



ECRB Market Monitoring Report

Gas and Electricity Retail Markets in the Energy Community

Reporting period 2020 - Publication December 2021

Content

A. INTRODUCTION	4
B. FINDINGS: ELECTRICITY	5
1. Electricity retail market characteristics	5
2. Switching behavior	12
3. End- user electricity prices	15
4. Electricity price breakdown for households	17
5. Regulation of electricity end-user prices	19
C. FINDINGS: GAS	23
1. Gas retail market characteristics	23
2. Switching behavior	28
3. End-user natural gas prices	29
4. Gas price breakdown for households	31
5. End- user gas price regulation	33
D. CONSUMER PROTECTION AND CUSTOMER EMPOWERMENT	34
1. Background	34
2. Supplier of last resort and disconnections	34
3. Vulnerable customers	38
4. Energy poverty	42
5. Customer information	45
6. Customer complaints	50
7. Service quality of distribution system operators	52
E. MAIN FINDINGS AND CONCLUSIONS	56
1. Electricity	56
2. Gas	58
3. Customer protection	59

List of figures

Figure 1 Total electricity sale to final customers in GWh 2013 - 2020	6
Figure 2 Total electricity sale to final customers in GWh 2013 - 2020 (excluding Ukraine)	6
Figure 3 Electricity demand growth rates 2018 to 2019	7
Figure 4 Average monthly consumption of electricity per household in 2019 and 2020 (kWh)	8
Figure 5 Are there electricity suppliers other than incumbent supplying customers connected to the transmission network?	10
Figure 6 Are there electricity suppliers other than incumbent supplying customers connected to the distribution network?	10
Figure 7 Final electricity prices in nominal terms for household consumers in EnC CPs- 2013-2020 (euro cents/kWh)	16
Figure 8 Final electricity prices in nominal terms for industrial consumers in EnC CPs- 2013-2020 (euro cents/kWh)	17
Figure 9 Breakdown of electricity prices for households in EnC CPs- 2020	18
Figure 10 Electricity weighted average breakdown in the EnC CPs– 2019–2020 (%)	19
Figure 11 Total sale of gas to final customers in the Energy Community Contracting Parties in the period 2012- 2020 (in GWh)	24
Figure 12 Trends in sale of gas to final customers in GWh (excluding Ukraine)	24
Figure 13 Growth rates of gas demand 2012 to 2020	25
Figure 14 Growth rates of gas demand 2017 to 2020	25
Figure 15 Average annual gas consumption per household in 2017- 2020 (in kWh)	26
Figure 16 Final gas prices in nominal terms for household consumers in EnC CPs- 2013-2020 (euro cents/kWh)	30
Figure 17 Final gas prices in nominal terms for industrial consumers in EnC CPs- 2013-2020 (euro cents/kWh)	30
Figure 18 Breakdown of household gas prices in the EnC CPs- 2020 (in %)	32
Figure 19 Weighted average breakdown of gas price for households in the EnC CPs – 2019–2020 (%)	32
Figure 20 Share of household disconnections due to non-payment of electricity bills in % of household metering points in 2019	37
Figure 21 Share of vulnerable customers in Contracting Parties on 31 December 2020	41
Figure 22 Main causes of energy poverty in Energy Community Contracting Parties	43
Figure 23 Implemented measures addressing energy poverty in the Contracting Parties	43
Figure 24 Minimal number of days in advance within household customers have to be informed about electricity price changes for variable-price contracts	46
Figure 25 Content of electricity bills 2020	48
Figure 26 Share of households with smart meters (status 31 th December 2020)	49
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	52

List of tables

Table 1 Number of active suppliers in retail electricity markets in 2020	9
Table 2 Electricity retail market concentration and market opening in 2019	12
Table 3 Annual switching rates in electricity markets in 2019 (in %)	14
Table 4 Number of non-households (number of metering points) supplied at non-regulated electricity prices in 2020	21
Table 5 Number of active gas suppliers in 2019 and 2020	27
Table 6 Retail gas market concentration in 2020	27
Table 7 Functions of the supplier of last resort in the Contracting Parties in 2020	35
Table 8 Minimum duration of disconnection process for non-paying consumers across Energy Community Contracting Parties in 2020	36
Table 9 Criteria for identification of vulnerable customers in the Contracting Parties in 2020	39
Table 10 Measures to protect vulnerable customers in the Contracting Parties in 2020	40
Table 11 Number of household customer complaints for gas and electricity received by different institutions in 2020	51

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**. 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 **2020**.

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

During 2020, the crisis caused by COVID pandemic had great impact on the retail electricity market in the Energy Community Contracting Parties. Total **sale of electricity** to final customers decreased in the most of the Contracting Parties in the period 2019-2020, except in Kosovo* and Serbia. In the Energy Community, total sale of electricity to final customers decreased by 2.67%. The highest decrease of electricity consumption was in Georgia and Bosnia and Herzegovina (9.03% in both CP), in Montenegro 3.99% and in Ukraine 3.01%. The decrease of electricity consumption was below 1% in Albania (0.55%), Moldova (0.23%) and North Macedonia (0.45%). In Kosovo* there was a significant increase of consumption (2.90%), while in Serbia this increase was less than 1% (0.73%).

The figures below show the total electricity sales to final customers in the period 2013-2020,³ presented with and without data for Ukraine.

The COVID pandemic also had great impact on **electricity consumption** of households and non-households customers. In all Contracting Parties consumption of non-households decreased⁴, while consumption of households customers increased⁵, except in Montenegro, where this consumption decreased by 3.98%, similar to the consumption of non-households customers.

³ Only for Moldova, presented data refers to the period 2015-2020.

⁴ The decrease of non- households' consumption was 16.97% (Bosnia and Herzegovina), 16.00% (Georgia), 7.48% (Albania), 7.12% (Kosovo*), 5.82% (Ukraine), 5.22% (North Macedonia), 4.00% (Montenegro), 3.03% (Moldova) and 1.06% (Serbia).

⁵ The increase of households' consumption was 10.45% (Kosovo*), 7.53% (Albania), 5.00% (North Macedonia), 4.25% (Georgia), 3.80% (Ukraine), 3.49% (Moldova), 2.83% (Serbia) and 1.46% (Bosnia and Herzegovina),

Figure 1 Total electricity sale to final customers in GWh 2013 - 2020

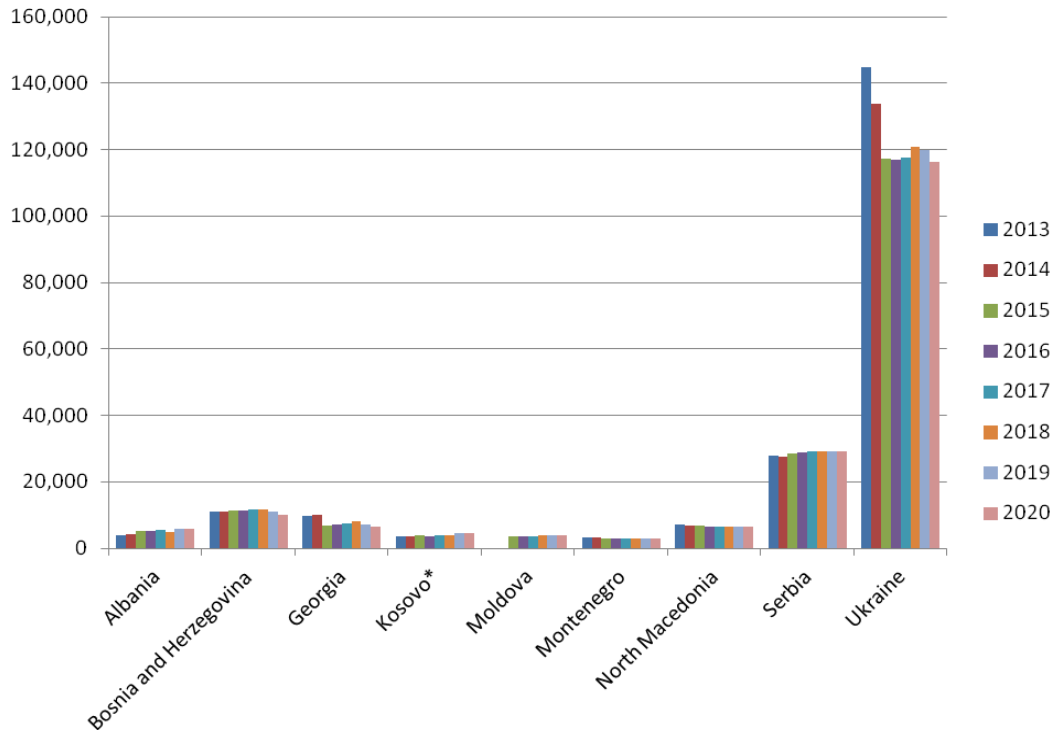
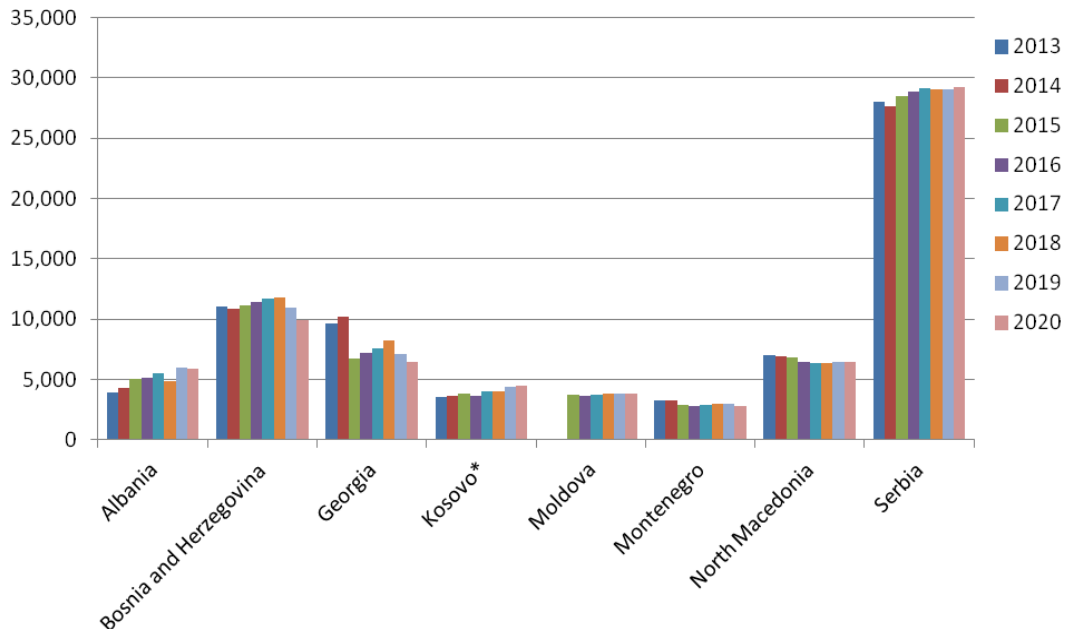
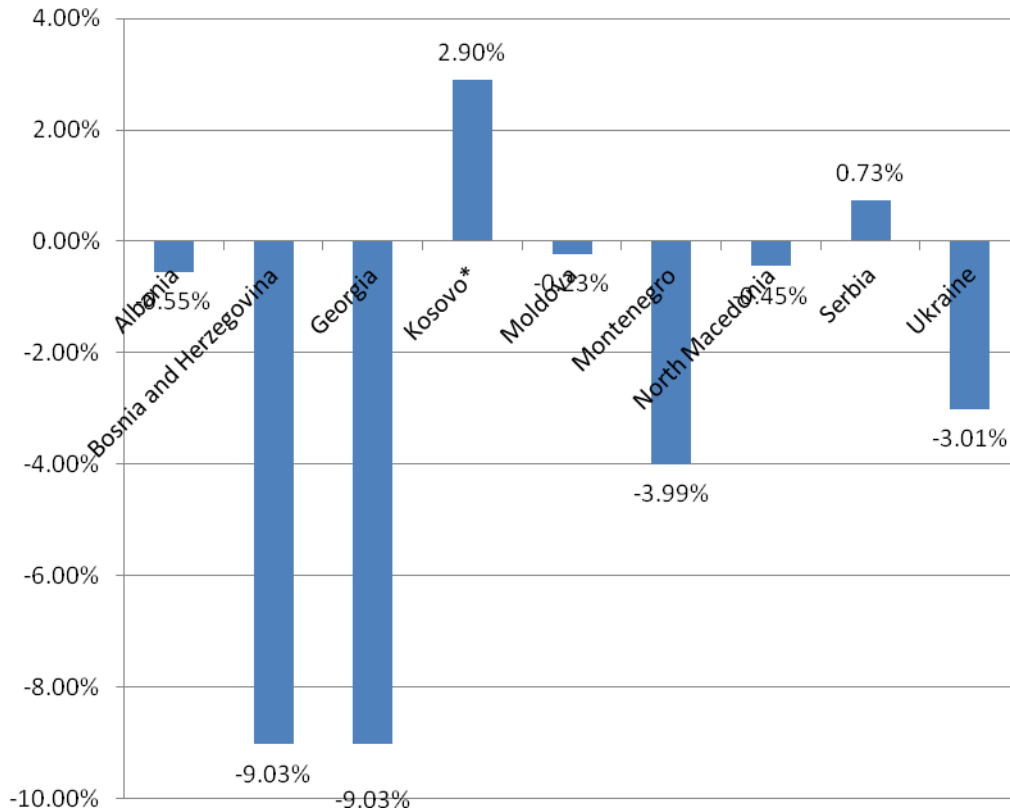


Figure 2 Total electricity sale to final customers in GWh 2013 - 2020 (excluding Ukraine)



The following figure shows the growth rates of the total of electricity sales to final customers in the Contracting Parties from 2019 to 2020.

