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Status Review on customer access to information on energy costs, sources and energy efficiency schemes

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INFORMATION PAGE

Abstract

This document (C13-CEM-65-04) presents a status review on customer access to information as of 1st January 2013, with an emphasis on energy costs, sources and efficiency schemes.

This Status Review seeks to identify strengths and weaknesses in current efforts to empower customers in their decision-making relating to energy supply. It is an important step in understanding the width and depth of information available to customers. The review illustrates how key information on the cost and sources of energy and of efficiency schemes is made available to final energy customers. Such information includes:

- the breakdown of cost components;
- national and international comparisons of end-user prices;
- different energy mixes;
- how to produce energy at home; and
- opportunities to participate in energy efficiency schemes.

By providing clarity on the information currently available, as well as the providers of such information and how it is distributed to customers, this document creates opportunities to address identified weaknesses, for example through future research into strategies to ensure that different types of customers can access the information they need.

Target Audience

European Commission, energy suppliers, traders, gas/electricity customers, gas/electricity industry, consumer representative groups, network operators, Member States, academics and other interested parties.

Keywords

Retail markets; bills; customer protection & empowerment; prices, contracts, tariffs, affordability; energy efficiency & energy savings, renewables

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Related Documents

CEER documents

- CEER Consultation on draft advice on "green" electricity, December 2013, Ref. C13-CEM-64-05
- CEER-ACER Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2012, November 2013
- A 2020 Vision for Europe's Energy Customers, Joint Statement with BEUC, November 2012 (updated December 2013)
- Status Review of Customer and Retail Market Provisions from the 3rd Package as of 1 January 2012, November 2012, Ref. C12-CEM-55-04
- Benchmarking Report on the roles and responsibilities of NRAs in customer empowerment and protection as of 1st January, October 2011, Ref. C11-CEM-46-03
- ERGEG Guidelines of Good Practice for Retail Market Monitoring for Electricity and Gas, October 2010, Ref. E10-RMF-27-03

External Documents

- Directive 2009/28/EC on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC
- Directive 2012/27/EU energy efficiency, amending Directives 009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC

- European Commission Working Groups:
  - European Commission Working Group on Billing
  - European Commission Working Group on Electronic Billing
  - European Commission Working Group on Price Transparency

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EXECUTIVE SUMMARY

Background

Access to information on cost and quality is critically important to customers when selecting a product or service. This also applies to energy products, be they for household or industry customers. Information on the costs and sources of energy are arguably among the most important criteria for customers when selecting an energy supplier. This information is therefore likely to influence the choices of final customers.

The more complex a market is – for instance, due to a growing number of suppliers and/or an increasing variety of products – the more vital it is for customers to be informed about current developments and their future implications. Such considerations apply in particular to "young markets" (and one could place Europe's liberalised energy markets in this category) – since customers have to become acquainted with the new market conditions. This Status Review takes as its starting point the need for energy customers to have access to information about the costs and sources of energy and of efficiency schemes. Since the end-user price for energy is a complex composite of variable energy costs, network tariffs, taxes and levies, their evolution may require particular analysis. Among other things, an understanding of the drivers of end-user prices could help customers distinguish between cheaper and more expensive energy offers and, eventually, could provide the basis for switching supplier.

An ever-growing amount of Europe's energy is being produced from renewable sources, including hydro, wind, solar and biomass. This contributes significantly to reducing carbon emissions. In recent years, we have witnessed a growing interest by customers in electricity generated from renewable sources and the willingness to use this electricity can be observed throughout many European countries. The source of the energy being supplied can act as a sort of "quality criterion" for energy – e.g. because one kind of energy production pollutes the environment less than another kind. Information about the sources of energy and their wider implications for the environment, the economy and society may thus have additional impact on consumer choice of energy supplier. Nevertheless, electricity customers' lack of understanding about issues related to disclosure of the source of that energy highlights the importance of providing them with adequate, reliable and consistent information. CEER is therefore also developing advice on 'green' electricity. [1]

This report provides a first look at how such information is made accessible to customers; which market actors provide what information and in what ways; and, importantly, whether this information is easily understandable by energy end-users.

[1] CEER public consultation on advice on "green" electricity, deadline 7 February 2014

Objectives and contents of the document

The findings in this document may be useful as input to the future work of national regulatory authorities (NRAs), CEER, BEUC and other parties interested in promoting customer information and customer understanding of energy retail markets across Europe. In particular, it has informed CEER's draft advice on green electricity, as regards availability of information on the declared energy sources for 'green' electricity supply.

The specific issues addressed in this report include:

- the type of information on the cost and sources of energy and of energy efficiency schemes;
- the availability of such information on energy bills and/or elsewhere, including the internet and offline sources; and
- the identification of market participants who provide this information to energy customers.

The report is structured as follows:

- The introduction briefly sets out the background of the Status Review, highlighting its objectives, purpose and methodology;
- Chapters 2 and 3 present insights into customer access to information on the cost (Chapter 2) and sources of energy (Chapter 3);
- Chapter 4 examines the roles and functions of various market participants in informing customers about opportunities to participate in energy efficiency schemes;
- Finally, Chapter 5 highlights the key strengths and weaknesses of customer information currently available in the energy sector. This section also identifies future challenges in making reliable information more widely available.

Brief summary of the conclusions

The Status Review reveals that information on many elements of energy costs, sources and energy efficiency schemes is made available by various market actors in multiple ways. A survey among NRAs suggests that detailed information on the cost and sources of energy can be found online and that the most important information is available on energy bills. This is more so with respect to the *cost* rather than the *sources* of energy. The widespread availability of information on sources of energy – especially the way energy is produced – suggests this is of growing relevance for customers. Importantly, from the NRAs' perspective, regulators are not alone in providing this information; many other market participants do so as well, including energy suppliers and, to a more limited extent, distribution network operators (DSOs). The Status Review was not able to assess how *customer friendly* the information provided is in practice. For instance, it is one thing to have information is online, but if this information is stored away on an out-dated website, customers will not be able to locate it quickly. The results of the NRA survey suggest that, in this sense, accessibility may vary across and within countries. Without further investigation and for a number of possible reasons (including different company policies, legal frameworks and customer behaviour trends), availability of information should not be equated with ease of access.

With respect to energy efficiency schemes, the report identifies government authorities as the actors most active in informing customers about such schemes. A growing number of schemes are being implemented throughout Europe, offering a range of options in order to facilitate broad public participation. However, whether information reaches the groups of customers who might benefit the most from the proposed schemes is open to further investigation. Likewise, how beneficial these schemes are for customers – e.g. what kind of energy and cost savings potential is realisable for which groups of customers – is a question not considered in this Status Review.

1 Introduction

The CEER/BEUC Joint Statement on a 2020 Vision for Europe's Energy Customers (hereafter the Vision) proposes four key principles for putting customers first in the energy market: simplicity, reliability, affordability and protection & empowerment. One of the first steps towards implementing these principles is to explore the information available to customers on key aspects of energy supply. There can be little doubt that the cost of energy and, increasingly, the origins of energy are important to customers when (re)-considering their choice of energy supplier. While energy price is arguably the central criterion for selecting a supplier – for instance, by customers using price comparison tools – environmental considerations may contribute to a greater interest in energy sources when deciding which supplier to choose. Therefore, it is essential to explore what information is available to European energy customers on the cost and sources of energy, as a first step towards further implementing the key principles of the Vision. Furthermore, since energy efficiency is a key European policy area, it has become important to inform customers about saving energy and how to participate in energy efficiency schemes.

1.1 Objectives and purpose

Knowing which information on energy cost, sources and energy efficiency schemes is available to customers is important for a number of reasons. Firstly, information can empower customers to build a more solid basis for their *economic decision-making*. Being informed about core market conditions, including the price and quality of products or services from different suppliers, is a precondition for informed decision-making.

Secondly, information on the end-user prices for energy, its various components, price trends, the origins of energy and their multiple implications for customers in economic and environmental terms is also key to *market transparency from a customer's perspective*. Customers are entitled to understand what they pay for, why, and where their energy comes from. However, since the liberalisation of energy markets, energy has become a more complex issue for customers – parts of the market are regulated, others are competitive; often there is a choice of suppliers offering new products and services. Technological innovations, for instance smart metering, or ways of producing energy at home for residential customers constitute new challenges, as do demands to save energy or use energy more efficiently – something most customers had not been involved with in the past. Hence, at least some information is needed to stay current with the changing nature of energy consumption and production from a customer perspective.

Thirdly, it is important to know who is providing the information. In the case of information about electricity and gas, market participants such as energy suppliers, DSOs and NRAs, as well as local and national government authorities and third parties, have different functions, roles and interests. Sometimes, they might even offer competing perspectives on and interpretations of market functioning, price setting mechanisms, energy price trends and characteristics of the origin of the energy. While this should generally enable customers to make up their minds independently and make a free choice, awareness of who provides which information and in what ways is important to detect any potential malpractice (e.g. misleading customers).

