



ECRB Market Monitoring Report

Gas and Electricity Retail Markets in the Energy
Community

Reporting period 2019 - Publication December 2020

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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* (hereinafter 'acquis') 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**, as well as **Greece**. 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. Greece is participating the present retail market monitoring activity for the second year in a row.

Data presented in this report refers to the year **2019**.

¹ ECRB operates based on the Treaty establishing the Energy Community (Energy Community Treaty). As an institution of the Energy Community, 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, the symbol * refers to the following statement: 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 decreased by -1.19% in the period 2018-2019; excluding Ukraine the total sale of electricity to final customers decreased by -1.82%. In Bosnia and Herzegovina, Georgia, Montenegro, Serbia and Ukraine electricity consumption decreased while in Albania, Kosovo*, Moldova and North Macedonia electricity consumption increased. Georgia (-13.21%) has the highest decrease of electricity consumption and Bosnia and Herzegovina (-7.07%) also faced a significant decrease of consumption. The decrease of electricity consumption was below -1% in Montenegro (-0.81%), Ukraine (-0.80%) and Serbia (-0.11%). Kosovo (9.61%) has the highest increase of electricity consumption, followed by Albania (3.44%), North Macedonia (1.70%) and Moldova where electricity consumption slightly increased (0.32%).

The figures below show the total electricity sales to final customers in the period 2013-2019,³ presented with and without data for Ukraine.

When analyzing **electricity consumption** of households and non-households customers, it can be noticed that in Bosnia and Herzegovina, Moldova and Montenegro consumption of households increased while consumption of non-households decreased.⁴ On the other side, in Serbia and Ukraine⁵ household-consumption decreased and non-household-consumption increased. In Albania⁶, Kosovo*⁷ and North Macedonia⁸, consumption of both household- and non-household- customers increased while only in Georgia⁹ consumption of both group of customers decreased.

³ Only for Moldova, presented data refers to the period 2015-2019.

⁴ The increase of households' consumption was 0.87% (Bosnia and Herzegovina), 1.44% (Montenegro) and 1.59% (Moldova), while the decrease of non-households consumption was -12.30% (Bosnia and Herzegovina), -2.46% (Montenegro) and -0.61% (Moldova),.

⁵ The decrease of households' consumption was -0.56% (Serbia) and -4.15% (Ukraine), while the increase of non-households consumption was 0.28% (Serbia) and 0.64% (Ukraine).

⁶ In Albania the increase of households' consumption was 2.54% and for non-households' consumption was 4.54%.

⁷ In Kosovo consumption of both group of customers significantly increased – for households increased 5.94% and for non-household 14.89%.

⁸ In North Macedonia, the increase of consumption was similar for both group of customers - for household 1.64% and in non-household 1.76%.

⁹ In Georgia consumption of households decreased only by -0.96%, but consumption of non-household decreased significantly by -18.50%.

Figure 1 Total electricity sale to final customers in GWh 2013- 2019

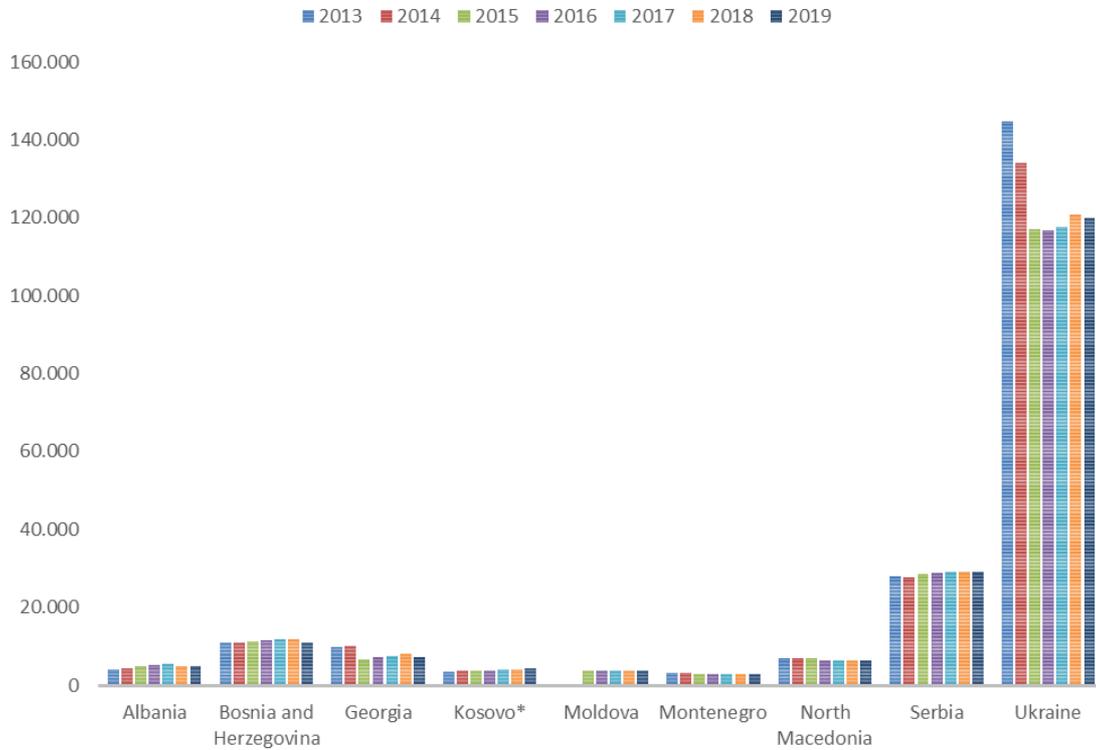
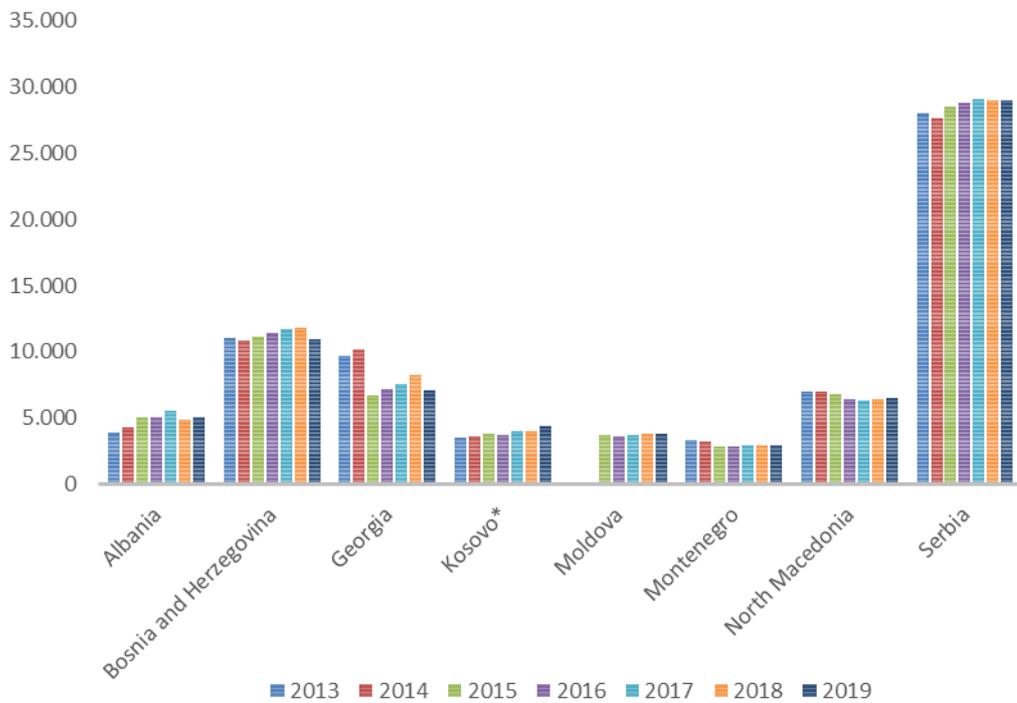
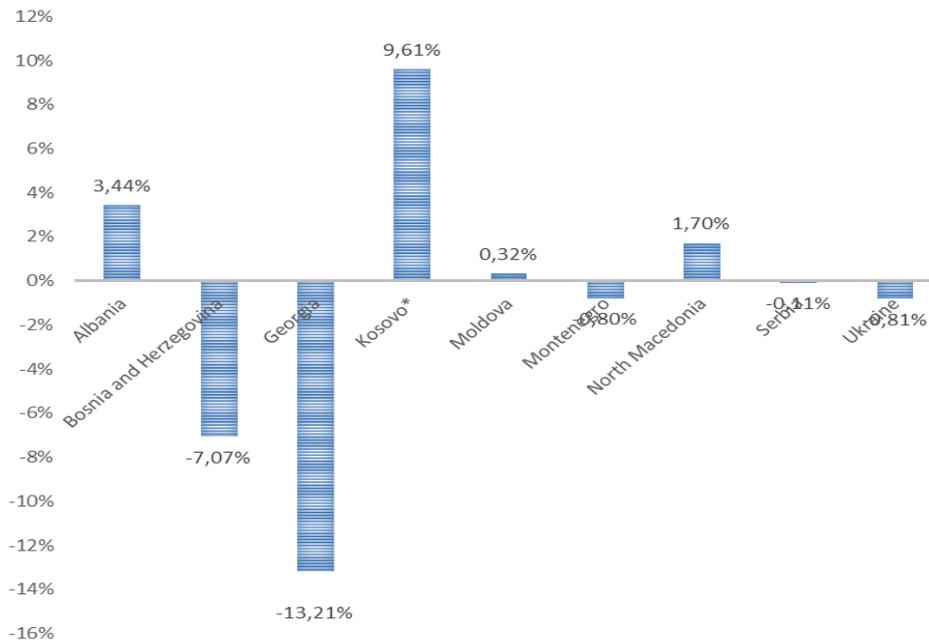


Figure 2 Total electricity sale to final customers in GWh 2013- 2019 (excluding Ukraine)



The following figure shows the growth rates of the total of electricity sales to final customers in the Contracting Parties from 2018 to 2019.

Figure 3 Electricity demand growth rates 2018 to 2019



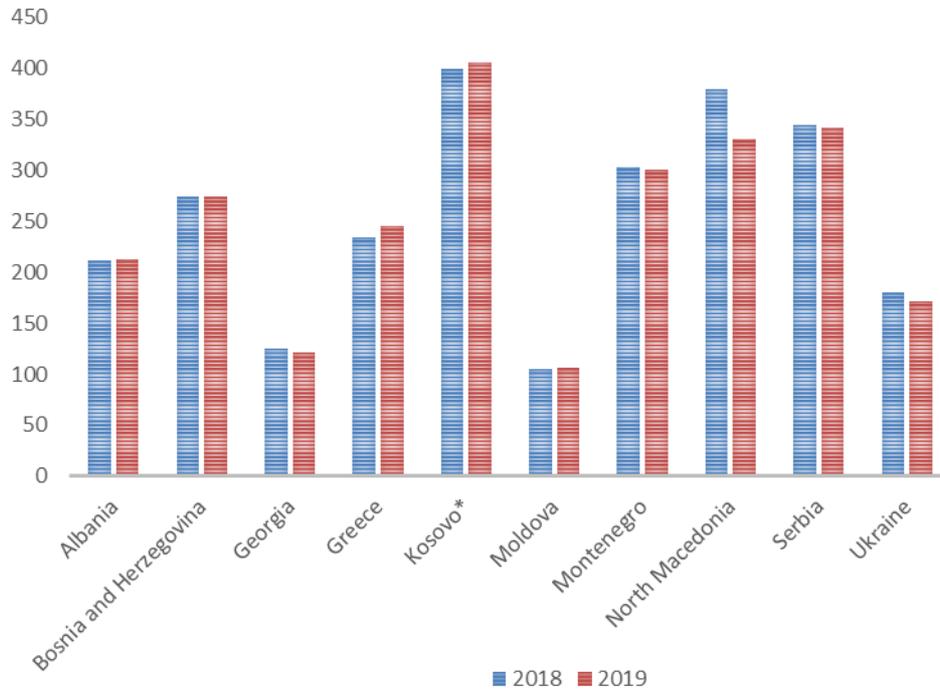
The average monthly consumption of electricity per household¹⁰ varies among the Contracting Parties. In 2019, the lowest consumption occurred in Moldova (106 kWh/month) and Georgia (121 kWh/month), the highest in Kosovo* (405 kWh/month). In the period 2018-2019, in Albania, Moldova and Kosovo* consumption of electricity per household increased, while in the other Contracting Parties this consumption decreased.¹¹ Relevant quantities are displayed in the figure below¹².

¹⁰ In the calculation of average monthly consumption of electricity per household, the number of households is equal to the number of metering points. Number of households include all customers, regardless if they were used electricity or not.

¹¹ Average monthly consumption of electricity per household decreased between 0.79 in Montenegro and 5.33% in Ukraine. This consumption increased in Kosovo* (1.50%), Moldova (0.88%) and Albania (0.86%) and remained practically unchanged in Bosnia and Herzegovina. For North Macedonia, the decrease of monthly consumption per household in the figure is not realistic, because the data for 2019 includes the number of all households, regardless if consuming electricity or not, while 2018 data included only the number of active households (i.e. households that consumed electricity).

