ECRB Market Monitoring Report

Gas and Electricity Retail Markets in the Energy Community

Reporting period 2021 - Publication December 2022

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A. Introduction

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

The present report covers the Energy Community Contracting Parties (CP) **Albania, Bosnia and Herzegovina, Georgia, Kosovo*,**[2] **Moldova, Montenegro, North Macedonia, Serbia** and **Ukraine**. It describes the status quo of electricity and gas markets on retail level with the aim to identify potential barriers and recommend improvements. For the first time this year, the report includes information on retail energy markets in **Armenia and Türkiye**[3]. Due to significant and continuous electricity price increase in 2021 and the first half of 2022, this report also provides a brief overview of the measures adopted by the Governments and energy regulators of the Contracting Parties to address the energy crisis and protect consumers.

Data presented in this report refers to the year **2021** and, **for Chapter E Measures to support consumers during the energy price surge,** also **the first half of 2022**.

[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.

[3] The information on the energy markets in Türkiye is provided only for some of the chapters.

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

After 2020, when crisis caused by COVID pandemic had contributed to decrease of electricity consumption in the Energy Community Contracting Parties, a gradual suspension of COVID crisis measures in 2021 led to increase in electricity consumption. In the Energy Community, on average, the **total sale of electricity to final customers** increased by 6.23%. The highest increases of electricity consumption were in Kosovo* (12.81%) and Albania (10.77%). Electricity consumption increased between 6% and 7.5% in North Macedonia (6.01%), Ukraine (6.43%), Bosnia and Herzegovina (7.03%) and Moldova (7.45%), while in Serbia electricity consumption increased by 4.24% and in Montenegro 4.45%. The lowest increase of electricity consumption was in Georgia (1.84%). In Armenia, electricity consumption in 2021 also increased by 6.90% comparing to 2020 (from 5,811 GWh to 6,212 GWh).

The figures below show the total electricity sales to final customers in the period 2013-2021,[4] presented with and without data for Ukraine.

In 2021, electricity consumption of households and non-household customers increased in all Contracting Parties: consumption of non-households increased by 7.23%[5], and consumption of household customers increased by 4.55%[6]. In Armenia, electricity consumption also increased in the period 2020 - 2021, for non-households by 9.09% and for households 2.67%.

[4] Only for Moldova, presented data refers to the period 2015-2021.
[5] The increase of non-households' consumption for all CPs was 7.23% - 17.22% (Albania), 11.31% (Bosnia and Herzegovina), 1.10%% (Georgia), 12.95% (Kosovo*), 8.97% (Moldova), 1.94% (Montenegro), 8.01% (North Macedonia), 6.97% (Serbia). and 6.84% (Ukraine),
[6] The increase of households' consumption for all CPs was 4.55% - 4.23% (Albania), 2.43% (Bosnia and Herzegovina), 2.97%% (Georgia), 12.72% (Kosovo*), 5.68% (Moldova), 7.70% (Montenegro), 3.95% (North Macedonia), 1.10% (Serbia). and 5.52% (Ukraine),

Figure 1 *Total electricity sale to final customers in GWh 2013 – 2021*

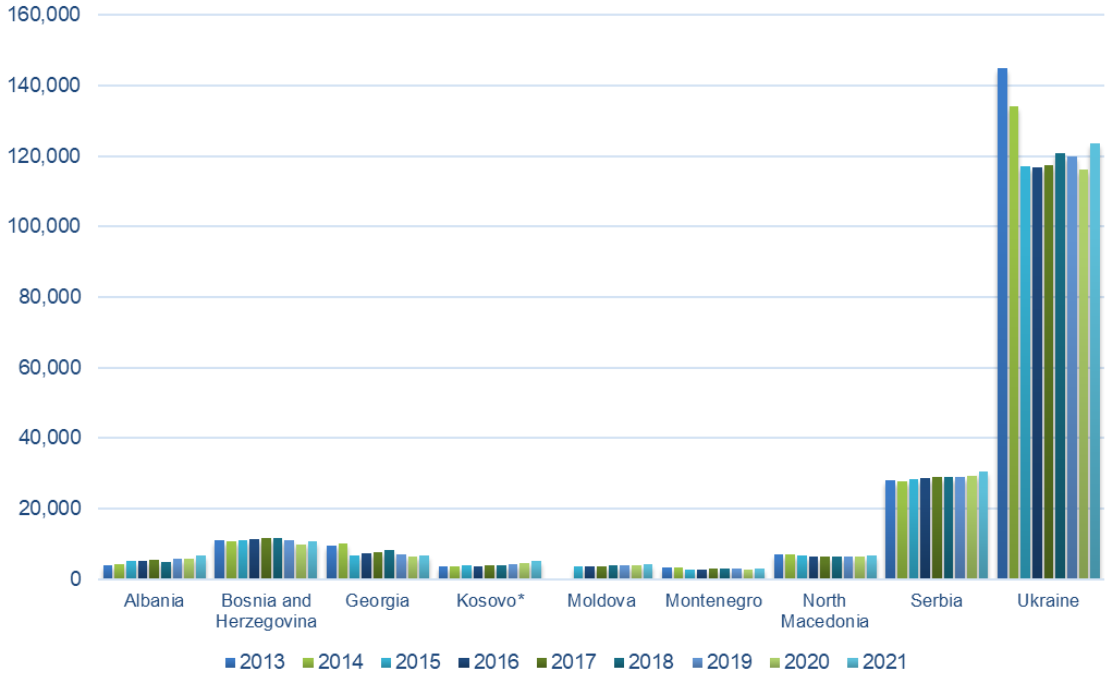
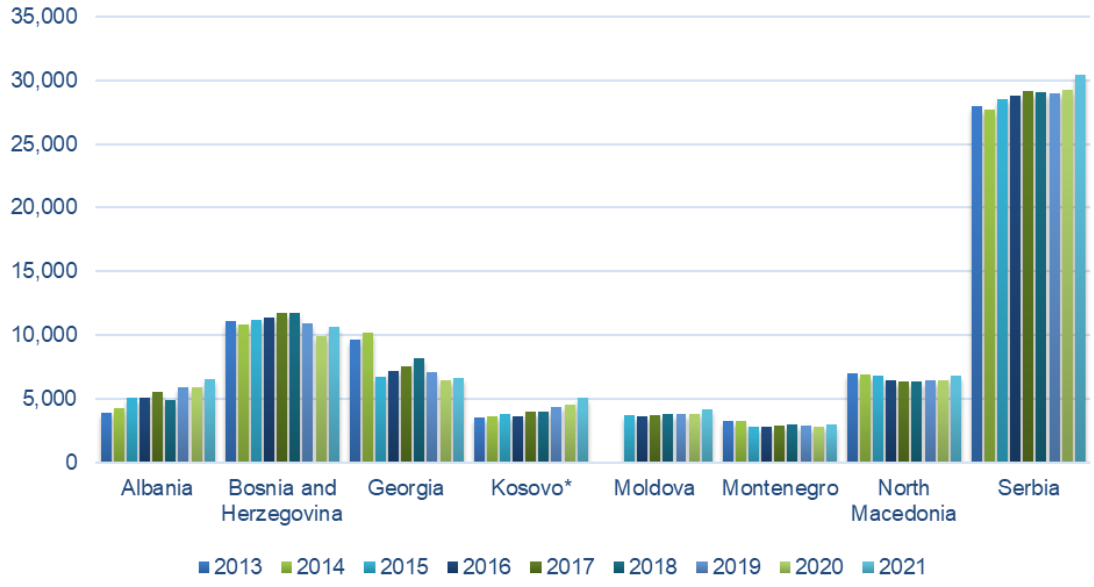
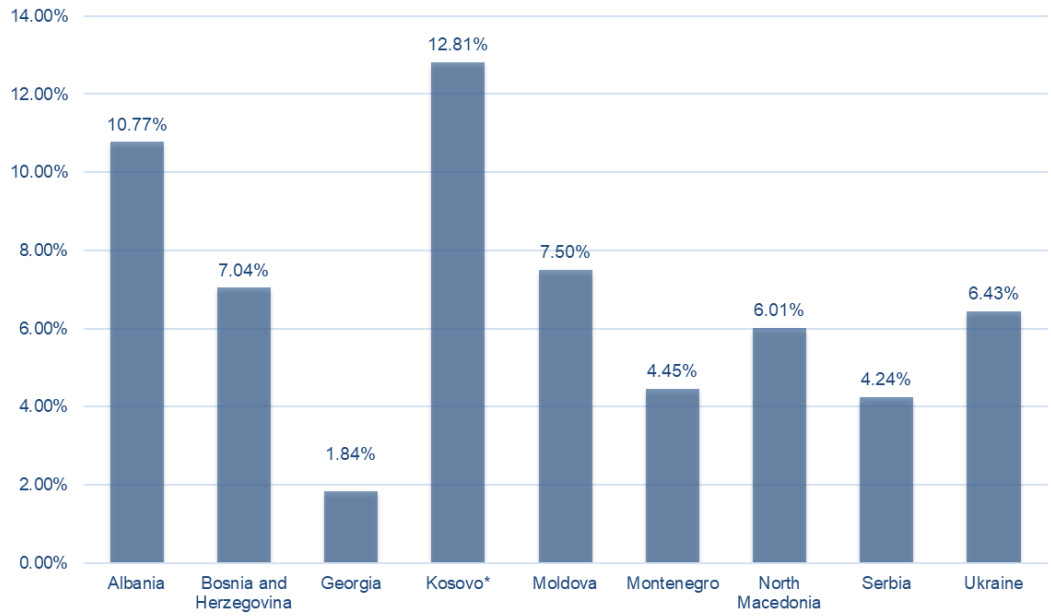


Figure 2 *Total electricity sale to final customers in GWh 2013 - 2021 (excluding Ukraine)*



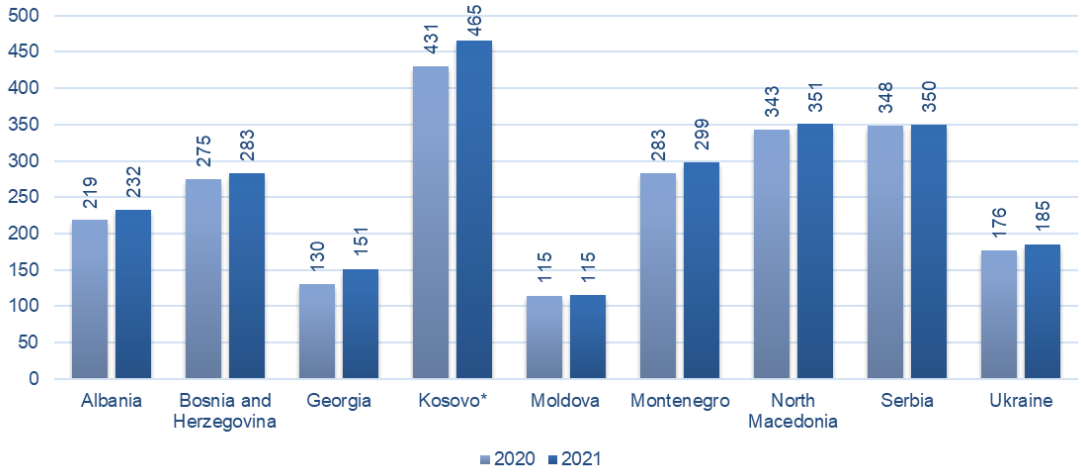
The following figure shows the growth rates of the total of electricity sales to final customers in the Contracting Parties from 2020 to 2021.

Figure 3 *Electricity demand growth rates 2020 to 2021*



The average monthly consumption of electricity per household[7] varies among the Contracting Parties. In 2021, the lowest consumption occurred in Moldova (115 kWh/month) and Georgia (151 kWh/month), the highest in Kosovo* (465 kWh/month). In the period 2020 - 2021, in all Contracting Parties except Moldova, consumption of electricity per household increased.[8] In Armenia average monthly consumption of electricity per household was 173 kWh/month. Relevant quantities are displayed in the figure below.

Figure 4 *Average monthly consumption of electricity per household in 2020 and 2021 (kWh)*



[7] 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 of the fact if they used electricity or not.

[8] Average monthly consumption of electricity per household in Moldova was not changed. In other Contracting Parties this consumption increased between 0.40% in Serbia and 16.33% in Georgia.

In all Contracting Parties, in Armenia and Türkiye, **licenses** have to be issued for the activity of supply of electricity to end-users. DSOs supply only customers located within the territory indicated in their licenses and hence there are no nationwide[9] suppliers.

During 2021, in Ukraine, the total number of **licensed** suppliers in the retail market significantly increased – by 110 compared to the previous year, while in Türkiye, the total number of licensed suppliers increased by 21. In Kosovo*, Moldova North Macedonia and Armenia, the total number of licensed electricity suppliers in the retail market increased by less than 10 suppliers, while in Bosnia and Herzegovina and Serbia the number of licensed electricity suppliers decreased by 3 suppliers. In Albania, Georgia and Montenegro, the number of licensed suppliers did not change in 2021 in comparison to 2020.

Not all the licensed suppliers were active in the retail markets in 2021. The Table 1 below provides information on the number of licensed and active suppliers in 2021 as well as the change in number of active suppliers between 2020 and 2021. In all Contracting Parties, all suppliers are allowed to offer products on the whole territory[10].

Table 1 *Number of active suppliers in retail electricity markets in 2021*

	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	24	21	21	-1
Armenia	4	1	1	0
Bosnia and Herzegovina	20	12	8	0
Georgia	2	2	0	0
Kosovo*	9	1	1	0
Moldova	46	8	8	1
Montenegro	6	1	1	0
North Macedonia	98	18	18	-7
Serbia	60	11	11	0
Türkiye	293	293	293	21
Ukraine	955	523	523	52

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 2021.

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

[9] Nationwide supplier means a supplier offering its products on the whole territory of a country.
[10] In Bosnia and Herzegovina and Ukraine, the universal suppliers are entitled to sell electricity only to the customers in the designated area, however when not providing universal service, these suppliers are also allowed to supply customers on the whole territory of the country.
[11] Net means the number of entries minus the number of exiting suppliers in the market.

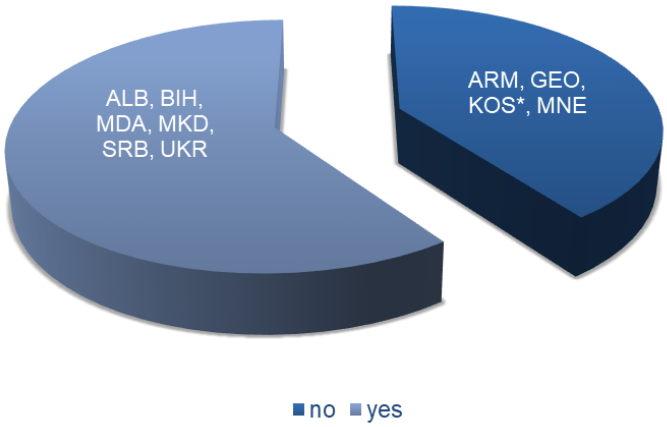
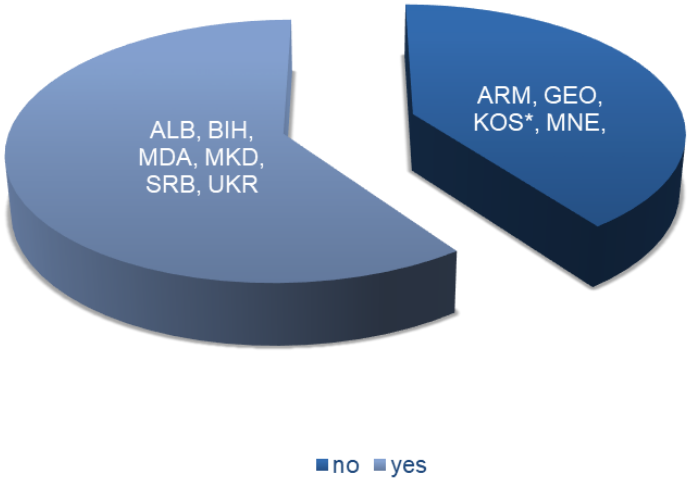


Figure 6 *Are there electricity suppliers other than incumbent supplying customers connected to the distribution network?*



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 Albania, there were three retail suppliers covering at least 5% of the market demand (83%, 5% and 5%).
- In Bosnia and Herzegovina, 12 suppliers were active in the retail market in 2021.There were three retailers selling at least 5% of the total electricity consumed by final customers, with a joint market share of 95.10%.
- 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. Customers that are connected to the transmission network (220 kV and 110 kV voltage level) are supplied under non-regulated prices from the

incumbent supplier, so the incumbent supplier supplied all customers on the retail electricity market.

- In Moldova, there were 8 retail electricity suppliers active in the retail market. Three of them were selling at least 5% of total electricity consumed by final customers in 2021, with a joint market share of 99.46% of the total sale of electricity on the retail market.
- In Montenegro, only one retail electricity supplier was active in the market. In 2021, the biggest customer "*Kombinat Aluminijuma*"[12] purchased electricity for its own needs from the incumbent undertaking at the wholesale prices[13].
- In North Macedonia, there were 18 active suppliers and 5 of them were selling at least 5% of total electricity consumed by final customers in 2021 (market share of the largest supplier was 53%). The market share of the three largest electricity suppliers was 76%.
- In Serbia, there were 11 active suppliers. The great majority of customers were supplied by the incumbent supplier covering a market share of 96.15% of the total sale of electricity to end customers and only this supplier sold more than 5% of total electricity consumed by final customers in 2021. The market share of three largest companies was 99.59%.
- The largest number of electricity suppliers are operating in Ukraine –there were 523 active suppliers on the retail electricity market in 2021. Only 6 suppliers were selling at least 5% of total electricity consumed by final customers in 2021. The market share of the three largest suppliers was 28.56% (market share of the largest supplier was 16.33%).
- In Armenia, there was only one active retail supplier with a 100% market share.

[12] The consumption of "Kombinat Aluminijuma" was 19.06% of total electricity consumed by final customers in Montenegro.
[13] Elektroprivreda Crne Gore performs both generation and supply activities.

