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Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2018

Consumer Empowerment Volume

October 2019



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Consumer Empowerment Volume

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Executive Summary

- 1 ACER and CEER monitor annually the performance of Europe's electricity and natural gas markets in order to assess progress in delivering benefits to consumers. The present Volume focuses on the application of consumer protection measures in the European electricity and gas markets from the perspective of the final household consumer.
- 2 The 8th edition takes into account the entry into force in 2019 of a new suite of legislative provisions in the Clean Energy Package (CEP)¹ and in particular of the Recast Electricity Directive².
- 3 **The European Union has come a long way since the Second Energy Package of 2003 introduced consumer protections rules.** The Third Energy Package³ of 2009 built on the previous package and significantly expanded electricity and gas consumer rights. The Clean Energy Package, which entered into force in 2019, tailored electricity consumer rights further, with an emphasis on enhancing the ability of a consumer to play an active role in the energy system.
- 4 Taken as a whole, the body of energy consumer rights and protections established in the Second and Third Energy Packages has been largely transposed in the Member States (MSs), as presented in previous editions of this Volume. The Sections below recall some of the key consumer rights established by each package, noting their performance as of 2018.

The Second Energy Package

- 5 The Electricity (2003/54) and Gas Directives (2003/55) of the Second Energy Package **introduced the first set of energy-specific consumer protection rules which can be grouped into two categories:**
 - **Public service obligations** which encompass the right for consumers to be supplied with electricity, the protection of vulnerable consumers as well as safeguard consumers from disconnection. On the latter, consumers that have arrears are protected from being disconnected during a certain period. In 2018, the legal minimum length for a disconnection due to non-payment in the MSs was between three weeks and two months. And while many consumers can settle any arrears during this period, some will still get disconnected. However, disconnection rates for electricity or gas in the EU rarely exceeded one to two percent in 2018 and has tended to be rather stable over the last couple of years.
 - **Measures** ensuring consumer rights, such as specific contract rights, access to price information and treatment of complaints, but also the right not to be charged any fee when switching supplier. Regarding complaints, the legal maximum time to respond to a complaint was set at two months, but ranged in 2018 between one and two months for most MSs. While there is a lot of variety in reporting and handling complaints across MSs, the same complaint categories tend to be the most frequent every year. In 2018, the main share of consumer complaints received by the National Regulatory Authorities (NRAs) for both electricity and gas related, once again, to invoicing, contracts and connection issues.

1 See <https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/clean-energy-all-europeans>.

2 Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32019L0944>.

3 The Third Energy Package consists of two Directives and three Regulations: The Electricity and Gas Directives, Regulation (EC) 714/2009 on conditions for access to the network for cross-border exchanges in electricity, Regulation (EC) 715/2009 on conditions for access to the natural gas transmission networks and Regulation (EC) 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators.

The Third Energy Package

- 6 The Electricity (2009/72)⁴ and Gas Directive (2009/73)⁵ of the 2009 **Third Energy Package** built on the provisions of the Second Package and **significantly expanded the scope of consumer rights**.
- The scope of consumer empowerment was significantly expanded with the creation of a national single point of contact (usually the NRA) to provide information on rights as well as with the establishment of an independent body to handle complaints and settle disputes. Energy bills were aligned by the establishment of minimum information requirements. In 2018, all MSs continue to apply these provisions.
 - At the same time, new concepts, like smart meters, were introduced. Meanwhile, new instruments, like electronic billing and price comparison tools, began to appear on the retail electricity and gas markets, despite not being explicitly required by the Directives. Today, such instruments are well established in most European retail markets, justifying a careful monitoring of their development. In 2018, around 100 million households and small and medium-sized enterprises (SMEs) had a smart electricity meter while the installation of the smart gas meters is still in an initial phase in most MSs. In addition, comparison tools were available to most electricity and gas consumers, except for a few MSs, to help with supplier choice.
- 7 Successive editions of this volume show that once **MSs implemented the Third Energy Package provisions, generally speaking, their application did not vary**. In a few instances, **MSs imposed more stringent provisions than required by the Directives**. For example, the Directives establish that consumers receive their final bill within six weeks after switching supplier. In 2018, however, the average time to receive the final bill in the EU MSs was around five weeks, both for electricity and for gas. This means that while almost all MSs abide by this rule, quite a few MSs have shorter periods.
- 8 **The various legal provisions for energy consumers in the Third Energy Package have been transposed into national (and/or regional) legislation of the MSs**. This occurred at various speeds and, in some cases, in different ways. The reasons for this are that legislation was tailored to national needs and circumstances, but foremost because some stipulations in the Directives left room for national adaptation. An example of the latter is the definition of the moment when the switching procedure actually starts, which is not specified in the electricity and gas Directives. However, the maximum total duration of the switching process is set at three weeks. In practice, almost all MSs fulfil this requirement and many MSs even outperform it. The 2019 recast Electricity Directive aims to add precision by defining what a technical switch is and that this should be executed within 24 hours. This capability needs to be implemented by 2026. However, the recast Directive still does not indicate when the switching process itself starts.
- 9 As noted above, **inherent to the nature of a Directive⁶, some rules led to different developments in MSs**. This is most visible when it comes to the roll-out of smart electricity meters across the EU. According to the 2009 Electricity Directive, MSs should reach an 80% roll-out of smart meters by 2020, unless the result of a cost-benefit analysis (CBA) was negative. The results presented in this Volume show that by the end of 2018, the roll-out of smart meters had reached at least 50 percent of household customers in 12 MSs. In addition, six MSs completed their roll-out by the end of 2018. However, several MSs had a negative CBA, resulting in no mass roll-out. In contrast, the roll-out of gas smart meters, where EU rules are less prescriptive, is still limited, with only five MSs having commenced their deployment.

4 Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC. <https://eur-lex.europa.eu/legal-content/en/ALL/?uri=celex%3A32009L0072>.

5 Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC <https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX%3A32009L0073>.

6 A Directive sets a goal to be achieved but leaves it to the MS to establish how to reach it by transposing the goal into a national legal framework.

- 10 **The EU provisions can also lead to unforeseen consequences.** The supplier of last resort (SOLR) mechanism is a good example. With a view to ensuring the provision of universal service of electricity connection and supply for consumers, the 2009 Electricity Directive foresaw that MSs may appoint SOLRs to protect consumers against supplier failure (insolvency). Similarly, and although universal service is not required for gas, the 2009 Gas Directive nevertheless promotes an SOLR mechanism for gas consumers. In practice, all MSs have a form of SOLR for both electricity and gas supply. Various editions of the market monitoring reports reveal that the SOLR often performs other functions beyond those envisaged in the Directives, including protecting inactive consumers or those with payment difficulties. Hence, while in some MSs very few consumers are supplied by an SOLR, in other MSs the SOLR serves a very large proportion of consumers, who do not seem necessarily to need protection. As such, the findings suggest that the current SOLR mechanism may unduly foster consumer inactivity and should be analysed carefully. It is worth noting that, in most MSs⁷, cases of an SOLR appointment in instances of supplier failure are rare.

The Clean Energy Package

- 11 The recast Electricity Directive (2019/944)⁸ in the **Clean Energy Package** focuses on reinforcing consumer rights, as a result of the further opening of retail markets to competition and the lessons learned from the behaviour of retail markets and consumers' experiences. Examples include the concern for contract termination fees, reinforcement of billing information for consumers and new provisions on comparison tools. The CEP also emphasises the active role consumers should be able to play in the electricity market. In doing so, it aims to **align consumer rights with an energy system that is transitioning towards decarbonisation**. As such, new concepts like dynamic electricity price contracts, 'citizen energy community', etc have been introduced in the recast Electricity Directive and the scope of other concepts has been extended (e.g. comparison tools). Therefore, the focus has expanded from purely granting rights and protections to empowering consumers as active participants in the energy system.
- 12 The present Volume aims to cover some of this new ground by already incorporating some of the newer concepts in its scope, in order to begin to examine their application across Europe.
- Dynamic electricity price contracts: The recast Electricity Directive stipulates that consumers with a smart meter must have the option to conclude a dynamic price contract. While this Volume does not yet check this provision, it assesses innovations linked to the roll-out of smart meters. Smart meter-related offers for retail consumers are indeed emerging in an increasing number of MSs. Currently, consumers in 16 MSs can sign time-of-use contracts with intra-day/weekdays/weekend energy price differentiation. In eight MSs, consumers can choose real-time or hourly energy pricing.
 - Comparison tools: In order for consumers to make an informed supplier choice, reliable comparison tools (CTs) are a crucial instrument in the provision of clear and transparent information. In the early days of liberalised retail markets, they were a novelty introduced in order to reflect liberalised markets and consumer choice. After a while, it became clear that quality standards were needed in order to establish their reliability, which was driven by the Council of European Energy Regulators (CEER). In practice, almost all MSs now have CTs. NRAs found that reliable CTs are available in 18 MSs for electricity and in 15 MSs for gas. The recast Electricity Directive explicitly defines the quality requirements of a CT. In 2018, seven MSs reported that their CTs meet these requirements.
 - Citizen energy communities are one of these new concepts. However, so far only Great Britain tracks their existence: in 2018 a total of 275 energy communities were in operation there.

7 In Great Britain, ten active household suppliers exited the retail market in 2018, and for eight of these Ofgem had to appoint an SOLR to absorb their customers.

8 Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32019L0944>.

- 13 Other provisions were revised in the recast Electricity Directive, mostly linked to evolving retail market conditions and policy priorities.
- Energy poverty has become a bigger concern and, while the Third Package already required a definition, the recast Electricity Directive reinforces calls on MSs to define the concept and to assess its level of importance according to specific criteria (e.g. income levels). For 2018, data on energy poverty for both gas and electricity is still limited, with figures indicating a wide range from 4.5% to 14% of household consumers. However, the national figures are not directly comparable as different definitions are used across MSs.
 - On complaints handling, the recast Electricity Directive now includes explicitly regulatory authorities as a potential dispute settlement body. Also, the participation of electricity undertakings in dispute settlement mechanisms for household customers shall be mandatory unless the MS can demonstrate other mechanisms to be equally effective.
- 14 The development of consumer protection and empowerment in the energy sector has proceeded in line with the developments of the levels of competition in the retail markets. The monitoring of the provisions deriving from the various Energy Packages has evolved over time as well, in particular through the definition of comparable indicators and through the development of data collection capabilities. In some cases, this has required reinforcing the NRAs' powers to request information from market actors. At this stage, the situation is more established, allowing for a broader analysis and understanding of consumer rights issues. Further improvements are needed, not least as implementation of the Clean Energy Package requires the design of new indicators and a more in-depth analysis of consumer rights.

Recommendations

- 15 The Clean Energy Package (CEP) only covers electricity related topics. Specific stipulations related to consumer rights were either introduced or modified in the recast Electricity Directive. This results in a suboptimal situation whereby gas and electricity consumers might be treated differently in the coming years, until an anticipated alignment with gas is completed. Hence, it is recommended to 'mirror' some of the EU gas legislation to the improvements in consumer rights and information for electricity introduced by the CEP, independently of the issuing of a new EU legislative proposal for the natural gas sector linked to decarbonisation issues. Areas of concern are, inter alia, the provisions on bills and billing information, switching, comparison tools, vulnerable consumers, energy poverty and dispute settlement. Others, such as those geared towards self-consumption, dynamic prices, demand response and (renewable) energy communities, may seem less obviously relevant for the gas sector but they may, nevertheless, merit careful consideration in order not to foreclose future technological solutions, such as developments in renewable gases.
- 16 SOLR mechanisms are in place to deal with potential failures of suppliers, but also for other purposes, including the protection of inactive consumers. In practice, in some MSs, large shares of households are supplied by SOLRs, raising questions regarding why so many household consumers either remain inactive or need protection. Therefore, it is recommended that SOLR mechanisms be designed in ways that enable and promote consumer engagement in liberalised energy markets, whilst safeguarding their essential role to protect consumers from the insolvency of their supplier.
- 17 MSs are called upon to transpose the various provisions of the recast Electricity Directive by the established deadlines. Below are selected areas where, based on the monitoring results presented in this Volume, the gap between the current situation and the implementation of the reinforced provisions is the largest and to which attention is drawn. It is worth noting that the deadline for MS to transpose the Directive is December 2020, in addition to individual deadlines in the Directive for specific measures.
- The electricity smart meter roll-out: according to the new provisions in the recast Electricity Directive, the time plan foreseen for a roll-out could be challenging for MSs that have initiated the systematic deployment of smart metering systems before 4 July 2019 as the implementation deadline is 2024 or for MSs starting the roll-out after 2019, the abovementioned deadline is seven years.

- Comparison tools (CTs) for electricity: while voluntary reliability criteria devised by CEER have been used until now, resulting in 18 MSs for electricity and 15 for gas having one or more CTs that adhere to the CEER criteria, the recast Electricity Directive introduces minimum requirements for electricity CTs that are mandatory. MSs will, therefore, need to ensure to align with these standards. The Directive also requires that electricity offers include offers for dynamic electricity price contracts.
- Definitions and monitoring of energy poverty: so far seven MSs have defined what energy poverty means to them. As such, there is a large group of MSs that needs to establish a clear definition and also track the relevance of energy poverty.
- Citizen energy communities: The Directive introduces the concept in legal terms and requires MSs to provide an enabling regulatory framework according to the provisions of Article 16.
- MSs should adapt their complaints treatment procedures to reflect Article 26, which implies that the participation of energy suppliers in dispute settlement procedures is mandatory.