Figure 3 Electricity demand growth rates 2019 to 2020

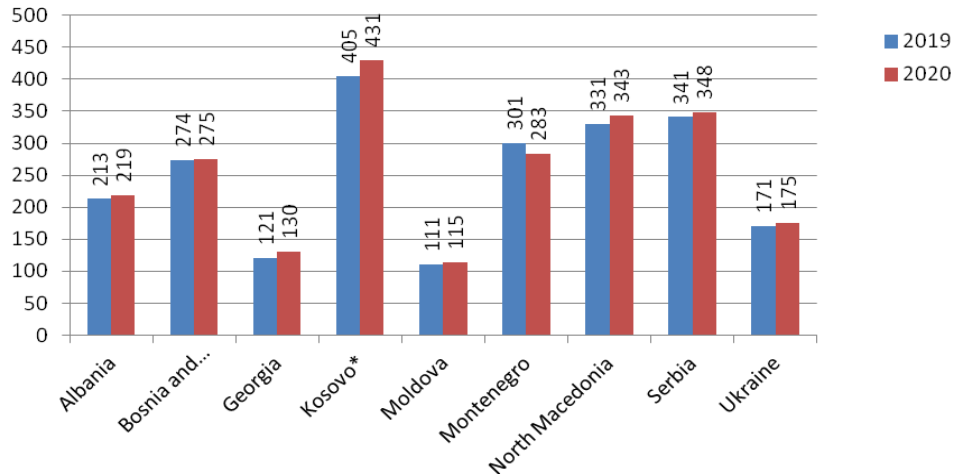


The average monthly consumption of electricity per household⁶ varies among the Contracting Parties. In 2020, the lowest consumption occurred in Moldova (115 kWh/month) and Georgia (130 kWh/month), the highest in Kosovo* (431 kWh/month). In the period 2019- 2020, in all Contracting Parties except in Montenegro consumption of electricity per household increased.⁷ Relevant quantities are displayed in the figure below.

⁶ 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.

⁷ Average monthly consumption of electricity per household decreased by 5.70% in Montenegro. In other Contracting Parties this consumption increased between 0.65% in Bosnia and Herzegovina and 7.65% in Georgia.

Figure 4 Average monthly consumption of electricity per household in 2019 and 2020 (kWh)



In all Contracting Parties **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 for supply. DSOs supply only customers located within the territory indicated in their licenses and hence there are no nationwide⁸ suppliers

Only in Bosnia and Herzegovina there are licensed **local and nationwide suppliers** in 2020⁹. During 2020, only in Ukraine the total number of licensed electricity suppliers in the retail market significantly increased.¹⁰

In Albania, Bosnia and Herzegovina, North Macedonia, Serbia and Ukraine more than ten nationwide suppliers were active in the retail market, in Moldova there were seven (7) active nationwide suppliers, while in the other Contracting Parties supply to electricity end-users was offered by one (1) supplier. Both local and nationwide suppliers are active only in Bosnia and Herzegovina and in the rest of the Contracting Parties (except Georgia), active suppliers were nationwide suppliers. In 2020, new active nationwide suppliers entered the markets of, North Macedonia (3), and Ukraine (227) while in Bosnia and Herzegovina and Serbia two nationwide suppliers left the market.

⁸ Nationwide supplier means a supplier offering its products on the entire territory of a country.

⁹ In Bosnia and Herzegovina there was 5 licensed local electricity suppliers which were active on the regulated electricity market

¹⁰ In Ukraine, number of net new licensed nationwide suppliers was 466 in 2020.

Table 1 Number of active suppliers in retail electricity markets in 2020

	Number of licensed electricity suppliers	Total number of active electricity suppliers	Number of active nationwide suppliers	Number of net new active nationwide suppliers ¹¹
Albania	27	22	1	0
Bosnia and Herzegovina	23	13	8	-2
Georgia	2	2	na	na
Kosovo*	8	1	1	0
Moldova ¹²	43	7	1	0
Montenegro	6	1	1	0
North Macedonia	91	25	25	2
Serbia	63	11	11	-2
Ukraine	854	854	464	227

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 2020.

¹¹ Net means the number of entries minus the number of exiting suppliers in the market.

¹² In Moldova, one supplier is active in the whole country and has contracts mostly with non-household customers from all areas of the country, on non-regulated prices. 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?

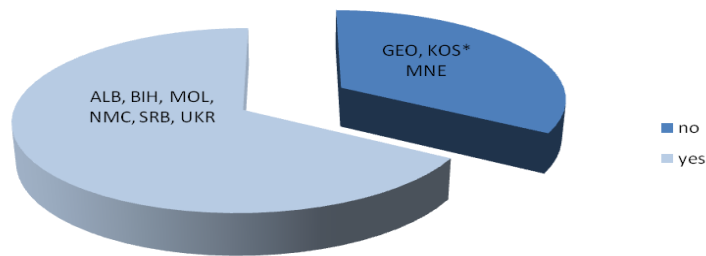
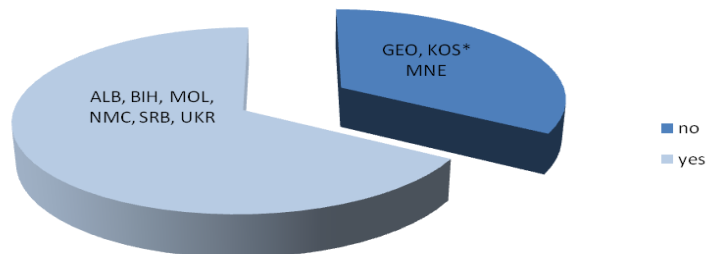


Figure 6 Are there electricity suppliers other than incumbent supplying customers connected to the distribution network?



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:

- In all Contracting Parties all households are supplied by the incumbent supplier at regulated prices.
- In Albania, 22 suppliers were active. There were two retailers selling at least 5% of the total electricity consumed by final customers. The market share of the three largest electricity suppliers was 93%.

- In Bosnia and Herzegovina, 13 suppliers were active.¹³ There were three retailers selling at least 5% of the total electricity consumed by final customers, with a joint market share of 95.83%.
- 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 Kosovo*, there was only one active retail supplier of electricity, namely the incumbent with a 100% market share.
- In Moldova, there were seven (7) retail electricity suppliers active in the retail market. Three of them were selling at least 5% of total electricity consumed by final customers in 2020, with a joint market share of 97.60% of the total sale of electricity on the retail market.
- In Montenegro, only one retail electricity supplier was active in the market. In 2020, 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 25 active suppliers and seven of them were selling at least 5% of total electricity consumed by final customers in 2020. The market share of the three largest electricity suppliers was 87.84%.
- In Serbia, there were 11 active suppliers, two less than in the previous year. The great majority of customers were supplied by the incumbent supplier covering a market share of 95.43% of the total sale of electricity to end user customers in 2020. The market share of three largest companies was 96.82%.
- The largest number of electricity suppliers are operating in Ukraine – namely, there were 464 active suppliers on the retail electricity market in 2020 (227 more than in 2019). Only four (4) suppliers were selling at least 5% of total electricity consumed by final customers in 2020. The market share of the three largest suppliers was 30.20% (market share of the largest supplier was 17.29%).

¹³ Including five subsidiaries of Elektroprivreda RS supplying tariff customers in their designated areas.

Table 2 Electricity retail market concentration and market opening in 2020

	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	2	93.00%	100.00%
Bosnia and Herzegovina	3	95.83%	100.00%
Georgia	2	100.00%	100.00%
Kosovo*	1	100.00%	100.00%
Moldova	3	97.60%	100.00%
Montenegro ¹⁴	1	100.00%	100.00%
North Macedonia	7	87.84%	100.00%
Serbia	1	96.82%	100.00%
Ukraine	4	30.20%	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.

In 2020, 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

¹⁴In 2020, the biggest customer “Kombinat Aluminijuma” purchased electricity for its need from EPCG, so EPCG supplied all customers on the retail electricity market.

Albania, Bosnia and Herzegovina, Georgia ¹⁵, Kosovo*, Moldova, Montenegro, North Macedonia, Serbia and Ukraine. However, in Albania, customers connected below 35 kV could not change supplier in 2020, due to absence of standardized load profiles¹⁶.

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*, North Macedonia, Montenegro, Serbia and Ukraine.

The table below shows the **switching rates** in the analyzed markets in 2020. 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.

¹⁵ In the Law on Energy and Water Supply, that was adopted in 2019, stating that all customers, including households are eligible to switch suppliers.

¹⁶ The Electricity Law foresees deadlines for these customers to make use of their eligibility, but this deadline was not met in 2020.

Table 3 Annual switching rates in electricity markets in 2020 (in %)¹⁷

	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	0/0	0	0	0	0	0	0
Bosnia and Herzegovina	1,588,783/17	0.001	0.000	2.58	1.58	0.000	3.05
Georgia	Nap	Nap	Nap	Nap	Nap	Nap	Nap
Kosovo*	605,676/3	0.0005	0.000	0.003	8.73	0.000	14.26
Moldova	1,349,674/1,055	0.078	0.000	1.07	9.66	0.000	17.40
Montenegro	404,151/0	0	0	0	0	0	0
North Macedonia	876,569/16,210	1.850	0.000	15.95	8.92	0.000	17.58
Serbia	3,690,708/ 11,188	0.303	0.005 ¹⁸	2.70	2.25	0.005	4.23
Ukraine	18,560,282/ 118,448	0.638	0.002	9.27	11.05	0.035	16.05

In Albania, Georgia and Montenegro there was no supplier switching in 2020. A very small number of eligible customers changed their suppliers in Bosnia and Herzegovina, Kosovo* and Moldova¹⁹. In North Macedonia and Serbia several thousand and in Ukraine almost 12,500 customers on more than 118,000 metering points changed their suppliers in 2020, which means that the annual switching rate in the whole retail market calculated by number of metering points was 1.85% in North Macedonia and less than 1% in Serbia and Ukraine. However, when the annual switching rate in the whole retail market is calculated by volume of consumption, the relevant rate reached in North Macedonia 8.92%, in Serbia 2.25% and in Ukraine 11.05%. Except for Serbia and Ukraine, only non-household customers changed their suppliers. In Serbia and Ukraine, a very small number of household customers left the incumbent electricity supply at regulated prices and chose a new supplier.

¹⁷“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.

¹⁸ Metering points which belong to the household category of distribution network users.

¹⁹ 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 0.078%) but annual switching rate in the whole retail market calculated by volume of consumption was 1.58% in Bosnia and Herzegovina, 8.73% in Kosovo* and 9.66% in Moldova.

The increasing **number of switching requests** is a proof of market liquidity development. In North Macedonia and Ukraine²⁰ this number increased, in Bosnia and Herzegovina and Serbia²¹ decreased, while in remaining Contracting Parties were not requests for switching supplier.

3. End- user electricity prices²²

In the Energy Community Contracting Parties, final average household and industry prices increased slightly in 2020 when compared to 2019- by 0.9% for household segment and 2.4% for industry.

From 2013 to 2020, electricity prices for households in the Contracting Parties excluding Ukraine increased, on average, by 16.8%, while industrial prices increased on average by 15.6%. This trend has not been observed in Ukraine, where, over the same period, electricity prices for households increased by 48% and industry prices decreased by 39%. The unwinding of cross- subsidization partially explains the price dynamics in the two segments.