Table 2 *Electricity retail market concentration and market opening in 2021*

	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	3	93.00%	100.00%
Armenia	1	100.00%	100.00%
Bosnia and Herzegovina	3	95.10%	100.00%
Georgia	2	100.00%	100.00%
Kosovo*	1	100.00%	100.00%
Moldova	3	99.46%	100.00%
Montenegro[14]	1	100.00%	100.00%
North Macedonia	5	76.00%	100.00%
Serbia	1	99.59%	100.00%
Ukraine	6	28.56%	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 2021, in most of the Contracting Parties legal requirements were in place allowing customers to choose their supplier. All customers in the Contracting Parties are eligible to choose their supplier. In Armenia, 91.27%[15] and in Türkiye 51.11% of all customers were eligible to choose their supplier in 2021.

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 Albania, Bosnia and Herzegovina, Kosovo*, North Macedonia, Montenegro, Serbia and Ukraine.

[14] In 2020, the biggest customer "*Kombinat Aluminijuma*" purchased electricity for its need from EPCG, so EPCG supplied all customers on the retail electricity market.
[15] In Armenia, vulnerable customers do not have right to choose supplier.

The table below shows the **switching rates,** measured by using the numbers of metering points, in the analyzed markets in 2021. 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.

Table 3 *Annual switching rates in electricity markets in 2021 (in %)*[16]

	Number of eligible customers under national legislation/number of customers that switched supplier in 2021	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	1,279,460/58	0	0	0	0	0	0
Armenia	973,662/0	0	0	0	0	0	0
Bosnia and Herzegovina	1,570,415/12	0.0008	0.000	0.0095	2.207	0.000	4.089
Georgia	Nap	Nap	Nap	Nap	Nap	Nap	Nap
Kosovo*	655,656/0	0	0	0	0	0	0
Moldova	1,423,047/1,463	0.103	0	1.453	9.262	0	16.470
Montenegro	413,404/0	0	0	0	0	0	0
North Macedonia	888,998/15,123	1.701	0	14.972	10.204	0	19.743
Serbia	3,725,580/ 11,186	0.300	0.116	1.752	4.027	0.028	7.357
Türkiye	24,183,220/ 386,085	0.82	0.01	4.55	62.85	0.15	82.91
Ukraine[17]	18,188,764/ 278,022	1.529	0.014	21.432	22.011	0.898	31.319

In Albania, Georgia, Kosovo*, Montenegro and Armenia, there was no supplier switching in 2021. A very small number of eligible customers changed their suppliers in Bosnia and Herzegovina[18]. In Moldova, customers on more than thousand metering points, in North Macedonia and Serbia on several thousand metering points, in Türkiye on more than 386,000 and in Ukraine on more than 278,000 metering points changed their suppliers in 2021, which means that the annual switching rate in the whole retail market calculated by number of metering points was 1.7% in North Macedonia, 1.5% in Ukraine and less than 1% in Moldova, Serbia and Türkiye. However, when the annual switching rate in the whole retail market is

[16] "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.
[17] The switching data for Ukraine was collected without information from 1 DSO (out of 32 DSOs) which was unable to provide relevant data due to Russian military aggression against Ukraine.
[18] Annual switching rate in the whole retail market calculated by number of metering points was very small (Bosnia and Herzegovina 0.0008%) but annual switching rate in the whole retail market calculated by volume of consumption was 2.207% in Bosnia and Herzegovina.

calculated by volume of consumption, the relevant rates were 9.3% in Moldova, 10.2% in North Macedonia, 4% in Serbia, 22% in Ukraine and in 62.85% Türkiye. Except for Serbia, Türkiye and Ukraine, only non-household customers changed their suppliers. In Serbia, Türkiye and Ukraine, a very small number of household customers left the incumbent electricity supply at regulated prices and chose a new supplier.

The increasing **number of switching requests** is a proof of market liquidity development. In North Macedonia, Serbia and Ukraine this number increased[19], in Bosnia and Herzegovina[20] and Türkiye [21] decreased, in Moldova this data was not collected, while in remaining Contracting Parties and Armenia there were no requests for switching supplier in 2021.

3. End-user electricity prices[22]

In the Energy Community Contracting Parties, final average household and industry prices increased in 2021 when compared to 2020 – by 5% for household segment and 11% for industry. For the first time since 2013, average prices for non-households were higher than the average household prices.

From 2013 to 2021, electricity prices for households in the Contracting Parties excluding Ukraine increased, on average, by 20%, while industrial prices increased on average by 28%. Over the same period, in Ukraine, electricity prices for households increased by 67% and industry prices decreased by 33%. The unwinding of cross-subsidization partially explains the price dynamics in the two segments.

In 2021, the average electricity price for household consumers in the Contracting Parties excluding Ukraine was 8.08 euro cents/kWh. This is 2.8 times less than the average EU electricity price for households in 2021. Household consumers in Ukraine paid in 2021, on average, around 1.7 times less than in other Contracting Parties – only 4.85 euro cents/kWh.

As in previous years, variations in the electricity price were observed across the Contracting Parties. In 2021, household electricity prices were highest in Montenegro (9.77 euro cents/kWh), which is twice the price paid by household electricity consumers in Ukraine. In comparison to 2020 prices, the slight decreases for household consumers were recorded in the Bosnia and Herzegovina, Kosovo* and Montenegro while in Moldova electricity prices decreased by 16%. In other Contracting Parties, electricity prices increased (the biggest increase was registered in Ukraine – 12.5%). Over the 2013 - 2021 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.

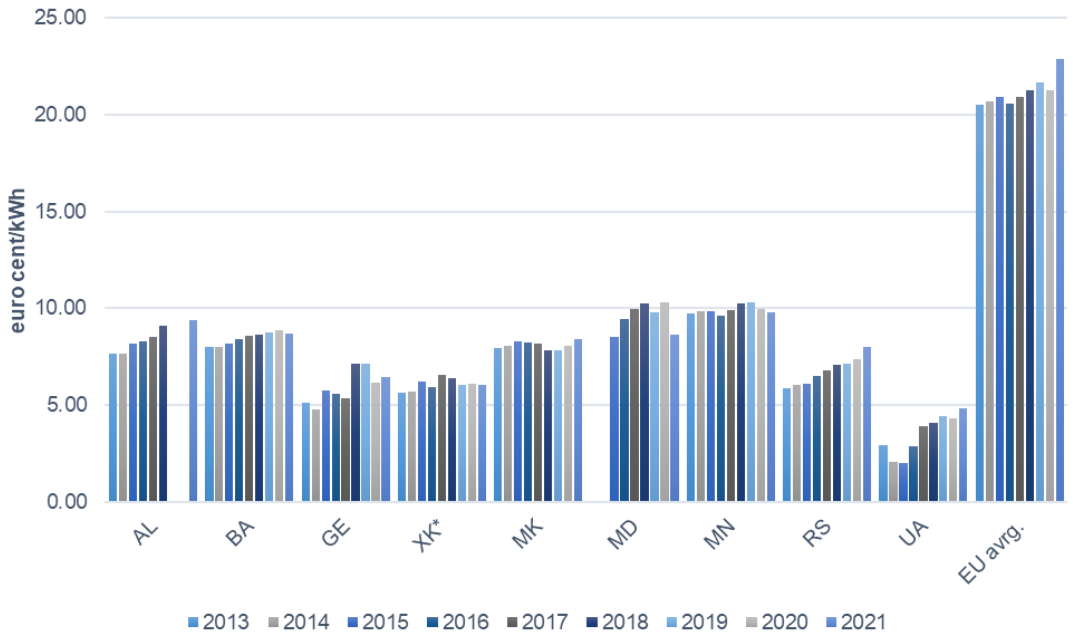
From 2013 to 2021, in part of the Contracting Parties, industrial electricity consumers observed decreasing electricity prices (Moldova - 43%, Montenegro - 2.5%, Ukraine - 33%)..

[19] Number of requests increased in North Macedonia from 2,596 in 2020 to 5,061 in 2021, in Serbia from 2,503 in 2020 to 5144 in 2021 and in Ukraine from 13,850 in 2020 to 35,420 in 2021
[20] Number of requests decreased in Bosnia and Herzegovina from 16 in 2020 to 12 in 2021.
[21] Number of requests decreased in Türkiye from 1.015.837 in 2020 to 386.085 in 2021.
[22] Information in this chapter was prepared based on EUROSTAT information, also for the purpose of ACER Market Monitoring Report 2021 (https://www.acer.europa.eu/sites/default/files/documents/Publications/MMR_2021_Energy_Retail_Consumer_Protection_Volume.pdf).

This was not the case for consumers in Bosnia and Herzegovina, Georgia, North Macedonia and Serbia, where average industrial prices increased by 33%, 43%, 23% and 48%, respectively. The highest year-to-year increase (76.6%) was observed in Georgia, where prices increased from 4.82 euro cents/kWh in 2020 to 8.51 euro cents/kWh in 2021. The lowest electricity prices for industrial electricity consumers were in Ukraine with 6.59 euro cents/kWh on average, whereas the highest industrial price was reported in North Macedonia (9.91 euro cents/kWh). In 2021, average electricity prices for industrial consumers in the Contracting Parties were around 63% of the average electricity prices for industry in the EU Member States.

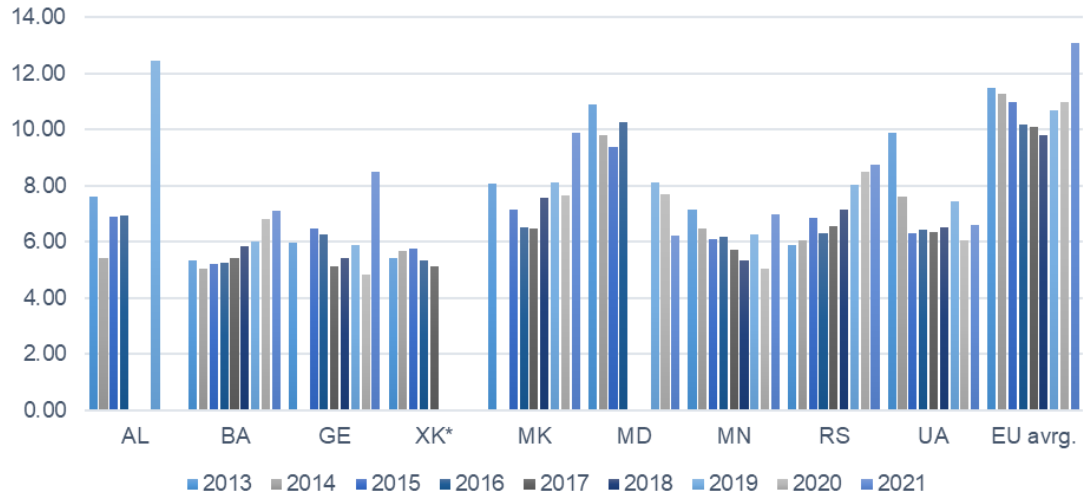
Figures 7 and 8 show the final electricity prices in nominal terms for household and industrial consumers in the Contracting Parties from 2013 to 2021 (in euro cents/kWh).

Figure 7 *Final electricity prices in nominal terms for household consumers in EnC CPs - 2013-2021 (euro cents/kWh)*



Source: Energy Community Secretariat calculations based on Eurostat and NRAs. Band DC: 2,500–5,000 kWh (household electricity consumption), September 2022

Figure 8 *Final electricity prices in nominal terms for industrial consumers in EnC CPs - 2013-2021 (euro cents/kWh)*



Source: Energy Community Secretariat calculations based on Eurostat and NRAs. Band IE: 20,000–70,000 MWh (industrial electricity consumption), September 2022

4. Electricity price breakdown for households[23]

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).

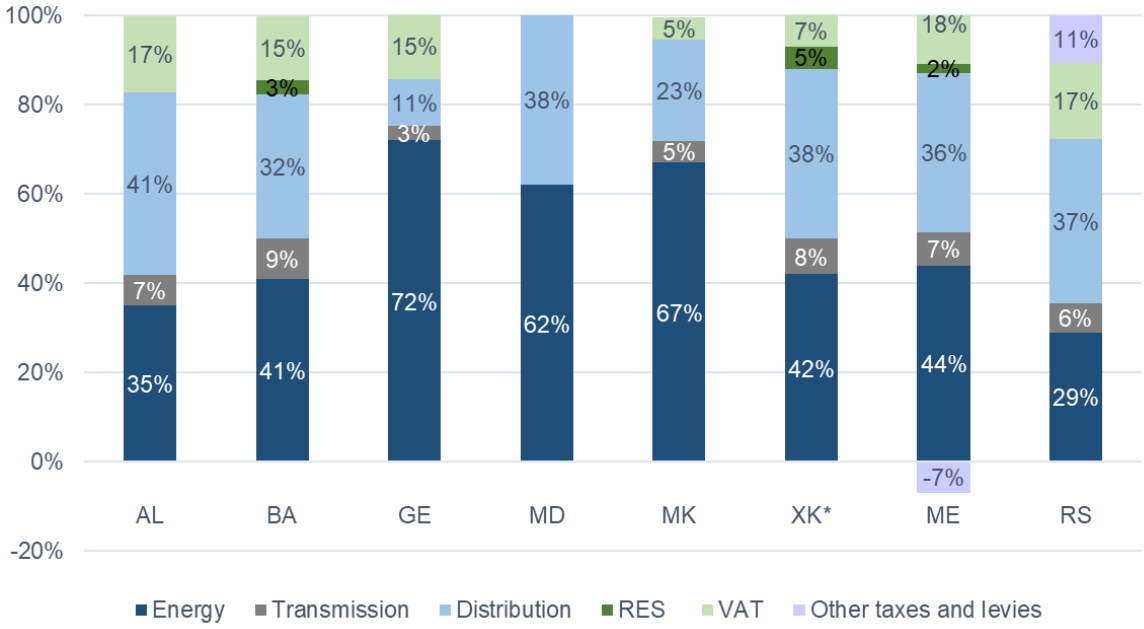
Figure 9 shows the breakdown of the final electricity price for households in the Contracting Parties in 2021. The composition of final household electricity price varies widely across the Contracting Parties. The share of the energy component in the final bill was the highest in Georgia (72%) and the lowest in Serbia (29%). In the Contracting Parties, the share of network costs in the total household electricity price ranged between 14% in Georgia and 48% in Albania.

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 support mechanism was reported in 2021. In Serbia, the category other taxes and levies includes RES support, energy efficiency support and excise tax. In North Macedonia, the RES charge is part of the energy charge and is not presented separately in the EUROSTAT database. In other Contracting Parties, the RES support varies between 2% of the final household price in Montenegro, 3% in Bosnia and Herzegovina 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 North Macedonia it was decreased in 2021 to only 5% as a measure to protect consumers from price surge. In other Contracting Parties, VAT shares range between 7% and 18%. The

[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%20%E2%80%93%20Energy%20Retail%20and%20Consumer%20%20Protection%20Volume.pdf)

component *other taxes and levies* for Montenegro (-7%) refers to the discount on electricity price applied by incumbent supplier.

Figure 9 *Breakdown of electricity prices for households in EnC CPs - 2021*[24]



Note: The price breakdown is calculated for the EUROSTAT Band DC, whereby the shares of distribution and transmission in the total network cost are based on the average price for all households.

Source: ECS calculations, based on EUROSTAT, November 2022

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.

Household customers were entitled to regulated end-user prices in all Contracting Parties in 2021, except in Montenegro where all categories of consumers are supplied under non-regulated prices. According to the Energy Law of Montenegro, the supplier which had the status of a public supplier until the day of entry into force of this Law, is entitled to change prices for households and small sized non-household customers[25] under certain restrictions. Namely, the prices for this category of customers cannot be increased beyond the weighted electricity price realized in the previous year and futures for the following year on a reference energy exchange nominated by the regulator; this means the price increase was limited to 7% in 2017 and 6% in 2018 and 2019. 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 -

[24] The information is not available for Ukraine.
[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 EUR or its total assets (property by the income statement) do not exceed 8,000,000 EUR.

2022 and it is limited to 6%. The end-user prices for households were also regulated in Armenia, while in Türkiye, the end-user prices for last resort and non-eligible households were regulated.

All household customers were supplied at regulated prices in the analyzed markets. The exceptions are Montenegro (see above), Serbia, where a very small number of household customers left the electricity supply at regulated prices and were supplied under non-regulated prices in 2021[26] and Türkiye, were certain households (around 0,01% of total household customers) were supplied at non-regulated prices.

In Albania, there is no price regulation only for non-households connected to the 35kV network[27] . 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;[28] for all other customers (about 8% 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 prices[29]. In Moldova[30] all final customers had the possibility to be supplied at regulated end-user prices. However around 1.5% of non-household customers were supplied at negotiated prices and they consumed almost 17.5% of the electricity consumed by all non-household customers in 2021). In Montenegro, all non-household customers were supplied at non-regulated prices[31] . In North Macedonia, only small consumers[32] were supplied under regulated prices (28.4% of non-household customers supplied at non-regulated prices and they consumed almost 90% of the electricity consumed by all non-household customers). In Serbia, only small customers had the possibility to be supplied at regulated end-user prices;[33] for all other non-household customers (almost 35% of non-household customers who consumed more than 92% of the electricity consumed by all non-household customers), prices were not regulated. In Ukraine, only small non- household

[26] In Serbia 2,414 of 3,306,174 household supplied at non-regulated prices by incumbent supplier.
[27] 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
[28] 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.
[29] 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.
[30] Small customer is an enterprise that has a number of employees of up to 50 people and an annual turnover or a balance sheet that does not exceed the equivalent in lei of 10 million euros.
[31] As previously mentioned, the annual price increase limit was in force for small consumers in 2021.
[32] 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
[33] 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 10 million EUR 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.

consumers were supplied under regulated prices.[34] For all other non-household customers prices were not regulated (about 38% of non-household customers who consumed more than 93% of the electricity consumed by all non-household customers). In Georgia non-household consumers had the possibility to be supplied at regulated prices, except for the customers that are connected to 35-100 kV lines and customers that are connected to 6-10 kV lines and consume at least 1 million kWh. In Armenia and Türkiye, 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 2021*

	Number of non-household customers supplied at non-regulated prices in (number of metering points)	
	2020	2021
Albania	53	72
Armenia	0	0
Bosnia and Herzegovina	13,640	9,910
Georgia	17	47
Kosovo*	3	3
Moldova	1,055	1,463
Montenegro	16,694	16,199
North Macedonia	33,291	n/a
Serbia	118,107	144,410
Türkiye	1,013,683	359,333
Ukraine	40,369	142,025

In 2021, end-user electricity prices were regulated using the following **methodologies**:

- Rate of return/cost plus in Bosnia and Herzegovina and Serbia;
- Revenue cap/price cap in Kosovo*, North Macedonia, Moldova and Türkiye
- Cost plus in Georgia;
- In Ukraine the regulated end-user prices for households are directly set by the Government within PSO regulation, for small non-households – calculated and formed by USS according to the NRA's methodology that defines the end user price as a sum of estimated price of electricity purchased on the market by the USS, TSO tariff, DSO tariff, tariff for USS services"

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

[34] 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

the wholesale market developments. One of the most efficient tools for doing so is a frequent update of the regulated energy component, so to allow the final price to reflect changes in the wholesale market. This will also offer customers the possibility to estimate if retail companies, other than incumbent suppliers, provide cheaper energy. Frequency of energy component update in the analyzed markets is different in Contracting Parties:

- Ukraine[35]: for small non-households, once a month; the end-user prices for households are regulated by the decisions of the Cabinet of Ministers, in the framework of the public service obligation rules, where there is no provision on the frequency of price update;
- Georgia, Moldova[36], Montenegro, North Macedonia: once per year;
- Kosovo* and 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 Bosnia and Herzegovina, Kosovo*, Moldova, Montenegro, North Macedonia, Serbia, Türkiye and Ukraine.

