



Monitoring Report on the Functioning of Gas  
and Electricity Retail Markets in the Energy  
Community in 2017

December 2018

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## A. INTRODUCTION

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

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

Data presented in this report refers to the year **2017**.

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<sup>1</sup> ECRB operates based on the Treaty establishing the Energy Community (Energy Community Treaty). As an institution of the Energy Community<sup>1</sup> 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](http://www.energy-community.org) – about us – institutions – regulatory board.

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

## B. FINDINGS: ELECTRICITY

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

### 1. Electricity retail market characteristics

Total **sale of electricity** to final customers in the Contracting Parties increased by 1.45% in the period 2016-2017 (excluding Ukraine total sale of electricity to final customers increased by 2.95%). In all markets, except in the FYR of Macedonia<sup>3</sup>, there was an increase in electricity consumption. The highest increases were in Albania (8.91%) and Kosovo\* (8.74%). Georgia (4.94%) and Montenegro (4.24%) had higher increase in electricity consumption than in Bosnia and Herzegovina (2.65%), Serbia (1.73%) and Moldova (1.66%), while in Ukraine increase of electricity consumption of 0.56% was the lowest. The main reason for the observed growth of total electricity consumption was increases of non-household customers consumption (from 1.95% in Ukraine to 16.64% in Kosovo\*). Electricity consumption of households in the Contracting Parties decreased by 1.22%, but excluding Ukraine consumption of households increased by 0.24%<sup>4</sup>. The figures below show the total electricity sales to final customers in the period 2013-2017<sup>5</sup>, presented with and without data for Ukraine.

Figure 1 Total electricity sale to final customers in GWh 2013-2017

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<sup>3</sup> Total electricity consumption decreased by 1.21%, consumption in households increased 1.08%, but drop for non-households customers was 3.27%

<sup>4</sup> Decrease of households' consumption was in Ukraine 2.50%, Moldova 2% and Serbia 0.83%, while in Albania, Bosnia i Herzegovina, Georgia, FYR of Macedonia and Kosovo\* households' consumption increased between 0.25% and 2.79%.

<sup>5</sup> Only for Moldova presented data refer to the period 2015-2017

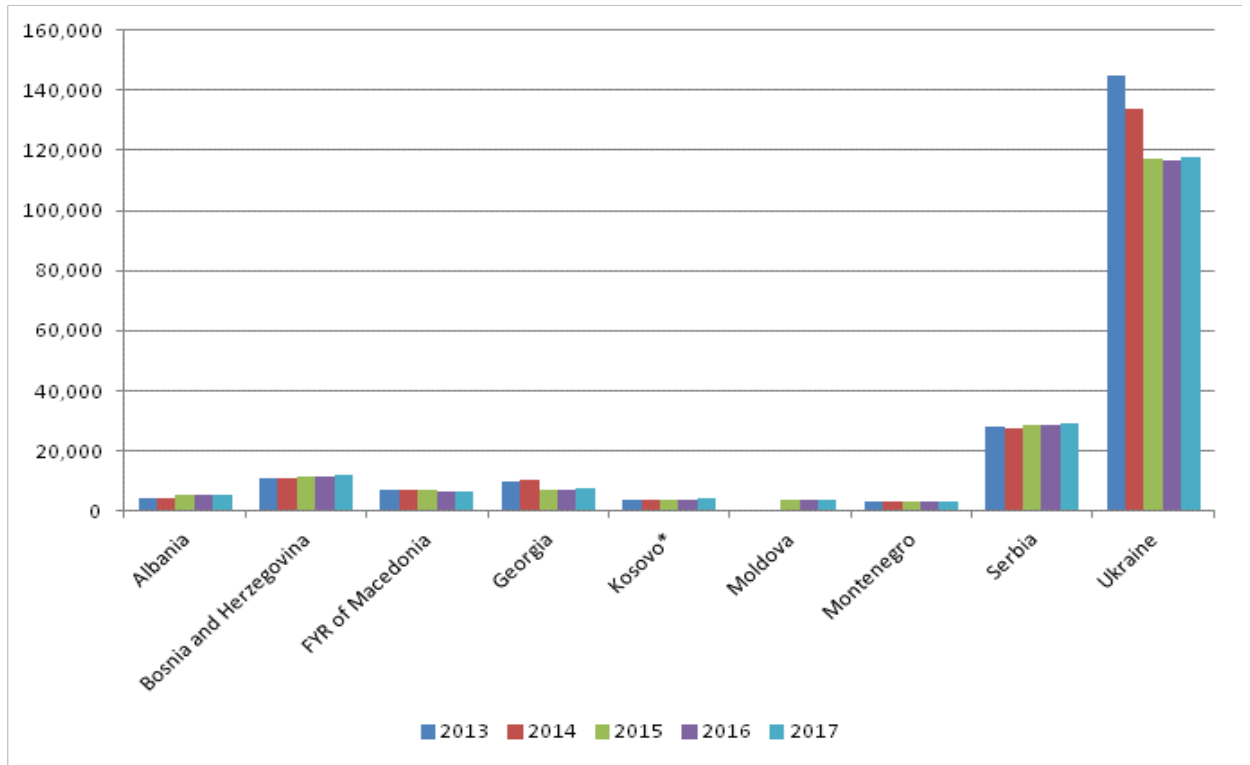
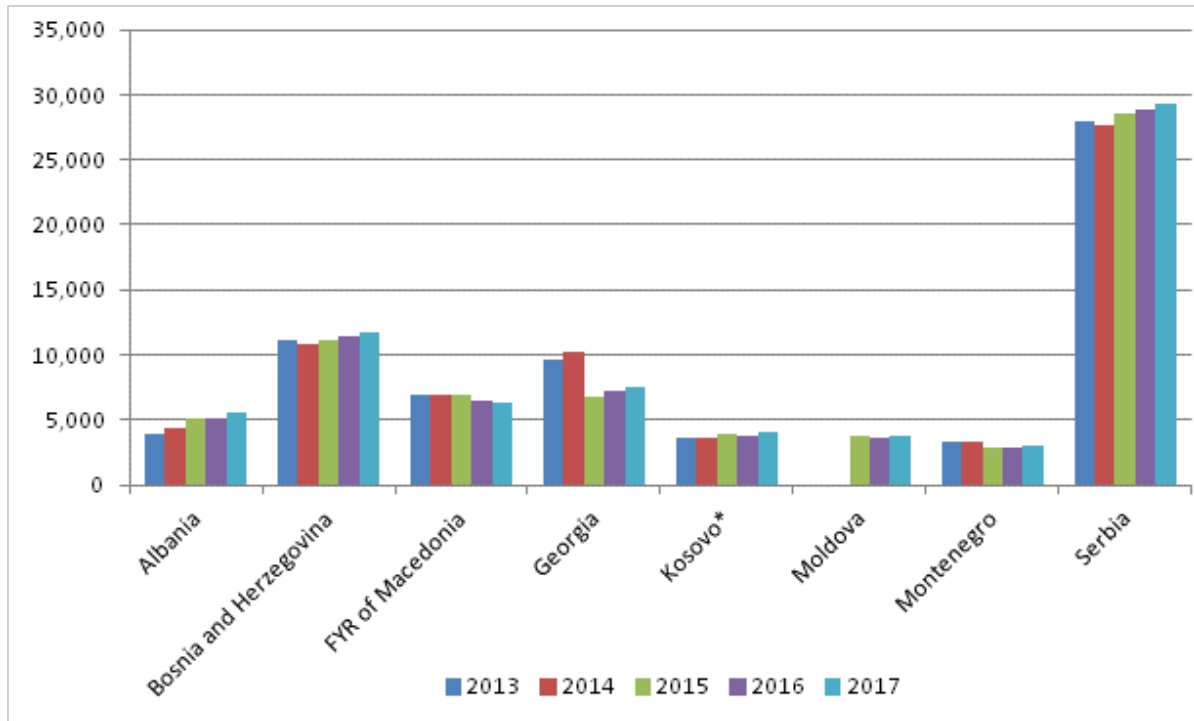
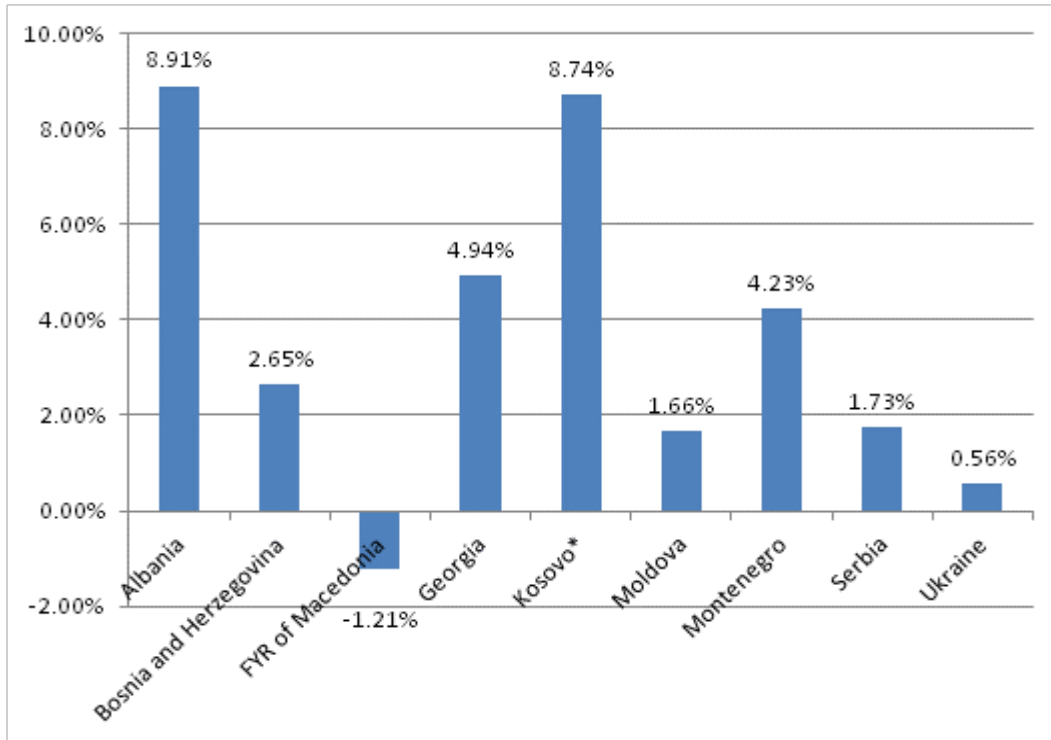


