, and put in place efficient treatment of complaints and out of court dispute settlements. These rules should be defined so as to facilitate consumers' understanding of the retail market and the entry of new suppliers. The rules are subject to review by national regulatory authorities and other relevant national authorities. Given the national regulatory authorities' general objective of promoting competitive, secure and environmentally sustainable internal energy markets, their review of the rules would be essential to producing rules that satisfy the requirements of the Directives (Articles 36 and 37 of the Electricity Directive, Articles 40 and 41 of the Gas Directive).

## **2.2 Role of regulators**

Articles 37(1) and 41(1) of the Electricity and Gas Directives respectively provide a list of core duties of national regulatory authorities. These core duties relate to:

- tariffs for access to transmission and distribution networks: setting or approving, in accordance with transparent criteria, transmission or distribution tariffs or their methodologies;

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<sup>1</sup> Moldova and Ukraine are Contracting Parties of the Energy Community ([www.energy-community.org](http://www.energy-community.org)). By decision of the Energy Community Ministerial Council (decision 2011/O2/MC-EnC of 6 October 2011; <http://www.energy-community.org/pls/portal/docs/1146182.PDF>) the Third Package has been adopted in the Energy Community Contracting Parties for transposition into national legislation by 2015 the latest. This obligation does not involve Armenia and Georgia as Observers to the Energy Community.



- ensuring that there are no cross-subsidies between transmission, distribution, liquefied natural gas storage and supply activities;
- general oversight of energy companies: ensuring compliance of transmission and distribution system operators, system owners (where relevant) and electricity or gas undertakings with their obligations under the Directive and other relevant European Union legislation, including as regards cross-border issues;
- consumer protection: helping to ensure, together with other relevant authorities, that the consumer protection measures, including those set out in Annex I of the Electricity and Gas Directives, are effective and enforced; publishing recommendations, at least annually, in relation to compliance of supply prices with Article 3; ensuring access to customer consumption data.

Articles 36(g) and 40(g) of the Electricity and Gas Directives respectively envisage an enhanced role for NRAs in ensuring that customers benefit from the efficient functioning of their national market, promoting effective competition and helping to ensure consumer protection. In view of this, the role of national regulatory authorities has been broadened to include additional monitoring and regulation of the operation of the internal energy market with a special focus on examination of supply prices to determine whether or not they are consistent with Article 3 of the Electricity and Gas Directives, i.e. whether there are minimum necessary conditions to protect consumers, vulnerable or otherwise, while not inhibiting effective competition in the market (Articles 37(1)(o) and 41(1)(o) of the Electricity and Gas Directives respectively). In this context, it will be the task of the regulator to determine whether prices are reasonable, easily and clearly comparable, transparent and non-discriminatory.

The enhanced role of NRAs in customer protection implies close cooperation of NRAs with other national organizations responsible for the protection of consumers, such as consumer associations, competition and consumer protection authorities, to ensure that consumer protection measures are effective. This cooperation, as a minimum, can take the form of open and transparent public consultation between the relevant bodies and provide for the capacity to share information.

Articles 35 and 39 of the Electricity and Gas Directives respectively enhance the independence of regulatory authorities. However, this does not mean that the government is deprived in any manner of the possibility to establish and issue its national energy policy. Depending on the national constitution, it could be the government's competency to determine the policy framework within which the NRA should operate but general energy policy guidelines issued by the government must not impinge upon the NRA's independence and autonomy.

While performing their duties at the EU level, NRAs are assisted by the Agency for the Cooperation of Energy Regulators (ACER)<sup>2</sup> which was established under Regulation 713/2009/EC of the European Parliament and of the Council of July 13, 2009. ACER was formally launched in March 2011. The role of ACER is to monitor regulatory authorities and provide them with assistance in implementation of their activities with a coordinated approach. ACER cooperates with EU institutions and stakeholders, to deliver a series of instruments for the completion of a single energy market. Among its tasks, ACER has to monitor the internal energy market, including retail energy prices and compliance with the

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<sup>2</sup> <http://www.acer.europa.eu>

consumer rights defined at EU level, and to publish an annual monitoring report identifying any barrier to the completion of the internal energy market.

In a nutshell, new provisions of the Third Energy Package reinforce the powers and duties of national regulatory authorities. They envisage more active involvement of NRAs in monitoring and enforcement of the retail energy market providing them with new powers to issue binding decisions and effective, proportionate and dissuasive penalties.

### **2.3 Customer protection**

Article 3 and Annex I of both Electricity and Gas Directives ensure a high standard of public service obligation and protection of all consumers, with a special focus on vulnerable customer protection. The Directives emphasize the issues of the major relevance for consumers such as consumption data, billing information, supplier switching, complaints and dispute settlement, consumer checklist and smart metering.

#### ***Protection of vulnerable customers***

While EU energy policy must benefit all consumers, the Third Package gives particular attention to the category of vulnerable customers.

There is an obligation on Member States to ensure that there are adequate safeguards to protect vulnerable customers, and in this context to define the concept of vulnerable customers (Article 3(7) of the Electricity Directive, Article 3(3) of the Gas Directive). This requirement allows Member States the flexibility to define vulnerable consumers according to their own particular situation while ensuring a high degree of protection. Pursuant to the same Articles, Member States are obligated to take measures to protect final customers in remote areas.

The Electricity and Gas Directives introduced an obligation for Member States to take appropriate measures to address energy poverty, such as formulating national energy action plans, providing benefits in social security systems to ensure the necessary electricity supply to vulnerable customers, or providing for support for energy efficiency improvements, to address energy poverty where identified, including in the broader context of poverty. Article 3 notes that social policy and energy policy, including energy efficiency measures, can interact to protect vulnerable customers but these measures shall not impede effective competition.

The European Commission has produced an interpretative note on Retail Market issues<sup>3</sup> giving examples of the types of consumers that could be considered as vulnerable consumers. According to this Note, it is anticipated that the actual number of consumers that fall within the category of vulnerable customers will be quite low. Furthermore, it would be reasonable to assume that disabled or elderly consumers could qualify as being vulnerable but not all consumers within these groups should be considered vulnerable, for example those with high incomes. The protection of vulnerable customers may refer to a prohibition of disconnection at critical times. For example, elderly consumers with an extremely low income may be considered to be vulnerable during a severe winter if they use electricity to heat their home. The prohibition may take the form of a license condition or obligation.

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<sup>3</sup> Commission staff working paper: Interpretative note on Directive 2009/72/EC concerning common rules for the internal market in electricity and Directive 2009/73/EC concerning common rules for the internal market in natural gas: Retail markets, Brussels, 22 January 2010

In its paper titled *An Energy Policy for Consumers*,<sup>4</sup> the Commission encourages Member States to adopt appropriate long-term policy solutions, and not only temporary relief. The aim of these policies should be to replace direct subsidies for high energy bills with a support for improving the energy quality of the dwellings. Energy efficiency measures should be an integral part of welfare policies. Furthermore, given the diverse situations of energy consumers in different parts of the EU, the Commission does not consider it appropriate at this stage to propose a European definition of energy poverty or of vulnerable customers.

### ***Access to consumer information***

The provisions of Article 3 and Annex I are designed to make it easier for consumers to understand the profile of their own consumption. They may decide to use this information either to compare it with offers from other energy suppliers, or to allow other suppliers to have access to their consumption data so as to provide them with a new offer of supply. Under Annex I(1)(i) of the Electricity and Gas Directives, consumers must be properly informed of actual energy consumption and costs frequently enough to enable them to regulate their own consumption.

Pursuant to Articles 3(5) and 3(6) of the Electricity and Gas Directives respectively, as a means of improving customers' ability to switch supplier, customers are entitled to receive all consumption data in an easily understandable harmonized format. They are entitled to receive the data in a non-discriminatory manner as regards costs, effort or time if they choose to request it. Articles 37(p) and 41(q) of the Electricity and Gas Directives respectively, impose an obligation on the national regulatory authority to provide an easily understandable harmonized format for the consumption data.

### ***Billing information and obligations relating to supplier switching processes***

According to Annex I(1)(i), consumers shall be properly informed of actual electricity/gas consumption and costs – frequently enough to enable them to regulate their own electricity/gas consumption. Annex I also points out that consumers must be offered a wide choice of payment methods, which do not unduly discriminate between customers. Furthermore, prepayment systems must be fair and adequately reflect likely consumption. These provisions ensure that consumers do not pay an excessive amount as part of a regular payment system and that consumers have access to a range of methods for payment.

Pursuant to Articles 3(5)(a) and 3(6)(a) of the Electricity and Gas Directives, a consumer is entitled to switch supplier within three weeks, while respecting contractual conditions. Furthermore, according to Annex I(1)(j) of the Electricity Directive and Annex I(1)(j) of the Gas Directive, consumers must receive a final closure account following any change of electricity or gas supplier no later than six weeks after the change of supplier has taken place.

### ***Single points of contact, complaints and dispute settlement***

Pursuant to Articles 3(12) and 3(9) of the Electricity and Gas Directives respectively, Member States must ensure that there are single points of contact to provide consumers with all necessary information on their rights and how they can have access to the relevant dispute settlement procedure. This should simplify the dispute procedure for consumers in case of a

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<sup>4</sup> Commission staff working paper: *An Energy Policy for Consumers*, Brussels, 11 November 2010

dispute and help consumers avoid becoming confused when dealing with the various agents involved in the supply of energy.

Under Articles 3(13) and 3(9) of the Electricity and Gas Directives respectively, Member States are obligated to ensure that there is an independent mechanism, such as an energy ombudsman or consumer body, to deal efficiently with complaints and facilitate out-of-court dispute settlements. This should help build confidence among consumers so that they will actively participate in the internal energy market.

Under Annex I(1)(f), consumers must benefit from transparent, simple and inexpensive procedures for dealing with their complaints. This should include a good practise of complaint handling by their energy service providers. Out-of-court dispute settlements should be completed within three months. Member States must ensure that suppliers effectively communicate to consumers their rights, including information on alternative dispute settlement procedures. Member States should have regard to best practices in complaint handling, in particular in relation to those systems that are available free of charge.

Annex 2 to an Energy policy for consumers gives an overview of which public bodies are responsible for out-of-court dispute settlement in the electricity sector in each of the Member States.

### ***European Energy Consumer Checklist***

Pursuant to Articles 3(16) and 3(12) of the Electricity and Gas Directives respectively, Member States are obligated to establish a clear and concise energy consumer checklist of practical information relating to energy consumer rights. This should be done in consultation with relevant stakeholders, including NRAs, consumer organizations and energy undertakings. Electricity suppliers or distribution system operators, in cooperation with NRAs, shall take necessary steps to provide a copy of the checklist to consumers and make it publicly available.

### ***Smart metering***

Under Annex I(2) of the Electricity and Gas Directives, Member States are obligated to ensure the implementation of intelligent metering systems that help consumers to participate actively in the electricity and gas supply markets.

The implementation of such metering systems may be subject to an economic assessment of all the long-term costs and benefits to the market and the individual consumer, or which form of intelligent metering is economically reasonable and cost-effective and which timeframe is feasible for the distribution of meters.

In its Interpretative Note on Retail Markets, the European Commission provides a number of benefits associated with the roll-out of smart meters that the Commission considers should be covered by the economic analysis, including:

- improved retail competition;
- energy efficiency and energy savings;
- lower bills due to better customer feedback;
- new services for consumers, including vulnerable consumers;
- improved tariff innovation with time of use tariffs;
- accurate billing;

- reduced costs and increased convenience for pre-pay;
- less environmental pollution due to reduced carbon emissions; and
- the facilitation of microgeneration, including renewable generation.

Pursuant to the Electricity and Gas Directives, this assessment must be completed by 3 September 2012. Where roll-out of smart meters is assessed positively, at least 80% of consumers have to be equipped with intelligent metering systems for electricity by 2020. (Annex I(2) of the Electricity Directive). With regard to gas, although there is no specific target date for the implementation of smart metering, it should be achieved within a reasonable period of time (Annex I(2) of the Gas Directive). Member States must have regard to the interoperability of smart meters in their jurisdiction when implementing these provisions. They must also apply appropriate standards and best practices and have due regard to the importance of developing the internal market for energy.<sup>5</sup>

\* \* \*

While opening the internal energy market, protecting customers remains one of the central issues in European energy policy. In this context the Citizens' Energy Forum has been established as a monitoring tool and discussion platform (see Section 7.5). The tools used for the protection of vulnerable customers must work in line with and support the prerequisites of open, competitive markets.

These goals are reiterated in the European Energy Strategy 2020,<sup>6</sup> according to which the European Commission will publish regular benchmark reports assessing the level of implementation of the regulatory provisions relating to consumers and the overall level of protection across the internal market. Particular emphasis will be given to vulnerable customers and to practices which enable consumers to reduce energy use.

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<sup>5</sup> More information on issues related to smart metering can be found in the ERRA Textbook on Renewable Energy Regulation. <http://www.erranet.org/Library/Search>

<sup>6</sup> Energy 2020, A strategy for competitive, sustainable and secure energy

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### 3. SOCIAL ASPECTS OF ENERGY SECTOR REFORMS

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#### 3.1 Introducing the free market

The concept of the single European market was created in 1987 with the objective of member countries to remove physical, legal and financial obstacles to the free movement of goods, services, capital and labour within the countries of the European Communities (the predecessor of the European Union). In addition, the Single European Act (Treaty of Rome) requires the elimination of the state-owned monopolies. This requirement also applied to the energy sector.

In 1990, the United Kingdom began to restructure and privatize the electricity sector, thus demonstrating that it is possible to unbundle vertically integrated utilities and develop a wholesale electricity market. Since then, many countries have also chosen a similar reform path. After the adoption of the Energy Policy Act, the United States began the process of liberalization in the electricity sector in 1992, while Norway did this in 1991. Five years later the European Parliament and Council adopted Directive 96/92/EC, this supplied the common rules for the internal market in electricity to promote the implementation of electricity market liberalization. The reform process proceeded according to each country's individually chosen model. In 2003, the Second Energy Legislative Package was adopted specifically to foster market opening, develop both a functional market model and regional trade in electricity. However, over time it became evident that further coordinated action was necessary, so the Third Energy Package was passed in 2009 (see Chapter 2).