[35] For small non-households being supplied by the universal supplier under the price set according to NRA's methodology - use of the energy component depends on the formula used for calculation of the price for universal services and varies from three months to one month before billing month.
[36] Once per year or more often in cases when the deviation between real costs and costs included in regulated tariffs exceed 5%

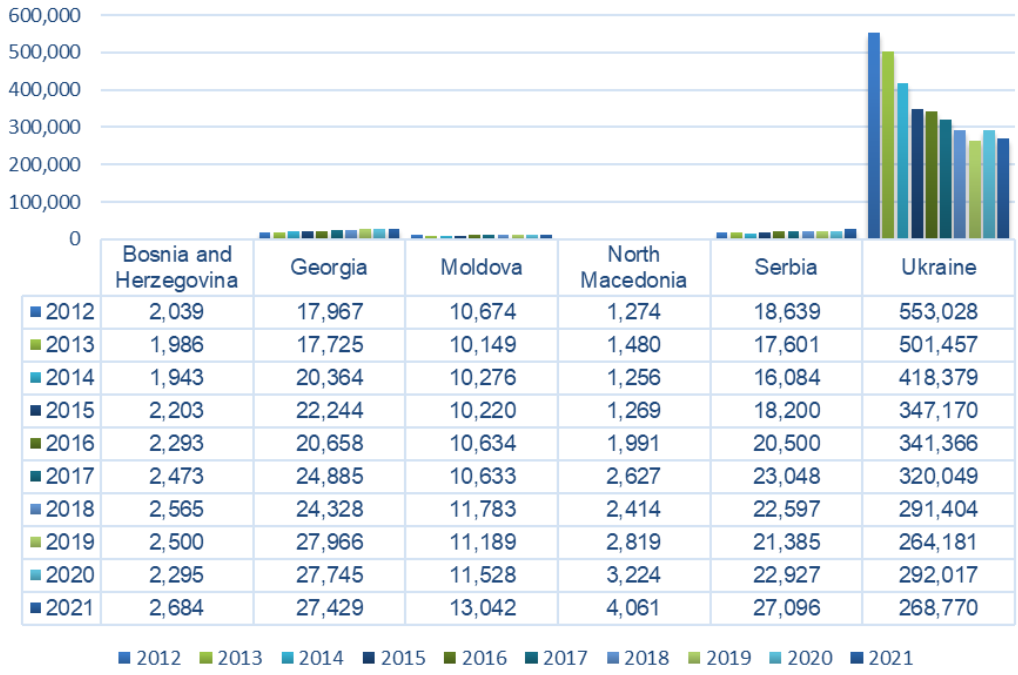
C. Findings: Gas

This part of the report provides analysis of the retail gas markets in Bosnia and Herzegovina,[37] 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 2021 by 47%. On the other side, in Ukraine, the demand decreased by 51% over the same period. With the exception of the clear downwards gas demand trend observed in Ukraine for the period 2012 - 2021, caused predominantly by efforts towards less import dependence, gas consumption in the Contracting Parties varies depending on industry performances[38] and winter temperatures. The figures below present the total gas sales to final customers in the period from 2012 to 2021 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.

Figure 10 *Total sale of gas to final customers in the Energy Community Contracting Parties in the period 2012 - 2021 (in GWh)*

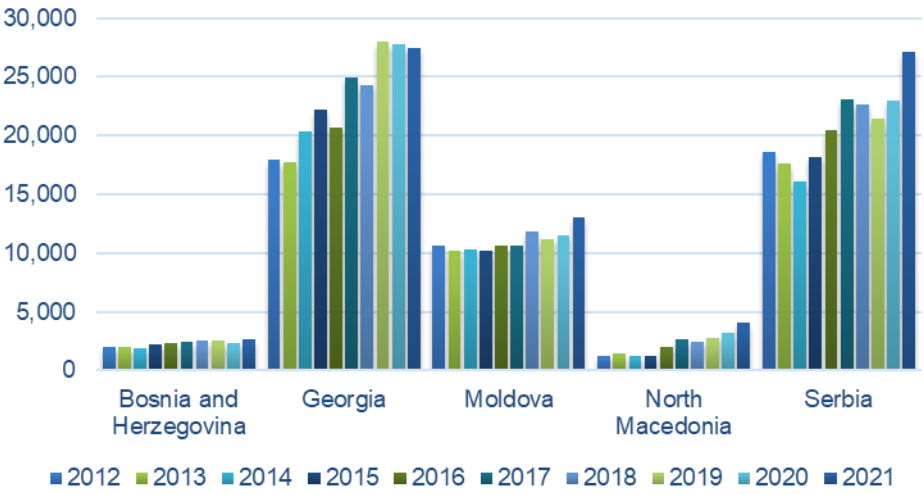


	Bosnia and Herzegovina	Georgia	Moldova	North Macedonia	Serbia	Ukraine
2012	2,039	17,967	10,674	1,274	18,639	553,028
2013	1,986	17,725	10,149	1,480	17,601	501,457
2014	1,943	20,364	10,276	1,256	16,084	418,379
2015	2,203	22,244	10,220	1,269	18,200	347,170
2016	2,293	20,658	10,634	1,991	20,500	341,366
2017	2,473	24,885	10,633	2,627	23,048	320,049
2018	2,565	24,328	11,783	2,414	22,597	291,404
2019	2,500	27,966	11,189	2,819	21,385	264,181
2020	2,295	27,745	11,528	3,224	22,927	292,017
2021	2,684	27,429	13,042	4,061	27,096	268,770

Source: National regulatory authorities

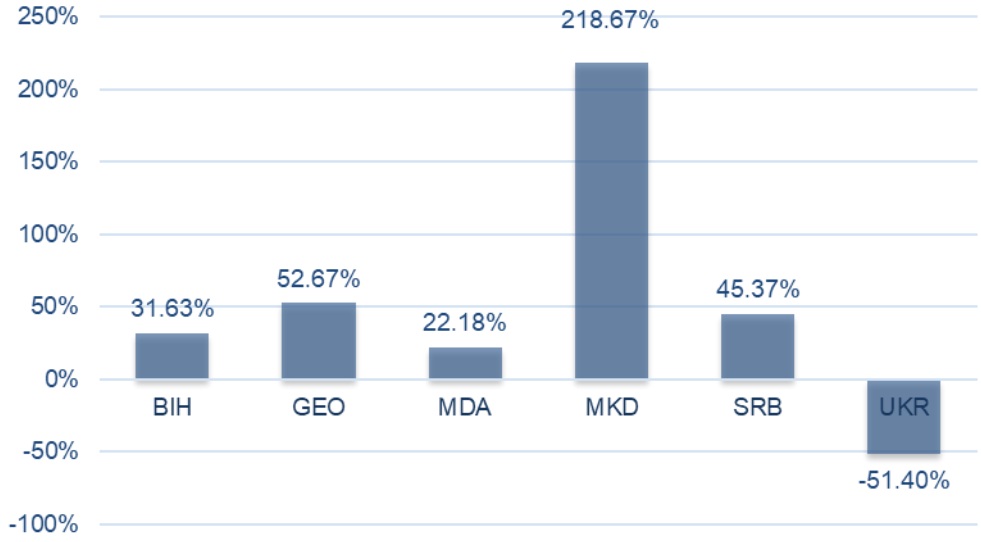
[37] The information for Bosnia and Herzegovina was provided by the regulatory authorities of Republika Srpska and Federation of Bosnia and Herzegovina.
[38] In North Macedonia, deployment of the biggest consumer - CHP plant in summer months strongly influences the average level of gas demand.

Figure 11 *Trends in sale of gas to final customers in GWh (excluding Ukraine)*



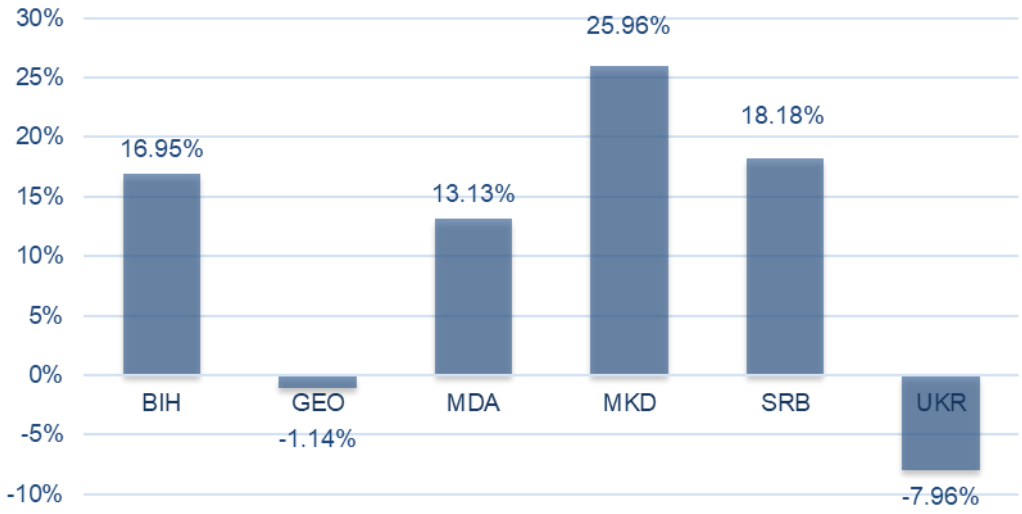
Source: National regulatory authorities

Figure 12 *Growth rates of gas demand 2012 to 2021*



Source: National regulatory authorities

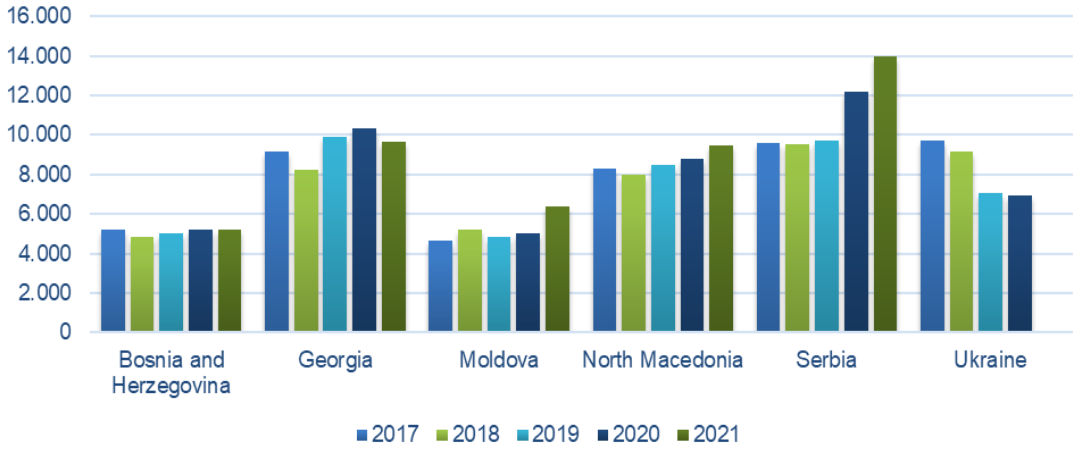
Figure 13 *Growth rates of gas demand 2020 to 2021*



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 14 *Average annual gas consumption per household in 2017 - 2021 (in kWh)*[39]



The number of active suppliers ranged from four in Bosnia and Herzegovina and six in North Macedonia to 248 in Ukraine. The majority of active retail suppliers hold a license for supplying customers nationwide, i.e. those suppliers that are entitled to supply not only in 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.

[39] For Ukraine, the information is not available for 2021.

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). On the other side, in all Contracting Parties except Moldova and Serbia, customers connected to the transmission network could be supplied by more than one supplier. To achieve positive market opening effects, it is of utmost importance to enable efficient separation of supply and network activities and allow gas retailers to supply customers nation-wide.

Table 5 *Number of active gas suppliers in 2019, 2020 and 2021*

	Number of licensed gas suppliers			Number of active gas suppliers		
	2019	2020	2021	2019	2020	2021
Bosnia and Herzegovina	7	6	6	3	4	4
Georgia	There is no license for retail gas supply			31	33	30
Moldova	17	24	24	10	14	14
North Macedonia	9	10	11	6	6	6
Serbia	70[40]	74[41]	71[42]	35	34	34
Ukraine	626	785	907	249	286	248

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 largest companies in the retail gas market increased from 61% in 2020 to 75% in 2021 in Ukraine and decreased slightly in Moldova (from 98% to 95%), whereas in other Contracting Parties remained stable.
- 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 2021. Obstacles to retail market entries in other Contracting Parties stem mostly from reasons other than retail market design, namely the status of wholesale market development (e.g. single source of gas and poor access to liquid wholesale markets). The effect of regulation of end-user prices is also substantial.

[40] 64 on non-regulated market, six (6) just on regulated segment i.e. for public supply.
[41] 65 on non-regulated market, nine (9) just on regulated segment i.e. for public supply.
[42] 65 on non-regulated market, six (6) just on regulated segment i.e. for public supply.

Table 6 *Retail gas market concentration in 2021*

	Number of gas retailers selling at least 5% of total gas consumed by final customers	Market share of the 3 largest companies in the retail market (aggregated) in %	Estimated incumbent market share in the household market, in % of annual consumption
Bosnia and Herzegovina	3	100%	100%
Georgia	3	85.40%	100%
Moldova	1	95.23%	100%
North Macedonia	3	97.94%	100%
Serbia	1	87.51%	100%
Ukraine	4	75%	na

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 2021**. In **Ukraine**, **6.88% of households, measured in number of metering points, changed supplier**. This trend continued after in August 2020 the end-user price regulation for households was removed.

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

- In Bosnia and Herzegovina, Georgia and North Macedonia, none of the non-households changed supplier in 2021;
- In Moldova, 82 non-households changed their supplier in 2021 and in Serbia 31.
- In Ukraine, 10.10% of non-households, measured in number of metering points, switched supplier.

3. End-user natural gas prices[43]

Between 2013 and 2021, average gas household prices in the Contracting Parties without Ukraine decreased by 25%. In the same period, households in Ukraine, as shown in Figure 15, recorded an increase of gas prices of around 230%. Average industrial prices decreased in the Contracting Parties excluding Ukraine, by 33%. In Ukraine, industrial prices decreased by 44% over the same period.

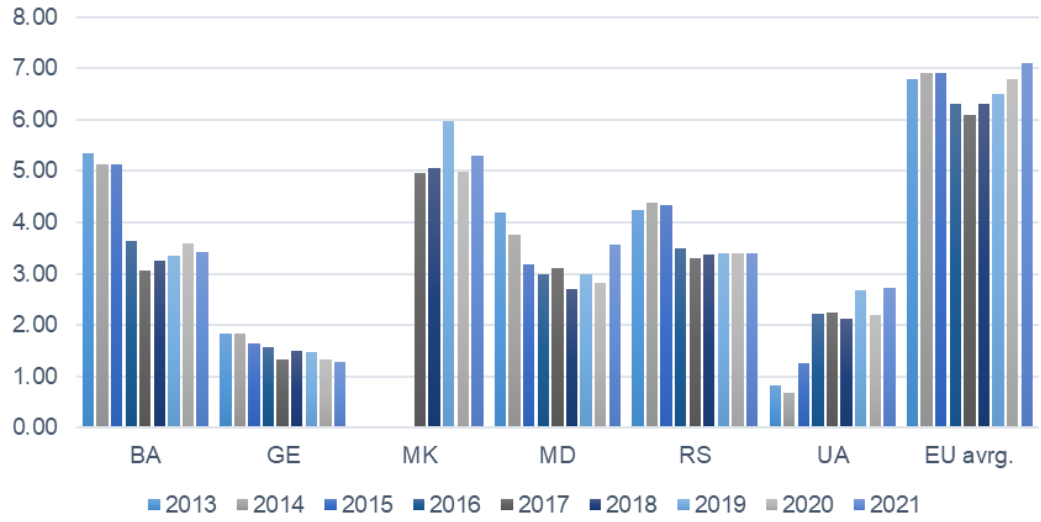
[43] Information in this chapter was prepared based on EUROSTAT information, also for the purpose of ACER Market Monitoring Report 2021 (https://www.acer.europa.eu/sites/default/files/documents/Publications/MMR_2021_Energy_Retail_Consumer_Protection_Volume.pdf).

In 2021, despite the energy crisis, both household and industry gas prices increased only by 8.7% i.e. 2% in comparison to 2020. Greater than average increases in gas prices for both segments were registered in Ukraine (25% for households and 57% for non-households), Moldova (25% for households and 10% for non-households) and in North Macedonia (6% for households and for industry - close to 17%).

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 (5.29 euro cents/kWh) was more than four times higher than 1.28 euro cents/kWh paid by Georgian households. In the industrial segment, the price paid by consumers in Georgia (1.85 euro cents/kWh) was only 43% of the price paid by consumers in Bosnia and Herzegovina (4.33 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 2021, regulated household gas prices existed in majority of the Contracting Parties except North Macedonia and partially Georgia.[44] In the industrial sector, gas prices were regulated in Moldova and partially in Bosnia and Herzegovina[45] and Serbia.[46] In Ukraine, the final industry prices were regulated only for district heating companies. The degree of cross-subsidization decreased over the observed period in all Contracting Parties.