1. Introduction

- 18 This Market Monitoring Report (MMR), which is in its eighth edition and covers the year 2018, consists of four volumes respectively on: Electricity Wholesale Market, Gas Wholesale Market, Electricity and Gas Retail Markets, and Consumer Empowerment. It covers the EU MSs and Norway and Energy Community Contracting Parties for selected topics. Information and data used for the analysis in this Volume are based on NRA inputs provided to CEER and ACER for this purpose.
- 19 The Consumer Empowerment Volume reviews the levels of consumer protection in the European electricity and gas markets⁹ from the perspective of the final household consumer. Through a series of indicators, it provides empirical evidence of consumer protection and engagement across European energy markets.
- 20 As in previous years, the Volume explores how the relevant EU provisions in force (i.e. the Third Package) were transposed into national legislation¹⁰. As most of these provisions have now been transposed into national and/or regional law, the report also elaborates on the existence and effectiveness of consumer protection mechanisms. It also provides recommendations on possible measures further to improve market functioning from a consumer perspective.
- 21 Additionally, the Consumer Empowerment Volume explores the similarities and differences in consumer protection between MSs in terms of the general principles set out in the Third Package. However, given the diverse way in which MSs deal with consumer protection issues, not all national specificities could be covered. Therefore, this Volume looks at public service obligations, consumer information rights, consumer choice, consumer complaints and the protection of vulnerable consumers. Moreover, it focuses on the indicators where there have been changes compared to the previous Volume. Indicators of consumer protection that saw minor changes are dealt with only in passing. As such, this Volume continues to demonstrate how consumer involvement constitutes an integral part of well-functioning retail energy markets.
- 22 With a view to the new EU legislation coming from the Clean Energy Package, especially the recast EU Electricity Directive, this year's Volume already takes a wider perspective and presents several new indicators beyond those related to the Third Package. This Volume provides a first look at changes coming from the new legislation. However, all new and revised rules in the recast Electricity Directive on consumer rights pertain to electricity only. Gas legislation was not covered by CEP. Hence, there is a disparity of the legal provisions related to the electricity and gas consumers.
- 23 For selected indicators, this Volume only displays the results for 2018. Time series covering data of selected indicators are published in the "CHEST" database available on the ACER website¹¹.

9 Sizeable gas retail consumer markets do not exist in Cyprus, Malta and Norway and are thus not covered in this Volume.

10 A Directive sets a goal to be achieved but leaves it to the MS on how to reach it.

11 See: <https://aegis.acer.europa.eu/chest/category/2/list>.

2. Public service obligations

24 Public service obligations cover several responsibilities which energy service companies have to meet in order to protect the general economic interest. The European legislation, in particular Article 3 of the 2009 Electricity and Gas Directives, provides MSs with the opportunity to introduce a series of obligations on energy sector undertakings in relation to, inter alia, the quality of supply and universal service, i.e. consumers’ right to be supplied with electricity of a specified quality at reasonable, easily comparable, transparent and non-discriminatory prices.

2.1 Supply of last resort

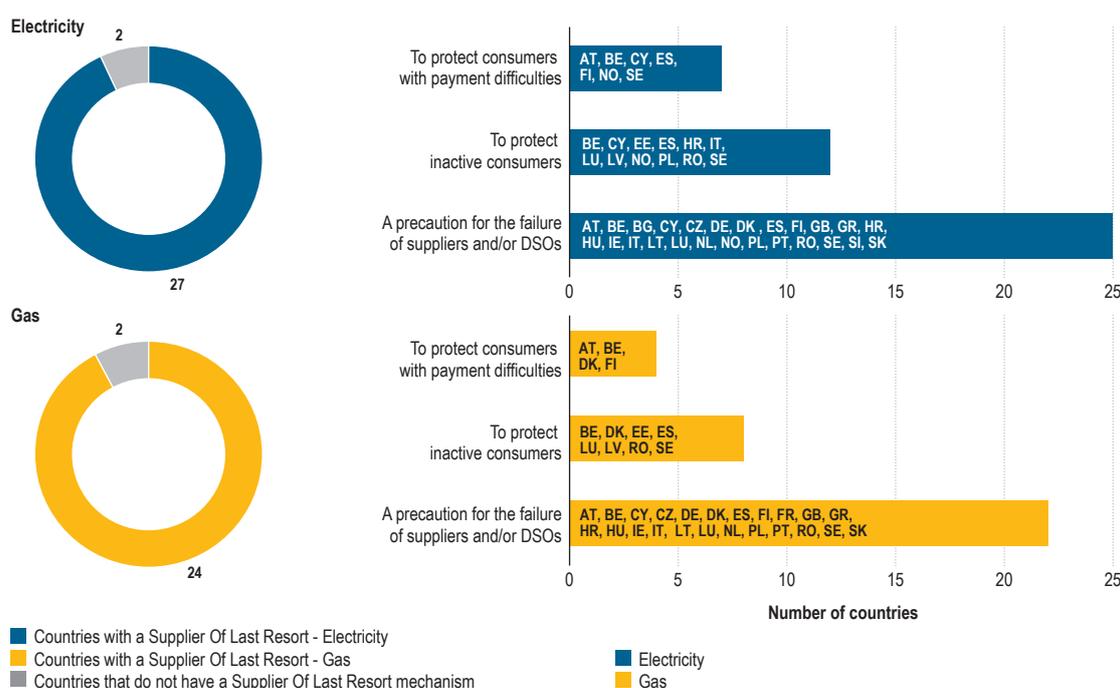
25 In order to ensure the provision of universal service, the 2009 Electricity Directive foresees that MSs may appoint a supplier of last resort (SOLR) and impose on DSOs an obligation to connect consumers. The 2009 Gas Directive, although short of imposing a universal service obligation, also calls for a SOLR for consumers connected to the gas system. Yet, the European legislation is not clear on the meaning and functions of a SOLR and the recast Electricity Directive 2019/944 does not contain a more specific description either.

26 As previous volumes have already shown, MSs have used this legal flexibility in order to introduce various protection mechanisms, for example, in case of business failure of suppliers and/or DSOs, of inactive consumers or of consumers with payment difficulties, introducing a default mechanism to maintain energy supply in certain cases.

2.1.1 Functions of supply of last resort

27 As shown in Figure 1, most MSs have implemented a SOLR mechanism covering a variety of functions, amongst which the establishment of a precaution mechanism in case of business failure is the most widespread¹². This happens, for instance, when a supplier goes bankrupt or the licence of a supplier or DSO is revoked. Hence, this protection appears to be a “universal function” of the SOLR in electricity, although not explicitly mentioned by the Directive.

Figure 1: Supply of last resort: availability and functions in EU MSs and Norway – 2018 (number of MSs)



Source: CEER 2019.

12 Only France (electricity) and Bulgaria and Slovenia (gas) have not appointed a SOLR. In Malta, there is only one supplier and therefore the concept of SOLR is not applicable.

28 The use of additional functions for SOLRs for gas customers comes directly from Article 3 of the 2009 Gas Directive which states that “Member States shall ensure that rights and obligations linked to vulnerable consumers are applied” as well as that “Member States may appoint a supplier of last resort for consumers connected to the gas system”. Hence, in practice, the SOLR mechanism may also be used to cover inactive consumers or those with payment difficulties. Some MSs have assigned these functions to a so-called default supplier, which may or may not be identical to the SOLR.

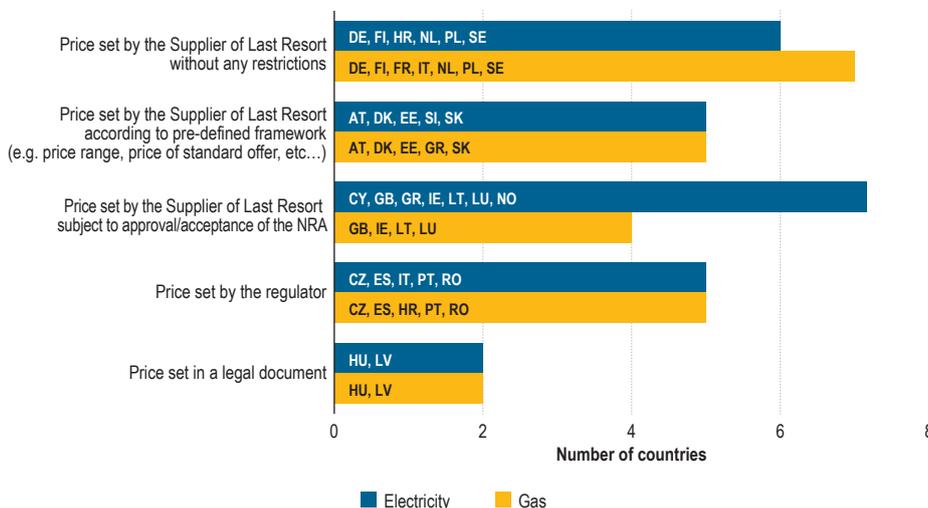
2.1.2 Main characteristics of supply of last resort pricing

29 The actual usage of SOLRs – i.e. the number of consumers supplied by this entity as a last resort – is very limited in most MSs¹³. Only for Great Britain, it was reported that several active household suppliers exited the retail market, requiring the British NRA to appoint a SOLR to absorb their customers in eight out of the ten suppliers that exited.

30 On top of its rare applicability, the SOLR function continues to be broadly interpreted by MSs, limiting cross-national comparability. Hence, caution is necessary in interpreting any cross-national differences in the number of final household consumers supplied by SOLR(s). The large shares of households supplied by SOLRs also raises the question as to why so many household consumers either remain inactive or need protection. In practice, this may hinder effective retail competition. The SOLR mechanisms may unduly foster consumer inactivity, especially if supply of last resort is associated with regulated prices.

31 In order to assess the costs of SOLR supply for consumers, the setting of the SOLR energy prices and those of the “conventional” suppliers were compared on a qualitative basis. The European legislation does not offer MSs any guidance on how to determine the SOLR energy price. As Figure 2 shows, all but eight MSs intervene in the price setting of the SOLR in some fashion¹⁴.

Figure 2: Entity determining the energy price for SOLR in EU MSs and Norway – 2018 (number of MSs)



Source: CEER 2019.

Note: For Poland, prices are set by the SOLR. However, in case the consumer does not accept the SOLR the incumbent takes over at regulated prices.

13 In 2018, the percentage of electricity consumers supplied by a supplier of last resort varied between 0% or very close to 0% (e.g. Austria, Denmark, Greece, Ireland, Luxembourg, Latvia, the Netherlands, Norway, Poland and Slovenia), 10–20% (Estonia, Portugal and Sweden), 38% (Spain) and a very high 72% (Romania), 84% (Slovakia) and 100% (Cyprus, where only one supplier exists). The shares for gas also vary greatly – from 0% or almost 0% (Austria, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Poland and Romania) to 19% (Portugal), 20% (Spain) and 75% (Slovakia).

14 These MSs are Germany, Finland, France (gas), Croatia, Italy (gas), the Netherlands, Poland and Sweden.

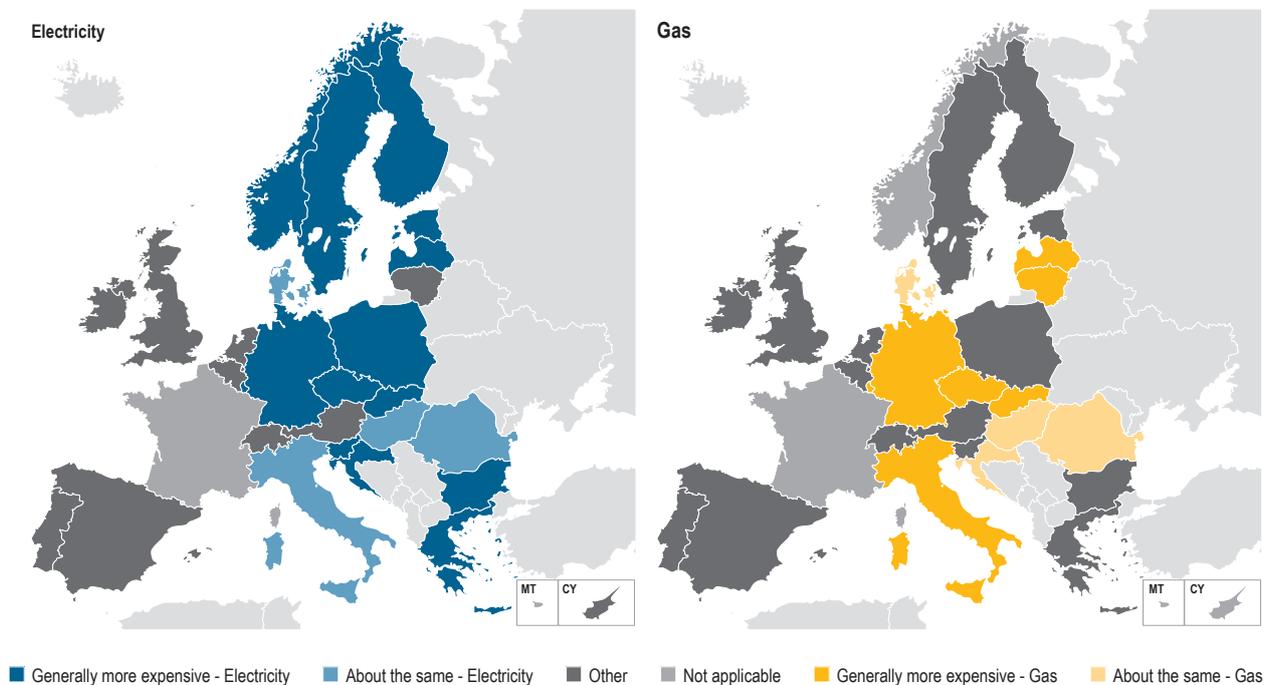
32 Two main approaches, based on who can take the initiative, can be deduced from Figure 2:

- A more top-down approach, whereby either the NRA sets the tariff or the law stipulates the SOLR tariff level;
- An approach whereby the initiative comes from the supplier. The SOLR proposes a price to the NRA for approval or has to follow a pre-defined framework. In many cases, a pre-defined framework (e.g. a price range, a standard price for any of its conventional products) exists within which the SOLR may set the price. For instance, the SOLR price could be directly related to the average day-ahead price of a specific exchange trading day on the electricity market, published on the electricity markets website (Latvia). Alternatively, a framework could determine that the SOLR price is legally bound to be equal to the exchange spot price and a predetermined surcharge approved by the NRA (Denmark). In other MSs, SOLR prices need to be approved or accepted by the NRA, sometimes in a competitive selection procedure (Great Britain).

33 A possible concern for consumers in case of supplier’s bankruptcy is the SOLR price level in comparison to other standard electricity and gas offers: they could tend to pay more than before they were served by a SOLR.

34 Figure 3 confirms that, for both electricity and gas, SOLR energy prices tend, on average, to be higher than the prices paid by consumers served by non-SOLR suppliers in the majority of MSs¹⁵. This may indicate that the SOLR is compensated for taking on such an extra task. Also, there is no single MS where energy sold by a SOLR is generally cheaper than a comparable standard product. This would indicate good practice since it incentivises consumers to switch to a supplier other than the SOLR. If a SOLR price is set lower than the average market price, there is a risk of market distortion as it discourages consumers from switching out of the SOLR contract after the bankruptcy of their former supplier. However, in several MSs the prices of the SOLR depend on a case-to-case basis, since SOLR prices are not set by the NRA and/or by any legal documents, but rather by the SOLR itself. Other MSs have no experience with SOLR prices as no such supply has come into effect so far.

