



**Monitoring Report on the Functioning of Gas
and Electricity Retail Markets in the Energy
Community in 2018**

December 2019

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A. INTRODUCTION

Market monitoring is a core element of regulatory responsibilities. Only in-depth knowledge of market performance, stakeholder activities and development trends allow regulators to create an effective market framework that balances the needs of market players and is able to promote competition, customer protection, energy efficiency, investments and security of supply at the same time. The relevance of regulatory market monitoring is not only recognized by the Energy Community *acquis communautaire* but is also since years a central activity of the Energy Community Regulatory Board (ECRB).¹

The present report covers the Energy Community Contracting Parties (CP) **Albania, Bosnia and Herzegovina, Georgia, Kosovo*,² Moldova, Montenegro, North Macedonia, Serbia and Ukraine**. It describes the status quo of electricity and gas markets on retail level with the aim to identify potential barriers and discuss recommendations on potential improvements.

During the data collection phase, information was also submitted by the regulatory authorities of Greece and, partially, Croatia (for gas and customer protection). Having in mind that information for these countries was not available in previous editions of the ECRB annual retail market monitoring reports, a dynamic and development based analysis was not possible for Croatia and Greece. However, certain information that refers to 2018 only is included in the report for these two EU Member States. Subject to availability of data in the next year(s), full analysis of the Greek and Croatian retail energy markets shall be provided in the next edition(s) of the ECRB retail market monitoring report.

Data presented in this report refers to the year **2018**.

¹ ECRB operates based on the Treaty establishing the Energy Community (Energy Community Treaty). As an institution of the Energy Community¹ the ECRB advises the Energy Community Ministerial Council and Permanent High Level Group on details of statutory, technical and regulatory rules and makes recommendations in the case of cross-border disputes between regulators. For more information about ECRB consult www.energy-community.org – about us – institutions – regulatory board. Previous editions of the ECRB annual retail market monitoring report are available at: https://www.energy-community.org/documents/reports_ECRB.html.

² Throughout this document, this designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Advisory Opinion on the Kosovo declaration of independence.

B. FINDINGS: ELECTRICITY

This chapter provides a status review of the analyzed retail electricity markets as regards demand data, the supply market structure, switching behavior of end-customers as well as end-user electricity prices and their regulation.

1. Electricity retail market characteristics

Total **sale of electricity** to final customers in the Contracting Parties increased by 2.24% in the period 2017-2018 - excluding Ukraine total sale of electricity to final customers increased by 1.29%. In most markets, electricity consumption increased. Georgia (8.60%) has the highest increase of electricity consumption, followed by Moldova (3.54%), Ukraine (2.82%), Albania (2.13%) and Montenegro (1.56%) while in Bosnia and Herzegovina (0.49%) and Kosovo* (0.35%) the increase of electricity consumption was below 0.5%. Electricity consumption has slightly decreased in Serbia (-0.29%) and North Macedonia (-0.19%).

When analyzing **electricity consumption** of households and non-households customers, it can be noticed that in Bosnia and Herzegovina, Montenegro, North Macedonia and Serbia consumption of households decreased while consumption of non-households increased.³ On the other side, in Kosovo*⁴ households` consumption increased and non-households` consumption decreased. In Albania⁵, Moldova⁶ and Ukraine⁷, consumption of both households and non-household customers increased.

The figures below show the total electricity sales to final customers in the period 2013-2018,⁸ presented with and without data for Ukraine.

³ The decrease of households' consumption ranged between -1.09% and -3.27% while the increase of non-households consumption was between 1.85% and 3.62%.

⁴ In Kosovo* the increase of households` consumption was 3.52%, the decrease of non-households' consumption - 4.02%.

⁵ In Albania the increase of households` consumption was 1.02% and for non-households' consumption was 3.53%.

⁶ In Moldova consumption of households increased by only 1GWh (0.06%) in 2018 but consumption of non-household increased significantly by 6.26%.

⁷ In Ukraine the increase of consumption was similar for both group of customers - for household 2.66% and in non-household 2.89%.

⁸ Only for Moldova presented data refers to the period 2015-2018.

Figure 1 Total electricity sale to final customers in GWh 2013- 2018

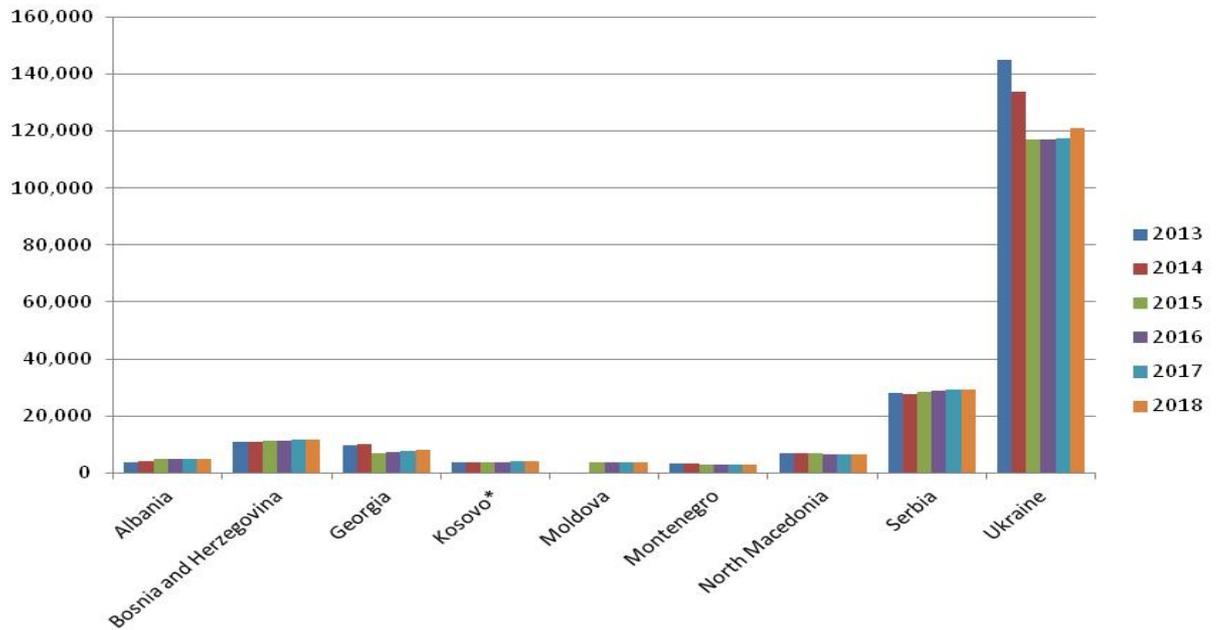
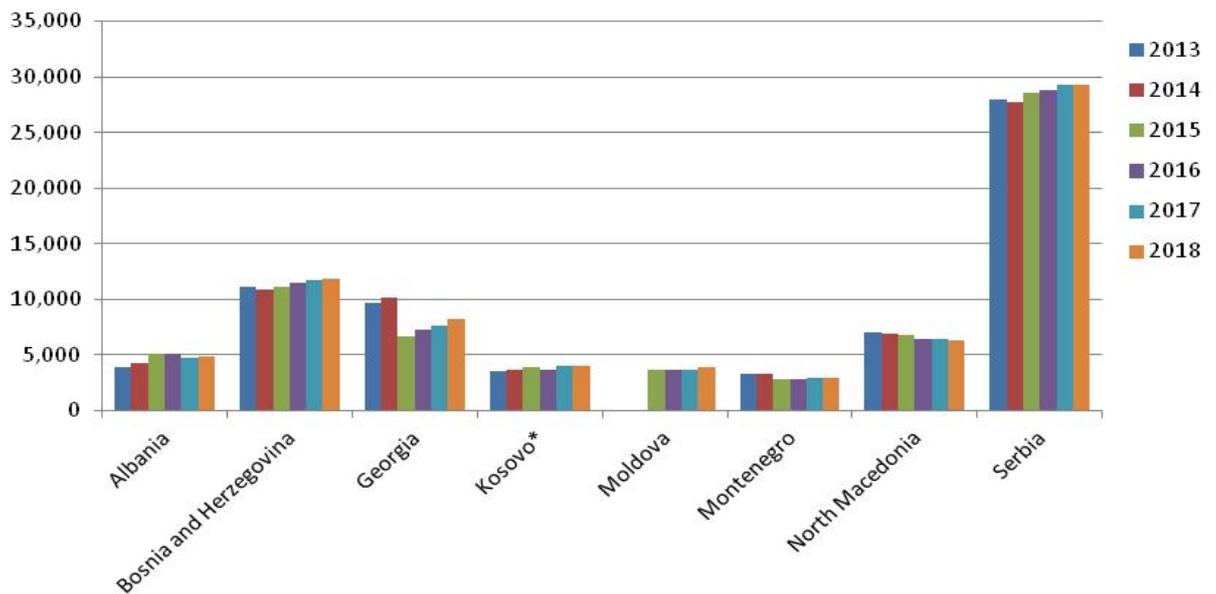
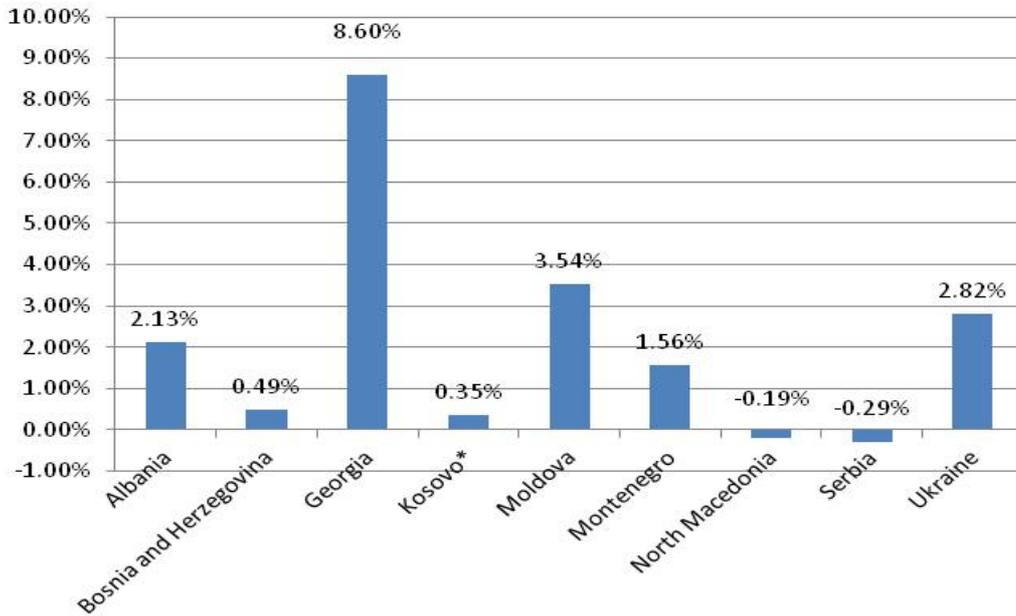


Figure 2 Total electricity sale to final customers in GWh 2013- 2018 (excluding Ukraine)



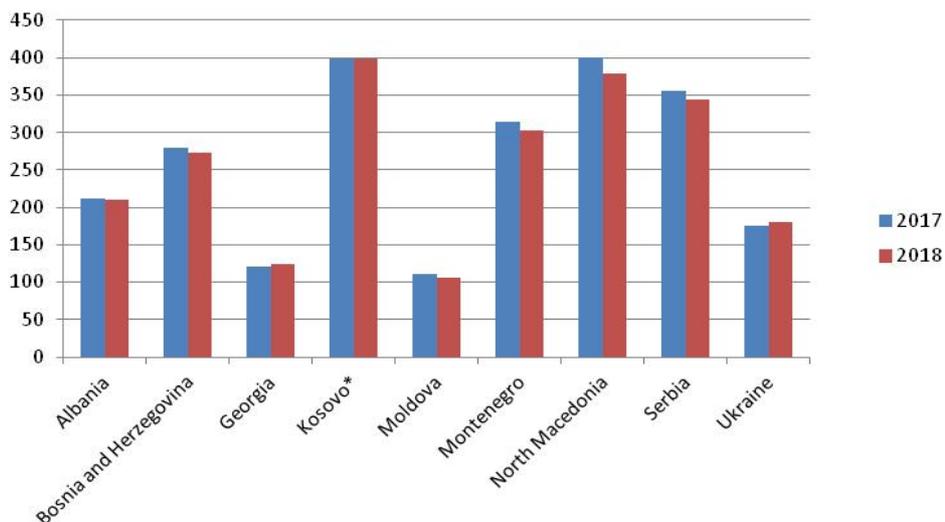
The following figure shows the growth rates of the total of electricity sales to final customers in the Contracting Parties from 2017 to 2018.

Figure 3 Electricity demand growth rates 2017 to 2018



The average monthly consumption of electricity per household⁹ varies among the Contracting Parties. In 2018, the lowest consumption occurred in Moldova (105 kWh/month) and Georgia (125 kWh/month), the highest in Kosovo* (399 kWh/month). In the period 2017- 2018, in most of the Contracting Parties consumption of electricity per household decreased.¹⁰ Relevant quantities are displayed in the figure below.

Figure 4 Average monthly consumption of electricity per household in 2017 and 2018 (kWh)



⁹ In the calculation of average monthly consumption of electricity per household, the number of households is equal to the number of metering points.

¹⁰ Average monthly consumption of electricity per household decreased between 0.83% in Albania and 5.44% in North Macedonia. This consumption increased in Georgia (3.37%) and Ukraine (2.45%) and remained practically unchanged in Kosovo*.

Only in Ukraine a large **number of both local and nationwide¹¹ suppliers** were active in the retail market in 2018.¹² In Albania, Bosnia and Herzegovina, Greece, North Macedonia and Serbia more than ten suppliers were active in the retail market, while in the other Contracting Parties supply to electricity end-users was offered by one or only few suppliers. Both local and nationwide suppliers are active in Bosnia and Herzegovina, North Macedonia, Moldova and Ukraine, and in the rest of the Contracting Parties and Greece, the majority of active suppliers were nationwide suppliers. In 2018, new active nationwide suppliers entered the markets of Bosnia and Herzegovina (2), Greece (5), North Macedonia (1), Serbia (4) and Ukraine (25).

Table 1 Number of active suppliers in retail electricity markets in 2018

	Number of licensed electricity suppliers	Total number of active electricity suppliers	Number of active nationwide suppliers	Number of net new active nationwide suppliers ¹³
Albania	38	23	23	2
Bosnia and Herzegovina	29	14	10	2
Georgia	2	2	0	0
Greece	47	24	24	5
Kosovo*	7	1	1	0
Moldova	27	5	1	0
Montenegro	5	1	1	0
North Macedonia	62	20	19	1
Serbia	67	18	18	4
Ukraine	264	152	119	25

In all Contracting Parties and Greece **licenses** have to be issued for the activity of supply of electricity to end-users. In the Georgian retail electricity market, supply is not recognized as a separate type of activity; therefore there is no separate supply license in Georgia and DSOs are responsible for electricity distribution and also for supply. DSOs supply only customers

¹¹ Nationwide supplier means a supplier offering its products on the whole territory of a country.

¹² In Ukraine, there was 152 active suppliers (whereby it was 119 nationwide active suppliers) in 2018.

¹³ Net means number of entries minus number of exits in the market.

located within the territory indicated in their licenses and hence there are no nationwide suppliers.¹⁴

During 2018, only in Ukraine total number of licensed electricity suppliers in the retail market significantly increased.¹⁵

The figures below show detailed information on whether more than one supplier (i.e. incumbent) was supplying customers connected to the transmission and distribution network in 2018.

Figure 5 Are there electricity suppliers other than incumbent supplying customers connected to the transmission network?

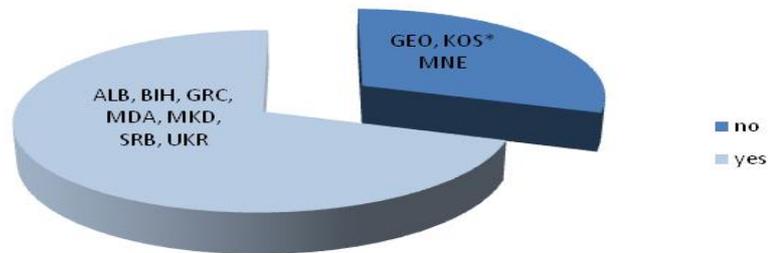


Figure 6 Are there electricity suppliers other than incumbent supplying customers connected to the distribution network?



¹⁴ Until September 2017, in Georgia only three distribution companies supplied end-users connected to their network. In September 2017 two of them merged, so as of beginning of 2018 only two companies supply end-users.

¹⁵ In Ukraine, number of net new licensed nationwide suppliers was 82 in 2018 (net means a number of entries minus the number of exits from the market).

In order to accomplish the picture of retail electricity markets from supply side, **concentration and openness of markets** have been investigated. Results are presented in the table hereinafter. The analyzed markets can be explained in the following way:

- Except in Greece and Serbia, in all other Contracting Parties all households are supplied by the incumbent supplier at regulated prices. Still, also in Serbia, the majority of households were still supplied by an incumbent supplier at regulated prices (99.95% of total consumption of households). In Greece, majority of households is supplied by incumbent suppliers, but at non-regulated prices (83.79%), while 8% of households are supplied at the so called “Social Residential Tariff”.
- In Albania, 23 suppliers were active. Still, the incumbent supplier remained the dominant supplier with a market share of 84% of total electricity consumed by final customers. The market share of the three largest suppliers was 93% of total electricity consumed by final customers.
- In Bosnia and Herzegovina, 14 suppliers were active.¹⁶ There were four retailers selling at least 5% of total electricity consumed by final customers, and three of them¹⁷ with a joint market share of 83.80%; also in 2016 these companies were dominant suppliers with a joint market share of 95.11% and in 2017 with market share of 88.23%.
- In Georgia, electricity retailers are regional and incumbent suppliers. Since the end of 2017, two companies supply end-users. The market share of these companies is 100%.
- In North Macedonia, there were twenty active suppliers. The market share of the three largest electricity suppliers slightly increased from 91.58% to 92.52%.
- In Kosovo*, there were seven licensed suppliers but only one active retail supplier of electricity, namely the incumbent with a 100% market share.
- In Moldova, there were five retail electricity suppliers active in the retail market. Two of them were selling at least 5% of total electricity consumed by final customers in 2018, with a joint market share of 96.86% of the total sale of electricity on the retail market.
- In Montenegro, only one retail electricity supplier was active in the market.¹⁸ In 2018, the biggest customer “Kombinat Aluminijuma” purchased electricity for its own needs from the incumbent supplier, so the incumbent supplier supplied all customers on the retail electricity market.
- In Serbia, there were 17 active suppliers and four of them started to supply customers in 2018. The great majority of customers were supplied by the incumbent supplier covering a market share of 95.39% of the total sale of electricity to end user customers. The market share of three largest companies was 96.41%.
- The large number of electricity suppliers in Ukraine – namely: 152 active suppliers on the retail electricity market – and their low market shares¹⁹ might indicate an open market for supply to non-household customers. However, 81.40% of consumption of non-household

¹⁶ Including five subsidiaries of Elektroprivreda RS supplying tariff customers in their designated areas

¹⁷ Elektroprivreda BiH, Elektroprivreda RS including its five subsidiaries and Elektroprivreda HZHB.