Figure 2 Total electricity sale to final customers in GWh 2013-2017 (excluding Ukraine)



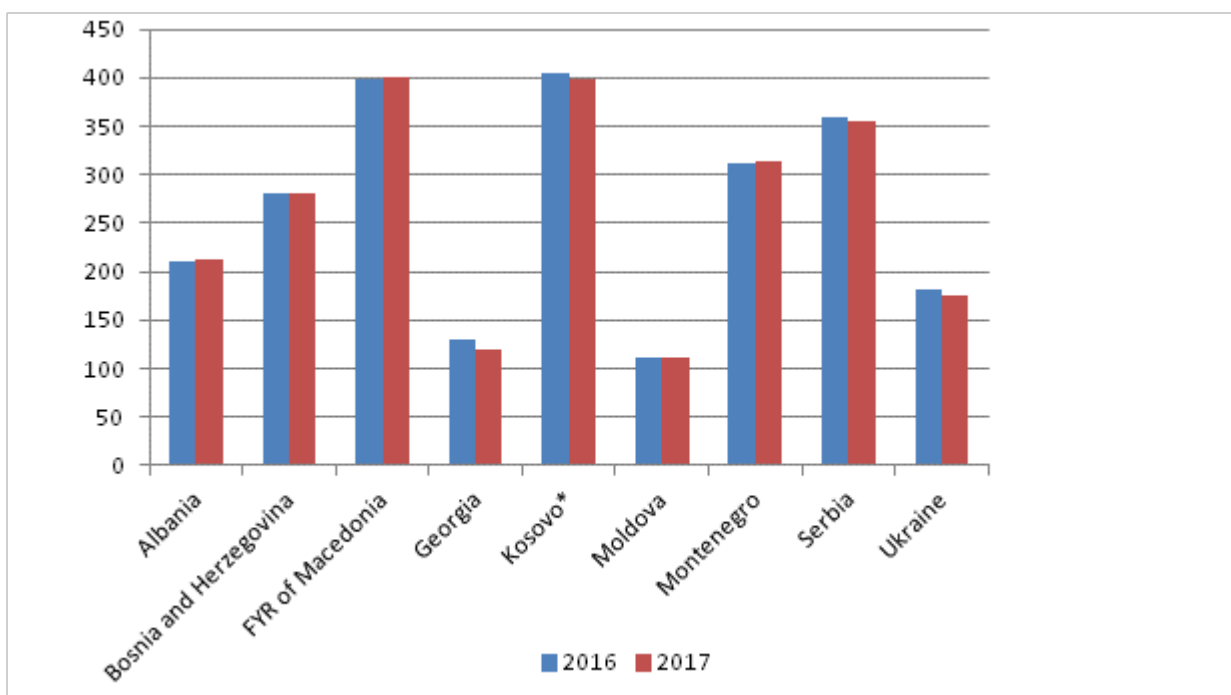
The following figure shows the growth rate 2016 to 2017 of the total of electricity sales to final customers in the Contracting Parties.