Organizations were created to foster the process of reform in the internal energy market, these include: the Agency for the Cooperation of Energy Regulators (ACER), the European Network of Transmission System Operators for Electricity (ENTSO-E), the European Network of Transmission System Operators for Gas (ENTSO-G), the Electricity Regional Initiative (ERI) – creating seven electricity regional markets, and the Gas Regional Initiative (GRI) – creating three gas regional markets. The European Commission supports each of these new organizations which is expressed through common EU regulations, framework guidelines, roadmaps, network codes and other documents which require the harmonization of legal provisions and coordinated actions in EU member countries to integrate national markets into the regional markets. The final goal is to have a single European electricity market at end of 2014.

The level of real and declared market opening are the first criterion, indicating the level of liberalization in each electricity market. The percentage of market opening is the ratio of end-users who are allowed to switch supplier. According to ERGEG/CEER 2010 Annual Report,<sup>7</sup> in 2009 in all EU countries, the proportion of markets open to competition was 100%, except Cyprus – 67% and Estonia – 28%. In the gas sector the markets were fully opened in all EU countries as well, except Greece – 86%. Finland has a derogation and Cyprus and Latvia are closed markets (no data for Malta). This possibility does not mean that all these end-users can

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<sup>7</sup> Council of European Energy Regulators (CEER) is closely linked to the Agency for the Cooperation of Energy Regulators (ACER) and they share similar objectives. The forerunner to ACER was the European Regulators Group for Electricity and Gas (ERGEG), a formal advisory group to the European Commission and created by the Commission in 2003 (Decision 2003/796/EC). With ACER fully operational (since March 2011), ERGEG was dissolved (Commission Decision of 16 May 2011 repealing Decision 2003/796/EC) with effect from 1 July 2011. All past works relating to ERGEG activity (documents, reports, public consultations etc.) can be found on the CEER website ([www.energy-regulators.eu](http://www.energy-regulators.eu)).

For the purpose of this textbook the terms CEER and ERGEG will be used interchangeably.

change suppliers. The switching rate depends on the level of retail competition. Regulated end-user prices remain one of the main barriers for market opening, which are usually lower than market prices (based on political decisions). Abolishing regulated end-user prices allows the introduction of market conditions and establishment of a single retail market.

Specific problems exist in a number of countries – lack of effective competition on production and demand side. The problem seems to disappear by integrating national and then regional markets, but the problem of interconnections becomes relevant in this context. In the annual report of ERGEG/CEER (above), important market failures are identified. In the gas sector capacity products and allocation mechanisms differ widely from one EU Member State to another and sometimes from one Transmission System Operator (TSO) to another within a country. Market mechanism, like First-Come-First-Served is not an appropriate allocation mechanism in cases of congestion. Another example, capacity mismatch at many interconnection points is a major obstacle to cross border gas trading and leads to sub-optimal use of infrastructure. In the electricity sector different technical requirements for generators requesting grid connection, means the accuracy and binding of rules differ between TSOs and Member States; with increased intermittent generation and greater interconnectedness of Member States control areas. This lack of harmonisation is leading to unsafe and uncontrolled system operations, exposing the entire European network to further threats like the system crash of UCTE<sup>8</sup> experienced in November 2006.

Other issues arise, such as company mergers and acquisitions and large investment needs limit the level of competition. Over the last decade, there were a numerous mergers, especially among gas suppliers and electricity producers. The potential abuse of market power of dominant suppliers could be avoided or mitigated with greater market integration; this stems from the potential that when the relevant market expands and, consequently, the number of players increases, greater competition can result. Market integration, could mitigate some of these barriers, and help in the creation of a robust wholesale market with higher price stability and a greater level of security of supply.

In the natural gas sector, market concentration is higher than in the electricity sector, this is due to the limited number of suppliers. Current and past EU Directives, especially the Third Energy Legislative Package, should mitigate such issues over the long term, if Member States follow the provisions on ownership unbundling.

Notwithstanding these issues, the reforms in the energy sector are advancing and regional cooperation is one of the main tools fostering an efficient, competitive, and integrated EU energy market.

During the transition period, end-users – especially households and vulnerable customers, may struggle with new market conditions. They need to choose a supplier, make new power purchase agreements, learn how the market works, and finally (most likely) to pay a higher price. There should be various means to help consumers cope with these issues. This includes creating an effective program for handling complaints, ensure a competitive retail market that benefits consumers, provide the needed switching, billing and price information. Also, it is important to ensure the involvement of consumer associations in the decision making process, and to create effective demand response schemes to fully leverage the expected benefits for consumers, including the use of smart technology. Finally, it is essential that government decisions are made regarding financial support mechanisms for vulnerable customer groups.

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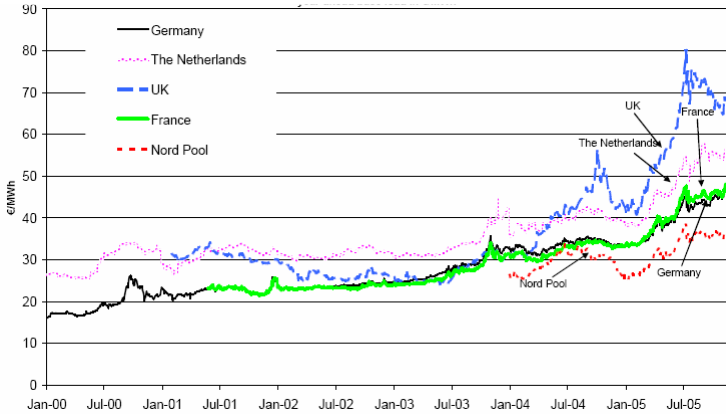
<sup>8</sup> Union for the Coordination of the Transmission of Electricity; on 1 July 2009 UCTE was wound up when all operational tasks were transferred to ENTSO-E.

Market opening and competition are expected to result in lower prices over the long term for consumers. Fostering an integrated EU wide internal energy market is essential for the full benefits to be felt by consumers. However, more must be done. Future infrastructure development must be carried out, which carries a high price tag. Smart grids and smart meters are essential for a more efficient and effective marketplace in electricity and gas, particularly at the regional level, smart grid technology needs to be rolled out at a broad scale. The end result may be higher electricity prices, during a transition period, social issues may come to the fore. The next section will address the reasons for price increases.

### 3.2 Demand and price trends

To create an efficient and competitive electricity market substantial reforms in the energy sector are necessary. This includes the unbundling of the vertically integrated system. It is important to differentiate and split the different portions of the electricity sector. This means identifying those areas that competition can exist and those areas that are natural monopolies. Therefore, generation and supply are areas where multiple players can provide competing services and do so in a competitive manner. Transmission, system operation and distribution are three areas where duplication of services are either impractical or would result in higher prices and therefore are viewed as a natural monopolies that should be regulated. Creating this split between competitive and monopolistic elements should lead to a more efficient electricity system and market.

Efficient electricity markets also require the development of a robust electric power system; this means greater integration should occur between traditionally isolated national markets. Figure 3.1 demonstrates the difference in electricity prices in different types of systems.



Source: Sector Inquiry (EU, 2006), based upon data from Argus Media, Platts, and NordPool

Figure 3.1. Wholesale electricity prices developments for base load in Europe in 2000 – 2005

This figure shows the hourly energy trade on the Power Exchange (PXs), it can be noticed the dramatic energy price increase in various countries, such as the UK, Netherlands, France, and Germany. The price increase happened because of the supply-demand balance. It was also affected by increased fuel prices and CO<sub>2</sub> credit pricing during these years. It also needs to be stated that during the recent economic crisis, prices dropped about 50%, especially on the EPEX spot market at the end of 2009.

The Energy Regulators Regional Association has a wholesale market monitoring project, and it is possible to find useful information on its website [www.erranet.org](http://www.erranet.org). According to the 2009 Market Conditions Monitoring Report, different tariffs structures are applied in the



analysed countries and it is hard to compare prices. End-user prices in all categories are also different, but mostly the prices are not fully market-based. The price of electricity (only the energy component) paid by household and non-household customers are showed in Figures 3.2 and 3.3. It should be noted, that the exchange rates could influence the statistics.

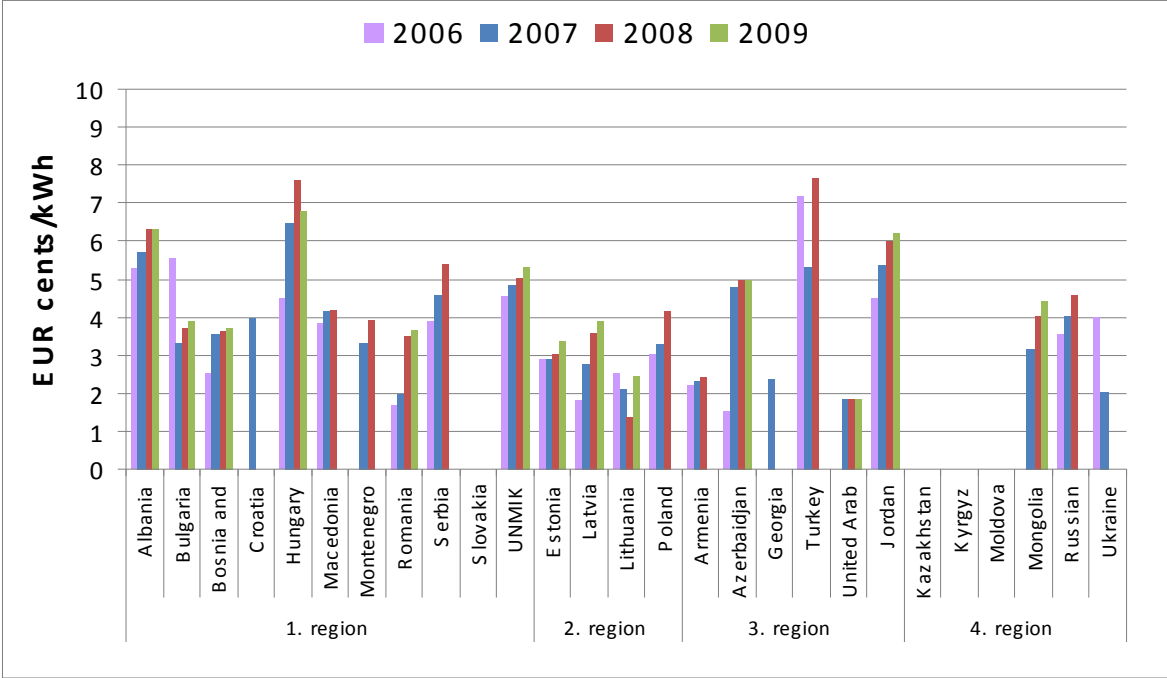


Figure 3.2. Electricity prices paid by the households in the ERRA member countries in 2006–2009

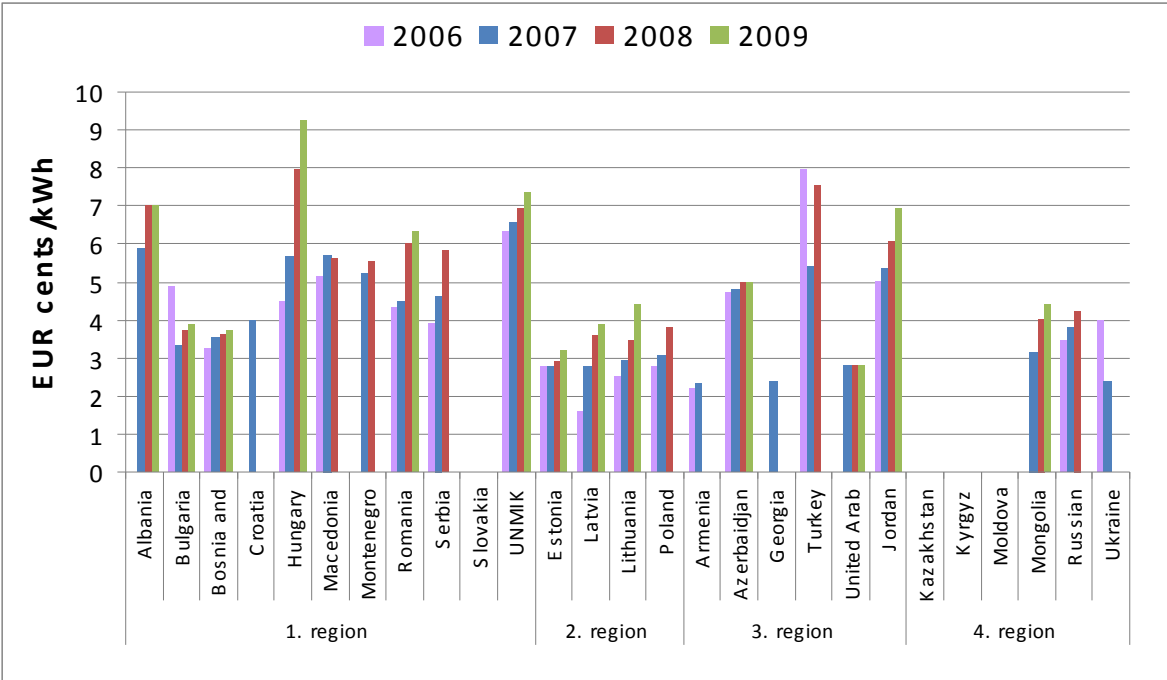


Figure 3.3. Electricity prices paid by the non-households in the ERRA member countries in 2006 – 2009

There are five major obstacles to an efficient market:

1. concentration
2. right to vertical use
3. lack of market integration
4. lack of transparency
5. price increases.

A transitional period usually exists, until technical and organizational arrangements are in place for the functioning of effective market with hourly trading for all parties: demand (customers/suppliers) and supply (generators). An effective market sets an objective price according to the demand and supply curves. The issue arises around the method, on which the price setting should be based. The comparison of possible methods is showed in Table 3.1.