¹² In addition to the Contracting Parties, average monthly consumption per households in 2018 and 2019 for Greece is included in this figure.

Figure 4 Average monthly consumption of electricity per household in 2018 and 2019 (kWh)



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 located within the territory indicated in their licenses and hence there are no nationwide¹³ suppliers.¹⁴

Only in Bosnia and Herzegovina there are licensed **local and nationwide suppliers** in 2019¹⁵. During 2019, only in Ukraine the total number of licensed electricity suppliers in the retail market significantly increased.¹⁶

In Bosnia and Herzegovina, Greece, North Macedonia, Serbia and Ukraine 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 supplier. Both local and nationwide suppliers are active only in Bosnia and Herzegovina and in the rest of the Contracting Parties (except Georgia) and Greece, active suppliers were nationwide suppliers. In 2019, new active

¹³ Nationwide supplier means a supplier offering its products on the whole territory of a country.

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 Bosnia and Herzegovina there was 5 licensed local electricity suppliers which were active on the regulated electricity market

¹⁶ In Ukraine, number of net new licensed nationwide suppliers was 377 in 2019.

nationwide suppliers entered the markets of Greece (1), North Macedonia (2), and Ukraine (118), while in Serbia 4 nationwide suppliers left the market.

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 ¹⁷ |
|------------------------|--|--|---------------------------------------|---|
| Albania | 31 | 22 | 22 | 3 |
| Bosnia and Herzegovina | 24 | 14 | 10 | 0 |
| Georgia | 2 | 2 | na | na |
| Greece | 49 | 25 | 25 | 1 |
| Kosovo* | 8 | 1 | 1 | 0 |
| Moldova ¹⁸ | 31 | 7 | 1 | 0 |
| Montenegro | 6 | 1 | 1 | 0 |
| North Macedonia | 86 | 23 | 23 | 2 |
| Serbia | 67 | 13 | 13 | -4 |
| Ukraine | 641 | 641 | 237 | 118 |

The figures below show detailed information on whether more than one supplier (i.e. the incumbent) was supplying customers connected to the transmission or distribution network in 2019.

¹⁷ Net means the number of entries minus the number of exiting suppliers in the market.

¹⁸ In Moldova, only one supplier is active in the whole country and has contracts with customers from all areas of the country. Other suppliers have the same rights, and in every moment, they can sign a contract with customers that they want but they are only active in different areas.

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

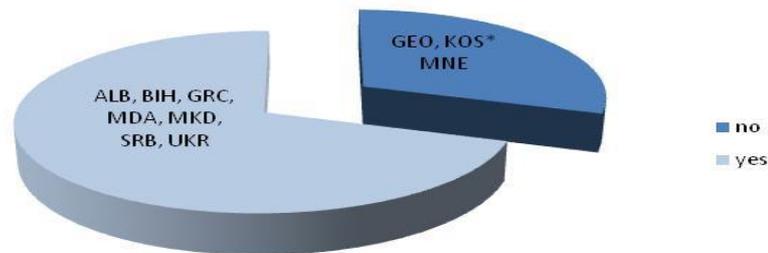
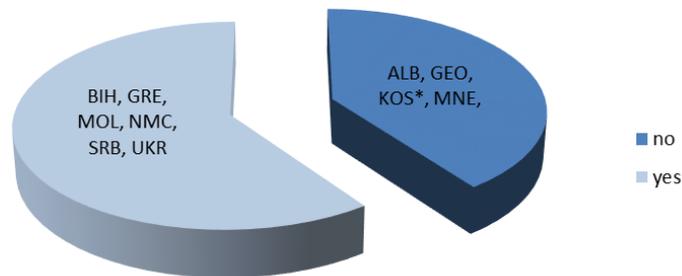


Figure 6 Are there electricity suppliers other than incumbent supplying customers connected to the distribution network?



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, in all Contracting Parties all households are supplied by the incumbent supplier at regulated prices. Also in Greece, the majority of households is supplied by the incumbent suppliers, but at non-regulated prices (75.56%), while 7.9% of households are supplied at the so-called “Social Residential Tariff”.
- In Albania, only the incumbent supplier was active with a market share of 100%.

- In Bosnia and Herzegovina, 14 suppliers were active.¹⁹ There were three retailers selling at least 5% of the total electricity consumed by final customers, with a joint market share of 97.58%.
- 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 Greece, there were 25 active suppliers in 2019, but only three of them were with a market share of at least 5% of total electricity consumption, and with a joint market share of 83.18%.
- In Kosovo*, there was only one active retail supplier of electricity, namely the incumbent with a 100% market share.
- In Moldova, there were 7 retail electricity suppliers active in the retail market. Two of them were selling at least 5% of total electricity consumed by final customers in 2019, with a joint market share of 93% of the total sale of electricity on the retail market.
- In Montenegro, only one retail electricity supplier was active in the market. In 2019, 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 North Macedonia, there were 23 active suppliers. The market share of the three largest electricity suppliers was 92.04%.
- In Serbia, there were 13 active suppliers, 4 less than in the previous year. The great majority of customers were supplied by the incumbent supplier covering a market share of 97.89% of the total sale of electricity to end user customers. The market share of three largest companies was 99.26%.
- The largest number of electricity suppliers are operating in Ukraine – namely, there were 237 active suppliers on the retail electricity market in 2019 (85 more than in 2018). The low market share of the largest supplier (12.37% of total sale of electricity to end user customers) and the fact that only 15.46% of consumption of non-household customers was supplied at regulated prices, indicate an open market for supply to non-household customers. The market share of the three largest suppliers was 26.11%, (this value is almost 6% less than in 2018).
- In Greece, there were 23 active suppliers in 2019. The market share of the three largest electricity suppliers covered 83.18%.

¹⁹ Including five subsidiaries of Elektroprivreda RS supplying tariff customers in their designated areas.

Table 2 Electricity retail market concentration and market opening in 2019

| | 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 | 100.00% | 100.00% |
| Bosnia and Herzegovina | 3 | 97.58% | 100.00% |
| Georgia | 2 | 100.00% | 100.00% |
| Greece | 3 | 83.18% | 86.04% |
| Kosovo* | 1 | 100.00% | 100.00% |
| Moldova | 2 | 97.50% | 100.00% |
| Montenegro ²⁰ | 1 | 100.00% | 100.00% |
| North Macedonia | 3 | 92.04% | 100.00% |
| Serbia | 1 | 99.26% | 100.00% |
| Ukraine | 5 | 26.11% | 100.00% |

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.

²⁰In 2019, the biggest customer “Kombinat Aluminijuma” purchased electricity for its need from EPCG, so EPCG supplied all customers on the retail electricity market.

In 2019, 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, North Macedonia, Serbia and Ukraine.
- 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. Customers connected below 35 kV are not eligible still.
- 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 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 to choose their supplier on the market. In North Macedonia²³ 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 2019. 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.

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.

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 2019 (in %)²⁴

| | Number of eligible customers under national legislation/active eligible customers | Annual switching rate in the whole retail market (by number of meter points) | Annual switching rate of household customers (by number of meter points) | Annual switching rate of non-household customers (by number of meter points) | Annual switching rate in the whole retail market (by volume) | Annual switching rate of household customers (by volume) | Annual switching rate of non-household customers (by volume) |
|------------------------|---|--|--|--|--|--|--|
| Albania | 108/41 | 0.002 | 0.000 | 0.013 | na | 0.000 | na |
| Bosnia and Herzegovina | 1,567,786/16 | 0.001 | 0.000 | 0.013 | 3.34 | 0.000 | 5.87 |
| Georgia | Nap | Nap | Nap | Nap | Nap | Nap | Nap |
| Greece | 7,577,944/ 624,024 | 8.23 ²⁵ | 8.49 | 7.33 | 2.22 ²⁶ | 1.31 | 2.80 |
| Kosovo* | 605,676/3 | 0.0005 | 0.000 | 0.003 | 10.53 | 0.000 | 24.52 |
| Moldova | 1,303,839/261 | 0.019 | 0.000 | 0.274 | na | 0.000 | na |
| Montenegro | 396,470/396,470 | 0 | 0 | 0 | 0 | 0 | 0 |
| North Macedonia | 868,614/7,231 | 0.830 | 0.008 | 6.990 | 7.86 | 0.010 | 14.74 |
| Serbia | 3,663,675/ 15,703 | 0.429 | 0.012 ²⁷ | 3.812 | 2.80 | 0.012 | 6.88 |
| Ukraine | 18,785,415/ 87,887 | 0.473 | 0.000 | 5.767 | 22.98 | 0.000 | 32.45 |

In Albania, Georgia and Montenegro there was no supplier switching in 2019. A very small number of eligible customers changed their suppliers in Bosnia and Herzegovina, Kosovo* and Moldova²⁸. In North Macedonia, Serbia and Ukraine several thousand customers changed their suppliers in 2019, which means that the annual switching rate in the whole retail market calculated by number of metering points was less than 1%. However, when the annual switching rate in the whole retail market is calculated by volume of consumption, the relevant rate was in North Macedonia 7,86%, in Serbia 2,80% and in Ukraine 22,98%. 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. Switching rates are calculated as share in % of total consumption (or number) of customers.

²⁵ Low-voltage customers (households & professional customers up to 250 KVA) and Medium-voltage customers (250 KVA - 10 MVA).

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

²⁷ Metering points which belong to the household category of distribution network users.

²⁸ Annual switching rate in the whole retail market calculated by number of metering points was very small (Bosnia and Herzegovina 0.001%, Kosovo*0.0005% and Moldova 0.019%) but annual switching rate in the whole retail market calculated by volume of consumption was 3.34% in Bosnia and Herzegovina and 10.53% in Kosovo*.

switching rates which are calculated by metering points in Greece are substantially higher than in the Contracting Parties. Except for Greece and Serbia, only non-household customers changed their suppliers. In Serbia, also only a very small number of household customers left the incumbent electricity supply at regulated prices and chose a new supplier.

The increasing **number of switching requests** is a proof of market liquidity development. Still, in all Contracting Parties this number decreased, except in Ukraine where number of request increased from 1145 in 2018 to 7385 in 2019.

3. End- user electricity prices²⁹

After several years of continuous increase, **final household prices** in the Energy Community Contracting Parties decreased in 2019, on average by 1.6% compared to the previous year. On the other side, **final industry prices** continued to increase on average since 2017, by an additional 11% to 7.27 euro cents/kWh in 2019.

This trend, however, has different dynamics in Ukraine than in the other Contracting Parties. In the period between 2013 and 2019, electricity prices for households in the Contracting Parties without Ukraine increased, on average, by 15.8%, while industrial prices increased on average by 12.8%. Over the same period, electricity prices for households in Ukraine registered an increase of around 50% and industry prices a decrease of 25%. The unwinding of cross-subsidization partially explains the average price dynamics in the two segments.

In 2019, the average electricity price for household consumers in the Contracting Parties without Ukraine was 7.66 euro cents/kWh, which is 2.8 times less than the average EU electricity price for households in the same year. Household consumers in Ukraine paid in 2019, on average, around 1.7 times less than in the other Contracting Parties - only 4.4 euro cents/kWh.

As in the previous years, there are substantial differences in electricity price levels across the Contracting Parties. In general, household electricity prices in 2019 were the highest in Montenegro (10.32 euro cents/kWh), where consumers paid, on average, 2.3 times the price paid by consumers in Ukraine. With the exception of Kosovo* and Moldova, where household prices decreased by around 5% in comparison to the previous year and North Macedonia, where these prices remained almost at the level of the previous year, in all other Contracting Parties the electricity prices for households increased. During the period 2013-2019 the household electricity prices increased in all Contracting Parties, except North Macedonia, where an upward trend was registered until 2015 but household prices started decreasing as of 2016. End consumer prices for households were still regulated in all Contracting Parties, except Montenegro, sometimes resulting in prices below actual costs.