¹⁸ In 2018, the biggest customer “Kombinat Aluminijuma” purchased electricity for its own needs also from incumbent supplier, so the incumbent supplier supplied all customers on the retail electricity market.

¹⁹ The market share of the largest supplier in the whole market was 18.10% in 2018, while the market share of the same company in supplying households was only 9.96%.

customers was supplied at regulated prices. The market share of three largest suppliers added up to 31.97% (this value is the same as in 2017).

Table 2 Electricity retail market concentration and market opening in 2018

	Number of electricity retailers selling at least 5% of total electricity consumed by final customers	Market share of the 3 largest companies in the retail market (aggregated) in %	Estimated incumbent market share in the household market, in % of annual consumption
Albania	1	93.00%	100%
Bosnia and Herzegovina	4	83.80%	100%
Georgia	2	100%	100%
Greece	3	88.12%	91.48%
Kosovo*	1	100%	100%
Moldova	2	96.94%	100%
Montenegro²⁰	1	100%	100%
North Macedonia	3	92.52%	100%
Serbia	1	96.41%	99.98%
Ukraine	3	31.97%	100%

²⁰In 2018, the biggest customer “Kombinat Aluminijuma” purchased electricity for its need from EPCG, so EPCG supply all customers on the retail electricity market.

2. Switching behavior

The switching rate is one of the commonly used indicators for measuring market competitiveness. However, its interpretation has to be done carefully by taking into consideration relevant legislative and regulatory provisions as well as the structure of the markets.

In 2018, in most of the Contracting Parties legal requirements were in place allowing customers to choose their supplier.

- All customers are eligible to choose their supplier in Bosnia and Herzegovina, Kosovo*, Moldova, Montenegro and Serbia.
- In Ukraine, all non- household customers can change supplier.
- In Albania, eligible customers are those connected to the 110 kV voltage network, and, since 30 June 2016, customers connected to the 35 kV voltage network. The amendments to the Power Sector Law of March 2018 extended the duration of the supply of last resort in a way that imposes the regulated supply of all medium voltage customers for two years after the switching conditions are met.
- According to the Protocol on the Accession of Georgia to the Treaty Establishing Energy Community, Georgia must ensure that all non-household customers become eligible customers from 31 December 2018. All customers, including households, have to become eligible from 31 December 2019. Presently retail customers are supplied by electricity distribution companies and are not eligible to switch suppliers, except when purchasing electricity directly from power plants.
- In North Macedonia, in 2018, eligible customers were customers connected to the transmission network, customers connected to the distribution network with more than 50 employees and an annual turnover exceeding EUR 10 million. The previous Energy Law foresaw that customers with electricity consumption of over 100 MWh in 2017 should become eligible as of 1 July 2018. The new Energy Law adopted in May 2018 introduced eligibility for all customers.

In order to better understand switching rates in the analyzed markets, it is worth mentioning that in some Contracting Parties some of the customers (mainly according to the voltage level of connection to the network, electricity consumption and which are not households or small customers) were obliged to leave the regulated market and choose a supplier. This obligation is defined in Bosnia and Herzegovina, Kosovo*²¹, North Macedonia, Montenegro, Serbia and Ukraine.²² In Serbia, as of 1st January 2015 all customers except households and small customers, as well as all customers with electricity consumption over 30,000 kWh were forced

²¹ In Kosovo*, from 2017, customers that were connected to 220 kV and 110 kV were obligated to leave the regulated market based on the guideline for the liberalization of the electricity market that was approved by ERO in January 2017.

²² In Ukraine, according to the Electricity Market Law adopted in 2017, all customers except households, small non-households and some category of non-households had to choose their supplier no later than by January 2019.

to choose their supplier on the market. In North Macedonia,²³ this is the case for customers connected to the transmission network since 2008 and customers with more than 50 employees and an annual turnover exceeding EUR 10 million connected to the distribution network since 2014.

The table below shows the **switching rates** in the analyzed markets in 2018. Data refers to the definition of switching as the free move of a customer from one to another supplier; i.e. the change of incumbent supplier due to the obligation to leave the regulated market defined in the law is not included in the data.

²³ In North Macedonia, small customers which gained eligibility to choose their supplier on the free market in the period 2016-2018, retained their right to be supplied by the incumbent supplier on the regulated market.

Table 3 Annual switching rates in electricity markets in 2018 (in %) ²⁴

	Number of eligible customers under national legislation/active eligible customers ²⁵	Annual switching rate in the <u>whole retail market</u> (by number of meter points)	Annual switching rate of <u>household</u> customers (by number of meter points)	Annual switching rate of <u>non-household</u> customers (by number of meter points)	Annual switching rate in the <u>whole retail market</u> (by volume)	Annual switching rate of <u>household</u> customers (by volume)	Annual switching rate of <u>non-household</u> customers (by volume)
Albania	na	0,002	nap	0,017	na	nap	na
Bosnia and Herzegovina	1,553,439/31	0.002	0.000	0.025	14.740	0.000	24.45
Georgia	nap	nap	nap	nap	nap	nap	Nap
Greece	na	4.49 ²⁶	4.48	4.51	3.93 ²⁷	2.81	4.63
Kosovo*	579,976/0	0.000	0.000	0.000	0.000	0.000	0.000
Moldova	1,338,499/0	0.000	0.000	0.000	0.000	0.000	0.000
Montenegro	386,956/0	0.000	0.000	0.000	0.000	0.000	0.000
North Macedonia ²⁸	21561/4344	20.15	nap	20.15	15.79	nap	15.79
Serbia	3,651,353/ 17,570	0.48	0.010 ²⁹	4.310	3.410	0.030	6.260
Ukraine	622.690/1,145	0.023	0.000	0.303	5.260	0.000	7.530

In Georgia, Moldova, Montenegro and Kosovo* there was no supplier switching in 2018. A small number of eligible customers changed their suppliers in Albania, Bosnia and Herzegovina, North Macedonia, Serbia and Ukraine. Except for Greece and Serbia, only non-household customers changed their suppliers. In Serbia, also only a very small number of household customers left electricity supply at regulated prices and chose a new supplier. The

²⁴“Nap” stands for “not applicable” and means that the market has not been opened to relevant group of customers or that there is only one active supplier in the market. “Na” stands for “not available” and means that data was not collected.

²⁵ This data reflects the number of metering points, except for Moldova and Ukraine where this represents the number of customers.

²⁶ Low-voltage customers (households & professional customers up to 250 KVA) and Medium-voltage customers (250 KVA - 10 MVA)

²⁷ Low-voltage customers (households & professional customers up to 250 KVA) and Medium-voltage customers (250 KVA - 10 MVA)

²⁸ In North Macedonia switching rates are calculated as share in % of consumption (or number) of customers who are eligible to change supplier under national legislation.

²⁹ Metering points which belong to the household category of distribution network users.

switching rates in Greece are substantially higher than in the Contracting Parties, especially in the household segment.

The increasing **number of switching requests** is a proof of market liquidity development. In North Macedonia this number increased from 3,202 in 2017 to 4,344 in 2018. Also in Serbia, the number of switching requests in 2017 was 14,951 and increased to 17,570 in 2018. In these two years in Ukraine the number of switching requests also increased from 702 to 1145. In Bosnia and Herzegovina number of switching requests decreased – 56 in 2017 to 31 in 2018.

3. End- user electricity prices³⁰

In the period between 2013 and 2018, **electricity prices for households** increased in all Contracting Parties. The final industry prices increased, on average, in 2018 after several years of continuous decrease. This trend has different dynamics in Ukraine than in the other Energy Community Contracting Parties.

In 2018, the average electricity price for household consumers in the Contracting Parties, excluding Ukraine³¹, amounted to 7.8 euro cents/kWh which is almost 2.7 times less than the average EU household electricity price for in the same year. Household consumers in Ukraine paid in 2018, on average, almost two times less than in the other Contracting Parties - only 4.1 euro cents/kWh.

There are large **differences in electricity price levels** across the Contracting Parties. In general, household electricity prices in 2018 were the highest in Montenegro (10.27 euro cents/kWh), where consumers paid, on average, 2.5 times the amount paid by consumers in Ukraine. With the exception of Kosovo* and North Macedonia, where household prices slightly decreased in comparison to the previous year, in all the other Contracting Parties electricity prices for households increased.

While the dynamics of the household electricity prices is influenced also by end- user price regulation, the final industry prices in the contracting Parties follow market developments already for several years.

In four Contracting Parties- Bosnia and Herzegovina, Georgia, North Macedonia and Montenegro, **industrial electricity prices** were, on average, lower than household prices in 2018. In Serbia and Ukraine however they were higher.³² While in the majority of the Contracting Parties, electricity prices for industrial consumers decreased between 2013 and 2017, in 2018 an increase was registered. The biggest year-on-year increase of final industry

³⁰ Information in this chapter was partially provided by the NRAs, also for the purpose of ACER Market Monitoring Report 2018 (https://acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/ACER%20Market%20Monitoring%20Report%202018%20-%20Electricity%20and%20Gas%20Retail%20Markets%20Volume.pdf). The source of other information is EUROSTAT.

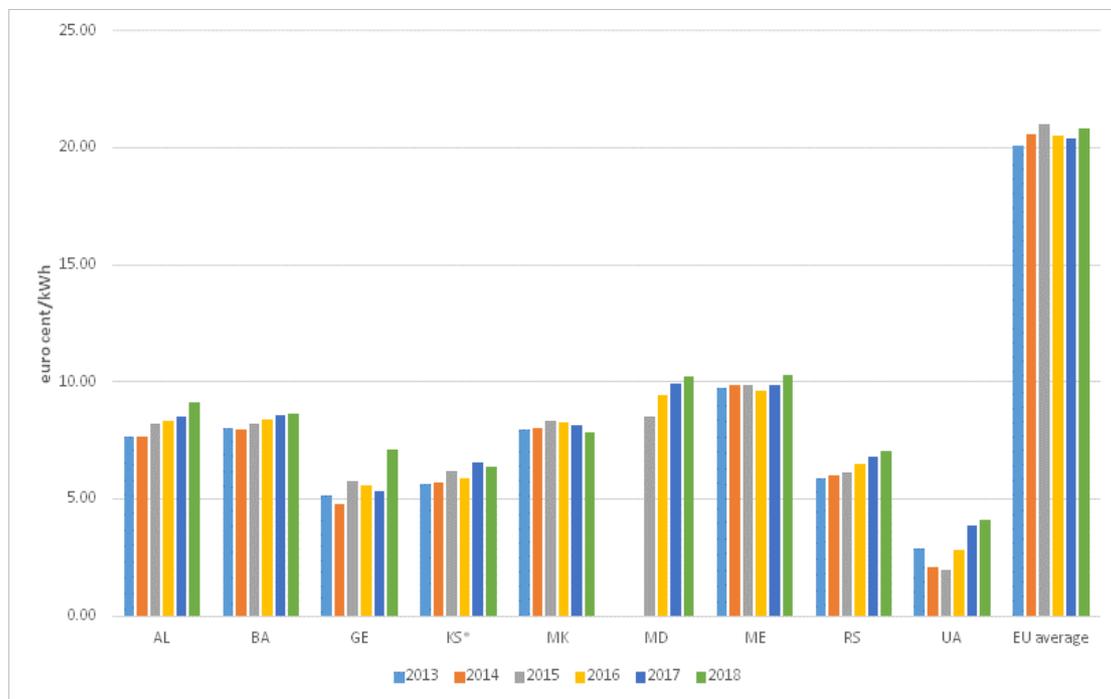
³¹ The average was calculated without Ukraine due to distortive effects of Ukrainian quantities on the average.

³² The information on industry prices for Albania, Kosovo* and Moldova was not available for 2018.

prices (17%) was observed in North Macedonia, where prices rose from 6.46 euro cents/kWh in 2017 to 7.59 euro cents/kWh in 2018. The lowest electricity prices for industrial consumers were applicable in Montenegro with 5.36 euro cents/kWh, while the highest industrial price was reported for North Macedonia (7.59 euro cents/kWh). On average, in 2018, electricity prices for the industrial segment in the Contracting Parties were at a level of around 60% of the average electricity prices for industry in the EU Member States.

Household and industry price trends in the Contracting Parties can be seen from figures 7 and 8 below.

Figure 7 Electricity POTP³³ trends for households in the Contracting Parties 2013-2018 (euro cent/kWh)

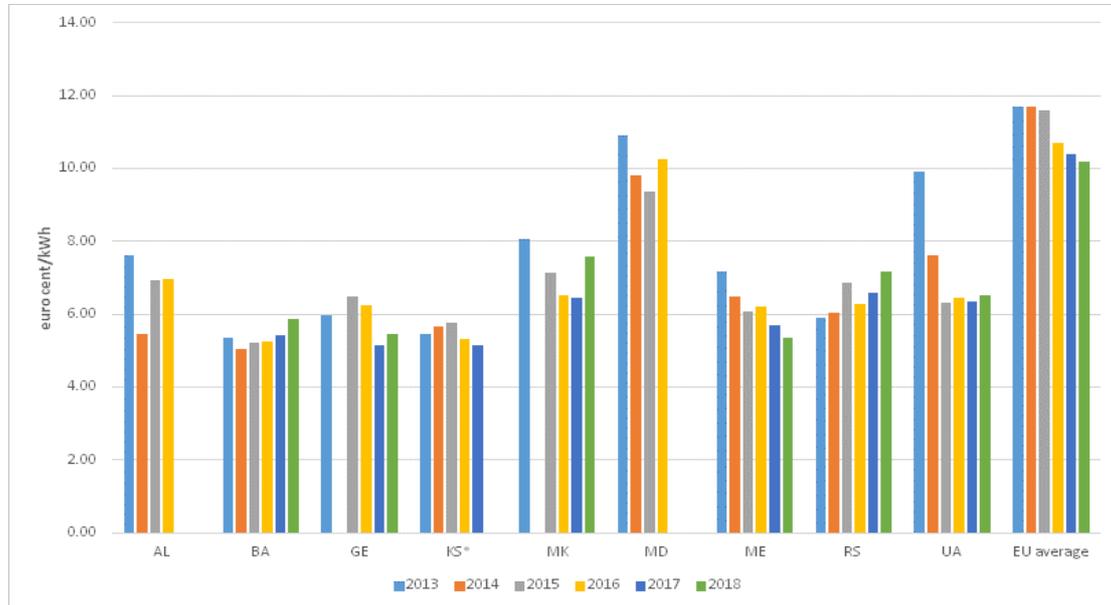


Source: EUROSTAT (June 2019), CP NRAs and Energy Community Secretariat calculations

Note: This Figure is based on bi-annual data provided by EUROSTAT for consumption band DC: 2,500-5,000 kWh (household electricity consumption) for Albania, Bosnia and Herzegovina, Kosovo*, Montenegro, North Macedonia and Serbia and consumption band IE: 20,000-70,000 MWh (industrial electricity consumption) for Bosnia and Herzegovina, Kosovo*, Montenegro, North Macedonia and Serbia. Information on prices in Georgia, Moldova and Ukraine is partially based on EUROSTAT, the remaining data is provided by the NRAs. Prices in nominal terms.

³³ Post-tax price i.e. end- user price.

Figure 8 Electricity POTP trends for industrial consumers in the Contracting Parties 2013-2018 (euro cent/kWh)



Source: EUROSTAT (June 2019), CP NRAs and Energy Community Secretariat calculations

Note: The figure is based on bi-annual data provided by EUROSTAT for consumption band IE: 20,000-70,000 MWh (industrial electricity consumption) and on the annual data provided by NRAs of Albania, Moldova, Georgia and Ukraine. Data for Albania and Moldova for 2017 and 2018 and for Kosovo* for 2018 were not available.

4. Electricity price breakdown for households³⁴

Figure 9 shows the breakdown of the final electricity price for households in capital cities of the Contracting Parties in November-December 2018, based on a consumption profile of 3,500 kWh per year. The composition of the final household electricity price varies widely across the Contracting Parties. The **share of the energy component** in the final bill was the highest in Albania (62%) and the lowest in Serbia (33%).

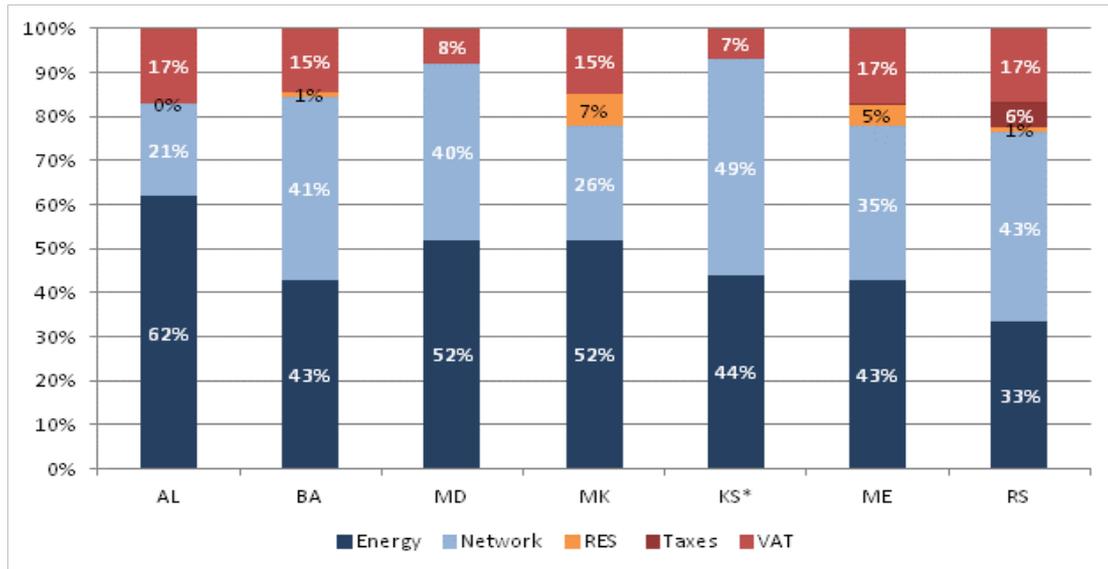
The **share of network costs** in the total household electricity price ranged between 21% in Albania and 49% in Kosovo*.