This Status Review therefore aims to gauge whether information is available for customers to understand current end-user price developments and where their energy comes from. It attempts to provide answers to the following questions:

- What information on the cost and sources of energy and efficiency schemes is available to customers?
- Who makes this information available and where can customers find it?

The objectives of this Status Review are as follows:

- To determine what information on energy cost, sources and energy efficiency schemes is generally available to customers, and where they can find it.
- To identify the actors informing customers and the communication channels through which information is provided.
- For energy efficiency schemes, to gain knowledge about the roles of NRAs and other market participants in informing customers about various programmes aiming to facilitate their participation.

1.2 Methodology

In spring 2013, CEER conducted an internal survey among its member and observer NRAs. A total of 23 responses were received from Austria, Belgium, Cyprus, Czech Republic, Estonia, Finland, France, Germany, United Kingdom, Greece, Hungary, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Slovenia, Spain and Sweden.

The questionnaire consisted of four sections, which are reflected in the structure of the present report. Each section contained several closed questions and ended with one open question, where NRAs were asked to add further relevant national details, if applicable. Section A of the questionnaire asked general questions about the relationship between the NRA and customers and customer organisations, respectively. These questions thus provide important contextual information about how NRAs gain knowledge about customers' needs, wants, challenges and difficulties regarding energy matters. This first section was also of value in preparing CEER's Status Review on the involvement of consumer organisations in the regulatory process[2]. The survey findings are presented in Annex A as background information to the main sections of the Status Review.

Sections B, C and D of the NRA questionnaire covered the information available on selected key aspects of energy consumption, how this information is made accessible to customers, where it can be found and who is providing it. Section B asked whether key types of information about different aspects of the cost of energy are available to customers and how this is done. Section C of the questionnaire addressed customer access to information about energy sources. It asked questions about the origins of energy, as well as the national energy mix in a country. Again, NRAs were asked to indicate which market participants inform customers, how they do it, and whether they do so because of legal responsibilities or

[2] CEER Status review on customer involvement in regulatory process, November 2013

voluntarily. Finally, Section D asked NRAs about energy efficiency schemes in their countries. The Status Review requested information about NRAs' actions to initiate efficiency schemes in the past, present and future, which types of schemes are available and what information is made available to customers to enable their participation in such schemes.

2 Customer access to information: cost of energy

Understanding the cost (and its components) and the properties of a product or service is often regarded as key to customers in deciding whether or not to purchase a specific product and/or service. Hence, making accurate information available about the various aspects of the cost of energy is paramount to enable final customers' choice of supplier in Europe's energy markets. The final price that end-users have to pay for energy, be it electricity or gas, includes not just the price of energy itself, but also transmission and distribution tariffs, taxes and levies. In short, the final end-user energy price – especially in contrast to other daily products and services – is frequently perceived as complex, obscure and unintelligible. Information about the energy price and its development allows customers to compare the products and services of energy suppliers and to switch to their preferred energy supplier.

While customers or groups of customers may vary in their interest and capacity to understand information on the composition of energy prices, information about the key properties and price components on final customers' energy bills should be available to all customers. In other words, even if some groups of customers do not show any interest and/or engagement in energy matters, information should still be published (also for transparency purposes). Information should be accessible to all customers, should they ever wish to consult it. However, market participants in a free market may provide different levels of information to their customers. For instance, it may be one energy company's policy to inform and educate their customers about various aspects of the energy market, including its price composition and policy. Other companies, however, may provide different information to their customers.

This chapter of the Status Review investigates what information on energy costs is made available to customers and where customers can access this information. In addition, it examines who provides this information and on what basis. The key questions are:

- What information about the cost of energy is made available to customers, and where can it be found?
- Which market participants take active roles in informing customers? Is this done on a mandatory or voluntary basis?

To answer these questions, NRAs were asked a series of questions on 14 different types of information on energy costs.

2.1 Information available on the cost of energy

This Status Review identifies a wide variety of energy-cost related information available to customers in various countries, including:

a) Various components of the end-user energy price;
b) Cheapest national energy supplier of the day/week/month;
c) Cheapest local energy supplier of the day/week/month;
d) End-user energy price trends;
e) Evolution of costs of different components on energy bills;
f) Wholesale energy price trends;
g) International comparisons of end-user energy price;

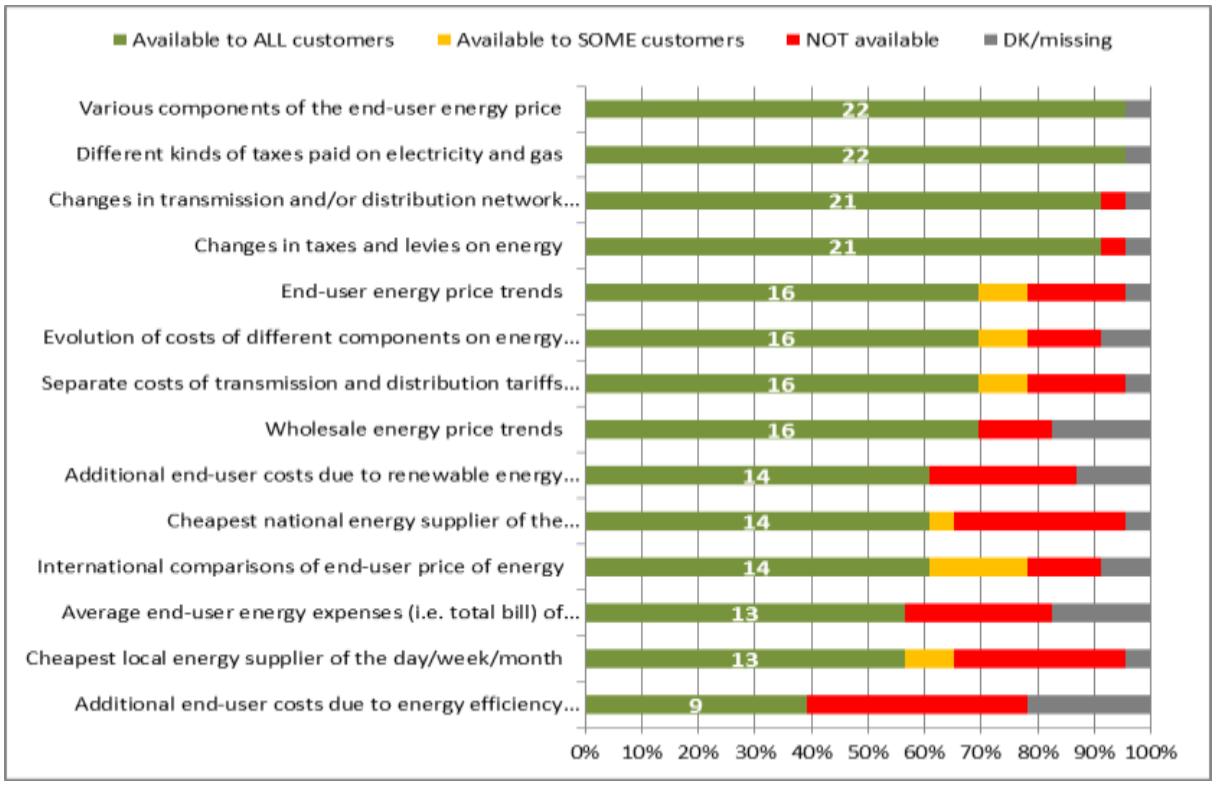
h) Average end-user final bill for households of different size and composition;
i) Separate costs of transmission and distribution tariffs for electricity and gas;
j) Different kinds of taxes paid for electricity and gas;
k) Additional end-user costs due to energy efficiency schemes;
l) Additional end-user costs due to the expansion of renewable energy production;
m) Changes in taxes and levies on energy; and
n) Changes in transmission and/or distribution network tariffs.

This list comprises often-mentioned information on the final end-user energy price, although some of the information listed may be of more relevance to some customer groups than others. Beyond the energy price itself, the final end-user price includes other components such as network tariffs, taxes and levies. To facilitate understanding of current and past end-user energy prices, additional information on, for instance, the funding of renewable energy and/or energy efficiency schemes, might be helpful. Likewise, price comparisons between suppliers and across households, regions and even countries can provide additional support in assessing what exactly a customer pays for electricity and gas. While some of this information may be available to all customers, other types of information might only be available to groups of customers. This is because some energy suppliers may inform their customers about cost-related aspects while other suppliers choose not to.

Figure 1 illustrates the number of countries (on the basis of 23 participating NRAs) in which the mentioned types of information on the cost of energy are made available to customers. Firstly, Figure 1 shows that some information is less frequently made available to customers. It seems that customers are most often informed about a) the various components of the end-user energy price and j) the different kinds of taxes paid on energy. Information on k) additional end-user costs due to energy efficiency schemes, b/c) cheapest suppliers, and h) the average end-user final bill are provided to customers less frequently.