Figure 3: SOLR energy price compared to conventional energy prices in EU MSs and Norway – 2018



Source: CEER 2019.

Note: Other means i) NRA does not know about SOLR prices, ii) NRA has not reported the data iii) SOLR prices vary from case to case or iv) no occurrence of SOLR.

15 In Sweden, for example, the SOLR price is estimated to be 20-30% higher than comparable contracts.

2.2 Restrictions to disconnecting non-paying consumers

35 In order to avoid the immediate loss of access to electricity or gas, MSs apply various measures to restrict disconnections from the electricity or gas grid in case of non-payment. A common procedure is to implement warning procedures that give consumers additional time to settle their overdue bills. Written reminders about the consequences of non-payment and prior notices of disconnections are the most widespread mechanisms across the EU. Prohibitions to disconnect on specific days (e.g. weekends), seasons (e.g. winter) or in specific circumstances (e.g. if consumers critically depend on energy for life-supporting appliances) are also common.

2.2.1 Minimum duration of a disconnection process due to non-payment

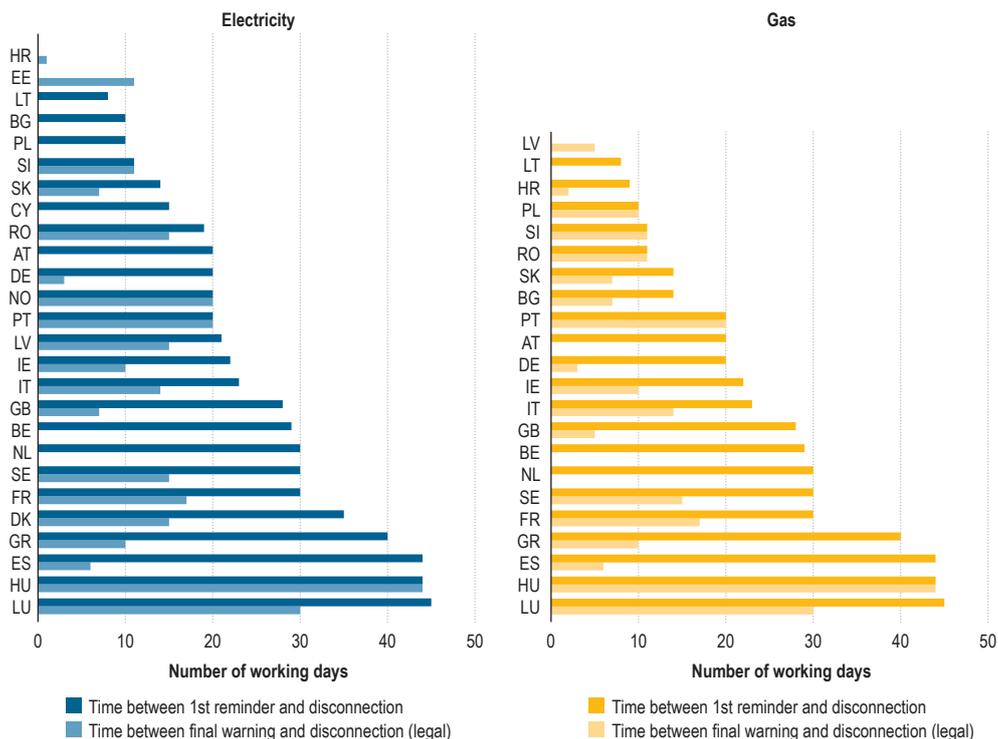
36 It is customary across MSs to send reminders to consumers on their payment obligation and on the consequences of failing to settle electricity or gas bills in due time. A lengthier disconnection process enables consumers to settle their pending bills and generally increases the likelihood of payment. However, excessively long processes may incentivise consumers to delay payment even further; after all, suppliers and DSOs depend on timely payments to run a viable business.

37 As shown in Figure 4, many MSs differentiate between a first reminder to pay (or warning) and a final warning about imminent disconnection in the event of prolonged non-payment. Consumers in most MSs usually have at least two weeks (10 working days) to react to a payment reminder, but in many MSs the time span is longer.

38 Final warnings indicating the exact day of disconnection are also used in many MSs. Such announcements are most frequently sent 2 weeks before an imminent disconnection or even closer to the disconnection date. In some MSs, the first warning also appears to be the “last” one, which limits the protective character of such warnings to a considerable extent.

39 In practice, only half of the NRAs have reported the actual average length of the time between a first reminder to pay and the disconnection. In most cases, the actual duration is significantly longer than the legal minimum. Such is the case in Great Britain, where disconnections take about 80 working days on average in practice, or in Lithuania, 53 working days in practice, which are decidedly longer periods than the legal requirements of 28 and 8 working days, respectively. Meanwhile, in Hungary, the actual length of the gas disconnection process (50 working days) is close to the minimum duration of 44 working days, as shown in Figure 4. In other MSs, the actual disconnection time is also quite short: 14 working days or even less between the first reminder and the disconnection (e.g. Bulgaria, Poland, Romania, Slovenia and Slovakia).

Figure 4: Legal minimum duration of the disconnection process in EU MSs and Norway – 2018 (in working days)



Source: CEER 2019.

2.2.2 Information about alternatives to disconnections

40 According to Article 10 of the recast Electricity Directive, suppliers should provide their household customers with adequate information on alternative measures to disconnection sufficiently in advance of any planned disconnection. Such alternative measures may refer to sources of support to avoid disconnection, prepayment systems, energy audits, energy consultancy services, alternative payment plans, debt management advice or disconnection moratoria. These measures shall not impose extra costs on the customers facing disconnection. Importantly, this requirement mandates tailored information for affected consumers rather than a one-off or general piece of consumer information, since the Directive requires such provision in advance of any planned disconnection. This requirement is not intended to replace disconnection as a last resort in case of protracted non-payment. Rather, households should be made aware upfront about ways to avoid being disconnected in order to increase their efficacy in handling such situations.

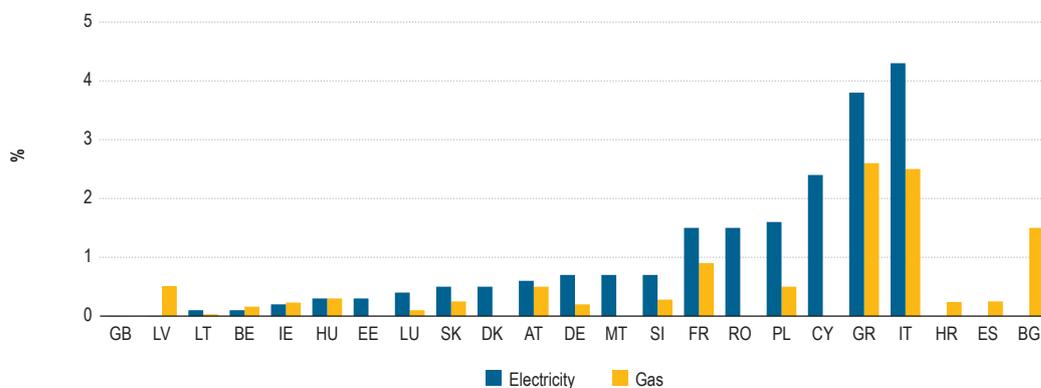
41 In 2018, 18 MSs in electricity and 15 MSs in gas declared that suppliers already have to provide such information to their household customers. In most cases, available alternative measures to disconnections are payment plans, the installation of a prepayment meter, information about various kinds of (social) benefits, and, if applicable, the registration as a vulnerable consumer.

42 For instance, the British Supply Licence Conditions foresee the most detailed requirements to offer domestic electricity and gas customers a range of alternative payment options when suppliers become aware, or have reason to believe, that a customer is struggling, or will struggle, to pay their bills. British suppliers must also provide energy efficiency advice at this time. When agreeing on a repayment plan, British suppliers must consider each individual customer’s ability to pay, including having appropriate credit management policies and guidelines; making proactive contact with customers in order to identify whether they are having payment difficulties; ensuring the customer understands the arrangement; and, finally, monitoring arrangements after they have been set up.

2.2.3 Shares of consumers disconnected due to non-payment

- 43 The actual number of consumers disconnected due to non-payment for electricity and gas supplies is shown in Figure 5. In 2018, the electricity disconnection rate due to non-payment was the highest in Italy, where 4.3% of metering points were disconnected. At the other end of the spectrum, there were again hardly any disconnections due to non-payment in Great Britain, Latvia (only electricity), Lithuania and Ireland. In Great Britain and Ireland, people struggling to pay their energy bills are usually offered (or were already equipped with) prepayment meters or choose other alternative measures to disconnection. Overall, and compared to 2017, disconnection rates in electricity and gas appear to be rather stable across MSs.
- 44 Article 37 of the Electricity Directive and Article 41 of the Gas Directive oblige NRAs to monitor disconnection rates. The data presented in Figure 5 refer to the cases of non-payment of energy bills only, since these are relevant from the point of view of consumer protection. Other disconnections, especially in cases of moving home or vacant accommodations, are not relevant from a consumer protection perspective and should not be considered in the analysis.
- 45 Prepayment meters are not widely used across Europe except in Great Britain and Ireland, where for electricity they account for around 15% of household customers. In Hungary and Poland, roughly 2% of household customers are equipped with prepayment meters. In other MSs, their use is even more marginal (e.g. 0.04% in Germany or 0.1% in Austria). In gas, the picture is almost identical, with Ireland (15.9%) and Great Britain (14.4%) reporting a wider use.
- 46 Such variation in the use of prepayment metering also constitutes another caveat for a comparison of disconnection rates across MSs. For instance, prepayment metering appears to be conceived as a (viable) alternative to disconnecting non-payers from the grid in some MSs.

Figure 5: Share of disconnections due to non-payment in EU MSs and Norway – 2018 (%)



Source: CEER 2019.

3. Protection of vulnerable consumers

3.1 Definition of the concept of vulnerable consumers

47 The previous editions of this Volume presented whether and how MSs defined the concept of vulnerable consumers. These earlier findings have shown that MSs use explicit or implicit definitions¹⁶ in order to fulfil the requirements of the Third Package. The majority of MSs¹⁷ use explicit definitions for both electricity and gas. Implicit definitions for both sectors exist in Austria, the Czech Republic, Germany, Finland, Luxembourg, Malta, Sweden and Great Britain (in Great Britain, there is also an explicit definition). In other MSs, definitions of the concept of vulnerable consumers are only available in electricity or gas or not at all.

48 The recast Electricity Directive further specifies that the concept of vulnerable customers may include income levels, the share of energy expenditure in disposable income, the energy efficiency of homes, critical dependence on electrical equipment for health reasons, age or other criteria. Table 1 summarises the current determining criteria as reported by NRAs for those MSs where a definition of the concept of vulnerable customers exists.

Table 1: Determining criteria for the concept of vulnerable customers in electricity and/or gas in EU MSs and Norway – 2018

MS	Income level	Share of energy expenditure of disposable income	Energy efficiency of homes	Critical dependency on electricity powered equipment for health reasons	Age	Other	None of the above
AT	•					•	
BE	•				•	•	
BG							•
CY	•			•	•	•	
CZ	•						
DE	•						
DK							•
EE							•
ES	•			•	•	•	
FI	•					•	
FR	•						
GB	•	•	•	•	•	•	
GR	•			•	•		
HR	•					•	
HU	•			•	•	•	
IE				•	•		
IT	•			•		•	
LT	•						
LU	•						
LV	•					•	
MT							•
NL				•			
NO							•
PL	•						
PT	•					•	
RO	•			•	•		
SE	•						
SI	•			•		•	
SK						•	

Source: CEER 2019.

16 “Implicit definitions“ refer to the case when the concepts of vulnerable consumers are an integral part of the national legislations without being put into specific wording. “Explicit definitions“ refer to the case when the concepts of vulnerable consumers are stated in legislation, e.g. social protection laws or energy laws which mention the characteristics of such consumers.

17 Belgium, Bulgaria, Cyprus, Spain, France, Great Britain, Croatia, Hungary, Ireland, Italy, Lithuania, Latvia, the Netherlands, Poland, Portugal, Romania, Slovenia and Slovakia.

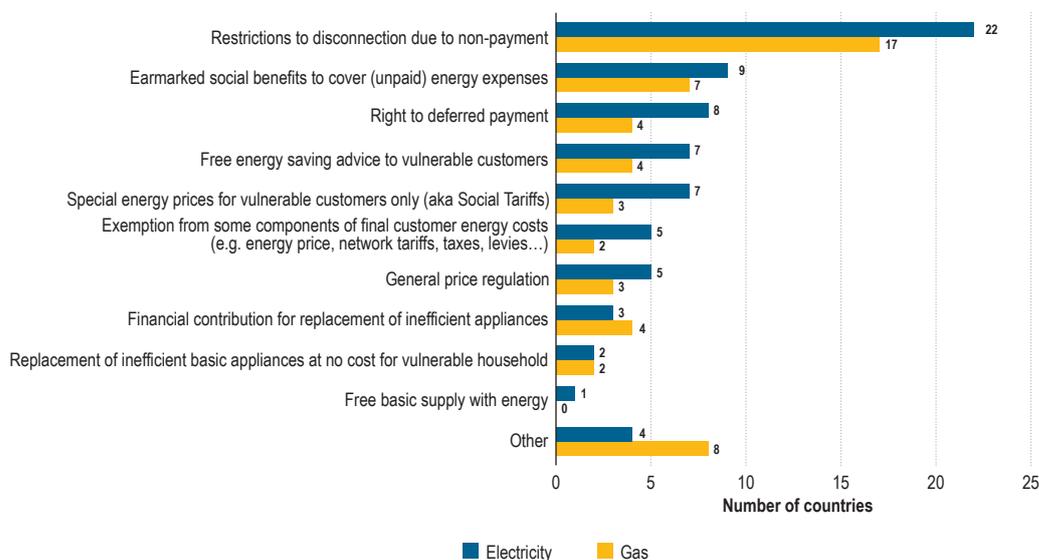
49 The dominant criterion for identifying vulnerable customers is their income level, which is used in 21 MSs. Health issues and age are also prominent features of existing definitions of the concept of vulnerable customers. Other common criteria to determine the concept of vulnerable customers include various social and living circumstances, including disabilities, household size, location (remote area) and nationally specific eligibility criteria for social services and benefits. The latter strongly relates to income levels. In contrast, only in Great Britain the share of expenditure for energy or energy efficiency of homes is also used to determine the concept of vulnerable customers.