Finally, the share of RES charges in the final price gives an indication of the support for renewable electricity production to the extent that it is financed by the electricity tariff. In Albania, Kosovo* and Moldova, no RES support mechanism was reported by the NRAs for

³⁴ Ref.: ACER/CEER Annual Report on the Results of Monitoring the Internal Electricity and Gas Markets in 2018 (Electricity and Gas Retail Markets Volume), October 2019
https://acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/ACER%20Market%20Monitoring%20Report%202018%20-%20Electricity%20and%20Gas%20Retail%20Markets%20Volume.pdf.

2018. In other Contracting Parties, RES support amounts to 1% of the final household electricity price in Bosnia and Herzegovina and Serbia, 5% in Montenegro and 7% in North Macedonia.

Figure 9 POTP electricity breakdown of the incumbent's standard offers for households in EnC capitals – November–December 2018 (%)

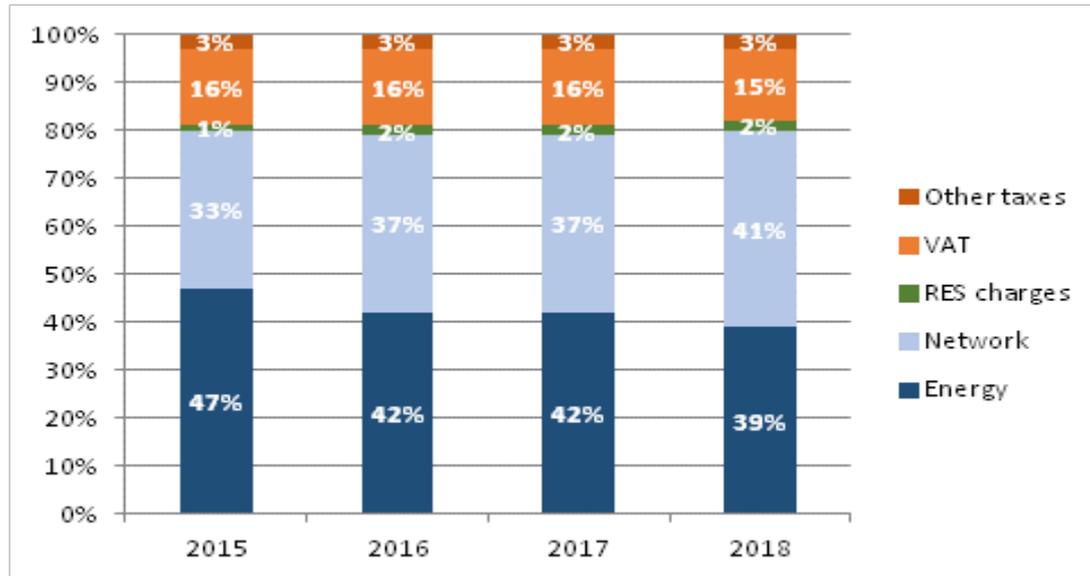


Source: ECS calculations based on ACER's methodology and data provided by regulators (2018).

Notes: The regulators of Georgia, Moldova and Ukraine could not provide the required data for calculating the electricity price breakdown. The energy component in Albania includes the costs of the distribution network. In Montenegro, the costs related to purchasing electricity for compensation of network losses are included in the energy component. Percentages do not always add up to 100% precisely due to rounding.

Figure 10 shows the weighted average final price breakdown of the incumbents' standard offers for electricity household consumers in the capitals in the period 2015–2018. Compared to 2015, the structure of household electricity prices evolved towards a lower share of the energy component (39% instead of 47%) and a higher share of the network component (41% instead of 33%). The share of RES charges slightly increased in the same period, from 1% to 2%.

Figure 10 Weighted average breakdown of incumbents' standard electricity offers for households in EnC capitals – 2015–2018 (%)



5. Regulation of electricity end-user prices

Regulation of end-user energy prices is generally recognized as one of the main obstacles to creating competitive and well-functioning retail markets. This is specifically the case when regulated prices are determined at a level below costs and/or when cross-subsidization between groups of customers applies.

End-user electricity prices for household customers were regulated in all Contracting Parties in 2018, except in Montenegro where all categories of consumers are supplied under non-regulated prices. However, in Montenegro, according to the Energy Law the supplier which had the status of a public supplier until the day of entry into force of this Law, is entitled to change prices for households and small sized non-household customers in line with changes of prices on the market, however under certain restrictions. Namely, the prices for this category of customers cannot be increased beyond the weighted electricity price realized in the previous year and futures for the following year on a reference energy exchange nominated by the regulator; this means the price increase was limited to 7% in 2017 and 6% in 2018 and 2019.

In Albania, there is no price regulation for non-households connected to the 35kV network. In Bosnia and Herzegovina, small and medium enterprises connected to the 0.4 kV network were entitled to supply under regulated end-user electricity prices; for all other customers prices were not regulated. In Kosovo*, all non-household customers that are connected to the DSO network have regulated prices, and customers that are connected to the TSO network (220 kV and 110 kV voltage level) are supplied under non regulated prices. In North Macedonia, only small consumers (i.e. customers with electricity consumption below 100

MWh in 2017) were supplied under regulated prices. In Serbia, only small customers had the possibility to be supplied at regulated end-user prices;³⁵ for all other non-household customers, prices were not regulated. In other Contracting Parties, all non-household customers had the possibility to be supplied at regulated prices.

In Greece, end-user prices regulation is applied only to vulnerable customers (i.e. those having the Social Residential Tariff, 8.01% of households in 2018) and to households under the Universal Service. In practice, in 2018, only 0.37% households used universal service offered by the company PPC SA.

Table 4 Number of non-households (number of metering points) supplied at non-regulated electricity prices in 2018

Number of non- household customers supplied at non- regulated prices in 2018 (number of metering points) ³⁶	
Albania	25
Bosnia and Herzegovina	9,784
Georgia	0
Greece	1,669,733
Kosovo*	3
Moldova	0
Montenegro	15,235
North Macedonia	21,561
Serbia	135,589
Ukraine	2,774

In 2018, end-user electricity prices were regulated using the following **methodologies**:

- Rate of return/cost plus in Bosnia and Herzegovina, Georgia, Serbia and Ukraine;
- Revenue cap in North Macedonia, Kosovo*, Moldova and Montenegro³⁷
- In Greece, a specific discount on the electricity price, in EUR / kWh, is provided to the vulnerable customers.

³⁵ The Energy Law defines small electricity customers are end customers (legal persons and entrepreneurs) with fewer than 50 employees and a total annual revenue of up to EUR 10 million in dinar counter value, whose all facilities are connected to the electricity distribution system with the voltage level lower than 1 kV, and whose electricity consumption in the previous year was not higher than 30,000 kWh.

³⁶ Except for Moldova and Ukraine where data is expressed in number of customers

³⁷ The hybrid regulatory method is implemented, as a type of economic regulation which aims to limit allowed revenue, to provide efficiency improvement incentives, and to allow risk-sharing between operators and users of the system (risk related to changes in deployed capacity).

In the process of **phasing out** of end-user price regulation it is important to explain to customers that the electricity price is a market-based commodity price that varies according to the wholesale market developments. One of the most efficient tools for doing so is a frequent update of the regulated energy component, so to allow the final price to reflect changes in the wholesale market. This will also offer customers the possibility to estimate if retail companies, other than incumbent suppliers, provide cheaper energy. The energy component in the analyzed markets receives update once a year in most of Contracting Parties:

- Albania, North Macedonia, Kosovo*, Moldova, Montenegro: once per year;
- Ukraine: every three months;
- Georgia: standard updates happen once in three years, however, in case of significant deviations, there is a possibility to update once in a year;
- Bosnia and Herzegovina: no automatic mechanism;
- Serbia: no automatic mechanism, the regulator decides upon request of a supplier (regarding changes in the wholesale market, according to the methodology, supplier may submit to the regulator a new price request if electricity purchase price is changed more than 10%).

Another precondition for successful transition towards complete deregulation of end-user prices is allowing customers to switch from and to regulated prices. Customers, especially households, typically consider regulated energy prices as more stable. If customers are not allowed to return to regulated supply, they will most likely not be willing to change their supplier at all. **Switching in and out of regulated prices for households** is allowed Kosovo*, Moldova, Montenegro, North Macedonia, Serbia and Ukraine. In Bosnia and Herzegovina this switching concept is allowed only in District Brcko.

C. FINDINGS: GAS

This part of the report provides analysis of the retail gas markets in Bosnia and Herzegovina,³⁸ Georgia, Moldova, North Macedonia, Serbia and Ukraine. Having in mind that Albania, Kosovo* and Montenegro do not have gas markets, this part of the report does not include information for these Contracting Parties.

1. Gas retail market characteristics

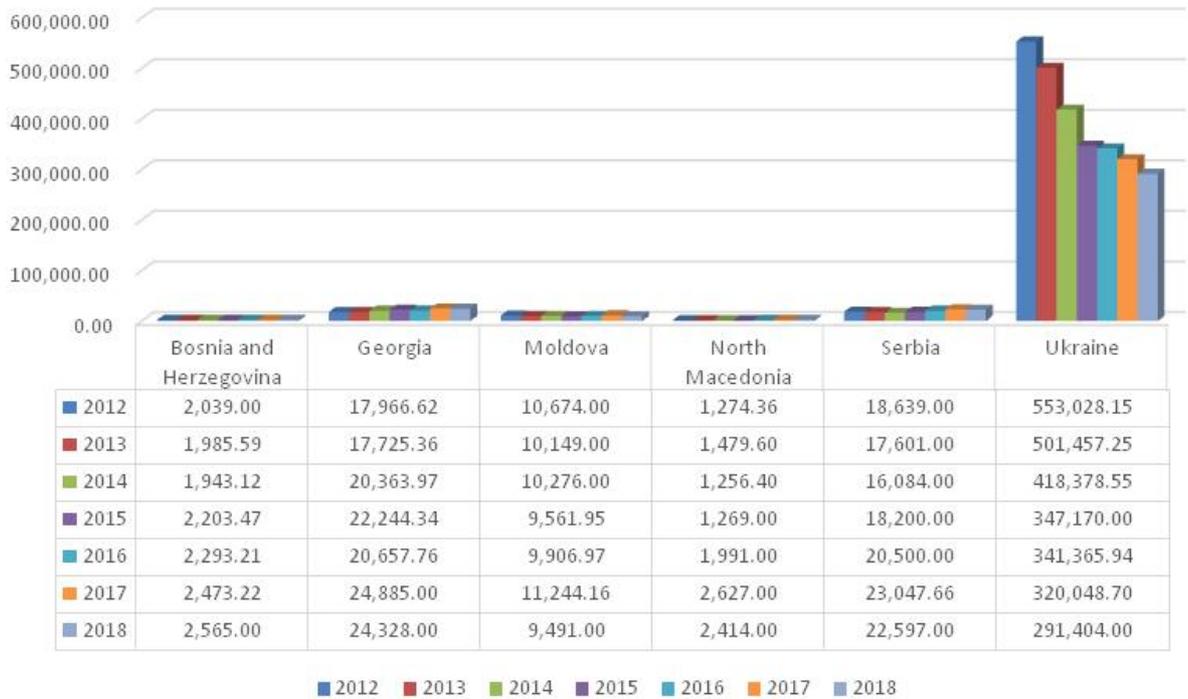
The total **sale of gas to final customers** in the Contracting Parties decreased from 2012 to 2018 by 40%. This was mainly driven by a substantial drop of gas consumption in Ukraine, adding up to 47% and initiated on purpose with a view to lower import dependence.³⁹ Over the same period, the demand decreased also in Moldova (by 11%) but other Contracting Parties registered an average increase of between 20% to 90% (see Figure 11 below). While the gas consumption in Ukraine shows clear trends, consumption in other countries varies depending on industry performances⁴⁰ and winter temperatures. In the period 2017-2018, gas consumption increased only in Bosnia and Herzegovina (3.7%), while in all other Contracting Parties there was a year-to-year drop in gas demand, the highest in Moldova with a minus of 15.6%. The figures below present the total gas sales to final customers in the period from 2012 to 2018 as well as consumption growth rates for the whole period and in the last year. Having in mind the size of the Ukraine gas market compared to other Contracting Parties, the results are displayed separately with and without data for Ukraine.

³⁸ The information for Bosnia and Herzegovina was provided by the regulatory authorities of Republika Srpska and Federation of Bosnia and Herzegovina.

³⁹ Also due to lack of data for Crimea and uncontrolled territory of Donbass in 2014-2016.

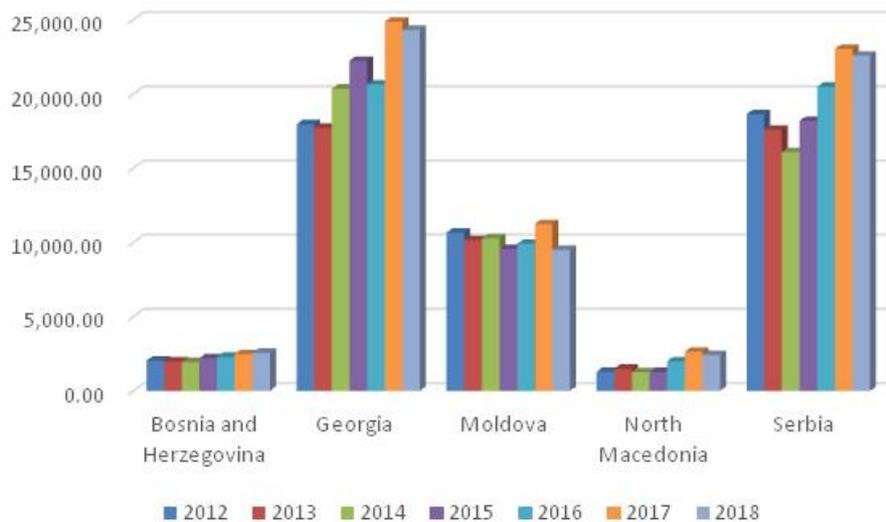
⁴⁰ In North Macedonia, deployment of the biggest consumer - CHP plant in summer months strongly influences the average level of gas demand.

Figure 11 Total sale of gas to final customers in the Energy Community Contracting Parties in the period 2012- 2018 (in GWh)



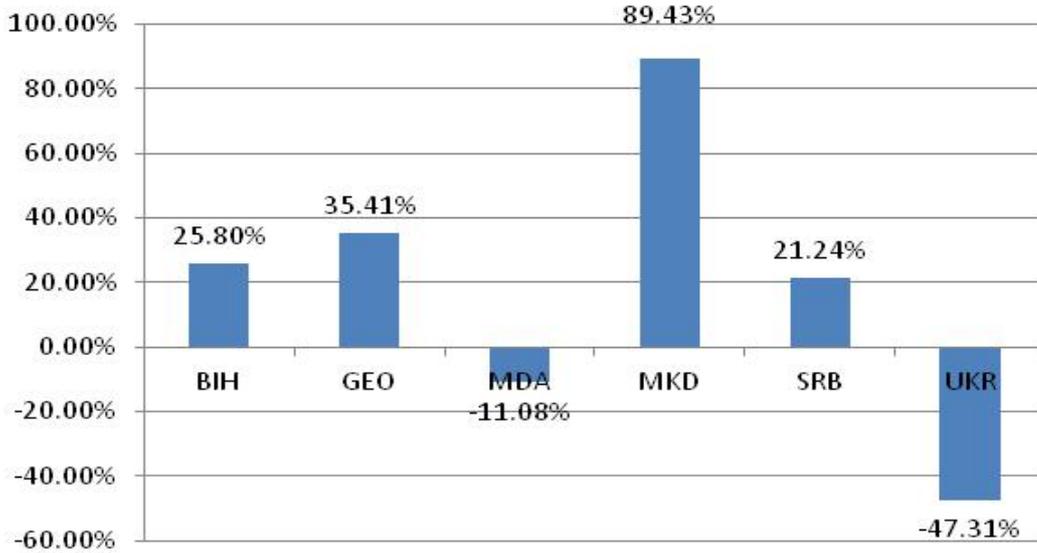
Source: National regulatory authorities

Figure 12 Trends in sale of gas to final customers in GWh (excluding Ukraine)