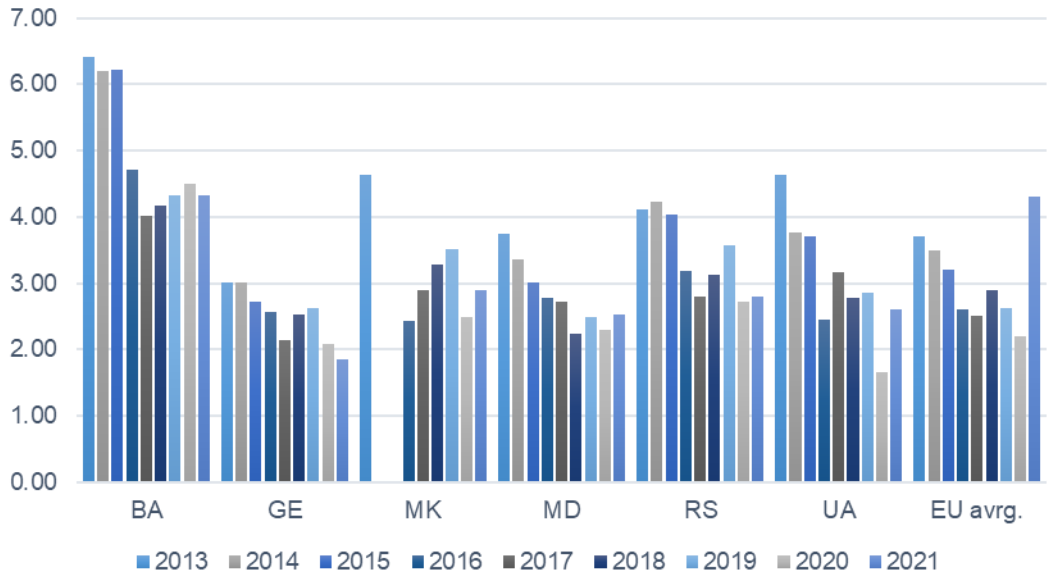
Figure 15 *Final gas prices in nominal terms for household consumers in EnC CPs - 2013-2021 (euro cents/kWh)*



Source: Eurostat, Band D2: 20–200 GJ (household gas consumption), September 2022

[44] Customers connected to the distribution network before 2008 do not have regulated prices, unless the NRA set supply tariffs for such customers after 1 July 2017.
[45] If metering point is less than 95 kW.
[46] 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 industrial consumers in EnC CPs - 2013-2021 (euro cents/kWh)*



Source: Eurostat, Band I5: 1,000,000–4,000,000 GJ, for Bosnia and Herzegovina, Ukraine and Serbia i.e. Band I4: 100 000 GJ -1 000 000 GJ, for Georgia, Moldova and North Macedonia, (industrial gas consumption), *September 2022*

4. Gas price breakdown for households[47]

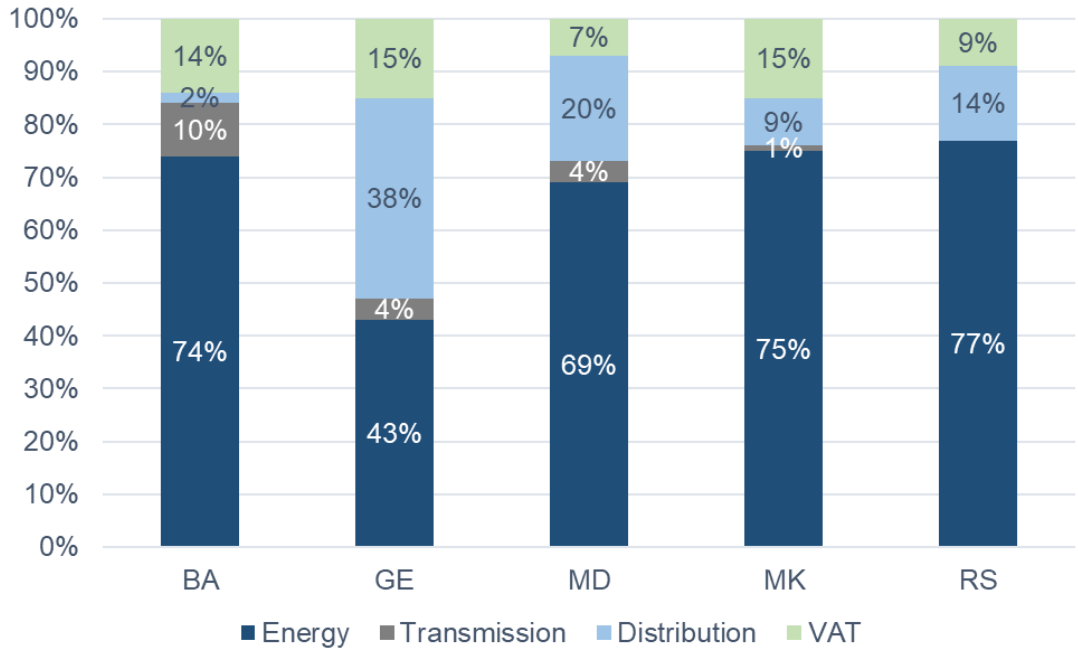
The following figure illustrates the breakdown of gas prices for households in the Contracting Parties, for which the information was available and where a gas market exists[48]. The share of energy component in the final gas price in 2021 ranged from 43% in Georgia to 77% in Serbia. The share of network charges, including both distribution and transmission network costs, ranged from 10% in North Macedonia to 42% in Georgia[49].

Differently from the EU Member States, more than half of the final price paid in 2021 by end consumers of gas in majority of the Contracting Parties, on average, covered the energy component i.e. contestable component of their annual gas bill.

[47] 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%20%E2%80%93%20Energy%20Retail%20and%20Consumer%20%20Protection%20Volume.pdf).

[48] For Ukraine, information for 2021 is not available.
[49] In Serbia, the transmission charge is included in the energy component.

Figure 17 *Breakdown of household gas prices in the EnC CPs- 2021 (in %)*



Source: *ECS calculations based on Eurostat, November 2022*

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 2021,[50] except in North Macedonia and Ukraine.

Application of price regulation for industry differs among Contracting Parties:

- In Bosnia and Herzegovina (Republika Srpska), North Macedonia, Georgia and Ukraine[51], end-user prices for industry are not regulated;
- In Serbia, small and medium enterprises with a yearly consumption up to 100.000 m3 and connected to the distribution system may buy gas at regulated prices.
- 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

[50] It is worth noting that all customers, including households, are eligible to change their suppliers. However, in all Contracting Parties protected customer categories (households, small industry and/or district heating) have the right to be supplier at regulated prices.
[51] The last public service obligation in Ukraine - for the heating companies, was abandoned as of May 2021

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

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. The Clean Energy Package builds on these measures, further facilitating transition to a carbon-neutral economy for the benefit of all citizens. A wide range of initiatives that aim to make consumers an active part of the clean energy transition is provided. 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[52].

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 3 of Directive 2009/72, Contracting Parties 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.

[52] The implementation of consumer protection provisions of the Electricity Directive 2019/944, as adopted for the Energy Community Contracting Parties in November 2021, will be analysed as of the next reporting period.

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 2021*

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	8	3
If a household customer is dropped by its current supplier because of non-payment	5	1
The current supplier has gone bankrupt and is no longer doing business	9	4
The license of the current supplier has been revoked	9	4
If a final household customer does not choose a supplier at market opening	4	3
If a fix-term supply contract expires	5	2
Other reasons	3	1
There is no supplier of last resort in the country	0	2

According to data provided, a supplier of last resort for electricity exists in all Contracting Parties, and for gas there is no SOLR in Georgia and BIH entity Republika Srpska yet. In Georgia, according to Electricity Retail Market Rules (adopted in August 13, 2020, entered into force in July 1, 2021), the customer turns to the supplier of last resort if he/she is not able to choose supplier due to justified reasons or the current supplier has gone bankrupt and is no longer doing business. As for natural gas market, retail market rules, which shall include SOLR operational rules, have not been adopted yet. In BIH entity Republika Srpska, new Gas Law (Official Gazette RS 22/18 and 15/21) defines duties and responsibilities of customers and supplier of last resort on gas market in BIH entity Republic Srpska. Regulatory Commission for Energy of Republika Srpska adopted secondary legislation Rulebook about change of supplier and Rulebook about supplier of last resort (Official Gazette RS 38/19). Supplier of last resort will be designated by Government and respected Ministry of Republika Srpska.

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 a customer is dropped by its current supplier because of non-payment;
- 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 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.

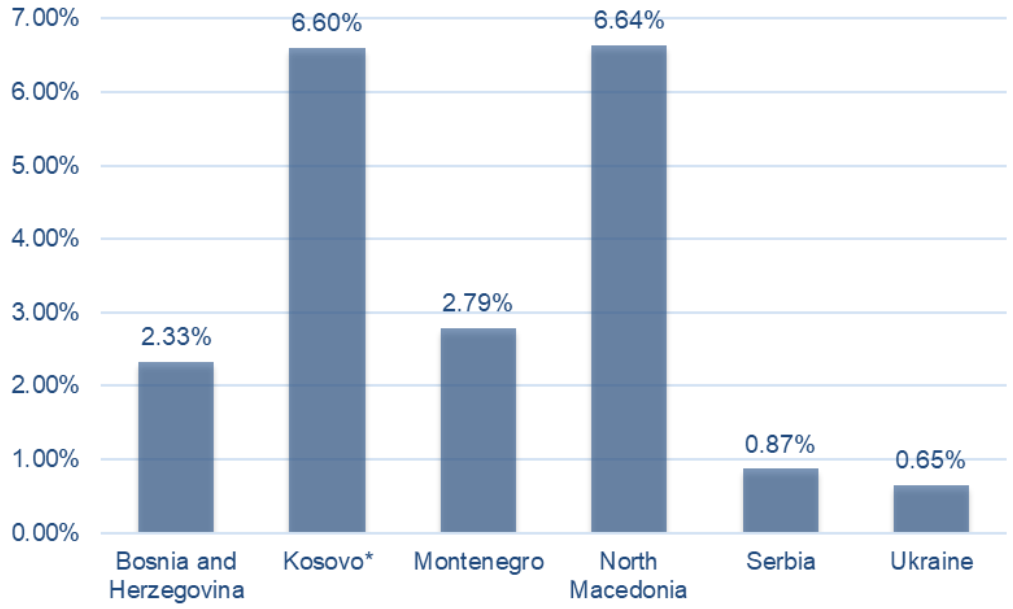
Table 8 *Minimum duration of disconnection process for non-paying consumers across Energy Community Contracting Parties in 2021*

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
Albania	60
Bosnia and Herzegovina	FBIH 30, RS - after 2 bills of non-payment based on General conditions of electricity supply, BD 60
Georgia	immediately, if not weekend or holiday
Kosovo*	30
Moldova	11
Montenegro	8
North Macedonia	60
Serbia	38
Ukraine	10

The presented data shows that the number of days legally envisaged for disconnection of household consumer because of non-payment varies significantly from country to country (from 8 days in Montenegro to 60 in Albania and North Macedonia). The actual duration of a disconnection in most cases takes longer than the legally foreseen deadlines. In Georgia, consumers are disconnected immediately after the due date for payment has expired, unless due date coincides with weekend or public holidays. Disconnection is not allowed during evening and night hours. In case of electricity retail market, the pensioners shall not be disconnected till 16 of the calendar month, other kind of socially vulnerable customers, determined by the Electricity Retail Market Rules, shall not be disconnected till 22 of the calendar months. In Ukraine's electricity market, DSO shall disconnect customer 10 days from the date of receipt of the notice.

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 18 shows.

Figure 18 *Share of household disconnections due to non-payment of electricity bills in % of household metering points in 2021*[53]



The share of household disconnections due to non-payment for electricity in the Contracting Parties varies among countries (0.65% - 6.64%). According to the provided data, the smallest share is in Ukraine and biggest in North Macedonia.

3. Vulnerable customers

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

The results of the conducted research show that most Contracting Parties have introduced **definitions of the concept of vulnerable consumers**, as required by the Directives.[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 are 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 2021.

[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.
[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*

Criteria for identification of vulnerable customers	Number of countries - electricity	Number of countries – gas
Income level	4	2
Share of energy expenditure in disposable income	2	0
Energy efficiency at home	0	0
Critical dependency on electricity powered equipment for health reasons	3	0
Age	1	0
Other	3[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 2021.

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	10	5
Earmarked social benefits to cover (unpaid) energy expenses	5	3
Special energy prices for vulnerable customers	1	0

[55] In Albania by law, The Ministry responsible for social affairs, shall in cooperation with the ministry responsible for energy, the Finance Ministry and in consultation with ERE and the stakeholders, shall draft the criteria, the procedures to obtain the vulnerable customers status and the way to handle them, which are approved with Council of Ministers decision. Such decision is not yet taken. The criteria to benefit from the vulnerable customer status shall take into account: a) customers with low income, which use electricity to supply their home; b) customers whose electricity consumption is connected to the single-phase grid with maximum power of about 16 ampere; c) maximum level of energy consumption per person, depending on the season; c) direct support from the State Budget; 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 on a 25 A connecting line or three-phase with the rated current of a fuse of 16 A; 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).

Additional social benefits to cover (unpaid) energy expenses (non-earmarked financial means)	0	0
Free energy-saving advice to vulnerable customers	3	2
Right to deferred payment	4	2
Exemption from some components of final customer energy costs (e.g. energy price, network tariffs, taxes, levies…)	1	1
Financial grants for the replacement of inefficient appliances	0	0
Free basic supply of energy	2	1
Other	4[56]	1

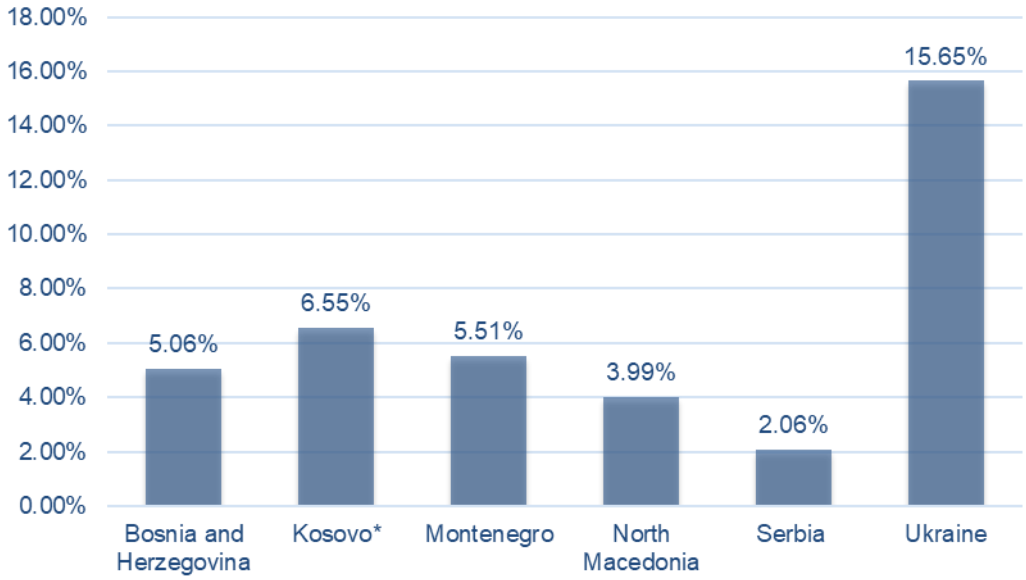
From the data is evident that the most common measures for protection of vulnerable customers in Contracting Parties are restrictions on disconnection due to non-payment and earmarked social benefits to cover (unpaid) energy expenses. Measures of protection are more used in electricity, but that is partly 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 101kWh, are actually designed with a view to support the vulnerable customers.

The following figure shows the share of vulnerable electricity customers out of the total number of households metering points in Contracting Parties on 31 December 2021.[57]

[56] In Albania, vulnerable customers who benefit from the financial support of the Government shall use the benefited funds to pay the electricity liabilities. In Montenegro subventions for all endangered categories are 40% of the bill if it is up to 60 EUR, for bills of more than 60 EUR the subvention is fixed at 24 EUR. The Government of the Brčko District of BiH subsidizes the costs for consumed electricity in accordance with the program of subsidizing vulnerable customers. In Ukraine for all household consumers until the termination or abolition of martial law in Ukraine, it is prohibited to accrue and collect penalties (fines), inflation accruals, interest per annum, accrued on arrears formed for late and / or incomplete payment for utilities, termination / suspension of the provision of utilities to the household consumers in case of non-payment or incomplete payment (the resolution of the Cabinet of the Ministers of March 5, 2022 № 206)

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

Figure 19 *Share of vulnerable customers in Contracting Parties on 31 December 2021*[58]



The share of vulnerable customers in the analyzed markets varies between 2.06% and 15.65%. According to the data provided, the smallest share is in Serbia and the highest in Ukraine.

4. Energy poverty

Even though energy poverty is not a new phenomenon in Europe, no official definition has been adopted across the EU. Both the Electricity and Gas Directive (2009/73/EC) and the revised Electricity Directive ((EU) 2019/944) require the MS to provide a definition and to develop a set of criteria to assess energy poverty. The European Commission has defined energy poverty as a situation in which households are unable to access essential energy services.[59] 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.[60]

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 Package. The EU Energy Poverty Advisory Hub 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. [61]

[58] For all Contracting Parties, except Serbia, this figure presents the share of electricity vulnerable customers in the total number of electricity customers. For Serbia, this share includes both gas and electricity customers. For Ukraine, the share of electricity vulnerable customers is calculated by the dividing the number of vulnerable consumers, who are the recipients of state subsidies for the payment of all utilities, by the total number of electricity consumers.
[59] COMMISSION RECOMMENDATION (EU) 2020/1563 of 14 October 2020 on energy poverty (https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32020H1563&qid=1606124119302)
[60] 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.
[61] https://energy-poverty.ec.europa.eu/index_en

While the Third Package alludes to energy poverty, the Clean Energy Package 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, Contracting Parties have to protect the most vulnerable groups of society and prevent their falling into energy poverty.