3.2 Protections for vulnerable consumers

50 The 2009 Electricity and Gas Directives did not define specific measures to protect vulnerable consumers and left to the MSs to decide whether and how to introduce specific measures in the energy laws or whether this belongs within the remit of the general social security system.

51 Figure 6 shows that many different measures have been implemented across the EU. MSs frequently apply restrictions to disconnection due to non-payment in order to protect vulnerable consumers. Many MSs also maintain special energy prices for such groups. The recast Electricity Directive, however, has specified in detail the conditions to which those public interventions in price setting have to adhere (e.g. be limited in time, be non-discriminatory)¹⁸. Other measures - such as (non)earmarked social benefits to cover energy costs, exemptions from parts of the energy costs (especially funding contributions to renewable energy or energy efficiency) or (partial) grants for replacing old appliances with new, more energy efficient ones – have gained popularity in a few countries.

Figure 6: Measures in place to protect vulnerable consumers in EU MSs and Norway – 2018 (number of MSs)



Source: CEER 2019.

3.3 Energy poverty

52 The concept of energy poverty has recently gained significant attention both at European and national levels. While a straightforward definition of energy poverty does not exist, various institutions, amongst which the European Commission, provide important insights into the topic. The EU Energy Poverty Observatory¹⁹, for instance, offers valuable descriptions of the phenomena commonly associated with energy poverty and illustrates a series of related metrics of energy poverty across Europe.

18 Article 5 of Directive (EU) 2019/944.

19 Accessible online at <https://www.energy-poverty.eu/>.

- 53 While the Third Package alludes to energy poverty, the recast Electricity Directive contains much clearer actions to be undertaken. MSs shall assess the number of households in energy poverty pursuant to point (d) of Article 3 (3) of Regulation (EU) 2018/1999 of the Energy Union Governance Regulation. There, the definition of energy poverty is related to the domestic energy services needed to guarantee basic standards of living in the relevant national context, to existing social policies and other relevant policies, as well as to indicative European Commission guidance on relevant indicators for energy poverty, i.e. the EU Energy Poverty Observatory²⁰.
- 54 If a MS finds that it has a significant number of households in energy poverty, on the basis of its assessment of verifiable data, it shall develop a national indicative objective to reduce energy poverty. The MSs concerned shall outline, in their integrated national energy and climate plans, the policies and measures to address energy poverty, if any, including social policy measures and other relevant national programmes.
- 55 The recast Electricity Directive calls on MSs, when assessing the number of households in energy poverty, to establish and publish a set of criteria, which may include low income, high expenditure of disposable income on energy and poor energy efficiency. The links to the concept of vulnerable customers is thus obvious.
- 56 In 2018, seven NRAs reported having an official definition of energy poverty, one more than in 2017 (Belgium)²¹. According to this information, a definition of energy poverty now exists in Belgium, Cyprus, Spain, France, Great Britain, Ireland and Romania. In Ireland, a household is considered energy poor if it spends more than 10% of its disposable income on energy. In Spain, energy poverty is a situation in which a household cannot meet basic needs of energy supply, as a result of an insufficient level of income and may have a low level of energy efficiency in its house. And in Cyprus, the concept of energy poverty includes recipients of public assistance from the social welfare services and the beneficiaries of a minimum guaranteed income. Devolved nations in Great Britain have different definitions:
- Fuel poverty in England is measured using a so-called Low Income High Costs indicator. Under this indicator, a household is fuel poor if it has fuel costs that are above average (the national median level) and, in spending that amount, it would be left with a residual income below the official poverty line. Hence, there are 3 important elements in determining whether a household is fuel poor: household income, household energy requirements and fuel prices.
 - In Scotland and Wales, a household is in fuel poverty if, in order to maintain a satisfactory heating regime, it would be required to spend more than 10% of its income on fuel use.
- 57 Among these seven MSs, five MSs have provided the percentages of energy poor people according to the local definition, which are 4.6% in Cyprus, 7% in Spain, 8.5% in Latvia, 10.9% in Great Britain and 14% in Belgium.
- 58 The reasons for energy poverty are manifold. Amongst them, the income level and the cost of energy play a crucial role. On this note, in seven MSs national definitions of energy poverty foresee as measurement criteria a low income and high energy expenses. Only in Spain, poor energy efficiency has been listed as an additional measurement criterion.

20 Article 29 of the recast Electricity Directive (EU) 2019/944 states: “The Commission shall provide guidance on the definition of ‘significant number of households in energy poverty’ in this context and in the context of Article 5(5), starting from the premise that any proportion of households in energy poverty can be considered to be significant.”

21 Several other NRAs indicated that national efforts are under way to establish a definition of energy poverty. However, national debates have not yet resulted in an official definition of energy poverty in these countries. Therefore, no further information was provided.

4. Consumer information rights

59 Consumer engagement requires that consumers have easy access to relevant information. Article 18 and Annex II of the recast Electricity Directive consider consumer information essential for consumer protection and empowerment. The same holds for information for gas consumers.

4.1 Information on bills

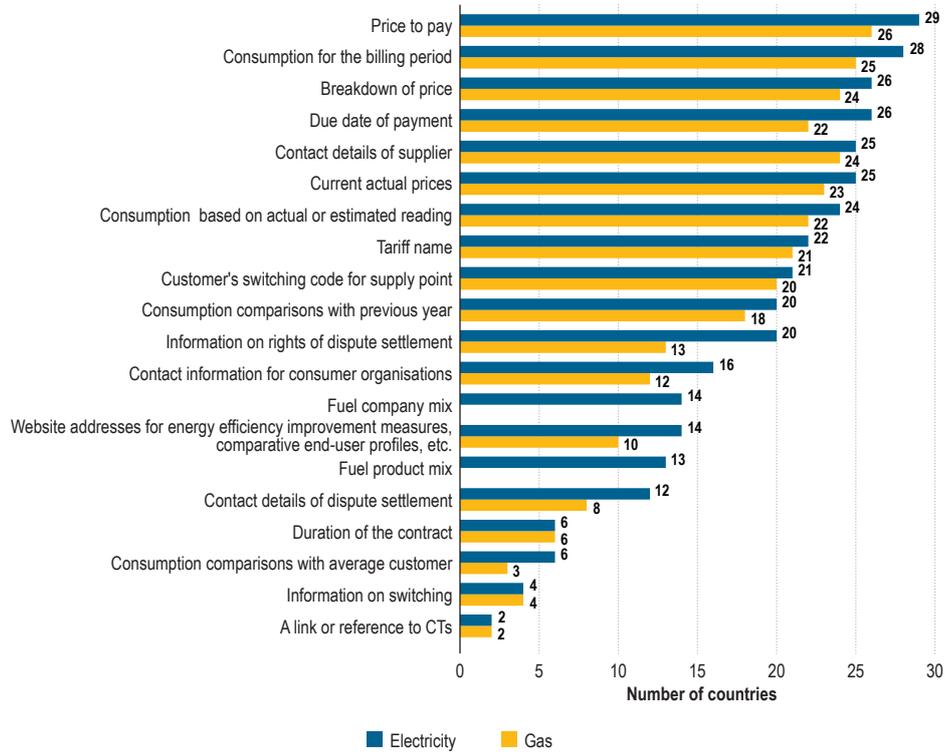
60 Article 10 of the Energy Efficiency Directive (Directive 2012/27) already states that energy bills should contain information about actual energy consumption. Annex VII of the Energy Efficiency Directive requires bills to include at least information on current prices and actual consumption of energy, historical consumption comparisons and contact information for consumer organisations, energy agencies or similar bodies. According to the recast Electricity Directive, bills should prominently display information about, for example, price, tariff name, switching code and contact details for dispute settlement. In addition to the requirements of the Energy Efficiency Directive and the recast Electricity Directive, other national legal requirements influence the number of information items on energy bills. Importantly, stipulations in the Energy Efficiency Directive remain relevant for gas consumers until the alignment of consumer rights elsewhere.

61 Figure 7 illustrates the types of information provided to household consumers on their bills and the number of MSs providing such information. Considering that three countries do not have sizeable retail markets for gas consumers and are thus not covered in this report (Cyprus, Malta and Norway), it can be argued that electricity and gas consumers have about the same access to information across the EU.

62 Consumers in most MSs receive information on: billed amount, actual consumption, breakdown of the price – arguably, these are necessary billing elements to determine volume and costs of energy for a given period. Information on, for example, the customer's unique switching code, energy efficiency measures and the duration of the contract is less common on bills. Unfortunately, these often missing pieces of information are intended as empowering elements for consumers. Knowledge about the switching code is said to guarantee a smoother and maybe faster switching process in many MSs; information about energy efficiency measures helps to save money and protect the climate.

63 Least common on bills is information about the duration of the contract, information on and benefits of switching supplier and links to comparison tools (CTs). Since these items are required by the recast Electricity Directive, they should be more common once the Directive has been fully implemented across MSs.

Figure 7: Information elements provided on household consumer bills in EU MSs and Norway – 2018 (number of MSs)

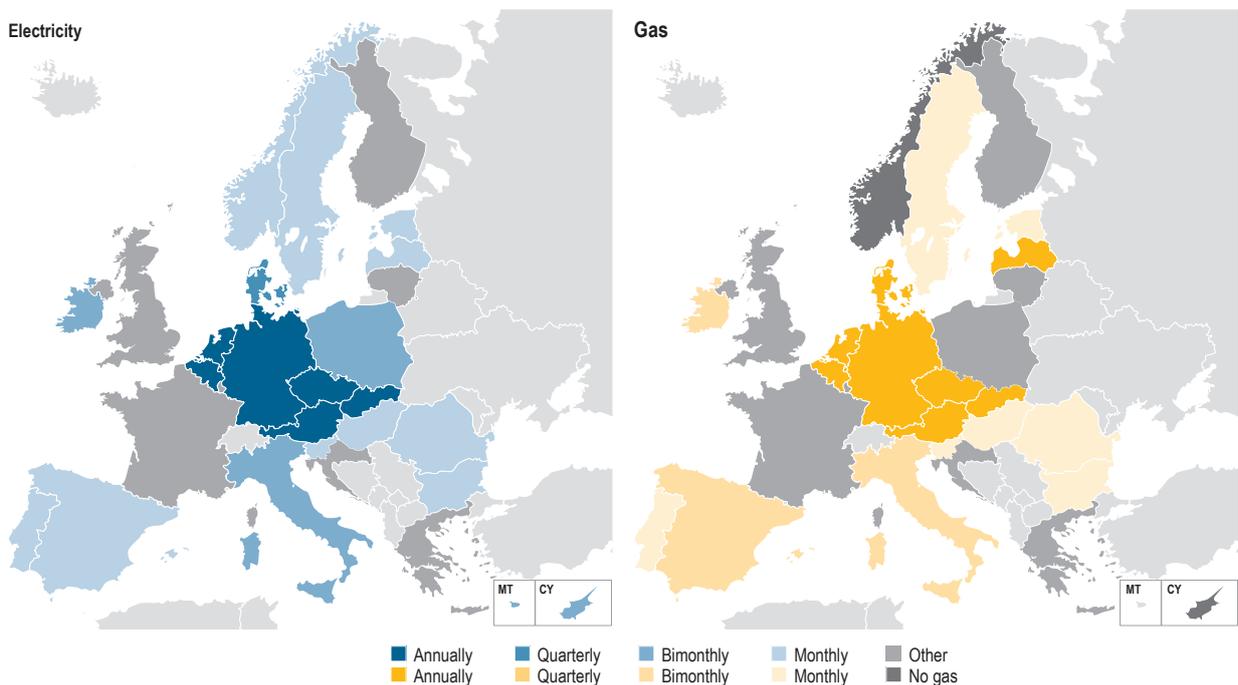


Source: CEER 2019.

4.2 Frequency of billing

64 Figure 8 shows that in 15 MSs, electricity consumers typically receive their bills either quarterly, bimonthly or monthly while in six MSs, electricity consumers are billed annually. The figure also shows that for gas, consumers in 12 MSs receive their bills at least quarterly, while consumers in seven MSs receive their bills annually.

Figure 8: Frequency of issuing energy bills to final household customers in EU MSs and Norway – 2018



Source: CEER 2019.

- 65 According to item 1.1 of Annex VII to the Energy Efficiency Directive 2012/27, MSs are required to ensure that, where individual meters are available, individual electricity and gas bills based on actual consumption are provided at least once a year²². According to the interpretative note by the European Commission²³, where smart metering is available, consumers should receive monthly billing information based on their actual consumption.
- 66 As explained in more detail in Section 5, smart meters are widely available (i.e. more than 80 percent coverage) in Denmark, Estonia, Spain, Finland, Italy, Malta, Norway and Sweden and a significant share has been rolled out in Latvia, Luxemburg, the Netherlands, and Slovenia. In most of these MSs, bills are already and typically issued monthly (or bimonthly) based on actual consumption volumes. Hence, in such cases the monthly billing interval may make it redundant to send separate billing information to consumers.

22 Note that all these billing issues have now been removed from the EED and placed within the recast Electricity Directive. However, the EED 2012/27 and the recast EED 2018/2002 continue to be relevant for the empowerment and protection of gas consumers.

23 Note from 22 January 2010: https://ec.europa.eu/energy/sites/ener/files/documents/2010_01_21_retail_markets.pdf.

5. Smart metering

- 67 The European Commission Recommendation on preparations for rolling-out smart metering systems²⁴ aims to facilitate the roll-out of smart meters and provides common minimum functional requirements for smart meters in electricity. The requirements concern access and frequency of meter readings for the consumer, the network operator and any third party designated by the consumer. The meters must provide two-way communication for maintenance and control, support advanced tariff systems, allow remote control of the power supply and/or flow or power limitation, and provide import/export facilities for data. Furthermore, meters must provide secure data connections, fraud prevention and detection mechanisms.
- 68 Article 9(2)(a) of the Energy Efficiency Directive 2012/27 establishes the obligation for MSs to ensure that the “objectives of energy efficiency and benefits for final household consumers are fully considered when establishing the minimum functionalities of smart meters and the obligations imposed on market participants”. It is for MSs to decide which energy efficiency objectives and which benefits to final consumers are considered when setting minimum standards for smart meters.