In 2020, the average electricity price for household consumers in the Contracting Parties excluding Ukraine was 7.73 euro cents/kWh. This is 2.8 times less than the average EU electricity price for households in 2020. Household consumers in Ukraine paid in 2020, on average, around 1.8 times less than in other Contracting Parties- only 4.3 euro cents/kWh.

As in previous years, variations in the electricity price were observed across the Contracting Parties. In 2020, household electricity prices were highest in Moldova (10.31 euro cents/kWh), which is more than twice the price paid by household electricity consumers in Ukraine. In comparison to 2019 prices, the slight decreases for household consumers were recorded in the Georgia, Montenegro and Ukraine while in other Contracting Parties electricity prices increased (the biggest increase was registered in Moldova- 5.4%). Over the 2013-2020 period, household electricity prices increased in all Contracting Parties. End consumer prices for households were still regulated in all Contracting Parties, except Montenegro, sometimes resulting in prices being set below actual costs.

From 2013 to 2020, in the majority of the Contracting Parties, industrial electricity consumers observed decreasing electricity prices. This was not the case for consumers in Bosnia and Herzegovina and Serbia, where average industrial prices increased by 27% and 44%, respectively. The highest year-to-year increase (13.1%) was observed in Bosnia and Herzegovina, where prices increased from 6.3 euro cents/kWh in 2019 to 6.8 euro cents/kWh in 2020. The lowest electricity prices for industrial electricity consumers were in Georgia with

²⁰ The number of request increased in North Macedonia from 2,347 in 2019 to 2,596 in 2020 and in Ukraine from 7385 in 2019 to 13,850 in 2020

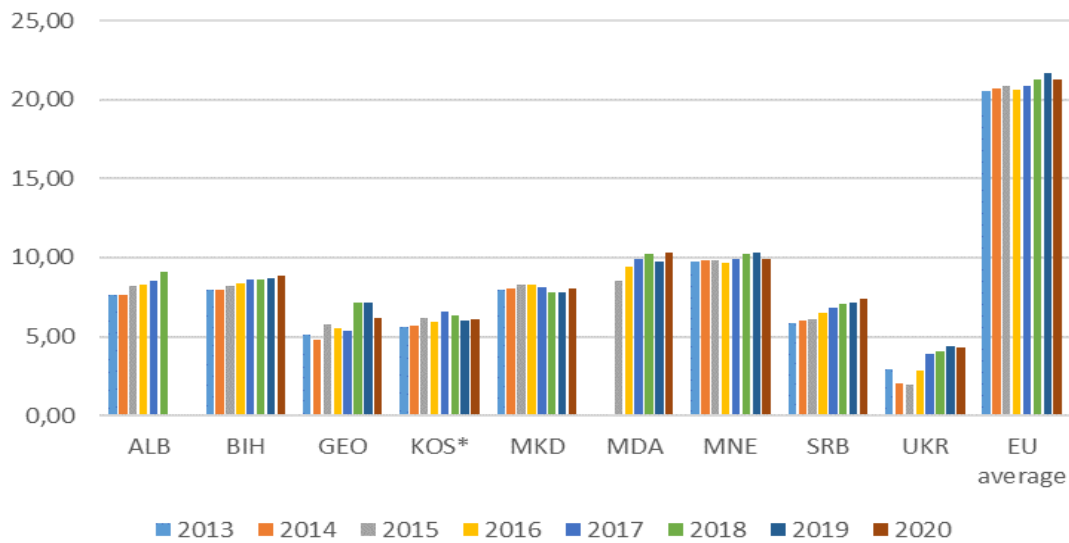
²¹ The number of request decreased in Bosnia and Herzegovina from 31 in 2019 to 16 in 2020 and in Serbia from 5,976 in 2018 to 2,503 in 2020.

²² Information in this chapter was partially provided by the NRAs, also for the purpose of ACER Market Monitoring Report 2020 (https://extranet.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/ACER%20Market%20Monitoring%20Report%202020%20%E2%80%93%20Energy%20Retail%20and%20Consumer%20Protection%20Volume.pdf). The source of other information is EUROSTAT.

4.82 euro cents/kWh on average, whereas the highest industrial price was reported in Albania (12.83 euro cents/kWh). In 2020, average electricity prices for industrial consumers in the Contracting Parties were around 68% of the average electricity prices for industry in the EU Member States.

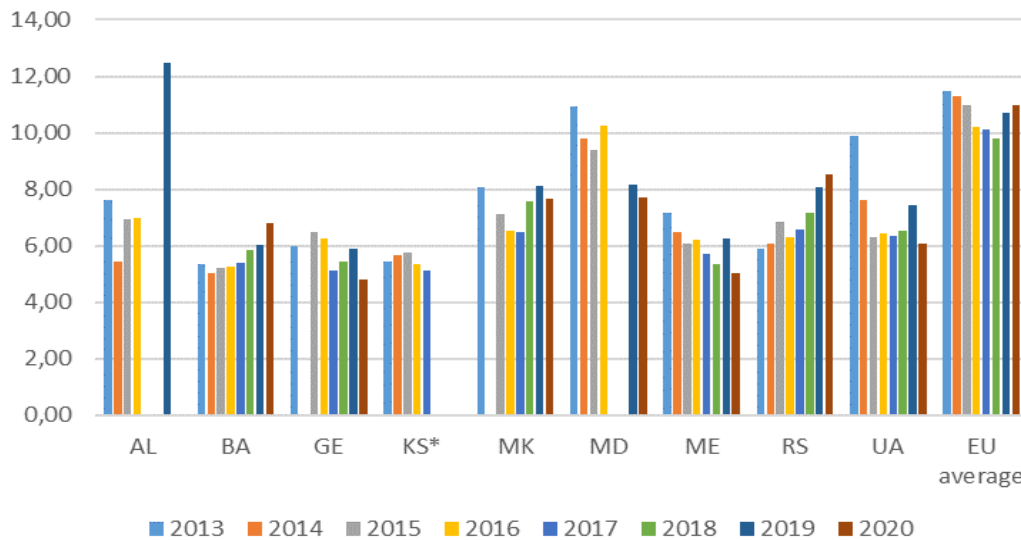
Figures 7 and 8 show the final electricity prices in nominal terms for household and industrial consumers in the Contracting Parties from 2013 to 2020 (in euro cents/kWh).

Figure 7 Final electricity prices in nominal terms for household consumers in EnC CPs- 2013-2020 (euro cents/kWh)



Source: Energy Community Secretariat calculations based on Eurostat and NRAs. Band DC: 2,500–5,000 kWh (household electricity consumption, (July 2021) and NRA contributions

Figure 8 Final electricity prices in nominal terms for industrial consumers in EnC CPs- 2013-2020 (euro cents/kWh)



Source: Energy Community Secretariat calculations based on Eurostat and NRAs. Band IE: 20,000–70,000 MWh (industrial electricity consumption)

4. Electricity price breakdown for households²³

Electricity prices depend on their constituent components, which include energy costs, network charges, charges for renewable energy (RES charges), other taxes and charges and value added tax (VAT). Information in this section is collected from Eurostat²⁴.

Figure 9 shows the breakdown of the final electricity price for households in the Contracting Parties in 2020. The composition of final household electricity price varies widely across the Contracting Parties. The share of the energy component in the final bill was the highest in Georgia (74%) and the lowest in Serbia (34%). In the Contracting Parties, the share of network costs in the total household electricity price ranged between 11% in Georgia and 51% in Kosovo*.

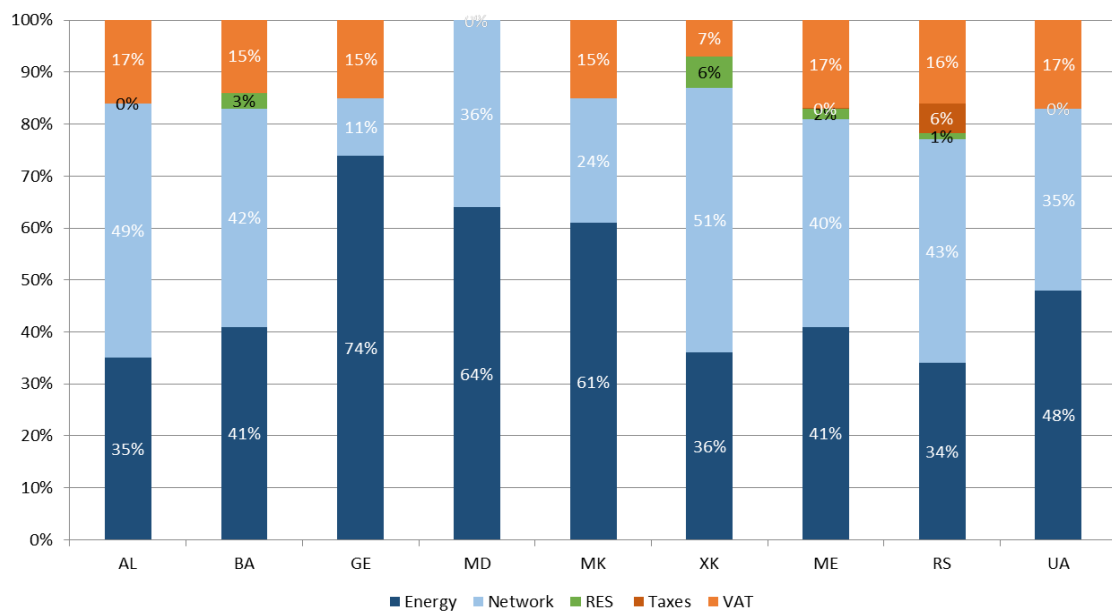
The share of RES charges in the final price gives an indication of the support for renewable electricity production in the Contracting Parties. In Albania, Georgia and Moldova, no RES

²³ Ref.: ACER/CEER Annual Report on the Results of Monitoring the Internal Electricity and Gas Markets in 2020 (Electricity and Gas Retail Markets Volume), November 2021 (https://extranet.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/ACER%20Market%20Monitoring%20Report%202020%20E2%80%93%20Energy%20Retail%20and%20Consumer%20Protection%20Volume.pdf)

²⁴ <https://ec.europa.eu/eurostat/web/energy/data/database>

support mechanism was reported. In Ukraine, the RES support is part of the transmission charge and in North Macedonia, it is part of the energy charge and is not presented separately in the EUROSTAT database. In other Contracting Parties, the RES support varies between 1% of the final household price in Serbia and 6% in Kosovo*. Diverse VAT shares correlate to differences in taxation policies in the Contracting Parties: in Moldova, for example, there is no VAT contribution to the final electricity price for households while in Kosovo* it is only 7%. In other Contracting Parties, VAT shares range between 15% and 17%.

Figure 9 Breakdown of electricity prices for households in EnC CPs- 2020



Source: Eurostat, NRA (for Ukraine) and national office for statistics (for Albania)

Figure 10 Electricity weighted average breakdown in the EnC CPs– 2019–2020 (%)

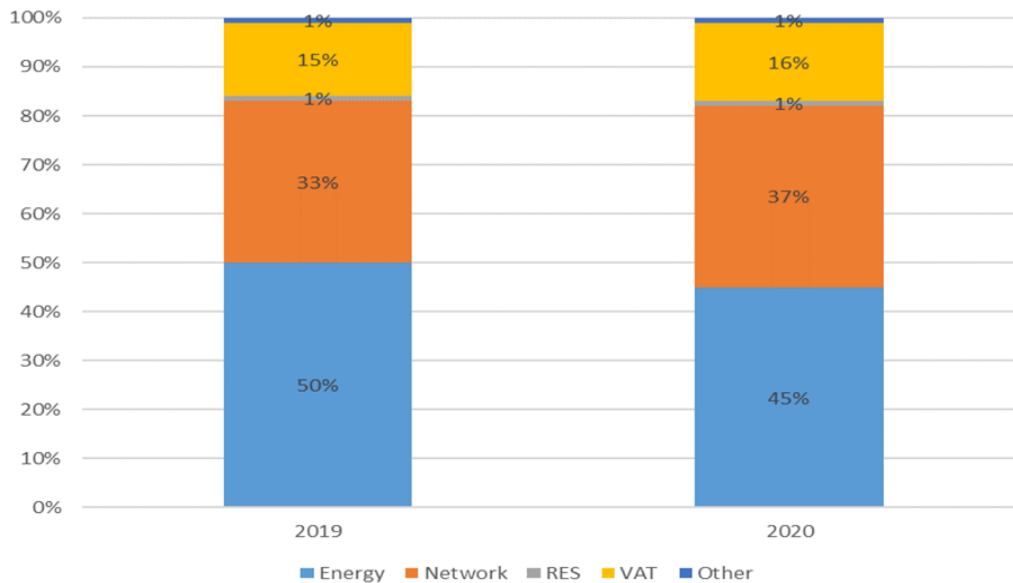


Figure 10 shows that in 2020, on average, 45% of the final price in the Contracting Parties consisted of the energy component (contestable charges), while the remaining 55% of the electricity bill consisted of non-contestable charges, i.e. the sum of network costs, taxes, levies and other charges. The share of energy component decreased by 5% in comparison to 2019, however still is substantially higher than in the EU Member States.