Secondly, it shows that most information is available to *all* customers rather than specific groups of customers (according to NRA responses). Some information – in particular information on the components of the end-user energy price: energy taxes, transmission and distribution tariffs – is available to all customers in almost all countries. Comparative information on some aspects of the final end-user price such as price trends over time, or wholesale market developments, are also widely available. For instance, in 16 out of 23 countries, NRAs report that information about end-user energy price trends are made available to final customers. In contrast, information comparing prices of different energy suppliers at local, national and international levels is somewhat less available. 13 out of 23 NRAs indicate that customers in their country are informed about the cheapest local and national energy supplier of the day, week or month. In 9 countries, customers are also informed about additional costs of energy due to energy efficiency schemes. However, due to the different funding mechanisms used for such schemes across CEER countries, this small number is less indicative of information policies across Europe. At this point, it is fair to say that informed customer choices do not necessarily require information about all of the listed aspects. Rather, different groups of customers may draw on different information when making decisions about energy matters for their households.

Figure 1. Number of CEER countries (n=23) in which key information about cost of energy is made available to customers



(Source: CEER)

Table 1 illustrates which information is made available to customers in each country. In Belgium, Germany and United Kingdom, all 14 of the listed types of information are available to all customers. In a number of other countries, the vast majority of the listed information is available to all customers. These countries are the Netherlands, Italy and Sweden (13 out of 14 types of information are available); Austria, France, Norway and Spain (12); Finland (11); and Lithuania and Portugal (10). In contrast, less information is made available in Cyprus, Czech Republic, Estonia, Greece, Hungary, Latvia, Luxembourg and Slovenia. These NRAs stated that at least 5 out of 14 types of information listed are not made available to customers in their countries. In Greece, only 3 of the 14 types of information are available for customers: a) information about the various components of the end-user energy price; i) separate costs of transmission and distribution tariffs; and j) different kinds of taxes. While these are arguably very important for customers, additional information on the cost of energy is not available to Greek customers, according to the input received through our survey.

Table 1 also shows that NRAs are well informed about which information is made available to customers – independent of who is provides the information. While no input was received from the Maltese NRA (and other NRAs on this particular question), NRAs only opted for “Don’t know” in very few cases.

Table 1 - Availability of information about key aspects of the costs of energy by country

Country	a	b	c	d	r	f	g	h	i	j	k	l	m	n
Austria	1	1	1	1	1	1	1	1	3	1	3	1	1	1
Belgium	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Cyprus	1	3	3	3	1	3	1	3	1	1	1	1	1	1
Czech Republic	1	1	1	1	3	9	3	3	1	1	9	9	1	1
Estonia	1	3	3	1	1	1	1		3	1	1	3	1	1
Finland	1	1	1	1	1	1	2	1	1	1	3	3	1	1
France	1	1	1	1	1	1	1	3	1	1		1	1	1
Germany	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Greece	1	3	3	3	9	9	9	3	1	1	3	3	3	3
Hungary	1	3	3	1	3	3	3	1	2	1	3	3	1	1
Italy	1	1	2	1	1	1	1	1	1	1	1	1	1	1
Latvia	1	3	3	3	3	1	1	9	1	1	3	1	1	1
Lithuania	1	3	3	1	1	1	1		1	1		1	1	1
Luxembourg	1	3	3	1	1	3	3	3	2	1	3	1	1	1
Netherlands	1	1	1	1	1	1	1	1	1	1	3	1	1	1
Norway	1	1	1	1	1	1	9	1	3	1	1	1	1	1
Poland	1	1	1	3	1	1	3	3	1	1	9	9	1	1
Portugal	1	2	2	2	2	1	1	1	1	1	1	1	1	1
Slovenia	1	1	1	2	2	9	2	1	3	1	1	3	1	1
Spain	1	1	1	1	1	1	1	1	1	1	3	3	1	1
Sweden	1	1	1	1	1	1	1	1	1	1	3	1	1	1
United Kingdom	1	1	1	1	1	1	1	1	1	1	1	1	1	1

(Source: CEER)
Notes: **Green (1)** = information available to all customers; **Yellow (2)** = information available to some customers only, **Red (3)** = information not available; **Grey (9)** = Don't know; **White** = no response received.

Legend:
a) Various components of the end-user energy price;
b) Cheapest national energy supplier of the day/week/month;
c) Cheapest local energy supplier of the day/week/month;
d) End-user energy price trends;
e) Evolution of costs of different components on energy bills;
f) Wholesale energy price trends;
g) International comparisons of end-user price of energy;
h) Average end-*user energy expenses* (i.e. total bill) of households of different size and composition;
i) Separate costs of transmission and distribution tariffs for electricity and gas;
j) Different kinds of taxes paid on electricity and gas;
k) Additional end-user costs due to energy efficiency schemes;
l) Additional end-user costs due to renewable energy programmes;
m) Changes in taxes and levies on energy, and
n) Changes in transmission and/or distribution network tariffs.

According to the NRA input, customers generally find information on the costs of energy on their bills and online. Information about a) the various components of the end-user energy price; j/m) different taxes on energy and changes therein; i) separate costs of transmission and distribution tariffs for energy; and l) additional costs due to renewable energy programmes are mainly found on the energy bill. In contrast, information about b/c) the cheapest local and/or national energy suppliers; d/e/f) evolution of and trends in wholesale and end-user energy prices; g) international comparisons; and h) average energy expenses can mainly be found online, as downloadable documents or in price comparison tools. In a few cases, information is also provided by telephone and customer service hotlines or in print and newspapers. Hence, there is a discernible trend to use the internet as the main platform for providing this kind of information to customers. Although this allows for timely, easy and low-cost access to information for market participants and customers alike, it is also important to bear in mind that some customer groups, especially those in vulnerable positions, often do not have access to the internet.

Whilst it is important to make available information about the cost of energy, it is also crucial that the information provided is of an appropriate quality and is useful for customers. As has been widely elaborated in numerous European documents and working groups on the issue of "billing", presenting information on the usage and cost of energy can take various forms. Both good and bad policies and practices regarding the provision of information have been identified. While some companies may work hard to inform their customers, others are less able and/or willing to put such effort into their information campaigns. Likewise, websites of market participants, including NRAs, vary in terms of quality. In particular, some are more consumer-friendly than others. While the results of the NRA survey show that relevant information on energy costs is generally available across Europe, it may not be equally accessible, depending on who provides this information and how.

2.2 Who informs customers about the costs of energy?

Customers can be informed about the cost of energy by many different actors. European NRAs generally take a very active role in informing customers about the various aspects of the cost of energy in their countries. In the vast majority of countries, NRAs provide information on 10 or more of the 14 types of information listed above [a) to n)].

Table 2 below illustrates how much information (out of the 14 identified types) is provided by different market participants, according to our NRA survey.[3] The results show that energy suppliers often provide cost information to customers, whereas DSOs do so less frequently. Whereas NRAs are quite proactive in terms of information provision across all countries, there is significant variation between countries regarding information provision by suppliers. According to the Finnish NRA, for instance, energy suppliers only provide information on 2 out of 14 types of information while the Finnish NRA informs on 12. Hence, in comparison to the NRA, Finnish energy suppliers appear rather reluctant to inform their customers. In other countries, however, suppliers (and other actors) are almost as active as NRAs in terms of providing information.

[3] Since NRAs are informed to differing degrees about the activities of other market participants, lower reported levels of information provision by some actors may not reflect actual practice. In other words, no answer from an NRA, or a "Don't know" response, does not necessarily mean that other actors do not provide the information.

Table 2 – Number of types of Information (out of 14) about costs of energy provided by different actors by country

Country	NRA	Energy suppliers	DSOs	PCTs	Consumer organisations	Government authorities	Private businesses	Independent bodies
Austria	12	5	4	7	3	5		5
Belgium	14	9	2	1	12	1	12	1
Cyprus	6	7	1		3	6		
Czech Republic	7	3	1	3	3		2	4
Estonia	1	1	5	3		6		
Finland	12	2	3	5		1	2	1
France	11	7	2	2	8	7		6
Germany	11	1	3	11	1	12		
Greece	2	3						
Hungary	2	5						
Italy	12	9	1	1		2		
Latvia	5	1	1			6	2	2
Lithuania	1	6					2	
Luxembourg	7	8	5			3		
Malta	4	3						
Netherlands	11	8	4	9	11	3		7
Norway	1	2	5	3		3		1
Poland	8	5	4	5	2	5	6	4
Portugal	14	9		1	13	5	2	2
Slovenia	12	5	5	8	1	8		
Spain	11	1		2		4		1
Sweden	1	7	4	7	5	6		1
United Kingdom	9	4		7	5	8	4	4

(Source: CEER)

Table 2 also reveals the variety of providers and the level of information available in different countries. The data shows that in Austria, Belgium, France, Germany, United Kingdom, Portugal, Sweden and the Netherlands customers can draw on information on energy costs from a variety of sources. For instance, all but one actor offers substantial amounts of information in Belgium – only DSOs are less active according to CREG, the federal Belgian regulatory authority. In contrast, the level of information available generally, as well as the number of providers, is reported to be limited in countries such as Greece, Hungary and Malta. Only the NRA and energy suppliers inform customers about cost issues in these countries, and only for comparatively few types of information. As mentioned above, it cannot be clearly discerned whether this is the actual situation or whether the corresponding NRAs have less knowledge about the activities of other actors in these markets.