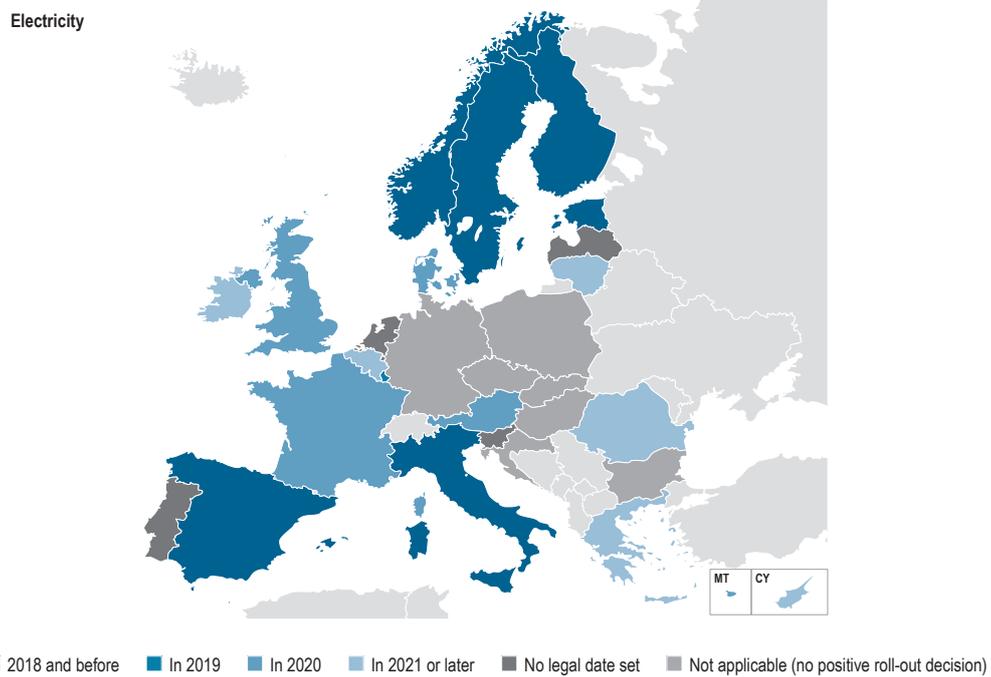
5.1 Roll-out

- 69 For the electricity sector, according to Annex I to the 2009 Electricity Directive, MSs should roll-out electricity smart meters to 80% of consumers by 2020, unless the result of a cost-benefit analysis is negative. Annex II of the recast Electricity Directive updates the provisions and states that where the deployment of smart metering systems is assessed positively, at least 80% of final customers shall be equipped with smart meters either within seven years from the date of the positive assessment or by 2024 for those MSs that have initiated the systematic deployment of smart metering systems earlier.
- 70 For the gas sector, Annex I to the 2009 Gas Directive requires MSs to prepare a timetable for the roll-out of gas smart meters with no indication of a timeline, but also subject to cost-effectiveness. The roll-out of gas smart meters is still very limited, with only France, Great Britain, Italy, Luxembourg and the Netherlands having commenced.
- 71 According to a report from the European Commission in 2018 there were around 99 million smart electricity meters or 34 % of electricity metering points (households and SMEs) in place. For gas this is around 12 million smart meters²⁵.
- 72 Figure 9 shows by when the electricity smart meter roll-out has been planned to reach 80% or more of electricity household consumers according to national laws. In 2018, one more country, Norway, completed the roll-out and has equipped consumers with electricity smart meters. By the end of 2019, most consumers in Luxembourg should have received electricity smart meters, followed by Denmark, Austria, France and Great Britain in 2020. In total, a decision not to implement the roll-out of smart meters based on a CBA, or no decision about a roll-out at all, has been taken in seven MSs: Bulgaria, Croatia, the Czech Republic, Germany, Hungary, Poland and Slovakia.

24 Commission Recommendation 2012/148/EU of 9 March 2012 on preparations for the roll-out of smart metering systems (OJL73, 13.3.2012, p. 9–22).

25 European Commission benchmarking report on smart metering implementation in the EU-28.

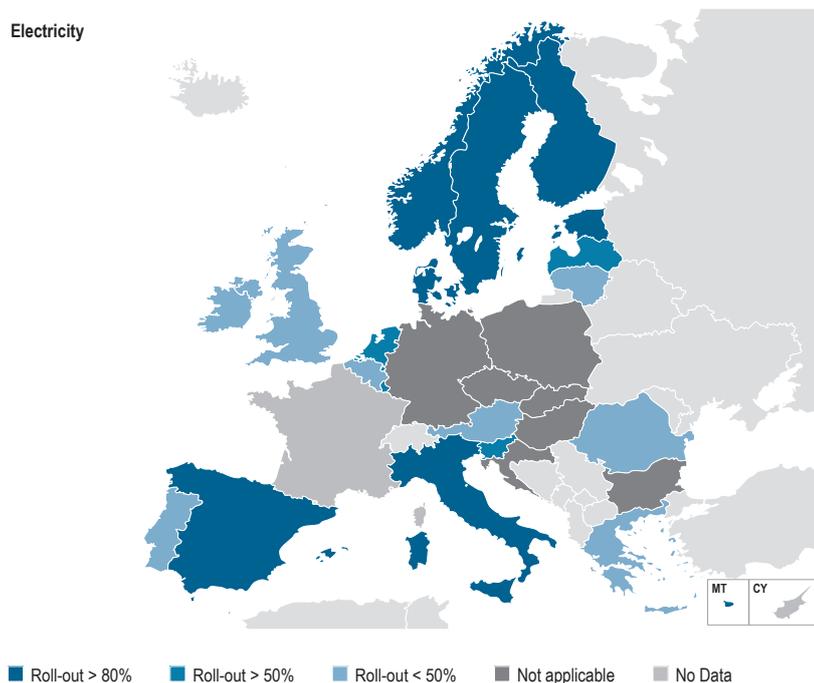
Figure 9: Target year by when the 80 % rate of electricity smart meters will be reached in EU MSs and Norway – 2018



Source: CEER 2019.

73 Figure 10 shows the status of the roll-out of electricity smart meters at the end of 2018. There are 12 countries where the roll-out of the electricity smart meters has already reached at least 50 percent of household consumers: Denmark, Estonia, Spain, Finland, Italy, Latvia, Luxembourg, Malta, The Netherlands, Norway, Sweden and Slovenia. In addition, in six MSs the roll-out has started but has not yet reached such a significant level. However, the functionalities offered by smart meters differ by MS.

Figure 10: Electricity smart meter roll-out rates in EU MSs and Norway – 2018 (%)

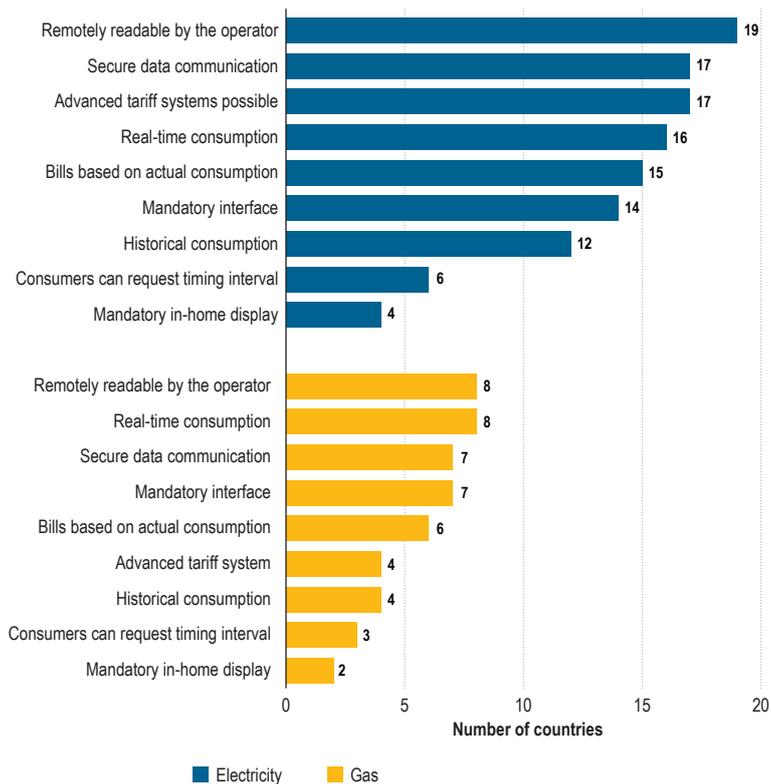


Source: CEER 2019.

5.2 Functionalities and consumption information

74 Minimal technical and other requirements for smart meters in order to ensure benefits to household consumers are defined in legislation in 19 MSs in the case of electricity and in eight MSs in the case of gas. Many of these MSs require that smart meters provide consumers with information on their actual consumption, make billing based on actual consumption possible and ensure easy access to information for household consumers. Figure 11 summarises the most common functionalities required for smart meters in EU MSs and Norway.

Figure 11: Main legal requirements for smart meters in EU MSs and Norway – 2018 (number of MSs)

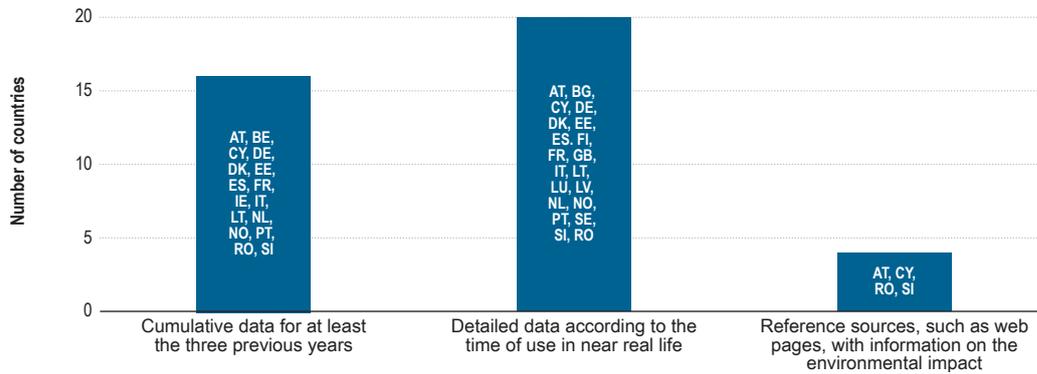


Source: CEER 2019.

75 Figure 12 shows in which MSs consumers with smart meters have access to complementary information on historical consumption²⁶. In 20 MSs, consumers have access to additional detailed data according to the time of their use of electricity for any day, week, month and year via internet or the meter interface. In 16 MSs, consumers have access to cumulative data for at least 3 years or the period since the start of the supply contract if this is shorter. In four other MSs, consumers also receive information on the environmental impact of their consumption.

26 Historical consumption information and, subsequently, smarter products may also be provided to household consumers without smart meters based on frequent actual readings and more sophisticated usage of standard load profiles.

Figure 12: Complementary information on historical consumption that final household consumers with smart meters must have access to – 2018 (number of MSs)



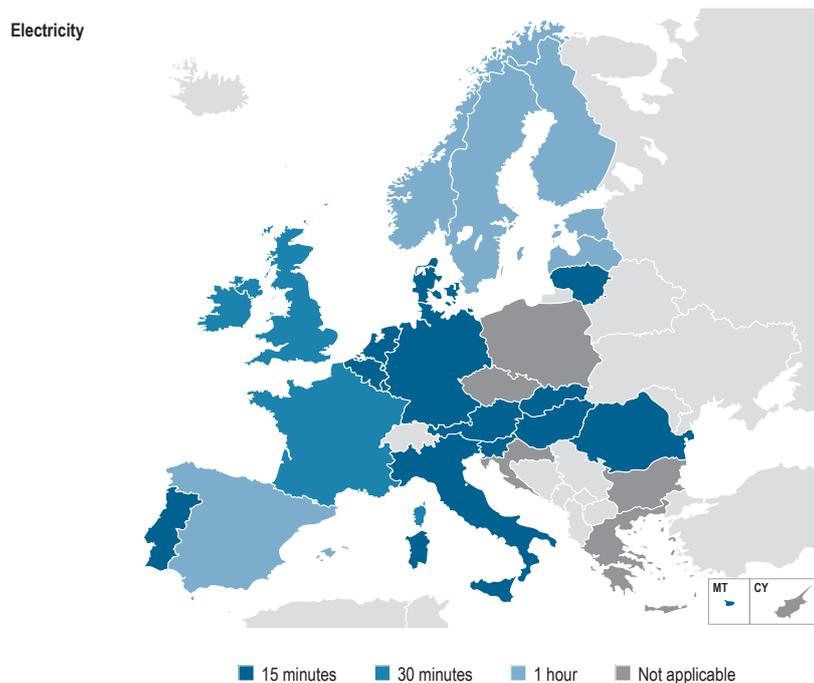
Source: CEER 2019.

5.3 Time intervals of smart meter readings

76 The maximum time granularity of available smart meter readings determines the actual consumption optimisation potential of the meter for the consumer. Usually, the granularity determines the type of time-of-use products that can be offered to consumers. A product matched to the price changes on the wholesale market (e.g. exchange) requires a smart meter reading in the same interval as found on the wholesale market in order perfectly to match price and consumption volume. Likewise, products which offer less expensive energy at specific times or days of the week require smart meter data being able to clearly identify consumption volumes in such periods.

77 The maximum time granularity for consumption data stored in the smart meter varies across MSs. The most commonly used granularity is 15 minutes (13 MSs). In three MSs, it is 30 minutes, while one hour applies in six MSs, as shown in Figure 13.

Figure 13: Maximum time granularity in electricity smart meters for electricity in EU MSs and Norway – 2018



Source: CEER 2019.