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 2020, 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 customers²⁵ in line with changes of prices on the market, however under certain restrictions. Namely, the prices for this category of customers cannot be increased beyond the weighted electricity price realized in the previous year and futures for the following year on a reference energy exchange

²⁵ 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.

nominated by the regulator; this means the price increase was limited to 7% in 2017 and 6% in 2018 and 2019. Also, according to the Energy Law, restrictions can be prolonged for the period of three years if the Agency estimates that conditions for liquid market are not fulfilled. Agency made a decision to prolong the restrictions for period 2020-2022 and it is limited to 6%.

In Albania, there is no price regulation only for non-households connected to the 35kV network²⁶. 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;²⁷ for all other customers (about 10% of non-household customers who consumed 67% of the electricity consumed by all non-household 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 prices²⁸. In Moldova only small customers had the possibility to be supplied at regulated end-user prices (1055 of 47,050 non-household customers supplied under non-regulated prices and they consumed 17.40% of the electricity consumed by all non-household customers in 2020). In Montenegro, about 42% of non-household customers were supplied at un-regulated prices who consumed almost 95% of electricity consumed by all non-household customers. In North Macedonia, only small consumers were supplied under regulated prices.²⁹ In Serbia, only small customers had the possibility to be supplied at regulated end-user prices;³⁰ for all other non-household customers (more than 30% of non-household customers who consumed 92% of the electricity consumed by all non-household customers), prices were not regulated. In Ukraine, only small consumers were supplied under regulated prices.³¹ For all other non-household customers prices were not regulated (about 8% of non-household customers who consumed more than 68% of the electricity consumed

²⁶ In 2020 only 78 of 143,195 non-household customers supplied under non-regulated prices and they consumed 67GWh of 2,129GWh electricity consumed by all non-household customers

²⁷ Federation 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.

²⁸ In 2020 only 3 of 91,786 non-household customers supplied under non-regulated prices, but they consumed 22.50% of the electricity consumed by all non-household customers.

²⁹ 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

³⁰ 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.

³¹ A small non-household customer means a non-household whose electric power installations are connected to an electricity network with a capacity up to 50 kW and who buys electricity for its own consumption. Small enterprises have a right for universal service supply with end prices calculated according NEURC's methodology

by all non-household customers). In Georgia all non-household customers had the possibility to be supplied at regulated prices.

Table 4 Number of non-households (number of metering points) supplied at non-regulated electricity prices in 2020

Number of non- household customers supplied at non- regulated prices in 2020 (number of metering points)	
Albania	78
Bosnia and Herzegovina	13,640
Georgia	0
Kosovo*	3
Moldova	1055
Montenegro	16,694
North Macedonia	33,291
Serbia	118,107
Ukraine	40,369

In 2020, end-user electricity prices were regulated using the following **methodologies**:

- Rate of return/cost plus in Bosnia and Herzegovina, Serbia and Ukraine³²;
- Revenue cap/price cap in Albania, Kosovo*, North Macedonia, Moldova and Montenegro;³³
- Mix of cost plus and revenue cap in Georgia;

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

- Albania: every month;

³² Regulated end-user price for households is set by Government. Price methodology for universal supply is set by NRA.

³³ 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).

- Ukraine: every third months;
- Kosovo*, Moldova³⁴, 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.

³⁴ Once per year or more often in cases when the deviation between real costs and costs included in regulated tariffs exceed 5%

C. FINDINGS: GAS

This part of the report provides analysis of the retail gas markets in Bosnia and Herzegovina,³⁵ 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

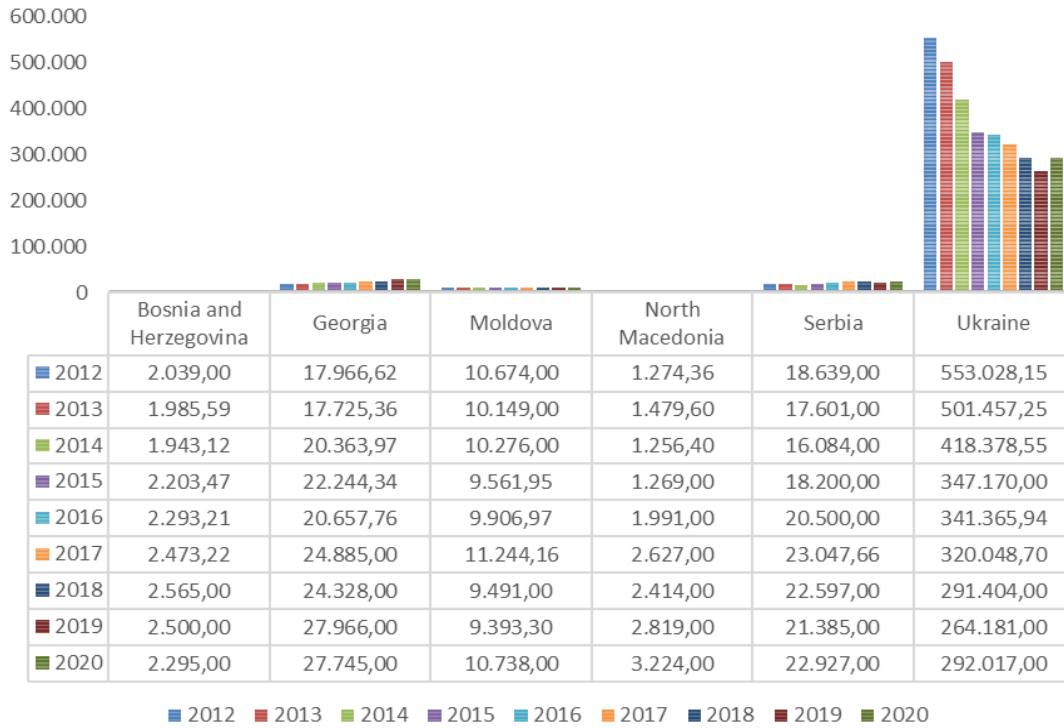
The total **sale of gas to final customers** in the Contracting Parties, without Ukraine, increased from 2012 to 2020 by 32%. On the other side, in Ukraine, the demand decreased by 47% over the same period. In 2020, for the first time since 2012³⁶, the final gas consumption in Ukraine increased on year-to-year basis, for around 10%. With the exception of the clear gas demand trend observed in Ukraine for the period 2012- 2019, caused predominantly by efforts towards less import dependence, gas consumption in the Contracting Parties varies depending on industry performances³⁷ and winter temperatures. The figures below present the total gas sales to final customers in the period from 2012 to 2020 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.

³⁵ The information for Bosnia and Herzegovina was provided by the regulatory authorities of Republika Srpska and Federation of Bosnia and Herzegovina.

³⁶ The first year for which the ECRB collected relevant data.

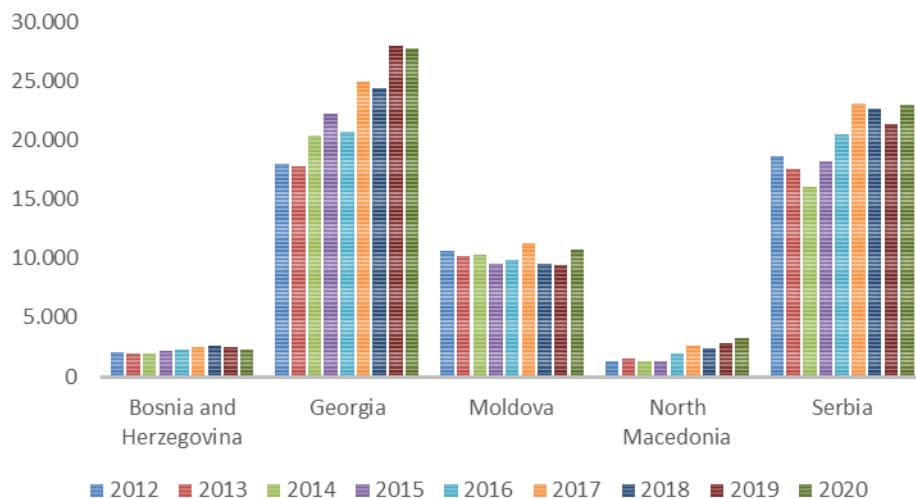
³⁷ In North Macedonia, deployment of the biggest consumer - CHP plant in summer months strongly influences the average level of gas demand.

Figure 11 Total sale of gas to final customers in the Energy Community Contracting Parties in the period 2012- 2020 (in GWh)



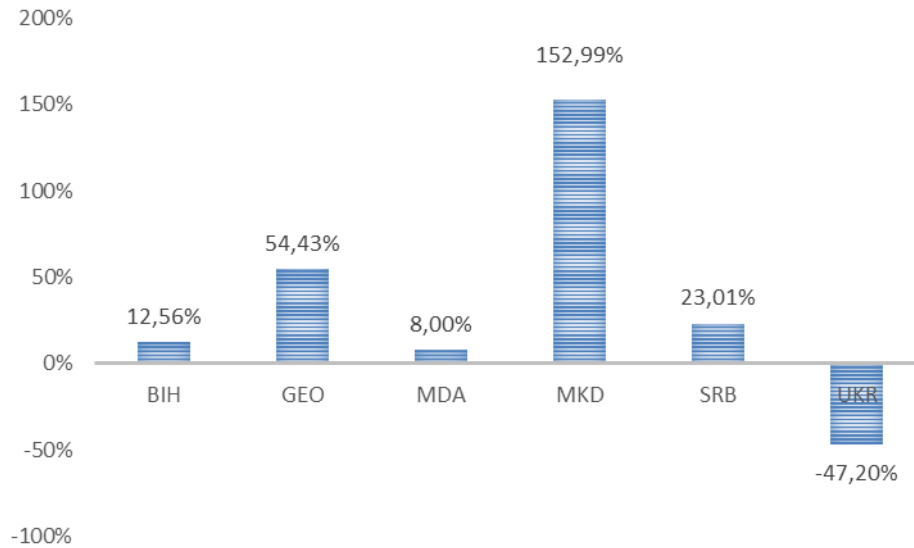
Source: National regulatory authorities

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 2020



Source: National regulatory authorities

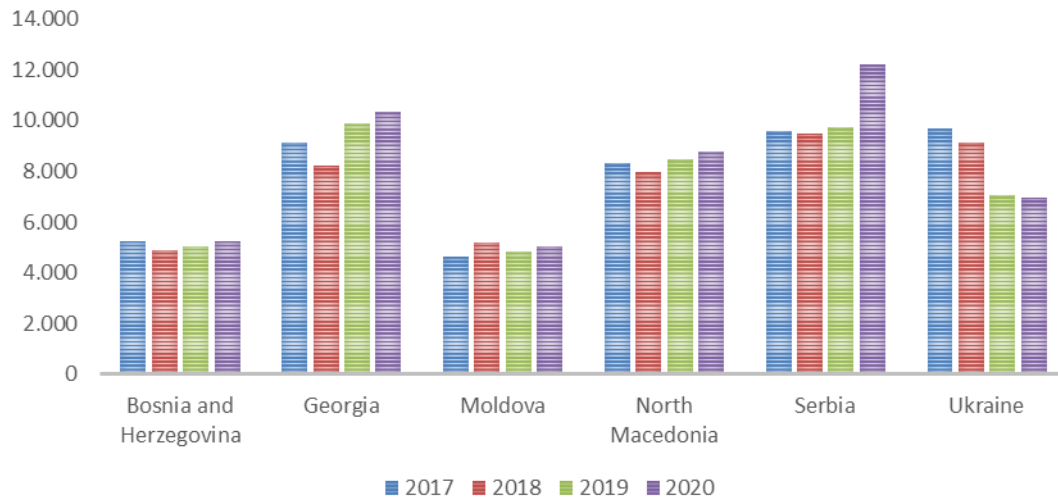
Figure 14 Growth rates of gas demand 2017 to 2020



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 four years can be observed for Ukraine where it dropped by 28%. Relevant quantities are displayed in the figure below.