NRAs' answers suggest that consumer organisations vary greatly in the extent to which they provide information about the cost of energy in different CEER countries. Whereas the Belgian, German and British NRAs report high levels of activity from consumer organisations in terms of informing customers about energy costs, most other NRAs could not respond with clarity. NRAs from Estonia, Finland, Greece, Hungary, Italy, Latvia, Lithuania, Luxembourg. Malta, Norway and Spain were not able to give clear "Yes-or-no" answers to these questions. Rather, they indicated that they were not well informed about the activities of consumer organisations.

Considering the legal basis for informing customers, most actors inform customers following both a legal obligation and voluntary actions. 14 out of 23 NRAs inform customers about cost-related aspects of energy on a voluntary basis beyond any legal obligations. Likewise, energy suppliers sometimes provide information voluntarily (in 7 out of 23 cases), although NRAs report more of a restriction to legal obligations amongst energy suppliers and even more so amongst DSOs. In contrast, in most countries, consumer organisations, private businesses and independent bodies tend primarily to inform customers on a voluntary basis. These results seem to reflect the different nature of the market participants. Again, these statements are based on NRAs' answers to the questionnaire and may not fully reflect the situation in each country.

In total, the analysis of the input from 23 NRAs suggests generally that a lot of information on the cost of energy is made available to customers in most CEER countries. Customers find essential information on their bills and online. In many cases, this is provided by a variety of actors, creating the opportunity to compare information. Despite some country differences, the data further implies that most NRAs take very proactive roles in informing customers about the cost of energy in their countries – more so than other actors. While NRAs might provide more information to customers than other market participants, it should also be noted that NRAs openly admit to potentially incomplete knowledge about the activities of other actors. This is demonstrated by the relatively high rate of missing and "Don't know" answers to some of the questions in this section and is not surprising since it is not an NRA task to monitor the information policies of other market actors. Therefore, some of the results presented above might be incomplete. Following from that, it might be helpful in future to investigate more systematically and comprehensively which information is provided to customers and by whom.

3 Customer access to information: sources of energy

According to Article 15 of EU Directive 2009/28/EC, final energy customers in the EU have the right to know where their energy comes from. EU-legislation introduced Guarantees of Origin (GO) which are, among other things, designed to deliver proof to final customers that a specific share of energy sold by their supplier has been produced from renewable sources.

From a customer perspective, knowing and understanding the sources of energy – be they renewable or not – is increasingly important. While GOs contain a lot of information, according to the present law the share of renewable energy in the supplier's energy mix must be communicated to customers. Information about the sources of energy also points at issues of environmental sustainability, pollution and social risks, although renewable energy is not necessarily identical with what is sometimes called "clean energy" or "green energy." In parallel to this Status Review, CEER is developing advice on "green" electricity[4] – looking at the reliability, consistency and transparency of disclosure systems for energy sources (including the use of GOs).

Customers may wish to consider the sources of energy supply when choosing an energy supplier in the competitive market. In addition to price, the source of energy might be one of the few ways in which (residential) customers can differentiate between energy products. This distinction may be more limited for gas than for electricity, since gas can only be differentiated by where it comes from geographically. It is therefore essential to provide opportunities for customers to find out about the sources of the energy that they consume at home, or that is produced generally across the market.

This Status Review investigates which information on energy sources is made available to customers. While some types of information have to be made available by law – for instance, the energy mix sold by a company has to be printed on the annual bill in many CEER countries – other information is not mandatory but can be used in commercial ways (e.g. marketing the energy mix of a specific energy offer or product). Also, information about the production and consumption of energy from different sources is important from a cross-national comparative perspective.

Where does the energy consumed in a country come from? Apart from customers, other market participants and stakeholders, e.g. NGOs, might have an interest in learning about a supplier (or country's) energy mix, due to financial, environmental or other reasons.

Knowing about the sources of energy and being able to trust available information are important aspects of customer empowerment. Similarly to the analysis of energy costs, this Status Review sheds light on how information on energy sources is made available to customers, who generally informs them and on what basis the information is provided.

[4] CEER public consultation on advice on "green" electricity, deadline 7 February 2014

3.1 Available information about the sources of energy

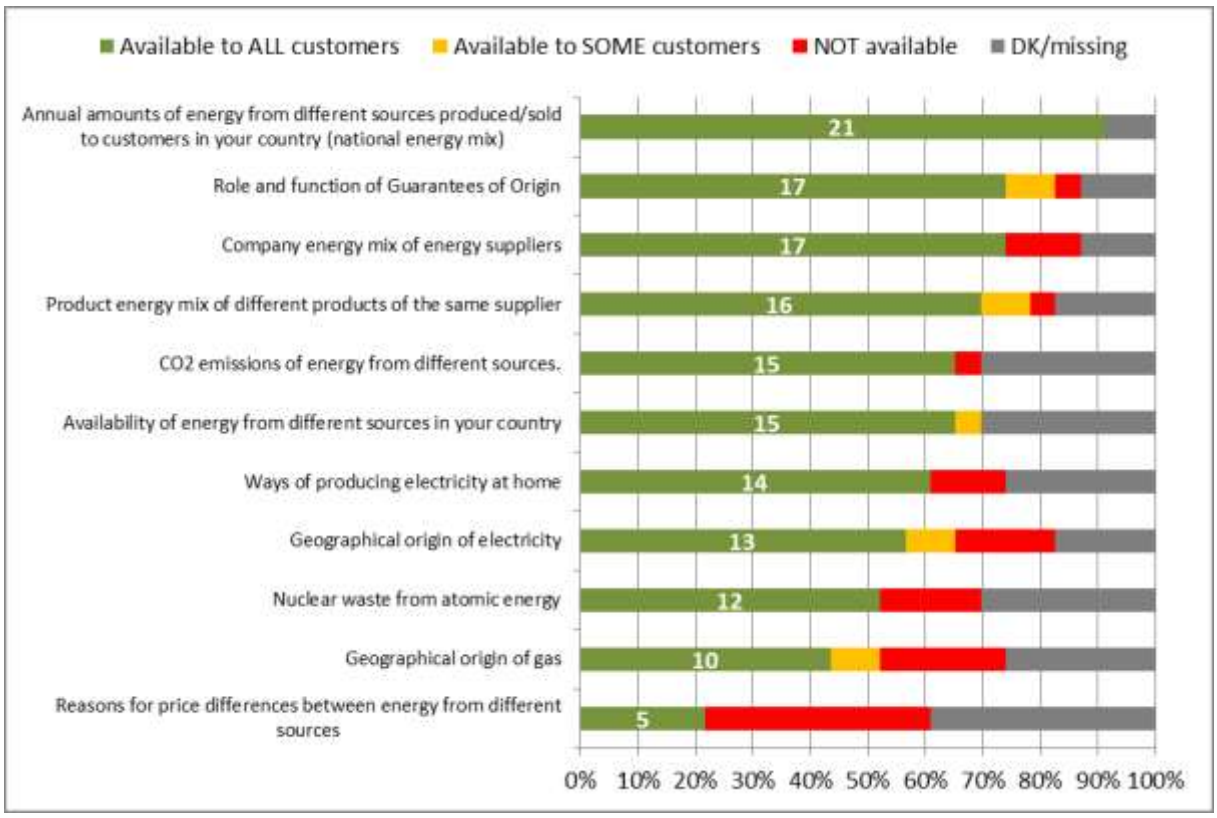
NRAs were asked to indicate which information is available to customers on energy sources. The Status Review identified 11 relevant types of information related to the source of energy:

1) Company energy mix of energy suppliers;
2) Product energy mix of different products from the same supplier;
3) Availability of energy from different sources in a country;
4) CO_2 emissions of energy from different sources;
5) Nuclear waste from atomic energy;
6) Reasons for price differences between energy from different sources;
7) Geographical origin of gas;
8) Geographical origin of electricity;
9) Annual amounts of energy from different sources produced/sold to customers in a country (national energy mix);
10) Role and function of Guarantees of Origin; and
11) Ways of producing electricity at home.

These 11 types of information are important indicators of the availability of information on the source of energy. They cover, for example, the composition of energy consumed at home, the environmental consequences of energy production, information on why energy from different sources might have different prices as well as the potential to produce energy at home. Together, information on these criteria should enable customers to compare the products and services of different suppliers according to their preferences.

Figure 2 shows which information is available to customers in CEER members' countries (out of 21 NRAs). As can be clearly seen, if information is available it is generally available to all customers, irrespective of their supplier, though some exceptions apply. The annual amount of energy from different sources which is produced or sold in a country, i.e. the national energy mix, is available to customers in 21 countries. Information about GOs and the company energy mix is also widely available. NRAs stated that customers are also able to access information about producing energy at home, product energy mix and environmental pollution caused by their energy consumption. However, according to the input received, customers are less well informed about the geographical origins of gas and especially the reasons for price differences between energy from different sources.