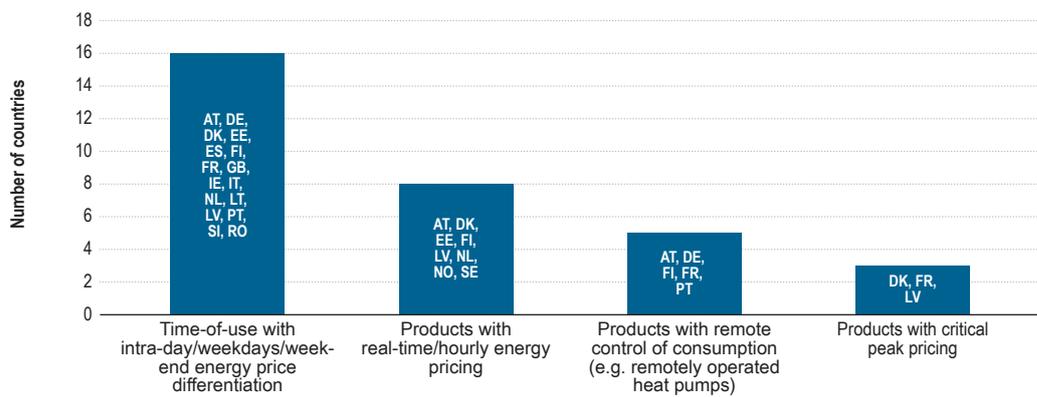
5.4 Types of smart meter products for electricity consumers

78 According to both the 2009 Electricity Directive and the recent recast Electricity Directive 2019/944, all consumers should be able to benefit from direct participation in the market by adjusting their consumption according to market signals and in return benefit from lower electricity prices. Therefore, smart meters and dynamic electricity pricing contracts are crucial. Such smart meter products could have many different properties.

- Time-of-use products, where the cost of electricity depends on the time of day, or the weekday/weekend, seem to be the most common ones;
- Real-time pricing matches consumer energy prices much more closely to wholesale prices;
- Critical peak prices generally signal peak consumption levels in determining the price of energy;
- Smart meters with remote consumption control functionality are, for example, devices that adapt the operation of specific home appliances, such as heat pumps, to hourly electricity prices, in order to benefit from shifting consumption to lower-price periods.

79 Currently, electricity consumers in 16 MSs can sign up to time-of-use contracts with intra-day, weekdays or weekend energy price differentiation. In eight MSs, electricity consumers can choose real-time or hourly energy pricing, as shown in Figure 14.

Figure 14: Types of electricity smart meter products available in EU MSs and Norway – 2018 (number of MSs)



Source: CEER 2019.

80 In very few MSs with (partial) smart meter roll-out, however, suppliers must already formally inform their final household consumers about the opportunities, costs and risks of dynamic electricity price contracts. The risks inherently linked to dynamic price contracts are, inter alia, uncertainty about the actual bill level, as well as potentially high price fluctuations over short periods of time.

6. Consumer choice

81 This section examines consumer activity levels, including switching, prosuming and demand response activities, and explores the availability and properties of comparison tools in EU MSs.

6.1 Active consumer roles

82 There are several ways for consumers to play a more active role in the liberalised energy market:

- First, supplier and/or product switching is an already well-established way of participating and benefiting from liberalised energy markets;
- Second, prosuming, that is, the self-generation and (partial) consumption of energy is a means to invest in the energy transition and reap the benefits of greener and renewable electricity;
- Third, the recast Electricity Directive also introduces a collective way of acting on energy markets known as energy communities (see Section 6.1.3 for further details). There are two different entities, i.e. renewable energy communities as defined in the 2018 Renewables Energy Directive, and citizens energy communities as defined in Article 16 of the recast Electricity Directive;
- Finally, consumers can engage in demand response activities, i.e. any behavioural or other action undertaken by households in response to (any kind of) signal “from the market” to further benefit from cheaper prices.

6.1.1 Switching

83 Supplier switching has been the most direct way for consumers to take part in the energy markets since their liberalisation. Furthermore, supplier switching strengthens competition, affecting market shares and thus putting competitive pressure on energy suppliers stimulating companies to offer better products and services²⁷.

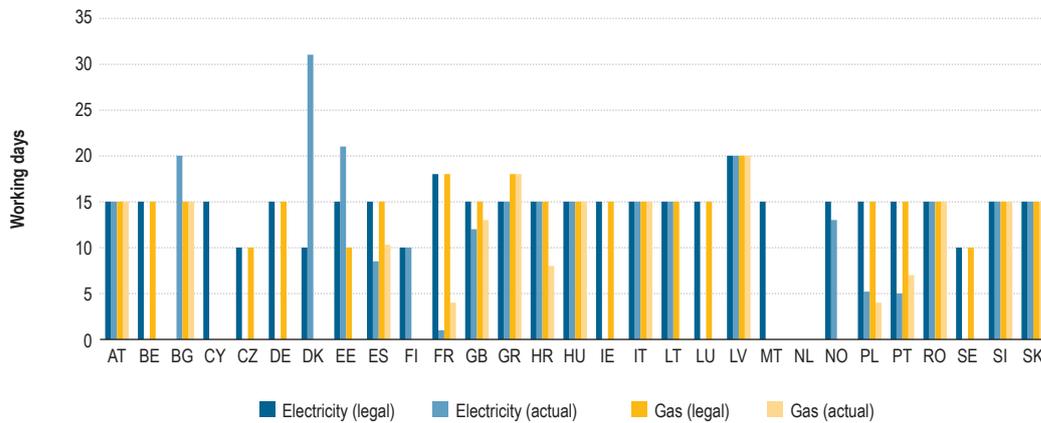
84 On the other hand, many NRAs reported in the context of the CEER ‘Benchmarking report on removing barriers to entry for energy suppliers in EU retail energy markets’ that complicated switching processes created a potential barrier to entry. A number of NRAs declared that they were currently working on improving timeframes, up to next-day switching²⁸. According to the 2009 Electricity and Gas Directives, a switch should take no longer than three weeks and consumers should receive their final bill within six weeks.

85 As shown in Figure 15, the legal maximum duration of an electricity and a gas switch meets the respective Directive requirements (i.e. 3 weeks or 15/18 working days) in most MSs. In some MSs, however, actual switching times are (considerably) longer than what the law stipulates. In Bulgaria and Estonia, consumers face longer average switching times to a new supplier than stipulated in national legislation. In Denmark, the average switching time is longer because consumers (and suppliers) may request longer time to switch in advance – resulting in record switching duration of more than 3 weeks, even though the Danish data hub can effectuate a switch within the same day.

27 See 2017 Handbook for National Energy Regulators, January 2017.

28 See CEER Benchmarking report on removing barriers to entry for energy suppliers in EU retail energy markets, April 2016.

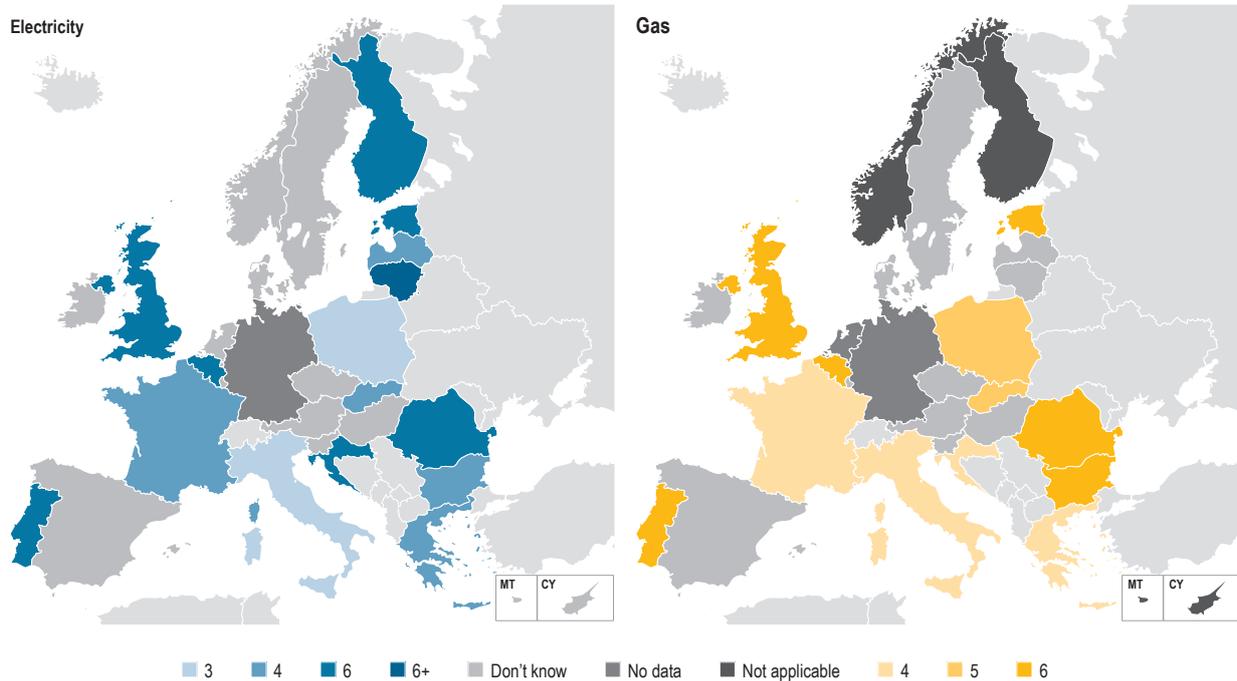
Figure 15: Legal and actual switching time in EU MSs and Norway – 2018 (in working days)



Source: CEER 2019.

- 86 In order to empower consumers, the switching time should be as short as possible and switching should be possible on any day. Therefore, the switching date should be as flexible as possible, adapting to consumer preferences (e.g. when the old contract expires, instead of as soon as possible). Specific national legislation determines when switching can be executed. In the electricity sector, in most MSs both consumers and suppliers can choose the precise switching date, in Luxembourg the ultimate decision lies with suppliers and in Estonia, Croatia, Latvia and Slovenia it is not possible to choose the precise switching date at all. The situation is similar for gas.
- 87 The possibility to choose the precise switching date depends on the practical switching procedures in place. In MSs where this possibility is available, consumers must contact the supplier in order to request a specific date. Otherwise, a consumer will typically be switched at the earliest date possible. However, this choice is not given if switching is restricted to certain days of the month or of the week.
- 88 The recast Electricity Directive also states, in Article 12, that the technical process of switching should be possible within 24 hours by 2026. As of 2018, this appears to be the case only in Italy, with only five other NRAs stating to know about its duration. However, most NRAs claim that the technical process of switching is not defined yet.
- 89 As already mentioned, after switching consumers should receive their final bill from their former supplier within six weeks. In most MSs, this timeframe is respected. There are a few exceptions though and in some MSs the process lasts even less than six weeks, as shown in Figure 16. Many NRAs, however, do not monitor the average time between switching and billing but rather only the percentage of late billing according to the EU requirements which explains the large number of “don’t know” answers in Figure 16.

Figure 16: Actual maximum time between switching supplier and actual receipt of the final bill in EU MSs and Norway – 2018 (in weeks)



Source: CEER 2019.

6.1.2 Prosuming

- 90 The recast Electricity Directive introduces several new policy and regulatory initiatives, recognising that consumers play a fundamental role in realising the full potential of the European energy market and that the retail electricity market has to offer them the possibility to actively participate in and benefit from the energy transition, in line with ACER’s conclusions paper ‘A Bridge to 2025’²⁹.
- 91 Large numbers of prosumers (consumers who produce energy on-site, behind a metering point capable of registering at least their hourly generation and consumption, making production data available³⁰) may dramatically change the electricity system. One type of prosumer has already existed for some time in most MSs: residential prosumers who produce and consume electricity in their homes – mainly through photovoltaic (PV) panels on their rooftops.
- 92 Examples of other types of prosumers are public institutions, cooperatives or housing associations, among others, whose core business activity is not electricity production, but who nonetheless generate electricity at their premises and use it themselves and/or inject it or any surplus into the grid.
- 93 The rise in the number of prosumers has been facilitated both by incentives provided and by falling costs of renewable energy technologies, especially PV panels, which in some MSs produce electricity at a cost that can be competitive with supplier retail prices. Profitability depends partly on the share of the electricity produced that prosumers can consume themselves and how this is regulated.

29 See: https://www.acer.europa.eu/official_documents/acts_of_the_agency/sd052005/supporting%20document%20to%20acer%20recommendation%2005-2014%20-%20%20energy%20regulation%20a%20bridge%20to%202025%20conclusions%20paper.pdf.

30 See CEER Position Paper on Renewable Energy Self-Generation, September 2016.

94 While the use of PV panels among household consumers has become more widespread, it is only reported by 13 NRAs (in 2017, only eight NRAs were able to provide figures) and can be used as an indication of what percentage of consumers participates actively in the energy transition. The MS with the highest share of households with PV panels for self-consumption is Denmark with 3.3% (2017: 2.9%). In Great Britain and Cyprus, 2.8% and 2.5% respectively, of the total number of consumers are using PV panels for self-consumption. In the remaining MSs for which data was reported – Greece, Hungary, Italy, Lithuania, Luxembourg, Malta, Romania, Slovakia, Slovenia and Sweden – the share is below 2%.

6.1.3 Energy communities

95 Community driven energy projects have been part of the European energy landscape since its inception in the early 20th century. In recent years, the development of decentralised renewable energy technologies has made direct participation in energy production and management more accessible. With its Clean Energy Package, the European Commission proposed for the first time formally to recognise community energy projects in European legislation. After over two years of negotiations, the recast Renewables Directive includes a definition for “Renewable Energy Communities” and the recast Electricity Market Directive includes a definition for “Citizen Energy Communities”.

96 Both types of energy communities are entities that are set up as a legal entity. They are defined by their structure. They must be effectively controlled by their shareholders or members, and their primary objective is to provide environmental, economic and social community benefits rather than financial profits. A recent CEER paper, titled “Regulatory Aspects of Self-Consumption and Energy Communities” investigates the legal nature of energy communities in detail and presents case studies of existing ones³¹.

97 Statistical coverage of citizens energy communities is still limited. Only Great Britain seems to report data at this point in time. It has 275 citizens’ energy communities with in total approximately 46,000 members, according to the data provided by the regulatory authority.

6.1.4 Demand response activities for electricity consumption

98 Demand response provides an opportunity for consumers positively to affect the operation of the electric grid by, for example, reducing or shifting their electricity usage away from peak periods in response to time-based tariffs and/or energy prices or other forms of financial incentives.