Figure 3 Electricity demand growth rate 2016 to 2017



The average monthly consumption of electricity per household<sup>6</sup> varies among the Contracting Parties. In 2017, the lowest consumption was in Moldova (110 kWh/month) and Georgia (120 kWh/month) and the highest in FYR of Macedonia (400 kWh/month) and Kosovo\* (398 kWh/month). Relevant quantities are displayed in the figure below.

Figure 4 Average monthly consumption of electricity per household in 2016 and 2017 (kWh)



Only in Ukraine a large number of both local and nationwide<sup>7</sup> suppliers were active in the retail market in 2017. In Bosnia and Herzegovina, FYR of Macedonia and Serbia more than ten suppliers were active in the retail market, while in the other Contracting Parties supply to electricity end-users was offered by one or only few suppliers. Both local and nationwide active suppliers there are in Bosnia and Herzegovina, FYR of Macedonia, Moldova and Ukraine, and in the rest of Contracting Parties the majority of active suppliers were nationwide suppliers. In 2017 new active nationwide suppliers entered the markets of FYR of Macedonia, Serbia and Ukraine.

In all Contracting Parties licenses have to be issued for the activity of supply of electricity to end-users. In Georgia there is no separate supply license but, instead, the distribution license entails the right to supply customers. Until September 2017, in Georgia only three distribution companies supplied end-users connected to their network. In September 2017, two of them merged, so in the end of 2017, only two companies supply end-users.

In Ukraine, total number of licensed electricity suppliers in the retail market significantly increased, because until 2016 activity for supply did not have to be licensed, but according to the Law of Ukraine "On the National Commission for State Energy and Utilities Regulation", adopted in 2016, all suppliers must obtain a license.

Table 1 Number of active suppliers in retail electricity markets in 2017

	Number of licensed electricity suppliers	Total number of active electricity suppliers	Number of active nationwide suppliers	Number of net new active nationwide suppliers <sup>8</sup>
Albania	32	21	21	1
Bosnia and Herzegovina	32	13	8	0
FYR of Macedonia	61	19	18	2
Georgia	2	2	0	0
Kosovo*	3	1	1	0
Moldova	17	3	1	0
Montenegro	5	2	2	0
Serbia	63	19	19	6
Ukraine	219	127	94	7

<sup>7</sup> Nationwide supplier means a supplier offering its products on the whole territory of a country.

<sup>8</sup> Net means number of entries minus number of exits in the market.



It should be noted that in some Contracting Parties, where there is a greater number of suppliers, transmission and distribution networks are not used by all suppliers that are active on the market. The figures below show detailed information on whether more than one supplier (i.e. incumbent) was supplying customers connected to the transmission and distribution network in 2017.

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

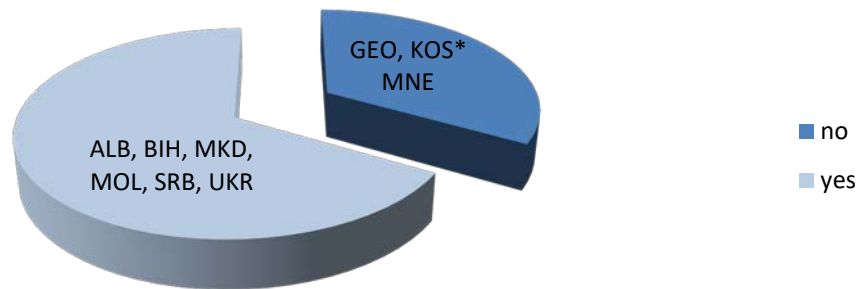
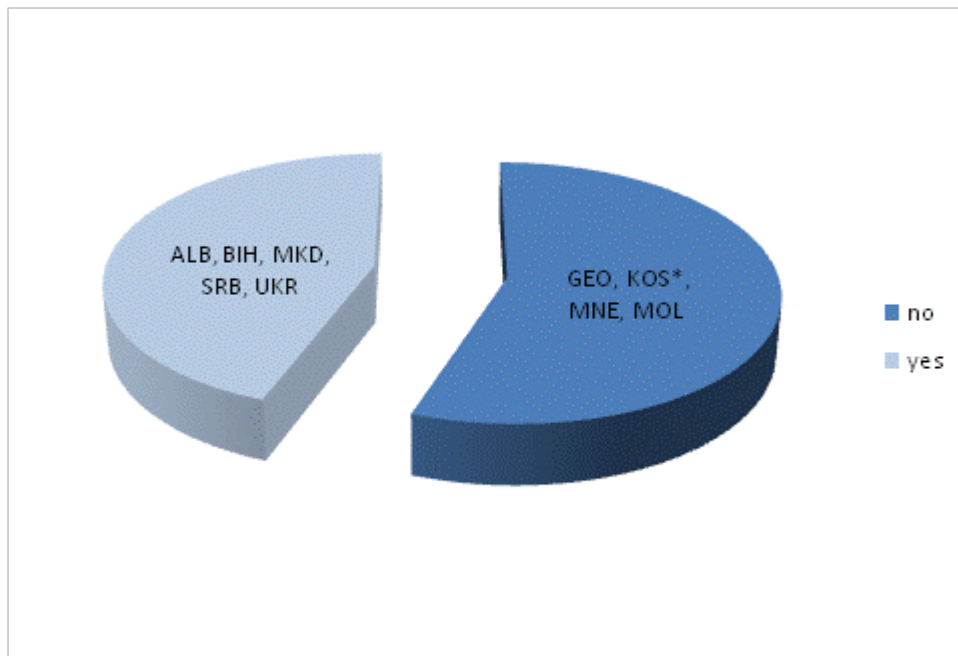


Figure 6 Are there electricity suppliers other than incumbent supplying customers connected to the distribution network?