In 2021, the Study on Addressing Energy Poverty in the Energy Community Contracting Parties was conducted, in order to take stock of already implemented policies and measures addressing energy poverty in the Contracting Parties, provide a preliminary assessment of the number of households in energy poverty and give recommendations for further measures to address energy poverty.[62]

Although the concept of energy poverty is not precisely defined in national legislation of the Contracting Parties, various measures that are directly or indirectly related to this issues have been implemented in the majority of observed countries.

Financial measures, i.e. various models of support for paying energy bills, provided via social welfare systems represent one of the most common implemented measures in Energy Community Contracting Parties.

Energy efficiency measures are widely used across the Contracting Parties and represent the most common implemented measure in Energy Community Contracting Parties.

In Albania, Agency for Energy Efficiency is the institution responsible for the promotion and following the implementation of energy efficiency measures and policies. 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.

In Ukraine, on 2017 the Ukrainian Parliament adopted the Law of Ukraine "On Energy Efficiency Fund". The Fund became opertional on 2018 and provides reimbursment for part of the costs of energy efficiency measures incurred by homeowners associations (HOA). Also similar support was provided under the State targeted economic program for energy efficiency and development of energy production from renewable energy sources (2021 was the last year of program operation). The program provided state support for measures to encourage the private households, homeowners associations (HOA) to implement energy efficiency measures by reimbursing part of the amount of loans raised for the purchase of boilers using any fuel and energy (except natural gas and electricity) and energy efficient equipment and/or materials.

[62] https://www.energy-community.org/dam/jcr:f201fefd-3281-4a1f-94f9-23c3fce4bbf0/DOOREIHP_poverty_122021.pdf

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

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, while 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 Ukraine, awareness raising campaigns on energy efficiency usually have been held by State Agency on Energy Efficiency and Energy Saving of Ukraine, Energy Efficiency Fund, Ministry for Communities and Territories Development of Ukraine, Ministry of Energy of Ukraine, international technical assistance projects (regional and national forums, seminars, social ad, preparation and dissemination of information and analytical materials). Also relevant information on market tariffs and energy savings measure is published on the official websites of the Regulator, Ministry of Social Policy, electricity suppliers (paragraph 9.2. of the Rules of the retail electricity market, approved by the resolution of the Regulator of March 14, 2018 № 312).

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

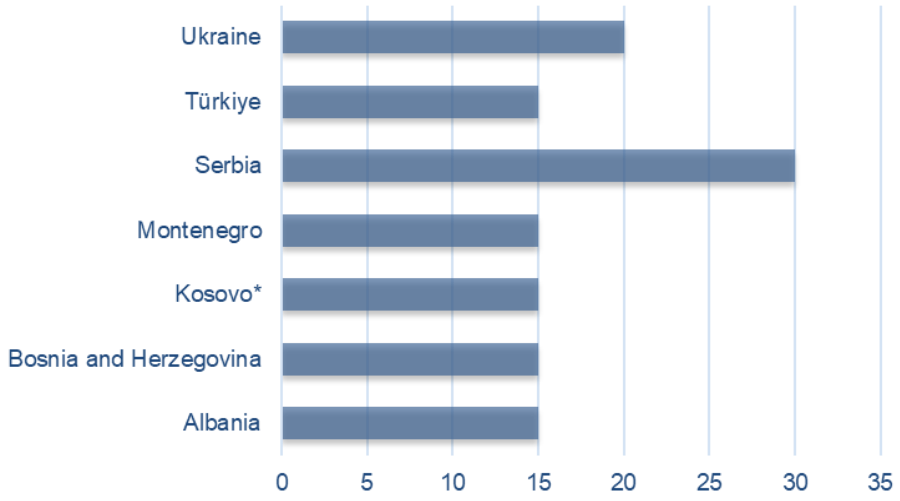
In order to facilitate the participation of customers in the market it is important to have clear and simple procedures and transparent information. The Third Energy Package Directives prescribe that clear and comprehensible information should be made available to consumers concerning their rights in 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 not such requirement. The following figure shows how many days in advance households have to be informed about electricity price changes.

Figure 20 *Minimal number of days in advance within household customers have to be informed about electricity price changes*



As shown in Figure 20, the minimal number of days to inform customers ahead of electricity price changes is 30 in Serbia, 15 in Albania, Bosnia and Herzegovina, Kosovo*, Montenegro, and 20 in Ukraine.

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

Price comparison tools (PCT) exist only in Bosnia and Herzegovina (http://uporedistruju.ba/), North Macedonia (https://switch.mk/#/) and Ukraine (links to commercial offers on the websites of the Regulator, Prozorro (electronic public procurement system).

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.

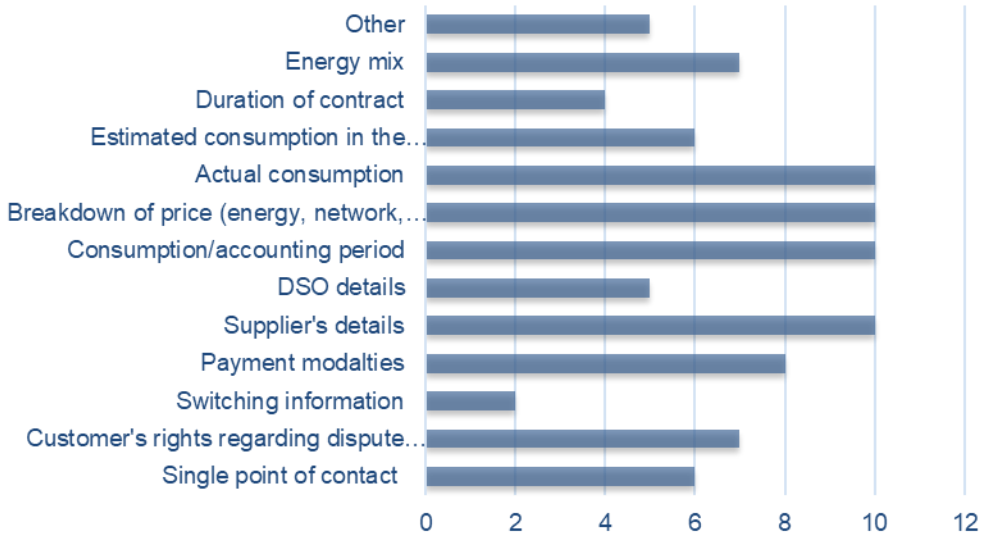
The Electricity Directive stipulates that suppliers should make the following information available to final customers on the bills and in promotional materials:

- 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 21 *Content of electricity bills 2021*



Source: NRAs

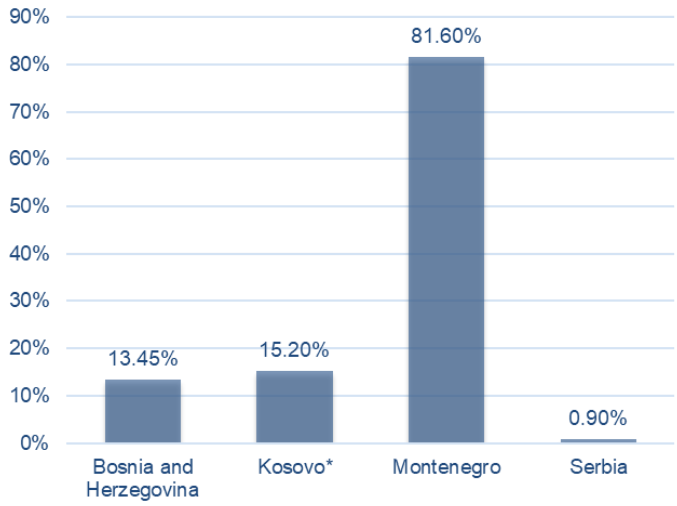
Information on the actual consumption, the accounting period, breakdown of price, payment modalities and suppliers details is included in the bills in all analyzed energy markets. Information related to the energy mix, as one of the mandatory elements foreseen by the Third Package, is available only in Albania, Georgia, North Macedonia, Moldova, Montenegro, Serbia and Ukraine. Customer's rights regarding dispute settlement are available in Albania, Federation Bosna and Herzegovina, Georgia, Kosovo, Moldova, Montenegro and Serbia. In Albania, among other information, bills include unit price according to the tariff structure and its components, amounts of taxes corresponding to it according to the legislation in force and deadline for invoice payment. In Bosnia and Herzegovina, 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, RES incentives. In addition to the information

outlined in figure 21, bills in Georgia include estimated consumption in the previous consumption/accounting period, link to energy-efficiency experts registry, link to consumption for last 3 years, consumption data for last 12 months, 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 21, bills include customer details, measuring point address and ID code, percentage of renewables included in the final price, VAT. In Ukraine, the bill also contains, once in a year, links to available sources of information (web pages, etc.) on environmental impact, caused by the production of electricity by all sources of energy purchased by consumer (and/or produced with his own electrical installations) for the previous year; the procedure for taking readings of measuring units and payment for consumed electricity; the possibility of obtaining information in an alternative way, taking into account the special consumer needs; dynamics of electricity consumption by the consumer for the previous year and their value; benefits of efficient end use of electricity by consumers; necessary measures to increase energy efficiency when consuming electricity (paragraph 9.6.2 of the Rules of the retail electricity market, approved by the resolution of the Regulator of March 14, 2018 № 312).

The frequency of billing information based on actual consumption was monthly in every Energy Community Contracting Party during 2021. 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. 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 22 *Share of households with smart meters (status 31st December 2021)*



Source: NRAs

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

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

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

The Electricity and Gas Directives stipulate that the switching procedure for customers that wish to change their supplier should be executed within three weeks. Research related to this issue showed that the prescribed number of working days for supplier switching in Energy Community Contracting Parties usually is 21 (in Bosnia and Herzegovina, Georgia, 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 Albania – by request of the consumer, or if the costumer has not fulfilled all obligations in relation to the first supplier;
- In Bosnia and Herzegovina – Federation BIH - incomplete or inaccurate request for switching, provisions of previous contract between old supplier and a customer;
- Georgia – non-payment for the service of current supplier, or incompliance with grid specifications;
- Kosovo* - in cases when current supplier rightly considers that, in 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 and shall provide supply to the customer until finalization of the process of switching the supplier, with the exception of the event that the final customer fails to meet their obligations specified in a contract i.e. in a bill for supplied energy, by the specified deadline, when the supplier shall file a request to the transmission or distribution system operator for limitation of delivery, where such limitation is allowed by technical possibilities, or for termination of delivery of electricity or gas;
- North Macedonia – If the DSO concludes that the provided data with the Switching request: show 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, 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 – formal deficiencies of the submission, e.g. unregulated financial liabilities with the current supplier, the measuring point does not exist in the database, etc.;
- Ukraine – The administrator of commercial metering may refuse to provide a change of electricity supplier in the following cases: lack of technical feasibility (non-compliance of commercial metering unit, operating modes, reliability categories, consumption volumes to the selected commercial offer of the electricity supplier), confirmation of which is carried out at the request of the new electricity supplier to administrator of commercial metering; the consumer does not have a valid consumer contract on the provision of distribution (transmission) services of electricity with the appropriate system operator; termination of power supply of the object (objects) of the consumer at the request of the current electricity supplier or the presence on the date of initiation of the supplier change procedure such a request, sent in the prescribed manner.

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 Third Energy Package, an independent mechanism such as an energy ombudsman or a consumer body should be in place in order to ensure efficient treatment of complaints and out-of-court dispute settlements. 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 2021.

Table 11 *Number of household customer complaints for gas and electricity received by different institutions in 2021*[63]

	Electricity				Gas			
	Suppliers	DSOs	ADR	NRA	Suppliers	DSOs	ADR	NRA
Albania	140.417	17.236	113		NA	NA	NA	NA
Bosnia and Herzegovina	12.994	3.225	159		42	511	NA	NA
North Macedonia	18.888	NA	381		NA	NA	NA	NA
Georgia	NA	NA	1.677		NA	NA	1087	
Kosovo*	5.258	163	75	49	NA	NA	NA	NA
Moldova	NA	NA	NA	NA	NA	NA	NA	NA
Montenegro	7.715	NA	119		NAP	NAP	NAP	NAP

[63] The following abbreviations apply: NA - not available, NAP - not applicable.

Serbia	NA	460.676	NA	NA	NA	5.592	NA	NA
Türkiye	NA	NA	79.441		NA	NA	NA	NA
Ukraine[64]	1.673	50.308	NA	9.235	70.502	143.189	NA	14.728

In most observed country the national regulatory authority has the role of an Alternative Dispute Resolution (ADR) body.[65] In Bosnia and Herzegovina, besides the regulator, the Ombudsman for customer protection and a local/ regional court may also be appointed as ADR, in Georgia the Energy Ombudsman, in Kosovo* a private mediator licensed by the Ministry of Justice, in Serbia for electricity: NRA, Complaints Resolution Body (Suppliers), Special Complaints Resolution Organizational Unit (DSO), for natural gas: NRA, supplier (with the obligation to resolve complaints effectively) and in both cases (electricity / gas), special bodies for resolving out-of-court disputes, which the consumer can contact after the complaint procedure (Law on Customer Protection) and in Türkiye Consumer arbitration commission.

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

7. Service quality of distribution system operators

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

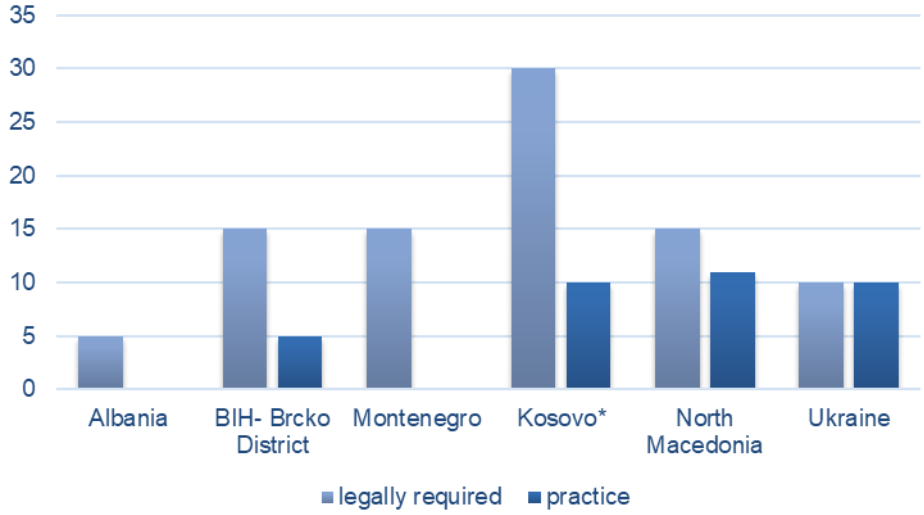
Research has been carried out to look at the legal requirements and practice in Energy Community Contracting Parties related to indicators of DSO service quality. Research covered the following indicators:

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

Figure 23 *Number of days to provide a price offer for a grid connection (from the date of consumer's request for a price offer) – electricity*

[64] Number of household customer complaints received by electricity suppliers is calculated without data from two suppliers, while the number of household customer complaints received by electricity DSOs is calculated without data from one DSO that were unable to provide data due to Russian military aggression against Ukraine.
[65] 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.



Source: NRAs

There are specific details related to this indicator for four observed countries, as listed below:

- In Georgia, price is determined by GNERC and differs due to capacity of the customer. However, in case of non-regulated connection, service provider is obliged to provide price offer within 10 business days from the date of consumer's requests.
- 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
- In Ukraine, number of days to provide a price offer for a grid connection extends to 20 working days if there are specifications to be agreed by the TSO or other business entities (except TSO) (for deep connections).

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 specificities related to this indicator for almost every observed country and they are listed below:

- In Albania it takes from 20 to 60 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 shallow[66] and deep[67] connection, in Brcko District 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 5 to 15 days.
- 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 GNERC,

[66] Customer pays only the connection costs. The costs of network reinforcement are socialised and paid by all network users via the network fees
[67] The customer in addition to the connection costs also pays part of the network reinforcement.

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, differentiated by 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 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 Serbia, the connection procedure in both cases (electricity, natural gas) is twofold, i.e., new facilities are mostly connected through a unified procedure prescribed by the Law on Planning and Construction, while conditionally speaking existing connections (which includes reconnection after disconnection) are resolved outside the mentioned procedure, in the administrative procedure in which the appeal is filed by referring to the NRA. In both cases (unified procedure, administrative procedure), the deadline for issuing the approval, i.e. the approval for joining is 15 days. After issuing the said acts, and fulfilling additional legally prescribed conditions related to payment of connection costs and construction of the connection, concluding the contract on supply/arranging balance responsibility, and submitting a proper request for connection, the electricity system operator shall connect the facility within seven (electricity), i.e. eight days (natural gas) to the distribution system it manages.
- In Ukraine, for shallow electricity connection, the legal requirement for connection service is 45 calendar days from the next working day after the date of payment of the cost of connection in accordance with connection agreement by the customer – for customers up to 16 kW inclusive and 60 days from the next working day from the date of payment of the connection cost in accordance with the connection agreement by customer - for customers from 16 to 50 kW inclusive. For deep electricity 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. For shallow natural gas connection – 3 months after the connection agreement is concluded.

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 48 hours legally.
- In Bosnia and Herzegovina, the prescribed number of days to disconnect the energy following a consumer request is two in Brcko District. In practice, it takes two days in Brcko District.

- In Georgia, it takes the same number of days to disconnect the energy following a consumer request in practice as it is legally prescribed - ten business days.
- In Kosovo*, the legally required number of days is 30, but in practice it takes 14 days.
- In Moldova, for electricity and gas the required number of days are 7, legally and practice.
- 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 Serbia, disconnection following a consumer request should be done without delay.
- In Ukraine, for electricity the required number of days are 10 legally.

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 - maximum duration of a planned interruption in practice in Brcko District is 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 Türkiye. the prescribed quality standard related to the duration of planned interruption is 10 hours in city, but in suburban it ranges between 11 and 12 hours.
- In Ukraine, the duration of the planned supply interruption should not exceed a total of 12 hours per day and 6 hours per day in the winter months, except for scheduled interruptions that occurred as a result of carrying out works on capital repairs, construction, technical re-equipment, reconstruction, modernization of electrical networks, if the implementation of such works is provided in the DSO investment program and/ or the annual DSO repair program provided to Regulator, and/ or during the implementation of contracts for connection to electricity grids of distribution systems in accordance with applicable regulations. The duration of such interruptions should not exceed 24 hours per day and 8 hours per day in the winter months if it is not possible to provide the backup power (paragraph 11.5.10 of the Distribution System Code).