99 Demand-side flexibility can be provided by:

- Consumers who shift their electricity consumption to another time of day or week. Typically, this relates to electricity use for heating, charging of electric cars or by household appliances.
- Consumers who reduce their electricity demand, including volume and load at certain times, in order to benefit from energy price changes. Typically, these are large-scale consumers within the electricity-intensive industry who choose to decrease demand when the electricity price is too high.

100 Two forms of demand-side flexibility can be distinguished. Implicit demand-side flexibility is the consumer’s reaction to price signals. Where consumers have the possibility to choose hourly or shorter-term pricing, reflecting price variability on the wholesale market and the grid, they can adapt their behaviour (through automation or individual action) in order to save energy costs. Some implicit demand response mechanisms are time-based rates, time-of-use pricing, critical peak pricing, variable peak pricing, real time pricing, and critical peak rebates. It also includes direct load control programmes which provide the ability for power companies to switch consumers’ air conditioners and water heaters on and off during periods of peak demand in exchange for a financial incentive and lower electricity bills. Further information on these mechanisms has been presented in Section 5. The availability of smart metering equipment and systems which allow time-of-use meter readings is a prerequisite for consumers to be able to opt into implicit demand response schemes.

31 CEER’s paper “Regulatory Aspects of Self-Consumption and Energy Communities” is available online: <https://www.ceer.eu/documents/104400/-/-/8ee38e61-a802-bd6f-db27-4fb61aa6eb6a>.

- 101 Explicit demand-side flexibility is committed and dispatchable flexibility that can be traded (like generation flexibility) on different energy markets (wholesale, balancing, system support and reserves markets). Electricity consumers receive specific rewards or incentives in order to change their consumption patterns upon request (using more or using less), e.g. triggered by activation of balancing energy, differences in wholesale prices, steep ramps or a constraint on the network. This can be facilitated and managed by a supplier or by an aggregator. While in many countries there are interruptible capacity contracts for industrial consumers, Germany is the only MS that has interruptible contracts also in place for household consumers. German consumers with controllable consumer devices who participate in such action may be charged lower network costs if these devices are controlled by the DSO for network management reasons and have the necessary grid usage contract.
- 102 The availability of smart metering equipment and systems which allow time-of-use meter readings are a prerequisite for consumers to be able to opt into implicit demand response schemes. Smart meters may also enable explicit demand response services through a dedicated standard interface, either as mandatory equipment or as an option³².

6.2 Comparison tools

- 103 Comparison tools (CTs) are crucial instruments in the provision of clear and transparent information to consumers. They empower energy consumers by offering a clear and trusted service and, if additional information is available, by helping consumers navigate and understand the market. This empowerment builds on the reliability of CTs and the promotion of direct access to well-functioning comparison services.
- 104 CTs give consumers the possibility to compare prices of different offers, enhancing customers' opportunities to gain from activity in the market. Customers reacting to the prices of different offers also give new entrants the opportunity to compete on price³³.
- 105 Figure 17 shows a comparison between the number and types of available CTs per MSs, including the total number of CTs, CTs covering the entire market and the number of reliable CTs³⁴. Consumers can access 32 CTs in the Netherlands and 30 CTs in Germany³⁵. Those numbers decrease when looking at the number of CTs covering the entire market, with France and Spain (15 CTs each) and Norway (seven CTs) and Portugal (four CTs) being the MSs with a significant total number of CTs.
- 106 According to public authorities, reliable CTs are available in 18 MSs for electricity and in 15 MSs for gas. There are MSs with multiple reliable CTs, such as Great Britain (11), Austria and the Czech Republic (three, for electricity only), Portugal (two), and Ireland (two). In most MSs with one, two or three CTs, NRAs or authorities dealing with consumer protection operate CTs. Yet, private companies also run CTs in several MSs. Only Portugal has a verification scheme for CTs.

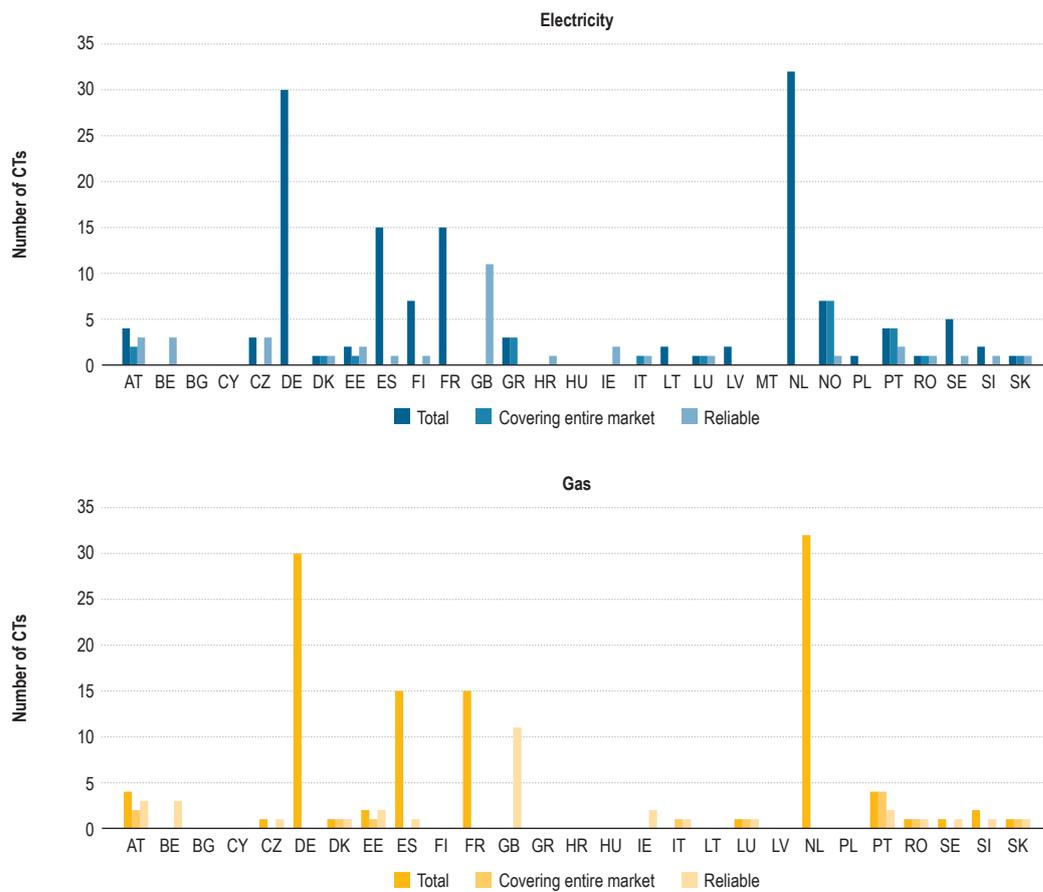
32 See CEER Benchmarking report on removing barriers to entry for energy suppliers in EU retail energy markets, April 2016.

33 See footnote 23.

34 In some MSs, these numbers are estimates provided by NRAs for this Volume due to a lack of national responsibility in closely monitoring CTs in many MSs in 2018.

35 BNetzA, the German regulatory authority recently published a report on CTs. This report differentiates between CTs with their own data source and CTs using data from other CTs (under a licence agreement). In total, the report concludes that there are 30 CTs but only 5 collect data on their own. The full report is available online (in German only): https://www.bundeskartellamt.de/SharedDocs/Publikation/DE/Sektoruntersuchungen/Sektoruntersuchung_Vergleichsportale_Bericht.pdf;jsessionid=A65B2C59E94895E082E5DDFE27B4EF1E.1_cid371?__blob=publicationFile&v=7.

Figure 17: Number of types of CTs in EU MSs and Norway – 2018



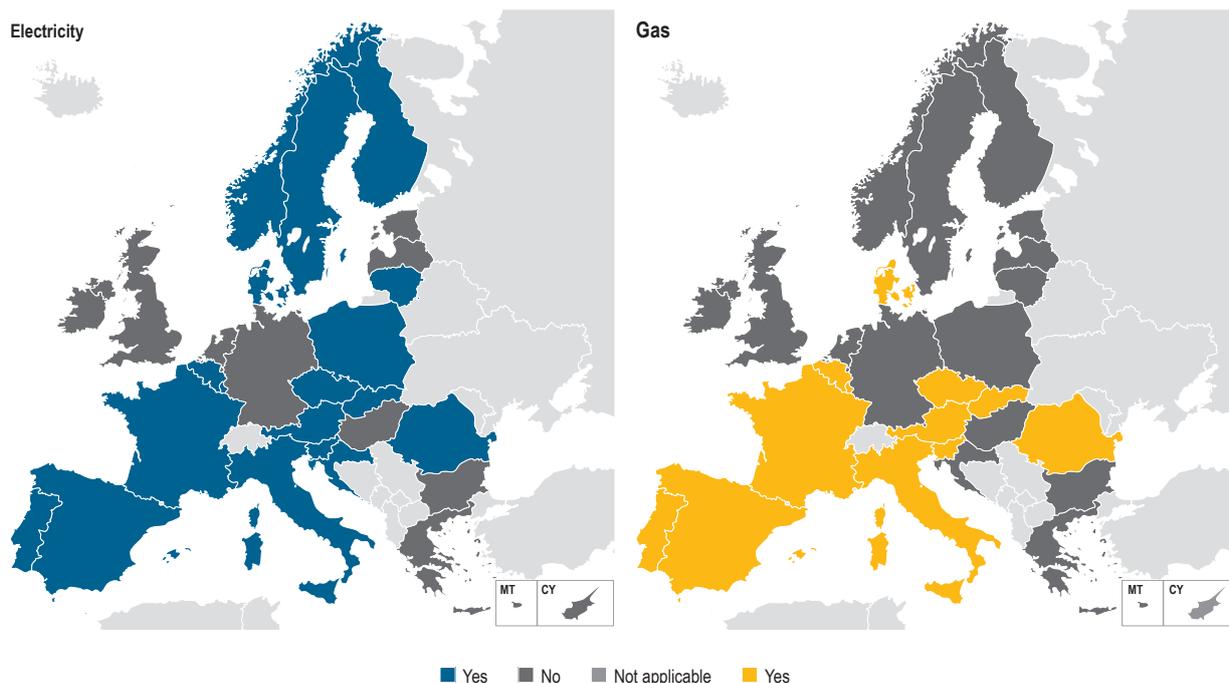
Source: CEER 2019.

- 107 According to the NRA assessment, CTs count as reliable in case they fulfil a set of criteria defined in guidelines of good practice published by CEER in 2017³⁶. The standards defined in these guidelines concern: independence, transparency, exhaustiveness, clarity and comprehensibility, correctness and accuracy, user friendliness, accessibility, and consumer empowerment. CTs meeting many of these standards are considered reliable, subject to NRA judgement.
- 108 For its Retail Markets Volume of the MMR, ACER downloads each year the retail offers for electricity and gas from one CT of each MS. Below is a non-exhaustive set of observations based on the Agency’s experience.
- Accessibility: CTs do not charge a fee and are usually accessible both by desktop computers and smart-phone. In some MSs, the tool offers English in addition to the official local language(s). However, it appears that few CTs are accessible to people with a disability.
 - Transparency of information: almost all CTs will mention the total number of offers coming out from the simulation. In most cases, the tool allows the user to rank the simulated offers by a number of parameters like supplier, price level and offer name.
 - Type of information provided: in general, the distinction between bundled and non-bundled contracts is clear. The type of price used (fixed, variable or dynamic) as well as the length of the contract will also be clearly mentioned. The high-level split of the price by the three main components, i.e. energy cost, grid costs and taxes is always provided, but further level of detail varies a lot. All CTs will, however, mention to double-check the offer of interest on the website of the relevant supplier.
 - User friendliness: In most cases, the consumer can check electricity and gas offers on the same comparison tool website. An element of an easy-to-use tool is the amount of information that is needed to calculate the offer simulation and to extract the suite of offers. Three types of data are standard: type of client, postal code/municipality and estimated consumption. In some MSs, the CT also requires input on the current supplier. Only few CTs have, unfortunately, a function that allows to download the underlying data.

36 The paper on CTs is available online: <https://www.ceer.eu/documents/104400/-/-/239d07c5-8512-7750-fbe6-d69f9233db60>.

109 Article 14 of the recast Electricity Directive mandates that MSs must ensure that at least household consumers and microenterprises have access to a CT. As Figure 17 has already shown, there are several MSs where no such tool exists at the moment for electricity, i.e. neither a private company nor a public body currently operates a CT for households and microenterprises (e.g. in Bulgaria, Cyprus, Hungary and Malta, where only one supplier operates). Hence, fulfilling the EU law implies that public authorities would need to start running CTs in case of absence of a privately-run one. In some MSs, public authorities have been already providing CTs for several years. As shown in Figure 18 this is the case in 18 MSs for electricity and 12 MSs for gas.

Figure 18: MSs where a public authority provides a comparison tool in EU MSs and Norway – 2018



Source: CEER 2019.

110 The recast Electricity Directive introduces a series of twelve standards on how CTs should function effectively to the benefit of energy consumers. In particular, there should be at least one CT in each MS with the following properties:

1. independence from market participants;
2. equal treatment of energy undertakings in search results;
3. disclosure of ownership;
4. disclosure of funding sources;
5. objective comparison criteria and their disclosure;
6. plain language;
7. accurate and up-to-date information;
8. information on the time of the last update;
9. accessibility for persons with disabilities;
10. procedures to report incorrect information;
11. requirement of as little personal information for comparison as possible and
12. coverage of the whole market.

111 The listed criteria promise consumers a better access to neutral and objective information that empowers them to take an active role in the liberalised energy market. As of 2018, seven NRAs state that such CTs fulfilling all these criteria operate in their MSs: Austria (one CT fulfilling all criteria), Estonia (one), Spain (one), Ireland (two), Italy (one), Norway (one) and Portugal (two).