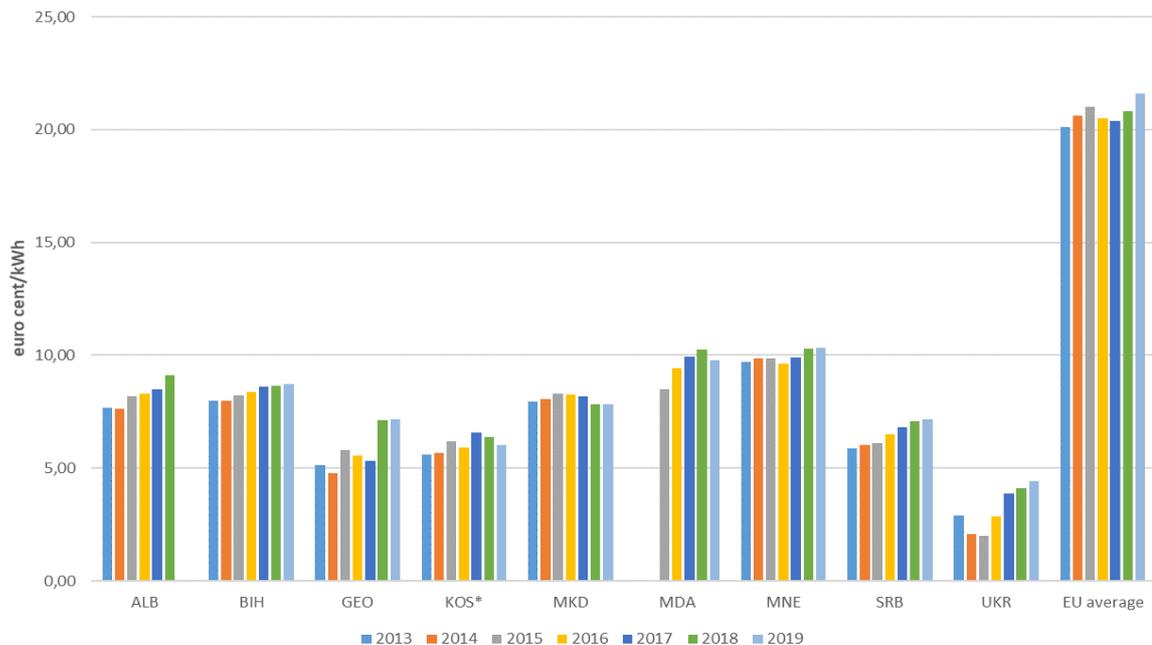
²⁹ Information in this chapter was partially provided by the NRAs, also for the purpose of ACER Market Monitoring Report 2019 (https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/ACER%20Market%20Monitoring%20Report%202019%20-%20Energy%20Retail%20and%20Consumer%20Protection%20Volume.pdf).The source of other information is EUROSTAT.

While in the majority of the Contracting Parties, electricity prices for industrial consumers were decreasing between 2013 and 2017, in 2018 and 2019 they registered increases. The biggest year-to-year increase (16.6%) is observed in Montenegro, where prices rose from 5.36 euro cents/kWh in 2018 to 6.25 euro cents/kWh in 2019. The lowest electricity prices for industrial consumers were monitored in Georgia with 5.89 euro cents/kWh, whereas the highest industrial price was reported in Albania (12.48 euro cents/kWh). On average, in 2019, electricity prices for the industrial segment in the Contracting Parties were around 65% of the average electricity prices for industry in the EU Member States.

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

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

Figure 7 Electricity POTP³⁰ trends for households in the Contracting Parties 2013-2019 (euro cent/kWh)

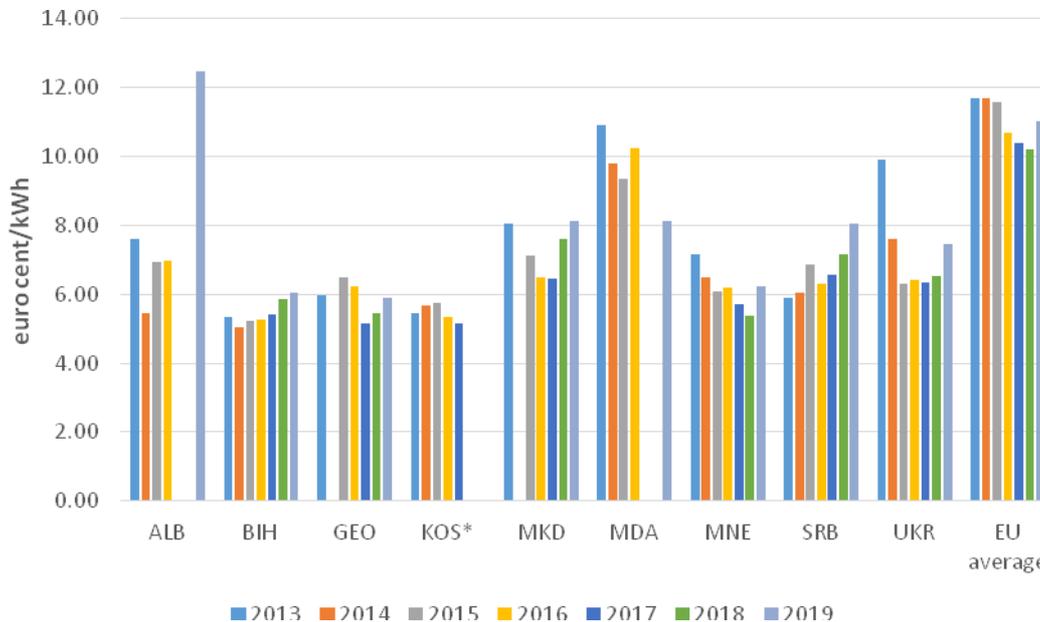


Source: Energy Community Secretariat calculations based on Eurostat and NRAs.

Note: This Figure is based on bi-annual data provided by Eurostat for consumption band DC: 2,500-5,000 kWh (household electricity consumption). Information on prices in Georgia and Moldova is partially based on Eurostat, the remaining data is provided by the NRAs. Prices in nominal terms.

³⁰ 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: Energy Community Secretariat calculations based on Eurostat and NRAs.

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

4. Electricity price breakdown for households³¹

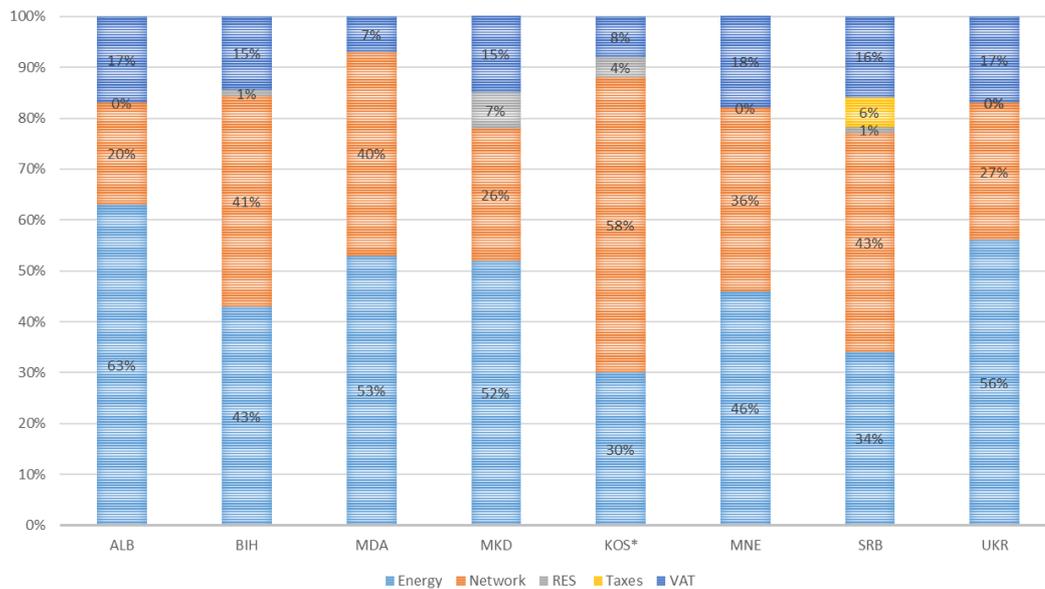
Figure 9 shows the breakdown of final electricity price for households in capital cities of the Contracting Parties in November/December 2019, based on a consumption profile of 3,500 kWh per year. The composition of final household electricity price varies widely across Contracting Parties. The share of the energy component in the final bill was the highest in Albania (63%) and the lowest in Kosovo* (30%).

The share of network costs in the total household electricity price ranged between 20% in Albania and 58% in Kosovo*.

³¹ Ref.: ACER/CEER Annual Report on the Results of Monitoring the Internal Electricity and Gas Markets in 2019 (Electricity and Gas Retail Markets Volume), October 2020 https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/ACER%20Market%20Monitoring%20Report%202019%20-%20Energy%20Retail%20and%20Consumer%20Protection%20Volume.pdf f). The NRAs of the Contracting Parties report on electricity price breakdown for the purpose of ACER market monitoring report and this report., whereby the ACER methodology is used in both cases. Please note that this report presents an updated data on Kosovo* and, consequently, on weighted average for Contracting Parties, in comparison to ACER report.

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, Moldova, Montenegro³² and Ukraine, no RES support mechanism was reported by the NRAs for 2019. In other Energy Community CPs, the RES support amounts to 1% of the final household electricity price in Bosnia and Herzegovina and Serbia, 4% in Kosovo* and 7% in North Macedonia.

Figure 9 POTP electricity breakdown of the incumbent’s standard offers for households in EnC capitals – November–December 2019 (%)



Source: Energy Community Secretariat calculations based on ACER’s methodology and data provided by regulators (2019).

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.

³² In Montenegro, a RES support scheme was part of the final electricity price until mid-2019, afterwards the support scheme changed. A RES fee is now paid by end- users for every kWh above 300kWh consumed monthly.

Figure 10 Weighted average breakdown of incumbents' standard electricity offers for households in EnC capitals – 2015–2019 (%)

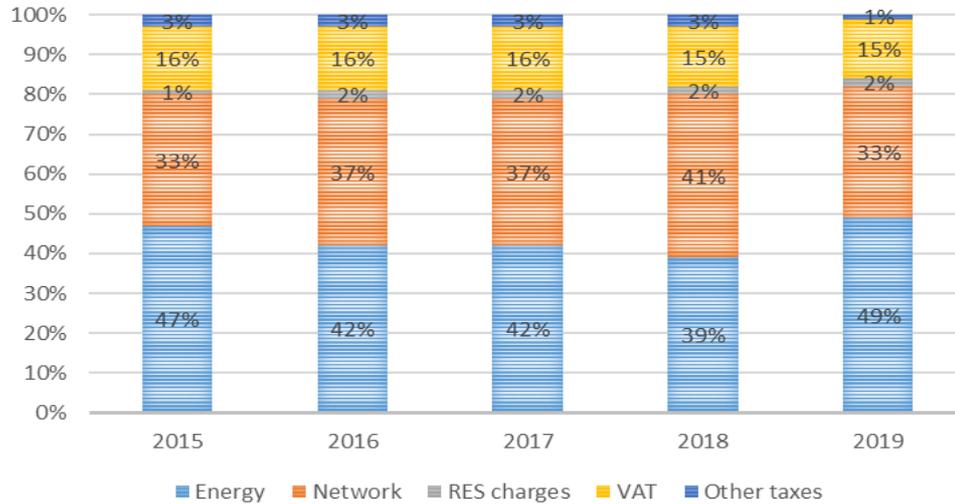


Figure 10 shows the weighted average final price breakdown of the incumbents' standard offers for electricity household consumers in the Contracting Parties' capitals in the period 2015- 2019. The average breakdown changed in 2019 mostly due to inclusion of the incumbents' standard offer of Ukraine in the Contracting Parties' average, which was not available in the previous years. Compared to the previous year, breakdowns of incumbents' standard electricity offers for households in other Contracting Parties almost did not change.

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 2019, 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 customers³³ in line with changes of prices on the market, however under certain restrictions. Namely, the prices for

³³ According to Article 196 of Energy Law, a small sized customer is a customer that purchases electricity or gas for its own consumption, has less than 50 employees, its electricity consumption in the previous calendar year does not exceed 30.000 kWh, i.e. its natural gas consumption in the previous calendar year does not exceed 100.000 m³, while its annual income does not exceed €8,000,000 or its total assets (property by the income statement) do not exceed €8,000,000.

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 but for those connected below 35kV. 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;³⁴ 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 were supplied under regulated prices.³⁵ In Serbia, only small customers had the possibility to be supplied at regulated end-user prices;³⁶ for all other non-household customers, prices were not regulated. In Ukraine, for all non-household customers prices are not regulated since January 2019. In Georgia and Moldova, all non-household customers had the possibility to be supplied at regulated prices.

In Greece, end- user prices regulation is applied to vulnerable customers (i.e. those being eligible to the Social Residential Tariff) and to households subject to Universal Service. In practice, in 2019, 10.2% of households used the Social Residential Tariff or Universal Service offered by the company PPC SA. Also, small and medium enterprises³⁷ had the possibility to be supplied under universal service conditions but only 2,2% of non-household customers connected to the distribution system on low voltage level made use of this right.

³⁴ Federation of BiH: small company means any company which meets at least two of the three mentioned criteria: it has fewer than 50 employees, to annual turnover less than 2 million BAM (1EUR=1,95583BAM) and with a value of operating assets at the end of the financial year less than 1 million BAM, and whose facilities are connected to the distribution system voltage levels lower than 1 kV;

Republika Srpska: small customer means any customer whose facilities are connected to the distribution system at the voltage level lower than 1 kV, which meets the following criteria (a) at least two of the three mentioned criteria: (1) it has fewer than 50 employees, (2) annual turnover is less than 2 million BAM, (3) a value of operating assets is less than 1 million BAM or (b) annual consumption in previous year is lower than 35000 kWh.

Brcko District: Small customer means any customer whose facilities are connected to the distribution system at the voltage level lower than 1 kV and that have less than 50 employees with total annual revenue not exceeding 10 million BAM.