Figure 2 – Availability of information on the sources of energy in 21 countries



(Source: CEER)

In general, information on energy sources is widely available to customers. Moreover, information such as energy mix and ways to produce energy at home are among the most widely available. This shows that customers in CEER countries can pick up important information about energy products available from different suppliers and use this information when choosing a supplier.

However, as Table 3 below illustrates, information on energy source is not equally available to customers in all countries. While customers can access many types of information in Sweden (all), Germany (10 out of 11), Austria, France, Lithuania and Luxembourg (9 out of 11 each), and Cyprus and Estonia (8 out of 11 each), access to this information appears to be more limited in other countries, such as Belgium, Portugal and United Kingdom.

It is important to note that NRA responses included a number of “Don’t know” responses. The number of “Don’t know” responses was higher for this section of the questionnaire than for the cost section, suggesting that some NRAs are less well informed about the availability of information on energy source. This should be noted when considering the analysis.

Table 3 – Availability of information about sources of energy by country

Country	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)	11)
Austria	1	1	1	1	1	9	9	1	1	1	1
Belgium	1	1	9	9	9	9	9	2	1	1	1
Cyprus	3	1	1	1	3	1	3	1	1	1	1
Czech Republic	1	9	1	9	9	1	1	1	1	1	9
Estonia	1	1	1	1	3	3	1	1	1	1	9
Finland	1	1	1	9	9	9	1	1	1	1	1
France	1	1	1	9	1		1	1	1	1	1
Germany	1	1	1	1	1	1	2	1	1	1	1
Greece	3	3	1	1	3	3	1	1	1	9	1
Hungary	1	1		1	1				1		
Italy	1	2	1	1	1		2	2	1	1	3
Latvia	1	1	9	9	3	3	1	1	1	1	9
Lithuania	1	1	1	1	1	1	1		1		1
Luxembourg	1	1	1	1	1	1	3	3	1	1	1
Malta				1							
Netherlands	1	1	9	1	1	3	3	3	1	1	1
Norway	1	1	2						1	1	1
Poland			1					1	1	1	
Portugal	1	1	1	1	1	3	3	3	3	2	3
Slovenia	3			3		3	1	1	1	1	1
Spain	9	1	1	1	1	3	1	1	1	1	3
Sweden	1	1	1	1	1	1	1	1	1	1	1
United Kingdom	1	2	9	1	1	3	3	3	9	2	1

(Source: CEER)

Notes: **Green (1)** = available to ALL customers; **Yellow (2)** = Available to SOME customers, **Red (3)** = not available, **Grey (9) =** Don't know; **White** = no response received.

1) Company energy mix of energy suppliers
2) Product energy mix of different products of the same supplier
3) Availability of energy from different sources in your country
4) CO_2 emissions of energy from different sources.
5) Nuclear waste from atomic energy
6) Reasons for price differences between energy from different sources
7) Geographical origin of gas
8) Geographical origin of electricity
9) Annual amounts of energy from different sources produced/sold to customers in your country (national energy mix)
10) Role and function of Guarantees of Origin
11) Ways of producing electricity at home

Information about energy mix – in particular the company energy mix, which must be published on bills according to EU legislation – is the most widely available information on the sources of energy.

In contrast to information about the cost of energy, extensive information about the sources of energy is available less frequently to customers on their energy bill. The internet is the primary means of accessing the available information. Hence, as was the case with information about the cost of energy, customers without access to the internet may be excluded from information about the sources of energy.

3.2 Who informs customers about the sources of energy and why?

NRAs appear to be the most active market participant in providing information on energy source. In most countries, the NRA ranks top and assumes a lot of responsibility in informing customers about the different aspects of the sources of energy identified in this Status Review. However, energy suppliers also provide significant amounts of information in many countries, for instance in Austria, Cyprus, Estonia, France, Luxembourg, the Netherlands and Slovenia. Dutch customers in particular are able to access information from a broad variety of market participants, including NRAs, energy suppliers, consumer organisations, government authorities and independent bodies. On the contrary, in some countries (e.g. the Czech Republic, Greece, Hungary, Italy, Malta, Norway, Poland, Spain, Sweden and the United Kingdom) a more limited number of market participants provide information on energy source.

Table 4 – Number of types of information about the sources of energy (out of 11) various market participants provided by country

Country	NRA	Energy suppliers	DSOs	PCT	Consumer organisations	Government authorities	Private businesses	Independent bodies
Austria	8	6		1	3	5		1
Belgium	7	3		2	5	3	1	
Cyprus	6	6	3		1	5		
Czech Republic	1	1						3
Estonia	3	7	5			2		
Finland	7	2	2	2		4	3	2
France	2	8			2	9	1	5
Germany	2	1		1	7	9	6	3
Greece		1	3				1	3
Hungary	2	3						
Italy	6	2						
Latvia	4	6	3			5		1
Lithuania	4	4	1		5	6	1	5
Luxembourg	8	6				1		1
Malta	1	3						
Netherlands	6	7	1	4	7	8		8
Norway	3	2					1	
Poland	3					3		3
Portugal	9	5		5		2		
Slovenia	8	7	2	2		6	3	
Spain	2	4				1		
Sweden	2	5	1			2		
United Kingdom		5		1		3		

(Source: CEER)

In many cases, NRAs provide legally required as well as voluntary information. Energy suppliers and government authorities more often provide information exclusively because of legal obligations, according to the NRA survey.

In summary, customers appear to have multiple ways of accessing information on sources of energy. A variety of market participants provide various types of information. Some actors, especially NRAs, appear to go beyond their legal obligations and make additional information available on a voluntary basis. Notwithstanding some country level differences in which information is made available, most information on energy source can be found online. Apart from mandatory energy company mix and additional product mix, customers find relatively little of this information on their energy bills. This illustrates again that people without Internet access might miss out on the latest information about where their energy comes from and/or how to produce energy themselves.

4 Energy efficiency schemes for customers

On 25 October 2012, the EU adopted Directive 2012/27/EU on energy efficiency. Member States had 12 months to implement the Directive. The Directive:

> "*establishes a common framework of measures for the promotion of energy efficiency within the Union in order to ensure the achievement of the Union's 2020 20 % headline target on energy efficiency and to pave the way for further energy efficiency improvements beyond that date. It lays down rules designed to remove barriers in the energy market and overcome market failures that impede efficiency in the supply and use of energy, and provides for the establishment of indicative national energy efficiency targets for 2020*."

In addition, according to Article 12 of the Directive, "*Member States shall take appropriate measures to promote and facilitate an efficient use of energy by small energy customers, including domestic customers."* Article 17 further states that "*Member States shall establish appropriate conditions for market operators to provide adequate and targeted information and advice to energy consumers on energy efficiency."* In the context of the transposition and implementation of the Directive, energy efficiency is high on the agenda in many countries. It is therefore essential to inform customers about opportunities to participate in a broad range of energy efficiency schemes.

In this Status Review, customer-focused energy efficiency schemes are defined as any programme or measure to improve the energy efficiency and/or reduce energy consumption of private buildings, heating systems and/or appliances. Energy efficiency schemes may thus include the renovation of a whole or parts of a building (e.g. flat, house and/or the premises of SMEs); the replacement of (old and inefficient) appliances and machines; energy consultancy/advice; cheap(er) lending for implementing one of the above; or similar.

This chapter investigates what information on energy efficiency schemes is made available to customers (as of January 1, 2013). In particular, the report investigates what types of schemes exist and compares their specific aims. Another objective of this report is to gain better knowledge about the roles of NRAs and other market participants as regards informing customers about various programmes, thus facilitating their participation in these programmes. In order to obtain this information, NRAs were asked a series of questions listed below.

4.1 Types of energy efficiency schemes

The following questions were addressed to NRAs to determine the range of available energy efficiency schemes:

"*What types of energy efficiency schemes for customers generally exist in your country?"* and *"What energy efficiency measures are covered/targeted by them and for what?"* The Status Review has identified 9 relevant types of energy efficiency schemes available to customers:

i. Financial support (grant, subsidy...);
ii. Replacement programmes;
iii. Improvement/repair programmes;

iv. Cheaper loans;
v. Upfront financing schemes (repaid through energy bill or similar);
vi. Tax reduction/tax refunds;
vii. Free energy saving advice;
viii. Fee-based energy saving advice; and
ix. Other (e.g.: white certificates, etc.).