Figure 15 Average annual gas consumption per household in 2017- 2020 (in kWh)



End-users of gas in the Contracting Parties 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 three (3) in North Macedonia to 286 in Ukraine, where 37 new suppliers entered the retail gas market in 2020. 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 a specified 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 Georgia, Moldova, Ukraine and Serbia customers connected to the distribution network can be supplied by more than one supplier (i.e. other than the incumbent)³⁸. On the other side, in all Contracting Parties except Moldova and 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 nationwide.

³⁸ In Moldova, only non- households.

Table 5 Number of active gas suppliers in 2019 and 2020

	Number of licensed gas suppliers		Number of active gas suppliers	
	2019	2020	2019	2020
Bosnia and Herzegovina	7	6	3	4
Georgia	There is no license for retail gas supply		31	33
Moldova	17	24	10	14
North Macedonia	21	19	6	6
Serbia	70 ³⁹	74 ⁴⁰	35	34
Ukraine	626	785	249	286

Source: *National regulatory authorities*

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

- In all Contracting Parties except Ukraine, dominant retail suppliers sell more than 80% of gas to end-users. The market share of the three (3) largest companies in the retail gas market decreased from year to year in Ukraine: in 2018 it added up to 71% and in 2020 to 61%. 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 2020. However, most of the obstacles to retail market entries mainly stem from reasons other than retail market design, namely the status of wholesale market development⁴¹ (e.g. single source of gas and poor access to liquid wholesale markets). The effect of regulation of end- user prices is also substantial.

Table 6 Retail gas market concentration in 2020

³⁹ 64 on non- regulated market, six (6) just on regulated segment i.e. for public supply.

⁴⁰ 65 on non- regulated market, nine (9) just on regulated segment i.e. for public supply.

⁴¹ 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.

	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	96.25%	100%
Georgia	3	85.86%	100%
Moldova	1	97.87%	100%
North Macedonia	3	98.4%	100%
Serbia	1	87.50%	100%
Ukraine	3	60.85%	100% ⁴²

2. Switching behavior

All natural gas customers in the analyzed Contracting Parties were eligible to choose their supplier. However, **household customers in none of the Contracting Parties' markets except Ukraine changed their suppliers in 2020**. In **Ukraine**, public service obligation of *Naftogaz* and its affiliated producers as well as the end- user price regulation for household customers were removed as of 1st August 2020, contributing to the **annual switching rate of households of 5.35%** (in number of metering points) as well as to the one of **non-households of 7.48%**.⁴³

For **non-households**, the following information on switching rates has been provided for other Contracting Parties:

- In Bosnia and Herzegovina and North Macedonia, none of the non- households changed supplier in 2019;
- In Georgia, the regulatory authority does not have data on switching;
- In Moldova, 0.32% of non- households changed their supplier in 2020 and in Serbia 0.12% (both in number of metering points).

⁴² Until 1st August 2020, afterwards 99.73% of households were supplied by incumbent at non- regulated prices.

⁴³ 667,267 households and 8,336 non- households changed supplier in Ukraine in 2020.

3. End-user natural gas prices⁴⁴

Between 2013 and 2020, average gas household prices in the Contracting Parties without Ukraine decreased by 30%. In the same period, households in Ukraine, as shown in Figure 16, recorded an increase of gas prices of around 167%. Average industrial prices decreased in the Contracting Parties excluding Ukraine, by 34%. In Ukraine, industrial prices decreased by 64% over the same period.

Across the Contracting Parties, substantial national discrepancies in the level of household and industrial gas prices exist. The final price paid by household gas consumers in 2020 in North Macedonia (4.99 euro cents/kWh) was almost four times higher than 1.32 euro cents/kWh paid by Georgian households. In the industrial segment, the price paid by consumers in Ukraine (1.66 euro cents/kWh) was only 37% of the price paid by consumers in Bosnia and Herzegovina (4.51 euro cents/kWh).

The discrepancies in national prices originate partly from the different regulatory approach and levels of cross- subsidization in gas prices between the household and industrial segments. For example, in 2020, regulated household gas prices existed in majority of the Contracting Parties except North Macedonia and partially Georgia.⁴⁵ In the industrial sector, gas prices were regulated in Moldova and partially in Bosnia and Herzegovina⁴⁶ and Serbia.⁴⁷ In Ukraine, the final industry prices were regulated only for district heating companies and religious organizations. The degree of cross-subsidization decreased over the observed period in all Contracting Parties.

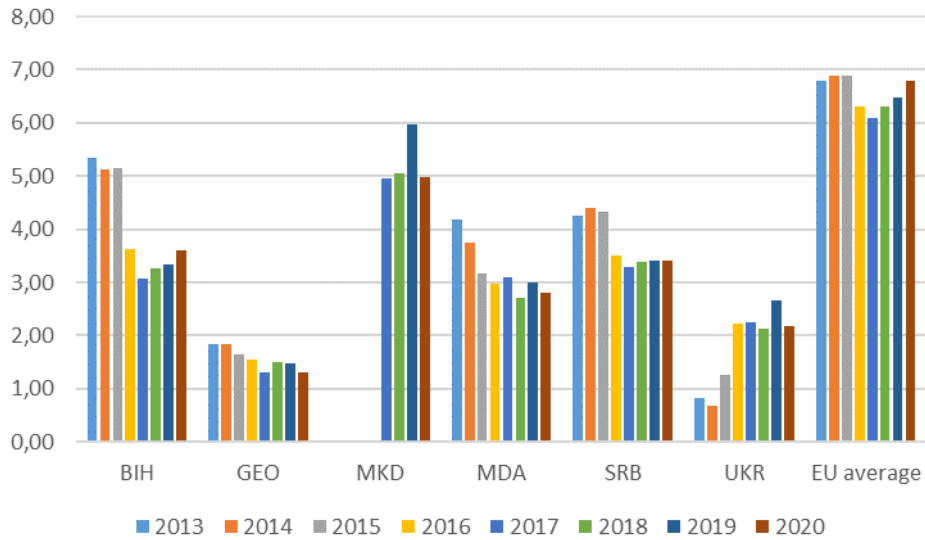
⁴⁴ The information in this chapter was partially provided by the national regulatory authorities also for the purpose of ACER Market Monitoring Report 2020 (https://extranet.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/ACER%20Market%20Monitoring%20Report%202020%20%E2%80%93%20Energy%20Retail%20and%20Consumer%20Protection%20Volume.pdf). The source of other information is EUROSTAT.

⁴⁵ Customers connected to the distribution network after 2008 do not have regulated prices.

⁴⁶ If metering point is less than 95 kW.

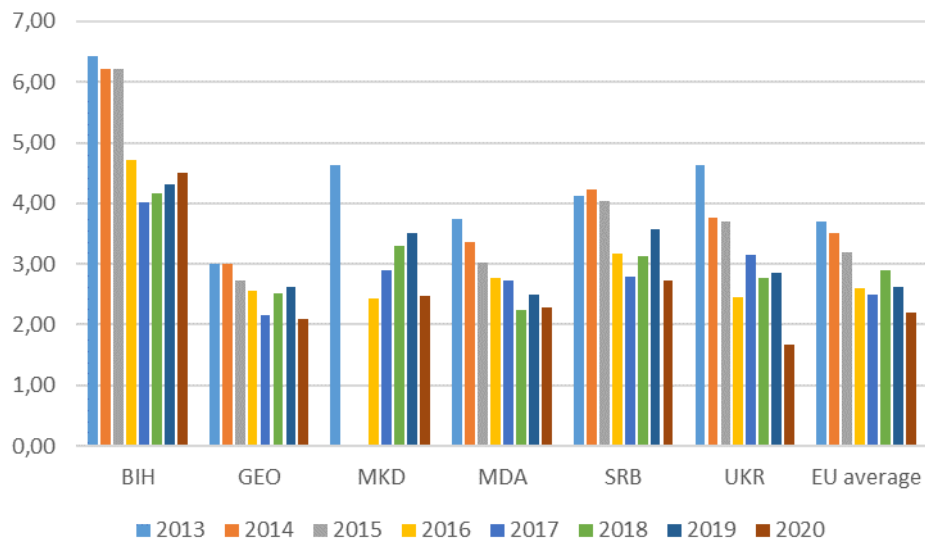
⁴⁷ For small non- household consumers connected to distribution network and consuming less than 100,000 m³ per year.

Figure 16 Final gas prices in nominal terms for household consumers in EnC CPs- 2013-2020 (euro cents/kWh)



Source: EnC Secretariat calculations, based on Eurostat and NRAs

Figure 17 Final gas prices in nominal terms for industrial consumers in EnC CPs- 2013-2020 (euro cents/kWh)



Source: EnC Secretariat calculations, based on Eurostat and NRAs

4. Gas price breakdown for households⁴⁸

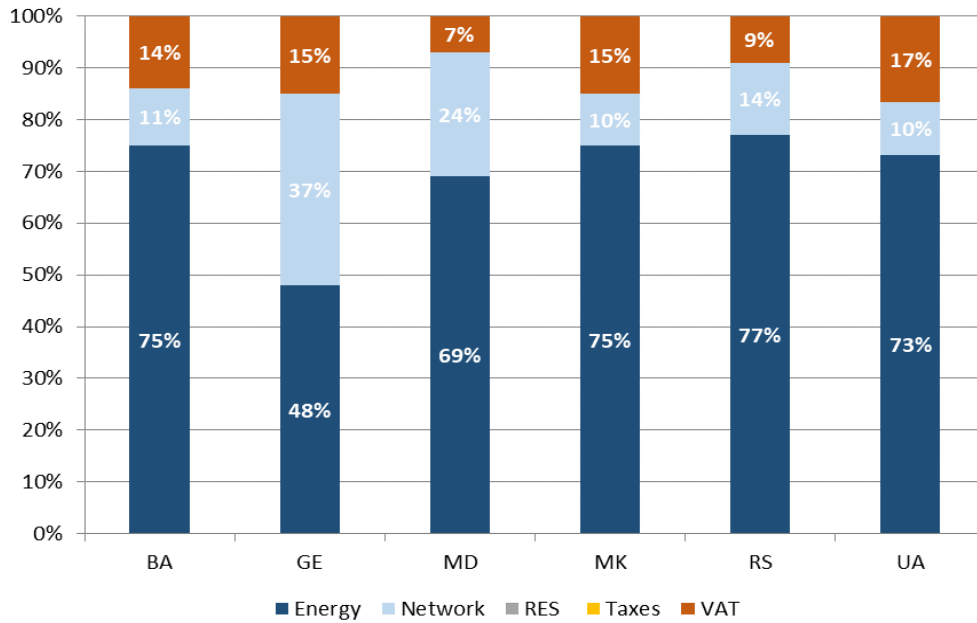
The following figure illustrates the breakdown of gas prices for households in the Contracting Parties, for which the information was available and where a gas market exists. The share of energy component in the final gas price in 2020 ranged from 48% in Georgia to 77% in Serbia. The share of network charges, including both distribution and transmission network costs, ranged from 10% in North Macedonia and Ukraine to 37% in Georgia. The composition of the network cost also varies greatly across Contracting Parties, whereby transmission share in the total network cost ranges from 3% in Moldova to 87% in Bosnia and Herzegovina.

The weighted average breakdown of gas prices in the Contracting Parties showed some changes from 2019 to 2020, whereby the difference observed in Figure 18 originates largely from unavailability of data for Ukraine for 2019 in Eurostat database. According to Ukrainian NRA, the structure of final gas price for households did not change substantially in 2020 in comparison to 2019.

Differently from the EU Member States, more than half of the final price paid in 2020 by end consumers of gas in the Contracting Parties, on average, covered the energy component i.e. contestable component of their annual gas bill.