E. Measures to support consumers during the energy price surge

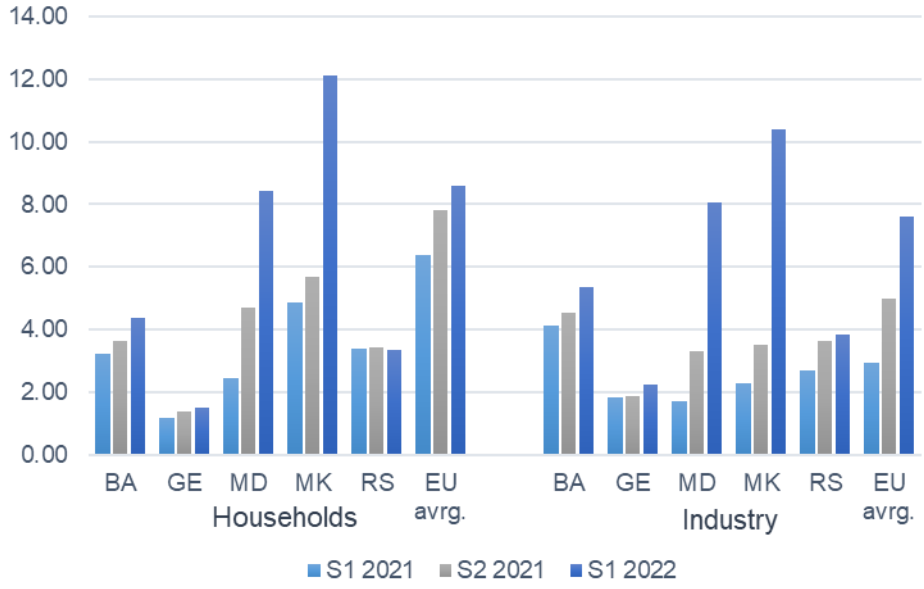
In the second half of 2021, there was a significant increase in energy prices on the wholesale markets, which continued also in the first half of 2022, having a great impact on the retail market. Suppliers have been faced with increased costs of purchasing electricity and gas, which led some to stop supplying customers or even go bankrupt. On the other hand, a significant increase of the price of energy for customers threatens the business of companies, and puts households in a situation where they cannot pay the bills, which increases the number of vulnerable customers. Bearing these negative consequences in mind, and with the aim to protect consumers, relevant institutions, primarily governments and energy regulators, adopted certain measures. This chapter provides a brief overview of the measures adopted by the Governments and energy regulators of the Contracting Parties of the Energy Community until 30th June 2022.

The overview of the electricity and gas price increases in 2021 and the first half of 2022 is presented in the figure below.

Figure 24 *Electricity prices on the retail markets of Contracting Parties in first semester of 2021, second semester of 2021 and first semester of 2022*

Source: Energy Community Secretariat calculations based on Eurostat and NRAs. Band DC: 2,500–5,000 kWh (household electricity consumption), Band IE: 20,000–70,000 MWh (industrial electricity consumption), November 2022

Figure 25 *Gas prices on the retail markets of Contracting Parties in first semester of 2021, second semester of 2021 and first semester of 2022*



Source: Eurostat, Band D2: 20–200 GJ (household gas consumption), Band I4: 100 000 GJ -1 000 000 GJ (industrial gas consumption), November 2022

Albania

Retail market interventions

ERE approved decision No. 242 dated 23.09.2022 on setting the band of minimum protected consumption in the amount of 800 kWh, with regulated price for household consumers and setting the price in line with the basic energy market costs for consumption above the band. However, in accordance with the latest decisions of ERE no. 254, dated 07.10.2022, and no. 286, dated 10.11.2022, this decision is set out of force for the months of October and November. Key factors for ERE's decision and as declared by General Assembly of Shareholders of KESH, are the improvement of the hydrological situation in the Drin river cascade as well as the decrease in electricity consumption of end consumers who are supplied by the Universal Service Provider, which made it possible not to the expose the Power Generator Company to the purchase of electricity in the free market. Hence, ERE approved the sale price of electricity of 42 ALL/kWh (36 euro cent/kWh) for the consumption over 800 kWh/month for household customers for the period December 1 - December 31, 2022. FSHU's electricity retail prices of 9.5 ALL/kWh (8.1 cent/kWh) is still unchanged for household consumers, including for November.

Government measures

According to the Decision of Councils of Ministers No. 456, dated 29.6.2022, the public generation company (KESH) is obliged to sell **the entire quantity of energy** produced to the universal service provider. (*KESH supplies about 70-75% of the electricity demand of regulated customers*). The public generation company has been obligated to sell the produced energy for the universal service provider at the price of circa 2 euro cents per kWh.

The Decision of Albanian government no. 650, dated 10.10.2022 “For announcing the state of emergency in the electricity supply” introduced the following obligations:

1. Establishing the public service obligation towards priority producers who have contracts with the state owned “Free Market Supplier” (FTL).
2. These Priority producers are assigned the obligation of public service for the sale of electricity to the Free Market Supplier, in accordance with the prices determined by the NRA, for the period of state emergency in the supply of electricity (until June 2023).

Plan of measures to reduce consumption (up to 15%) by state institutions has been developed, by which the penalties will be imposed for non- fulfillment of the target.

Social protection

- State financial support at 70% of the cost, for placing solar panels on the terraces of buildings for water heating. The government has launched a project that will help citizens to change the form of energy supply. The project concerns the installation of solar panels for 2,000 households, which will be supported by financing 70% of the cost of purchasing and installing solar panels.
- Increase of the amount of electricity bill compensation for vulnerable consumers.

Bosnia and Herzegovina

Retail market interventions

Federation of Bosnia and Herzegovina

Regarding the situation on the electricity market, i.e. the increase of prices in the second half of 2021, the Parliament of the Federation of Bosnia and Herzegovina (FBIH) adopted the Law on Amendments to the Law on Electricity in the FBIH at the end of the same year, which entered into force on 6th of January 2022. The aforementioned amendment stipulates that if there is a disturbance in the electricity market that leads to the increase of the price of electricity supply for a qualified customer by more than 20% compared to the previous year, the Government of FBIH is obliged to limit the increase in electricity supply prices by a special decision up to 20% maximum, where the same applies to contracts with an annual duration or longer. In accordance with that, the Government of FBIH on 7th of January 2022 adopted the Decision on limiting the increase in electricity supply prices, which stipulates that during 2022 the Government of FBIH limits the increase in electricity supply prices for qualified customers to a maximum of 20% compared to the previous year, while the same applies to contracts with an annual duration or longer.

Customers from the household category, as well as small commercial customers who did not choose a supplier on the market, are supplied within the framework of the public service (universal service). The price of the service of two public suppliers in the Federation of Bosnia and Herzegovina during 2021 and 2022 has not been changed.

Republika Srpska

In the second half of 2021, there was a significant increase in electricity and gas prices on the wholesale markets, which continued also in the 2022, and had limited impact on the retail market, mostly on gas retail market.

In 2022, so far, the market activities did not cause the price change neither for the households and small customers nor for other end-users. For other end-users (non-households and non-small customers) the latest price increase was at the end of 2021. There was no decision made by the Government of RS regarding the price increase limit.

In July 2022, the Regulatory Commission for Energy of RS determined the retail reference price for electricity in the amount of 0.07997 BAM fening/kWh (0.04089 euro/kWh) which serves as a basis for determination of the price of the last resort supply.

Social protection

Federation of Bosnia and Herzegovina

The Government FBIH, at the proposal of the Federal Ministry of Energy, Mining and Industry, amended and supplemented the Decision on the implementation of measures to reduce household electricity costs and stimulate energy efficiency.

It is stipulated that in a period from 1st of July 2022 until 30th of November 2022, the subsidy will be introduced with a maximum of 25.50 BAM (13.05 EUR) per month bill for household customers of "Elektroprivreda Bosne i Hercegovine" d.d. Sarajevo (EPBIH), and 27 BAM (13.85 EUR) for household customers of "Elektroprivreda Hrvatske zajednice Herceg Bosne" d.d. Mostar (EPHZHB), depending on the consumed electricity in the calculation period. The subsidy amount must be specifically stated on each customer bill. Previously, the subsidy, which the Government of FBIH has been carrying out since 2011, included a subsidy for household customers in the amount of 5.50 BAM (2.81 EUR) for the EPBIH, and 7 BAM (3.58 EUR) for the EPHZHB. The average number of subsidy beneficiaries per year was approximately 70 thousand.

Republika Srpska

No special protection measures have been introduced for households or for vulnerable electricity customers. All households have the right to supply at regulated price (right for guaranteed supply), and this price of electricity has not been increased.

Brcko District of Bosnia and Herzegovina

In the course of 2021, the Government of the Brcko District of Bosnia and Herzegovina (BD BIH) provided funds in the amount of 829,905.60 BAM (424,324.00 EUR) to households customers through the program for subsidies to persons in a state of social need for the consumption of electricity.

Funds were provided for 12,420 beneficiaries from the following categories:

- Pensioners - 7,153 beneficiaries
- Unemployed persons - 2,649 beneficiaries
- Beneficiaries of permanent social assistance - 864 beneficiaries

- Disabled children - 444 beneficiaries
- War invalids - 1,304 beneficiaries
- Blind persons - 6 beneficiaries

It is expected that the funds for 2022 will be provided by the end of the year.

Georgia

Retail market interventions

Since energy market in Georgia wasn't influenced by the energy crisis in Europe, there were no price interventions caused by energy crisis. However, due to economic difficulties caused by COVID, measures were taken to support customers.

According to the Resolution N52 of the Government of Georgia from 3 February 2022, electricity charges shall be subsidized for certain category of socially vulnerable customers. The amount of the subsidy is equal to the difference between the end-user tariff that had been in force in December 2020 and current electricity tariff; additionally, 3.5 Tetris per 1 kWh (taking into account the difference between the tariffs in effect in January 2022 and December 2020 and including VAT) has been covered through this subsidy. As for the period, this subsidy shall be active from 1 January 2022 to 31 December 2022, except for the customers that live within the administrative boundaries of Tbilisi Municipality. As for the customers that live within the administrative boundaries of Tbilisi Municipality, such subsidy shall be available from 1 April 2022 to 31 October 2022. Also, from January to December 2022, for the customers that live in Tbilisi, Rustavi or Mtskheta, water supply and drainage fees shall be reimbursed within the limit of 100 GEL.

According to the Resolution N655 of the Government of Georgia from 30 October 2020 (amended in May 2021, December 2021, July 2022), in January and February 2021 (for each month), household customers who consumed 200 kWh or less electricity, in case of natural gas – 200 m^3 or less, the sufficient fees, as well as water supply and drainage had been subsidized by the State. According to the same resolution, for the households who consumed more than 200 kWh of electricity, but not more than 301 kWh, the difference between the electricity tariff that had been in force during in December 2020 and current electricity tariff had been subsidized. Also, the household consumers who monthly (accounting period) consumed up to 301 kWh of electricity, in March, April, May and June 2021 (for each month), the difference between the electricity consumer tariff had been subsidized by the State.

In 1 July 2021 new Electricity Retail Market Rules entered into force and, accordingly, the customers had switched to the universal service suppliers. Also, in July, August, September, October, November and December of 2021 (for each month), the difference between the tariff that had been in force in December 2020 and universal service tariff had been subsidized.

Social protection

The Electricity Retail Market Rules, that had entered into force in 1 July 2020, determine additional measures in order to prevent disconnection of certain group of vulnerable customers, namely, the supplier is obliged to give such customers additional time for payment in case of missing payment due date.

*Kosovo**

Retail market interventions

In order to protect consumers with the right to Universal Service Supply from the direct impact of price increase, the Regulator and the Government during 2021 and 2022 have taken several decisions, including changing the tariff structure.

The measures taken for the purpose of consumer protection are:

1. The government has allocated 20 million EUR for subsidizing the import of electricity.
2. The national regulatory authority, ERO, on 13 December 2021 initiated the Extraordinary Review of the tariffs for regulated activities in the electricity sector.
3. The government has made a decision committing to allocate 90 million EUR to subsidise the final customers entitled to Universal Service Supply.
4. The Board of ERO, based on the analysis and the comments received, approved retail electricity tariffs for all consumers entitled to Universal Service Supply, and the new tariff structure for the household customers. ERO introduced two block-tariff for the household customers. The threshold of the consummation for first block was set at 800kWh and for second block >800 kWh. So there is no increase in tariffs for the consumption up to 800kWh/month, while the difference of the consumption above the first block will be priced with 12.52 cents/kWh during peak load and 5.9 cents/kWh during off-peak.
5. ERO in the final proposal for retail electricity tariffs had taken into account the allocation of an additional subsidy of 10 million EUR according to the decision of the Government No. 05/55 dated 21.01.2022, as well as decision No. 01/60 dated 05.02.2022, for the energy subsidy in the amount of 90 million EUR. As a result of the subsidy, retail tariffs for non-household (business) customers - and for household customers with monthly consumption up to 800kWh - remained unchanged.

0.4kV Domestic 2-rate meter	Standing (customer) charge	€/customer/month		1.74
	0-800kWh (First block)	€c/kWh	High tariff	6.75
		€c/kWh	Low tariff	2.89
	>800kWh (Second block)	€c/kWh	High tariff	12.52
		€c/kWh	Low tariff	5.90

Social protection

No special protection measures have been introduced for households or for vulnerable customers. All households have the right to supply at regulated price and this price has not been increased except for household customers with consumption above the first block.

Moldova

Electricity

Retail market interventions

In 2021, the retail market of electricity in the Republic of Moldova was not affected by the energy crisis. Since the prices on electricity increased insignificantly in this period, the state intervention in stabilization of the prices wasn't necessary. However, the Emergency Situation

Commission decided that, in the period of state of emergency, the disconnections for non-payment were prohibited. In first half of 2022, the prices on electricity have risen considerably, and forecasts show that the increases will continue.

Social protection

Because of an insignificant impact on prices, no special protection measures have been introduced in 2021. In 2022 however, starting as of November, a part of the consumption (75 kWh) will be compensated by the Government.

Gas

Retail market interventions

The energy crisis in Republic of Moldova, affected the most the natural gas sector. Because of significant increase of prices, the Government decided to grant compensation for household and for non-household consumers for cold period, in dependence of the consumption. At the same time, the disconnection for non-payment were prohibited.

Considering the challenges for this crisis, the Parliament adopted amendments on Law on natural gas intended to ensure the energy security of the state. Among the changes, was the national supplier was obliged to ensure a stock of natural gas in reserve, in order to use them in case of lack of natural gas or the increase of prices on the market.

Social protection

In 2022, the Government implemented the Energy Vulnerability Fund, that will ensure the compensation of vulnerable consumers of natural gas, electricity and heating. For this, the Parliament adopted the Law on Energy Vulnerability Reduction Fund.

The Energy Vulnerability Reduction Fund will allow monthly compensations for the consumption of natural gas, electricity and thermal energy, as well as a subsidy for the replacement of technically and morally outdated household appliances with energy-efficient ones, in the invoice.

Montenegro

Retail market interventions

Based on the energy data in 2021, domestic production and consumption in Montenegro are nearly matched. Electricity prices for households and small consumers are unchanged from 2019. The Energy Law provides a specific type of protection for households and small consumers until the end of 2022 (transitional period until the retail market liquid), by limiting the increase of electricity prices for mentioned categories of consumers to 6%.

So far, high energy prices on the wholesale market did not affect retail prices for households and small consumers, but they did affect TSO and DSO, due to the unexpected increase of prices of energy needed for covering losses in the transmission and distribution system. Higher incurred costs of energy purchased for covering the losses in 2020 and 2021 will affect prices of usage of transmission and distribution systems for the next regulatory period 2023-2025.

Measures undertaken by Government

The Energy Law gives the possibility for Government to react in case of a disturbance on the market caused by an unexpected energy deficit, by introducing different measures.

Measures undertaken by the Regulator

No specific measures undertaken. However, regulator took into account the impact of the increased wholesale electricity prices on TSO in the process of adjustments of transmission system tariffs, which was ongoing in 2021, and will have impact on network tariffs for the next regulatory period 2023-2025.

Social protection

No special protection measures have been introduced for households or for vulnerable customers.

North Macedonia

Retail market interventions - Electricity

Small consumers and households benefit from the universal service obligation of the universal supplier EVN HOME which is a privately owned company. ERC sets the prices for the universal supplier. However, the universal supplier is not highly exposed to the wholesale electricity prices since most of the electricity offered by the universal supplier derives from the largest domestic electricity producer, a state-owned company (JSC ESM) that is obliged to offer electricity on tenders opened by the universal supplier in a percentage set in the Energy Law, which gradually decreases from 'at least 80% of the total annual needs of the universal supplier in 2019' to 'at least 30% of the total annual needs of the universal supplier in 2025'. If the prices of the largest electricity producer are the lowest, the universal supplier shall conclude a power purchase agreement. The remaining electricity needed, but not covered by the largest electricity producer, is purchased by the universal supplier from other traders, suppliers, or producers through transparent procedure.

Industrial consumers and other consumers that do not fall into the category of small consumers that are supplied under market prices are significantly exposed and directly impacted. Furthermore, some of the suppliers were faced with termination of their bilateral agreements for purchase of electricity from their foreign traders, as well with changes of prices previously set in their bilateral agreements, initiated by their foreign traders. These circumstances had large impact on the consumers of such suppliers. For instance, some of the consumers were left without a supplier, in most cases, with a very short cancellation period offered by their supplier and had to go back to the universal supplier or supplier of last resort (with price 1,5*HUPX day a head). Other consumers received new offers with increased prices, although their purchase agreements with fixed term tariff were still in force i.e. the contract period has not ended.