³⁵ A small electricity consumer is an entity whose average number of employees in the last two accounting years is less than 50 employees and has a total annual income of less than two million euros in denar counter value, with the exception of electricity producer and transmission system operator and electricity distribution system

³⁶ The Energy Law defines small electricity customers are end customers (legal persons and entrepreneurs) with less than 50 employees and a total annual revenue of up to EUR 10 million in dinar counter value whose facilities are all connected to the electricity distribution system at a voltage level lower than 1 kV and whose electricity consumption in the previous year did not exceed 30,000 kWh.

³⁷ Small enterprises: professional customers with an installed capacity up to 25kVA; Medium enterprises: low voltage professional customers with an installed capacity from 25kVA to 250kVA.

Table 4 Number of non-households (number of metering points) supplied at non-regulated electricity prices in 2019

| Number of non- household customers supplied at non- regulated prices in 2019 (number of metering points) | |
|--|-----------|
| Albania | 41 |
| Bosnia and Herzegovina | 10,083 |
| Georgia | 0 |
| Greece | 1,646,378 |
| Kosovo* | 3 |
| Moldova | 0 |
| Montenegro | 16,203 |
| North Macedonia | 17,799 |
| Serbia | 139,140 |
| Ukraine | 1,099,305 |

In 2019, end-user electricity prices were regulated using the following **methodologies**:

- Rate of return/cost plus in Bosnia and Herzegovina, Serbia and Ukraine;
- Revenue cap/price cap in Albania, Kosovo*, North Macedonia, Moldova and Montenegro;³⁸
- Mix of cost plus and revenue cap in Georgia;
- In Greece, a specific discount on the electricity price, in EUR / kWh, is provided to vulnerable customers.

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. Frequency of energy component update in the analyzed markets is different in Contracting Parties:

³⁸ 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).

- Albania: every month;
- Ukraine: every third months;
- Kosovo*, Moldova, Montenegro, North Macedonia: once per year;
- Georgia: tariffs are set for a three-year regulatory period, however, if something significant happens, such as the purchase price of electricity for the supplier changes by $\pm 10\%$, then GNERC will review the tariff, but no more than 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 in 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,³⁹ 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

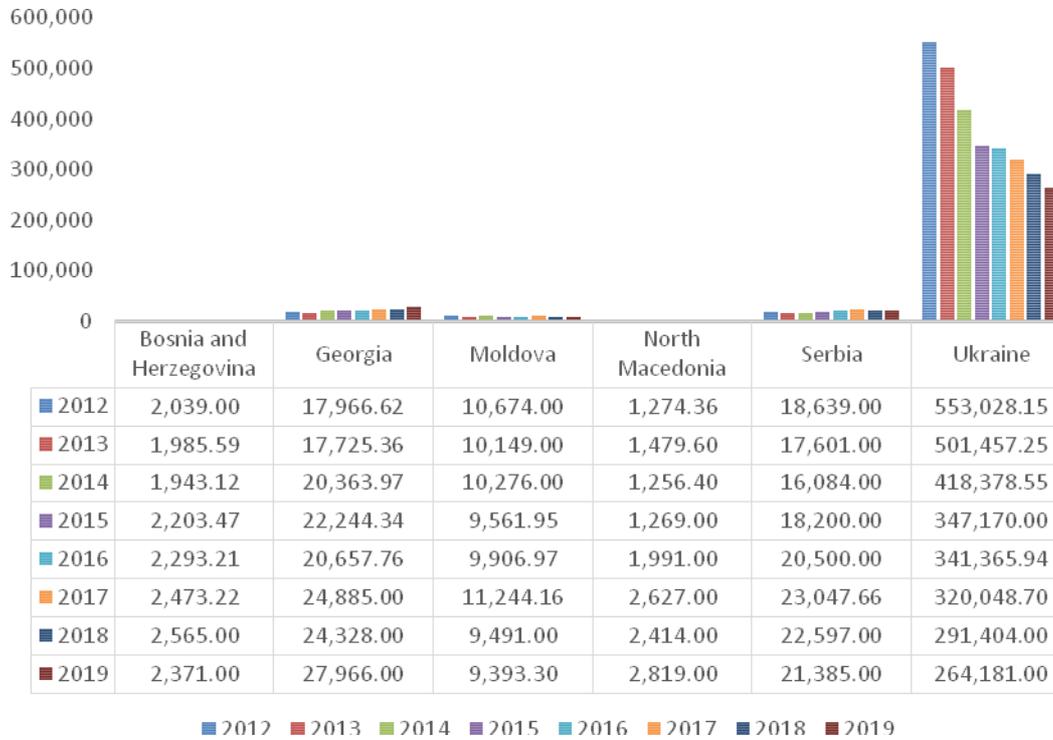
The total **sale of gas to final customers** in the Contracting Parties decreased from 2012 to 2019 by 45%. This was mainly driven by a substantial drop of gas consumption in Ukraine, adding up to more than 50% and initiated on purpose with a view to lower import dependence.⁴⁰ Over the same period, the demand decreased also in Moldova (by 12%) but other Contracting Parties registered an average increase of between 15% to 120% (see figure 11 below). While the gas consumption in Ukraine shows clear trends, consumption in other countries varies depending on industry performances⁴¹ and winter temperatures. In the period 2018-2019, gas consumption increased in Georgia (15%) and Moldova (17%), while in all other Contracting Parties there was a year-to-year drop in gas demand, the highest in Ukraine with a minus of 9.3%. The figures below present the total gas sales to final customers in the period from 2012 to 2019 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.

³⁹ The information for Bosnia and Herzegovina was provided by the regulatory authorities of Republika Srpska and Federation of Bosnia and Herzegovina.

⁴⁰ Also due to lack of data for Crimea and uncontrolled territory of Donbass in 2014-2016.

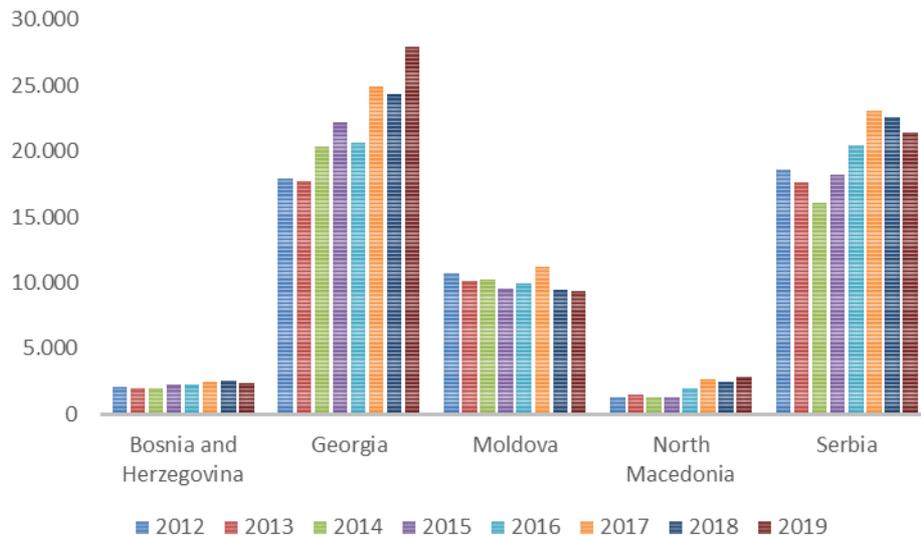
⁴¹ In North Macedonia, deployment of the biggest consumer - CHP plant in summer months strongly influences the average level of gas demand.

Figure 11 Total sale of gas to final customers in the Energy Community Contracting Parties in the period 2012- 2019 (in GWh)



Source: National regulatory authorities

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



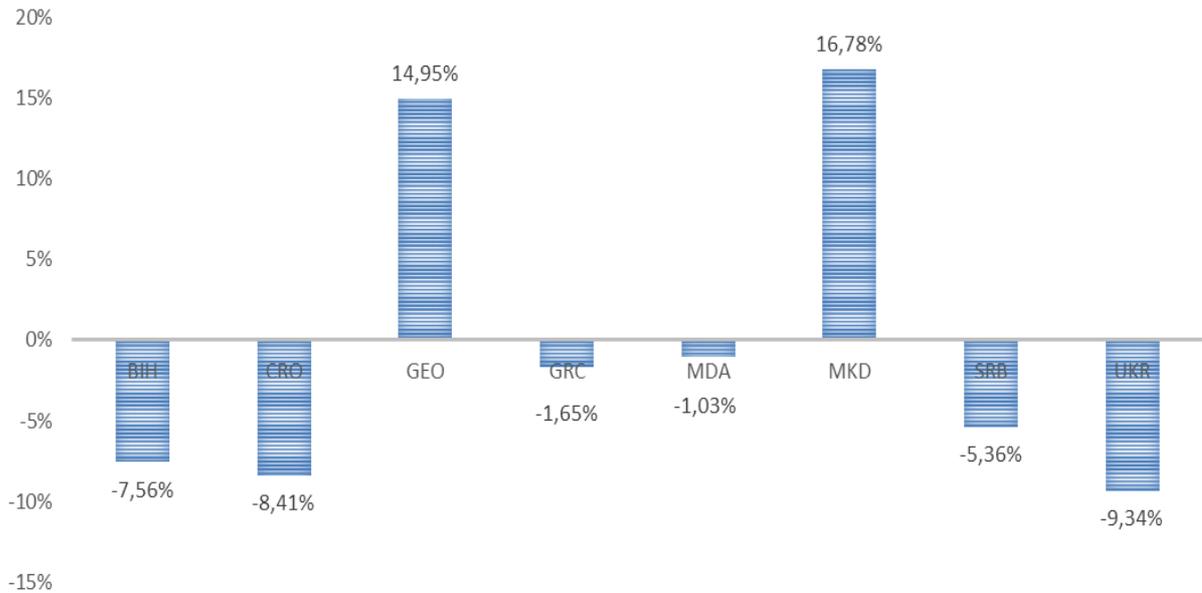
Source: National regulatory authorities

Figure 13 Growth rates of gas demand 2012 to 2019



Source: National regulatory authorities

Figure 14 Growth rates of gas demand 2017 to 2019

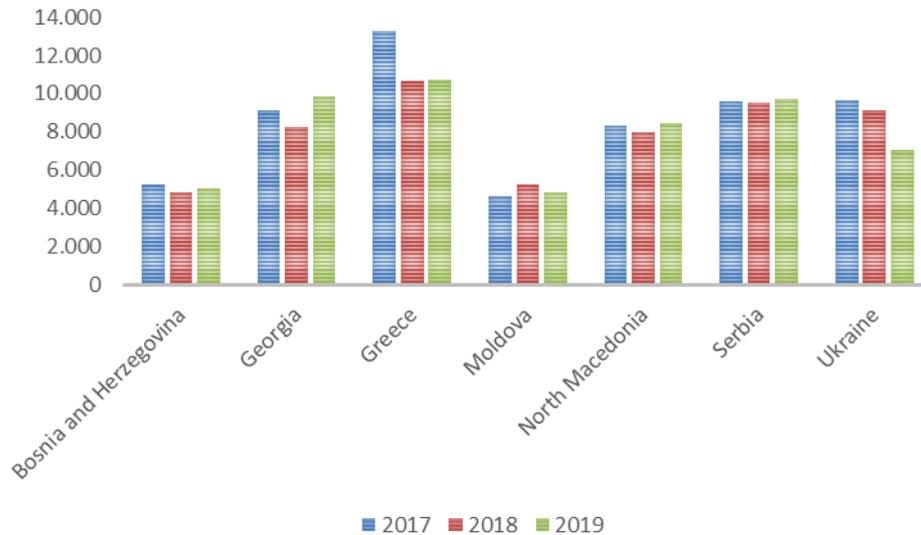


Source: National regulatory authorities

The **average consumption of gas per household varies** among countries and over the time. A substantial change in average household consumption over the last three years can

be observed for Ukraine where it dropped by 27%. Relevant quantities are displayed in the figure below.

Figure 15 Average annual gas consumption per household in 2017- 2019 (in kWh)



End-users of gas in the Contracting Parties and Greece were supplied mainly by regional **retail suppliers**, 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 3 in Bosnia and Herzegovina to 249 in Ukraine. While some active suppliers left the retail markets in Moldova, North Macedonia and Serbia, 15 new suppliers entered the retail gas market of Ukraine. The majority of active retail suppliers hold a license for supplying customers nationwide, i.e. those suppliers that 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 four countries, namely Greece, Georgia, Ukraine and Serbia customers connected to the distribution network can be supplied by more than one supplier (i.e. other than the 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 Serbia, 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 nation-wide.