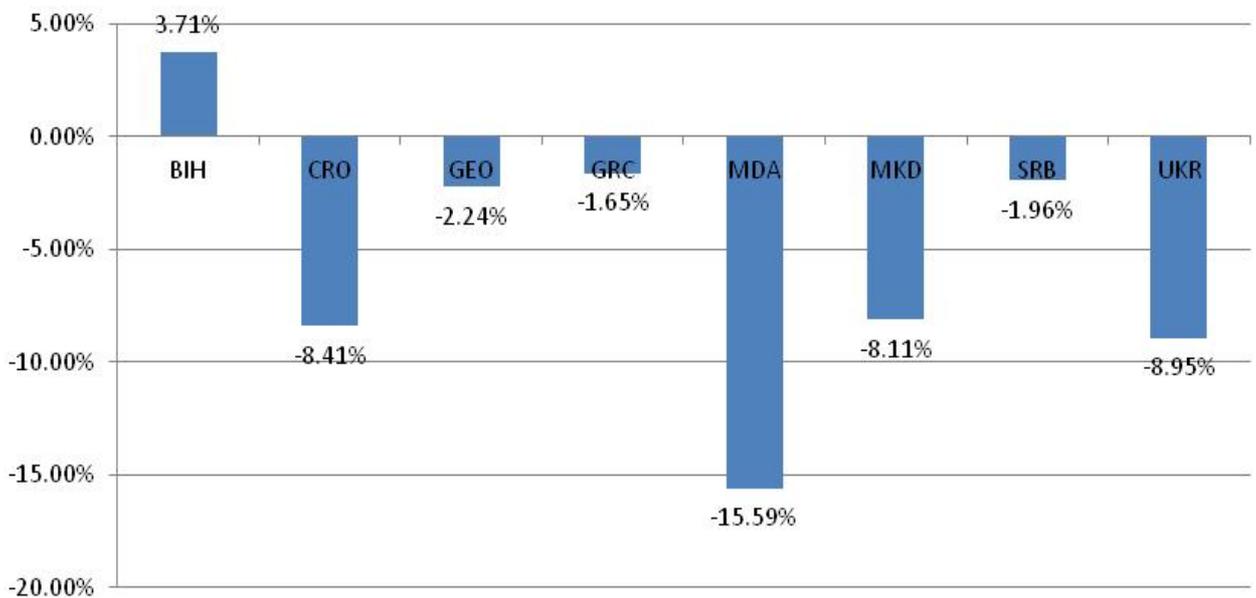
Source: National regulatory authorities

Figure 13 Growth rates of gas demand 2012 to 2018



Source: National regulatory authorities

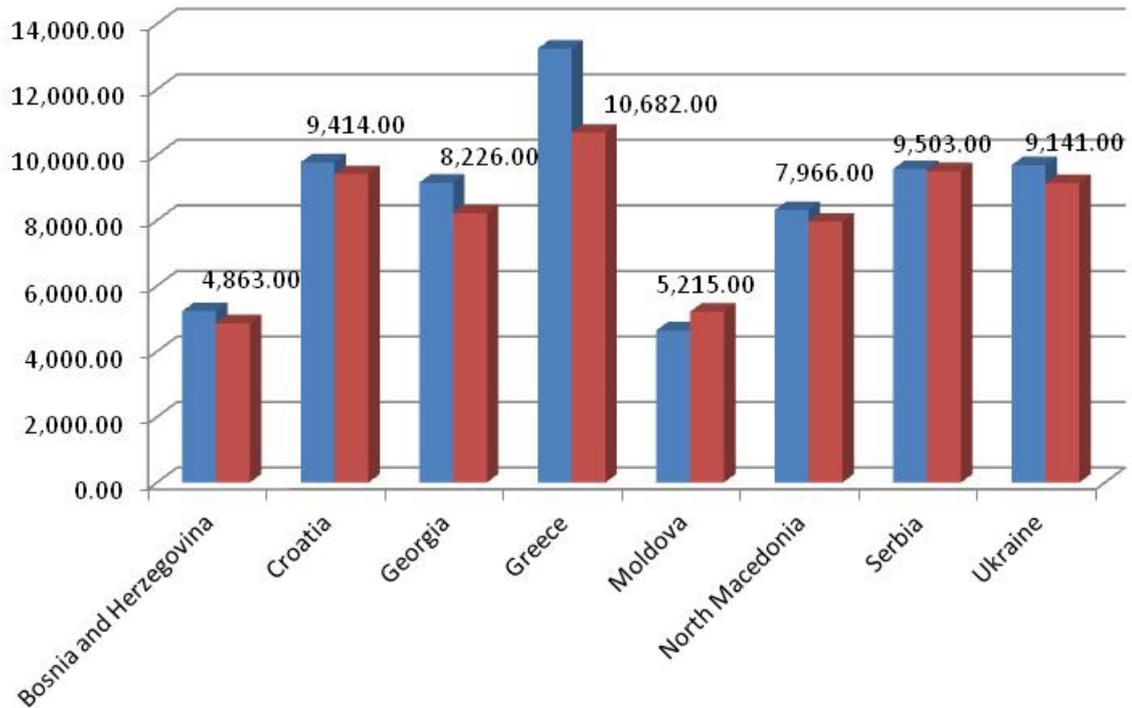
Figure 14 Growth rates of gas demand 2017 to 2018



Source: National regulatory authorities

The **average consumption of gas per household varies** among countries. Relevant quantities are displayed in the figure below.

Figure 15 Average annual gas consumption per household in 2017 and 2018 (in kWh)⁴¹



End-users of gas in the Contracting Parties, Croatia and Greece were supplied mainly by regional **retail suppliers**,⁴² i.e. suppliers offering gas only to a restricted area and usually performing also distribution system operator (DSO) functions. The number of active suppliers ranged from four in Bosnia and Herzegovina to 234 in Ukraine. The majority of active retail suppliers hold a license for supplying customers nationwide, i.e. these suppliers are entitled to supply not only in one geographical region, but on the entire territory of the country. Nevertheless, the household customers in the Energy Community Contracting Parties predominantly buy gas from local incumbent suppliers.

In five countries, namely: Croatia, Greece, Georgia, Ukraine and Serbia, customers connected to the distribution network were supplied by more than one supplier (i.e. other than incumbent). In Bosnia and Herzegovina, North Macedonia and Moldova only the incumbent supplier was selling gas to customers connected to the distribution network. On the other side, in all Contracting Parties except North Macedonia, as well as in Croatia and Greece customers connected to the transmission network were supplied by more than one supplier. To achieve positive market opening effects, it is of utmost importance to enable efficient separation of supply and network activities and allow gas retailers to supply customers nationwide.

⁴¹ Data labels inserted for 2018 only.

⁴² In Ukraine, regional suppliers are for households only, i.e. there are no regional suppliers for non-households.

Table 5 Number of active gas suppliers in 2018

	Number of licensed gas suppliers	Number of active gas suppliers	Number of active gas retail suppliers licensed nationwide
Bosnia and Herzegovina	7	4	2
Croatia	54	45	45
Georgia	There is no license for retail gas supply	31	31
Greece	49	21	21 ⁴³
Moldova	15	11	1
North Macedonia	10	8	1
Serbia	68	39	28
Ukraine	513	234	234

Source: *National regulatory authorities*

In order to accomplish the picture of retail gas markets from supply side, **concentration** of markets have been investigated. The results are presented in the table below. The following conclusions can be drawn:

- In all Contracting Parties except Ukraine, dominant retail suppliers sell more than 80% of gas to end-users. In Ukraine, but also in Croatia and Greece, market shares of retail suppliers are lower. This, however, does not prove immediately absence of monopolies, but, taking into consideration other relevant information provided in this report, rather points to the existence of regional or local monopolies for household customers;
- There was often no alternative to the incumbent gas suppliers in the household segments of the analyzed markets and in cases where there was an alternative available it was hardly used in 2018.⁴⁴ However, most of the obstacles to retail market entries mainly stem from reasons other than retail market design, namely the status of wholesale market development⁴⁵ (e.g. single source of gas and poor access to liquid wholesale markets). The effect of regulation of end- user prices is also substantial.⁴⁶

⁴³ Only 8 of them actually offered gas nationwide.

⁴⁴ In Ukraine, there was alternative, but due to the public service obligations which are in place in Ukraine the final gas prices for incumbents are usually lower compared to other suppliers

⁴⁵ This does not apply for Ukraine. ECRB published annual reports on the developments of the Energy Community gas and electricity wholesale markets (available at: https://www.energy-community.org/documents/reports_ECRB.html) and also contributes to the ACER annual market monitoring reports.

⁴⁶ Especially in Ukraine the prices of gas for households and other protected categories (i.e. district heating companies and religious organizations) are regulated on three levels: (1) the price of domestically produced gas for

Table 6 Retail gas market concentration in 2018

	Number of gas retailers selling at least 5% of total gas consumed by final customers	Market share of the 3 largest companies in the retail market (aggregated) in %	Estimated incumbent market share in the household market, in % of annual consumption
Bosnia and Herzegovina	3	100%	100%
Croatia	5	60.64%	98.05%
Georgia	3	82%	99.2%
Greece	6	74.19%	58.42%
Moldova	1	99.55%	100%
North Macedonia	4	100%	100%
Serbia	1	86.70%	100%
Ukraine	3 ⁴⁷	71%	100%

2. Switching behavior

All natural gas customers in the analyzed Contracting Parties, Croatia and Greece were eligible to choose their supplier. However **household customers** in none of the Contracting Parties' markets changed their suppliers in 2018. For non-households, the information on switching rates has been provided for four Contracting Parties:

- Bosnia and Herzegovina: 0.002% of non-household customers, measured by the number of metering points, changed supplier in 2018. The switching rate measured by volume⁴⁸ added up to 3.95%.
- North Macedonia: 0.85% of non-household customers, measured by the number of metering points, changed supplier in 2018. The switching rate measured by volume reached 2.80%.
- Serbia: 0.42% of non-households changed their supplier in 2018 which corresponds to a switching rate of 8.80% by volume.
- Ukraine: 4% of non-households (measured as the number of customers) changed supplier in 2018.

sell to protected customers is regulated; (2) the price at which public wholesale supplier Naftogaz sells gas to retail suppliers for the needs of protected customers is regulated; and (3), the end- user price for the same customer category is regulated (cf. Public Service Obligation (PSO) act of the Cabinet of Ministers of Ukraine).

⁴⁷ taking into account domination principle (grouping of companies under the same brand).

⁴⁸ Share of consumption of non- household customers that switched supplier related to the total consumption of non-households.

In Moldova none of the customers changed their supplier in 2018, while for Georgia this information was not available.

In Croatia, 0.63% of household customers and 0.42% of non- households, measured by the number of metering points, changed supplier in 2018. The switching rates measured by volume reached 0.97% i.e. 13.09% respectively. Interestingly, 49% out of almost 14,000 switching requests in 2018 was rejected- further exploring of the reasons would reveal whether there are some obstacles for gas retail market functioning in the country.

Finally, in Greece, 1.69% of household and 2.54% of non- household customers, measured by the number of metering points, changed supplier in 2018. The same switching rates measured by volume reached added up to 1.13% for households and 7.38% for non-households.

3. End-user natural gas prices⁴⁹

In the period 2013 to 2018, average gas household prices in the Energy Community Contracting Parties, without Ukraine, decreased by 27%. Over the same period, household gas prices in Ukraine rose by more than 160%. This increase in Ukraine is due to the Government's Public Service Decree,⁵⁰ applicable as of 2014, which implements a stepwise increase of household gas prices to the market level pursuant to an agreement with the International Monetary Fund.

In the same period, average industrial gas prices decreased in the Energy Community Contracting Parties, by 25% on average. In Ukraine, industrial prices were subject to a decrease of 40% over the same period. Average prices for the industry segment in the Contracting Parties excluding Ukraine are close to industry gas prices of the EU Member States.

Differences between household and industrial gas prices on national level across the Contracting Parties can be seen from figures 16 and 17 below. In Bosnia and Herzegovina and Ukraine, the industry prices are higher than gas prices of households, pointing to the still existent cross-subsidization between these two categories in the process of regulating end-user gas prices. In Georgia, direct subsidies exist – the state is receiving low price natural gas from transit pipelines, which, by the Government's choice, is directed towards households. In 2018 household gas prices were regulated in all Contracting Parties except in North Macedonia, while industrial prices were regulated in Bosnia and Herzegovina, Moldova and, partially, Serbia.⁵¹ However, the intensity of cross-subsidization decreased in the reporting

⁴⁹ Information in this chapter was partially provided by the national regulatory authorities also for the purpose of ACER Market Monitoring Report 2018 (https://acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/ACER%20Market%20Monitoring%20Report%202018%20-%20Electricity%20and%20Gas%20Retail%20Markets%20Volume.pdf). The source of other information is EUROSTAT.

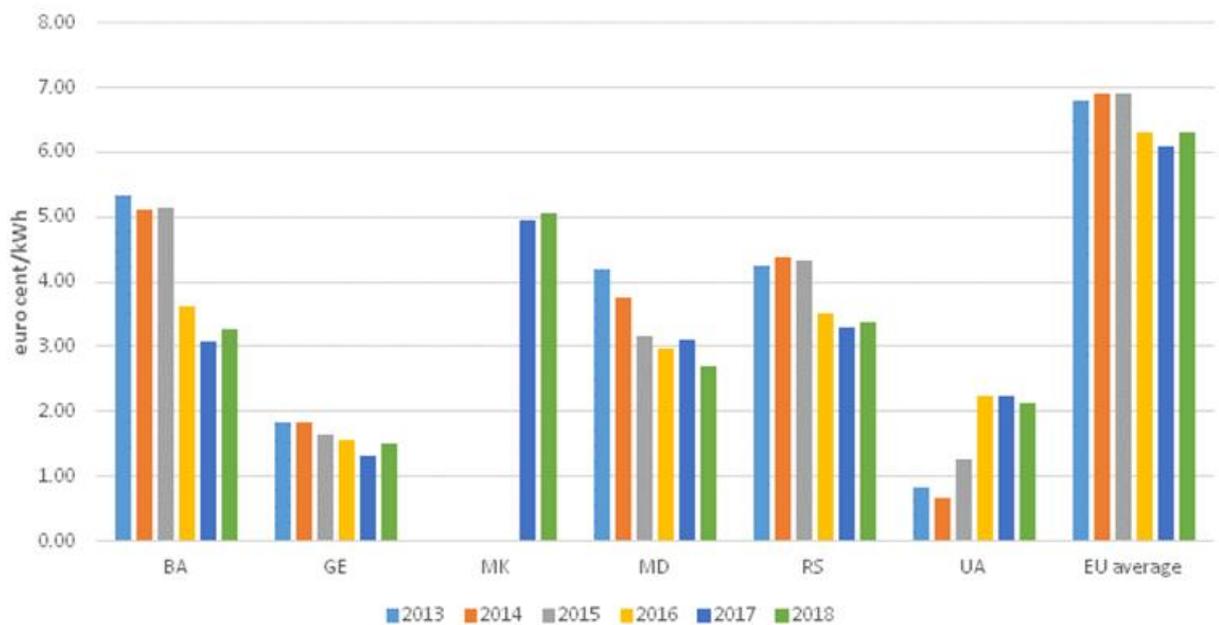
⁵⁰ This resolution is updated every year. See the latest version here: <https://zakon.rada.gov.ua/laws/show/867-2018-%D0%BF>.

⁵¹ Only for small non-household customers consuming less than 3,600 GJ per year.

period, especially in Ukraine where the household gas price in 2018 (2.12 euro cent/kWh) was almost three times higher than in 2013 (0.82 euro cent/kWh) and industrial prices almost halved in the same period (from 4.63 euro cent/kWh in 2013 to 2.78 euro cent/kWh in 2018).

The final price paid by household gas consumers in North Macedonia (5.06 euro cents/kWh) was more than three times higher than the 1.51 euro cents/kWh paid by Georgian households. In the industrial segment, the prices paid by consumers in Moldova (2.24 euro cents/kWh) were only 50% of the prices paid by consumers in Bosnia and Herzegovina (4.17 euro cents/kWh).

Figure 16 Gas POTP⁵² trends for households in the Contracting Parties- 2013-2018, in comparison to EU-28 average level (euro cent/kWh)



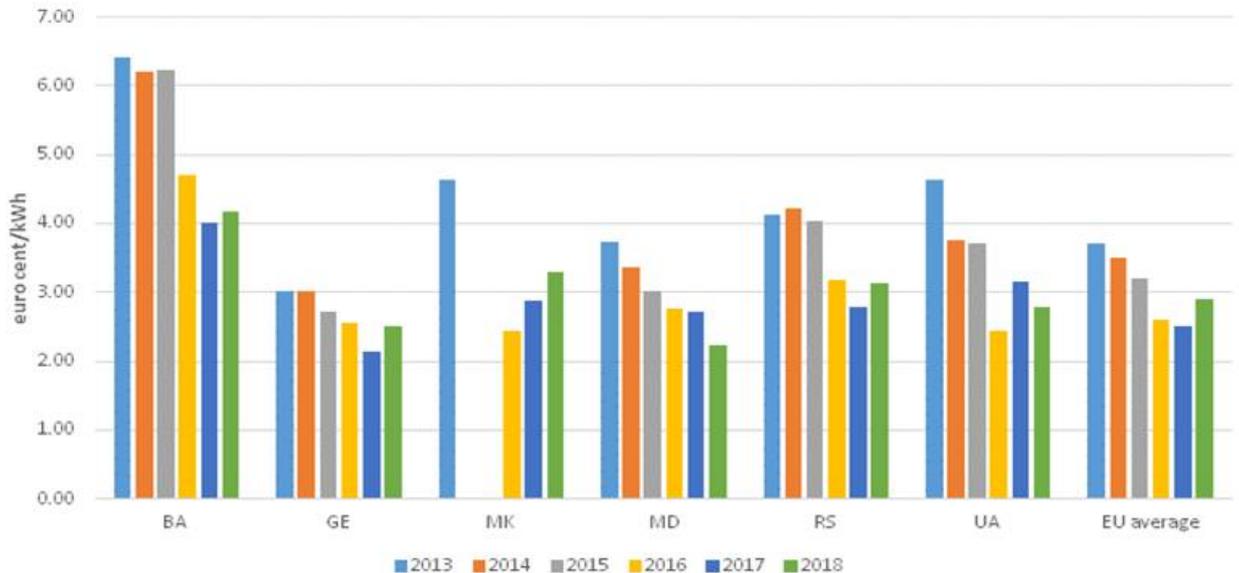
Source: EUROSTAT (June 2019), CP NRAs and Energy Community Secretariat calculations

Note: The figure is based on bi-annual data provided by EUROSTAT for consumption bands D2: 20-200 GJ (household gas consumption) and on the annual data provided by regulators of Moldova, Georgia and Ukraine. Data for North Macedonia is available only as of 2017.

The final prices for households in Ukraine increased by 1.38% in local currency. However, this rise corresponds to a 5% YoY decrease expressed in euro.

⁵² Post-tax price i.e. end- user price.

Figure 17 Gas POTP trends for industrial consumers in the Contracting Parties -2013-2018, in comparison to EU-28 average level (euro cent/kWh)



Source: EUROSTAT (June 2019), CP NRAs and Energy Community Secretariat calculations

Note: The figure is based on bi-annual data provided by EUROSTAT for consumption bands I5: 1,000,000-4,000,000 GJ (industrial gas consumption).