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

- Except for Serbia, in all Contracting Parties all households are supplied by the incumbent supplier at regulated prices. Nevertheless, also in Serbia, the majority of households were still supplied by an incumbent supplier at regulated prices (99.97% of total consumption of households).
- In Albania 21 suppliers were active. Still, the incumbent supplier remained the dominant supplier with a market share of 90% of total electricity consumed by final customers. The market share of the three largest suppliers was 96% of total electricity consumed by final customers.
- In Bosnia and Herzegovina 13 suppliers were active.<sup>9</sup> There are four retailers selling at least 5% of total electricity consumed by final customers, and three of them with a joint market share of 88.23% (in 2016 three companies<sup>10</sup> were dominant suppliers with a joint market share of 95.11%).
- In Georgia electricity retailers are regional and incumbent suppliers. Until September 2017 three distribution companies are suppliers for customers connected to their network. In September 2017, two of them merged so since the end of 2017 two companies supply end-users. The market share of these companies is 100%.
- In FYR of Macedonia there were nineteen active suppliers and two of them started to supply customers in 2017. The market share of the three largest electricity suppliers added up to 91.58%.
- In Kosovo\* there was only one retail supplier of electricity, namely the incumbent with a 100% market share.
- In Moldova there were three retail electricity suppliers active in the retail electricity market. Two of them were selling at least 5% of total electricity consumed by final customers in 2017, with a joint market share of 88.23% of the total sale of electricity on the retail market.
- In Montenegro two retail electricity suppliers were active in the market. One of them supplies only non-household customers covering a market share of 2.62% of total consumption. All other non-household customers and households are supplied by the incumbent supplier with the market share of 97.38%.
- In Serbia there were 19 active suppliers and six of them started to supply customers in 2017. The great majority of customers were supplied by the incumbent supplier covering a market share of 94.26% of the total sale of electricity to end user customers. The market share of three largest companies was 97.35%.
- The large number of electricity suppliers in Ukraine – namely: 127 active suppliers on the retail electricity market – and their low market shares<sup>11</sup> might indicate an open market for supply to non-household customers. However, 84.6% of consumption of non-household customers was supplied at regulated prices. The market share of three largest suppliers added up to 31.98%.

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<sup>9</sup> Including five subsidiaries of Elektroprivreda RS supplying tariff customers in their designated areas

<sup>10</sup> Elektroprivreda BiH, Elektroprivreda RS including its five subsidiaries and Elektroprivreda HZHB.

<sup>11</sup> The market share of the largest supplier in the whole market was 18.57% in 2016, while the market share of the same company in supplying households was only 9.79%.

Table 2 Electricity retail market concentration and market opening in 2017

	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
<b>Albania</b>	1	96.00%	100%
<b>Bosnia and Herzegovina</b>	4	88.23%	100%
<b>FYR of Macedonia</b>	3	91.58%	100%
<b>Georgia</b>	2	100%	100%
<b>Kosovo*</b>	1	100%	100%
<b>Moldova</b>	2	100%	100%
<b>Montenegro</b>	1	100%	100%
<b>Serbia</b>	1	97.35%	99.97%
<b>Ukraine</b>	3	31.98%	100%

## 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 structures of the markets.

In 2017, in the most of the Contracting Parties legal requirements were in place allowing customers to choose their supplier.

- All customers are eligible to choose their supplier in Bosnia and Herzegovina, Kosovo\*, Moldova, Montenegro and Serbia.
- In Ukraine, all non- household customers can change supplier.
- In Albania, eligible customers are those connected to the 110 kV voltage network, and, since 30 June 2016, customers connected to the 35 kV voltage network.

- According to the Protocol on the Accession of Georgia to the Treaty Establishing Energy Community, Georgia must ensure that all non-household customers become eligible customers from 31 December 2018. All customers, including households, will become eligible from 31 December 2019. Presently retail customers are supplied by electricity distribution companies and are not eligible to switch suppliers, except when purchasing electricity directly from small power plants (up to 13 MW in 2017).
- In the FYR of Macedonia in 2017, eligible customers were customers connected to the transmission network, customers connected to the distribution network with more than 50 employees and an annual turnover exceeding EUR 10 million, as well, according to the provisions from the previous Energy Law, as of 1st of July 2017 eligible customers became customers with electricity consumption of over 500 MWh in 2016.

In order to better understand switching rates in the analyzed markets, it is worth mentioning that in some Contracting Parties some of the customers (mainly according to the voltage level of connection to the network, electricity consumption and which are not households or small customers) were obliged to leave the regulated market and choose a supplier. This obligation is defined in Bosnia and Herzegovina, FYR of Macedonia, Montenegro, Serbia and Ukraine<sup>12</sup>. In Serbia as of 1<sup>st</sup> January 2015 all customers except households and small customers were forced to choose their supplier on the market. In FYR of Macedonia large customers connected to the transmission network were forced to leave the regulated market as of beginning of 2008, while customers connected to the distribution network with more than 50 employees and an annual turnover exceeding EURO 10 million were forced to leave the regulated market and choose a supplier on the free market mid of 2014.

The table below shows the **switching rates** in the analyzed markets in 2017. 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.

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<sup>12</sup> In Ukraine, according to the Electricity Market Law adopted in 2017, all customers except households and small non-households must choose their supplier no later than December 2018.

Table 3 Annual switching rates in electricity markets in 2017 (in %) <sup>13</sup>

	Number of eligible customers under national legislation/active eligible customers	Annual switching rate in the <u>whole retail market</u> (by number of meter points)	Annual switching rate of <u>household</u> customers (by number of meter points)	Annual switching rate of <u>non-household</u> customers (by number of meter points)	Annual switching rate in the <u>whole retail market</u> (by volume)	Annual switching rate of <u>household</u> customers (by volume)	Annual switching rate of <u>non-household</u> customers (by volume)
Albania	na	Na	nap	na	na	nap	na
Bosnia and Herzegovina	1,531,501/56	0.004	0.000	0.044	15.85	0.000	26.65
FYR of Macedonia	15,887/3,202	20.77	nap	20.77	36.01	nap	36.01
Georgia	nap (see explanation above)						
Kosovo*	561,812/3	0.0005	0.000	0.0036	8.360	0.000	38.00
Moldova	1,277,443/0	0.000	0.000	0.000	0.000	0.000	0.000
Montenegro	376,735/0	0.000	0.000	0.000	0.000	0.000	0.000
Serbia	3,639,637/ 14,951	0.411	0.010 <sup>14</sup>	3.670	3.950	0.010	8.230
Ukraine	17,398,592/702	0.02	0.000	0.265	5.640	0.000	8.080

In Albania, Georgia, Moldova and Montenegro there was no supplier switching in 2017. A small number of eligible customers changed their suppliers in Bosnia and Herzegovina, FYR of Macedonia, Kosovo\*, Serbia and Ukraine. Except for Serbia, only non-household customers changed their suppliers. In Serbia, also only a very small number of household customers left electricity supply at regulated prices and chose a new supplier. Switching rates in FYR of Macedonia in 2017 reflect the active engagement of the eligible<sup>15</sup> customers in the electricity retail market.