Table 5 Number of active gas suppliers in 2018 and 2019

| | Number of licensed gas suppliers | | Number of active gas suppliers | | Number of active gas retail suppliers licensed nationwide | |
|------------------------|---|------|--------------------------------|------|---|------|
| | 2018 | 2019 | 2018 | 2019 | 2018 | 2019 |
| Bosnia and Herzegovina | 7 | 7 | 3 | 3 | 2 | 2 |
| Georgia | There is no license for retail gas supply | | 31 | 34 | 31 | 31 |
| Greece | 49 | 60 | 21 | 25 | 21 ⁴² | 25 |
| Moldova | 15 | 17 | 11 | 10 | 1 | 1 |
| North Macedonia | 19 | 21 | 8 | 6 | 5 | 3 |
| Serbia | 68 | 70 | 39 | 35 | 28 | 26 |
| Ukraine | 513 | 626 | 234 | 249 | 234 | 249 |

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, and in Greece, dominant retail suppliers sell more than 80% of gas to end-users. The market share of the 3 largest companies in the retail gas market decreased from year to year in Ukraine: in 2018 it added up to 71% and in 2019 to 62.5%. 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 supplier in the household segments of the analyzed markets and in cases where there was an alternative available it was hardly used in 2019.⁴³ However, most of the obstacles to retail market entries mainly stem from reasons other than retail market design, namely the status of wholesale

⁴² Only 8 of them actually offered gas nationwide.

⁴³ 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.

market development⁴⁴ (e.g. single source of gas and poor access to liquid wholesale markets). The effect of regulation of end- user prices is also substantial.⁴⁵

Table 6 Retail gas market concentration in 2019

| | 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% |
| Georgia | 3 | 84.87% | 100% ⁴⁶ |
| Greece | 6 | 73.04% | 56% |
| Moldova | 1 | 99.38% | 100% |
| North Macedonia | 3 | 98% | 100% |
| Serbia | 1 | 86.90% | 100% |
| Ukraine | 3 | 62.5% | 100% |

2. Switching behavior

All natural gas customers in the analyzed Contracting Parties and Greece were eligible to choose their supplier. However, **household customers in none of the Contracting Parties' markets changed their suppliers in 2019**. For **non-households**, the following information on switching rates has been provided:

- In Bosnia and Herzegovina, Moldova and North Macedonia, none of the non-households changed supplier in 2019;
- In Georgia and Ukraine, the regulatory authorities do not have data on switching in 2019;
- In Serbia 1.46% of non-households changed their supplier in 2019, which corresponds to a switching rate of 0.41% by volume.

⁴⁴ 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.

⁴⁵ 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 sell to protected customers is regulated; (2) the price at which the 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).

⁴⁶ In 2017, natural gas tariff was calculated for the three biggest natural gas DSOs in Georgia and since then, natural gas is supplied at regulated prices almost for all household consumers. Before July 2017, there was a significant share of household supplied with non-regulated price.

In Greece, 4.12% of household and 5.67% of non-household customers, measured by the number of metering points, changed supplier in 2019. The same switching rates measured by volume reached added up to 3.23% for households and 2.18% for non-households.

3. End-user natural gas prices⁴⁷

In the period 2013 to 2019, 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 220%. This increase in Ukraine is due to the Government's Public Service Decree,⁴⁸ 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 17.6% on average. In Ukraine, industrial prices were subject to a decrease of 38% 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 the majority of the Contracting Parties, namely Bosnia and Herzegovina, Georgia, Serbia and Ukraine, 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 2019 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, Ukraine⁴⁹ and Serbia.⁵⁰ However, the intensity of cross-subsidization decreased in the reporting period, especially in Ukraine where the household gas price in 2019 (2.67 euro cent/kWh) was 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 2.86 euro cent/kWh in 2019).

The final price paid by household gas consumers in North Macedonia (5.98 euro cents/kWh) was four times higher than the 1.47 euro cents/kWh paid by Georgian households. In the industrial segment, the prices paid by consumers in Moldova (2.49 euro cents/kWh) were only 57% of the prices paid by consumers in Bosnia and Herzegovina (4.32 euro cents/kWh).

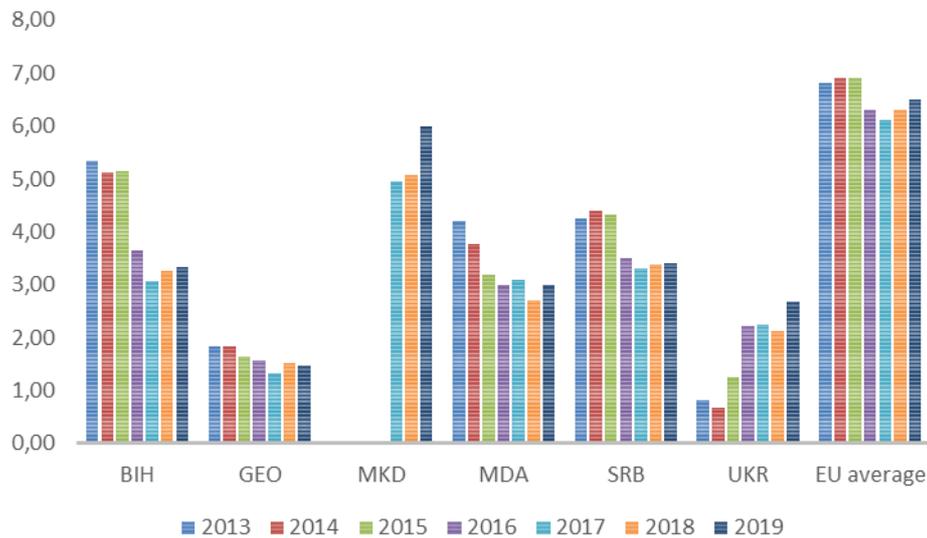
⁴⁷ The information in this chapter was partially provided by the national regulatory authorities also for the purpose of ACER Market Monitoring Report 2019 (https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/ACER%20Market%20Monitoring%20Report%202019%20-%20Energy%20Retail%20and%20Consumer%20Protection%20Volume.pdf). The source of other information is EUROSTAT.

⁴⁸ This resolution is updated every year.

⁴⁹ In Ukraine, the final industry prices were regulated only for district heating companies and religious organizations

⁵⁰ Only for small non-household customers consuming less than 3,600 GJ per year.

Figure 16 Gas POTP⁵¹ trends for households in the Contracting Parties- 2013-2019, in comparison to EU-28 average level (euro cent/kWh)

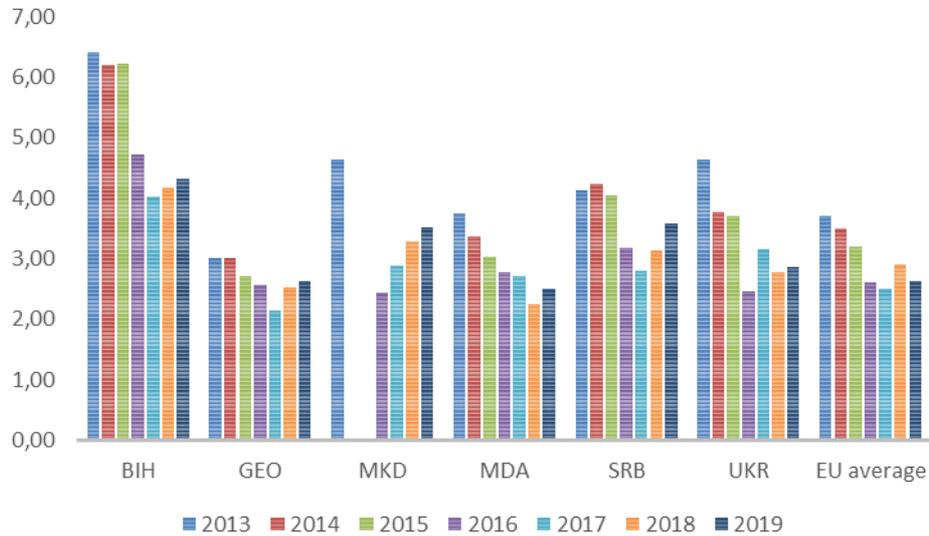


Source: EUROSTAT (June 2020), CP NRAs and Energy Community Secretariat calculations

Note: This figure is based on bi-annual data provided by Eurostat for consumption bands D2: 20–200 GJ (household gas consumption). Household prices for North Macedonia are available only as of 2017. Prices in nominal terms. Household prices for Georgia are available at EUROSTAT since 2017; the information about the prices in the previous years is provided by GNERC.

⁵¹ Post-tax price i.e. end- user price.

Figure 17 Gas POTP trends for industrial consumers in the Contracting Parties -2013-2019, in comparison to EU-28 average level (euro cent/kWh)



Source: EUROSTAT (June 2020), 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). Household prices for Georgia are available at EUROSTAT since 2017; the information about the prices in the previous years is given by GNERC.

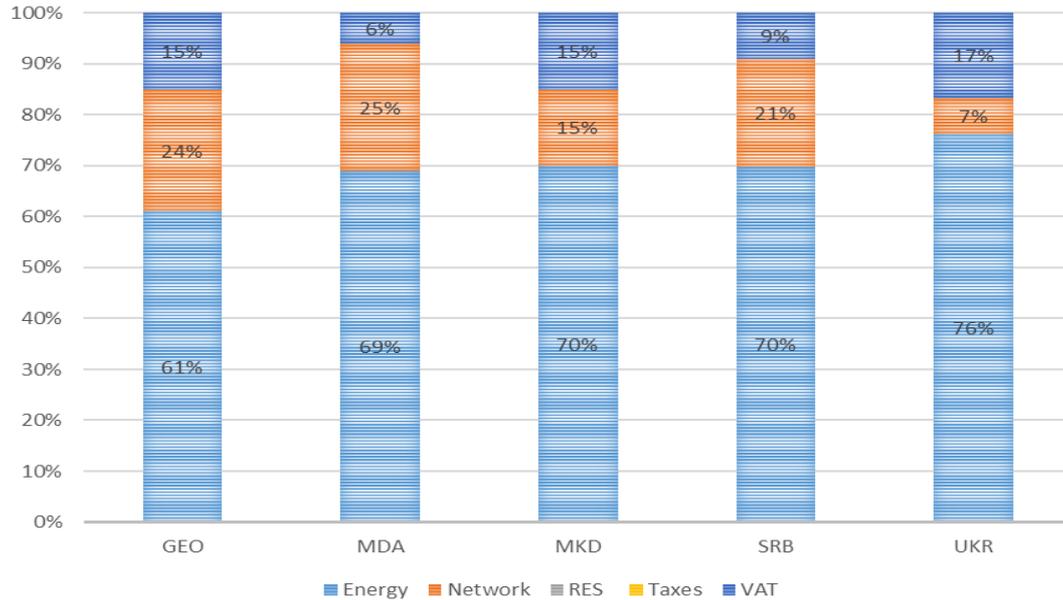
4. Gas price breakdown for households⁵²

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 2019 ranged from 61% in Georgia to 76% in Ukraine. The share of **network charges**, both transmission and distribution, ranged from 7% of the final gas price for consumers in Kiev to 25% for households in Chisinau.

The weighted average breakdown of gas prices in the Contracting Parties' capitals remained stable throughout the period 2015–2019. Compared to 2015, the relative share of the energy component increased, while the share of network charges decreased, by two percentage points in 2019.

⁵² 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.

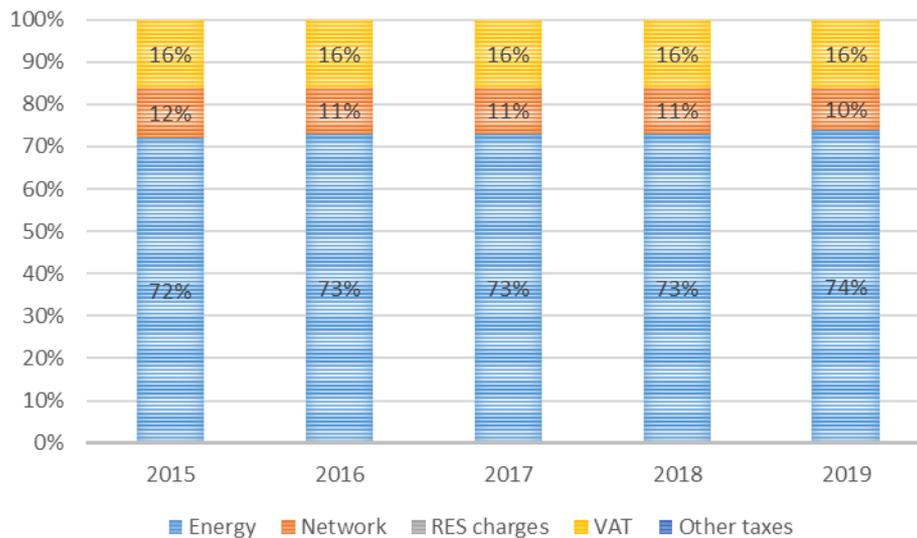
Figure 18 POTP gas breakdown of incumbents' standard offers for households in EnC capitals – November–December 2019 (%)



Source: Energy Community Secretariat calculations, based on ACER's methodology and data provided by national regulatory authorities (2020).

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

Figure 19 Weighted average breakdown of incumbents' standard offers for households in EnC capitals – 2015 - 2019 (%)



Source: Energy Community Secretariat calculations, based on ACER's methodology and data provided by NRAs (2020).

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 2019,⁵³ except in North Macedonia.

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 Serbia; and district heating companies and religious organizations in Ukraine;⁵⁴
- In Moldova all industry customers were supplied at regulated prices.

End- user prices for non- households are not regulated in 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 to allow 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 in the reporting period.