Table 3.1. The comparison of weighted average and marginal (maximum) methods for price setting at auction/PX

Weighted average price		Marginal (maximum) price	
<i>Pros</i>	<i>Cons</i>	<i>Pros</i>	<i>Cons</i>
Dominant generators are regulated and have no market power	Need of partial or full market regulation	Clear and transparent price setting mechanism	Higher price in the short-term perspective
Incentive for higher consumption	No proper signals for the market, does not reflect real situation	Objective price formation for balancing market and financial products	Higher instability
One price for suppliers	Investments are based on regulation – no business logic	Price signal reflects real situation of demand and supply	Method is applicable, when there is competition
Lower price for customers	Problems of market integration with other markets	Right signal for investments and consumption	A lot of prices for suppliers
-	-	Lower price in the long-term perspective	-

During the transition period, and before the formation of a competitive market, the weighted average price method is applied, at later stages – the marginal price method is applied. The main difference between the two is the price level. The weighted average price method evaluates producers' costs in accordance with their proposals, while the marginal (maximum) price is applied to all producers, regardless of their actual costs. This is a prerequisite for the "cheapest" producers so as to maximize their profits since they are paid at maximum price.

Generally, the essence of the market is to foster business opportunities where participants can earn additional profits, while consumers' benefit through the opportunity to pay less for electricity. This appears contradictory. In regards to the regionalization of electricity markets, it can be difficult to assess the direct benefits of a regional electricity exchange. For example, when trading across national borders results in lower priced electricity being sold in higher priced national markets, consumers in the lower priced country may appear to be harmed. In this case, the benefits may only appear over the long term, such as when domestic demand, in the low priced country, exceeds supply, such as in peak periods, or in emergency cases when security of supply is affected. A robust regional market provides a more resilient system over

the long term that is able to balance different demand levels and at different times of the day or season. For importing countries, the additional supply can reduce prices, while improving security of supply. A good example is the Nordic market which shows that the integration of individual national markets may reduce the price difference between peak periods.

Market development depends on the infrastructure of the power system. In order to develop a more integrated power market, with substantial levels of trade between countries, there is a need for sufficient levels of power generation and interconnector capacity.

Investment into the energy system's infrastructure is essential for the internal EU energy market. It is one of the main prerequisites for efficient regional energy trading. The European Commission estimates that over the next 20 years, Europe will need about one trillion Euros to ensure growing energy needs. Eighteen percent demand growth is foreseen till 2020, or 1.5% annually. It is clear that investments in infrastructure have a significant impact on the price of electricity. In order to find other elements involved in the development of market based end-user prices – in addition to fuel prices and the supply-demand balance, the market structure and models should be analysed.

In a monopolistic market model there are no competitive market conditions, this is due to the existence of vertically integrated energy companies. In a single buyer (monopolistic) model, market conditions exist mainly on the generation (supply) side. In the wholesale (competitive) trade model, market conditions apply on the generation (supply) and demand (customer) side; however only for large amounts of electricity or large market players, including those in the PX. In retail trade, the same conditions as for wholesale trade exist, with market conditions being extended to the whole electricity sector, including small suppliers and customers.

The more mature a market structure in a country or a region is, the more open and competitive the market, including the presence of strong market forces, i.e. they are not regulated to the same level as a monopolistic market.

Electricity market models can be integrated or decentralized. The choice of a model will influence costs and the final electricity price. In the integrated market model the dispatch centre is responsible for the cheapest combination of generation which covers demand, it also solves congestion problems in the transmission grid (cost based optimisation approach). In the decentralized system, there are many aspects to the market, e.g. for balancing, cross-border congestion management and other issues.

As mentioned earlier, the gradual abolishment of regulated end-user prices is one of the prerequisites of liberalized markets, while the regulated element of network and system charges should remain. It means that more customers are supplied by negotiated electricity and gas prices, because a fully open market – where competition is effective, it cannot coexist with regulated end-user prices over the longer term. There can be a number of reasons for the market prices being higher than the regulated ones: a monopolistic environment, political decisions, historical context, private equity firms seeking profits and so on. In the transient period of market building (until the wholesale and retail markets are not efficient, thereby “controlling” the price) and especially in countries, where price regulation has a long tradition and there is a lack of trust in the role of a competitive market, governments may prefer end-use price regulation especially for household customers. In this case, regulated end-user prices for all households (not only vulnerable ones) can deviate from market based prices for years. If this happens the impact can be felt throughout the energy supply chain, resulting in postponed maintenance and development of the system. Over the long term, this neglect does not serve the interests of rate payers and negatively impacts the level of security of supply.

Table 3.2. Comparison of market and regulated end-user prices by the customer groups in 2007

Country	Households	Commerce	Medium business	Large industry
Denmark	Similar	Similar	Similar	Similar
Estonia	Closed	Closed	Closed	Lower
France	Lower	Lower	Above	Above
Greece	NA	NA	NA	NA
Hungary	Above	Above		
Ireland	Similar	Similar	Similar	
Italy	NA	NA		
Latvia	Lower	Lower		
Lithuania	Above	Above	Above	
Netherlands	NA	NA		
Poland	NA			
Portugal	Similar	Similar	Similar	Above
Romania	Above	Lower	Lower	Lower
Slovak Republic	Above			
Spain	Similar	Similar		Above

Note: “Closed” means electricity market is not open for competition.

Source: [ERREG Status Review of End-user Price Regulation as of 1 July 2008](#), 11 March 2009

The comparison of free retail market prices vs. regulated prices shows that the situation varies across EU countries (Table 3.2).

In some specific cases there may exist a number of reasons to keep regulated prices such as the lack of opportunity to trade in regional energy markets. This may be the result that neighbouring countries are not ready for greater market opening, different eligibility thresholds, incompatible pricing principles, lower regulated prices (old structure, strong regulator), limited acceptance by society and politicians for market pricing, lack of proper procedures or market supervision, etc. However, for an efficient functioning market, regulated end-user prices should be abolished.

As described earlier, the creation of an integrated regional market can result in increased prices for consumers due to higher electricity and network prices. In this context, social issues come to the fore, especially for the small commercial customers and households. Each country has to decide how to protect vulnerable customers. Further reforms in the energy sector may reduce prices over the long-term, but social schemes should be implemented during the transitional period.

### 3.3 Safeguarding the socially and physically vulnerable

#### *General aspects of end-user prices*

The introduction of a competitive energy market may result in price increases for certain customer groups (especially when the former regulated prices did not reflect real costs). Special attention should be paid to safeguarding the socially and physically vulnerable, who are a group of customers that have less bargaining power and need assistance to “navigate” the new market conditions. The ERREG documents listed below provide a good insight into the issue:

- ERGEG Position Paper of End-user energy price regulation, 18 July 2007;
- ERGEG Status Review of End-user energy price regulation as of 1 July 2008;
- ERGEG Status Review of End-User Price Regulation as of 1 January 2010.

These documents state, that regulated end-user prices **distort** the functioning of the market, **jeopardizing** both security of supply and the efforts to fight climate change; therefore end-user price should be **abolished**, or where appropriate, brought into line with market conditions. The impact is that suppliers will not be able to make competitive offers, which cover their supply cost, if regulated prices are not in line with wholesale market conditions, and if customers benefit from artificially low regulated prices, the lack of competition on retail markets hampers the customers' right to choose. Besides, regulated prices do not give reliable price signals to the market and to the final customer and artificially low prices potentially increase demand and will be an obstacle to the EU objectives of climate change and security of supply.

Although in theory the market is open, in practice on some national markets there may still be only one dominant supplier and a consequent a lack of choice for consumers. Fully open markets with well-functioning competition cannot, in the long term, coexist with regulated prices. All EU countries, which had regulated prices, were obligated to publish an individual roadmap to remove regulated prices by 1 July 2008. The steps taken by the Member States have been properly monitored both at the national and EU levels. ERGEG urges the Member States governments and regulators to act rapidly so as to create the environment to attract entry of new suppliers.

Protecting vulnerable customers from potential market abuse by dominant suppliers remains necessary in a competitive market. The tools must work in line with and support the prerequisites of open competitive markets. In defining vulnerable customers different approaches could be adopted:

- low income households (Belgium, France) or unable to pay (Belgium, United Kingdom);
- different climate zones within a country;
- urban versus rural population.

ERGEG/CEER believes that in general, issues of consumer protection and the needs of vulnerable customers are **social issues rather than energy policy issues** and that it is the EU Member State governments' responsibility to define the tools. The Energy Community Regulatory Board (ECRB) similarly concluded in its 2009 report on vulnerable customers that *“Protection of vulnerable customers typically does not involve a specific support scheme for energy customers alone but rather provides a more general support to the group of eligible persons within a social welfare system”*. The alternatives other than regulated end-user prices should be used in protecting certain vulnerable customers:

- different energy taxes or VAT based on, for example, income, geographical conditions, industry situation, competitive situation;
- subsidies either proportional or lump sum;
- social benefits.

Price regulation must be balanced so as not to obstruct market opening, create discrimination among EU energy suppliers and reinforce imbalances in competition or restrict resale. Finally a transparent price model that reflects the market prices level should be defined.

Competition requires careful oversight, to ensure that customers are fairly treated, get the best possible deal available and are empowered to exercise their right to choose in an open market. In view of the current global economic downturn and concerns over security of supply and adequate investment in the electricity and natural gas markets, it is important to remember that end-user energy price regulation can distort the development of wholesale and retail markets as well as send price signals to both suppliers and consumers (which can encourage behaviour changes and quality improvements).

Lord Mogg, Chair of the CEER stated in 2008:

- *“End-user price regulation is not the right solution to protect or to empower consumers in the market. There are other solutions to ensure the consumer is at the heart of the 3rd Package”.*
- *“The figures are staggering. In a majority of countries with regulated prices, 95% of households and more than 80% of businesses are still on regulated prices. Such regulated end-user prices can distort the development of wholesale and retail markets as well as interfering with proper price signals to both suppliers and consumers. Unless there is a clear price signal driven by the market, customers will not see the benefit of using their energy responsibly.”*

Comparing ERRA (Energy Regulators Regional Association) countries by the same aspects, it can be seen, that some countries (mainly EU Member Countries) have started abolishing end-user regulated prices. According to the Energy Community regulatory Board (ECRB) Report on Vulnerable Household Customers in 2009, the options in the analysed countries (Albania, Bosnia and Herzegovina, Croatia, the Former Yugoslav Republic of Macedonia (FYROM), Montenegro, Serbia and the United Nations Interim Administration Mission in Kosovo (UNMIK), which have a financial support system within the energy sector vary from discounts on the network tariff, social tariffs, rebates and trust funds to measures not related to grid fees such as state heating aid and governmental subsidies. Some European countries and the majority of mentioned analysed countries have regulated energy prices for vulnerable customers. Where regulated prices exist, they shall be increased year after year in such a way that they reach a market price level and that subsidies need not be maintained. While the need for protection of vulnerable household customers is fully acknowledged, this challenge should only be addressed with market oriented instruments. The number of licensed and active independent suppliers in the countries indicates the progress of the electricity market.

In the energy sector the scope of overall customer protection typically involves the right to network access, kind and type of contract, billing procedures – payment deadlines, dunning procedures, procedures for disconnection from the grid, treatment of energy theft and so-called non-technical or commercial losses, dispute settlement, general conditions of delivery.

### ***Case Study: Protection schemes used in Lithuania***

Electricity tariffs are a sensitive issue, because a country’s economy depends a lot on aspects of competition. Usually, there should be a strong political will to ensure non-cross subsidizing between customer groups, and doing so by using a special fund instead of social tariffs.

There are no social electricity tariffs (except historical tariffs using the electric-stoves, which are gradually abolished) in Lithuania. Social support for vulnerable customers exists in the district heating and hot and cold water sectors.

The receivers of social support could be the family (one person), when the monthly earnings are less than the state supported earnings (SSE) (100 EUR in 2011). The support is 90% of the difference between the family (person) SSE and average earnings per month.

In the district heating sector social support is given for the expenses for heating the used living space, but not higher than the normative, taking into account the costs of energy or fuel, but not higher than the normative, exceeding 20% of the difference between the family (person) earnings and State supported earnings' size of the family (person).

In the water supply sector the social support is differentiated by cold and hot water:

- expenses for the volume of actual *cold water and outflow*, but not higher than the normative, exceed 2% of family (person) earnings;
- expenses for the hot water, when the volume, energy and fuel costs are not higher than the normative, exceed 5% family (person) earnings.

The persons eligible to get social support (vulnerable customers) should be permanent residents of the country, and living in the country not less than 6 months during last 12 month. The value of available property does not exceed the normative value of property, which is set taking into account the construction of the dwelling, site of land and price. Family members (person) should correspond with one of the condition: – Not employed, because:

- studying in a day-time course in an educational institution, if younger than 24;
- pensioner, according to the law;
- invalids of certain groups;
- jobless, getting the unemployment grant, during studying period – study grant;
- are not less than 6 months registered in the job-centre as looking for a job, etc.

This is just a small sampling of the types of eligible people that could be part of groups in the category for vulnerable customers. There is a whole scheme for vulnerable customers, including physically vulnerable; the description can be found on the website of the Ministry of Social Protection of the Republic of Lithuania ([www.socmin.lt](http://www.socmin.lt)).

Social support is paid for 3 months from the 1st day of month, when the application was submitted. It could be less, if the reasons are known in advance regarding the end of compensation or the size of compensation changes.

Here is some statistical data regarding the social support in Lithuania: in over 3 months it reached about 20 million EUR for the district heating and water in May 2011. It shows the increasing numbers – the social support system needed 6 million EUR more than last year. In the district heating sector, it included about 220,000 people, or 32% more than the previous year, who received social support. On average, compensation was about 28 EUR/person/per month for district heating, and 31 EUR for other energy sources. In the water supply sector, compensation for *cold water* was given to 55,000 people, or 50% less than the previous year, but it increased 40% within the same period (1 quarter). The average compensation was about 1.5 EUR/person/per month for cold water. Regarding *hot water*, about 112,000 people, or 35% more than last year, received the social support of the average compensation of about 6 EUR/person/per month.

Social support is provided from the state budget through special grants for municipality budgets. In 2010, the compensation increased by 50% compared to 2009 (about 34 million EUR), i.e. 167,000 or 5% of all residents of Lithuania received the social compensation, which is given if expenses for utility services are generally more than 20% of earnings.

On average 60% of residents of Lithuania are debtors, especially in the field of the district heating services. The district heating cost for old buildings, which are not sufficiently insulated, on average, was more than 87 EUR per month, while average earnings amounted to 463 EUR without taxes. There are 300,000 people officially jobless out of 3 million residents. This was caused by the world economic crisis, which started in 2008 and still continues to effect the country's economic development. In Lithuania, more than 25% of earnings are spent on energy sources during the heating season. Normally, the percentage should be 5-10% of monthly earnings.