The increasing **number of switching requests** is a proof of market liquidity development. In FYR of Macedonia this number increased from 1,392 in 2015 to 3,202 in 2017. In Serbia, the number of switching requests in 2017 was 14,951 and increased for 2,971 compared to 2016. In these two years in Ukraine the number of switching requests also increase from 420 to 702

<sup>13</sup>“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.

<sup>14</sup> meter points which belong to the household category of distribution network users

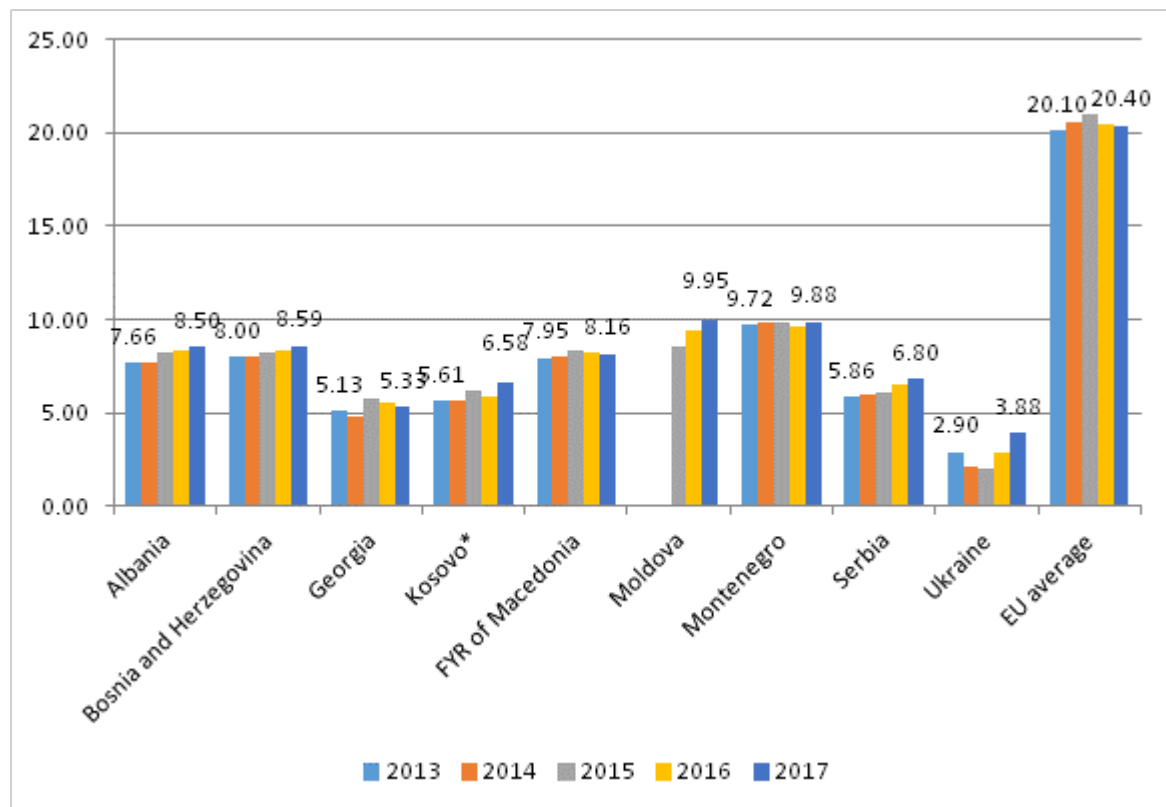
<sup>15</sup> In FYR of Macedonia, according to the previous Energy Law, households and small customers with annual consumption below 500 MWh in 2016, were not eligible to choose supplier on the liberalized retail market in 2017.

In Bosnia and Herzegovina number of switching requests was decreased – 58 in 2016 and 56 in 2017 and in Kosovo\* only 3 switching requests there was in 2017.

### 3. End- user electricity prices<sup>16</sup>

In the period between 2013 and 2017, electricity prices for households increased in all Contracting Parties. In the same period, industry prices decreased in the majority of the Contracting Parties. In Moldova the main reason for this decline was stepwise abandoning of cross-subsidies, while in other countries industry prices follow market trends already for several years<sup>17</sup>. Household and industry price trends in the Contracting Parties can be seen from figures 7 and 8 below.

Figure 7 Electricity POTP<sup>18</sup> trends for households in the Contracting Parties -2013-2017 (euro cent/kWh)



Source: EUROSTAT (June 2018), CP NRAs and Energy Community Secretariat calculations

<sup>16</sup> Information in this chapter was partially provided by the NRAs, also for the purpose of ACER Market Monitoring Report 2017 ([https://www.acer.europa.eu/Official\\_documents/Acts\\_of\\_the\\_Agency/Publication/MMR%202017%20-%20RETAIL.pdf](https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/MMR%202017%20-%20RETAIL.pdf)). The source of other information is EUROSTAT.