⁵³ 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 supplied at regulated prices.

⁵⁴ This represents 4.6% of non-households consuming around 44.5% of total consumption of non-households.

D. CONSUMER PROTECTION AND CUSTOMER EMPOWERMENT

1. Background

The Third Energy Package defines a set of measures that 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 and Energy Community's energy policy and a wide range of initiatives that aim 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 and Greece, from the perspective of household consumers. 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

Public service obligations cover several responsibilities that energy companies have to meet in order to protect the general economic interest. The acquis provides countries with the opportunity to introduce a series of obligations on energy sector companies in relation to, inter alia, the quality of supply and universal service, i.e. consumers' right to be supplied with

electricity of a specified quality at reasonable, easily comparable, transparent and non-discriminatory prices. In order to ensure the provision of universal service, the Electricity Directive foresees that MSs may appoint a supplier of last resort (SOLR) and impose on DSOs an obligation to connect consumers. 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. The acquis does not further define the meaning and functions of a supplier of last resort, but those that are recognized in national legislation and practice in European Union Member States⁵⁵ 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.

The following tables summarize the results of the research conducted in the Energy Community Contracting Parties as well as in Greece regarding the functions of the supplier of last resort.

Table 7 Functions of the supplier of last resort in the Contracting Parties and Greece in 2019

| 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 | 7 | 4 |
| If a household customer is dropped by its current supplier because of non-payment | 7 | 4 |
| The current supplier has gone bankrupt and is no longer doing business | 9 | 6 |
| The license of the current supplier has been revoked | 8 | 6 |
| If a final household customer does not choose a supplier at market opening | 4 | 4 |
| If a fix- term supply contract expires | 4 | 2 |
| Other reasons | 2 | 2 |
| There is no supplier of last resort in the country | 0 | 1 |

According to data provided, a supplier of last resort for electricity exists in all Contracting Parties and for gas in North Macedonia, Moldova, Serbia and Ukraine. In 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 supplier of last resort on the **electricity sector** are:

⁵⁵ACER Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2018 - https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/ACER%20Market%20Monitoring%20Report%202018%20-%20Consumer%20Protection%20and%20Empowerment%20Volume.pdf.

- when a customer does not find a supplier on the free market;
- when a customer is dropped by its current supplier because of non- payment;
- when the current supplier has gone bankrupt; or
- when the license of the 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 Gas and Electricity 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. The rules 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 the minimum notice period for disconnection of consumer from the network in Energy Community Contracting Parties and Greece is shown in the following table.

Table 8 Minimum duration of disconnection process for non-paying consumers across Energy Community Contracting Parties and Greece in 2019

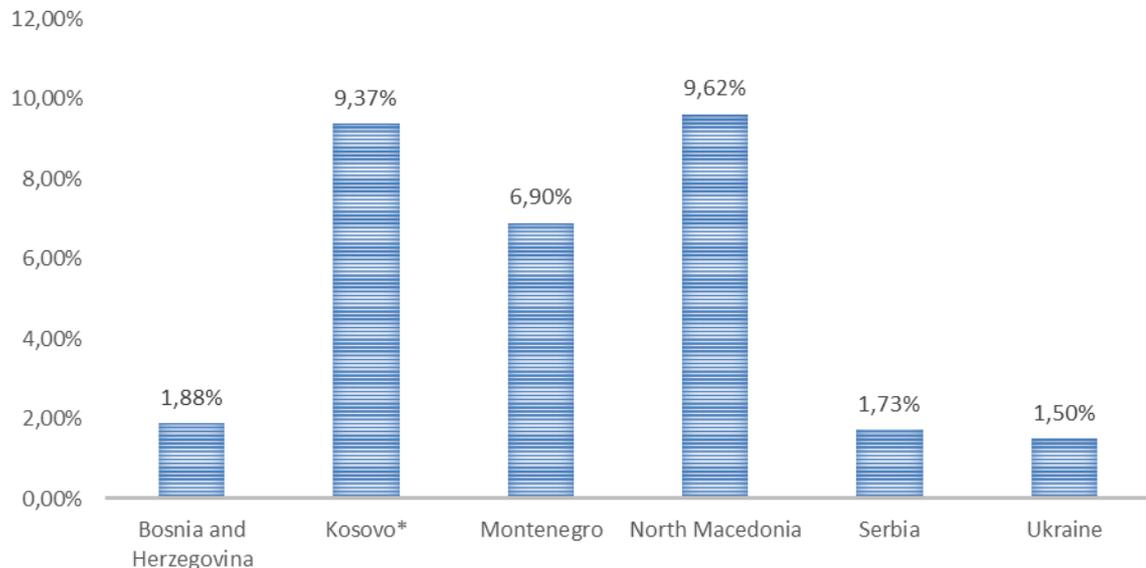
| How many days (at least) does it take to disconnect a final household customer from the grid because of non-payment? Starting date is due date of payment. | Legal | In practice |
|---|-----------------------|---|
| Albania | 60 | 60 |
| Bosnia and Herzegovina | FBIH 30, RS 15, BD 10 | FBIH 60, RS 45, BD 10 |
| Greece | 10 ⁵⁶ | 70 days for Public Power Corporation/ 40 days for alternative providers |
| Kosovo* | 30 | 45 |
| Moldova | 20 | 40 |
| Montenegro | 8 | More than 8 |
| North Macedonia | 60 | 60 |
| Serbia | 38 | 38 |

⁵⁶ 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 8 days in Montenegro to 60 in Albania and North Macedonia). The actual duration of a disconnection in most cases takes longer than the legally foreseen deadlines. In Georgia, disconnection of household is done immediately unless the due date coincides with a weekend or public holiday according to the Laws of Georgia. In Ukraine, DSO shall provide the notification to household customer about termination of supply/distribution not less than 3 working days (for gas) or 5 (DSO)/10 (supplier) working days (for electricity) before the intended date of termination of supply/distribution. This notification shall also contain the reasons and the date of termination of supply/distribution.

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 table 8, consumers usually have several weeks to settle their due amounts before they are disconnected, which helps them to deal with financial problems. Nevertheless, some households are 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 2019



The share of household disconnections due to non-payment for electricity in the Contracting Parties varies among countries (1.50% - 9.62%). According to the provided data, the smallest share is in Ukraine and biggest in North Macedonia.

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 others. Therefore, it is necessary to provide ways and means to identify and protect vulnerable category of customers.

The results of the conducted research show that most Contracting Parties have introduced **definitions of the concept of vulnerable consumers**, as required by the Directives.⁵⁷ Some Contracting Parties have defined vulnerable customers in their energy laws and some in legal acts related to social protection. In Greece, definitions of vulnerable customers are introduced 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. Still, the common criteria is the need for financial support and health and social care.

The following table shows the criteria used for identification of vulnerable customers in the Contracting Parties in 2019.

Table 9 Criteria for identification of vulnerable customers in the Contracting Parties and Greece in 2019

| Criteria for identification of vulnerable customers | Number of countries - electricity | Number of countries – gas |
|---|-----------------------------------|---------------------------|
| Income level | 4 | 2 |
| Share of energy expenditure in disposable income | 2 | 1 |
| Energy efficiency at home | 0 | 0 |
| Critical dependency on electricity powered equipment for health reasons | 4 | 1 |
| Age | 1 | 0 |
| Other | 1 ⁵⁸ | 0 |

⁵⁷ The 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.

⁵⁸ In Kosovo, the Ministry of Labour and Social Welfare sets the criteria for identifying consumers in need based on two criteria: (i) based on poverty status (recipients of the SAS scheme, defined by Law on the Social Assistance Scheme, and (ii) based on merit / recognition for service during the war, defined by Law on the Status and the Rights of the Martyrs, Invalids, Veterans, Members of Kosovo Liberation Army, Civilian Victims of War and their Families.

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 2019.

Table 10 Measures to protect vulnerable customers in the Contracting Parties and Greece in 2019

| 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 | 7 | 3 |
| Special energy prices for vulnerable customers | 1 | 0 |
| Additional social benefits to cover (unpaid) energy expenses (non-earmarked financial means) | 0 | 0 |
| Free energy-saving advice to vulnerable customers | 1 | 2 |
| Right to deferred payment | 2 | 3 |
| 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 | 1 |
| Free basic supply of energy | 1 | 0 |
| Other | 2 ⁵⁹ | 1 |

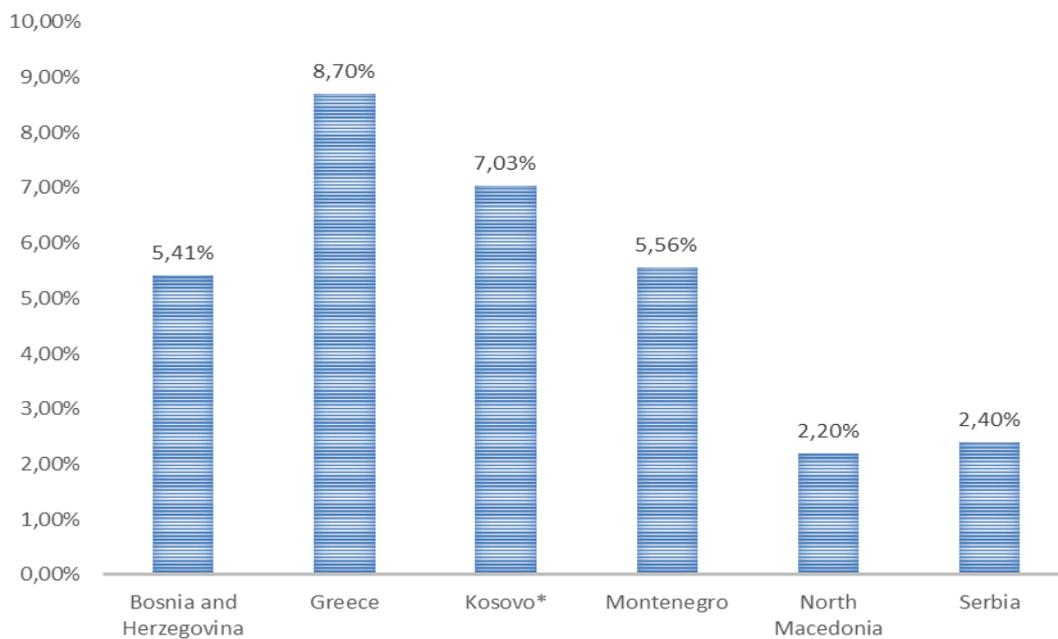
From the data is evident that the most common measures for protection of vulnerable customers in Contracting Parties are restrictions on disconnection due to non-payment and earmarked social benefits to cover (unpaid) energy expenses. Measures of protection are more used in electricity, but that is partly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

⁵⁹ In Montenegro subventions for all endangered categories are 40% of the bill if it is up to 60 €, for bills of more than 60 € the subvention is fixed at 24 €. The government pays the subventions. In North Macedonia, the government by the end of the year, after a proposal of the Ministry of Economy, given by a previous opinion of the NRA, adopts a programme for protection of vulnerable customers in cooperation with the Ministry for Labour and Social Protection. This programme 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 programme for protection of vulnerable customers is still not adopted, so there is still no detailed information about the measures for protection of vulnerable customers available.

monitored country. Special energy prices for vulnerable customers are applied only in Greece. In Georgia, block electricity tariffs, applied for all customers with the monthly consumption below 101kWh, are actually designed with a view to support the vulnerable customers.

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 31 December 2019.⁶⁰

Figure 21 Share of vulnerable customers in Contracting Parties and Greece on 31 December 2019



The share of vulnerable customers in the analyzed markets varies between 2.20% and 8.70%. According to the data provided, the smallest share is in North Macedonia and the highest in Greece.

⁶⁰ It is important to note that definitions of vulnerable customers differ among the analysed markets.

4. Energy poverty

The concept of energy poverty has recently gained significant attention both on European and national levels. 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'*.⁶¹ 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.⁶²

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.⁶³

While the Third Package alludes to energy poverty, the 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 (Bosnia and Herzegovina, 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 legislation⁶⁴. The following figure shows which reasons are perceived as main causes of energy poverty in observed countries.

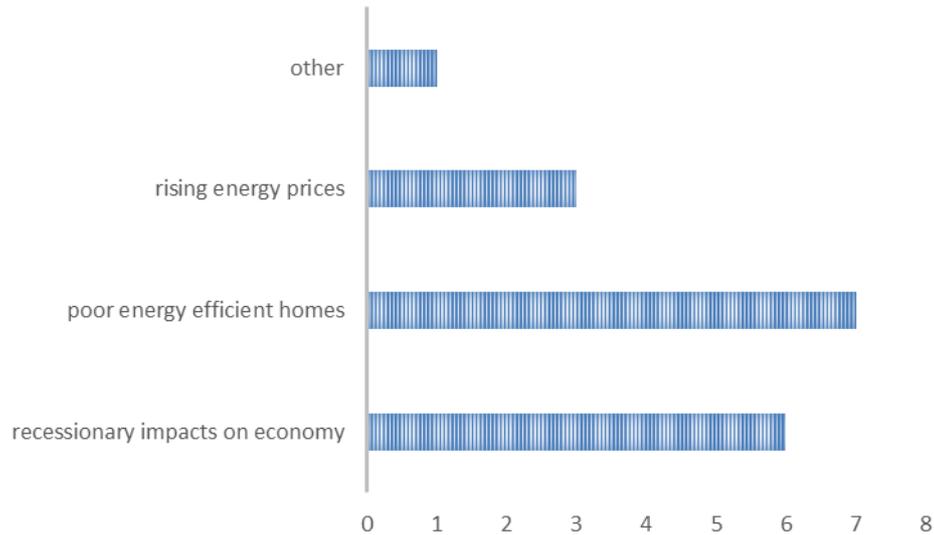
⁶¹ https://www.energypoverty.eu/sites/default/files/downloads/publications/18-08/paneureport2018_final_v3.pdf.