More case studies are presented in the ERRA Issue Paper "Low income customers – meeting their needs" (2000).<sup>9</sup>

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<sup>9</sup> <http://www.erranet.org/Library/Search>; Year: 2000, Keyword: customers



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## 4. IDENTIFYING VULNERABLE CUSTOMERS

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### 4.1 Understanding and definitions

The Second EU Energy Package Directives<sup>10</sup> concentrated on market structure issues, including unbundling commercial activities – ranging from grid activities to improving the functioning of the energy market, also vulnerable customer issues were addressed. In an open and liberalized retail market, in particular household consumers may be affected by bad practices and aggressive marketing policies from service providers. A well-functioning market should be based on a balance between different market actors. It is obvious that customers, especially vulnerable customers, are weak in term of negotiation power. This is why they should be empowered and protected properly. Some groups of customers are not attractive for service providers for many reasons: low-income, living in remote areas, or have low consumption levels. On the other hand, EU Member States are responsible for ensuring security of supply for certain groups of customers in order to guarantee basic living standards. It is specifically stated in the Second EU Energy Package Directives that: “*Member States should ensure necessary energy supply to vulnerable customers.*” Therefore, it is highly relevant that consumers are provided with services which are crucial for life.

The Third EU Energy Package Directives<sup>11</sup> strengthen customers’ rights and their protection with a focus on vulnerable customers stating that adequate safeguards are necessary to be in place. “*Member States shall take appropriate measures to protect customers, and shall in particular, ensure that there are adequate safeguards to protect vulnerable customers*”<sup>12</sup>. The proper protection of customer interests is a prerequisite for a liberalized market. It is certain that the number of eligible customers, to be determined as vulnerable customers, should be quite low. Therefore, it is also a key point to define adequate criteria for vulnerable customers. As mentioned earlier, common criteria for defining vulnerable customers are not available.

The term “vulnerable customer” was not defined in Second Directives. In the Third Energy Package it is stated that: “*Member State should define a concept of vulnerable customers which may refer to energy poverty and, inter alia, to the prohibition of disconnection of such customers in critical times*”. To meet the requirement Member States must define the categories of consumers that will qualify as vulnerable customers. Therefore, there is no common definition in the Third Energy Package to be implemented at national levels. Member States should define vulnerable customers in terms appropriate to national circumstances taking into consideration some general rules and characteristics. In the Third Energy Package legislation the main focus is on the existence of different (social) support mechanisms and categories of customers eligible to receive support rather than on a definition of vulnerable customers. It is underlined that customers to be categorized as vulnerable customers should be financially and physically weak in relation to their service providers (with certain needs) and they cannot afford settlement of electricity/gas bills. They can be protected from disconnection at critical times (severe winters). Customers who have just

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<sup>10</sup> Directive 2003/54/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in electricity and repealing Directive 96/92/EC

Directive 2003/55/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in natural gas and repealing Directive 98/30/EC

<sup>11</sup> see Chapter 2

<sup>12</sup> Article 3(7) of Electricity Directive, Article 3 (3) of the Gas Directive

forgotten to settle a bill in due date or for any other reasons should not be treated as vulnerable.

As ERGEG status review<sup>13</sup> shows the term vulnerable customer is very often used in the EU legislation and documents without a precise definition. In ERGEG Countries the term is not commonly known or used which can be linked with the low status of implementation of support systems specially dedicated to vulnerable customers. The “commonly known” expression means that vulnerable customer term is used often within the EU-system but there is no general definition of the term. Only eight out of twenty seven European countries commonly used this term.

Table 4.1 Occurrence of the term “vulnerable customer”

The term “vulnerable customer” commonly known and used	The term “vulnerable customer” not commonly known and used
Belgium, Bulgaria, Great Britain, Greece, Hungary, Ireland, Italy and Slovenia	Austria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Latvia, Lithuania, Luxembourg, Norway, Poland, Portugal, Romania, Slovak Republic, Spain, Sweden and the Netherlands.

The term “vulnerable customer” is not commonly used in Energy Community Contracting Parties.<sup>14</sup> In 2009 there was no single definition of vulnerable customer at a national level in Albania, Bosnia and Herzegovina, Croatia, FYROM and UNMIK. The definition only existed in Serbia, where vulnerable customers were defined by the welfare centre as customers using financial support, low-income pensioners, disabled persons, foster families, families that receive support for third and fourth child.<sup>15</sup>

**4.2 Criteria for defining**

In most countries vulnerable customers are directly or indirectly defined by predetermined and accepted criteria, which identify their vulnerability.

There are some factors used for defining categories of vulnerable customers:

1. level of monthly income for household; the criterion is used in the majority of countries where specific economic support system exists (electricity: Belgium, France, Great Britain, Ireland, Italy, Romania, Slovenia, Albania, Bosnia and Herzegovina, Serbia, UNMIK and in gas: Austria, Belgium, France, Great Britain, Hungary, Ireland, Italy and Romania);
2. senior citizens with a defined low income (electricity: Ireland and Spain, Bosnia and Herzegovina, Serbia in gas: Ireland);
3. all senior citizens (electricity and gas: Great Britain and Ireland);

<sup>13</sup> [Status review of the definitions of vulnerable customer, default supplier and supplier of last resort,](#)

<sup>14</sup> As of 1 Feb 2011, the Parties to the Energy Community are: the European Union and nine Contracting Parties Albania, Bosnia and Herzegovina, Croatia, FYROM, Serbia, Moldova, Montenegro, Ukraine and UNMIK.

<sup>15</sup> [ECRB Report – Vulnerable household customers – an ECRB contribution to a common understanding,](#) 2009

4. households with children with a defined low income level (electricity: Italy, France, Spain, Croatia and gas Italy);
5. all households with children (electricity: Spain, Serbia gas: Great Britain, Ireland);
6. all households (electricity: Spain);
7. disabled persons with a defined low income level (electricity: Great Britain, Ireland, Spain, Serbia; gas: Belgium, Bulgaria);
8. all disabled persons Belgium, Albania, Bosnia and Herzegovina;
9. customers from remote areas;
10. unemployed people (Albania).

It is worth noting that a level of monthly income is the most popular criterion. In a few countries customer groups such as households with children, disabled persons and senior citizens are eligible to receive some support and very often it is attached to an income level.

In some countries (Bulgaria, Hungary) vulnerable customers are individually defined by Social Assistance Centres. In Finland the definition covers unemployed and chronically ill persons. In Ireland the Commission for Energy Regulation defines three categories of vulnerable customers as those relying on electrical life support equipment, customers with visual, hearing, mobility deficiencies and senior citizens over 66.<sup>16</sup>

In Serbia, vulnerable customers are identified by the welfare support pensioners are receiving, whether they are disabled or families receive financial support for their third and fourth child.

In Bosnia and Herzegovina, vulnerable customers are defined as groups that receive monthly support as follows: pensioners with the lowest pensions, the disabled, people on maternity allowances, and people getting child support. In Sarajevo Canton vulnerable customers are described as households with defined low monthly income level for a family member: households with income not exceeding €36, single pensioners with income lower than €85, two-pensioner households with revenue lower than €113, households in which one or more persons benefit from support and care for deaf and whose income is lower than €62.

In the Hungarian Energy Law a vulnerable customer means those household customers who require special attention due to their social disposition defined in legal regulations, or some other particular reason, for supplying them with electricity or natural gas.

Household customers who are considered vulnerable customers are afforded protection under specified legislation if, by definition, they are defined as indigent persons or people with disabilities, in the form of allowances by electricity or natural gas traders and distributors of electricity or natural gas to the extent specified in detail in specific legislation.

In Romania, a vulnerable customer is defined as a household customer who for reasons of illness, age and of other nature and through a decision of Government and local administration benefits from facilities in connection with electricity supply service.

In Slovenia, the system operator should continue electricity and gas supply within a limit that is – with respect to circumstances – taking into consideration the life and health of the customer in question (vulnerable customer).<sup>17</sup>

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<sup>16</sup> [Commission for Energy Regulation \(Ireland\): Decision Paper on the Provision of Services to Vulnerable customers by Suppliers and Network Operators in the Natural Gas and Electricity Industries](#)

<sup>17</sup> [ECRB Report on the Implementation of the Best Practice Guidelines on the Protection of Vulnerable Household Customers](#)

In New Zealand, a customer is vulnerable if, for reason of age, health and disability, the disconnection of electricity presents a clear threat to their or a member of their household's health or wellbeing.<sup>18</sup>

In Polish energy law, definitions of vulnerable customer have been determined as a household eligible to get a temporary/permanent allowance according to assumptions in the Social Act.

In Great Britain, eligibility criteria can vary between utility providers. Examples of those who may qualify for social tariffs include: a household in receipt of pension credit, a household in receipt of income support, a household in receipt of income based jobseeker's allowances, a household in receipt of child tax credit which includes a disability or severe disability element. The household that meets the requirement for social tariffs will have a low income and will be deemed vulnerable through age (elderly or very young), disability and "fuel poor". In Great Britain, fuel poverty occurs when at least 10% of income is spent on gas and electricity.

In Belgium, the categories of customers matching the definition of vulnerable customers are determined in a federal legal act, and more precisely in a Royal Decree. There are all households with a defined low income and all disabled persons.

In light of the above ways to classify vulnerable consumers, common criteria for defining vulnerable customers do not exist at a European level. Therefore, it is a key point to define criteria for vulnerable customers properly at the national level. It is recommended to combine different criteria in order to avoid abuse. By determining vulnerable customers as *all senior citizens* it is possible to cover customers who should not be qualified (pensioners, elderly consumers with high incomes). Using the income criterion alone might be inappropriate to define vulnerable customers. It is certain that the criteria to be vulnerable customers should be in line with the social, economic circumstances of the given countries and with the existing social network systems. In case the criteria are too loose, the result could be a large number of vulnerable customers, which could strain the government budget, or could disturb competition (if the cost of support is socialized among end-users).

In Belgium – where all households with a defined low income are qualified as vulnerable customers – in order to reduce abuses, usage of social tariffs for owners of summer residences and owners of luxury apartments is forbidden.

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<sup>18</sup> [www.empower.co.nz/files/vulnerablecircumstences.pdf](http://www.empower.co.nz/files/vulnerablecircumstences.pdf)

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## 5. CUSTOMER PROTECTION AND SUPPORT SCHEMES

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In Europe the consumer protection mechanisms and support systems are designed in different ways. The systems are regulated within primary law – energy acts (e.g. Belgium, France, Great Britain, Italy, Romania, Slovenia, Spain), in secondary legislation (e.g. Bulgaria, Great Britain, Greece, Hungary, Italy) and/or in other additional regulations (e.g. Great Britain, Ireland, Spain). There are support systems not specific to the energy sector, but connected to the social security systems and economic and non-economic support systems for vulnerable customers. Some countries base their support systems for low income customers on a social tariff solution, others countries determine support within the framework of Corporate Social Responsibility. It needs to be emphasised that all support systems, including social network systems, must discourage vulnerable customers from excessive and inefficient energy use. Vulnerable customers must be empowered and educated properly on energy efficiency issues. It is also a role for regulators and other consumer bodies and organizations to inform customers on energy efficiency issues. Any system implemented should avoid incentives for high energy consumption and should avoid penalties for energy savings.

### 5.1 General support system

The Third EU Energy Package directives states that “*Member States shall take appropriate measures, such as formulating national energy action plans, providing benefits in social security system to ensure the necessary electricity supply to vulnerable customer, or providing for support for energy efficiency improvements (...)*”.

As mentioned above, there are different ways of supporting low income customers among EU countries. One of the most applied, which is not specific to the energy sector, is based on the countries’ existing social networks. The social schemes which provide benefits in the social security system for the low income should distinguish and identify customers in fuel poverty (with non-settled bills) and ensure necessary electricity/gas supply. In general, mandatory economic support systems which are not specific to energy sector financial support are dedicated to the vulnerable customers’ everyday living. Nearly all EU countries have mandatory economic support systems for vulnerable customers which are not specific to the energy sector.<sup>19</sup> They are included in national social welfare systems. The social network systems differ considerably depending on the market development, national social traditions and countries’ structure. Social protection systems are usually based on social temporary/permanent allowances or benefits from the state budget or communities’ budgets managed by social assistance centres.

In Poland, customers with low income are eligible to get general social support (temporary or permanent allowances). In the first instance, support can be spent on prime necessities (food and clothes), but families still remain in fuel poverty. In Finland financial support for low-income people can be obtained for necessary everyday living from social assistance funds. The payment of the benefits is handled by the municipalities. In Norway, social security systems for low-income people (no other assets) exist based on allowances and a possibility to get public housing, where a certain amount of electricity/gas consumption is included. In Sweden the social welfare system covers protection of low income households. The support includes all necessary goods (electricity, gas, heat). The support is handled at the municipality

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<sup>19</sup> except Slovenia ([ERGEG Status review of the definitions of vulnerable customer, default supplier and supplier of last resort](#))

level where decisions are taken on which household to help. Danish energy legislation contains no specific provisions on “vulnerable consumers”; i.e. consumers that are below a certain income threshold or otherwise unable to pay their energy bills and therefore covered by the general social security legislation.

It is recommended that social protection systems should be income-based, in which energy consumption is granted at lower/preferential prices. Customers eligible to be classified as vulnerable customers should be qualified for support based on their threshold of income.

## **5.2 Support systems within the energy sector**

There is no special economic support system within the energy sector for vulnerable customers in the majority of countries in Europe. The system within the energy sector exists in the electricity sector in Belgium, Bulgaria, France, Great Britain, Greece, Ireland, Italy, Romania, Slovenia, Spain and in the gas sector in Austria, Belgium, Bulgaria, France, Great Britain, Hungary, Greece, Ireland, Italy, Romania. These solutions support different customer categories. In most countries, systems apply to all households with a defined low income. The other beneficiaries of economic support are senior citizens, households with children, disabled persons and it is usually combined with the income threshold.

Economic support systems within the energy sector exist also in some of the Energy Community Contracting Parties: Albania, Bosnia and Herzegovina, Croatia, Serbia and UNMIK.