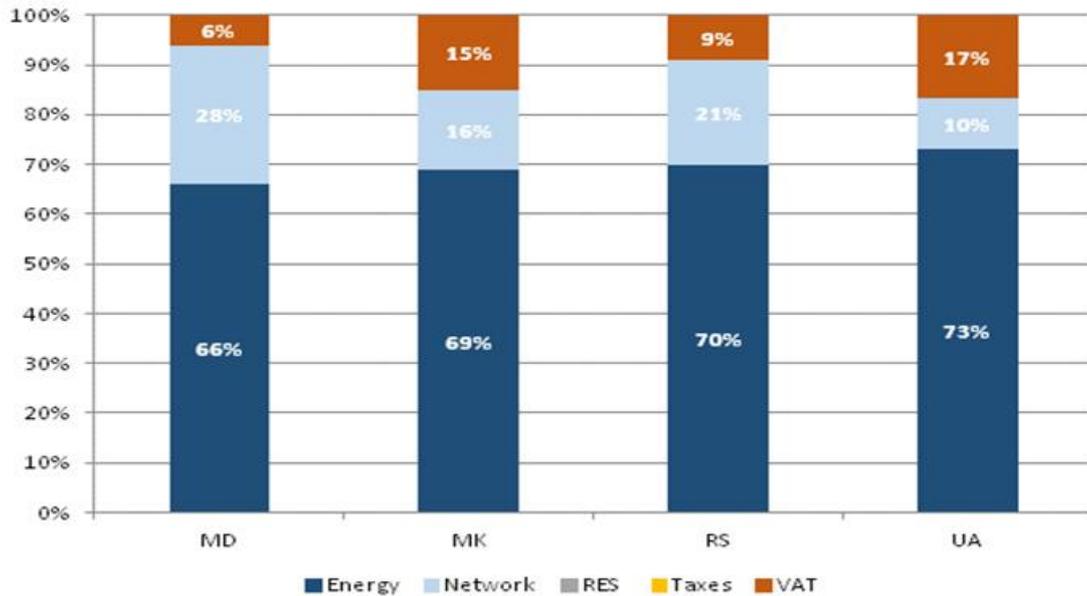
4. Gas price breakdown for households⁵³

The following figure illustrates the breakdown of gas incumbents' standard offers to households in capital cities of the Contracting Parties where information was available and a gas market exists for an annual consumption profile of 11,000 kWh/year. The share of the **energy component** in the final gas price in 2018 ranged from 66% in Moldova to 73% in Ukraine. The share of **network charges**, both transmission and distribution, ranged from 10% of the final gas price for consumers in Kiev to 28% for households in Chisinau.

The weighted average breakdown of gas prices in the Contracting Parties' capitals remained stable throughout the period 2015–2018. Compared to 2015, the relative share of the energy component increased by one percentage point in 2018, while the share of network charges decreased.

⁵³ ACER/CEER Annual Report on the Results of Monitoring the Internal Electricity and Gas Markets in 2018 (Electricity and Gas Retail Markets Volume), October 2019
https://acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/ACER%20Market%20Monitoring%20Report%202018%20-%20Electricity%20and%20Gas%20Retail%20Markets%20Volume.pdf

Figure 18 POTP gas breakdown of incumbents' standard offers for households in EnC capitals – November–December 2018 (%)



Source: EnC Secretariat calculations, based on ACER's methodology and data provided by national regulatory authorities (2019).

Note: Bosnia and Herzegovina and Georgia are not included in this figure due to insufficient data.

Figure 19 Weighted average breakdown of incumbents' standard offers for households in EnC capitals – 2015 - 2018 (%)



Source: EnC Secretariat calculations, based on ACER's methodology and data provided by NRAs (2019).

Note: This Figure is based on data provided by the respective NRAs for the gas breakdown for Moldova, North Macedonia, Serbia and Ukraine, weighted by the total household gas consumption in each country. For North Macedonia the information on final gas price breakdown is available only as of 2017.

5. End- user gas price regulation

Regulation of end-user energy prices is generally recognized as one of the main **obstacles to creating competitive and well-functioning retail markets**. This is especially the case when regulated prices are determined at a level below costs and/or when cross-subsidization between groups of customers exists.

End-user gas prices for household customers were regulated in all Contracting Parties in 2017,⁵⁴ except in North Macedonia. Also in Croatia, final gas prices for households are subject to regulation.

Application of price regulation for industry differs among Contracting Parties:

- In Bosnia and Herzegovina (Republika Srpska), North Macedonia and Georgia end- user prices for industry are not regulated;
- In Serbia and Ukraine certain industry categories may buy gas at regulated prices – i.e. small and medium enterprises with a yearly consumption up to 100.000 m³ and connected to the distribution system in Serbia⁵⁵; and district heating companies and religious organizations in Ukraine;⁵⁶
- In Moldova all industry customers were supplied at regulated prices.

End- user prices for non- households are not regulated in the analyzed EU Member States- Croatian and Greece.

In the process of **phasing out** end-user price regulation it is important to prove to customers that the gas price is a market-based commodity price that varies according to the wholesale market developments. One of the most efficient tools for doing so is frequent updating of the regulated energy component, so to allow the final price to reflect changes in the wholesale market. This will also offer customers the possibility to estimate if retail companies, other than incumbent suppliers, provide cheaper energy. The energy component is updated once a year in majority of the Contracting Parties where end-user price regulation is applied.

Another precondition for successful transition towards complete deregulation of end-user prices is allowing customers to **switch from and to regulated prices**. Customers, especially households, typically consider regulated energy prices as more stable. If customers are not allowed to return to regulated supply, they will most likely not be willing to change supplier at all. This tendency increases where regulated prices are set at levels below costs. Obviously such approach does not contribute to liquid and effective retail market development. Among the markets analyzed in this report, only in Bosnia and Herzegovina, Serbia and Ukraine switching in and out of regulated prices was allowed.

⁵⁴ It is worth noting that all customers, including households, are eligible to change their suppliers. However in all Contracting Parties protected customer categories (households, small industry and/or district heating) have the right to be supplier at regulated prices.

⁵⁵ This represents 48% of all non-households, accounting for only 4% of total non-households' gas consumption.

⁵⁶ This represents 4.7% of non-households consuming around 42% of total consumption of non-households.

D. CONSUMER PROTECTION AND CUSTOMER EMPOWERMENT

1. Background

The Third Energy Package defines a set of measures which aim to ensure continuous supply of electricity and gas, participation of customers in liberalized energy market, strengthening of customers' rights and protection of vulnerable customers. Consumers are in the center of the EU's energy policy and a wide range of initiatives has been taken to make consumers an active part of the clean energy transition and help them save more money and energy. By providing consumers with information and offering them options on how they can participate in the energy market, they will be better protected and in a stronger position in the energy supply chain. All consumers should enjoy general consumer rights guaranteed in EU legislation, as well as a set of defined energy related rights that have been in force since the opening up of the energy supply market. Energy consumer rights have to be clearly set out in the national laws of countries and must reflect provisions in EU legislation.

This chapter reviews the level of consumer protection and empowerment in electricity and gas markets of Energy Community Contracting Parties, Croatia and Greece, from the perspective of the **household consumer**. Like in the previous year, it explores through various indicators how the relevant Third Package provisions were transposed into national legislation and which mechanisms of consumer protection are implemented. It also gives an overview of the topics related to energy poverty which has been identified as a policy priority in the "Clean Energy for All Europeans" legislative package.

The topics covered in this chapter are:

- Supplier of last resort and disconnections;
- Vulnerable customers;
- Consumer information;
- Complaint handling and dispute resolution;
- Energy poverty;
- DSO service quality.

2. Supplier of last resort and disconnections

To ensure the provision of universal service, the Electricity Directive foresees that EU countries may appoint a supplier of last resort. Although the Gas Directive does not foresee a universal service, it also calls for a supplier of last resort for consumers connected to the gas system. However, European legislation does not further define the meaning and functions of a

supplier of last resort, but those which are recognized in national legislation and practice in European Union Member States⁵⁷ and Energy Community Contracting Parties are: protection of inactive consumers, precaution for failure of supplier/DSO and protection of consumers with payment difficulties. The role of supply of last resort should be designed in a way to enable and promote consumer engagement in the liberalized market.

In the following tables are summarized results of the research conducted in the Energy Community Contracting Parties as well as in Croatia and Greece regarding the functions of the supplier of last resort.

Table 7 Functions of the supplier of last resort in the Contracting Parties in 2018

In what circumstances may a household customer turn to the "supplier of last resort" to ensure continuous energy supply?	Number of countries - electricity	Number of countries - gas
If a household customer does not find supplier on the market	6	4
If a household customer is dropped by its current supplier because of non- payment	5	3
The current supplier has gone bankrupt and is no longer doing business	8	7
The license of the current supplier has been revoked	7	7
If a final household customer does not choose a supplier at market opening	5	4
If a fix- term supply contract expires	5	2
Other reasons	0	1 ⁵⁸
There is no supplier of last resort in the country	2	5 ⁵⁹

According to data provided, a supplier of last resort for electricity exists in all Contracting Parties, except in Georgia⁶⁰ and Ukraine⁶¹; for gas it exists North Macedonia, Moldova, Serbia and Ukraine. In Croatia and Greece a supplier of last resort is established for both electricity and gas. The most common cases when a household customer may turn to the

⁵⁷ ACER Market Monitoring Report 2017 – consumer protection and empowerment volume https://acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/MMR%202017%20-%20CONSUMER%20PROTECTION.pdf.

⁵⁸ Ukraine – if in consequence of dissolution of the current supplier, declaring it bankrupt, revocation/suspension of its license, lack of natural gas resources to meet the consumer needs, the absence of supplier offers or in other cases foreseen in the rules of natural gas supply, when the consumer loses (will lose) the supplier and/or consumer is left (will be left) without sufficient resources (proven natural gas volumes), the consumer has a right to apply to the supplier of last resort.

⁵⁹ Republika Srpska – the Gas Law (Official Gazette RS 22/18) defines duties and responsibilities of customers and the supplier of last resort on the gas market in Republika Srpska. New secondary legislation is in adoption procedure by the Regulatory Commission for Energy of Republika Srpska. The supplier of last resort will be designated by the government and the relevant Ministry of Republika Srpska.

⁶⁰ According to the Protocol Concerning the Accession of Georgia to the Energy Community Treaty, the deadline for implementation of Directive 2009/73/EC is 31st December, 2020. Therefore the supplier of last resort has not been appointed yet.

⁶¹ Supplier of last resort is established in 2019

supplier of last resort on the electricity sector are: when customer does not find supplier on the market, when current supplier has gone bankrupt and when the license of their current supplier has been revoked. The same circumstances are applicable for the consumers on the gas market. This means that protection of inactive consumers and precaution for failure of supplier is provided through the role of supplier of last resort.

The Directives stipulate that appropriate measures should be taken to protect final customers. In order to protect customers but also to provide a predictable framework for suppliers it is of great importance to set clear and simple procedures for disconnection from the network due to non-payment and for re-connection to the network after removing the reasons for disconnection. Special emphasis is placed in this context on vulnerable customers. Every country is allowed to create its own concept of vulnerable customers which may refer to energy poverty and, inter alia, to the prohibition of disconnection of electricity to such customers in critical times. They shall ensure that rights and obligations linked to vulnerable customers are applied and regulatory authorities are obliged to monitor the level and effectiveness of market opening, prices for household customers, switching rates, disconnection rates, complaints by household customers etc. The review of minimum notice period to disconnect consumer from the network in Energy Community Contracting Parties, Croatia and Greece is shown in the following table.

Table 8 Minimum duration of disconnection process for non-paying consumers across Energy Community Contracting Parties in 2018

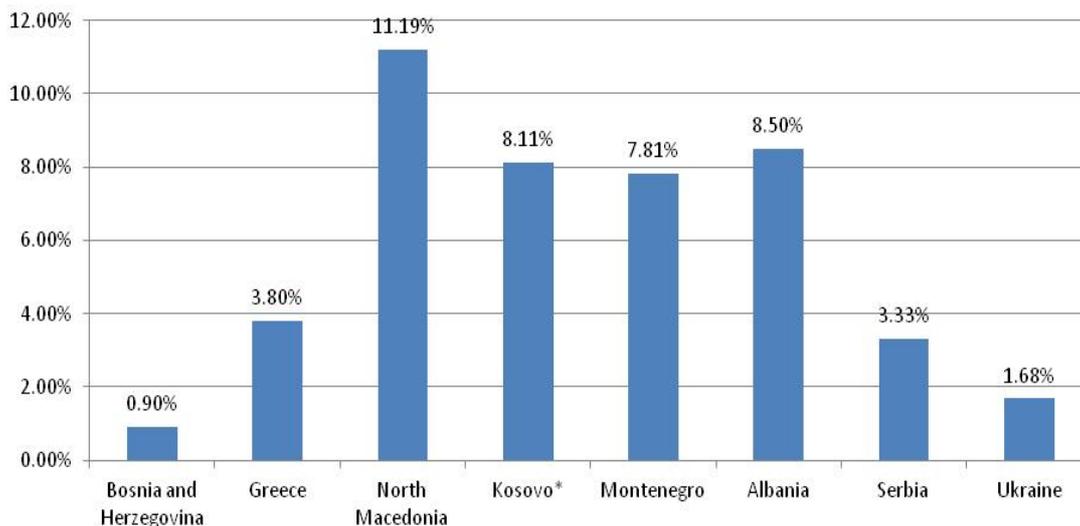
How many days (at least) does it take to disconnect a final household customer from the grid because of non-payment? Starting date is due date of payment.	Legal	In practice
Albania	30	45
Bosnia and Herzegovina	FBIH 30, RS 15, BD 60	FBIH & BD 60, RS 45
Croatia	13	na
Georgia	na	15
Greece	10 ⁶²	70
Kosovo*	30	45
Moldova	10	Up to 20
Montenegro	8	More than 8
North Macedonia	na	60
Serbia	30	30
Ukraine	10	na

⁶² After the second notice, not after the payment due date.

The presented data shows that the number of days legally envisaged for **disconnection** of household consumer because of non-payment varies significantly from country to country (from eight in Montenegro to 60 in Bosnia and Herzegovina). The actual duration of a disconnection in most cases takes longer than the legally foreseen deadlines. In Georgia, customers shall have at least 15 days after receiving the bill to settle it and if the bill is not paid within this period of time, the company is allowed to disconnect such customer on the next business day. In Ukraine bills must be paid after receipt within ten working days. After this, the supplier can initiate disconnection with a notification not less than ten working days before disconnection (additional notification – DSO not less than five working days).

Apart from protection of inactive consumers and precaution for failure of the supplier/DSO, an important role of the supplier of last resort is in protection of **consumers with payment difficulties**. As shown in the Table 8, consumers usually have several weeks to settle their due amounts before they are disconnected, which helps them to deal with financial issues. Nevertheless, some households do get disconnected because of non-payment, as Figure 20 shows.

Figure 20 Share of household disconnections due to non-payment of electricity bills in % of household metering points in 2018



The share of household disconnections due to non-payment for electricity in the Contracting Parties varies among countries (0.90% - 11.19%). According to provided data, the smallest share is in Bosnia and Herzegovina⁶³ and biggest in North Macedonia.

⁶³ The share does not include the data from all suppliers.

3. Vulnerable customers

A well-functioning energy market is accessible, inclusive, and responsive to the needs of all consumers, including those in vulnerable situations. Different customers have different ability to protect their interests in the energy market and some of them are more susceptible to suffer significant damage than other customers. Therefore it is necessary to provide ways and means to identify and protect vulnerable category of customers.

Results of conducted research show that most Contracting Parties have introduced **definitions of the concept of vulnerable consumers**, as required by the Directives⁶⁴. Some Contracting Parties have defined vulnerable customers in their energy laws and some in legal acts related to social protection. Also in Croatia and Greece, definitions of vulnerable customers are introduced (in Greece only for electricity).

There is however a variety of national approaches in defining the criteria for obtaining the status of vulnerable customer which makes it difficult to compare the data on the occurrence of vulnerability, but the common criteria is – need for financial support and health and social care. It is difficult to define vulnerability of customers in the right way, because it should cover risk factors from personal circumstances as well as from the energy market itself. In addition to this vulnerability can be transitory as people’s circumstances change in time.

The following table shows measures used for protection of vulnerable customers in the Contracting Parties in 2018.

Table 9 Measures to protect vulnerable customers in the Contracting Parties in 2018

Measures to protect vulnerable customers	Number of countries - electricity	Number of countries – gas
Restrictions on disconnection due to non-payment	10	5
Earmarked social benefits to cover (unpaid) energy expenses	9	4
Special energy prices for vulnerable customers	2	0
Additional social benefits to cover (unpaid) energy expenses (non-earmarked financial means)	1	0
Free energy-saving advice to vulnerable customers	2	2
Right to deferred payment	4	3

⁶⁴ Outline of the Social Strategy in the Energy Community, adopted in 2013, provided a definition of socially vulnerable electricity and gas consumer and invited Contracting Parties to take in into consideration when providing national definitions.