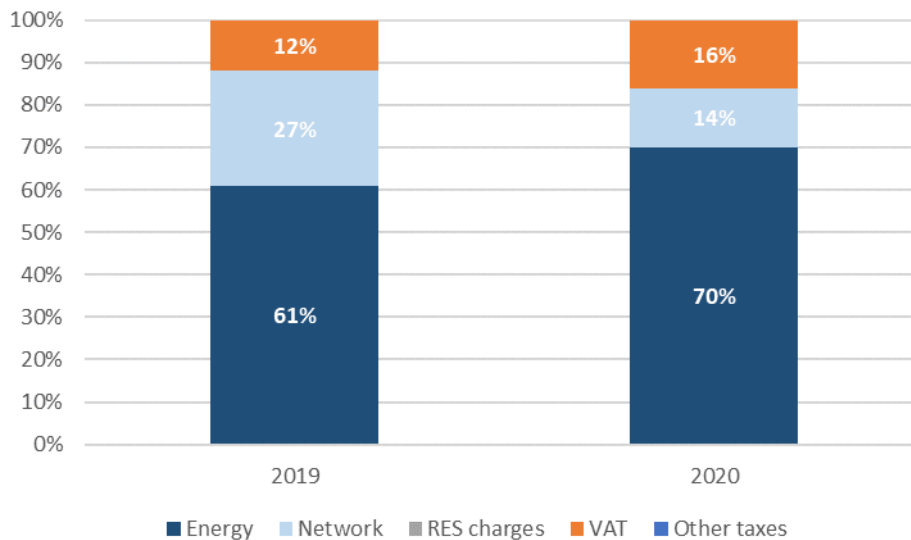
⁴⁸ ACER/CEER Annual Report on the Results of Monitoring the Internal Electricity and Gas Markets in 2020 (Electricity and Gas Retail Markets Volume), November 2021 (https://extranet.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/ACER%20Market%20Monitoring%20Report%202020%20E2%80%93%20Energy%20Retail%20and%20Consumer%20Protection%20Volume.pdf).

Figure 18 Breakdown of household gas prices in the EnC CPs- 2020 (in %)



Source: EnC calculations, based on Eurostat and data provided by NRAs

Figure 19 Weighted average breakdown of gas price for households in the EnC CPs – 2019–2020 (%)



Source: EnC calculations, based on Eurostat and data provided by NRAs

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 2020,⁴⁹ except in North Macedonia and Ukraine.⁵⁰

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;⁵¹
- In Moldova, non- households are supplied both at regulated and non- regulated prices, depending on a supplier. The so-called non- regulated suppliers became active suppliers for the first time in 2020.

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 Serbia and Ukraine switching in and out of regulated prices was allowed in the reporting period.

⁴⁹ 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.

⁵⁰ As of 1st August 2020.

⁵¹ This represents 0.95% of non-households consuming around 42% of total consumption of non-households; religious organizations were supplied at regulated prices until 1st August 2020.

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, 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

To ensure the right to universal service according to Article 27 of Directive 2019/944, EU countries may appoint a supplier of last resort (SOLR) and impose on DSOs an obligation to connect consumers. Directive 2009/73, also calls for a SOLR for consumers connected to the

gas system but does not call for the imposition of a universal service obligation. Yet, the European legislation is not exhaustive on the meaning and functions of SOLR.⁵²

The acquis does not further define the meaning and functions of a SOLR, but those that are recognized in national legislation and practice in European Union Member States 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 table summarize the results of the research conducted in the Energy Community Contracting Parties regarding the functions of the supplier of last resort.

Table 7 Functions of the supplier of last resort in the Contracting Parties in 2020

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	5
If a household customer is dropped by its current supplier because of non-payment	4	2
The current supplier has gone bankrupt and is no longer doing business	8	5
The license of the current supplier has been revoked	8	5
If a final household customer does not choose a supplier at market opening	5	4
If a fix- term supply contract expires	5	3
Other reasons	1	2
There is no supplier of last resort in the country	1	2

According to data provided, a supplier of last resort for electricity exists in all Contracting Parties, except in Georgia, and for gas in Albania, North Macedonia, Bosnia and Herzegovina (Republika Srpska), Serbia and Ukraine. In Georgia, according to Electricity Retail Market Rules (adopted in August 13, 2020, enters into force in July 1, 2021), the customer turns to the supplier of last resort if he/she loses a supplier due to planned or unplanned exit of the supplier or a severe violation by the supplier of its obligations. SOLR is not assigned yet. As for natural gas market, retail market rules, which shall include SOLR operational rules, have not been adopted yet.

⁵² Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2019 - https://extranet.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/ACER%20Market%20Monitoring%20Report%202019%20-%20Energy%20Retail%20and%20Consumer%20Protection%20Volume.pdf

The most common cases when a household customer may turn to the supplier of last resort on the **electricity sector** are:

- when a customer does not find a supplier on the free market;
- when the current supplier has gone bankrupt and is no longer doing business;
- when the license of the current supplier has been revoked;
- when a final household customer does not choose a supplier at market opening;
- when a fix-term supply contract expires.

The same circumstances are applicable for the consumers on the gas market.

This means that protection of inactive consumers and precaution for failure of supplier is provided through the role of supplier of last resort.

The Directives stipulate that appropriate measures should be taken to protect final customers. In order to protect customers but also to provide a predictable framework for suppliers it is of great importance to set clear and simple procedures for disconnection from the network due to non-payment and for re-connection to the network after removing the reasons for disconnection. Special emphasis is placed in this context on **vulnerable customers**. Every country is allowed to create its own concept of vulnerable customers which may refer to energy poverty and, inter alia, to the prohibition of disconnection of electricity to such customers in critical times. 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 is shown in the following table.

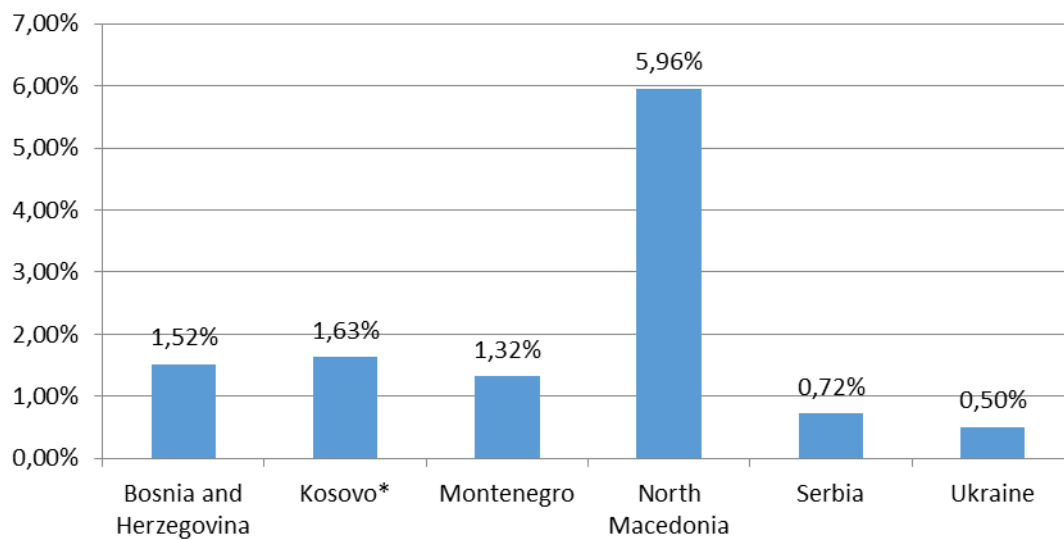
Table 8 Minimum duration of disconnection process for non-paying consumers across Energy Community Contracting Parties in 2020

How many days (at least) does it take to disconnect a final household customer from the grid because of non-payment? Starting date is due date of payment.	Legal	In practice
Albania	30	30
Bosnia and Herzegovina	FBIH 30, RS 8, BD 10	FBIH 60, RS 16, BD 10
Kosovo*	30	45
Moldova	20	40
Montenegro	8	More than 8
North Macedonia	60	60
Serbia	38	38

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 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 2020⁵³



⁵³ For Serbia, data include Number of disconnections for all metering points that are connected to the low voltage distribution network, not only for households.

The share of household disconnections due to non-payment for electricity in the Contracting Parties varies among countries (0.50% - 5.96%). According to the provided data, the smallest share is in Ukraine and biggest in North Macedonia. In 2020 share of household disconnections due to non-payment of electricity bills is lower than in 2019 due to the COVID-19 measures regarding the non-disconnections of consumer due to non-payments.

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.⁵⁴ Some Contracting Parties have defined vulnerable customers in their energy laws and some in legal acts related to social protection.

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 2020.

⁵⁴ 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.

Table 9 Criteria for identification of vulnerable customers in the Contracting Parties in 2020

Criteria for identification of vulnerable customers	Number of countries - electricity	Number of countries – gas
Income level	4	3
Share of energy expenditure in disposable income	1	0
Energy efficiency at home	0	0
Critical dependency on electricity powered equipment for health reasons	2	0
Age	0	0
Other	2 ⁵⁵	1

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 2020.

⁵⁵ 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. In North Macedonia electricity sector: household has a person that lives in a state of social risk (motherhood, illness, old age, injury, and disability) to which the energy supply and/or the use of the network is given under special conditions. it must be supplied by a universal electricity supplier: it must have a yearly electricity consumption of up to 3600 kWh, it must have an electricity consumption which is measured through a single-phase, meter with a rated current of insurance feeder or a three-phase with the rated current of a fuse of 16 A; in the gas sector: household has a person that lives in a state of social risk (motherhood, illness, old age, injury, and disability) to which the energy supply and/or the use of the network is given under special conditions, it must be supplied by a supplier with an obligation to provide public service in the supply of natural gas and the consumption of natural gas for October to March annually must not exceed 70 normal cubic meters (from October to March, annually).

Table 10 Measures to protect vulnerable customers in the Contracting Parties in 2020

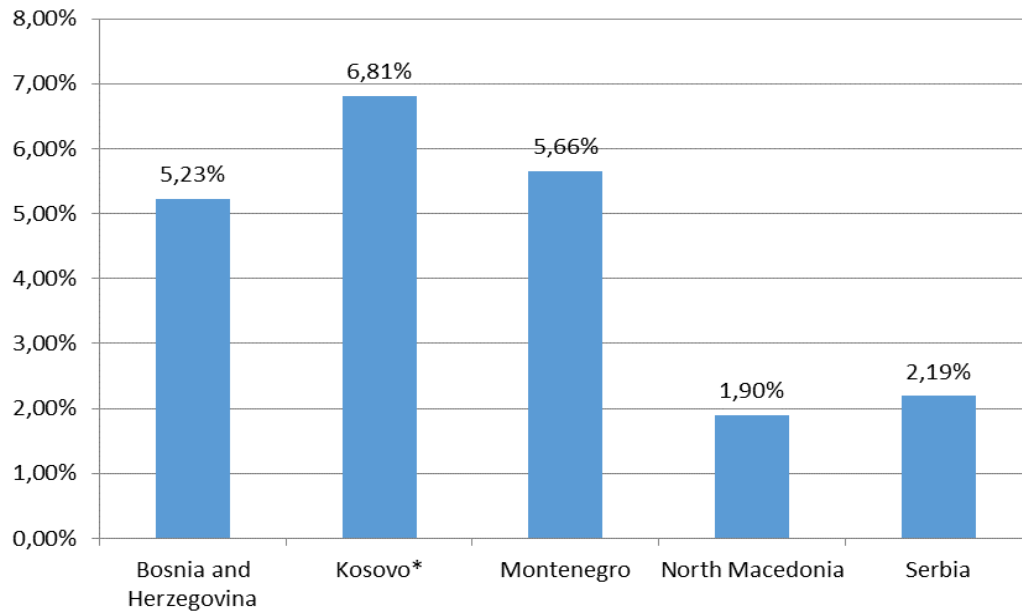
Measures to protect vulnerable customers	Number of countries - electricity	Number of countries - gas
Restrictions on disconnection due to non-payment	8	5
Earmarked social benefits to cover (unpaid) energy expenses	5	2
Special energy prices for vulnerable customers	1	0
Additional social benefits to cover (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...)	0	0
Financial grants for the replacement of inefficient appliances	1	1
Free basic supply of energy	2	1
Other	2 ⁵⁶	1

From the data is evident that the most common measures for protection of vulnerable customers in Contracting Parties are restrictions on disconnection due to non-payment and earmarked social benefits to cover (unpaid) energy expenses. Measures of protection are more used in electricity, but that is partly so because gas markets do not exist in every monitored country. In Georgia, block electricity tariffs, applied for all customers with the monthly consumption below 101 kWh, are actually designed with a view to support the vulnerable customers.

⁵⁶ In North Macedonia, the government by the end of the year, after a proposal of the Ministry of economy, given by a previous opinion from the 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. 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.

The following figure shows the share of vulnerable electricity customers out of the total number of households metering points in Contracting Parties on 31 December 2020.⁵⁷

Figure 21 Share of vulnerable customers in Contracting Parties on 31 December 2020



The share of vulnerable customers in the analyzed markets varies between 1.90% and 6.81%. According to the data provided, the smallest share is in North Macedonia and the highest in Kosovo*.

⁵⁷ 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'*.⁵⁸ 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.⁵⁹

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.⁶⁰

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.