The approaches to how the economic support system reaches the eligible customers differ widely from social tariffs, rebates and trust funds, network tariffs related discounts and measures not related to grid fees, such as state heating aid, government subsidies, and regulated energy prices for specially defined customer groups. In light of the discussion above, the advantages and disadvantages of the solutions should be noticeable. In EU countries and Energy Community Contracting Parties, economic support systems within the energy sector can be classified as:

1. supply specific regulated prices for certain consumer groups,
2. supply specific prices for certain consumer groups,
3. network specific tariff for certain consumer groups,
4. other solutions.

The specific regulated prices for certain consumer groups exist in the electricity sector in: Belgium, France, Romania, Slovenia, Portugal and Spain; in the gas sector in Belgium and Estonia.

### ***Specific country approach***

In Belgium, social tariffs for gas and electricity exist and are foreseen by the law for vulnerable consumers. These are specific supply regulated prices for certain consumer groups. Customers qualified for the gas social tariffs can be automatically qualified for the electricity social tariff. There are different types of social gas tariffs, depending on the purpose of energy usage (heating in separate flats, water heating, heating installation for a social building). In one region in Belgium (Flanders), all persons in a household are eligible to receive 100 kWh of electricity (on an annual basis), in addition, the household receives 100 kWh for free per year. In Belgium, a special fund for covering costs of social tariffs is contributed by a tax imposed on non-entitled customers (solidarity rule). The setting of the social tariffs is

identified by the cheapest tariff applied by a supplier on the Belgian territory. Therefore, the support for vulnerable customers (the difference between justified, economic level of supply tariff and lower energy price in social tariff) burdens directly all (non-vulnerable) customers.

In Portugal the social tariff was introduced by Decree Law in 2010. The Government created a social tariff for the supply of electricity to vulnerable customers. For the purpose of attributing the social tariff, customers considered vulnerable were determined as those who benefit from social benefits: solidarity supplement for the elderly, social integration income, unemployment benefit, child benefit, and disability pension. The social tariff is calculated by applying a discount on the grid tariff for the low voltage system. The Regulator is responsible for establishing a discount amount on yearly basis in accordance with the Tariff Regulations, taking into account the maximum end-users social tariff change rate of last resort suppliers. The social tariff is financed by the electricity generation centres in standard regime in proportion to the installed power.

In Spain a special social bonus (for large families, a pensioner older than 60 years old with minimum retirement pension, the unemployed, or low voltage consumers (less than 1 kV) with contracted load capacity lower than or equal to 3 kW) was introduced by Royal Decree Law in 2009. The social bonus was determined as the difference between the last resort tariff and the integral tariffs in 2009. The Royal Decree Law also established the percentage to distribute the cost of the social bonus between the generators. At the end of 2010 nearly 3 million customers in Spain had social bonuses.

In Romania, social tariffs are allowed for household customers – the most attractive social tariff (the lower electricity supply price) covers up to 50 kWh on a monthly basis (“block tariffs”).

The support for vulnerable customers similarly as in Belgium, burdens remaining customers. In Romania, there are also financial benefits for heating (gas) for customers who have defined low incomes.

The new rules for vulnerable electricity and gas customers were introduced on 1 January 2009 in Italy. The number of electricity tariff discounts for vulnerable customers referred to 1.5 million families. The estimated value of electricity tariff reduction for vulnerable customers (2008-2010) is €233 million. As far as gas tariff discounts are concerned the estimated total cumulative value of gas tariff reductions for vulnerable customers (2009-2010) is around €715 million. The gas application for tariff discounts is managed by municipalities. In Greece, there is end-user price regulation for all customers and also special lower prices are established for vulnerable customers.

In Albania, social tariffs exist and compensation was €4.2 for 200 kWh/month in 2007. The compensation is covered by an increase in electricity prices. Due to the lack of funds in the state budget in 2008 a “block tariff” was introduced as 300 kWh/month.

In UNMIK three “block tariffs” exist for low income and low consumption customers: 1) up to 200 kWh/month, 2) 200-600 kWh/month, 3) over 600 kWh/month.

In Serbia, for example, social allowances are provided from the state budget. The Electricity Power Company allows discounts to customers defined by welfare centres in two groups: one group with 35% discount for 450 kWh per month for the tariff element “active energy”; all other groups have 35% discount for 350 kWh per month. There are no discounts for gas in Serbia.

In Great Britain, social tariffs are a part of the government’s strategy to eradicate fuel poverty by 2016. Alongside the government’s fuel poverty strategy, suppliers decided to increase their

collective spending on social tariffs by £225 million between 2008-2011.<sup>20</sup> The idea of the Great Britain social tariff is combined with a Corporate Social Responsibility (CSR) issue.

CSR is a form of corporate self-regulation integrated into a business model. CSR policy functions as a self-regulating mechanism whereby business monitors and ensures its active compliance within the spirit of the law, ethical standards, and international norms. The goal of CSR is to embrace responsibility for the company's actions and encourage a positive impact through its activities on the environment, consumers, employees, communities, stakeholders and all other members of the society. Therefore, support for vulnerable customers and companies' activities taken against increasing fuel poverty should be perceived as an element of CSR service provider's strategy.



Figure 5.1. Corporate Social Responsibility (Source: New learning Playbook)

There is a voluntary agreement between British energy suppliers and the Government according to which suppliers are to provide a range of support including social tariffs, trust funds and rebates. In Great Britain, all energy suppliers have to offer social tariffs to help their most vulnerable customers cope with high costs of gas and electricity. Social tariffs are a special rate offered to vulnerable people and they vary between suppliers (Table 5.1).

The Polish Regulator has introduced its understanding of the CSR strategy as “*ethical and environmental elements in business activity of energy companies focusing on effectiveness, transparency, honesty in customer contacts (setting tariffs, quality of service), self-regulation and limited predominance*”. Polish service providers have been encouraged to adopt CSR strategies because of the long term benefits such as: an increase in consumer loyalty, better relationship with community, society, local authorities, development of company, an increase in good image and company value. Within the framework of CSR service providers and companies support vulnerable customers in cooperation with communities (local authorities). The most common forms of support applied by Polish suppliers and distribution system operators cover installation of pre-payment meters, payment in instalments, interests exemptions, shifting the terms of payment, desistance from the debt collection and special agreement with Social Assistance Centres to cover unpaid bills of low income customers. In Poland social tariffs do not exist.

<sup>20</sup> [www.energychoices.co.uk/social-tariffs](http://www.energychoices.co.uk/social-tariffs)



Table 5.1 Vulnerability criteria and types of social energy tariffs in Great Britain

The name of British supplier	Vulnerability criteria	Types of social energy tariffs
British Gas	People in receipt of disability, attendance, allowance, pension credit	- Winter Warmer scheme - it provides payments of up to £30 each for gas and electricity during winter - lowest standard gas and electricity tariffs
E.On	People over 60, living in a house with a max. of three bedrooms and paying by direct debit	- Stay Warm - low rate for a year
EDF Energy	Fuel poor, people who qualify for income support or pension credit	15% discount on current standard tariff prices
Npower's	Dual fuel customers who are most in need (£125 for single fuel users).	- Spreading Warmth - discount of £250 yearly
Scottish and Southern Power	Fuel poor, people on benefits	- Energy Plus - 30% reduction in bills for a family in a three-bed semi.

Source: Confused.com/gas-electricity

In Italy and Spain, there are discounts on electricity network tariffs for certain customer groups (vulnerable customers).

As far as other support systems within the energy sector are concerned, in Austria, there is a Federal States' Heating Aid which guarantees special payments for heating costs during winter time to protect people from the cold. In Ireland, there is a subsidy available from the government to cover up to: a) 2400 kWh units of electricity and electricity standing charges, b) €545 of gas and gas standing charges.

In Croatia, the Government took a decision to exempt from the price increase, low consumption customers in 2008. The difference in prices was covered from state budget. These include:

- tariff customers with yearly consumption under 2000 kWh – no tariff price increase;
- customers with yearly consumption from 2001 to 2500 kWh – only 5% of total increase in prices;
- tariff customers with yearly consumption from 2501 to 3000 kWh – only 10% of total increase in prices.

This support system covered 45% of households.

In EU countries, customers are protected both through economic support and non-economic support. The most common means of non-economic support is protection against disconnection. This solution exists in about 60% of all countries (in electricity: Belgium, Czech Republic, Estonia, Finland, France, Great Britain, Hungary, Ireland, Italy, Luxembourg, Norway, Romania, Slovenia, Spain, Sweden and the Netherlands and in gas: Belgium, Czech Republic, Estonia, Finland, France, Great Britain, Greece, Hungary, Ireland, Norway, Romania, Slovenia, Sweden and the Netherlands). It should be underlined that non-

economic support systems co-exist with economic support systems, so they can create an adequate safety net for vulnerable consumers.

A considerable number of countries protect all households against disconnection (in electricity: Belgium, Czech Republic, Estonia, France, Latvia, Luxembourg, the Netherlands and Slovenia; in gas: Belgium, Czech Republic, Estonia, Luxembourg, the Netherlands, Romania and Slovenia). In other countries this measure is directed to vulnerable customers defined in different ways. In Finland, all low income customers who are in a difficult situation such as with a serious illness or unemployed are protected against disconnection. In Italy, it applies to customers who depend on health safety equipments. In Greece, citizens over 65 living alone or living with other senior citizens are protected against gas disconnection. In Hungary, a special group of disabled customers (whose life or health is in immediate danger in the case of disconnection; this may include the breach of the contract by the customer, or in case of a planned stoppage or the breakdown of the electricity or gas supply) are protected against electricity and gas disconnection. In Portugal, there is an obligation to inform customers with health safety equipments before planned electricity interruption. In Latvia, there is an obligation for public supplier to supply electricity to vulnerable customers. The obligation is set out in the Electricity Market Law, as well as indicated in the licence of public supplier.

The British Regulator (Ofgem) continues to encourage energy supplier to take a proactive approach to helping their vulnerable customers, in particular by developing their social programmes and through the promotion of best practices in the area of debt and disconnection. In September 2010, the British Regulator introduced a modification to gas and electricity suppliers' Standard Licence Condition obliging energy suppliers to take all reasonable steps to determine the status of a customer and the occupants of any affected households before disconnection. The change was aimed at ensuring vulnerable customers are not disconnected in error.

In Slovenia, a system operator should not disconnect vulnerable customers below the electricity and gas limit that is, with respect to circumstances, the limit to ensure that the life and health of a customer, and persons living with the customer, are not threatened.

The supply to vulnerable customers is the responsibility of the system operator. Household customers are obliged to submit evidence to the system operator – a proof of receiving social welfare, and medical certificate, which proves the life and health of the customer or the person living with the customers, depend on medical equipment running on electricity, and the interruption of supply would endanger the life and health of the customer or the persons who reside with him/her. The low income household customer whose life and health and life and health of the persons living with the customer, are threatened, may introduce welfare allowance to system operator in order to avoid gas disconnection. This right can be exercised from October to April. The supplier's costs are covered by the revenues from the use-of-network price.

In the Netherlands a Ministerial Decree on disconnections is in place for the winter period (from October to April). The regulation protects customers against disconnection if the consumers are in the process of debt recovery with a recognised body. In case of customer's refusal to enter debt recovery or if the consumer cannot enter a debt recovery programme, then the service providers can disconnect the consumer from the grid.

Other non-economic support schemes for vulnerable customers are:

- Special service for blind persons with telephone information on bills and a possibility of a personal visit to provide information on the safe use of gas (Greece);

- Indigent customers shall, in particular, have access to the following benefits: payment facilities, deferred payment, prepayment metering device, more frequent meter reading for vulnerable customers: in pensionable age, disabled, chronically sick, blind, partially sighted, deaf, hearing impaired (Great Britain).

Special treatments for disabled customers in gas and in electricity are:

- reading of the meter on a monthly basis in the service location;
- extraordinary, gratis supervision of the meter once in 12 calendar months;
- settlement of the bill in cash in the service location;
- establishment of the measuring place deviating from the general arrangement, but corresponding to the technical and safety rules;
- individual assistance to the interpretation of the bill provided according to the standard service agreement (part of business contract rules) of the licensed operator (explanation, translation, etc. of the bill in the service location);
- other services specified in the standard service agreement of the licensed operator facilitating the participation of the disabled customer in the supply of gas or electricity (Hungary).

In Ireland, suppliers are currently required to produce Codes of Practice in order to provide their customers with a level of customer protection. One of the Codes is devoted to vulnerable customers – Code of Practice for Vulnerable Customers. The Irish Regulator issued guidelines in relation to Code of Practice for Vulnerable Customers to ensure consistency in its preparation.

### **5.3 Social aspects of tariff setting**

As it has been mentioned above, consumer protection mechanisms are designed in each country in different ways. There are obviously advantages and disadvantages to the various solutions. It must be emphasised that the preparation of the support system should be devised so it does not hinder competition and prevents vulnerable customer groups to take an active part in the liberalized market, to receive cheaper offers and to shop around for the best deal. There are still countries with regulated supply prices for household customers (Table 5.2) including special regulated supply prices for the low income or those in certain need (vulnerable).

Regulated supply prices for households exist in 57% of European countries as of 1 January 2010. There are two countries (Poland and Cyprus), where the Regulator is authorized to make decision to stop end-user price regulation instead of the government.

At the beginning of 2010, regulated prices for household customers existed in nineteen European countries and this situation did not change in comparison to 2008. It is worth noting that *Status Review of End-user Price Regulation* document shows the situation as of 1 January 2010 and since this date there has been significant changes in the area of market liberalisation in Ireland. As of 4 April 2011, the Irish Regulator released end-users price regulation for all customer categories. Irish energy suppliers are free to establish supply prices for household customers. It must be stressed that the regulator's decision was preceded by the fulfilment of all conditions included in the road map document adopted by the regulator in April 2010. The Irish road map consisted of:





- requirement for the functioning of at least 3 active suppliers on the relevant market;

- requirement for the functioning of at least 2 mutually independent suppliers, in terms of capital, respecting the fact that each of them must have at least 10% share in market;
- requirement imposed on suppliers related to ESB (the biggest incumbent supplier) to have a fixed market share. For the household segment a 60% share in the market was accepted. With regard to household customers, two additional conditions were established:
  - requirement that market share of households that switched supplier will exceed 10%,
  - requirement imposed on ESB to prove to the regulator that it accomplished rebranding for 60% of its suppliers before the market release.