The balancing market was also highly impacted by the wholesale electricity prices. The balancing price is set in accordance with the methodology for setting the balancing price regulated in the Electricity Balancing Rules. The Balance Service Providers (BSPs) submit offers on the auctions performed by the TSO (JSC MEPSO). At some point the balancing prices were lower than the market prices due to the lack of correlation with market prices. Under such conditions, few market participants did not close their position in the market and supplied their customers, on short term or continuously, through imbalances, utilizing

therefore all the balancing capacity available to the TSO in continuation for 24 hours. This brought hydro-accumulation at the historically lowest level. Also, TSO (JSC MEPSO) received several warnings from ENTSO-E.

In the period until October 2022, the Government adopted the following measures:

- On 30th of October 2021 the Government of North Macedonia issued new Decree determining the criteria and conditions for declaration of crisis in the electricity sector. The Ministry of Economy established a Commission for monitoring the situation in the electricity supply which constantly monitors the situation with the electricity supply in the country.
- On 9th of November 2021 the Government of North Macedonia declared a state of electricity crisis effective until 9 December 2021. The state of electricity crisis was declared due to electricity shortages on the domestic market, caused by occasional outages of major production facilities, lack of coal for production of electricity, and the inability to prevent possible outages with reserves in the electricity production. The decision provided funds in the amount of four billion MKD from the Budget and made payment on the earmarked account of JSC ESM Skopje in state ownership, with the obligation JSC ESM to submit a monthly report on the expenditure of these funds to the Government and the Ministry of Finance. According to the decision, JSC ESM can use these funds exclusively for procurement of additional quantities of electricity, ancillary reserve and energy for balancing. The duration of electricity crisis was extended by the Assembly of the Republic of North Macedonia for six months which means, until June 9, 2022.
- From December 2021 until now several Decisions have been adopted by the Government approving financial means for dealing with electricity supply crisis.
- On 25th November 2021 the Government of North Macedonia gave its consent to the JSC ESM to activate TPP Negotino with operation for temporary additional production of electricity in conditions of electricity crisis. This TPP uses fuel oil as primary resource. TPP Negotino, which was a cold reserve for 12 years, will be put into operation with a total available production capacity of 180MW. The TPP Negotino was built in 1978 and last operated in 2009.
- From January 2022 until 15th April several Decisions have been adopted by the Government according to which JSC TE-TO (CHP) is obliged to generate electricity of 160 MW every day of the week, and the generated electricity to be purchased by JSC ESM at a price not higher than 190 EUR per megawatt hour. This last Decision was valid until 15th April 2022. For the implementation of these decisions JSC ESM and JSC TE-TO concluded contracts.
- On 25th of August 2022 the Government of North Macedonia declared a state of electricity crisis effective for the period from 1st to 30th of September. On 30th of September, the duration of electricity crisis was extended until 30th April 2023 by the Parliament.
- On 9th of September, Government adopted a Decision for limitation of the trade margin on the electricity market to 10%.

The regulator has so far undertaken two types of measures:

- Decisions against suppliers that have not complied with their obligations set in their license, the Energy Law and Rules for Electricity Supply, for customer protection in respect of providing timely information and information of consumer's rights to choose another supplier or to be supplied by the supplier of last resort and asked for a retroactive application of new higher prices. These decisions also set a timeframe for regular reporting to the regulator of actions taken for a proper provision of relevant information to consumers.
- Decisions against suppliers that presumably abused the market and intentionally lowered their nominations to use balancing energy for supply of their consumers or did not have any bilateral agreements and used the entire balancing electricity for supply of their consumers. The regulator ordered these suppliers to end such practices and initiated a procedure for revoking their licenses due to potential breaches with general requirements of suppliers to contract electricity for supplying their consumers and also endangering the security of supply.

The regulator also adopted the new Tariff System on Electricity Sale to Consumers Supplied by the Universal Supplier and the Supplier in Last Resort, adopted by ERC on 27 June 2022.

Analysis of the consumption of households showed that some of the consumers drastically exceed the average consumption that is characteristic for this group of consumers. Bearing in mind that North Macedonia is import dependent - over 30% of the necessary electricity is imported, as well as the lack of electricity at the European level, and with a view to incentivize electricity savings, block tariffs were introduced with the new tariff system.

On 30th September 2022, the Energy Regulatory Commission adopted the amendments to the tariff system for the sale of electricity to consumers supplied by the universal supplier and the supplier of last resort in order to change the price paid by consumers supplied by the supplier of last resort, instead of 50% higher than HUPX it will be 20% higher than HUPX.

In order to reduce the impact of the drastically increased price of electricity, state-owned company (JSC ESM) on the public tenders conducted by the TSO and DSO submitted lowest offer for electricity to cover the losses. The prices for TSO was 220 euro/MWh and for the DSO 143 euro/MWh.

Social protection - Electricity

In December 2021, the Government adopted the Program for protection of vulnerable energy consumers for 2022. According to this Program, a vulnerable consumer is a household:

that uses guaranteed minimum assistance and realizes cash assistance to cover part of the costs for energy consumption in the household in accordance with Article 42 of the Law on Social Protection and the Elderly pursuant to Article 7 of the Law on Social Security of the Elderly; and which regular monthly income in the household does not exceed the net income of MKD 30,000 (hereinafter low-income citizens) such as:

- single citizen up to MKD 15,194;
- household with two members up to MKD 18,000;
- household with three members up to MKD 21,000; household with four members up to MKD 25,000; and
- household with five members and more up to MKD 30,000.

According to this program, citizens with low income receive financial support by reducing the monthly bill for consumed electricity in the amount of MKD 600 per month, or MKD 800 per month, depending on the number of household members. Financial support is granted to monthly level per user for a period of 12 months. The procedure for realization of the financial support is implemented by the Ministry of Economy, for which a Public Call was launched in January, which states the conditions and the necessary documentation for application. The Ministry of Economy submits the data from the decisions in electronic form to the universal electricity supplier on a monthly basis for all beneficiaries of financial support, on the basis of which the universal supplier will reduce the monthly electricity bill for those who have been granted financial assistance. For the implementation of this Program, in the State Budget for 2022, funds in the amount of 60.000.000 MKD (980.000 EUR) have been provided and as of 09.02.2022, the Ministry of Economy has received more than 6.500 applications from households seeking financial support.

Gas

The Government and ERC did not adopt any measures in retail gas market to protect customers from a significant increase in the price of natural gas.

Serbia

Retail market interventions

In order to protect the consumers that will be directly affected, the Government made a Conclusion to freeze certain prices at which consumers are supplied in an open market. This is done through the national supply incumbent, Public company „Elektroprivreda Srbije“ (EPS - state owned generation and supply company).

In the period until June 2022, the Government adopted the following measures:

- Consumers whose supply agreement ended in October and November 2021 are supplied until end of 2021 under the same conditions by EPS.
- Consumers, whose last resort supply agreement ended on 31 October 2021 and have not yet signed the new agreement, EPS will offer an extension of last resort supply for another month.
- Recommended to EPS to conclude contracts with customers supplied at non-regulated prices for the period 1 January – 30 June 2022 at the price of 75 euro/MWh.
- The price of the supply-of-the-last-resort was increased from 6.67 to 9.75 euro cents/kWh. A conclusion was also adopted related to the supply-of-the-last-resort where it was recommended to the EPS to enable the supply-of-the-last-resort to customers who are not entitled to the guaranteed supply after 1January 2022 at the price of 9.75 euro cents/kWh without VAT.

Social protection

No special protection measures have been introduced for households or for vulnerable customers. All households have the right to supply at regulated price (right for guaranteed supply), and this price of electricity has not been increased.

Ukraine

Retail market interventions – Electricity

In accordance with the procedure for the formation of prices for universal services approved by the Regulator, the supply of electricity to household consumers is carried out by the supplier of universal services at fixed prices within the framework of PSO to ensure the availability of electricity. Fixed prices for electricity for household consumers from 1st of October 2021 to 31st of October 2022 are UAH 1.44 (including VAT) per 1 kWh (within monthly consumption of up to 250 kWh) (approx. 3.9 euro cents at the exchange rate of the National Bank of Ukraine) and UAH 1.68 (including VAT) per kWh (for monthly consumption of more than 250 kWh) (approx. 4.6 euro cents at the exchange rate of the of the National Bank of Ukraine). On 28 October, 2022 the Government of Ukraine extended the PSO model till 31 March, 2023.

The price for small non-households with universal supplier is set in accordance with the procedure approved by the Regulator. Before October 2021, the market price for electricity in the structure of universal supply service was based on the actual market price of electricity for 3 months preceding the bidding month. Since October 2021, the market price for electricity was based on the market price of electricity for two months preceding the bidding month, while since November 2021 it was reduced to one month preceding the bidding month. In that regard, the price surge did influence the universal service non-household consumers but only after a few months' delay.

Ministry of Energy of Ukraine adopted a number of orders regarding the operation of the electricity market under martial law during the March and April 2022. In accordance with the orders, consumers are guaranteed with the supply of electricity under the terms of universal service in the event of the termination of the supply of electricity by the previous supplier as a result of assigning the supplier the status of "Default" or suspending the validity of its license. The supply of electricity to such consumers is carried out by the USSs at the price of a universal service for small non-household consumers. The supplier of last resort during the period of martial law and within 30 days after its termination or cancellation (except in the case of a change of supplier at the initiative of the consumer in accordance with the Rules of the retail electricity market) supplies electricity to those consumers who do not have an electricity supplier, including those being supplied by the last resort supplier as of March 4, 2022.

Retail market interventions – Natural Gas

On 4th of July 2021, the Regulator made changes to the Rules for the supply of natural gas and the Model Contract for the supply of natural gas to household consumers, which provided the opportunity for household consumers to consume natural gas during the year at a fixed price within the framework of the basic annual offer, which is valid from 1st of May of the current year until 30th of April of the following year. The supplier has no right during the period of validity of the basic annual offer to increase the price of natural gas supplied within the framework of the basic annual offer.

The Regulation on imposing special obligations on natural gas market entities, approved by Resolution of the Cabinet of Ministers of Ukraine dated 06.03.2022 No. 222 (hereinafter - Regulation on PSO 222), imposes special obligations on natural gas market entities regarding the sale of natural gas to household consumers, the sale of natural gas to operators of gas

distribution systems, natural gas supply to consumers who do not belong to the category of household consumers and perform vital functions for ensuring the defense capability of the state, under the conditions provided for in the Regulation on PSO 222. Provisions of the Regulation on PSO 222 include obligations of Gas Supply Company "Naftogaz Trading" LLC to sell during the period from 1st of May 2022 till 30th of September 2022 natural gas to natural gas suppliers in the volumes needed by household consumers on the basis of a contract and at prices determined at the level that, taking into account the trade allowance (markup) of the gas supplier in the amount of 0,6 UAH per cubic meter (incl. VAT), will be equal to the basic annual offer of such a supplier which was in effect as of 24th of February 2022. On 10th of September 2022, the Government of Ukraine extended the PSO model till 30th of April 2023.

The Regulation on imposing special obligations on natural gas market entities regarding the specifics of natural gas supply to heat energy producers and budget institutions, approved by Resolution No. 812 of the Cabinet of Ministers of Ukraine dated 19.07.2022 (hereinafter - Regulation on PSO 812) imposes special obligations on natural gas market entities to ensure the supply of natural gas to heat energy producers and budget institutions under the conditions stipulated by the Regulation on PSO 812. The Regulation on PSO 812 include obligations on Gas Supply Company "Naftogaz Trading" LLC to sell during the period from 1st of September 2022 till 31st of March 2023 natural gas to heat energy producers on the basis of a contract and at a pre-defined range of prices (from 7420 UAH per cubic meter (incl. VAT) for producing heat energy for households to 16390 UAH per cubic meter (incl. VAT) for producing heat energy for budgetary institutions and religious organizations and 38325,5 UAH per cubic meter (incl. VAT) for other needs).

On 14 June, 2022 Ministry of Energy adopted decision that obliged Gas Supply Company “Naftogas Ukraine” LLC to supply from 1st of May 2022 natural gas to household customers included into SLR Register on the terms of the Standard contract and basic annual offer. On 6th of September 2022, the Regulator prolonged the model till 1st of May of the year following the year in which martial law in Ukraine was suspended or canceled.

Ukrainian Parliament adopted Law No. 2479-IX of 29.07.2022 "On the peculiarities of regulating relations in the natural gas market and in the field of heat supply during martial law and their subsequent restoration of functioning" (hereinafter - Law No. 2479-IX). The Law No. 2479-IX stipulates that during the period of martial law in Ukraine and six months after the month in which martial law is suspended or canceled:

- it is prohibited to increase tariffs for natural gas distribution services for all categories of consumers;
- the price of natural gas for household consumers, as well as for home-owners associations, housing cooperatives, heat energy producers - if they use natural gas for the production of heat energy for the households and have entered into an agreement with a natural gas market entity with special obligations, cannot be increased compared to the price applied in the relations between suppliers and relevant consumers as of 24th of February 2022;
- in contracts for the supply of natural gas to the home-owners associations with the purpose of providing heating and hot water supply to co-owners' apartments (except for non-residential premises), it is prohibited to stipulate conditions regarding advance payment, provision of a bank guarantee for the amount of the consumer's monetary obligations and non-acceptance withdrawal of funds from the consumer’s bank account;

- the supplier of natural gas is prohibited from taking any actions to compel the household consumer to pay the debt regulated in accordance with the Law of Ukraine "On measures aimed at overcoming crisis phenomena and ensuring financial stability in the natural gas market" (including the debt in the payment bill, filing lawsuits, collecting the debt by force, taking measures to stop gas supply due to the existence of debt etc.);
- the Regulator has the right, at the request of the "last resort" supplier, to make a decision on the supply of natural gas to household consumers by the "last resort" supplier on the terms of the standard contract for the supply of natural gas to household consumers, which is approved by the Regulator, and on the terms of the basic annual offer of the business entity (supplier), defined by the "last resort" supplier.

Measures for both electricity and natural gas market

Until the termination or abolition of martial law in Ukraine, it is prohibited to accrue and collect penalties (fines), inflation accruals, interest per annum, accrued on debts formed for late and/or incomplete payment for utilities, termination/ suspension of the provision of utilities to the household consumers in case of non-payment or incomplete payment (the resolution of the Cabinet of the Ministers of 5th of March 2022 № 206)

Social protection

No special protection measures have been introduced for households or for vulnerable customers.

F. Main findings and conclusions

1. Electricity

In 2021, a gradual suspension of COVID crisis measures led to an increase in electricity consumption in all Energy Community Contracting Parties compared to 2020. The **total sale of electricity to final customers** increased by 6.23% in total, whereas the highest increase occurred in Kosovo* (12.81%), and the lowest one in Georgia (1.84%). The demand growth was caused by the increase of both non-household (7.23%) and household consumers' consumption (4.55%) in all Contracting Parties. In Armenia, electricity consumption in 2021 also increased by 6.90% compared to 2020.

The average monthly consumption per household varied between 115 kWh/month in Moldova and 465 kWh/month in Kosovo*.

In 2021, among all Contracting Parties, by far the most licensed suppliers were active in the retail market of Ukraine (523 in total). The number of active suppliers in other Contracting Parties ranged from 18 (North Macedonia) to one (Kosovo* and Montenegro). The total number of licensed suppliers was 293 in Türkiye, while in Armenia there were only four licensed 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 above 95%. Only in North Macedonia and Ukraine, this share is lower (76% and 28.56%, respectively). In Armenia, there was only one active retail supplier with a 100% market share.

In 2021, all consumers in all Contracting Parties had the **right to choose the supplier**. In Armenia, 91.27% and in Türkiye 51.11% of all customers were eligible to choose their supplier in 2021.

During 2021 in Albania, Georgia, Kosovo* and Montenegro there was no supplier switching, while only a limited number of eligible customers **changed their suppliers** in Bosnia and Herzegovina. On the other hand, in Moldova, North Macedonia, Serbia and Ukraine more than a thousand customers changed their suppliers, with an annual switching rate (calculated by the number of metering points) of less than 1% in North Macedonia and Serbia, while in Moldova 1.7% and Ukraine 1.5%. The annual switching rate in Türkiye was 0.82% in 2021, while there was no suppliers switching in Armenia during the reporting year. Generally speaking, only non-household customers changed their suppliers, except for Serbia, Türkiye and Ukraine, where a very small number of household customers left electricity supply at regulated prices.

The **number of switching requests**, which is an indicator of market liquidity, increased in North Macedonia, Serbia and Ukraine, while it decreased in Bosnia and Herzegovina and Türkiye. In Moldova, this data was not collected, while in the remaining Contracting Parties and Armenia there were no requests for switching supplier in 2021.

End-user electricity prices for household customers in the Energy Community Contracting Parties varied substantially from 4.85 euro cent/kWh in Ukraine to 9.77 euro cent/kWh in Montenegro and are still much lower than the EU 28 average price for households of 22.9 euro cent/kWh in 2021. In comparison to 2020 prices, slight decrease of prices for household

consumers was recorded in Bosnia and Herzegovina, Kosovo* and Montenegro while in Moldova electricity prices decreased by 16%. In other Contracting Parties, electricity prices increased (the biggest increase was registered in Ukraine – 12.5%). Price increase at the EU level in 2021 was 7.51% compared to 2020.

When it comes to the electricity price breakdown for households, the share of the energy component in the final bill for households was the highest in Georgia (72%) and the lowest in Serbia (29%). The share of network costs in the total household electricity price ranged between 14% in Georgia and 48% in Albania.

On the other hand, **electricity prices for industrial** customers in Contracting Parties varied from 6.59 euro cent/kWh in Ukraine to 9.91 euro cent/kWh in North Macedonia. The average electricity prices for industrial consumers in the Contracting Parties were around 63% of the average electricity prices for the industry in the EU Member States.

In 2021, household customers were entitled to and supplied at the **regulated prices** in all Energy Community Contracting Parties, except in Montenegro and Serbia. In Montenegro, in 2021, the supplier that had the status of the public supplier until the day of entry into force of the Energy Law was allowed to freely define the retail prices for household and small consumers, however, respecting the maximum annual price increase defined by the NRA. On the other hand, in Serbia, even though all household customers are entitled to the regulated prices, a very small number of household customers left the electricity supply at regulated prices and were supplied under non-regulated prices in 2021. In Türkiye, certain household customers were supplied at non-regulated prices.