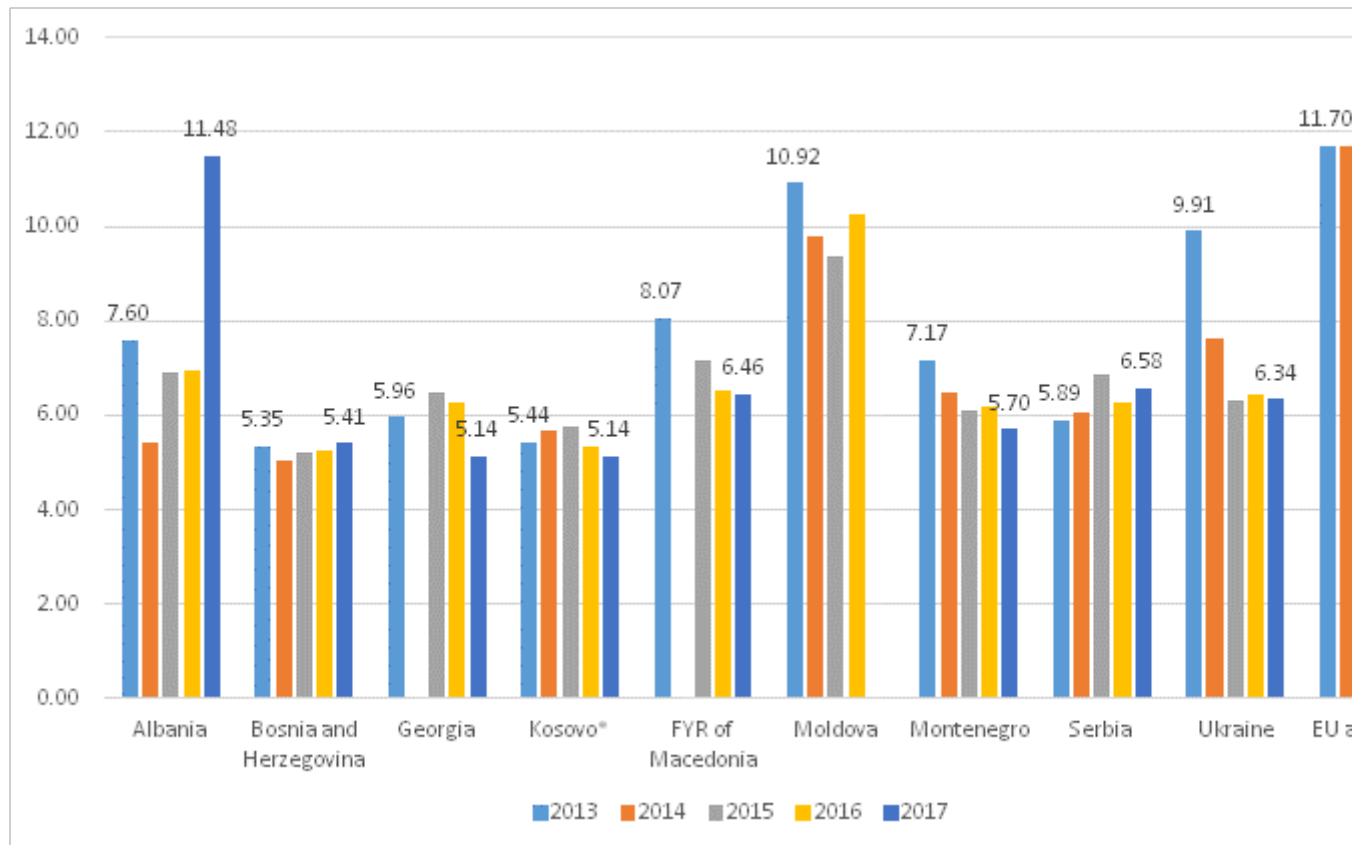
<sup>17</sup> In the figure the decrease of the industry price in Ukraine for 2014-2015 is due to the fall of exchange rates for UAH.

<sup>18</sup> Post-tax price i.e. end- user price.

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

Household electricity prices in 2017 were highest in Montenegro (9.95 euro cent/kWh), where consumers on average paid around two and a half time more than consumers in Ukraine (3.88 euro cent/kWh). In comparison to EU average, household prices in the Contracting Parties on average were almost three times lower. It is worth mentioning that the end-user prices of electricity for households were still regulated in all Contracting Parties in 2017, in some cases not covering actual costs and including cross- subsidization between industrial categories of electricity consumers and household consumers.

Figure 8 Electricity POTP trends for industrial consumers in the Contracting Parties-2013-2017 (euro cent/kWh)



Source: EUROSTAT (June 2018), CP NRAs and Energy Community Secretariat calculations

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

In five out of nine Contracting Parties industrial electricity prices are lower than household prices. However, in Albania, Georgia, Moldova and Ukraine the opposite tends to be the case. In the period 2013 to 2017, the average electricity price for households increased by 26%, while average industrial prices decreased by almost 35%<sup>19</sup>.

The lowest electricity industry prices are observed for Georgia and Kosovo\*: 5.14 euro cents/kWh, which is two times less than the average price for industrial consumers in the EU28 in 2017 (10.4 euro cent/kWh).

#### 4. Electricity price breakdown for households<sup>20</sup>

Figure 9 shows the breakdown of final electricity price for households available in capital cities in November/ December 2017 based on a consumption profile of 3,500 kWh per year. The composition of final household electricity price varies widely across the Contracting Parties. The share of the energy component in the final bill was slightly above 50% in Kosovo\* and FYR of Macedonia, while it was the lowest in Serbia (33%) and the highest in Albania (62%)<sup>21</sup>. The major part of the energy component relates to the cost of purchasing electricity on the wholesale market.

The share of network costs in the total household electricity price ranged from 21% of the final bill in Albania to 43% in Serbia. Taxes and levies on electricity bills vary between 7% and 17% of the final household prices, reflecting different national energy and fiscal policies.

The share of charges for electricity produced from renewable energy sources (RES) in the final price gives an indication of the support for renewable electricity production to the extent that it is financed by the electricity tariff. In Albania and Kosovo\*, no RES support mechanism was reported for 2017. In Bosnia and Herzegovina and Serbia the RES support accounted for 1% of the final household electricity price, while in Montenegro and FYR of Macedonia these shares were 5% and 7% respectively.

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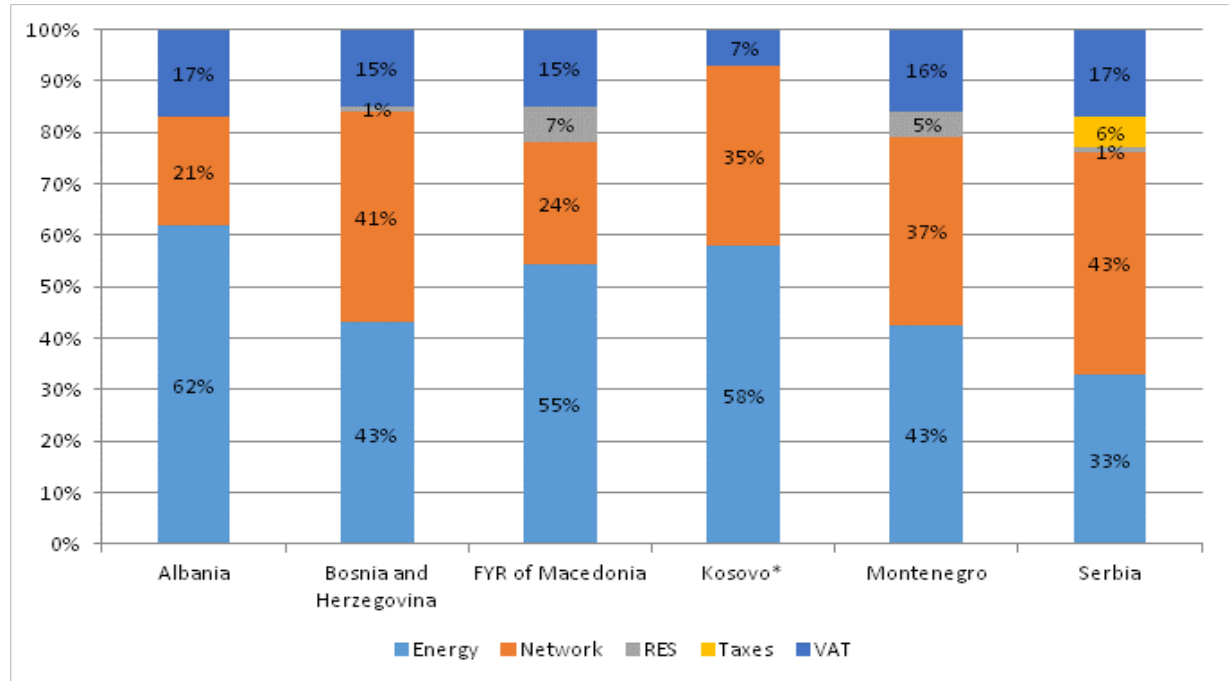
<sup>19</sup> If Ukraine is excluded from this average, the trends are the following: average household prices increased by 11% and industry prices decreased by 20%.