Table 5.2 Price regulation in EU countries, Croatia and Iceland

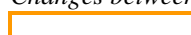
Country	Market opening Final market opening date	Price regulation on 1 January 2010			
		Households	Small businesses	Medium sized to large businesses	Energy intensive industry
Austria	2001				
Belgium	Jan-07				
Bulgaria					
Croatia					
Cyprus					
Czech Republic	2006				
Denmark	2003				
Estonia	2009	2013-01	2013-01	2010-04	2010-04
Finland	1997				
France	Jul-07				
Germany	1998				
Greece	Jul-07				
Hungary	Jul-07				
Iceland					
Ireland	2005		2010-10	2010-10	
Italy	Jul-07				
Latvia	Jul-07				
Lithuania	Jul-07	2015-01	2013-01		
Luxembourg	Jul-07				
Malta					
Netherlands	2004				
Norway	1995				
Poland	Jul-07				
Portugal	2006		2011-01	2010-01	2010-01
Romania	Jul-07				
Slovak Republic	Jul-07	2012-12	2011-12		
Slovenia	Jul-07				
Spain	2003		2009-07	2009-07	2008-07
Sweden	1996				
United Kingdom*	1990				


Price regulation

	YES
	NO
	Closed market
	N.A.

XXXX-XX Scheduled date of price regulation removal

Changes between July 2008 and January 2010:

 End-user price regulation in open market segment removed between July 2008 and January 2010

 Segment closed in July 2008

\* There is some price regulation in Northern Ireland but it accounts for less than 3% of UK consumption - so this report covers the GB situation.

Source: [Status Review of End-user Price Regulation as of 1 January 2010](#), ERGEG

Because of the fact that all conditions mentioned above were achieved, the Irish regulator decided to stop end-user price regulation for all customers.

It should also be emphasised that in some Energy Community Contracting Parties there is still the regulation of end-user prices. According to 2009 data, the regulated prices were established for all customers in Albania, Bosnia and Herzegovina, Montenegro, Serbia and UNMIK. In Croatia, regulated prices existed for households and in FYROM end-user price regulation was kept for all customer connected below 110 kV.

End-user price regulations take different forms, such as setting and approving prices, a price cap or other different elements. It is certain that vulnerable customers should be protected in the open and liberalized market. They are considered more susceptible to suffer from misleading commercial practices. The ERGEG position paper on end-user price regulation<sup>21</sup> stated that vulnerable customers should be protected through social support schemes (social aids ensuring continuous access to energy) without using end-user price-regulation, as emphasised in Section 3.3. Some countries perceive end-user price regulation including social tariffs as a means of protecting customer households and vulnerable customers. ERGEG considers maintaining end-user price regulation an inappropriate and harmful tool for support of vulnerable customers. Moreover, it hinders the efficient and competitive market.

Well functioning competition cannot over the long term coexist with regulated end-user energy prices. Price regulation obstructs the aim of customer protection and full participation through competition by distorting the market and jeopardizing both security of supply and efforts to fight climate change. Actually, retail end-users supply prices, including social tariffs, are established at a lower level than the wholesale market level. Active and alternative suppliers are not able to introduce attractive offers to customers who cover their supply costs. There is limited retail market competition. Supply side regulated prices limit incentives to customers to switch their supplier. Social supply tariffs constrain vulnerable customers to choose a new supplier with the cheapest offer and, in addition, uncovered costs may burden the other customers. On the other hand, any result in uncovered costs requires compensation to energy companies. If customers have access to artificially low prices, there is no trigger to go shopping on the market and find the most attractive offer. Competition is of major importance for low income customers. It is obvious that they must be protected, so social protection support schemes are strictly recommended and non-tariffs based solutions should be preferred as they do not obstruct market mechanisms.

It should be underlined that social tariffs make the structure of prices non-transparent; they are also combined with a cross-subsidy effects. The difference between lower prices for vulnerable customers is covered by higher prices for other customers. Therefore, customers may get inappropriate price signals from suppliers. The prices for other customers are actually unjustified in term of economic conditions. As far as distribution social charges are concerned, there are also unreasonable signals for investors affecting investors' behaviours.

The social protection basic rules should be introduced by market orientated approaches, without administrative intervention in natural mechanisms of the energy market and without distorting competition.

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<sup>21</sup>[ERGEG Position Paper on the End-user energy price regulation](#)

## 5.4 Role of various institutions

Usually the roles of various institutions supporting vulnerable customers are set in the primary legislation, which should clearly define their functions in order to see the line of responsibilities between the various state institutions and energy companies. Authorities' hierarchy is important when solving the social and customer protection issues. Ideally, when each party knows its duties and performs its activities in a responsible and non-discriminatory manner, the common long-term benefit for society is achieved.

Parliament has the main role in passing laws, which set provisions regarding customer protection and the proper social support schemes. The government also plays a key role as these issues involve several ministries like finance, social security and energy. Sometimes the regulatory authorities and energy companies can take an active role and initiate the changes in the law, defining the right and optimal decisions.

In the energy sector, the Government, or a body authorised by it, shall:

- 1) formulate and implement the state policy;
- 2) co-operate with foreign energy institutions and represent, within the limits of its competence, the country in the international organizations;
- 3) draw up a list of public service obligations;
- 4) establish energy supply reliability and service quality requirements;
- 5) determine the duration of customer equipment connection to networks and resumption of energy supply;
- 6) perform other functions established under laws and other legal acts of country.

The parliament passes laws (primary legislation), provisions of which are implemented in the secondary legal acts by ministries, regulators, energy inspectorate and other state institutions. Energy companies and other parties may participate in the preparation process depending on the issue concerned. Core duties of national regulatory authorities are specified in Section 2.2.

The mentioned parties, additional if appropriate, should act, when the customer protection policy is designed through the social tariffs, which seems quite attractive and simple. But in practice, usually it is difficult to implement it due to the increasing number of social needs of various interested groups of customers.

Different application aspects, control mechanism and disputes are an additional burden for energy companies, regulators and ministries. But the main problem is usually the source of the compensation fund. If there is no outside funding, the issue of cross-subsidy and discrimination among customers and their groups appears. That is why it is important that all institutions and energy companies coordinate their efforts in reaching the right decision. In the case of social tariff support scheme the regulators should ensure, that there is no cross-subsidy between the energy activities, and it is done in non-discriminatory way, i.e. at the expense of other customers or their groups. The compensation could be done through the companies' profit, but at the same time it is important to ensure, that the companies' revenues are sufficient in order to provide reliable energy supply and security. The energy companies should also be active in order to prevent bad price signals to customers, because the price, which does not cover reasonable costs, leads to inefficient use of energy. It should be stated clearly, that the social tariffs without special outside funding are a temporary solution, which can lead to further problems, as it is hard to abolish them later.

It may be decided to provide the compensation fund through an additional tariff component; this budget usually should be managed by the transmission system operator, as all customers use its services. But this also leads to the earlier mentioned circulation issue – the greater compensation, the higher the tariff, which creates additional need for the compensation funding, again caused by the higher tariff, etc.

The best solution would be to have a separate outside funding source, which is done through the state (municipality) budget and managed by the ministry of social affairs.

In short, the roles of various institutions can be defined as follows:

- the parliament should ensure the proper primary legislation;
- the ministries should stand and defend their position of the right support schemes;
- the regulatory authority must protect the principles of non-discrimination, non cross-subsidy and the right price signals;
- the energy companies should implement the set tools practically and be active, when their viable financial situation is under threat (for example, to propose the provisions to the legal acts, to make calculations showing the consequences in long-term projections, to communicate with various state institutions and organisations in order to change the situation, etc).

It should be mentioned that energy companies should have a sufficient level of revenues in order to fulfil their functions set in legal acts. Their main responsibilities are the safety of the power system, reliability, operation, maintenance, management and development in observance of the needs of networks users. Otherwise, the reliability of the energy supply and quality may be endangered. A lack of financial resources also creates the possibility of cross-subsidies and discrimination between customers or their groups.

The regulated utility sector and its regulatory institutions are not ideally suited to address this difficult social problem. It is primarily the role of other governmental bodies to deal with social safety issues. Increasingly, regulators need to stress this point in an effort to ensure that governments assume their proper role and minimize the distortions that can result from energy sector/regulatory involvement.

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## 6. ENERGY POVERTY

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### 6.1 Concept

The Third Energy Package additionally strengthens the rights of the customers. Articles 3(7) of Electricity Directive and 3(3) of Gas Directive require that “*Member States shall define a concept of vulnerable customers which may refer to **energy poverty** and, inter alia, to the prohibition of disconnection of such customers in critical times*”. However, the relevant Articles explicitly do *not* establish an obligation to consider energy poverty as part of what constitutes a vulnerable consumer.

There is no consensus on what actually constitutes energy poverty. The lack of a uniform definition should not be a problem *per se* as it allows for solutions that are adapted to national and local conditions. However, it may be appropriate to give guidance on the factors to be taken into account when developing a national definition.

The term “energy poverty” and the term “fuel poverty” are often used interchangeably. The energy sources covered by the term fuel poverty (electricity, natural gas, liquefied petroleum gas, oil, coal, district heating and other solid fuels) are broader than those considered in the energy poverty references in the EU internal energy market legislation (electricity and gas). It could therefore be argued that considering energy poverty alone would exclude those consumers using fuels other than electricity and gas to heat their homes.

The World Health Organisation (WHO) notes<sup>22</sup> that the term “fuel poverty” does not necessarily mean that a household is “poor” in the traditional sense. WHO suggests considering a definition that is based less on a concept of poverty and is more on targeting the home. It argues that the main risk factor is inadequate housing and that fuel poverty is to be seen as a result and not as a cause.

Energy poverty is an interaction of three different policy areas: energy, housing and incomes. Understanding and evaluating energy poverty phenomenon entails an understanding of these areas and their interactions.

Poverty is a highly subjective and relative notion, for its definition is linked to the conception of an “acceptable situation”. Meaning that the perception of a household’s particular poverty depends, among others, on situations such as full or part time employment, on the labour market generally, but also on societal values, the cultural and social background (a fuel-poor household from one of EU countries will probably not be considered as one in a developing country). The notion of energy/fuel poverty is just starting to emerge in most European countries as a particular kind of poverty.

In short, fuel poverty can be defined as a household’s difficulty, sometimes even inability, to adequately heat its dwelling, at an acceptable price. The concrete situation is influenced by the specific heat demand, total heat demand, energy prices and the family budget.

At the national level, definitions of fuel poverty exist in the UK and Ireland. In the UK the definition is: fuel poverty occurs when a household needs to spend more than 10% of its income in order to achieve a heating regime that is adequate for health and comfort. The Irish definition also uses a threshold of 10% of available household income for heating expenses to identify fuel poor households.

The main factors that generate fuel-poverty are low incomes, the “pure” dwellings (requiring significant refurbishment and energy efficiency improvements) and energy prices.

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<sup>22</sup> [WHO’s European Regional Office report on “Housing, Energy and Thermal Comfort”](#)



Fuel poor households make two distinct choices:

- They try to heat their dwelling anyway, using extra heating like an oil-burning stoves, and run the risk of not being able to pay the bills thus ending in debt.
- They decide not to heat their dwellings (or heat it just a little), even if it means living in a cold dwelling.

One possible way to quantify the number or proportion of households struggling to settle their energy bills is to try to count the households that spend more than a pre-defined threshold share of their overall consumption expenditure on energy products. An alternative method could focus on those households that have (or have had in recent times) payment difficulties or are in arrears with energy bill payments.

All indicators suggest that the problem of energy poverty exists in all countries, but with substantial differences from one country to another.

Fuel poverty is a growing problem – according to 2009 findings of the European Fuel Poverty and Energy Efficiency Project (EPEE) between 50 and 125 million people suffer fuel poverty in Europe. This number could easily double due to the current economic crisis and the projected rise in energy costs, and due to the fact that old housing stock, which is particularly vulnerable, accounts for 95% of housing in Europe.<sup>23</sup>

## **6.2 Energy poverty and affordability**

The recognition of energy poverty as a distinct condition involves a parallel recognition that energy poverty may have its own distinct causes. In particular, energy poverty can be caused as much by poor energy efficiency of housing or a lack of access to cheaper substitutable energy sources, highlighted by economic issues such as the level of disposable income and the cost of energy alternatives. Affordability, on the other hand, is foremost an economic category. It has to do with the ability of certain consumers or consumer groups to pay for a minimum level of service. At its simplest, the affordability is defined as the share of monthly household income (or alternatively expenditure) that is spent on utility services, such as electricity, district heating and water. Thus, energy poverty and affordability are linked, with energy poverty being a wider concept than affordability.

Regulation directed at energy prices for particular group(s) of consumers is the major strategy to ensure the affordability of energy used by policy makers (as discussed in Sections 3.3 and 5.3). On the other hand, the mitigation of energy poverty requires targeted measures that address its causes. Consequently, measures that are helping to prevent situations of energy poverty mostly focus on energy prices (for example, “social” or subsidised tariffs), building quality (for example, promoting greater energy efficiency in both public and private housing) and low income (for example, financial assistance).

It is widely recognized that certain individuals are particularly vulnerable to energy poverty. Pensioners and disabled individuals are doubly affected, because in addition to being more likely to be at home for longer hours and hence having higher energy costs in terms of heating hours, they are also likely to be more vulnerable to illnesses and poor health as a result of inadequate heating. Resistance to respiratory disease falls when the temperature is below 16°C. Young children are particularly susceptible to respiratory diseases. Similarly, households with school- and university-age children may have greater requirements for good quality lighting for educational purposes than other houses.

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<sup>23</sup> [www.fuel-poverty.org](http://www.fuel-poverty.org)

Energy/fuel poverty has serious consequences:

1. **Physical health risks and impact.** The national studies established a relationship between fuel poverty and impacts on physical health, which affect firstly vulnerable people, such as children, elderly people and people with chronic health conditions. For example, in the UK, where data and research findings on mortality caused by bad housing conditions are available, it appears that an average 25 000 to 40 000 people die each year (~0,041 - 0,066% of total population), depending on the severity of the weather.<sup>24</sup> In Germany and Romania an estimated average number of excess winter death cases per year in a period longer than ten years amounts to 32 119 (~0,039% of total population) and 17 538 (~0,081% of total population), respectively.<sup>25</sup>

The permanent cold and the humidity in a dwelling can lead to respiratory problems, such as asthma, bronchitis, etc. And in order to find an alternative and less expensive way for heating the dwelling, people choose to install auxiliary heating. However these alternative heaters do not solve humidity, still have an impact on health and may cause accidents and/or carbon monoxide poisoning. Despite these dangers, the auxiliary heating is perceived as a reliable, immediate and manageable means of heating by many people in fuel poverty and agencies working with them. Moreover, some “low performance” dwellings may have also defective electrical devices, which represent major fire hazard.