Exemption from some components of final customer energy costs (e.g. energy price, network tariffs, taxes, levies...)	1	0
Financial grants for the replacement of inefficient appliances	2	2
Free basic supply of energy	1	0
Other	2 ⁶⁵	1

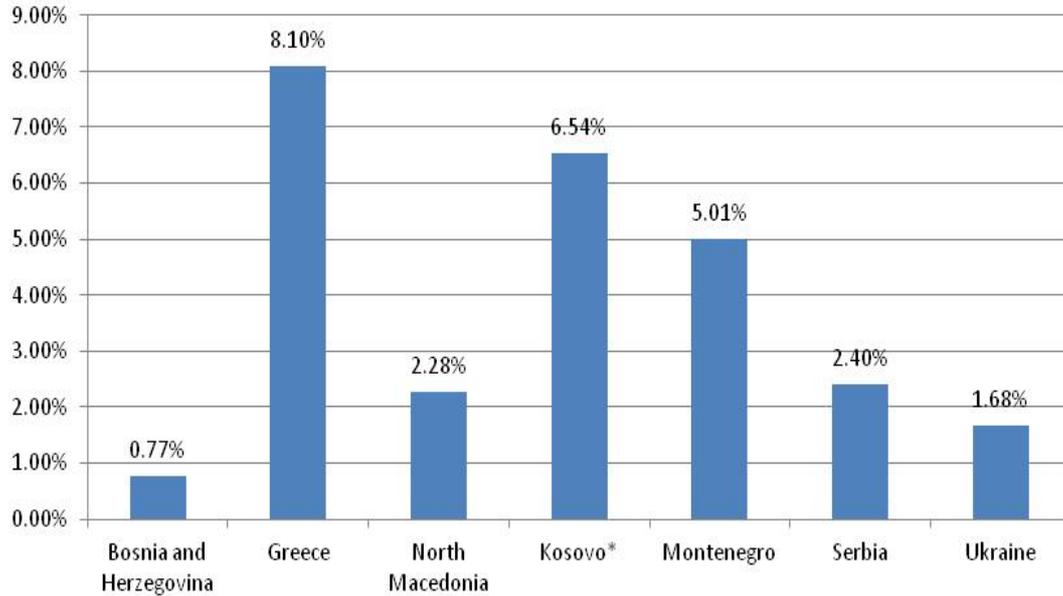
From the data is evident that the most common measures for protection of vulnerable customers in Contracting Parties are restrictions on disconnection due to non-payment and earmarked social benefits to cover (unpaid) energy expenses. Measures of protection are more used in electricity, but that is partly so because gas markets do not exist in every monitored country.

The following figure shows the share of vulnerable electricity customers out of the total number of households metering points in Contracting Parties and Greece on 31st December 2017.⁶⁶

⁶⁵ Montenegro - subventions for all endangered categories are 40% of the bill if it is up to 60 euro, for bills of more than 60 euro there is fixed a subvention of 24 euro. Subventions are financed by the Government. In North Macedonia, the Government by the end of the year, after a proposal of the Ministry of Economy, given by a previous opinion from the regulator, adopts a program for protection of vulnerable customers in cooperation with the Ministry for Labor and Social Protection. This program determines the consumers that are included in this category, the measures that should be taken to protect the vulnerable customers, the measures for energy savings and energy efficiency improvement etc. (Article 15 of the Energy Law). The abovementioned program for protection of vulnerable customers is still not adopted, so North Macedonia still does not have detailed information about the measures for protection of vulnerable customers.

⁶⁶ It is important to note that definitions of vulnerable customers differ in Energy Community Contracting Parties, and therefore the below percentages should be compared with care.

Figure 21 Share of vulnerable customers in Contracting Parties and Greece on 31st December 2018



The share of vulnerable customers in the analyzed markets varies between 0.77% and 8.1%. According to provided data, the smallest share is in Bosnia and Herzegovina⁶⁷ and the biggest in Greece.

⁶⁷ The share doesn't include the data from all suppliers.

4. Energy poverty

As noted by the European Commission (EC), a single definition of energy poverty does not exist across the European Union. According to the EC, energy poverty is often described as the ‘inability to keep homes adequately warm’. The EC has defined energy poverty as a set of conditions where ‘individuals or households are not able to adequately heat or provide other required energy services in their homes at affordable cost’.⁶⁸ Definitions used for vulnerable consumers and energy poverty vary significantly across countries, reflecting differences in problem identification and in approaches to action. Less than a third of EU Member States explicitly recognize concepts of energy poverty.⁶⁹

The concept of energy poverty has recently gained significant attention and it has been identified as a policy priority by various EU institutions, most notably in the “Clean Energy for All Europeans” legislative package. The EU Energy Poverty Observatory is established in order to provide an open-access resource that will promote public engagement on the issue of energy poverty, disseminate information and good practice, facilitate knowledge sharing among stakeholders, as well as support informed decision making process.⁷⁰

While the Third Package alludes to energy poverty, “Clean Energy for All Europeans” contains clear actions to be undertaken. Obligations to monitor energy poverty and take measures against it are foreseen in this legislative package. While allowing for full competition in energy markets, regulators, among other institutions, have a role to protect the most vulnerable groups of society and prevent their falling into energy poverty.

Research has been carried out in order to explore to what extent this concept is recognized and addressed in Energy Community Contracting Parties.

Definition of energy poverty does not exist in any of the Contracting Parties. However, in the majority of analyzed countries energy poverty is tackled through a certain framework, i.e. through the energy development strategy and national action plans (Albania, Kosovo*, Moldova, Montenegro and Serbia) and in North Macedonia via an annual program for reduction of energy poverty. In Greece, there is a definition of energy poverty in the legislation⁷¹. The following figure shows which reasons are perceived as main causes of energy poverty in observed countries.

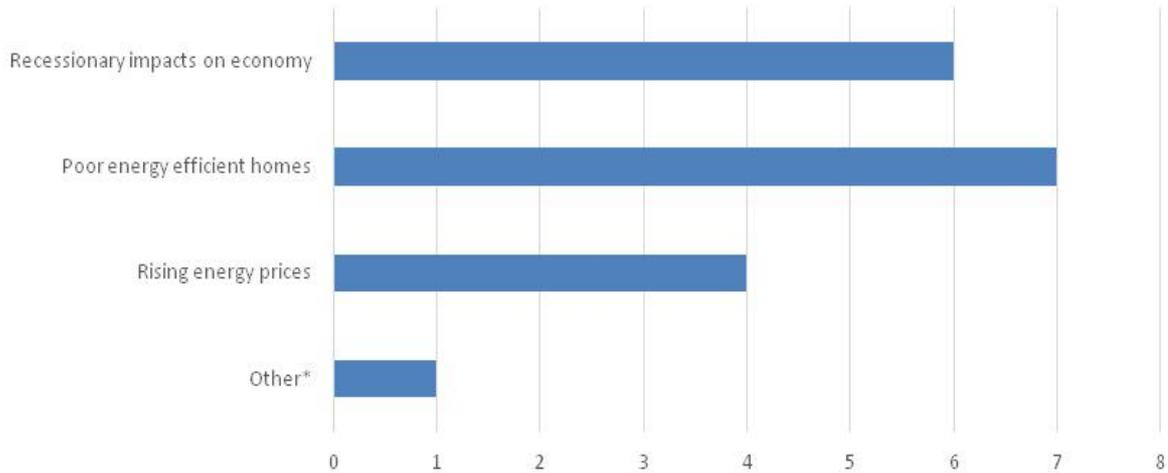
⁶⁸ https://www.energy-poverty.eu/sites/default/files/downloads/publications/18-08/paneureport2018_final_v3.pdf.

⁶⁹ Energy poverty and vulnerable consumers in the energy sector across the EU: analysis of policies and measures https://ec.europa.eu/energy/sites/ener/files/documents/INSIGHT_E_Energy%20Poverty%20-%20Main%20Report_FINAL.pdf.

⁷⁰ <https://www.energy-poverty.eu/>

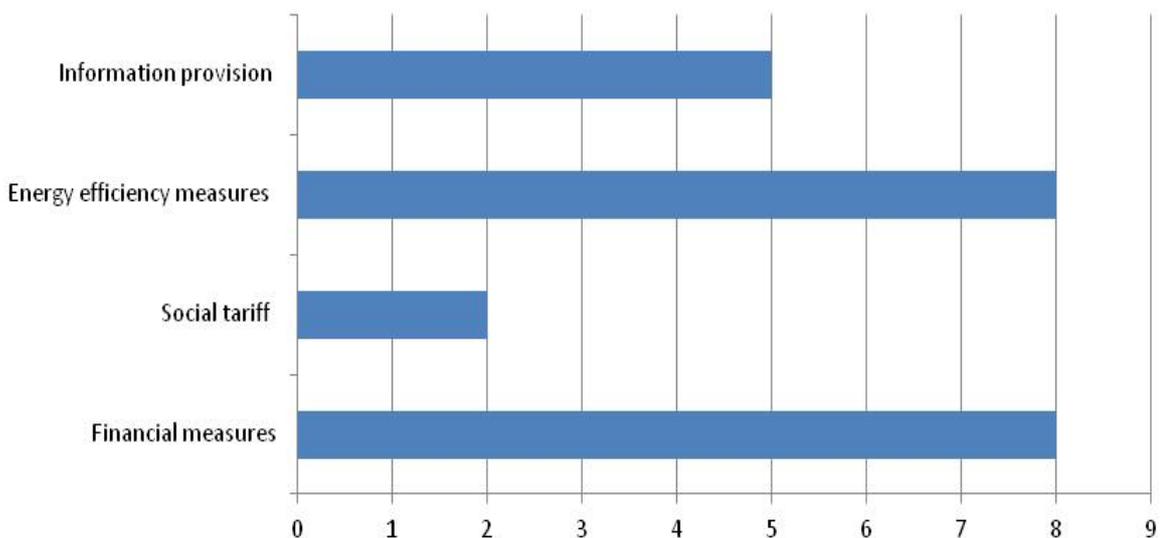
⁷¹ According to Law 4001/2011, energy poverty is “the situation of consumers, who are in a difficult situation, because of their low income, as is evident by their tax returns, combined with their occupational status, marital status and special health situations, to cover costs for their reasonable supply needs for electricity or natural gas, as these costs represent a significant proportion of their disposable income”

Figure 22 Main causes of energy poverty in Energy Community Contracting Parties and Greece



Although the concept of energy poverty is not precisely defined in national legislation of Energy Community Contracting Parties, various measures that are directly or indirectly related to this issues have been implemented in the majority of observed countries (Albania, Bosnia and Herzegovina, North Macedonia, Georgia, Kosovo*, Moldova, Montenegro and Serbia). The following figure shows which measures where implemented until now.

Figure 23 Implemented measures against energy poverty in the Contracting Parties and Greece



Information provision, such as awareness campaigns, information on market tariffs and energy savings measures and establishment of national advice organisations were implemented in Bosnia and Herzegovina, North Macedonia, Georgia, Kosovo* and Moldova.

The data gathered through this research suggests that the variety of measures that have been implemented in Energy Community Contracting Parties, focused both on vulnerable consumers and on energy poverty. Even though these are distinct issues, they are closely related. Vulnerable consumer issues require curative solutions and are short-term in nature and energy poverty is often structural in nature, concerns affordability and requires a long-term, preventive approach. Both concepts require an integrated approach to address them efficiently. Financial measures are useful in addressing affordability in the short term, and they can be used to complement longer term measures that address the underlying structural issues of energy poverty. The possibility to improve and set an integrated approach (social policy and energy efficiency) lies in exchange of experiences and good practice, recognition of two different issues and development of database of measures for vulnerable consumer protection and energy poverty, which will make the evaluation of the impact of implemented policies and measures possible.

Energy efficiency measures are widely used across Energy Community Contracting Parties (Albania, North Macedonia, Georgia, Kosovo*, Moldova, Montenegro and Serbia), but also in Greece.

In Georgia there are a number of energy efficiency credit lines of Georgian financial institutions financed by various donors, allowing small and medium-sized consumers to obtain energy efficient technology for residential and commercial purposes.

In Montenegro, many energy efficiency measures were implemented, such as: development and implementation of the regulatory framework for energy efficiency in buildings, implementation of energy audits of heating and air conditioning systems, certification of energy characteristics of buildings, energy labelling of household appliances, financial support for energy efficiency investments for households and small and medium-sized companies, individual metering and informative billing, improvement of the energy characteristics of buildings in the public sector, implementation of measures for energy efficiency improvement in public utilities.

Social tariffs are applied in Georgia and Greece. In Georgia, for household customers, block tariffs are available. The lowest price is reserved for the customers who, within a 30-day period, consume 101 kWh or less.

Financial measures, ie. social welfare system that targets energy-poor customers, direct payments to specific groups, represent the most common implemented measure in Energy Community Contracting Parties and Greece.

In Georgia, there are a number of schemes that aim to provide financial support to household customers. Financial support is offered, for instance, by the Law on Development of High Mountainous Regions which foresees partial subsidization of the electricity costs for the residents of mountainous settlements. Decree no 381 of the Government of 30 July 2015 sets rules for partial subsidization of electricity costs and targets specifically socially vulnerable customers, defined in accordance with a methodology approved by the government. The decree does not cover the municipality of Tbilisi as far as Tbilisi City Hall has its own support scheme/program for vulnerable customers to cover the costs of electricity and water supply.

Additional support schemes are offered by various municipalities themselves within the limitations of local governmental budgets.

In Kosovo*, the Ministry in charge for social welfare shall develop, in cooperation with the Ministry for Energy and Ministry of Finance, a detailed program for establishing the status of customers socially in need, as well as measures aimed at protecting these customers in order to meet their electricity demand. A fund of 4.5 million EUR is approved by the Government which is dedicated to these customers. The payments will not exceed 20 EUR per eligible customer. Also the payment is done directly to the supplier on yearly bases.

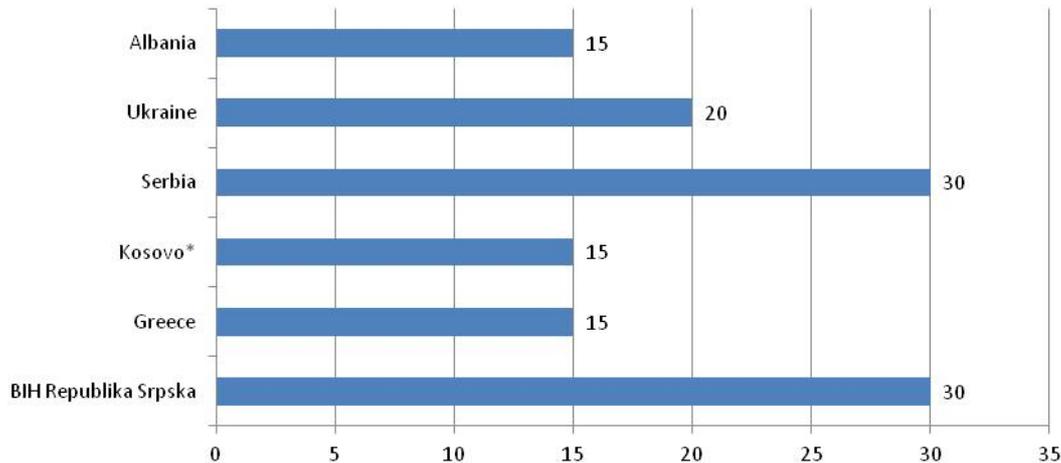
5. Customer information

In order to facilitate the participation of customers in the market it is important to have clear and simple procedures and transparent information. The Third Energy Package Directives prescribe that clear and comprehensible information should be made available to consumers concerning their rights in relation to the energy sector. High levels of consumer protection, particularly with respect to transparency regarding contractual terms and conditions, general information and dispute settlement mechanisms should be provided. It is advisable to have single point of contact to provide consumers with all necessary information concerning their rights, current legislation and the means of dispute settlement available to them in the event of a dispute.

Research has been carried out to analyze the related practice in the Energy Community Contracting Parties. Research covered the legal requirements for information to consumers about price changes for fixed-price and variable-price contracts, the number of days in advance necessary for informing customers about energy price changes, the prescribed number of days for DSOs to inform customers on planned disconnection, the number of days for supplier switching, the number of households with smart meters, the information on bills issued by suppliers, the choice of payment methods, the frequency of billing information based on actual consumption, the existence of price comparison tools and single point of contact.

Results of the research show that in the majority of Contracting Parties a legal requirement for information to household consumers on **price changes** exists. In Moldova, there is not such a requirement. The following figure shows how many days in advance households have to be informed about electricity price changes.

Figure 24 Minimal number of days in advance that household customers are informed about electricity price changes for variable-price contracts



As shown in Figure 22, the minimal number of days to inform customers ahead of electricity price changes for variable-price contracts is 30 in Serbia and Bosnia and Herzegovina- Republika Srpska entity, 15 in Kosovo*, Albania and Greece and 20 in Ukraine.

In Montenegro, it is prescribed by law that suppliers shall publish prices for households and other final customers that it supplies on its web page at least 15 days prior to initiation of supply and the supplier shall publish each change of prices and fees on its web page, in a timely manner but not later than by the expiry of calculation period after the change has come into force, and shall inform customers about the possibility of termination of the contract in case they refuse to accept changed prices.

In Kosovo* the Law on Electricity prescribes that suppliers shall inform their customers on any changes in the contract conditions at least 15 days prior to their application, including their right to withdraw upon such notice. Suppliers notify their customers directly on any increase in expenditure and on their right to withdraw from the contract in the event they do not accept the new conditions offered in the notice.

In North Macedonia, the supply rules prescribe that information about energy price changes for variable-price is given in the first invoice after the prices changed.

Price comparison tools exist only in Bosnia and Herzegovina (<http://uporedistruju.ba/>) that during 2018 still were in a test phase within a USAID EIA project (technical assistance) for a price comparison tool for the-electricity sector. The development of PCT started in other countries for electricity retail market.

Besides changes in the energy price component, it is of great importance that **information on energy bills** is clear and transparent. Presenting ten or more distinct information items may be too much for consumers to deal with. It is recommended that consumers are provided with only essential information on bills, such as the price, energy consumption, payment options

and the details of the single point of contact. Detailed consumer information could be provided through various other communications channels.