<sup>20</sup> Ref.: ACER/CEER Annual Report on the Results of Monitoring the Internal Electricity and Gas Markets in 2017 (Electricity and Gas Retail Markets Volume), October 2018  
[https://www.acer.europa.eu/Official\\_documents/Acts\\_of\\_the\\_Agency/Publication/MMR%202017%20-%20RETAIL.pdf](https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/MMR%202017%20-%20RETAIL.pdf)).

<sup>21</sup> However, this share in the final price includes also the costs of distribution network, which cannot be disentangled from the energy component for Albania.



Figure 9 POTP electricity breakdown of the incumbent's standard offers for households in EnC capitals – November–December 2017 (%)



Source: ECS calculations based on ACER's methodology and data provided by regulators (2017).

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

## 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 especially the case when regulated prices are determined at levels below costs and/or when cross-subsidization between groups of customers applies.

End-user electricity prices for household customers were regulated in all Contracting Parties in 2017, except in Montenegro, where all categories of consumers are supplied under non-regulated prices. However, in Montenegro, transitional and final provisions of the Energy Law prescribe that, after January 1, 2017, the supplier which had the status of public supplier until the day of entry into force of this Law, shall be in a position to change prices for households and small sized non-household customers, in line with changes of prices on the market, but under certain restrictions. Namely, prices for this category of customers cannot be increased above weighted electricity price realized in the previous year and futures for the following year

on reference energy exchange nominated by the Agency, and cannot exceed 7% in 2017 and 6% in 2018 and 2019.

In Albania there is no price regulation for non-households connected to 35kV network. In Bosnia and Herzegovina small and medium enterprises connected to the 0.4 kV network were entitled to supply under regulated end-user electricity prices; for all other customers prices were not regulated. In Kosovo\*, all non-household customers that are connected to DSO network have regulated prices, and customers that are connected to TSO network (220 kV and 110 kV voltage level) are supplied with un-regulated prices. In FYR of Macedonia only small consumers (customers with electricity consumption below 500 MWh in 2016) were supplied under regulated prices. In Serbia only small customers had the possibility to be supplied at regulated end-user prices; for all other non-household customers, prices were not regulated. In other Contracting Parties, 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 2017

Number of non- household customers supplied at non- regulated prices in 2017 (number of metering points)	
Albania	15
Bosnia and Herzegovina	10,541
fYR of Macedonia	15887
Georgia	0
Kosovo*	3
Moldova	8881
Montenegro	14,502
Serbia	124,791
Ukraine	835,585

End- user electricity prices were regulated using the following methodologies:

- Rate of return/cost plus in Serbia and Georgia;
- Cost plus and revenue cap in Bosnia and Herzegovina and Ukraine;

- Revenue cap in FYR of Macedonia, Kosovo\*, Moldova and Montenegro.<sup>22</sup>

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

- Albania, FYR of Macedonia, Georgia, Kosovo\*, Moldova, Montenegro: once per year;
- Ukraine: every three months;
- Bosnia and Herzegovina: no automatic mechanism;
- Serbia: no automatic mechanism, the regulator decides upon request of a supplier.

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

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<sup>22</sup> The hybrid regulatory method is implemented, as a type of economic regulation which aims to limit allowed revenue, to provide efficiency improvement incentives, and to allow risk-sharing between operators and users of the system (risk related to changes in deployed capacity).

## C. FINDINGS: GAS

This part of the report provides analysis of the retail gas markets in Bosnia and Herzegovina<sup>23</sup>, fYR of Macedonia, Georgia, Moldova, Serbia and Ukraine. Having in mind that Albania, Kosovo\* and Montenegro do not have gas markets, this part of the report does not include information for these Contracting Parties.