In Albania, there is no price regulation only for non-households connected to the 35 kV network. In Bosnia and Herzegovina, all non-household consumers except for the small and medium enterprises connected to the 0.4 kV network are supplied under non-regulated prices. In Kosovo*, non-regulated prices are applied only to non-household consumers connected to the TSO network (220 kV and 110 kV voltage levels). In North Macedonia, Serbia and Ukraine[68] only small consumers, among the non-household consumers, were supplied at regulated prices. In Montenegro, all non-household consumers were supplied at non-regulated prices. In Georgia some non-household customers were entitled to electricity supply at regulated prices, while in Armenia and Türkiye, all non-household customers had the possibility to be supplied at regulated prices.

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 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. Another precondition for a 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 Bosnia and Herzegovina, Kosovo*, Moldova, Montenegro, North Macedonia, Serbia, Türkiye and Ukraine.

[68] Small enterprises have a right for universal service supply with end prices calculated according NEURC's methodology.

2. Gas

Total sale of gas to final customers in the Energy Community Contracting Parties, without Ukraine, increased in the period 2012-2021 by 47%. Over the same period, in Ukraine, the demand decreased by 51%. With the exception of a clear downward trend in gas demand in Ukraine from 2012 to 2021 (beside the slight increase in the demand in 2020), caused predominantly by efforts to reduce import dependence, consumption in the Contracting Parties varies depending on industry performances and winter temperatures.

In the reporting period, the number of active suppliers ranged from four in Bosnia and Herzegovina to 248 in Ukraine. Although, the majority of active retail suppliers hold a license for supplying customers nationwide, the household customers in the Energy Community Contracting Parties predominantly buy gas from local incumbent suppliers.

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 the incumbent). Similarly, the customers connected to the transmission system were supplied by more than one supplier in all Contracting Parties, except Moldova and Serbia. If the 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 have a **market share** higher than 5%. The market share of the three largest companies in the retail market varied from 75% in Ukraine to 100% in Bosnia and Herzegovina. In the most of the Energy Community Contracting Parties, households were supplied by the incumbent gas supplier in 2021. Obstacles to retail market entries in other Contracting Parties stem mostly from reasons other than retail market design, namely the status of wholesale market development (e.g. single source of gas and poor access to liquid wholesale markets).

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 2021. In Ukraine, the annual switching rate of households was 6.88%.
- Only in Moldova, Serbia, and Ukraine some non-households changed supplier in 2021 - 82 in Moldova, 31 in Serbia and around 10.10% of non-households in Ukraine. There was no supplier switching in Georgia.

End-user gas prices for household and industrial customers in Energy Community Contracting Parties increased by 8.7% and 2%, respectively, in 2021 compared to 2020. The household gas prices ranged from 1.28 euro cents/kW in Georgia to 5.29 euro cents/kW in North Macedonia, while industry gas prices varied from 1.85 euro cents/kW in Georgia to 4.33 euro cents/kW in Bosnia and Herzegovina. The discrepancies in national prices originate partly from the different regulatory approaches and levels of cross-subsidization in gas prices between the household and industrial segments. Both household and industrial prices in Energy Community Contracting Parties were lower than the EU average.

Differently from the EU Member States, more than half of the final price paid in 2021 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 2021 ranged from 43% in Georgia to 77% in Serbia. The share of network charges, including both distribution and transmission network costs, ranged from 10% in North Macedonia to 42% in Georgia.

End-user gas prices for household customers were regulated in all Contracting Parties in 2021, except in North Macedonia and Ukraine. For non-household customers, end-user prices were not regulated in Bosnia and Herzegovina (Republika Srpska), Georgia, North Macedonia and Ukraine. In Serbia, 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 a choice of suppliers but also offering lower prices, end-user price regulation should be abandoned. Abandoning the 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, while for gas a supplier of last resort has not been yet designated in Georgia and BIH entity Republika Srpska. The most common cases when a household customer may turn to the supplier of last resort in the electricity sector are: when the current supplier has gone bankrupt; when the license of the current supplier has been revoked; when a customer does not find a supplier on the free market; when a household customer is dropped by its current supplier because of non-payment and when a fix-term supply contract expires. The same circumstances are applicable to consumers in gas markets. This means that protection of inactive consumers and precaution for the failure of supplier is provided through the role of supplier of last resort.

Non-payment of energy bills is one of the main problems that electricity and gas suppliers face in the Contracting Parties. Therefore, **transparent procedures for disconnection** that protect both suppliers and customers are very important. The number of days legally envisaged for disconnection of the household consumer because of non-payment varies significantly from country to country (from immediately after the due date expired in Georgia to 60 days in Albania and North Macedonia).

The **shares of household disconnections due to non-payment** for electricity in the Contracting Parties vary substantially among countries. The share of household disconnections due to non-payment for electricity in the Contracting Parties varies among countries (from 0.65% in Ukraine to 6.64% in North Macedonia).

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

Different approaches to protect vulnerable customers have been chosen. Measures for the 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 electricity vulnerable customers in the total number of household metering points, showing how well-targeted vulnerable customers are, varied between 2.06% in Serbia[69] to 15.65% in Ukraine.

The concept of **energy poverty** has recently gained significant attention and it has been identified as a policy priority in the Clean Energy Package. In 2021, the Study on Addressing Energy Poverty in the Energy Community Contracting Parties was conducted, in order to take stock of already implemented policies and measures addressing energy poverty in the Contracting Parties, provide a preliminary assessment of the number of households in energy poverty and give recommendations for further measures to address energy poverty.

Even though 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 these issues have been implemented in the majority of observed countries. In this regard, financial measures, energy efficiency measures and information provision are the most commonly implemented measures in Energy Community Contracting Parties.

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 to inform household consumers of price changes, including the provision of a minimal number of lead days for informing consumers before new prices apply, which vary from 15 to 30 days.

Electricity and gas bills are the primary sources of information for 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 every Energy Community Contracting Party. Actual consumption, breakdown of the price, accounting period, suppliers' details and payment modalities are included in the bills in all Contracting Parties. Information related to the energy mix, as one of the mandatory elements, is available only in Albania, Georgia, North Macedonia, Moldova, Montenegro, Serbia and Ukraine.

The frequency of billing information based on actual consumption was monthly in every Contracting Party during 2021. 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.

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, the share of household customers with smart meters varied between 0.90% in Serbia to 81.60% in Montenegro in 2021.

[69] In Serbia, this share includes also the gas vulnerable consumers, however the great majority of the vulnerable consumers receive the assistance for electricity (they can apply for either electricity or gas assistance).

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.

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

The customer's **right to switch supplier** is essential for customer protection and empowerment and for competition development in the energy market. The number of working days for supplier switching in Energy Community Contracting Parties usually is 21 (in Bosnia and Herzegovina, Georgia, Kosovo*, North Macedonia, Serbia and Ukraine). In Albania and Montenegro, it is 15, in Moldova 20.

Besides being continuously supplied with 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 the level and effectiveness of market opening and competition, regulatory authorities should, among others, monitor also the complaints of household customers. In most of observed markets, the national regulatory authorities have the role of an **Alternative Dispute Resolution** body. Besides the regulator, in Bosnia and Herzegovina, the Ombudsman for customer protection and a local/regional court may also be appointed as Alternative Dispute Resolution, in Georgia the Energy Ombudsman, in Kosovo* a private mediator licensed by the Ministry of Justice, in Serbia for electricity: Complaints Resolution Body (Suppliers), Special Complaints Resolution Organizational Unit (DSO), for natural gas: supplier (with the obligation to resolve complaints effectively) and in both cases (electricity/ gas), special bodies for resolving out-of-court disputes, which the consumer can contact after the complaint procedure (Law on Customer Protection), while in Türkiye Consumer arbitration commission. The majority of complaints reported for 2021 refer to bills. A great part of them was also related to the quality of supply.

Analysis 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, maximum number of days to disconnect the energy following a consumer request and the maximum duration of a planned supply interruption) varies significantly among the Contracting Parties. The number of days to provide a price offer for a grid connection varies from 5 days in Albania to 30 days in Kosovo*, while the number of days to connect to the network and activate energy supply to a consumer depending on the connection capacity can be up to 350 days (for electricity consumers with the capacity in the range from 1000 kW to 5000 kW in Ukraine). The maximum number of days to disconnect the energy following a consumer request ranges from disconnection immediately after the request is submitted in Serbia to 30 days in Kosovo* and North Macedonia. Finally, the maximum duration of a planned supply interruption per day varies from six hours in Kosovo* to 47 hours in Albania.

4. Measures to support consumers during the energy price surge

From the second half of 2021, unprecedented energy price surges are being recorded at a wholesale level, leading to increases in the price level in the retail markets too. During 2021 and the first half of 2022, the electricity prices for households and industry increased in all Contracting Parties, except in Montenegro, where household electricity prices slightly decreased in 2022. This insignificant decrease however is not the result of the electricity price decrease, but rather reflects the slight changes in distribution tariffs. While in some markets the household electricity prices increased only between 1% and 2%, in Moldova they rose by 38%. In the same period, the gas price increases for households of the Contracting Parties were even more substantial: from 29% in Georgia to 247% in North Macedonia. Only in Serbia, the household gas prices slightly decreased - by 0.35%. The electricity and gas price increases for the industry segment of the markets were substantially higher than for households. Therefore, most of the Energy Community Contracting Parties had adopted certain measures to protect and support end customers.

In **Albania**, the NRA introduced the block tariff for the monthly electricity consumption of more than 800 kWh, with the sale price of electricity of 42 ALL/kWh (36 euro cent/kWh). The consumption up to 800 kWh is still priced at 9.5 ALL/kWh (8.1 cent/kWh). The Government obliged KESH to sell the entire quantity of energy produced to the universal service provider, at the price of 2 euro cents per kWh. The Government also launched the project that should help citizens to change the form of energy supply. The project concerns the installation of solar panels for 2,000 households, which will be supported by financing 70% of the cost of purchasing and installing solar panels. Finally, the amount of electricity bill subsidy for vulnerable customers was increased.

In the **Federation of Bosnia and Herzegovina**, the Government of FBIH on 7th January 2022 adopted the Decision on limiting the increase in electricity supply prices for qualified customers to a maximum of 20% compared to the previous year, while the same applies to contracts with an annual duration or longer. Nonetheless, the prices for household customers and small commercial customers who did not choose a supplier on the market were not changed in 2021 and at the beginning of 2022. Additionally, The Government FBIH amended and supplemented the *Decision on the implementation of measures to reduce household electricity costs and stimulate energy efficiency* with the aim to introduce the subsidy in the amount of a maximum of 25.50 BAM (13.05 EUR) per month bill for household customers of "Elektroprivreda Bosne i Hercegovine" d.d. Sarajevo (EPBIH), and 27 BAM (13,85 EUR) for household customers of "Elektroprivreda Hrvatske zajednice Herceg Bosne" d.d. Mostar (EPHZHB), depending on the consumed electricity, in the period from 1 July 2022 until 30 November 2022.

In **Bosnia and Herzegovina entity Republika Srpska**, the price for household customers was not changed during 2021, nor at the beginning of 2022, while the electricity price for non-household and non-small customers was increased (but only to a limited extent) at the end of 2021. So far, the Government of RS has not adopted any decision regarding the price increase limit. In July 2022, the Regulatory Commission for Energy of RS determined the retail reference price for electricity in the amount of 0.07997 BAM fening/kWh (0.04089 euro/kWh) which serves as a basis for the determination of the price of the last resort supply.

In 2021, the Government of the **Brcko District of Bosnia and Herzegovina** provided funds in the amount of 829,905.60 BAM (424,324.00 EUR) to households customers through the program for subsidies to persons in a state of social need for the consumption of electricity. It is expected that the funds for 2022 will be provided by the end of the year.

In **Georgia**, no price interventions were introduced due to the energy crisis in Europe because its energy market wasn't affected by the crisis. However, some measures were taken to support the consumers due to economic difficulties caused by COVID. In February 2022, Resolution N52 of the Government of Georgia put in place subsidies for certain category of vulnerable customers that is equal to the difference between the current electricity tariff and the one that was in force in December 2020. Additionally, new Electricity Market Law from July 2021 introduced additional measures in order to prevent disconnection of certain group of vulnerable customers. On the other hand, Resolution N655 of the Government of Georgia introduced the subsidies for other consumer differentiated by their monthly consumption.

In **Kosovo***, the ERO (NRA) and the Government during 2021 and 2022 have adopted several decisions aiming to protect consumers with the right to Universal Service Supply. The adopted measures included: the allocation of 20 million EUR for subsidizing the import of electricity; the Extraordinary Review of the tariffs for regulated activities in the electricity sector; allocation of 90 million EUR to subsidize the final customers entitled to Universal Service Supply; approval of the retail electricity tariffs for all consumers entitled to Universal Service Supply taking into account the Government's decisions on the allocation of subsidies and introduction of the two block-tariff for the household customers (the first block for the consumption up to 800 kWh/month, while the second for the consumption higher than 800 kWh/month). It is defined that there is no price increase for the first block, i.e., up to 800 kWh consumed during the month, while the consumption that exceeds 800 kWh/month (second block) will be priced at 12.52 cents/kWh during peak hours and 5.9 cents/kWh during off-peak hours.

In **Moldova**, the retail electricity prices were stable in 2021 and started significantly increasing in 2022. The Emergency Situation Commission decided that, in the period of the state of emergency, the disconnections for non-payment were prohibited. Because of the significant increase of gas prices in 2021 and 2022, the Government decided to grant compensation for all consumers for the cold period. Also here, the disconnections for non-payment were prohibited. The amendments to the primary legislation obliged national supplier to ensure a stock of natural gas in reserve. Finally, the Government introduced the Energy Vulnerability Fund to support the energy poor.

In **Montenegro**, high energy prices on the wholesale market did not affect retail prices for households and small consumers, i.e., the electricity prices for these categories were not changed since 2019. Nevertheless, the Energy Law provides a protection for households and small consumers until the end of 2022 by limiting the increase of electricity prices for mentioned categories of consumers to 6%. The Energy Law also gives the possibility for Government to react in case of a disturbance in the market caused by an unexpected energy deficit, by introducing different measures.

On the other hand, the significant increase in wholesale electricity prices affected TSO and DSO, due to their obligation to purchase energy needed for covering losses in the transmission and distribution system. Higher incurred costs of energy purchased for covering

the losses in 2020 and 2021 will affect the network charges for the next regulatory period 2023-2025.

By the October 2022, the Government of **North Macedonia** adopted several legal acts to cope with the price surges, namely: the *Decree determining the criteria and conditions for declaration of crisis in the electricity sector*, *Decision for limitation of the trade margin on the electricity market to 10%, Program for protection of vulnerable energy consumers for* 2022, decisions for approving financial means for dealing with electricity supply crisis and decisions aiming to oblige JSC TE-TO (CHP) to generate 160 MW of electricity daily and sell it to JSC ESM at price not greater than 190 euro/MW. Additionally, the Government declared a state of electricity crisis effective until 9 December 2021 and gave a consent to the JSC ESM to activate TPP Negotino with operation for temporary additional production of electricity in conditions of electricity crisis. On the other hand, the NRA of North Macedonia has undertaken the measures to protect consumers by adopting the decisions against suppliers that have not complied with their obligations set in their license, the Energy Law and Rules for Electricity Supply and decisions against suppliers that presumably abused the market. NRA also adopted the amendments to the *Tariff system for the sale of electricity to consumers supplied by the universal supplier and the supplier of last resort* in order to change the price paid by consumers supplied by the supplier of last resort, instead of 50% higher than HUPX it will be 20% higher than HUPX.

On the other hand, the Government of North Macedonia and NRA did not adopt any measures in retail gas market to protect customers from a significant increase in the price of natural gas.

In **Serbia**, the Government made a Conclusion to freeze certain prices at which consumers are supplied in an open market. In that regard, by June 2022, the Government: extended the period of supply of the consumers whose supply agreement ended in October and November 2021 until the end of 2021 under the same conditions by EPS; extended for one month the supply of consumers whose last resort supply agreement ended on 31 October 2021; recommended EPS to conclude contracts with customers supplied at non-regulated prices for the period 1 January – 30 June 2022 at the price of 75 euro/MWh; increased the price of the supply-of-the-last-resort from 6.67 to 9.75 euro cents/kWh. A conclusion was also adopted related to the supply-of-the-last-resort where it was recommended to the EPS to enable the supply-of-the-last-resort to customers who are not entitled to the guaranteed supply after 1 January 2022 at the price of 9.75 euro cents/kWh without VAT.

In **Ukraine**, the electricity prices for households are fixed at the level of the 1.44 UAH/kWh (including VAT) (within monthly consumption of up to 250 kWh) (approx. 3.9 euro cents at the exchange rate of the National Bank of Ukraine) and 1.68 UAH/kWh (including VAT) (for monthly consumption of more than 250 kWh) (approx. 4.6 euro cents at the exchange rate of the National Bank of Ukraine) from the 1st of October 2021 to 31st of March 2023. On the other hand, the electricity price of the universal service for non-household consumers is affected by the price surge with a few months of delay, as the price for this category is based on the actual market price of electricity for a month preceding the bidding month from November 2021. During the March and April 2022, Ministry of Energy of Ukraine adopted a number of orders regarding the operation of the electricity market under martial law.

When it comes to the interventions in gas sector, the measures included amendment of the *Rules for the supply of natural gas and the Model Contract for the supply of natural gas to*

household consumers, adoption of: *Regulation on imposing special obligations on natural gas market entities, Regulation on imposing special obligations on natural gas market entities regarding the specifics of natural gas supply to heat energy producers and budget institutions* and Decision that obliged Gas Supply Company “Naftogas Ukraine” LLC to supply from 1st of May 2022 natural gas to household customers included into SLR Register on the terms of the Standard contract and basic annual offer. At the end of July 2022, Ukrainian Parliament adopted Law (No. 2479-IX of 29.07.2022) "*On the peculiarities of regulating relations in the natural gas market and in the field of heat supply during martial law and their subsequent restoration of functioning*" which stipulates certain prohibitions that ensure consumer protection during the period of martial law in Ukraine and six months after suspension or cancelation of the martial law. Additionally, by the *Resolution of the Cabinet of the Ministers of 5th of March 2022 № 206* it is prohibited to accrue and collect penalties (fines), inflation accruals, interest per annum, accrued on debts formed for late and/or incomplete payment for utilities, termination/ suspension of the provision of utilities to the household consumers in case of non-payment or incomplete payment until the termination or abolition of martial law in Ukraine.