⁶² 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.

⁶³ <https://www.energypoverty.eu/>

⁶⁴ 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"*.

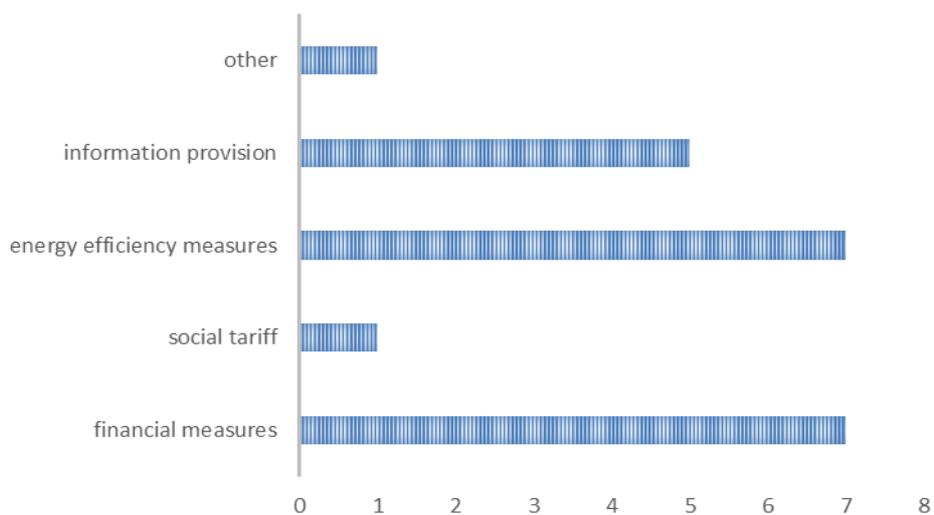
Figure 22 Main causes of energy poverty in Energy Community Contracting Parties and Greece



In North Macedonia, reasons for energy poverty are low standard income and high unemployment.

Although the concept of energy poverty is not precisely defined in national legislation of the Energy Community Contracting Parties, various measures that are directly or indirectly related to this issues have been implemented in the majority of observed countries. The following figure shows which measures where implemented until now.

Figure 23 Implemented measures addressing 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 report suggests that the majority of measures that have been implemented in Energy Community Contracting Parties focus on both 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 (Bosnia and Herzegovina, North Macedonia, Kosovo*, Moldova, Montenegro and Serbia), but also in Greece.

In Bosnia and Herzegovina activities regarding the energy efficiency measures are partially covered through activities of Environmental Protection Fund.

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 systems that target energy-poor customers, direct payments to specific groups, represent the most common implemented measure in Energy Community Contracting Parties.

In Georgia, there are a number of mechanisms aimed at providing financial support to households. Financial support is offered, for instance, by the 2015 Law on Development of High Mountainous Regions, which foresees partial subsidization of the electricity costs for the residents of mountainous settlements. According to Decree of Government of Georgia N517, of October 31, 2018, families having 4 children have the right for a subsidy of 20 GEL and

additionally 10 GEL for each more child, according to electricity consumption. The decree does not cover the municipality of Tbilisi, which has its own support scheme to help vulnerable households to cover the costs of electricity supply during the winter period. Additional support schemes are offered by various municipalities.

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. In regards to this there is fund approved by government in value of 4.5 million which is dedicated for customers in needs-social customers. The payments of their electricity needs-bill per month will not exceed 20 € per customer that is part of the social scheme. Also the payment is done directly to the supplier on yearly basis.

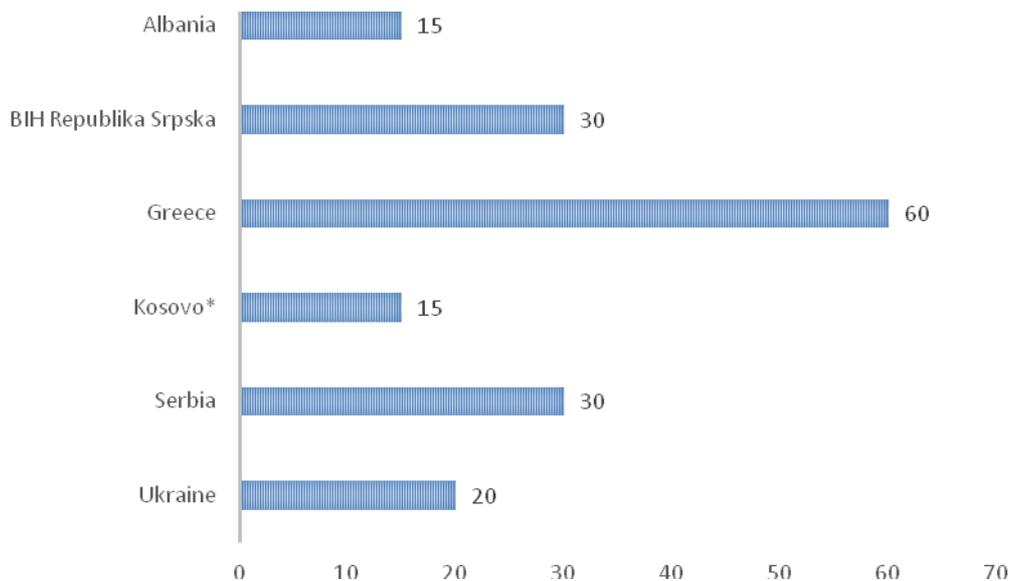
5. Customer information

Consumer engagement requires that consumers have easy access to relevant information. The Electricity Directive considers consumer information essential for consumer protection and empowerment. 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 a 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 lead-days 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 the availability of a 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 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 within household customers have to be informed about electricity price changes for variable-price contracts



As shown in Figure 24, 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* and Albania, 20 in Ukraine and 60 in Greece.

In Montenegro, it is prescribed by law that a supplier 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 the calculation period after the change came into force. The supplier 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.

In Greece according to Electricity Supply Code suppliers must inform customers 60 days before any change in the supply contract.

Price comparison tools (PCT) exist only in Bosnia and Herzegovina (<http://uporedistribuju.ba/>) and North Macedonia (<https://switch.mk/#/>) for a price comparison

tool for the electricity sector. The development of PCT started in other countries for the 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.

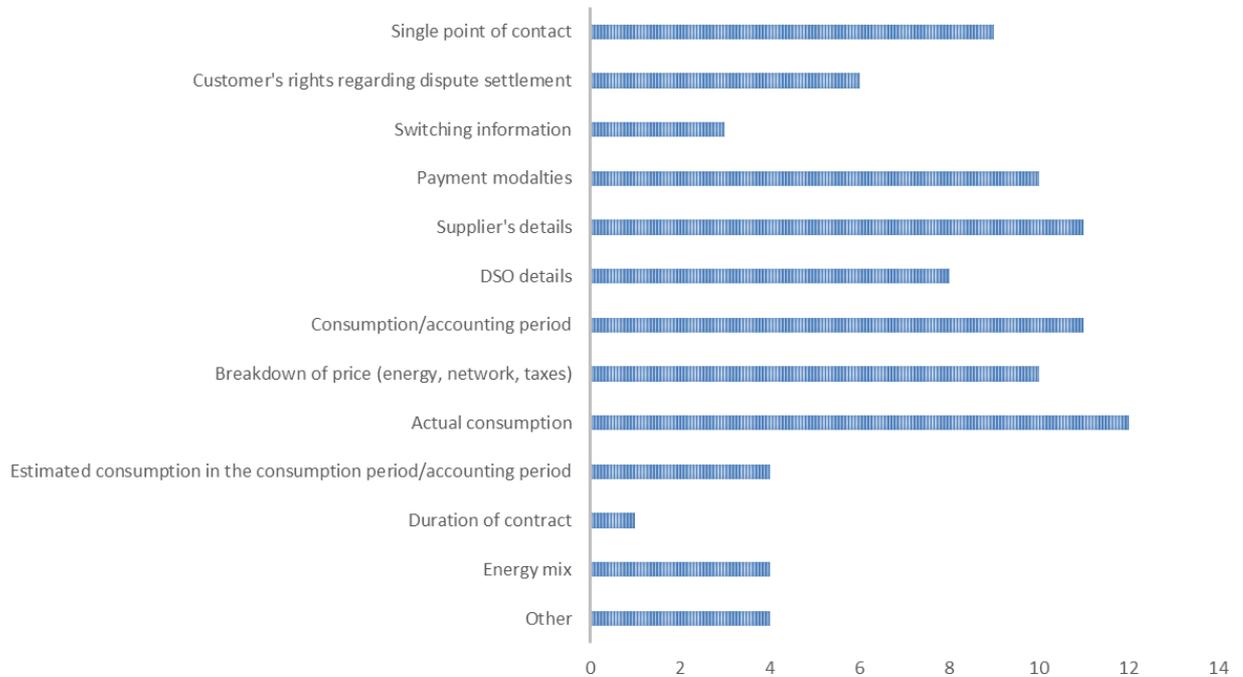
The Electricity Directive stipulates that suppliers should make the following information available to final customers on the bills and in promotional materials:

- 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 2019



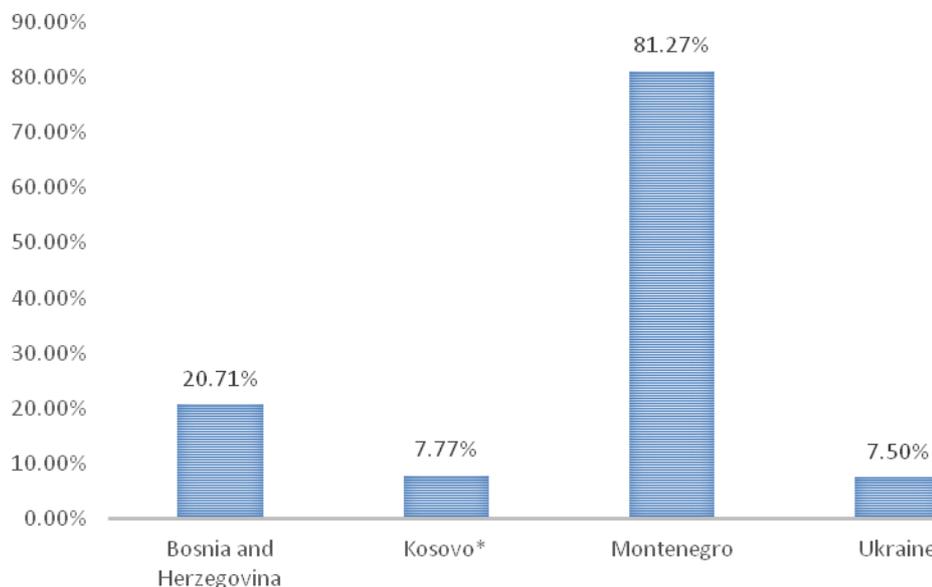
Information on the actual consumption, the accounting period and suppliers details is included in the bills in all analyzed energy markets. Information related to the energy mix, as one of the mandatory elements foreseen by the Third Package, is available only in North Macedonia, Serbia, Ukraine and Greece. 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 25, bills in Georgia include a mobile number or e-mail in order to provide information about the reason of switching, payment due date, duration of switching, other customer rights and supplier's obligations, GNERC contact information. In North Macedonia, besides information from figure 25, customer details, measuring point address and ID code, percentage of renewables included in the final price, VAT. In Ukraine, the bill also contains the amount of state subsidy and compensation payments.

The frequency of billing information based on actual consumption was monthly in every Energy Community Contracting Party during 2019. 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 such smart 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 2019 compared to 2018 the roll out of smart meters increased in Bosnia and Herzegovina, Kosovo*, Ukraine and Montenegro. 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 2019)



As stipulated in the Third Energy Package, a **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 the supplier** is essential for customer protection and empowerment and for competition development in energy market. The process of supplier switching 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 their 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, Montenegro and Greece it is 15, in Moldova 20.

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

- In Bosnia and Herzegovina – Federation BIH- incomplete or inaccurate request for switching, provisions of previous contract between old supplier and a customer; in Republika Srpska – if an existing supplier has submitted a request to suspend the delivery of electricity to the competent system operator before notification of the change of supplier or the end customer is already disconnected for non-payment, the competent system operator cannot approve the request for change of supplier; in Brcko District – in accordance with the provisions of the contract;
- Georgia – cancellation of the contract between the customer and another supplier;
- Greece – outstanding debts in energy bills, errors in the application form, interest to withdrawal;
- Kosovo* - in cases when the current supplier rightly considers that, at the proposed transfer date, the customer is still obligated under the contract with the current supplier;
- Moldova – the process can be stopped only by a request of the customer;
- 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 (i.e. in the period of 7 working days sends a notification for rejecting switching request to the new supplier and incumbent supplier). If this occurs, the switching procedure ends at this point.