Table 5 – Types of energy efficiency schemes available by country

Country	i	ii	iii	iv	v	vi	vii	viii	ix
Austria	1	1	9	1	9	9	1	1	
Belgium	1	9	9	1	9	1	1	1	
Cyprus	2	2	2	2	2	2	1	9	
Czech Republic	1	1	1	1	2	2	1	1	9
Estonia	1	2	2	2	2		1	1	
Finland	2	2	2	2	2	2	1	1	
France	1	2	1	1	2	1	1	9	
Germany	1	1	1	1	1	1	1	1	
Greece	1	1	1	1	2	2	1	2	
Hungary	1	1	1	1	9	9	1	1	
Italy	1	2	2	2	1	1	2	9	1
Lithuania	1	1	1		1		1		
Luxembourg	9	9	9	9	9	9	9	9	9
Malta	1								
Netherlands									
Norway									
Poland	1	9	9	1	9	9	9	9	1
Portugal	1	1	9	1	2	1	1	1	1
Slovenia									
Spain	1	1	1	1	2	1	1	2	
Sweden	1	1	1	9	9	1	1	1	
United Kingdom	1				1		1		
Total	**15**	**8**	**7**	**10**	**4**	**6**	**15**	**8**	**3**

(Source: CEER)

Notes: **Green (1)** = available to all customers; **Red (2)** = not available, **Grey (9) =** Don't know; clear=no response received.

i. Financial support (grant, subsidy...);
ii. Replacement programmes;
iii. Improvement/repair programmes;
iv. Cheaper loans;
v. Upfront financing schemes (repaid through energy bill or similar);
vi. Tax reduction/tax refunds;
vii. Free energy saving advice;
viii. Fee-based energy saving advice;
ix. Other (e.g.: white certificates, etc.)

Table 5 above illustrates the types of energy efficiency schemes generally available to customers. According to NRAs, energy efficiency schemes are not equally available to customers in different countries. In a number of countries, the vast majority of the types of energy efficiency schemes listed exist, for example in Germany (8 out of 9 types); Portugal (7); the Czech Republic, Hungary, Spain and Sweden (6); Austria, Belgium, France, Greece and Lithuania (5). Fewer types of energy efficiency schemes are available in Italy (4); Estonia, Poland and UK (3); Finland (2); and Cyprus and Malta (1). No input on these questions was received from the Dutch, Norwegian or Slovenian NRAs. In some cases, NRAs might not be fully informed about the existence energy efficiency schemes available in their country. One reason for this could be that NRAs have different levels of involvement in the organisation and operation of these schemes, and some are not involved at all.

The table also shows that financial support (grants, subsidies, etc.) and free energy saving advice are the most frequently available schemes in most countries. Cheaper loans, replacement programmes and fee-based energy saving advice are also common in some countries. In contrast, upfront financing schemes which are repaid through energy bills or a similar mechanism are only available in 4 countries (Germany, Italy, Lithuania and UK), according to the NRA survey.

What the table cannot show, however, is how much money is devoted to energy efficiency schemes in each country. Since the number of available types of schemes is not sufficient to make a statement on the funds available for energy efficiency measures, more information would be needed to assess the financing of these schemes. In other words, even if the number of available types of energy efficiency schemes is low, large sums of money may be behind rather big programmes (e.g. in the UK). Thus, it is important to note that financial support and upfront financing schemes might be very large-scale programmes which are targeted towards a variety of energy efficiency measures, including replacement and improvement/repair programmes.

Additionally, it should be mentioned that “white certificates” schemes are used to promote energy efficiency in Italy and Poland. In Portugal, a specific tender mechanism called *Plan for the Promotion of the Electrical Energy Consumption Efficiency* (PPEC) was initiated (see further description below).

4.2 Energy Efficiency Measures

This Status Review has also identified 5 different types of energy efficiency measures which may be covered or targeted by the aforementioned 9 types of energy efficiency schemes available to customers. Energy efficiency measures can thus be seen as an application field of the different schemes. The 5 types of energy efficiency measures identified are:

1) Insulation of walls, roofs;
2) Electric appliances;
3) Heating systems;
4) Windows and doors; and
5) Other.

Table 6 below illustrates the types of measures that are covered/targeted by energy efficiency schemes and are made available to customers in each country. The table shows that most countries have put in place several types of energy efficiency measures. Especially in Germany but also in Spain, Czech Republic, Portugal, Belgium and Italy, final customers can access a wide range of energy efficiency measures to reduce their energy consumption. No input was received from Luxembourg, Netherlands, Norway and Slovenia.

Table 6 – Energy efficiency measures covered/targeted by efficiency schemes by country

Country	Insulation (walls, roofs)	Electric appliances	Heating systems	Windows and doors	Other	Total
Austria	3	4	4	3	1	15
Belgium	5	3	5	5		18
Cyprus	1	1	1	1		4
Czech Republic	5	3	6	5		19
Estonia	3	3	3	3	1	13
Finland	2	2	2	2		8
France	4	2	5	4		15
Germany	6	6	6	6	6	30
Greece	6	1	6	6		19
Hungary	5	2	5	5		17
Italy	4	3	4	4	3	18
Lithuania	5		5	5		15
Luxembourg						
Malta					1	1
Netherlands						
Norway						
Poland	3	2	3	3	2	13
Portugal	3	5	4	3	4	19
Slovenia						
Spain	6	4	6	5		21
Sweden	1	1	1	1	1	5
United Kingdom	3	1	3	2	1	10

(Source: CEER)

Improvements to existing heating systems, insulation (walls and roofs) and windows and doors are very common energy efficiency measures available to customers in a number of countries. In other words, efficiency schemes more often include measures to improve home insulation, heating systems and windows/doors than electric appliances and other measures. This suggests that the focus of available schemes is on improvements in long-term energy efficiency in, since these measures require investments in building infrastructure. In Cyprus and Sweden, however, only a few measures aimed at reducing energy consumption are available to customers.

It is important to note that since NRAs are not all involved in issues relating to energy efficiency and national systems to improve energy efficiency vary, the numbers in Table 6 might not be strictly comparable across countries. In addition, a number of countries did not respond to these questions, which complicates international comparisons further.

4.3 NRAs and efficiency schemes

To explore the role of NRAs in implementing energy efficiency schemes, the following question was posed to the NRAs: "*Does your NRA initiate any energy efficiency schemes for customers?"* As illustrated in Table 7, NRAs were invited to respond to whether or not they *"initiate at least one efficiency scheme for customers:*

... as of January 1, 2013?
... has done so in the past (efficiency schemes ended before 2013)?
... plans/obliged to do so later in 2013?
... plans/obliged to do so in 2014 or later?"

Table 7 – NRAs as initiators of efficiency schemes by country

Country	… as of 1 January 2013	… has done so in the past (efficiency schemes ended before 2013)	…plan/obliged to do so later in 2013	…plan/obliged to do so later in 2014 or later
Austria		1		
Belgium	2	2	2	2
Cyprus	2	2	2	2
Czech Republic	2	2	2	2
Estonia	2	2	2	2
Finland	2	2	2	1
France				
Germany	2	2	2	2
Greece		1		
Hungary	1	1	1	1
Italy	1	2	2	2
Latvia				
Lithuania	2	2	2	2
Luxembourg				
Malta	1	1		
Netherlands				
Norway				
Poland	1	2	1	1
Portugal	1	1	1	1
Slovenia				
Spain	1	1		1
Sweden	2	2	2	2
United Kingdom	2	2	2	2

(Source: CEER)
Notes: **Green (1)** = Yes; **Red (2)** = No; **White** = no responses received

According to the survey, regulatory authorities have initiated and will further initiate energy efficiency schemes in 4 countries (Hungary, Poland, Portugal and Spain). Furthermore, only 2 NRAs have provided positive answers to all four questions. 6 NRAs (Austria, Greece, Hungary, Malta, Portugal and Spain) have initiated energy efficiency schemes in the past, although to varying degrees. 5 NRAs (Finland, Hungary, Poland, Portugal and Spain) plan or are obliged to do so from 2014 or later. No input was received from France, Latvia, Luxembourg, the Netherlands, Norway or Slovenia.

This evidence shows that the majority of regulators are not heavily involved in starting energy efficiency initiatives. Only in Italy and Poland, have the NRAs widely initiated such programmes. In Hungary, the NRA implements and conducts campaigns on energy efficiency. In Malta, the NRA provides subsidies for energy-saving measures. In Portugal, the NRA has the responsibility to define mechanisms promoting energy efficiency on the demand side (PPEC) and also regarding the restrictions and penalties on the use and selling of equipment with low energy standards. In Spain, it is not the regulator (CNMC) but a government institution (IDAE) which initiates a series of energy efficiency programmes (as of January 1, 2013).

4.4 Initiators of energy efficiency schemes

To explore different initiators of energy efficiency schemes, the following question was posed to the NRAs: "*Generally speaking, who initiates efficiency schemes in your country?"* The Status Review has identified 8 actors who may initiate efficiency schemes for customers. The initiator of an energy efficiency scheme is any actor who is responsible for an improvement in energy efficiency in its own sphere of influence, whose actions towards meeting the responsibilities may either be implemented on its own premises and/or those of its customers.

Table 8 shows the actors who initiate efficiency schemes by country. Government authorities (national, municipalities, etc.) appear to be the most active market participant. Indeed, in most countries, government authorities rank top and assume wide responsibilities in initiating energy efficiency schemes. Private businesses, consumer organisations, independent bodies and energy suppliers also play significant roles in many CEER countries. However, in some countries (e.g. Cyprus, Finland, Malta, Poland and UK), a limited number of market participants have initiated efficiency schemes.