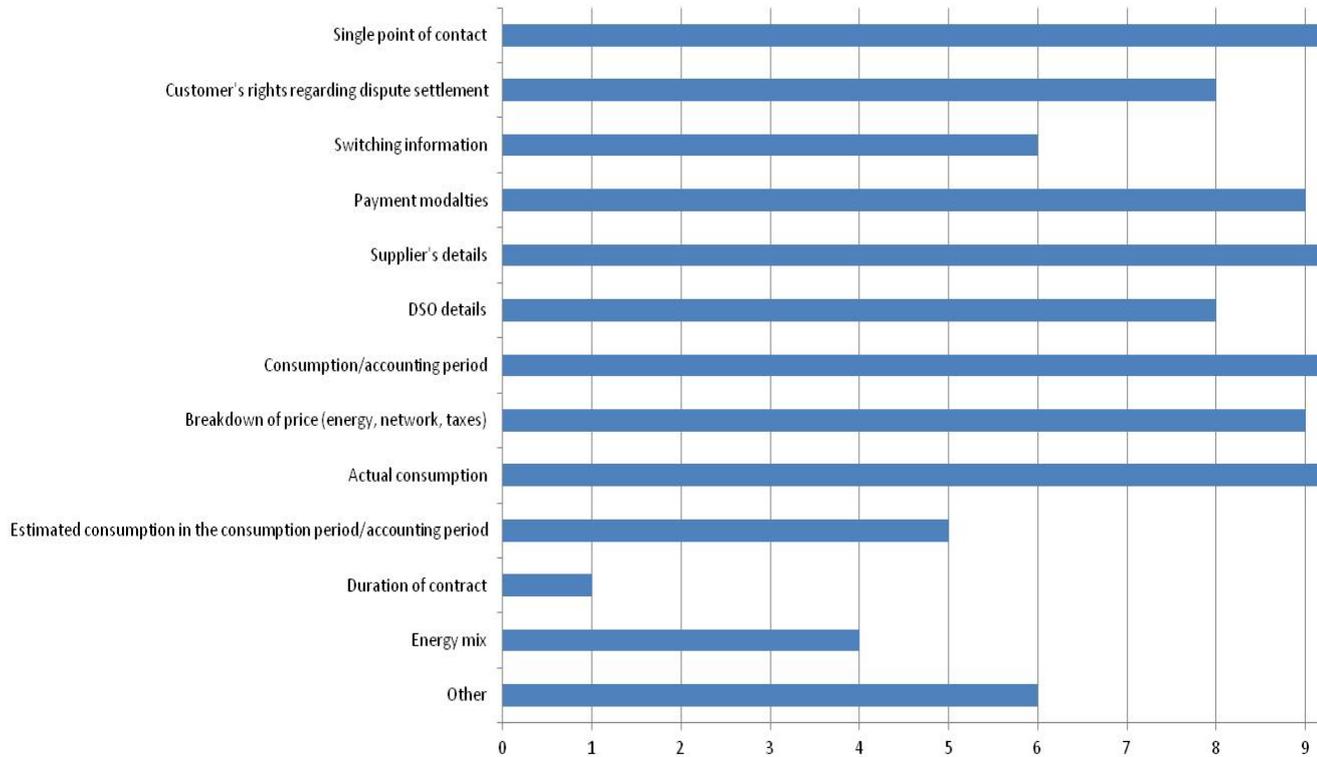
Electricity Directive stipulates that suppliers should make the following information available to final customers on the bills and in promotional materials:

- the contribution of each energy source to the overall fuel mix of the supplier over the preceding year in a comprehensible and, at a national level, clearly comparable manner,
- at least the reference to existing reference sources, such as web pages, where information on the environmental impact, in terms of at least CO₂ emissions and the radioactive waste resulting from the electricity produced by the overall fuel mix of the supplier over the preceding year is publicly available,
- information concerning their rights as regards the means of dispute settlement available to them in the event of a dispute.

Consumers should have access to their consumption data, associated prices and services costs so that they can invite competitors to make an offer based on those data.

The necessary content of customer bills is prescribed by various legal acts in every Energy Community Contracting Party. The following figure shows which information is included in the customers' bills in the observed countries.

Figure 25 Content of electricity bills 2018



Information on the **single point of contact**, actual consumption, the accounting period and suppliers details is included in the bills in all analyzed energy markets. Information related to the energy mix, as one of the mandatory elements foreseen by the Third Package, is available only in North Macedonia, Serbia and Ukraine. Only in Republika Srpska information on the duration of the contract is provided. In Bosnia and Herzegovina, among other information, bills also include information related to the payment deadline, cost attributed to metering point, the common area consumption (elevator, water pump) and in Federation of Bosnia and Herzegovina and in Republika Srpska also information on renewables related cost elements. In addition to the information outlined in Figure 23, bills in Georgia include a telephone or e-mail contact of the regulator for provision of information about the payment due date, duration of switching, other customer rights and supplier's obligations. In North Macedonia, besides information from Figure 23, bills include customer details, the measuring point address and ID code and the percentage of renewables included in the final price.

In Moldova bills contain the data about previous consumption and debts, if any, and in Ukraine the amount of state aid⁷² and compensation payments⁷³.

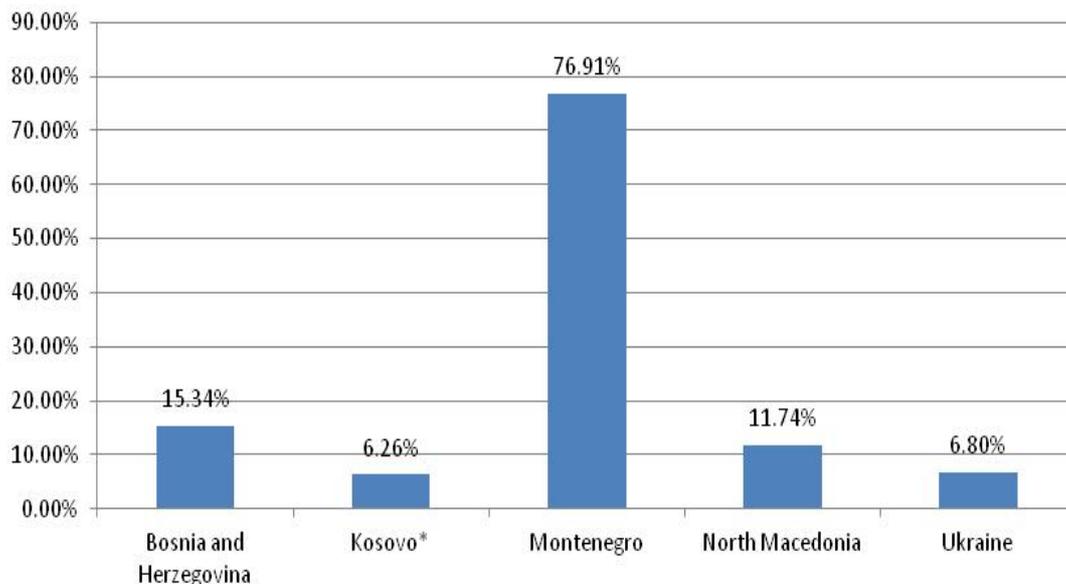
⁷² State aid is an amount of money that reduces total amount of energy bill and it is provided for some categories of consumers (e.g. with low income)

⁷³ Compensation paid in case of non-compliance with quality of supply indicators.

The frequency of billing information based on actual consumption was monthly in every Energy Community Contracting Party during 2018. The Gas and Electricity Directives stipulate that consumers should have the right to be properly informed about their energy consumption and this requirement is met in every observed energy market.

The Electricity Directive requires the implementation of **intelligent metering systems** that shall assist the active participation of consumers in the electricity supply market. The implementation of those metering systems may be subject to an economic assessment of all long-term costs and benefits to the market and the individual consumer. Where roll-out of smart meters is assessed positively, at least 80 % of consumers shall be equipped with intelligent metering systems by 2020. According to the provided data, in 2018 compared to 2017 roll out of smart meters increased in Bosnia and Herzegovina, Kosovo*, and North Macedonia. Montenegro has the highest share of household customers with smart meters. The following figure shows share of households with smart meters in Energy Community Contracting Parties where implemented.

Figure 26 Share of households with smart meters (status 31th December 2018)



As stipulated in the Third Energy Package, **single points of contact** need to be in place to provide consumers with all necessary information concerning their rights, current legislation and the means of dispute settlement available to them in the event of a dispute. Such contact points may be part of general consumer information points. Conducted research indicates that in all Energy Community Contracting Parties regulators are the single point of contact, but in practice customers are contacting also other institutions, such as Ombudspersons, suppliers and customer associations.

Annex I of both the Electricity and Gas Directive requires that customers have to be offered a wide choice of **payment methods**, which is fulfilled in every observed energy market.

The customer's **right to switch supplier** is essential for customer protection and empowerment and for competition development in energy market. The process of switching supplier has to be easy from the customer's point of view, conducted under clear and simple roles. The switching period should be as short as possible and the customer shall not pay any direct fees for changing supplier. Any unnecessary obstacle for switching supplier should be removed. In order to facilitate the whole process, there should be easy access to relevant and correct information for the customer prior to switching.

The Electricity and Gas Directives stipulate that the switching procedure for customers that wish to change supplier should be executed within three weeks. Research related to this issue showed that the prescribed number of working days for supplier switching in Energy Community Contracting Parties usually is 21 (in Bosnia and Herzegovina, Kosovo*, North Macedonia, Serbia and Ukraine). In Albania it is 15, in Georgia 5,⁷⁴ in Moldova 20 and in Montenegro 15.

The switching process may be stopped due to various reasons which are different from country to country and they are listed below:

- Albania – according to the amendments of the regulation on switching the electricity supplier, even if the consumer has a debt with previous supplier, he can make a request to switch the supplier in the case that: 1) the debt is covered by the new supplier, according to an agreement signed by the parties and 2) the previous supplier and the customer has been signed an agreement for a delayed debt payment.;
- Bosnia and Herzegovina - incomplete or inaccurate request for switching, provisions of a previous contract between old supplier and a customer. Republika Srpska - non-compliance of data or contractual arrangements with the existing supplier, whereby the contract cannot contain provisions limiting the right of the buyer to change the supplier. The rulebook on the supply of qualified customers further foresees that if an existing supplier has submitted a request to suspend the delivery of electricity to the relevant system operator prior to notification of change of supplier or the end customer is already excluded due to non-payment, the competent system operator cannot approve the change request for the supplier;
- Croatia- debt or a cancelation request by customer;
- Georgia – if the supplier and the customer decided to terminate the contract before initiating supply and informed the DSO accordingly, the latter would stop the procedures;
- Greece- outstanding debts and errors in application;

⁷⁴ Within five business days after receiving the contract between the customer and the supplier, the distribution licensee shall determine the date on which the supply will begin. This date shall be no later than ten calendar days, starting from the date on which the contract was received.

- Kosovo* - in cases when the current supplier rightly considers that, at the proposed transfer date, the customer is still is obligated under the contract with the current supplier;
- Moldova – the choice of supplier switching is the exclusive right of the consumer, on the condition that the latter has no debts left to the actual supplier (this means that there must not be any disputes related to non-payment issues). There is not an exhaustive list of reasons to stop the switching process;
- Montenegro – the supplier whose contract is in the process of termination shall not set conditions for termination of the contract, including unsettled liabilities, and shall provide supply to the customer until finalization of the process of switching the supplier (however if a final customer already failed to meet the payment obligation by the specified deadline, the existing supplier shall file a request to the transmission or distribution system operator for limitation of delivery and the new supplier shall not accept the switching request);
- North Macedonia - if the DSO concludes that the provided data with the switching request shows inconsistency; there is not enough data for consumer identification; the consumer is supplied by another consumer; another switching process is ongoing; a termination procedure from the incumbent supplier is ongoing; the DSO started a procedure for consumer termination because of unpaid invoices for using the network;
- Serbia - in case of a complaint of current supplier that the consumer did not settle its obligations under the contract;
- Ukraine – in cases of debt of customer under the current supply contract. Since 1 October 2019 debt is not any longer a reason to stop the switching process in electricity.

6. Customer complaints

The Third Energy Package Directives stipulate that customers should also have access to choice, fairness, representation and dispute settlement mechanisms. They can be protected and empowered in the right way only if their complaints are efficiently treated. Under the 3th Energy Package, an independent mechanism such as an energy ombudsman or a consumer body should be in place in order to ensure efficient treatment of complaints and out-of-court dispute settlements. Also the obligation of regulators is prescribed to monitor complaints by household customers.

The following table shows number of household customer complaints received by different institutions in 2018.

Table 10 Number of household customer complaints for gas and electricity received by different institutions in 2018⁷⁵

Country	Electricity				Gas			
	Suppliers	DSOs	ADR	NRA	Suppliers	DSOs	ADR	NRA
Albania	39,683	4,394	1	279	NA	NA	NA	NA
Bosnia and Herzegovina	22,378	933	0	250	NA	NA	NA	NA
Georgia	NA	NAP	NA	680	NA	NAP	1,296	
Greece	856,236	28,961	0	3,618	137,859	12,773	0	609
Kosovo*	8,040	792	0	106	NAP	NAP	NAP	
Moldova	NA	NA		420	NA	NA		118
Montenegro	8,142	NA		25	NAP	NAP	NAP	NAP
North Macedonia	34,040			47	NA	NA	NA	NA
Serbia	NA	NA	NA	367	NA	NA	NA	2
Ukraine	873,490			2,353	NA	NA	NA	4,469

In every observed country the national regulatory authorities have the role of an Alternative Dispute Resolution (ADR) body.⁷⁶ In Bosnia and Herzegovina, besides the regulator, the Ombudsman for customer protection and a local/regional court may also be appointed as ADR, in Georgia the Energy Ombudsman, in Kosovo* a private mediator licensed by the Ministry of Justice and in Serbia a non energy specific third body for issues other than connection issues, consumer organizations, an arbiter and a mediator.

The majority of complaints included in the table above refer to bills. A great part of them is also related to quality of supply in Bosnia and Herzegovina and Ukraine.

⁷⁵ The following abbreviations apply: NA- not available, NAP- not applicable.

⁷⁶ Directive 2013/11/EU on alternative dispute resolution for consumer disputes and amending Regulation (EC) No 2006/2004 and Directive 2009/22/EC is not applicable in the Contracting Parties.

7. Service quality of distribution system operators

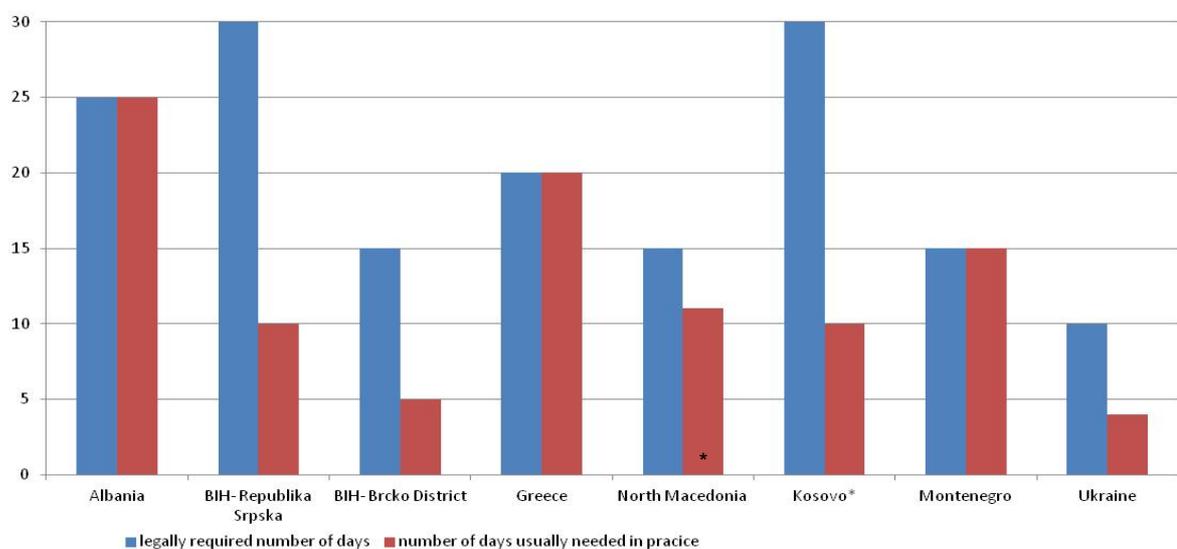
The duties of distribution system operators are to ensure long-term system capability to meet realistic requirements for electricity and gas distribution, as well as to provide distribution system users with clear and precise information regarding conditions for service providing and particularly with information about access to distribution system, including technical, contractual and available capacities. The Electricity and Gas Directives prescribe the obligation of regulatory bodies to monitor, among other things, the time taken by distribution system operators to make connections and repairs.

Research has been carried out to look at the legal requirements and practice in Energy Community Contracting Parties related to indicators of DSO service quality. Research covered the following indicators:

- Number of days to provide a price offer for a grid connection (from the date of consumer's request for a price offer),
- Number of days to connect to the network and activate energy supply to a consumer (from the date of consumer's request to be connected),
- Maximum number of days to disconnect the energy following a consumer request, and
- Maximum duration of a planned supply interruption.

The figure below shows legally required **number of days to provide a price offer for a grid connection** and how long it takes in practice.

Figure 27 Number of days to provide a price offer for a grid connection (from the date of consumer's request for a price offer) – electricity



There are specific details related to this indicator for two observed countries and they are listed below:

- In Georgia, connection to the distribution network may be regulated or negotiated. Regulated connection is the one where the object to be connected is located within 800 meters from the network, for 0.4 kV voltage level consumer, whereas a 6 km radius applies to consumers connected to the 6-10 kV voltage level (medium voltage). For the gas distribution network, the distance should be no more than 300 meters. In this case the price and duration of the connection is set by the regulator, in accordance with the capacity requested. In case of negotiated connection, the DSO issues technical conditions within ten business days from the date of consumer's request, and the consumer is responsible for construction of the necessary network. After finalisation of works, the DSO will install a meter for the fee and during the period fixed by NRA.
- In Montenegro connection takes between 15 days and four months for production and industrial facilities that are connected to the 110 kV or higher voltage level, for which systemic analysis is needed, and distributed production and objects of customers who are connected with an inadequate connection, for which it is necessary to develop a report on connection to the system.

One of explored indicators in conducted research was the **number of days to connect to the network and activate energy supply to a consumer**. The results show that there are specific details related to this indicator for almost every observed country and they are listed below:

- In Albania it takes 45 working days in legislation and practice to connect to the network and activate energy supply to a consumer.
- In Bosnia and Herzegovina it takes 30 days for the DSO's decision on the application, another 30 days is needed for the construction for a low voltage distribution network and ten days for connecting the facility to the distribution network. For shallow connection⁷⁷ in Republika Srpska the legally prescribed number of days to connect to the network and activate energy supply to a consumer is 15.
- In Greece, in the electricity sector, it takes up to 20 days to connect to the network and activate energy supply to a consumer (from the date of consumer's request to be connected) for shallow connection and up to 40 for deep. In the gas sector, both shallow and deep connections are done within 60 days.
- In North Macedonia the legally prescribed number of days is 130, but in practice it takes 97 days to connect to the network and activate energy supply to a consumer. In practice it takes 30 days to connect to the gas network in the case when the customer has finalized internal gas installation and has a usage permit.