2. **Mental health risks and impacts.** In each country, people in fuel poverty are susceptible to mental health problems. Bad dwelling conditions can cause anxiety, lead to social exclusion and isolation and have a negative impact on self-esteem and the capacity to manage.
3. **Degradation of dwellings.** Humidity in dwellings can lead very quickly to the degradation of the building. It causes changes to the properties of the walls, doors and windows, increasing thermal loss. The more a dwelling deteriorates, the more it is difficult to keep it warm and to stop humidity.
4. **Excessive debt.** Households on low incomes finding it difficult to pay their energy bill often start to accumulate debts. Paying high energy bills may lead to much lower disposable income for other essentials such as food and transport.
5. **CO<sub>2</sub> emission.** The low energy performance of dwellings and their degradation cause an increase in the energy consumed to keep an adequate heating standard. Addressing fuel poverty should be integrated into the global fight against global warming with actions targeted to households with low income.

Assessing energy affordability is less straightforward than assessing energy poverty. While the process of assessing the resource threshold is unchanged, assessing the subsistence level of energy required to satisfy basic needs, the consumption threshold, is more complex.

Consuming electricity is only one way of satisfying basic energy-related physiological needs. Cooking and heating needs can be satisfied by a number of energy sources including gas, electricity, and traditional fuels. For this reason, electricity tariff increases are accompanied by a substitution to alternative forms of energy.

Social vulnerability and energy poverty are not synonyms. It should be noted that energy poverty and affordability are only weakly correlated. While the concept of energy poverty refers to energy which is not available to the extent necessary and has the resource threshold

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<sup>24</sup> Data taken from European Fuel Poverty and Energy Efficiency Project

<sup>25</sup> [WHO's European Regional Office report on "Housing, Energy and Thermal Comfort"](#)

in the focus, affordability involves parameters that refer to national specificities such as minimum level of consumption and payment capacity.

### 6.3 Poverty reduction policies

Given the trends of recent years, the cost of energy will most likely not go down, but will rather continue to rise. Without housing interventions, the consequences of fuel poverty will increase as will the number of individuals suffering adverse effects on health caused by inappropriate indoor temperatures.

The results of the search and the selection of “good practices” have been organised according to the different targets because fuel poverty is a complex phenomenon and a holistic approach is needed in order to consider all the possibilities in operating in different fields to improve conditions that may influence and impact on this form of poverty.

Public action plays a crucial role in poverty reduction. Different analysis of best practice have shown that the role played by public programmes is crucial in order to combine action in several three key factors including action on prices, direct aid, work on buildings and customer education. This role is vital in setting up consistent systems and programmes that make it possible to optimise public funding.

These programmes must comply with regulations and be appropriate to local conditions and the targeted public, and therefore require considerable funding. While some households are in a position to contribute to the cost of the works – providing adequate funding systems are available – large budgets are needed to design and develop programmes, as they are necessary to pay for interventions in the homes of the most vulnerable.

Actions and measures may work towards different targets. They may work:

- in the social field by strengthening low incomes as possible (households’ income side);
- to reduce energy prices for the vulnerable households (energy price side);
- to improve energy efficiency of buildings occupied by vulnerable households (energy efficiency side);
- in the field of customer education, including a necessary commitment and effort in educating households to the rational use of energy and energy saving.

There can be two possible targets for housing intervention:

1. **Subject – targeted interventions** focused on householders and intended to try to ensure occupiers can afford to obtain sufficient energy to maintain their homes at healthy and comfortable temperatures. This route can be broken down into three options:
  - a) Subsidies paid direct to the householder. The intention being to supplement the householder’s available finances, allowing the householder to purchase sufficient energy. This leaves control in the hands of the householder, who may decide to use the subsidy on energy or not.
  - b) Payments made to the energy supplier for the householder’s energy. This can cover the full cost of energy, or be a contribution. This is more likely to ensure that there is sufficient energy available or used.
  - c) Control of the cost of energy by tariff (special or social tariff for vulnerable customers). This is intended to make energy available at a cost affordable by households.

This approach is necessary to protect vulnerable households and to avoid the immediate consequences of energy inefficient housing. It will reduce excess winter deaths and the prevalence of any other temperature-related health effect. However, it is to be considered as short term “first aid” measure and is not recommended as a long term solution: with energy prices expected to rise in the future, larger groups of the population may face the problem of being unable to pay for sufficient heating which will make the total costs of subsidies required higher every year without curing the actual problem.

It should be noted that there is a major disadvantage with option (c) in that it does not provide any incentive to improve the energy efficiency of housing and so does nothing to reduce the contribution to climate change from domestic energy usage.

2. **Object – targeted interventions** focused on improving the energy efficiency of housing to reduce the cost of maintaining healthy and comfortable temperatures (more details on the energy efficiency can be found in the next subchapter).

The two approaches are not mutually exclusive, and ideally should be used in combination. The subject-oriented approach is most applicable to avoid the immediate health effects of energy inefficiency; while the object-oriented approach leads to a more permanent reduction in the numbers exposed to threats to health from low indoor temperatures with a longer term vision. In addition, it helps to reduce the contribution to climate change from domestic sources.

### **Fuel Poverty: Specific results**

The analysis of fuel poverty-related specific results in any national contexts has to consider that fuel poverty and its relations with social, economic, health, energy and environmental impacts, should be connected with increasing energy consumptions and costs.

Mediterranean Countries have particular **climatic conditions in summer** and hot periods are increasing, creating a new critical state for vulnerable people (elderly people and children above all). In these countries the ability to keep the home adequately warm is becoming absolutely equivalent to the ability of keeping the home adequately cool in summer.

According to WHO data, in Kyrgyzstan more than 60% of the population is below the poverty line. There is an intension to shift heating systems to electricity as the country has resources to produce sufficient energy at affordable price as electricity is seen as one of the cheaper energy resources. Consequently, the focus would be **more on production and less on the saving of energy**.

Obviously every good practice in fighting energy poverty needs to be supported by a communication and training plan. Information is necessary to make citizens, key-actors and other subjects aware of the opportunity whereas training allows transfer of knowledge and experience to technicians, decision makers and others.

### **6.4 Case for energy efficiency**

Energy efficiency has enormous potential as a poverty reduction policy. A number of governments and other relevant stakeholders have realised the importance of the energy efficiency measures as a tool to combat energy poverty as well as the way for consumers to reduce their energy consumption and lower their energy bills. The EU is strengthening its work in the energy efficiency area with consumer interests in mind. With access to energy efficient products and services and related funding mechanisms for energy efficient

refurbishment of existing buildings, the right information and/or through changes in behaviour, consumers can significantly improve their energy efficiency.

There are a number of measures to help consumers. These actions are designed to give support to citizens to improve energy efficiency and reduce greenhouse gas emissions.

Providing information to consumers on how much energy they use in their daily lives is the first step for them to take control of their energy consumption and expenditures. One successful example is energy labelling. As energy becomes more expensive, the actual energy usage of appliances becomes an important consideration in affordability. The EU Directive on energy labelling<sup>26</sup> has had a significant effect in encouraging greater awareness of the energy running costs of electrical appliances, as well as putting pressure on manufacturers to reduce the energy consumption of relevant products (washing machines, fridges, etc).

Likewise, the EU Buildings Directive<sup>27</sup> has focused attention on improving the energy performance of buildings, and providing information on the energy consumption of buildings, enabling consumers to judge better how much the energy bill will be and if investments are worthwhile. Under this directive, the new buyer or tenant of a building must receive an energy performance certificate for the building. This certificate should include not only energy efficiency values for the building, but also recommendations on how to improve its energy performance cost-effectively, a recommendation which will in fact become obligatory for all EU Member States once the recast of the Buildings Directive becomes applicable (January 2013). In the recast Directive, Member States are encouraged to include information on financial incentives to be provided to owner and/or tenant in the energy performance certificates. The Directive also requires that the energy performance of boilers and air conditioning systems are inspected at regular intervals.

The energy efficiency of new housing can be controlled through regulations. This approach will have benefits in the long term, but as existing housing makes up more than 90% of the housing stock of countries and the renewal rate is currently around 1% per year in many countries, the impact will be slow.

Action should (mostly but not exclusively) be directed at improving the energy efficiency of the existing housing stock, particularly of older housing which will be the most energy inefficient. This could involve improving and making more efficient the heating system as well as the ventilation options, improving the thermal insulation of the dwelling, or both. Public awareness may be raised by adopting an energy rating “labelling” system, where each dwelling is rated (similar to the energy rating system for appliances). Any intervention should be for all housing sectors – the public and the private sectors, and both the rented and the owner-occupied. This approach cannot be immediately effective, but will in the long term provide a more effective solution than the subject-targeted approach.

Energy efficiency measures have a number of advantages. Unlike social tariffs or welfare payments, energy efficiency programs are one time cost that delivers an ongoing benefit. They do not distort market mechanisms as prices are market based and billing is consumption based. Furthermore, reduced final energy use is beneficial not only to individual households, but to the entire country and global community as a whole. Less coal and imported fossil fuels are used and hence emissions of greenhouse gases and other pollution are reduced.

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<sup>26</sup> Directive 2010/30/EU of the European Parliament and of the Council of 19 May 2010 on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products

<sup>27</sup> Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings

## Energy efficiency measures

Efficiency improvements can be done through different activities such as building renovation, weatherization, the installation of heat meters and control devices, or by upgrading building infrastructure.

**Heat meters and control devices:** Installing meters and controls are relatively low-cost activities that are essential in helping low-income consumers take control of their energy consumption and expenditures. For electricity and natural gas, measures include timers and thermostatic controls. For communal heating, heat cost allocators and radiator valves are used.

**Upgrades:** Installation of new windows, doors, roof tiles, heating pipes, and insulation in ceilings and walls all curb heat loss. Replacing incandescent light bulbs with compact florescent bulbs saves an average of two-thirds to three-fourths the amount of electricity for comparable lighting levels.

**Weatherization:** Sealing windows and doors, caulking around windows, installing thicker curtains, cleaning the insides of radiators, placing thermal reflective sheets behind radiators, and moving furniture away from radiators improve energy efficiency without the costs of installing anything new.

**New Infrastructure:** Installing a new building boiler, automatic door closing systems, and automatic lighting regulation systems are computerized ways to reduce consumption.

*Source: Maintaining Utility Services to the Poor: Policies and Practice in Central and Eastern Europe and the former Soviet Union.*

<http://siteresources.worldbank.org/ECAEXT/Resources/publications/Maintaining-Utility-Services/14804.pdf>

However, disadvantages should not be neglected. Many actors, both within and outside of government, are needed to coordinate and successfully implement an energy efficiency program. Also, it is difficult to target the most vulnerable: the poor and non-poor live in intermixed neighbourhoods and buildings throughout the region; hence it is difficult to target those who are in the greatest need of assistance. An additional problem may be lack of domestic energy efficiency knowledge – the lack of comprehensive information on energy efficiency deters many policy makers from choosing a relatively new and untraditional approach.

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## **7. CUSTOMER EDUCATION**

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### **7.1 Challenges of consumer education**

Consumers in the EU are bombarded with messages, advice and warnings. Consumer education is crucial in helping customers make meaningful choices and to use their rights when faced with information overload.

It is necessary to start consumer education at an early age, to influence the skills, attitudes and knowledge of the next generation of consumers. But there is also the issue of “lifelong learning”. In recent years, the need for consumer information and education has become increasingly evident at a European level, given a number of economic and technological developments.

Consumer information on its own does not suffice. It is highly necessary to complement this information with consumer education which addresses skills, attitudes, and knowledge to help individual consumers look for, understand and apply consumer information.

Individual consumers are not experts. To guide them some countries have established independent advisory services. Examples exist in Sweden and the UK. In Sweden, through the Consumer Electricity Advice Bureau, local consumer counsellors based in Swedish municipalities help the consumer with pre-purchase information concerning suppliers and their prices. They can also give advice how to get a dispute settlement.

In the UK the regulator Ofgem collaborates with a citizen front line organisation, Citizens’ Advice, to train councillors so citizens receive simple, independent and targeted information about energy consumption, savings, how to manage energy payments and how to find funding for domestic energy improvements (e.g. insulation).

Such help can go a long way in improving trust in the market place and confidence, particularly for “newcomers” to liberalised energy markets.

Consumer education on market reforms should be a permanent task for state institutions, regulators, consumer organizations, business organizations, academics and others.

### **7.2 Customers in the energy market**

The customer is an important player in the energy market. Customer decisions impact how the market operates and gives feedback of its proper functioning. Consumers are a market force.

According to the Electricity Directive 2009/72/EC, the customer means a wholesale or final customer of electricity. The wholesale customer means a natural or legal person purchasing electricity for the purpose of resale inside or outside the system where s/he is established. The final customer means a customer purchasing electricity for his/her own use. In the mentioned legal act there is no definition of the vulnerable customer.

Usually customers are represented by their associations. They help them reach their goals in a more efficient way and provide the needed information. Their active role in the market development process is crucial, as they attempt to balance the influence of energy companies. The number of complaints and the variety of themes (concentrated and fragmented markets, dominant players, high entry barriers, regulated wholesale and retail prices, lack of unbundling, etc.) show the complexity of the market. The increasing number of customers switching leads to a conclusion that there are, or are not, the right conditions created to foster customers’ choice.

In practice, the purchase agreement reflects the relation between the customer and the supplier. Standard agreements, especially for households, approved by the ministry or regulator may help avoid discriminating treatment. But the availability of detailed and objective information plays an important role in signing contracts. Customers should know their rights and options, such as the smart metering features, the billing terms and conditions, the supply quality criteria, the price structure and similar information. This is the reason why it is important to educate consumers and publish all necessary information about the electricity and gas markets in easily accessible places and to provide a special call-centre to answer questions.