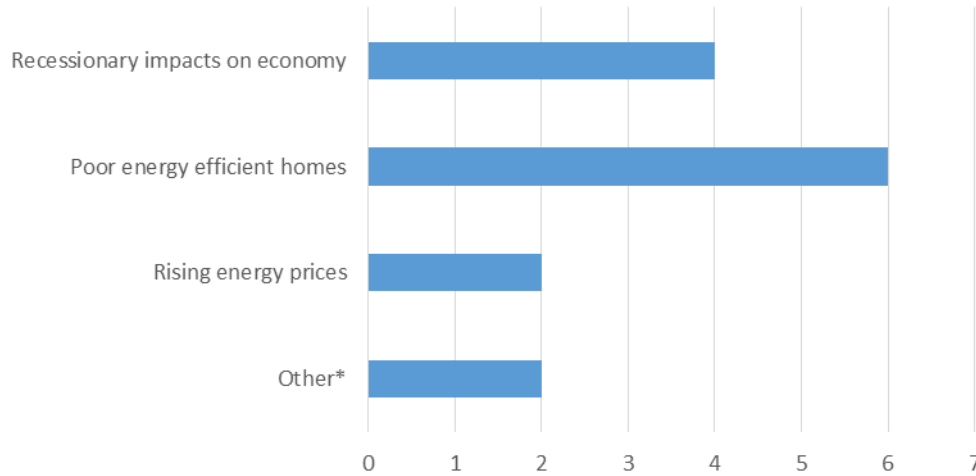
Definition of energy poverty does not exist in any of the Contracting Parties. However, in the majority of analyzed countries energy poverty is tackled through a certain framework, i.e. through the energy development strategy and national action plans (Bosnia and Herzegovina, Kosovo*, Moldova, Montenegro and Serbia). The following figure shows which reasons are perceived as main causes of energy poverty in observed countries.

⁵⁸ https://www.energypoverty.eu/sites/default/files/downloads/publications/18-08/paneureport2018_final_v3.pdf.

⁵⁹ 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.

⁶⁰ <https://www.energypoverty.eu/>

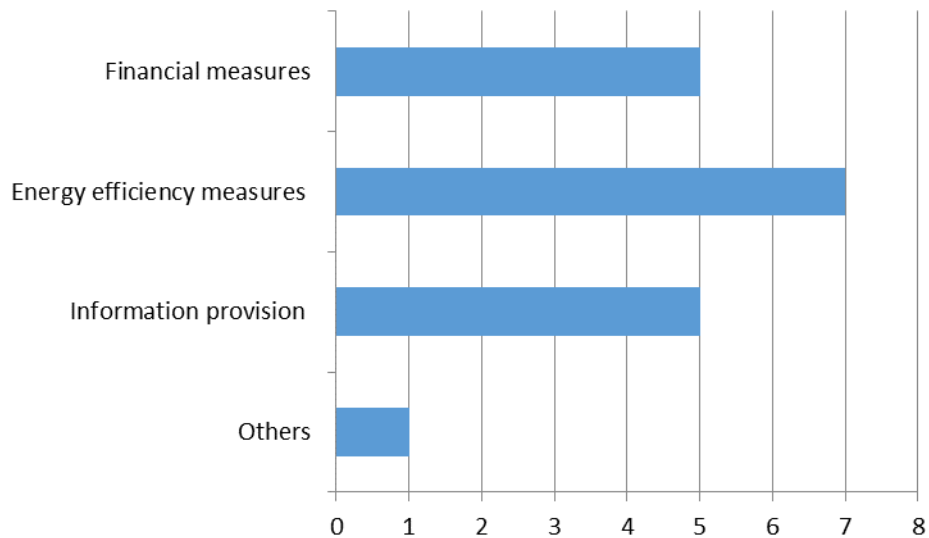
Figure 22 Main causes of energy poverty in Energy Community Contracting Parties



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



Financial measures, ie. social welfare systems that target energy-poor customers, direct payments to specific groups, represent one of 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. Decree No 381 of the government of 30 July 2015 sets rules for partial subsidization of electricity costs and targets specifically socially vulnerable customers, defined in accordance with a methodology approved by the government. The decree does not cover the municipality of Tbilisi, 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 excide 20 € per customer that is part of the social scheme. Also the payment is done directly to the supplier on yearly basis.

Energy efficiency measures are widely used across Energy Community Contracting Parties (Bosnia and Herzegovina, Georgia, North Macedonia, Kosovo*, Moldova, Montenegro and Serbia) and represent the most common implemented measure in Energy Community Contracting Parties.

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.

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

Information provision, such as awareness campaigns, information on market tariffs and energy savings measures and establishment of national advice organizations 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.

In Georgia various campaigns aimed at awareness raising have been implemented by GNERC and other parties. In addition, in 2016, the Sustainable Energy Information Centre was established at the Tbilisi City Hall. The center is involved in raising awareness regarding energy efficiency through direct conversations with the visitors of the Tbilisi City Hall.

Social tariffs are not applied in Energy Community Contracting Parties.

Other measures implemented for addressing energy poverty are in Bosnia and Herzegovina, defined by the Decision on Implementation of the Measures Intended to Reduce Costs of Electricity for the Households and to Enhance Energy Efficiency.

5. Customer information

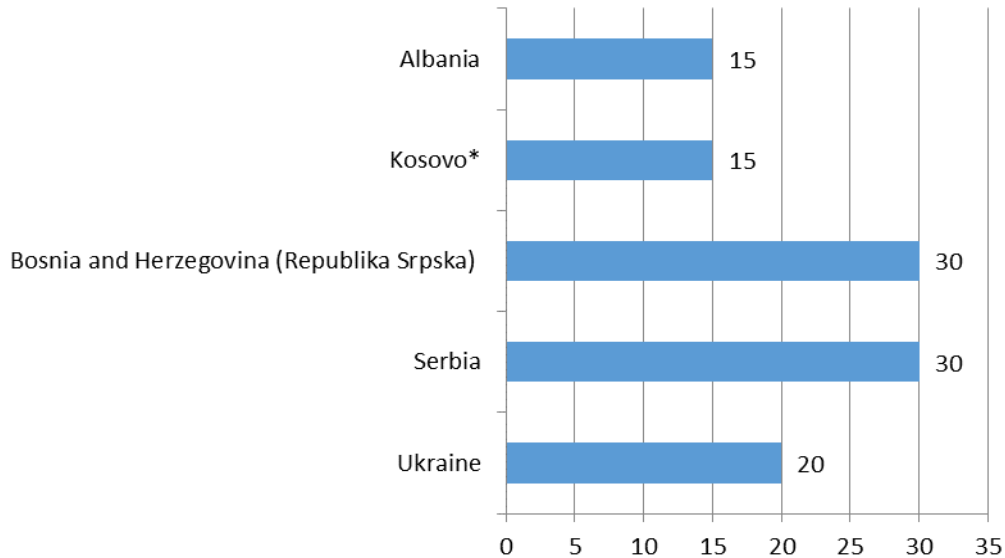
In order to facilitate the participation of customers in the market it is important to have clear and simple procedures and transparent information. The Third Energy Package Directives prescribe that clear and comprehensible information should be made available to consumers concerning their rights in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

Research has been carried out to analyze the related practice in the Energy Community Contracting Parties. Research covered the legal requirements for information to consumers about price changes for fixed-price and variable-price contracts; the number of 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 no 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), 15 in Kosovo* and Albania and 20 in Ukraine.

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 Moldova, if the price is determined by the NRA as regulated prices, the customer is informed with 30 days before, from Official Gazette.

Price comparison tools (PCT) exist only in Bosnia and Herzegovina (<http://uporedistruju.ba/>), North Macedonia (<https://switch.mk/#/>) and Ukraine (mobile

application “Energy online” 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.

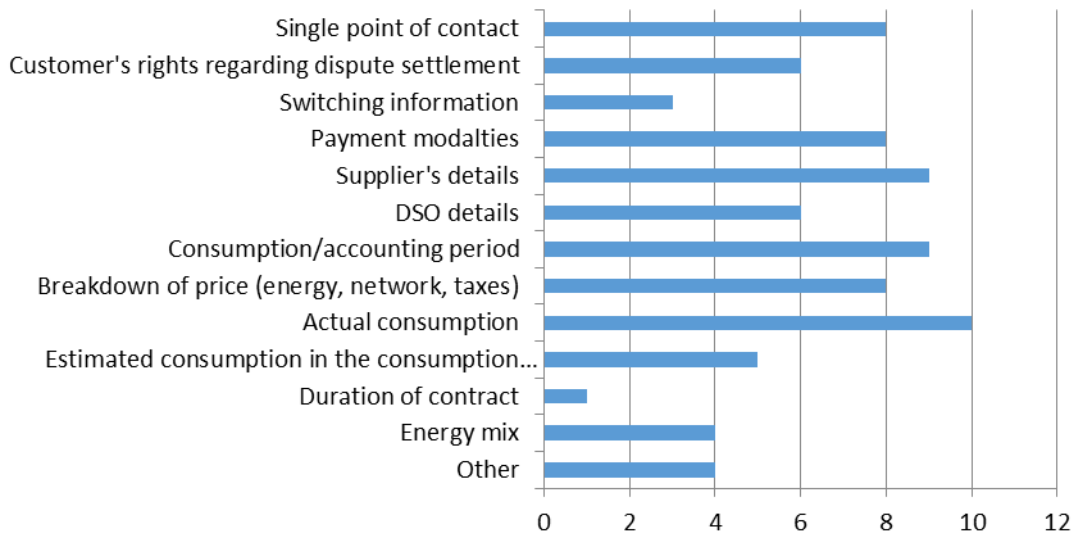
The Electricity Directive stipulates that suppliers should make the following information available to final customers on the bills and in promotional materials:

- 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 2020



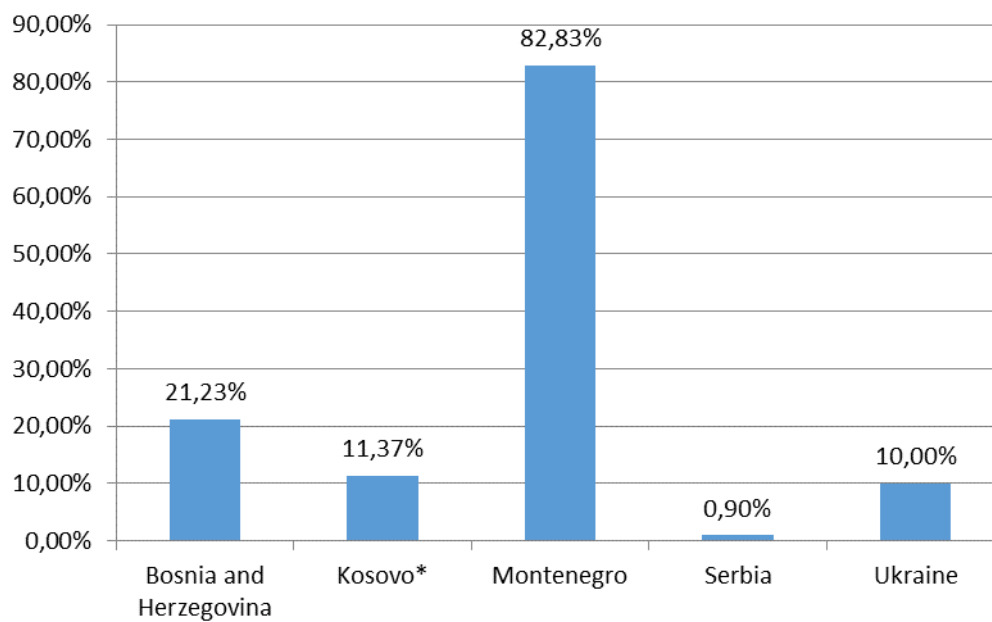
Information on the actual consumption, the accounting period and suppliers details is included in the bills in all analyzed energy markets. Information related to the energy mix, as one of the mandatory elements foreseen by the Third Package, is available only in Albania, North Macedonia, Serbia and Ukraine. Only in Bosnia and Herzegovina (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 cost of metering point, common area consumption (elevator, water pump), the default interest to be charged for late payment and RES incentives. 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 aid and compensation payments.

The frequency of billing information based on actual consumption was monthly in every Energy Community Contracting Party during 2020. 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 2020 compared to

2019 the roll out of smart meters increased in Bosnia and Herzegovina, Kosovo*, Montenegro, Serbia and Ukraine. 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 2020)



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 rules. 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 and Montenegro 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 – non-compliance of data or contractual arrangements with existing supplier, whereby the contract cannot contain provisions limiting the right of the buyer to change the supplier; in Brcko District – unfulfilled obligations from the Supply Contract;
- Georgia – Non-payment for the service of current supplier;
- 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 – non-payment, multiple switching requests submitted to DSO in parallel,;
- Ukraine – disparity of metering point characteristics with supplier's offer, absence of distribution contract and old supplier's request for disconnection.