⁷⁷ Customer pays only the connection costs. The costs of network reinforcement are socialised and paid by all network users via the network fees

- In Georgia it takes the same number of days to connect to the network in practice as it is legally prescribed – 40 business days in case of regulated connection, if the requested capacity is up to 220 kWh and ten days for installing a meter in case of negotiated connection. For gas, it takes 40 business days, if the requested capacity is up to 6 cm/h and 10 days for installing a meter in case of negotiated connection.
- In Kosovo* it is legally defined that the deadline for connection of customer to the grid from the date of application is two days, for shallow and for deep connection⁷⁸, but in practice it takes one day for shallow and two days for deep connection.
- In Moldova it takes the same number of days to connect to the network in practice as it is legally prescribed – two days.
- In Montenegro it takes 15 days to connect to the grid if the customer fulfills the prescribed conditions before the request.
- In Serbia, it takes 15 days for issuing decision and 15 days for physical connection. Same situation is for gas.
- In Ukraine for shallow connection, the legal requirement for connection service is 20 calendar days for customers up to 16 kW inclusive and 30 days for customers from 16 to 50 kW inclusive. For deep connection, the legal requirement is 120 days - up to 160 kW inclusive, 230 days - from 160 kW to 400 kW inclusive, 280 days - from 400 kW to 1000 kW inclusive, 350 days - from 1000 kW to 5000 kW inclusive.

The specificities of the observed countries related to **the maximum number of days to disconnect the energy following a consumer request** are listed below:

- In Albania, the maximum number of days to disconnect the energy following a consumer request is 30 days legally and in practice.
- In Bosnia and Herzegovina prescribed number of days to disconnect the energy following a consumer request is one in Republika Srpska and two in Brcko District. In practice, it takes two days.
- In North Macedonia the legally required number of days to disconnect the energy following a consumer request is 30 for electricity, but in practice it takes two to three days for electricity and one for gas.
- In Georgia, it takes the same number of days to disconnect the energy following a consumer request in practice as it is legally prescribed and it is ten business days.
- In Greece, legally required number of days to disconnect the electricity following the consumer request is 3- it is achieved in that deadline in practice. For gas, the legally required deadline is 5 days to assess the application of the disconnection and maximally 10 days to complete disconnection.
- In Kosovo*, legally required number of days is 30, but in practice it takes 14 days.
- In Serbia, disconnection following a consumer request should be realized without delay.

⁷⁸ The customer in addition to the connection costs also pays part of the network reinforcement.

- In Ukraine, according to the Distribution Grid Codes if the customer wants to terminate electricity supply he shall inform DSO not later than ten working days (for temporary termination) or 20 working days (for final termination) before the desired date of termination. The disconnection should be performed at the indicated date. In practice 28 days are needed. According to the gas distribution systems code if a customer makes a request for the suspension of gas supply/distribution to his object or his individual gas appliances for the purpose of repair, reconstruction or technical re-equipment, the customer no later than seven days before shall notify the DSO in written form and agree with him the date of suspension of gas supply/distribution, and the DSO shall suspend gas supply/distribution at the date agreed with the customer.

As regards the indicator - **maximum duration of a planned supply interruption**, there is no legal requirement in Bosnia and Herzegovina, North Macedonia, Georgia, Montenegro and Ukraine. Specific details about this indicator are presented below:

- In Albania, from two to 24 hours depending on the area.
- In Bosnia and Herzegovina maximum duration of a planned interruption in practice is six to ten hours.
- In Georgia, GNERC sets targets for the average duration of supply disruptions, for the tariff regulation period, per each year. If no such targets are set, the regulated company's indicators for the previous year are considered as targets. Whether the company achieves the target or not, its regulated cost base will be correspondingly adjusted (increased or decreased) at the time of tariff calculation, in accordance with the Q factor.
- In Greece, legally prescribed maximum duration of a planned interruption is twelve hours.
- In Kosovo*, the prescribed quality standard related to the duration of planned interruption is six hours, but in practice it ranges between two and six hours.
- In Moldova, the prescribed quality standard related to the duration of planned interruption for electricity supply is 24 hours and for gas 120 hours. In practice interruptions last less than legally prescribed standard.
- In Serbia, maximum 72 hours per year.
- In Ukraine, the average value in practice is 455 min and the maximum 34.950 min and it is related to the reconstruction of 0.4 kV overhead lines.

E. MAIN FINDINGS AND CONCLUSIONS

1. Electricity

The **total sale of electricity to final customers** in the Energy Community Contracting Parties increased by 2.24% from 2017 to 2018, and excluding Ukraine total sale of electricity to final customers increased by 1.29%. Those changes mostly were caused by the changes in industrial consumption. Analyzing the Contracting Parties, a significant increase of electricity consumption (greater than 1,5%) was registered in Albania, Georgia, Moldova, Montenegro and Ukraine (the highest increase was in Georgia 8.60%). In Bosnia and Herzegovina and Kosovo* electricity consumption slightly increased, less than 0.5% while in North Macedonia and Serbia, electricity consumption slightly decreased.

The average monthly consumption per household vary between 105 kWh/month in Moldova and 399 kWh/month in Kosovo* and in comparison to 2017, in most Contracting Parties, except in Georgia and Ukraine, this consumption was decreased.

Only in Ukraine a large **number of both local and nationwide suppliers** were active in the retail market in 2018. In Albania, Bosnia and Herzegovina, Greece, North Macedonia and Serbia more than ten suppliers were active in the retail market, while in the other Contracting Parties supply to electricity end-users was offered by one or few suppliers.

In the majority of the Contracting Parties, retail electricity markets are still **highly concentrated**, with an aggregated market share of the three largest companies higher than 90%. In Bosnia and Herzegovina market share of the three largest companies was 83.8% and in Ukraine this share was 32%.

In 2018 in the majority of the Energy Community Contracting Parties (namely: Bosnia and Herzegovina, Kosovo*, Moldova, Montenegro and Serbia) and in Greece all customers had the **right to choose the supplier**. In Ukraine, all non- household customers can change supplier and in the other Contracting Parties (Albania, Georgia and North Macedonia) the dynamics of giving customers the right to choose a supplier on the free market are defined by the law or by sub-legal acts.

During 2018 only a limited number of eligible customers **changed their suppliers** in Albania, Bosnia and Herzegovina, North Macedonia, Kosovo*, Serbia and Ukraine. Except for Greece and Serbia only non-household customers changed their suppliers. In Serbia a very small number of household customers left electricity supply at regulated prices and choose new supplier. The increasing **number of switching requests** is a proof of market liquidity development. The increasing number of switching requests monitored in North Macedonia, Serbia and Ukraine, while in Bosnia and Herzegovina this number was decreasing in 2018, in comparison to 2017. It is worth mentioning that in Bosnia and Herzegovina, North Macedonia,

Montenegro and Serbia some customers⁷⁹ were obliged to leave the regulated market and choose a supplier already several years ago.

End-user electricity prices for household customers in the Energy Community Contracting Parties vary substantially from 4.1 euro cent/kWh in Ukraine to 10.27 euro cent/kWh in Montenegro and are still much lower than the EU 28 average price for households of 20.8 euro cent/kWh in 2018.

Electricity prices for industrial customer are more harmonized among Contracting Parties varying from 5.36 euro cent/kWh in Montenegro to 7.59 euro cent/kWh in North Macedonia.

End-user electricity prices for household customers were **regulated** in all Energy Community Contracting Parties in 2018, except in Montenegro. Also the great majority of non-household customers were still supplied at regulated prices in 2018. In Montenegro, transitional and final provisions of the Energy Law prescribe that, following January 1, 2017, the Supplier which had the status of public supplier until the day of entry into force of this Law, shall be in a position to change prices for households and small sized non-household customers, in line with changes of prices on the market, but under certain restrictions. In Serbia only small customers had the possibility to be supplied at regulated end-user prices; for all other non-household customers, prices were not regulated. In North Macedonia only small consumers (customers with electricity consumption below 100 MWh in 2017) were supplied under regulated prices. In Bosnia and Herzegovina small and medium enterprises connected to the 0.4 kV network were entitled to supply under regulated end-user electricity prices. In Albania there is no price regulation for non-households connected to 35kV network. In Kosovo*, only customers that are connected to TSO network are supplied with un-regulated prices. In other Contracting Parties, all non-household customers had the possibility to be supplied at regulated prices.

In Greece, end- user price regulation is applied to vulnerable customers.

Providing an adequate approach for protecting **vulnerable customers** in the Energy Community Contracting Parties is also an important step in the process of price deregulation. Namely, only when the vulnerable customers are properly defined and targeted, price regulation will lose one of its main alleged justifications,⁸⁰ i.e. protection of customers by not exposing them to potential effects of liberalized market.

Another precondition for successful transition towards complete deregulation of end-user prices is allowing customers to switch from and to regulated prices as customers, especially households, typically consider regulated energy prices as more stable. Switching in and out of regulated prices for households is allowed in Kosovo*, Moldova, Montenegro, North Macedonia, Serbia and Ukraine. In Bosnia and Herzegovina this switching is allowed only in District Brcko.

⁷⁹ Mainly related to the voltage level of their connection to the network, annually electricity consumption and exclusively reacted to customers that are not households or small customers.

⁸⁰ ECRB in its reports on protection of vulnerable customer treatment (2011, 2013) pinpointed to the negative effects of price regulation on market development and liquidity, in particular when too extensive, not targeted, not cost-covering. ECRB thus urged for de-regulation of prices and establishment of customer protection mechanism outside from and neutral to the energy market.

2. Gas

Total sale of gas to final customers in the Energy Community Contracting Parties decreased in the period 2012-2018 by 40%, mainly because of the substantial drop of gas consumption in Ukraine. While gas consumption in Ukraine shows clear backward trend, consumption in other countries varies depending on industry performances and winter temperatures.

In the reporting period end-users of gas in the Energy Community Contracting Parties, Croatia and Greece were mainly supplied by regional retail suppliers. The number of **active suppliers** ranged from 4 in Bosnia and Herzegovina to 234 in Ukraine.

In five countries, namely Croatia, Greece, Georgia, Serbia and Ukraine, customers connected to the distribution networks were supplied by more than one supplier (i.e. other than incumbent). On the other side, in all Contracting Parties, except North Macedonia, as well as in Croatia and Greece, customers connected to the transmission networks were supplied by more than one supplier. If effects of the market opening are to be achieved, it is of utmost importance to allow gas retailers to supply customers on the whole territory of a country.

Although most of the analyzed gas markets have a substantial number of retailers, only a very limited number of them has a **market share** higher than 5%. This, however, does not prove immediately absence of monopolies, but, taking into consideration other relevant information provided in this report, rather points out to the existence of regional or local monopolies. Household customers are supplied almost only by incumbents. However, most of the obstacles to retail market entries result from reasons outside the retail market, such as scarce infrastructure and the little developed wholesale market (e.g. single source of gas and poor access to liquid wholesale markets). The influence of end- user price regulation is also very relevant.

In the reporting period all gas customers in the Energy Community Contracting Parties, Croatia and Greece were **eligible to choose their supplier**. However in practice:

- Household customers in none of the Energy Community Contracting Parties changed their supplier in 2018. Limited number of households changed supplier in Croatia and Greece.
- Some non-household customers in Bosnia and Herzegovina, North Macedonia, Serbia and Ukraine changed their supplier in 2018. The percentages of non- households that changed suppliers in Croatia and Greece are higher than in the Contracting Parties.

End-user gas prices for household and industrial customers increased in 2018 in comparison to 2017 in all Energy Community Contracting Parties, except Moldova and Ukraine (for industry). While household prices were still much lower than in the EU average, industry prices came almost to the EU level. This is mainly due to the continuous process of abandoning cross- subsidization between the two customer categories.

End-user gas prices for household customers were **regulated** in all Energy Community Contracting Parties with the exception of North Macedonia and in Croatia in 2018.

Application of price regulation for industry differs among the Contracting Parties: they were regulated in Moldova, but not in Bosnia and Herzegovina (Republika Srpska), North Macedonia and Georgia. In Serbia and Ukraine certain industry categories were entitled to buy gas at regulated prices, but they were also free to choose their suppliers and be supplied at non- regulated prices. End- user prices for non- households are not regulated in Croatia and Greece.

If market liberalization is to bring benefits to customers, not only by allowing choice of suppliers, but also offering the lower prices, end-user price regulation should be abandoned. Abandoning of end- user price regulation in countries where prices are regulated at levels below costs will, most evidently, not lead to lower prices in the first step. Only once all suppliers offer gas at market prices, market liberalization and competition can bring benefits to customers in terms of lower prices.

3. Customer protection

The **supplier of last resort** is appointed for electricity in all Contracting Parties, except in Georgia and Ukraine, and in Croatia and Greece, while for gas it exists in North Macedonia, Moldova, Serbia and Ukraine. The most common cases when a household customer may turn to the supplier of last resort in the electricity sector are: when customer doesn't find supplier on the market, when current supplier has gone bankrupt and when the license of their current supplier has been revoked. Also, the same circumstances are for the consumers in gas markets. The aforementioned means that protection of inactive consumers and precaution for failure of supplier is provided through the role of supplier of last resort.

Non-payment of energy bills is one of the main problems electricity and gas suppliers face in the Contracting Parties. Therefore **easy and transparent procedures for disconnection** that protect both suppliers and customers are very important. The number of days legally envisaged for disconnection of household consumer because of non-payment varies significantly from country to country (from 8 to 60 days). The actual duration of a disconnection in most cases is longer than legally binding deadlines.

The **shares of household disconnections due to non-payment** for electricity in the Contracting Parties vary substantially among countries. The share of household disconnections due to non-payment for electricity in the Contracting Parties varies among countries (0.90% - 11.19%).

Contracting Parties in majority of cases included **definition of vulnerable customers** as well as the measures for their protection in the relevant legislative frameworks. Some of the Contracting Parties define vulnerable customers in their energy related laws and some in legal acts related to social protection. There is a variety of national approaches in defining the criteria for obtaining the status of vulnerable customer, but the common criteria is – need for financial support and health and social care.

Different approaches to protect vulnerable customers have been chosen. Measures for protections of vulnerable customers are much more used for electricity than gas, partly because gas markets do not exist in every monitored country. The most spread measures are restrictions on disconnection due to non-payment and earmarked social benefits to cover energy expenses.

The share of vulnerable customers in the total number of household metering points, showing how well targeted vulnerable customers are, varied between 0.77% in Bosnia and Herzegovina to 8.01% in Greece.

The concept of **energy poverty** has recently gained significant attention and it has been identified as a policy priority by various EU institutions, most notably in the “Clean Energy for All Europeans” legislative package. Definition of energy poverty does not exist in any of observed countries. However, in majority of observed countries energy poverty is tackled through certain framework, i.e. through energy development strategy and national action plans (Albania, North Macedonia, Kosovo*, Moldova, Montenegro and Serbia). Although the concept of energy poverty is not precisely defined in national legislation of Energy Community Contracting Parties, various measures that are directly or indirectly related to this issues have been implemented in the majority of observed countries (Albania, Bosnia and Herzegovina, North Macedonia, Georgia, Kosovo*, Moldova, Montenegro and Serbia).

Consumers should receive transparent information on applicable electricity and gas prices. This means also that they need to be informed in advance about the **change in energy prices**. In majority of analyzed markets there is a legal requirement for information to household consumers on price changes, including the provision on minimal number of days for informing consumers before the new prices apply.

Electricity and gas bills are the primary source of information to customers, therefore their content needs to be carefully prepared - relevant, clear and concise. The **content of electricity and gas bills** is prescribed by various legal acts in most of the Contracting Parties. Actual consumption, accounting period and suppliers details are included in the bills in all observed energy markets. Information related to energy mix, as one of the mandatory elements, is available only in North Macedonia, Serbia and Ukraine.

Frequency of billing information based on actual consumption was monthly in every Contracting Party during 2018. This means that the requirement of the Directives that stipulate that consumers should have the right to be properly informed about their energy consumption is met in every observed energy market.

Electricity Directive requires the implementation of **intelligent metering systems** that shall assist the active participation of consumers in the electricity supply market. According to provided data, smart meters roll-out is carried out in Bosnia and Herzegovina, Kosovo*, Montenegro and North Macedonia. The share of household customers with smart meters varies between 6,26% in Kosovo to 76.91% in Montenegro. Contracting Parties could consider introduction of incentive schemes in order to motivate and facilitate smart meters roll-out.

In all analyzed markets the electricity and gas customers are offered a wide **choice of payment methods**, which fulfills requirements of Annex I of both Electricity and Gas Directives.

Establishing **single point of contact** to provide consumers with all necessary information concerning their rights, current legislation and the available means of dispute settlement is another obligation for the Contracting Parties. In all Energy Community Contracting Parties and Greece NRAs are single point of contact, but in practice customers are contacting also other institutions, such as Ombudsman, suppliers, government and customer associations.

Besides being continuously supplied by energy and informed about various aspects of their consumption, consumers may be properly protected and empowered only if their **complaints** are efficiently treated and if there are clearly defined dispute resolution procedures. When monitoring level and effectiveness of market opening and competition, regulatory authorities should monitor also the complaints of household customers. In every observed market national regulatory authorities have the role of an Alternative Dispute Resolution body. In Bosnia and Herzegovina, besides the regulator, Ombudsman for customer protection and local/regional court may also be appointed as ADR, in Georgia Energy Ombudsman, in Kosovo* private mediator licensed by the Ministry of Justice and in Serbia non energy specific third-party body for issues other than connection issues, consumer organizations, Arbiter and Mediator. The majority of complaints included in the table above refer to bills. The great part of them is related to the quality of supply in Bosnia and Herzegovina and Ukraine.

Research related to **DSO service quality** showed that legal requirements for analyzed indicators (number of days to provide a price offer for a grid connection, number of days to connect to the network and activate energy supply to a consumer and maximum number of days to disconnect the energy following a consumer request) varies significantly among the Contracting Parties and usually it differs from number of days needed in practice. As regards the indicator - maximum duration of a planned supply interruption, there is no legal requirement in Bosnia and Herzegovina, North Macedonia, Georgia, Montenegro and Ukraine.