The Second and Third Energy Package, as it was mentioned earlier, introduced the concept of vulnerable consumer classes. Their interests should be represented on the retail market, because of their weak bargaining power and relatively high energy bills in comparison to their household budgets.

### **7.3 Consumers in the regulatory process**

The regulator's main function is to find a balance between the consumers' and the energy companies' interests. Usually the latter party has good lobbying power, so the regulator should mainly concentrate on defending consumer interests. They are related to:

- reliable supply, affordable prices, environmentally acceptable energy products;
- competition – improved efficiency and less price increases;
- increased transparency, market discipline, reduced corruption, less discrimination;
- simplified customer switching procedure; informative and understandable billing;
- more efficient utilization of existing and new infrastructure, etc.

In order to reach these goals, conditions for the consumers' active participation in the regulatory process should be created. Consumer education and sufficient information is the key for their knowledge and increased involvement. It can be done through various educational means:

1. special trainings (especially for senior citizens), conferences and seminars in various regions of the country, particularly in small towns;
2. special website for customers, providing an electronic price calculator;
3. special call-centre with the short and easy to remember telephone number;
4. various media (TV, radio, newspapers) or tour campaigns, involving the different market players, representatives of consumer organizations and social assistance centres, etc.

Customer and regulator relations could be strengthened through direct communication, in particular. For example, the regulator may set periodical meetings during the week with the respective specialists of the regulatory authority. This would allow for consumers to plan their time and get information or clarification in a more efficient way. It would also help the regulator to get feedback from consumers regarding market operations and urgent issues.

Measuring the expectations and satisfaction of different consumer classes can also provide good feedback for regulators, highlighting those elements in the distributor/supplier – consumer relationship that are important for end-users.

Consistent news publication of decisions in a simple and understandable way, provided on the regulator's website also helps to foster a better understanding and improve the relation



between the customer and the regulator. Besides, information provided in this way is more efficient than repeated explanations on the telephone or in writing.

Consumers or their associations are free to participate in regulatory public hearings. They should be invited and all needed material should be published in advance. This helps the regulator to get feedback in order to take proper regulatory decisions, and at the same time provides necessary information or clarifications to consumers or their associations.

A competent representation of consumers in the energy policy area is a further safeguard for better policy-making and of identification and exchange of best national practices or an indicator of bad practices so that repeated mistakes can be avoided in the future.

The consumers' general interest can be simplified and categorized into two groups:

- short term interest: low prices;
- long term interest: reliable supply.

The regulator should focus on both interests in a balanced way. The latter one could mean adequate pricing (not necessarily low prices).

#### **7.4 Consumers rights and awareness**

The energy market should function well, when all players, especially consumers, know their duties and rights. General and basic consumer rights are:

- to receive a reliable energy supply;
- to choose the supplier;
- to have access to transparent and objective information;
- to be protected against the misleading or unfair terms and conditions of the agreement;
- to give an opinion (the possibility to complain).

Important consumers' duties and rights could be set by law. Concrete and detailed consumer duties and rights are usually set in Energy Supply Rules approved by the ministry or regulator.

General and basic consumer duties are:

- to pay the bill on time;
- to provide timely and accurate information to supplier/distributor, particularly when it changes;
- to allow and/or assist meter reading etc.

It should be emphasized that easy access to information is a key prerequisite for consumer education and protection. Their rights and awareness of these are necessary for the successful functioning of a liberalized market. As it was mentioned, all relevant state institutions and energy companies should participate in consumer awareness campaigns, including making needed information public and to update it periodically. Special attention should be given to simplifying the process of choosing a supplier, because it is one of the main elements of a competitive market. In order to make sure that customers are aware of energy prices, any social subsidies processed via the electricity bill should be clearly distinguished from the electricity price, which they would pay without this social aid.

## 7.5 Promotion of the rights of energy consumers

An efficient approach to reinforcing the rights of energy consumers is the initiative launched in the EU for the proposed Energy Consumers' Charter. The consultation process resulted in over 70 contributions from across Europe. As a follow-up, the European Commission organized the Conference on the Promotion of the Rights of Energy Consumers (Brussels, May 2008) that proposed a new approach to informing consumers by means of a European Energy Consumers' Checklist.<sup>28</sup> National stakeholders were invited to provide answers that would form an easily accessible data pool containing comprehensive local information in the consumer's language.

The same conference launched the Citizens' Energy Forum<sup>29</sup> with focus on specific retail issues, as announced in the Third Package. A European retail market for energy can only be created gradually. The Third Energy Package is focused on improving the functioning of the retail market so as to yield real benefits for both electricity and gas consumers. A number of issues have been addressed in the new legislation, but adequate implementation needs further monitoring and a discussion platform, one of them being Citizens' Energy Forum (London Forum). In this Forum all parties that have a role in ensuring that competition in energy markets is established, in a way that is most beneficial to consumers, are represented. This includes electricity and gas companies, network operators, government representatives, regulatory authorities, independent dispute resolution bodies, as well as organisations that represent consumer interests.

The overall aim of the Forum is the implementation of competitive, energy efficient and fair retail markets for consumers. The focus of the Forum is twofold:

- The regulation perspective: well functioning markets serving final consumers and the elimination of remaining obstacles for new entrants;
- The consumer perspective: the implementation and application of rights benefiting individual energy consumers and public service obligations with social perspectives, like the obligation to protect vulnerable consumers.

The first three meetings of the Forum have drawn attention to three critical topics: (i) the development of guidance on billing, (ii) complaint handling and (iii) ensuring that new technologies, such as smart meters, are introduced after careful consideration of how costs and benefits are shared between consumers and energy companies.

In 2011, the Forum focused on: (1) faster and less expensive ways to solve consumer disputes with energy providers without going to court, based on best national practices; (2) the competitive retail market that benefit consumers (supplier switching, billing, customer empowerment); (3) the role of consumer-friendly tools for individuals, such as online price comparison websites, in helping consumers find the best offers in gas and electricity supplies; (4) smart meters and smart grids; and (5) demand response schemes including the European Commission's proposal for a Directive on Energy Efficiency which would help individual consumers across the EU to make their homes more energy efficient and reinforce the consumer dimension.

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<sup>28</sup> The European Energy Consumer Checklist is a set of questions put together by the European Commission to allow consumers to compare information on energy markets across member states. The questions are exactly the same for each member country and cover a range of topics of interest to consumers of natural gas and electricity. <http://www.energycustomers.ie/electricity/euchecklist.aspx>

<sup>29</sup> [http://ec.europa.eu/energy/gas\\_electricity/forum\\_citizen\\_energy\\_en.htm](http://ec.europa.eu/energy/gas_electricity/forum_citizen_energy_en.htm)

## **The European Consumer Consultative Group on Energy (ECCG)**

The ECCG is one of the sub-groups active within the Citizens Energy Forum. The ECCG is a network of consumer representatives that the Commission consults on problems relating to the protection of consumer interests in the Member States. The ECCG:

- Constitutes a forum for general discussions on problems relating to consumer interests;
- Gives an opinion on Community matters affecting the protection of consumer interests;
- Advises and guides the Commission in the formulation of policies and activities affecting consumers;
- Informs the Commission of developments in consumer policy in the Member States.

It was emphasised that the European Commission should take account of the collective views of the London Forum so that the technical rules and policy now under development to deliver a single energy market reflect what consumers want and need from the process.

At the Fourth London Forum (26-27 October 2011), Lord Mogg, Chair of CEER, called for a new “customer-focused” approach: *“We need to inject a customer-focus into the technical work being undertaken on behalf of consumers, be it network codes, energy efficiency, energy infrastructure regulation or wholesale markets, to make sure that customer needs are efficiently balanced against other objectives.”*

## **7.6 Priorities in customer education**

The findings of the EU retail electricity study<sup>30</sup> showed that EU consumers are not well aware of many aspects of the market, such as their consumption, alternative tariffs and suppliers, contract terms, consumer rights, and consumer protection bodies. Moreover, many consumers still struggle to find and understand several pieces of information on their electricity bills and in a number of countries consumers have limited access to their personal account details. Hence, consumers should be provided with more suitable information that allows them to actively participate in the market.

The European Commission currently supports a number of consumer education tools. Some of them are provided below:

- The Europa Diary<sup>31</sup> is a school diary aimed at students between the ages of 15 and 18, helping young people to become more aware of their rights and provide them with information on topics such as health safety, sustainable consumption and enabling them to make more informed decisions as consumers.
- The EU Intelligent Energy Europe Programme (IEE)<sup>32</sup> supports numerous actions to inform and educate consumers, helping them reduce their energy use. The programme supports multi-lingual web portals such as BUILD UP<sup>33</sup> to provide homeowners and tenants with energy efficiency advice; or TOPTEN<sup>34</sup> to present them the best appliances

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<sup>30</sup> [Functioning of retail electricity markets for consumers in the European Union](#), November 2010

<sup>31</sup> [http://ec.europa.eu/consumers/empowerment/cons\\_education\\_en.htm#diary](http://ec.europa.eu/consumers/empowerment/cons_education_en.htm#diary)

<sup>32</sup> <http://ec.europa.eu/energy/intelligent/>

<sup>33</sup> [www.buildup.eu](http://www.buildup.eu)

<sup>34</sup> [www.topten.eu](http://www.topten.eu)

available on the market. To further raise confidence and awareness about energy-efficient technologies, the programme co-funds independent compliance tests as well as large scale mobilisation campaigns targeted to citizens and using various media, including social networks, radio and televisions. Vulnerable consumers have received a particular attention in the IEE programme as more than 30 co-funded projects have aimed to unlock the potential for energy efficiency in the social housing sector.

- DOLCETA<sup>35</sup> is a web-based tool which offers consumer education modules targeted at teachers and trainers, as well as consumers. Its online modules focus on different consumer topics, energy being included in the section on services. Electricity and gas feature prominently since they are of direct relevance for households. DOLCETA covers different issues like provision of electricity and gas, information before purchase, tips and points to focus when buying electricity and gas, and advice on after sales issues such as complaining.
- The European Integrated Master Programmes<sup>36</sup> offer skills to future professionals to work as multipliers of consumer policy at NGOs, and in public and business sectors.

In short, priorities in consumer education should be to educate young people, who are a vulnerable target group, and who will be the consumers and the parents of tomorrow, educate vulnerable adults in cooperation with adult education institutions and social services, fill the existing gap at university level in consumer protection and integrate consumer interests into the education policies.

All customer education programmes and activities require a strong dedication and continuous cooperation of different government bodies and other relevant stakeholders dealing with consumer protection and social assistance issues.

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<sup>35</sup> [www.dolceta.eu](http://www.dolceta.eu)

<sup>36</sup> [www.emca.info](http://www.emca.info)

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## 8. CONCLUSIONS

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Energy sector reforms are taking place throughout the European Union and further to the East, including Inogate partner countries. With energy market liberalization, these countries have made some progress in passing on the economic costs of energy to the consumer.

The price of energy depends on a range of different supply and demand conditions, including the geopolitical situation, import diversification, distribution costs, environmental protection costs, severe weather conditions, or levels of excise and taxation. The different new scenarios<sup>37</sup> that take into account the latest economic developments, energy price environment of recent years, and new policies and measures implemented in the EU, imply considerably higher energy prices in the next two decades compared to current levels.

Increased energy prices and payment enforcement cause a significant financial burden on many customers, especially for the most vulnerable ones. For these reasons it is necessary to implement a range of measures to mitigate the effect of increasing energy prices.

Rules and regulations concerning this issue are of utmost importance. The legal framework for customer protection provided by the Third EU Energy Package is a good example of a legal framework for customer protection contributing directly or indirectly to the improvement of consumer welfare in the energy sector. The main objective of the legislative package is to put in place the regulatory framework needed to make market opening fully effective while putting the rights of citizens at the centre of the market opening process with strong obligations on relevant authorities to protect vulnerable energy consumers.

In this context, defining vulnerable customers is one of the steps to be undertaken. There is no common understanding or definition of vulnerable customers. Vulnerable customers should be defined in terms appropriate to national circumstances taking into consideration some general rules and characteristics. The level of monthly income is a commonly used criterion for defining the group of vulnerable customers, but using income alone would be certainly inappropriate for defining vulnerable customers. Additional criteria may be introduced such as health condition, age, single parent families, large families, customers in remote areas, etc. However, it is anticipated that the actual number of consumers that fall within the category of vulnerable customers will be quite low.

Different countries have different solutions to the vulnerable customer protection depending on the maturity of the energy markets and national traditions and structures. Some countries have chosen to aim the economic support towards different sectors, such as electricity or gas, while other countries have chosen to provide a more general support to low income groups. The options in countries which have a financial support system within the energy sector may vary from discounts on the network tariff, social tariffs, rebates and trust funds to measures not related to grid fees such as state heating aid and governmental subsidies.

Some countries have regulated energy prices for particular customer groups, mostly households. However, a number of energy regulatory bodies, including ERGEG/CEER and ECRB made clear that regulated prices distort the functioning of the market and should be abolished, or where appropriate, brought into line with market conditions. Where regulated prices exist, they shall be increased year after year in such a way that they reach a market price level and that subsidies do not need to be maintained. While the need for protection of vulnerable household customers is fully acknowledged, this challenge should only be addressed with market oriented instruments.

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<sup>37</sup> [EU energy trends to 2030](#), 4 August 2010

Energy poverty reduction policies, including energy efficiency measures are yet another task to be tackled. An evaluation of the impact of energy prices on fuel poverty is an important consideration when formulating the policies that will aim to eradicate fuel poverty in vulnerable households.

The easy access to information is a key prerequisite for consumer education and protection. Their rights and awareness are necessary for the successful functioning of liberalized markets. Empowering consumers with focus on customer education will ensure that not only are consumers better off as a result of market opening and competition, but can recognise the benefits of a competitive market.

Ensuring secure, safe, sustainable and reliable energy supplies at affordable prices while taking into consideration consumers' rights and needs with a special focus on safeguarding vulnerable customers is a complex task for energy policy makers. All parties that have a role in ensuring that competition in energy markets is established in a way that is most beneficial to consumers should be actively involved. This should be a permanent task for state institutions, regulators, consumer organizations, business organizations, academics and others. Regardless of the leading role, communication and collaboration among all stakeholders involved are of vital importance for a timely and effective customer protection.

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