7. Complaints and ADR

112 According to the provisions of the Third Energy Package, NRAs must monitor complaints made by household consumers.

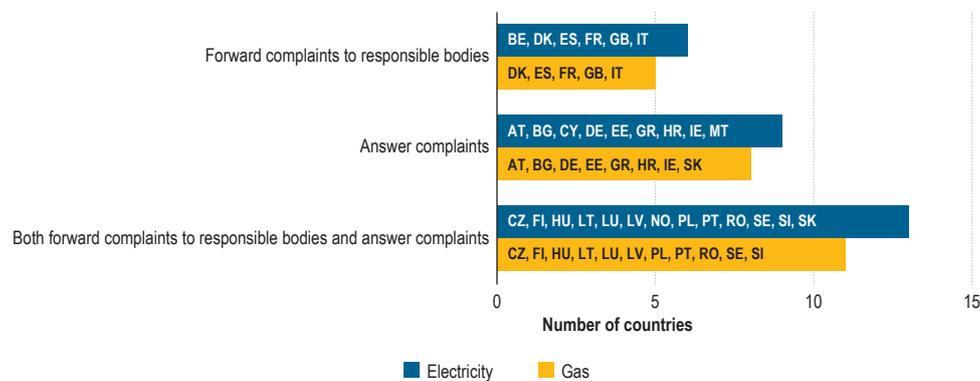
7.1 Complaint handling bodies and procedures

113 The 2009 Electricity and Gas Directives state that MSs should introduce speedy and effective complaint handling procedures. MSs need to:

- assign roles and responsibilities in handling consumer complaints; and
- design a process on how to handle consumer complaints.

114 As shown in Figure 19, in most MSs, the role of dealing with final consumer complaints has been assigned to NRAs. In 19 MSs for electricity and 16 MSs for gas, NRAs also forward complaints to other responsible parties.

Figure 19: Role of NRAs in complaint handling in EU MSs and Norway – 2018 (number of MSs)



Source: CEER 2019.

115 First and foremost, consumers complain to their contractual counterparty in energy affairs, i.e. their supplier and/or the DSO. In 21 MSs for electricity and in 18 MSs for gas, DSOs report such complaints to NRAs. In 17 and 18 MSs, respectively for electricity and gas, suppliers also report such complaints to the NRA. In very few MSs (Belgium, Germany, Great Britain and Luxembourg), the Alternative Dispute Resolution (ADR) body or the (Energy) Ombudsman also reports data on consumer complaints to the NRAs. In four MSs, reporting data on consumer complaints to the NRA is not obligatory.

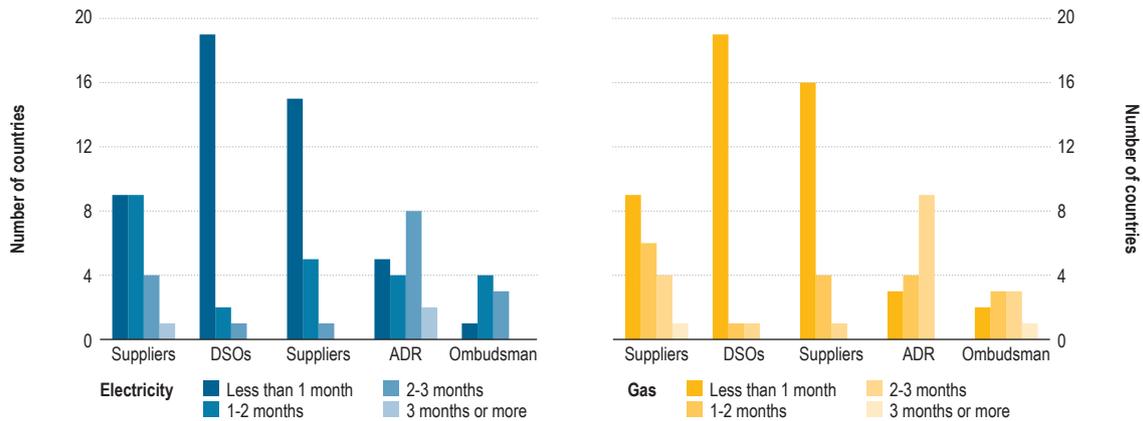
116 In 19 MSs, NRAs publish complaint data about final household consumers. While DSOs only publish complaint data in three MSs, suppliers do so in four MSs in electricity and in five MSs in gas. Apart from NRAs, ADR bodies (in nine MSs in electricity, in seven MSs in gas) must most often publish their own findings about consumer complaints. While publication responsibilities thus vary across Europe, information about what consumers complain about and how often they do so appears to be widely available due to mandatory reporting requirements, except for those MSs (three for electricity and two for gas) where none of the listed bodies must publish complaint data³⁷.

117 Information about where and how to complain must be made available in electricity and gas consumer contracts, bills or even advertising material in all MSs. In most MSs, such information is even mandatory in contracts, bills and on suppliers' websites. In the majority of MSs, some complaint information is also necessary on advertising materials and other information leaflets.

118 To accelerate the complaint services, a short legal maximum processing time is set for the various market actors, as shown in Figure 20. In most MSs, suppliers and DSOs are requested to respond to consumer complaints within one month or faster. NRAs and Ombudsman are given more time to handle complaints due to their role and responsibility in acting as a balanced and neutral party between energy service companies and consumers.

37 According to NRAs, no publishing obligations exist in Estonia, Finland and Malta (only for electricity).

Figure 20: Legal maximum processing time to handle complaints in EU MSs and Norway – 2018 (number of MSs)



Source: CEER 2019.

7.2 Complaint data

119 This Section comments on the number of final household consumer complaints directly addressed to NRAs, suppliers, DSOs or ADR/Ombudsman/other entities. Furthermore, categories of consumer complaints are presented to monitor the reasons for consumer dissatisfaction.

7.2.1 Number of complaints

120 The number of final household consumer complaints received by NRAs, suppliers, DSOs or ADR/Ombudsman/other entities in electricity and gas continues to vary significantly across MSs – also because of different definitions used and population sizes. Apart from that, variation is mainly caused by differences in handling and reporting procedures in MSs, so that the absolute number of complaints is not a straightforward indicator of the quality of service in a country. Hence, a cross-national comparison of the number of complaints is challenging and robust conclusions about consumer protection and market-functioning are difficult to draw from such comparison.

121 However, even a cursory look at the reported data sheds some light on the challenges in monitoring complaints at both European and national levels. In total, 6.2 million complaints in electricity and 1.8 million complaints in gas to either suppliers, DSOs, ADR bodies, Ombudsman and NRAs have been reported by NRAs in 2018. That equals approximately 1,200 complaints in electricity per 100,000 European inhabitants and 350 in gas. Per entity receiving the complaints, the situation is as follows:

- Suppliers receive the main share of complaints: in 2018, 5.6 million complaints in electricity and 1.6 million in gas. However, data on complaints received by suppliers is only reported by 12 NRAs (out of 29). The other NRAs are not able to submit numbers of complaints received by suppliers.
- DSOs also receive many complaints; however, much less compared to those received by suppliers (585,000 complaints directed at electricity DSOs and 169,000 at gas DSOs).
- NRAs also receive complaints. In total, 21 NRAs report a total of approximately 40,000 complaints for electricity and 21 NRAs a total of 15,000 complaints for gas³⁸. The numbers of complaints directly addressed to NRAs vary significantly across MSs, also because of the NRA's national role in complaint handling (as already shown in Figure 19)³⁹.

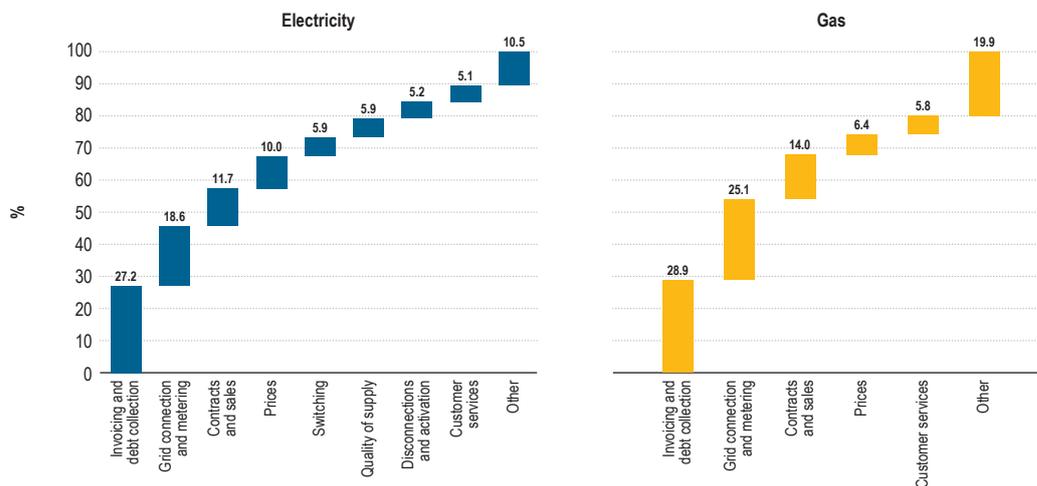
38 In some MSs, NRAs are not able to provide separate information for received complaints for electricity or gas.

39 In electricity, the range of complaints directly addressed to NRAs is 0 (in Denmark) to 17,196 (Portugal); in gas the range is 0 (in Denmark, Estonia, Finland and Luxembourg) to 2,893 (Romania). Only four additional NRAs report more than 1,000 complaints for electricity and three NRAs for gas. Most other NRAs report figures below 1000 complaints. In total, the following classification is based on approximately 43,000 complaints directly addressed to NRAs concerning electricity and 14,000 concerning gas.

7.3 Classification of consumer complaints

122 Statistics on complaints directly addressed to NRAs⁴⁰ appear to be more comparable than data on complaints submitted to suppliers or DSOs, since they are better reported across more MSs. A MS-level average classification of all complaints addressed to NRAs gives a better understanding about consumer complaints⁴¹.

Figure 21: Average national shares of types of final household consumer complaints in electricity directly addressed to NRAs for EU MSs and Norway – 2018 (%)



Source: CEER 2018.

123 Figure 21 shows that, on average, 27% of all electricity complaints to NRAs concern invoicing and debt collection, followed by complaints on grid connection and metering (19%), contract and sales (12%), and prices (10%)⁴². Switching is only of concern in 6 out of 100 electricity complaints. Likewise, unfair commercial practices no longer seem to constitute a major cause of concern.

124 In gas, the three main categories of complaints are: invoicing and debt collection, grid connection and metering, and disconnections and activation⁴³. Hence, the topics of complaints in gas are similar to those in electricity. Switching issues and unfair commercial practices again seem not to be a major concern for gas consumers.

7.4 Alternative dispute resolution

125 According to Article 3 of the 2009 Electricity and Gas Directives, MSs should design an “independent mechanism, such as an energy ombudsman or a consumer body to ensure the efficient treatment of complaints and out-of-court dispute settlements”. All MSs, except Cyprus, have implemented an ADR mechanism for both electricity and gas. Furthermore, an ADR is available free of charge for final household consumers in most MSs. Consumers must pay a small fee for the ADR service in Croatia and Denmark, which might be refunded if their complaint is successful.

126 As shown in Figure 22, most often MSs have assigned the role of ADR in both electricity and gas to the NRA. Non-energy sector specific third parties, such as non-sector specific consumer bodies, come in second place. Figure 22 also shows that MSs have frequently shied away from designing energy sector-specific third parties as ADR mechanism. Ombudsman also remains a minority choice when it comes to alternative dispute settlement.

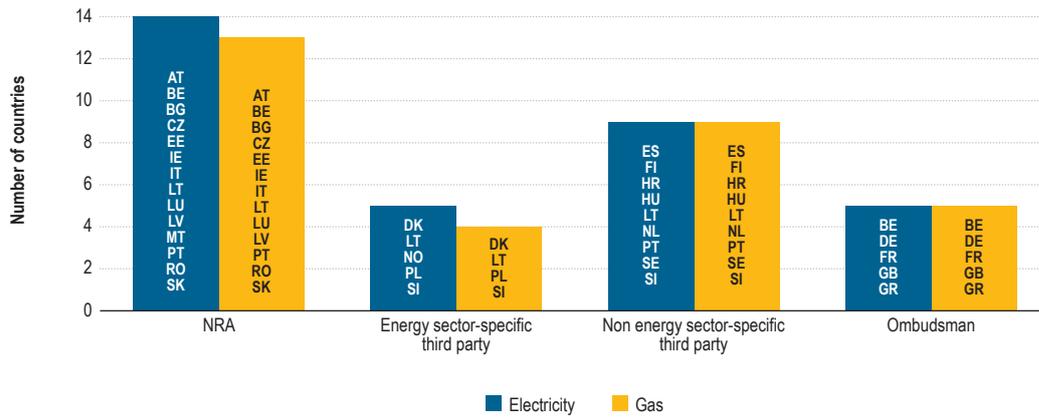
40 In their capacity as NRA, not as ADR.

41 For the presentation of the types of consumer complaints, the population weighting and the number of complaints reported by each NRA are not considered. Resulting figures thus refer to MS-level average percentages of complaints in the various categories.

42 Findings based on data reporting from 21 NRAs for electricity (Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Finland, Germany, Greece, Hungary, Ireland, Latvia, Lithuania, Luxembourg, Malta, Norway, Poland, Portugal, Romania, Slovenia, Spain and Sweden).

43 Findings reflect the average national percentages of 12 NRAs reporting for gas (Bulgaria, Czech Republic, Germany, Greece, Hungary, Ireland, Latvia, Lithuania, Poland, Portugal, Romania and Spain).

Figure 22: Entities responsible for ADR in EU MSs and Norway – 2018 (number of MSs)



Source: CEER 2019.

- 127 The most common way to provide household consumers with relevant information on the ADR body is to include the contact information in the supply contract (in 20 MSs), and/or in the bill (in 19 MSs for electricity and in 15 MSs for gas). In most MSs, the service providers inform the final household consumers about the relevant contact information of a competent ADR body on their websites.
- 128 Once a dispute is filed, responsible parties have, in many MSs, an obligation to meet the legal maximum processing times. These vary substantially across MSs and can reach up to six months in more complex cases. In general, however, most ADR bodies must issue a recommendation or solution no longer than three months after a dispute was filed. In some MSs, ADR bodies are expected to work significantly faster. For instance, in Spain the ADR body should reach a conclusion within one month.
- 129 Finally, ADR bodies across Europe settled 81,472 disputes according to NRA reports⁴⁴. However, this number is based on only 16 NRAs reporting the number of ADR disputes for electricity and 13 for gas.

44 Most disputes were settled in Great Britain (39,012 in total), followed by Portugal (16,972 in electricity and 2,148 in gas yielding 19,120 disputes in total) and Belgium (10,803 disputes). Some NRAs report a very small number of settled disputes with a total of five disputes or fewer (Latvia, Malta and Romania).

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