NRAs appear to be the least active market participant in this field. Only in some countries are energy efficiency schemes initiated by NRAs, for instance, in Finland (e.g. free energy saving advice), Poland (e.g. white certificates), Malta (e.g. financial support: grant, subsidy, etc.), and Portugal (e.g. free energy saving advice and PPEC). In general, it can be argued that NRAs do not play a very significant role in initiating energy efficiency schemes, especially when compared to national governments. This could be due to a number of reasons; often efficiency issues are not part of an NRA's duties. For instance, in Luxembourg the supervision of the general implementation of energy efficiency schemes is not a regulatory responsibility. In Slovenia, the NRA cannot answer this section because energy efficiency schemes do not fall within its competencies. No answers were received from the Netherlands and Norway.

Table 8 – Number of Types of efficiency schemes initiated by various market participants

Country	NRA	Energy suppliers	DSOs	Consumer organisations	Government authorities	Private businesses	Independent bodies	Other
Austria		1		1	3	4	1	
Belgium		2	2	1	4	1		
Cyprus					5			
Czech Republic		1	1	1	6	1		1
Estonia				2	2	3		
Finland	1					2	1	1
France		3		1	4	4	3	1
Germany		2	1	2	6	2		4
Greece					6	6	2	
Hungary		2			4	2		
Italy		1			4	1		
Lithuania				5	4	5	5	
Luxembourg								
Malta	1				1			
Netherlands								
Norway								
Poland	1				2			1
Portugal	2				6	1		
Slovenia								
Spain					6			
Sweden					6			
United Kingdom				1	3			

(Source: CEER)

4.5 Providers of information about efficiency schemes

NRAs were asked *"Who provides any information to customers about the various types of efficiency schemes in your country?"*

The Status Review has identified 8 actors who provide information to customers, as seen in Table 9. Government authorities (national authorities, municipalities, etc.) again appear to be the most active market participant. In most countries, government authorities rank top and assume wide responsibilities in informing customers about energy efficiency schemes. Private businesses, consumer organisations and independent bodies also provide significant information in many countries, including Austria, the Czech Republic, France, Italy, Lithuania, Portugal and the United Kingdom. Particularly in Belgium, the Czech Republic, France, Germany, Greece, Lithuania and the United Kingdom, customers are able to access information on energy efficiency schemes from a broad variety of market participants. In contrast, in some countries (e.g. Cyprus, Finland, Malta, Poland, Spain and Sweden) data suggests a rather limited number of market participants provide information on energy efficiency schemes.

Table 9 – Number of types of efficiency schemes on which information is provided by various market participants

Country	NRA	Energy suppliers	DSOs	Consumer organisations	Government authorities	Private businesses	Independent bodies	Other
Austria		1		1	4	3	1	
Belgium		3	4	3	4	2		
Cyprus					5			
Czech Republic		5	2	6	6	6	6	5
Estonia				3	2	3		1
Finland	1					2	1	1
France		4		5	5	4	5	4
Germany		8	8	8	8	8		8
Greece	1				5	5	5	
Hungary		3			4	4		
Italy	1	2	1	1	3	2	2	1
Lithuania				5	5	5	5	
Luxembourg								
Malta	1	1			1			
Netherlands								
Norway								
Poland	1				3			2
Portugal	2				6	1		
Slovenia								
Spain					6			
Sweden					7	1		
United Kingdom	1	3		3	3	3	3	

(Source: CEER)

In Lithuania, no efficiency scheme dedicated exclusively to electricity or gas is available and the Lithuanian NRA does not possess further relevant information. No input was received from Luxembourg, the Netherlands, Norway or Slovenia.

In summary, customers appear to have several channels for accessing information about energy efficiency schemes. This information is mainly provided by government authorities, private businesses, independent bodies and consumer organisations. NRAs do not seem to have developed much activity in the field, at least according to their own answers to the NRA survey. Apart from Finland, Greece, Italy, Malta, Poland, Portugal and the United Kingdom, NRAs do not play any role in the provision of information about energy efficiency schemes. This is explained by the fact that in most countries NRAs do not initiate energy efficiency schemes. Initiating and informing customers about energy efficiency schemes seems to be primarily an issue and task for government authorities.

4.6 How is information about efficiency schemes made available?

To illustrate how information is made available for customers, NRAs were asked *"How is this information made accessible to customers?"* Table 10 shows the responses received.

The internet (websites and downloadable documents) is clearly an important channel for communicating information on efficiency schemes to customers in most countries. Print media, TV/Radio and telephone hotlines are almost equally important channels for delivering this information. Energy bills and price comparison tools do not seem to have a significant role in providing such information, in contrast to the findings regarding the cost and sources of energy. However, free energy saving advice is available on bills in some countries (the Czech Republic, France, Germany, Greece, Italy and UK).

Table 10 – Number of channels (out of 9) though which consumer-relevant information on efficiency schemes is provided

Country	Energy bill	Print media (newspapers)	Internet: websites	Internet: downloadable documents	Internet: PCTs	Print materials (e.g. leaflets, factsheets, brochures)	Telephone hotline/customer service hotline	TV and Radio	Other	No information provided
Austria		2	4	1		1	1			
Belgium		3	5	3		4	1	1		
Cyprus		5	5	5		5	5	5		1
Czech Republic	1	7	7	7	2	7	7	7	6	
Estonia		3	3	3		3	2	3	1	
Finland		1	2			1	1	1		5
France	1	5	5	5		5	5	5	5	
Germany	1	7	7	7	1	7	7	7	7	
Greece	1	6	6	6		1		6		
Hungary		6	6	6	5	6	6	6		
Italy	1	1	3	3	2	3	1	1	1	
Lithuania		5	5	5		5		5		
Luxembourg										
Malta			1	1					1	
Netherlands										
Norway										
Poland			3	3						
Portugal		1	2	2	1	2	1			
Slovenia										
Spain		5	6	6		6		6		
Sweden		1	1	1	1	1	1			
United Kingdom	1	1	2	2		2	2			

5 Conclusions

This Status Review describes which information on energy costs, sources and energy efficiency schemes is made available to customers across Europe. It investigates who provides such information and in what ways customers are able to access this information.

The objective of this Status Review was to explore in depth the information available to help customers to make decisions about their energy supplier, purchase and consumption. While the energy price is probably the most important factor influencing energy customers' decision, information about additional "properties" of energy products (such as their source) is widely available and may assist customers in their decision-making. The final aim of this Status Review was to explore information available on energy efficiency schemes. While many of these schemes may be in their infancy, it is nonetheless useful to explore who is initiating and running these schemes and to find out how customers are informed about them.

The analysis shows that much information on the cost and sources of energy is available to customers in CEER countries. Information about a number of aspects of the cost of energy is available on energy bills, whereas information about the sources of energy is primarily found online (with the notable exception of the company energy mix, which often must be printed on the bill).

However, the report also reveals that some information on the cost of energy (e.g. additional end-user costs due to energy efficiency schemes) or sources of energy (for instance, the geographical origin of gas or reasons for price differences between energy from different sources) is available less frequently. Similarly, although there are a number of countries where a lot of information on the cost and sources of energy is available to consumers (e.g. Belgium, Germany and the United Kingdom), in other countries information is only available for a small number of cost aspects (e.g. Greece).

NRAs are very active in providing information on the costs and sources of energy – yet again, to varying degrees. They are more active in some countries (e.g. Austria, Belgium, Portugal or Slovenia) than others (e.g. Greece, Hungary or Malta). Generally speaking, NRAs inform more about the cost of energy than its sources.

There are a number of different market participants who provide the information considered to consumers. In some countries, customers may draw on information from many different sources (e.g. Belgium, Germany and the Netherlands).

It should be noted that NRAs may differ in how informed they are about the actions of other market participants. In some cases, it is not the responsibility of NRAs to monitor the provision of information to customers in these areas and therefore their knowledge is limited.

Regarding energy efficiency schemes, the Status Review shows that efficiency schemes have gained a foothold in many countries. In particular, free energy saving advice and financial support of various kinds are commonly used measures which enable the public to contribute to politically defined aims for energy savings, the protection of the environment and the effort to prevent climate change. In a minority of countries surveyed, NRAs are responsible for initiating such schemes. NRAs are particularly active in this area in Hungary and Portugal. In general, however, the tasks of implementing and informing customers about energy efficiency schemes largely falls to government authorities.

This Status Review illustrates clearly that information on energy costs, sources and energy efficiency schemes is publicly available. Different market participants – including NRAs – make this information widely available through a number of platforms. However, whether or not this information is “easily” available and, most importantly, used by customers is beyond the scope of the report. The analysis supports not only making this information available to consumers, but also ensuring that it reaches the customers and is useful to them. Therefore, a necessary next step is to explore the degree to which customers actually find and access this information, how they use it, whether they trust it and if they consider it helpful to their decision-making processes. This endeavour necessitates, however, a closer look at customer behaviour and practices.

Annex 1 – CEER

The Council of European Energy Regulators (CEER) is the voice of Europe's national regulators of electricity and gas at EU and international level. Through CEER, a not-for-profit association, the national regulators cooperate and exchange best practice. A key objective of CEER is to facilitate the creation of a single, competitive, efficient and sustainable EU internal energy market that works in the public interest.