6. Customer complaints

The Third Energy Package Directives stipulate that customers should also have access to choice, fairness, representation and dispute settlement mechanisms. They can be protected

and empowered in the right way only if their complaints are efficiently treated. Under the 3th Energy Package, an independent mechanism such as an energy ombudsman or a consumer body should be in place in order to ensure efficient treatment of complaints and out-of-court dispute settlements. Also the obligation of regulators is prescribed to monitor complaints by household customers.

The following table shows number of household customer complaints received by different institutions in 2020.

Table 11 Number of household customer complaints for gas and electricity received by different institutions in 2020⁶¹

	Electricity				Gas			
	Suppliers	DSOs	ADR	NRA	Suppliers	DSOs	ADR	NRA
Albania	43.605	NA	165		NA	NA	NA	NA
Bosnia and Herzegovina	70.365	20.064	184		25	7		
North Macedonia	47.431		362		NA	NA	NA	NA
Georgia	NA	NAP	NA	1.242	NA	NAP	1332	
Kosovo*	6.594	302	0	62	NAP	NAP	NAP	
Moldova	NA	NA	NAP	NAP	NAP	NAP	NAP	NAP
Montenegro	6.443	NA	57		NAP	NAP	NAP	NAP
Serbia	NA	NA	NA	NA	NA	NA	NA	NA
Ukraine*	758.982	379.323	5.317				11.373	

In every observed country the national regulatory authority has the role of an Alternative Dispute Resolution (ADR) body.⁶² 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 and in Kosovo* a private mediator licensed by the Ministry of Justice.

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

⁶¹ The following abbreviations apply: NA - not available, NAP- not applicable.

⁶² Directive 2013/11/EU on alternative dispute resolution for consumer disputes and amending Regulation (EC) No 2006/2004 and Directive 2009/22/EC is not applicable in the Contracting Parties.

7. Service quality of distribution system operators

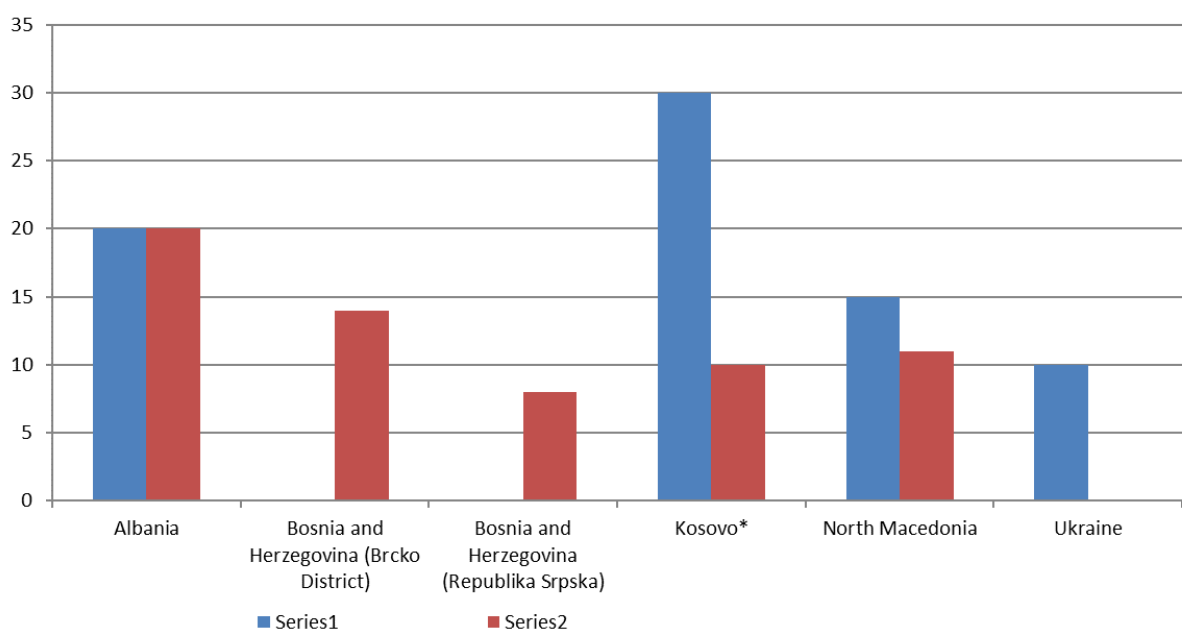
The duties of distribution system operators are to ensure long-term system capability to meet realistic requirements for electricity and gas distribution, as well as to provide distribution system users with clear and precise information regarding conditions for service providing and particularly with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

Research has been carried out to look at the legal requirements and practice in Energy Community Contracting Parties 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 connections⁶³ 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:

- In Albania, it takes up 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 shallow⁶⁴ and deep⁶⁵ 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 Republika Srpska the legally prescribed number of days to connect to the network and activate energy supply to a consumer is 15 and in the practice ranks from 9 to 15 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 – 10 business days/up to 120 business days (determined by

⁶³ 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.

⁶⁴ Customer pays only the connection costs. The costs of network reinforcement are socialised and paid by all network users via the network fees.

⁶⁵ The customer in addition to the connection costs also pays part of the network reinforcement.

GNERC, differs from the capacity requested as well as from location - self-governed towns/municipalities). For gas, it takes 10 - 60 business days, (determined by GNERC, differs from the gas pressure requested).

- 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 operator and 15 days for physical delivery if customer has fulfilled prescribed conditions.
- In Ukraine, for shallow connection, the legal requirement for connection service is 45 calendar days for customers up to 16 kW inclusive and 60 days for customers from 16 to 50 kW inclusive. For deep connection, the legal requirement is 120 days - up to 160 kW inclusive, 230 days - from 160 kW to 400 kW inclusive, 280 days - from 400 kW to 1000 kW inclusive, 350 days - from 1000 kW to 5000 kW inclusive.

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

- In Albania, the maximum number of days to disconnect the energy following a consumer request is 15 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 (10) business days for electricity and 40 calendar days for gas.
- 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 within eight (8) days the latest.
- 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 Bosnia and Herzegovina, North Macedonia and Montenegro. Specific details about this indicator are presented below:

- In Albania – maximum duration of a planned interruption is 47 hours
- In Bosnia and Herzegovina- Republika Srpska, maximum duration of a planned interruption in practice is 15 hours and in Brcko District 8 hours.
- In Georgia, 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, the average value is 231 minutes.

E. MAIN FINDINGS AND CONCLUSIONS

1. Electricity

During 2020, the crisis caused by COVID pandemic had great impact on the retail electricity market in the Energy Community Contracting Parties. In the period from 2019 to 2020, the **total sale of electricity to final customers** in the Energy Community Contracting Parties decreased by 2.67%, in Ukraine by 2.10%. Those changes were mostly caused by decrease of non-household consumption. Contrary to non-household consumption, households consumption increased in all Contracting Parties, except Montenegro.

The average monthly consumption per household varied between 115 kWh/month in Moldova and 431 kWh/month in Kosovo*.

Only in Ukraine, a large **number of both local and nationwide suppliers** were active in the retail market in 2020 and during 2019 the total number of licensed electricity suppliers in the retail market significantly increased. In Albania, Bosnia and Herzegovina, North Macedonia and Serbia more than ten suppliers were active in the retail market, while in the other Contracting Parties supply to electricity end-users was offered by one or few suppliers.

In the majority of the Contracting Parties, retail electricity markets are still **highly concentrated**, with an aggregated market share of the three largest companies higher than 90%. In North Macedonia this share is slightly lower (87.84%). Only in Ukraine this share added up to only 30.20%.

In 2020 in the majority of the Energy Community Contracting Parties (Bosnia and Herzegovina, Georgia, Kosovo*, Moldova, Montenegro, North Macedonia, Serbia and Ukraine) 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 2020 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 and Serbia several thousand and in Ukraine almost 12,500 customers on more than 118,000 metering points have changed their suppliers, but annual switching rate in the whole retail market calculated by number of metering points was less than 1% and only in North Macedonia was 1.85%. Except for Serbia and Ukraine, 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, and in Ukraine several collective households changed suppliers. The increasing **number of switching requests** is a proof of market liquidity development. In North Macedonia and Ukraine this number increased, in Bosnia and Herzegovina and Serbia decreased, while in remaining Contracting Parties were not requests for switching supplier.

End-user electricity prices for household customers in the Energy Community Contracting Parties vary substantially from 4.3 euro cent/kWh in Ukraine to 10.31 euro cent/kWh in Moldova and are still much lower than the EU 28 average price for households of 21.3 euro cent/kWh in 2020.

Electricity prices for industrial customer are more harmonized among Contracting Parties varying from 4.82 euro cent/kWh in Georgia to 12.83 euro cent/kWh in Albania.

End-user electricity prices for household customers were **regulated** in all Energy Community Contracting Parties in 2020, except in Montenegro. In addition, the great majority of non-household customers were still supplied at regulated prices in 2020. 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. Agency made a decision to prolong the restrictions for period 2020-2022. 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 Moldova and North Macedonia, only small customers 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.

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,⁶⁶ 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.

⁶⁶ 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, without Ukraine, increased in the period 2012-2020 by 32%. Over the same period, In Ukraine, the demand decreased by 47%. However, for the first time since 2012, Ukrainian gas demand increased on year-to-year basis by around 10%. With the exception of clear downwards trend in gas demand in Ukraine from 2012 to 2019, caused by efforts to reduce import dependence, consumption in the Contracting Parties varies depending on industry performances and winter temperatures.

In the reporting period end-users of gas in the Energy Community Contracting Parties were mainly supplied by regional retail suppliers. The number of **active suppliers** ranged from 3 in North Macedonia to 286 in Ukraine.

In four countries, namely Georgia, Moldova, 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 Moldova and 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.

All gas customers in the Energy Community Contracting Parties were **eligible to choose their supplier**. However in practice:

- Household customers in none of the Energy Community Contracting Parties except Ukraine changed their supplier in 2020. In Ukraine, annual switching rate of households was 5.35% and 7.48% of non- households.
- Only in Serbia and Moldova some non- households changed supplier in 2020- 0.12% in Serbia and 0.32% in Moldova. There is no information on switching in Georgia.

End-user gas prices for household and industrial customers decreased in 2020 in comparison to 2019 in all Energy Community Contracting Parties, except in Bosnia and Herzegovina. 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.

Differently from the EU Member States, more than half of the final price paid in 2020 by end consumers of gas in the Contracting Parties, on average, covered the energy component i.e. contestable component of their annual gas bill. The share of energy component in the final gas price in 2020 ranged from 48% in Georgia to 77% in Serbia. The share of network charges, including both distribution and transmission network costs, ranged from 10% in North Macedonia and Ukraine to 37% in Georgia

End-user gas prices for household customers were regulated in all Contracting Parties in 2020, except in North Macedonia and Ukraine⁶⁷. For non- household customers, end-user prices were not regulated in Bosnia and Herzegovina (Republika Srpska), North Macedonia and Georgia. In Serbia and Ukraine certain industry categories may buy gas at regulated prices and in Moldova both regulated and non- regulated prices were available to non-households.

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, except in Georgia, while for gas it exists in Albania, North Macedonia, Bosnia and Herzegovina (Republika Srpska), 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; when the license of the current supplier has been revoked; when a final household customer does not choose a supplier at market opening and when a fix-term supply contract expires. 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 supplier's 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

⁶⁷ As of 1st August 2020.

disconnections due to non-payment for electricity in the Contracting Parties varies among countries (0.50% - 5.96%). The smallest share is in Ukraine and the biggest in North Macedonia. In 2020 share of household disconnections due to non-payment of electricity bills is lower than in 2019 due to the COVID-19 measures regarding the non-disconnections of consumer due to non-payments.

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 1,90% in North Macedonia to 6,81% in Kosovo*.

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). 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 Albania, North Macedonia, Serbia and Ukraine.

Frequency of billing information based on actual consumption was monthly in every Contracting Party during 2020. 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 2020 compared to 2019 roll out of smart meters increased in Bosnia and Herzegovina, Kosovo*, Montenegro, Serbia and Ukraine. The share of household customers with smart meters varies between 0.90% in Serbia to 82.83 % 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 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 and in Kosovo* a private mediator licensed by the Ministry of Justice. The majority of complaints reported for 2020 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.