- Serbia - objective of previous supplier in switching procedure, that for example the ID data of the consumer are not correct;
- Ukraine – disparity of metering point characteristics with supplier's offer, absence of distribution contract and old supplier's request for disconnection.

6. Customer complaints

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

The following table shows number of household customer complaints received by different institutions in 2019.

Table 11 Number of household customer complaints for gas and electricity received by different institutions in 2019⁶⁵

| | Electricity | | | | Gas | | | |
|------------------------|-------------|---------|-----|-------|-----------|--------|--------|-----|
| | Suppliers | DSOs | ADR | NRA | Suppliers | DSOs | ADR | NRA |
| Albania | 80,390 | NA | 22 | 183 | NA | NA | NA | NA |
| Bosnia and Herzegovina | 14,016 | 310 | 92 | | NA | NA | NA | NA |
| North Macedonia | 31.133 | | 70 | | NA | NA | NA | NA |
| Greece | 1,284,570 | 32,742 | | | 126,359 | 79,861 | | |
| Georgia | NA | NAP | NA | | NA | NAP | NA | |
| Kosovo* | 1.589 | 278 | 0 | 102 | NAP | NAP | NAP | |
| Moldova | NA | NA | | 439 | NA | NA | | 108 |
| Montenegro | 7,476 | NA | 18 | | NAP | NAP | NAP | NAP |
| Serbia | NA | NA | | 239 | NA | NA | | 0 |
| Ukraine* | 443,891 | 422,325 | | 5,457 | 2,387 | 9,466 | 12,684 | |

In every observed country the national regulatory authority has the role of an Alternative Dispute Resolution (ADR) body.⁶⁶ 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.

⁶⁵ The following abbreviations apply: NA- not available, NAP- not applicable.

⁶⁶ 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.

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

7. Service quality of distribution system operators

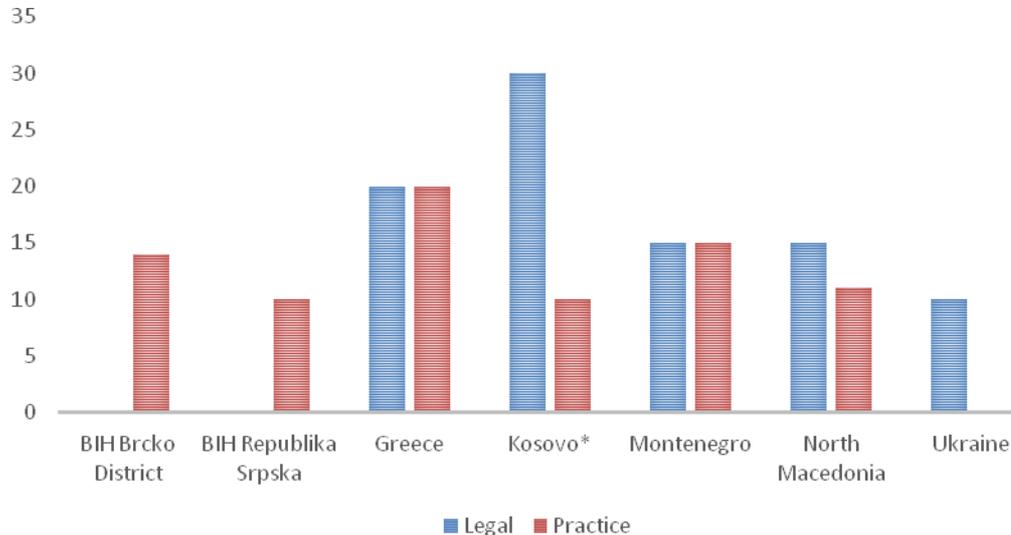
The duties of distribution system operators are to ensure long-term system capability to meet realistic requirements for electricity and gas distribution, as well as to provide distribution system users with clear and precise information regarding conditions for service providing and particularly with 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 and Greece 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 four observed countries, as listed below:

- In Georgia, the connection fee for certain types of connections⁶⁷ is determined by GNERC and differs based on the customer's capacity. However, in case of non-regulated connection, the service provider is obliged to provide a price offer within 10 business days from the date of the consumer's requests.
- In Montenegro, connection takes between 15 days and 4 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.
- In Moldova, the price for grid connection is determined by the NRA.
- In Serbia, the price of connection is calculated in line with a methodology issued by NRA, and should be determined in decision on connection without any offer in advance.

One of the 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:

⁶⁷ For customers seeking connection to the network for the first time. In the electricity sector, regulated connection includes connections to the 0.4 kV voltage network with up to 1000 kV capacity, as well as connections to the 6/10 kV voltage network with up to 5000 kV capacity. In the gas sector, regulated connection includes connections to the low-pressure distribution network with up to 100 kV capacity.

- In Albania it takes from 10 to 60 working days according to 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 are needed for the construction for a low voltage distribution network and ten days for connecting the facility to the distribution network. For shallow⁶⁸ and deep⁶⁹ connection, in Brcko District the legally prescribed number of days to connect to the network and activate energy supply to a consumer is 30 and in the practice ranks from 20 to 30 days.
- 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 connection. 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 case the customer has finalized internal gas installation and has a usage permit.
- In Georgia, it takes the same number of days to connect to the network in practice as it is legally prescribed – 40 - 110 business days in case of regulated connection, depending on the requested capacity. For gas, it takes 5 - 40 business days, also depending on the requested capacity.
- 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 connection, 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 – 45 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 a decision by the NRA and 15 days for physical connection.
- 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:

⁶⁸ Customer pays only the connection costs. The costs of network reinforcement are socialised and paid by all network users via the network fees

⁶⁹ The customer in addition to the connection costs also pays part of the network reinforcement.

- 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, the prescribed number of days to disconnect the energy following a consumer request is three in Brcko District. In practice, it takes two days in Republika Srpska, and one to two days in Brcko District.
- 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 - ten business days both for electricity and gas.
- In Greece, the legally required number of days to disconnect the electricity following the consumer request is three - it is achieved in that deadline also in practice. For gas, the legally required deadline is 5 days to assess the application of the disconnection and maximum 10 days to complete disconnection.
- In Kosovo*, the 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.
- In Ukraine, according to the Distribution Grid Code if a customer wants to terminate electricity supply he shall inform the DSO not later than 10 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 30 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 shall notify the DSO no later than 7 days before in written form and agree with the DSO on the date of suspension of gas supply/distribution; 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 Albania, Bosnia and Herzegovina, Georgia, North Macedonia and Montenegro. Specific details about this indicator are presented below:

- In Bosnia and Herzegovina- Republika Srpska, maximum duration of a planned interruption in practice is 15 hours and in Brcko District 8 hours.
- In Greece, the 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 8 hours for maintenance work and 24 hours for rebuilding or repairing networks.
- In Serbia, maximum 72 hours per year.

- In Ukraine, legally prescribed maximum duration of a planned interruption is 24 hours (48 hours - for reconstruction or building of new lines). In practice, average value is 231 min.

E. MAIN FINDINGS AND CONCLUSIONS

1. Electricity

In the period from 2018 to 2019, the **total sale of electricity to final customers** in the Energy Community Contracting Parties decreased by -1.19%, and excluding Ukraine decreased by -1.82%. Those changes were mostly caused by decrease of non-household consumption. Analyzing the Contracting Parties, a significant increase of electricity consumption (greater than 1.5%) was registered in Albania, Kosovo* and North Macedonia (the highest increase was in Kosovo* 9.61%), and in Moldova was 0.325. In Georgia (-13.21%) and Bosnia and Herzegovina (-7.07%) electricity consumption significant decreased, while in Montenegro, Ukraine and Serbia the decrease of electricity consumption was below -1%.

The average monthly consumption per household varied between 106 kWh/month in Moldova and 405 kWh/month in Kosovo*.

Only in Ukraine a large **number of both local and nationwide suppliers** were active in the retail market in 2019 and during 2019 the total number of licensed electricity suppliers in the retail market significantly increased. In 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%. Only in Ukraine this share added up to only 26.11%.

In 2019 in the majority of the Energy Community Contracting Parties (Bosnia and Herzegovina, Kosovo*, Moldova, Montenegro, North Macedonia, Serbia and Ukraine) and in Greece all customers had the **right to choose the supplier**. In Albania and Georgia, 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 2019 in Albania, Georgia and Montenegro there was no supplier switching. Only a limited number of eligible customers **changed their suppliers** in Bosnia and Herzegovina, Kosovo* and Moldova. In North Macedonia, Serbia and Ukraine several thousand customers have changed their suppliers, but annual switching rate in the whole retail market calculated by number of metering points was less than 1%. 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 a new supplier. The increasing **number of switching requests** is a proof of market liquidity development. Still, in all Contracting Parties this number decreased, except in Ukraine where number of request increased from 1145 in 2018 to 7385 in 2019. It is worth mentioning that in Bosnia and

Herzegovina, Kosovo*, North Macedonia, Montenegro, Serbia and Ukraine some customers⁷⁰ 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 4.4 euro cent/kWh in Ukraine to 10.32 euro cent/kWh in Montenegro and are still much lower than the EU 28 average price for households of 21.6 euro cent/kWh in 2019.

Electricity prices for industrial customer are more harmonized among Contracting Parties varying from 5.89 euro cent/kWh in Georgia to 12.48 euro cent/kWh in Albania.

End-user electricity prices for household customers were **regulated** in all Energy Community Contracting Parties in 2018, except in Montenegro. In addition, the great majority of non-household customers were still supplied at regulated prices in 2019. In Montenegro, transitional and final provisions of the Energy Law prescribe that, after 1 January 2017, the supplier that had the status of public supplier until the day of entry into force of that 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 (i.e. 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 but for those below 35kV. 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,⁷¹ 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.

⁷⁰ 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.

⁷¹ 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 2012-2019 by 45%, mainly because of the substantial drop of gas consumption in Ukraine. While gas consumption in Ukraine shows a 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 and Greece were mainly supplied by regional retail suppliers. The number of **active suppliers** ranged from 3 in Bosnia and Herzegovina to 249 in Ukraine.

In four countries, namely 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 Serbia, 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 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 2019. In Greece, 4.12% of households changed supplier in 2019.
- Only in Serbia and Greece some non- households changed supplier in 2019- 1.46% in Serbia and 5.67% in Greece. There is no information on switching in Georgia and Ukraine.

End-user gas prices for household and industrial customers increased in 2019 in comparison to 2018 in all Energy Community Contracting Parties, except in Georgia for households. 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 are **regulated** in all Energy Community Contracting Parties with the exception of North Macedonia.

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.

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

A **supplier of last resort** is appointed for electricity in all Contracting Parties and in 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 does not find a supplier on the free market; when the current supplier has gone bankrupt; and when the license of their current supplier has been revoked. The same circumstances are applicable for the consumers in gas markets. This 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, **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 (1.50% - 9.62%). The smallest share is in Ukraine and the biggest in North Macedonia.

Contracting Parties in the majority of cases included a **definition of vulnerable customers** as well as the measures for their protection in the relevant legislative framework. 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 the 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 for 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 2,20% in North Macedonia to 8,70% in Greece.

The concept of **energy poverty** has recently gained significant attention both on European and national levels. 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*'. The concept of energy poverty has recently gained significant attention and it has been identified as a policy priority in the Clean Energy for All Europeans legislative package.

Definitions of energy poverty do not exist in any of the Contracting Parties. However, in the majority of the analyzed countries energy poverty is tackled through a certain framework, i.e. through the energy development strategy and national action plans (Bosnia and Herzegovina, 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 legislation. Various measures that are directly or indirectly related to this issues have been implemented in the majority of observed countries.

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 the majority of the analyzed markets there is a legal requirement for information to household consumers on price changes, including the provision of a minimal number of lead-days for informing consumers before 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 the energy mix, as one of the mandatory elements, is available only in North Macedonia, Serbia and Ukraine, and also in Greece.

Frequency of billing information based on actual consumption was monthly in every Contracting Party during 2019. This means that the requirement of the Third Package Directives stipulating that consumers should have the right to be properly informed about their energy consumption 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. According to the provided data, in 2019 compared to 2018 roll out of smart meters increased in Bosnia and Herzegovina, Kosovo*, Ukraine and Montenegro. The share of household customers with smart meters varies between 7,50% in Ukraine to 81,27 % 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 a **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 analyzed countries. In all Energy Community Contracting Parties and Greece NRAs are the single point of contact, but in practice customers are contacting also other institutions, such as an Ombudsman, suppliers, governments 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, among other, 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, the Ombudsman for customer protection and a local/regional court may also be appointed as Alternative Dispute Resolution, 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. The majority of complaints reported for 2019 refer to bills. A great part of them is also related to quality of supply.

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.