CEER works closely with (and supports) the Agency for the Cooperation of Energy Regulators (ACER). ACER, which has its seat in Ljubljana, is an EU Agency with its own staff and resources. CEER, based in Brussels, deals with many complementary (and not overlapping) issues to ACER's work such as international issues, smart grids, sustainability and customer issues.

The work of CEER is structured according to a number of working groups and task forces, composed of staff members of the national energy regulatory authorities, and supported by the CEER Secretariat.

This report was prepared by the Customer Empowerment (CEM) Task Force of CEER's Customer and Retail Markets (CRM) Working Group. CEER wishes to thank in particular the regulatory experts closely involved in the preparation of this report.

Annex 2 – List of abbreviations

Term	Definition
ADR	Alternative Dispute Resolution
BEUC	European Consumers Organisation
CEER	Council of European Energy Regulators
CNMC	National Commission for Markets and Competition
DSO	Distribution System Operator
GGP	Guidelines of Good Practice
GO	Guarantee of Origin
IDAE	Instituto para la Diversificación y Ahorro de la Energía
NRA	National Regulatory Authority
PCT	Price Comparison Tool
PPEC	Plan for the Promotion of the Electrical Energy Consumption Efficiency

Annex 3 - NRA bases for knowledge of customer issues

This annex describes the grounds on which NRAs base their knowledge about customer issues. While some NRAs may have direct contact to different groups of customers, others may only find out about customer understanding of various aspects of energy markets in indirect ways. For instance, some NRAs might have facilities to directly talk with energy customers face-to-face, while others have no such infrastructure but undertake research on customer related matters. Hence, this section deals with a variety of potential and important sources of knowledge on customer needs and demands.

Customer-oriented NRA Actions

The ways through which regulators interact with customers are different in nature and thus need to be analysed in a wider context. Generally speaking, all NRAs deal with customers, consumer organisations and consumer-related issues to some extent. In some countries, they have a legal mandate to do so. The table below illustrates which forms of interaction are most likely used to engage with customer affairs.

Table 11 – Dealing with customer issues: How many NRAs do what in CEER countries?

How NRAs deal with customer affair issues…	# NRAs
The NRA provides customers with general information about the electricity/gas markets in print and/or online	23
The NRA liaises with consumer organisations on a regular basis	16
The NRA liaises with other public organisations representing consumer interests on a regular basis	16
The NRA is in charge of complaint handling	16
The NRA runs a separate department dedicated to customer affairs	13
The NRA operates a telephone hotline for energy customers	13
The NRA is responsible for ADR	11
The NRA runs public information campaigns or outreaches customers in similar ways	10
The NRA operates a price comparison tool	10
The NRA commissions market research on customer related issues	10
The NRA does in-house research on customer-related issues	8
Consumer organisations are members of the (Advisory) Board of the NRA	6
The NRA is the Single Point of Contact	5
Other	4

All participating NRAs stated that they provide general information about the energy markets either in print and/or online throughout their webpage. The majority (16 out of 23 NRAs) is in regular contact with consumer organisations or other public organisations representing consumer interests. In addition, regulators are mostly in charge of complaint handling (16 out of 23) offering some leeway in a more direct form of customer contact. More than half of the participating NRAs (13 out of 23) confirmed that they have separate departments dedicated to customer affairs and/or operate a telephone hotline for energy customers.

NRAs are responsible for alternative dispute resolution (ADR), run public information campaigns, commission market research on customer related issues or operate their own price comparison tools in a few countries. In fewer countries still, consumer organisations are members of the (Advisory) Board of the NRA or are the Single Point of Contact. Only a minority of NRAs undertake their own in-house research on customer-related issues. More frequently research is done, inter alia, by energy ministries, DSOs, suppliers, competition or consumer authorities, consumer organisations, consumer helpdesk or regional and local authorities.

Other forms of interaction with customers mentioned by the responding countries include public consultations and hearings, press releases, speeches, TV/radio interviews, complaint handling supervisions and ADR for DSO related disputes.

NRA information sources

To be able to contextualise NRAs' customer-oriented actions, it is helpful to know where information about customer understanding and behaviours comes from. Thus, various ways of gathering information have been analysed.

Table 12 – NRAs' sources of information about customer-related affairs

Information sources	# NRAs
Energy suppliers	20
Consumer organisations	19
In-house individual customer contact	17
Publicly available research (not commissioned) by NRA), e.g. national statistics, published market research,…	17
Ministries, national and local authorities	17
DSOs	17
In-house and/ or commissioned market research	15
Media review (e.g. systematic press review)	15
In-house statistics	14
Social organisations (e.g. charity)	6

Most commonly, NRAs obtain customer-related information from energy suppliers and consumer organisations. Nonetheless, sources such as in-house individual customer contact, publicly available research, bilateral exchanges with other public authorities or DSOs, and media reviews appear to be essential in the daily customer-related work of NRAs.

Moreover, NRAs entertain contact with a number of other institutions and market players, including international institutions, ombudsman and "switching monitoring" entities. Other sources about customer issues may also include statistics based upon written complaints received by consumers or social media reviews.

Information providers

In order to properly inform customers about their rights and to empower them to understand and manage their own consumption, it is recommendable to investigate which actors of the energy market actually provide information to end-users. Generally speaking, various actors play an important role in informing customers about market functioning. It can also be observed that some players are active in multiple ways. This might be due to the circumstance that they are legally obliged to do so, while other actors are not.

As can be seen in Table 13 below, the most active information providers are NRAs and energy suppliers regarding the costs of energy. However, consumer organisations, DSOs, ministries, national and local authorities are so as well. As for sources of energy, NRAs and energy suppliers are the main actors again. In the majority of countries, facts on energy efficiency schemes are presented by energy suppliers as well as ministries, national and local authorities. NRAs, however, inform notably less about this issue.

Explaining to customers how energy markets function mainly lies in the hands of NRAs and energy suppliers. A more balanced picture emerges with respect to informing customers about their rights in the energy markets. This task is shared between NRAs, consumer organisations, energy suppliers, DSOs as well as ministries, national and local authorities. Significantly less information is transmitted to end-users on technical innovations. Still, DSOs, energy suppliers, and ministries, national and local authorities do this in many countries.

In summary, numerous actors – be they NRAs, consumer organisations, suppliers, DSOs or ministries – provide information to customers on a broad range of issues. While NRAs mainly inform about key aspects of energy markets – market functioning, customer rights, costs and sources of energy – consumers also have information at hand from suppliers and DSO who also cover information about technical innovations and efficiency schemes. Somewhat surprisingly, consumer organisations provide considerably less often information about energy matters to consumers according to NRAs' answers to the questionnaire. While they most often inform about customer rights – arguably their core task in this respect – they are less active in providing information on the sources of energy, the costs of energy and technical innovations in some CEER countries.

It can also be seen in Table 13 that legal obligations to provide information exist only occasionally. NRAs, energy suppliers, DSOs, ministries, national and local authorities are most likely to be legally required to inform their clients. Other stakeholders such as consumer organisations, independent bodies or private businesses are rarely obliged to do so, even though they are equally crucial in informing energy customers in practice.

Table 13 - Information provided by each type of market player in CEER countries?

	Actor informs at least some consumers about						Legal obligation			
Actors	Costs of energy	Sources of energy	Efficiency schemes	Market functioning	Rights of customers in the energy markets	Technical innovations	Yes, for all information	Yes, for some information	No	Don't know
NRA	23	20	10	22	21	10	2	17	3	-
Consumer organisation(s)	15	10	12	14	19	10	-	6	14	2
Energy suppliers	23	20	16	16	18	13	5	17	1	-
DSOs	16	10	12	13	16	15	5	15	2	-
Ministries, national and local authorities	14	13	17	13	17	14	5	12	3	2
PCTs[5]	17	10	1	3	7	6	1	5	14	1
Independent bodies[6]	5	5	7	6	7	7	2	1	8	5
Private businesses[7]	5	5	7	4	3	6	-	-	11	4
Other (e.g. international institutions)	1	2	1	2	2	2	1	-	3	3

Details on the relationship between NRAs and customers in a national context

NRAs were also asked to provide details on their relationship with customers in order to present examples of good ways to interact with them. Three responses to this question are outlined below.

- The Austrian NRA currently undertakes efforts to reach out to their population. Teams of two E-Control employees visit municipalities across the country to inform customers about key aspects of the energy market, including switching.
- In France, CRE does not directly interact with customers on its own. As a part of a joint venture – energie-info – the NRA closely cooperates with the Ombudsman and the Ministry of Energy in customer matters.
- The Hungarian regulator commissions a survey on consumer satisfaction on a yearly basis in both electricity and gas to better understand and react to consumer needs.

[5] Strictly speaking, PCTs are not actors. However, because of their important role and functions, PCTs may also provide important information to customers.
[6] In this category, NRAs named for instance ombudsman, associations, arbitration board and private energy experts.
[7] NRAs identified (independent) energy consultants and businesses which deliver energy saving programmes as such.