### 1. Gas retail market characteristics

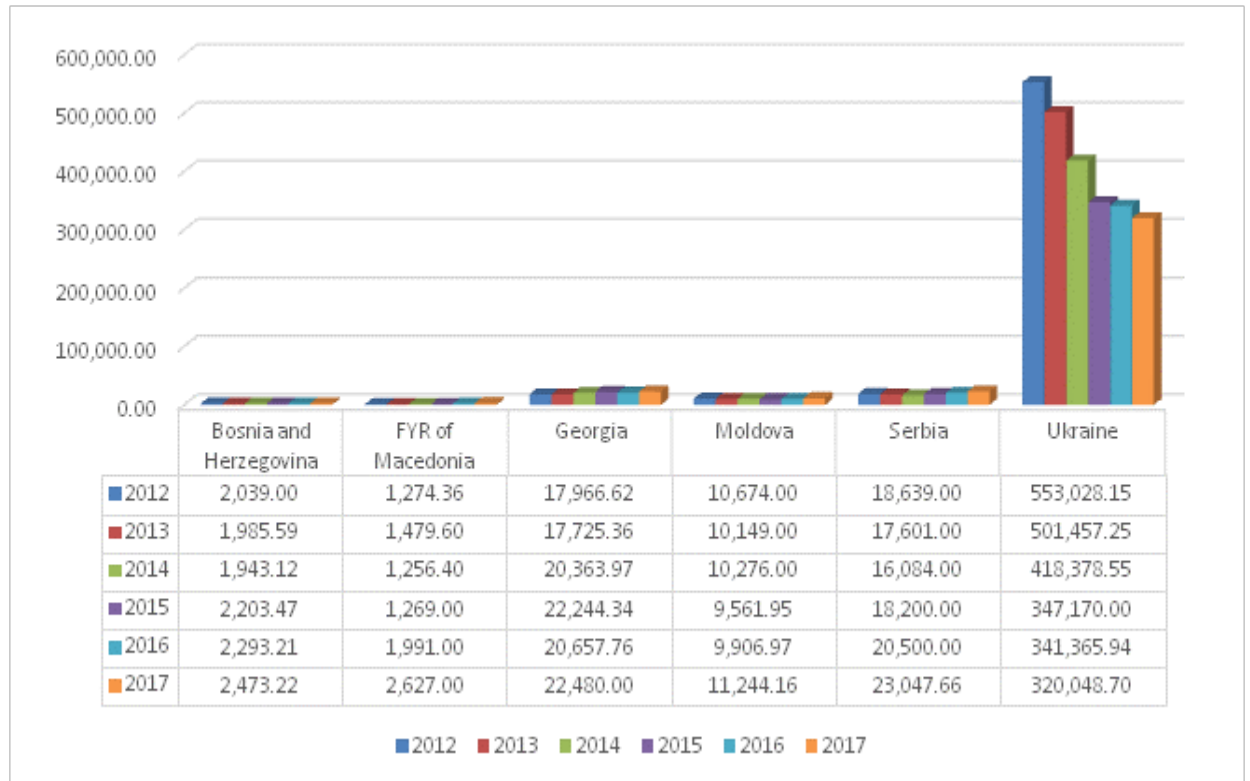
The total sale of gas to final customers in the Contracting Parties decreased from 2012 to 2017 by 35%. This was mainly driven by a substantial drop of gas consumption in Ukraine, adding up to 42%, initiated on purpose with a view to lower import dependence.<sup>24</sup> The majority of other Contracting Parties experienced different levels of growth in gas demand with fYR of Macedonia facing constant year-to-year increase of consumption due to network developments. While gas consumption in Ukraine and fYR of Macedonia shows clear trends, consumption in other countries varies depending on industry performances and winter temperatures. In the period 2016-2017, gas consumption increased in all Contracting Parties except Ukraine, which registered drop of 6.24%. The figures below present the total gas sales to final customers in the period from 2012 to 2017 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.

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<sup>23</sup> The information on gas demand is available for entire Bosnia and Herzegovina. The rest of the analysis is based on the information for one of the entities of Bosnia and Herzegovina, namely Republika Srpska, while the information on gas market for the other entity, - Federation of Bosnia and Herzegovina, is not available.

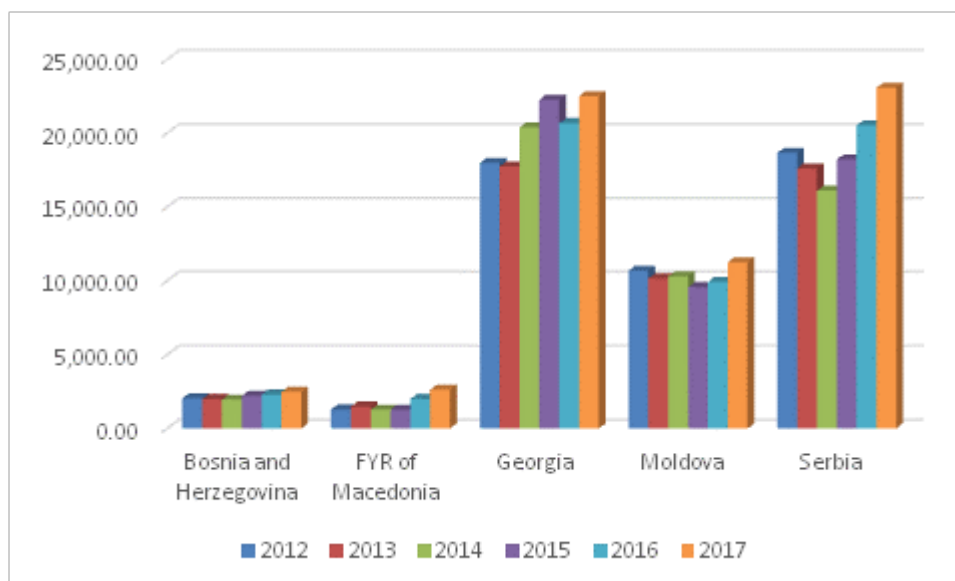
<sup>24</sup> Also due to lack of data for Crimea and uncontrolled territory of Donbass in 2014-2016.

Figure 10 Total sale of gas to final customers in the Energy Community Contracting Parties in the period 2012- 2017 (in GWh)



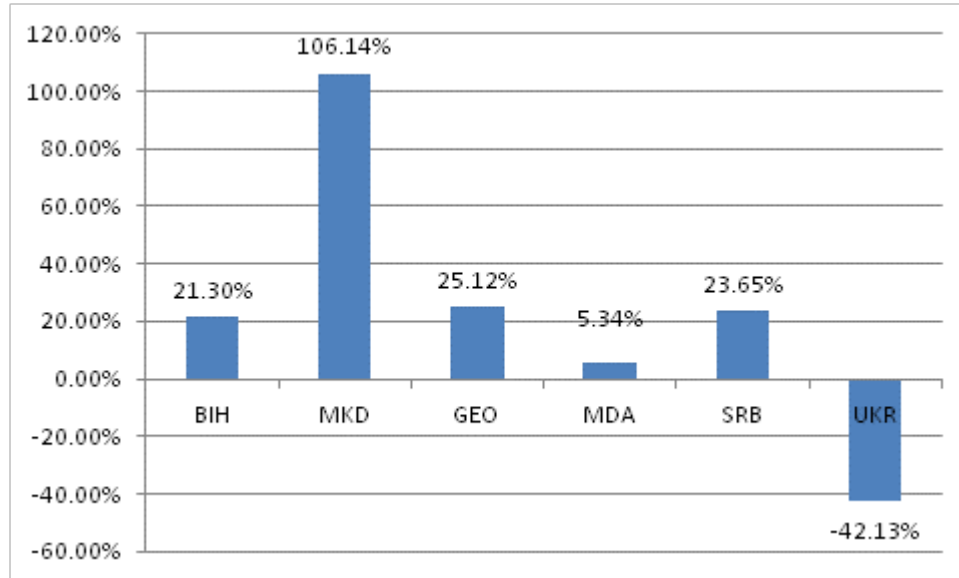
Source: National regulatory authorities

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



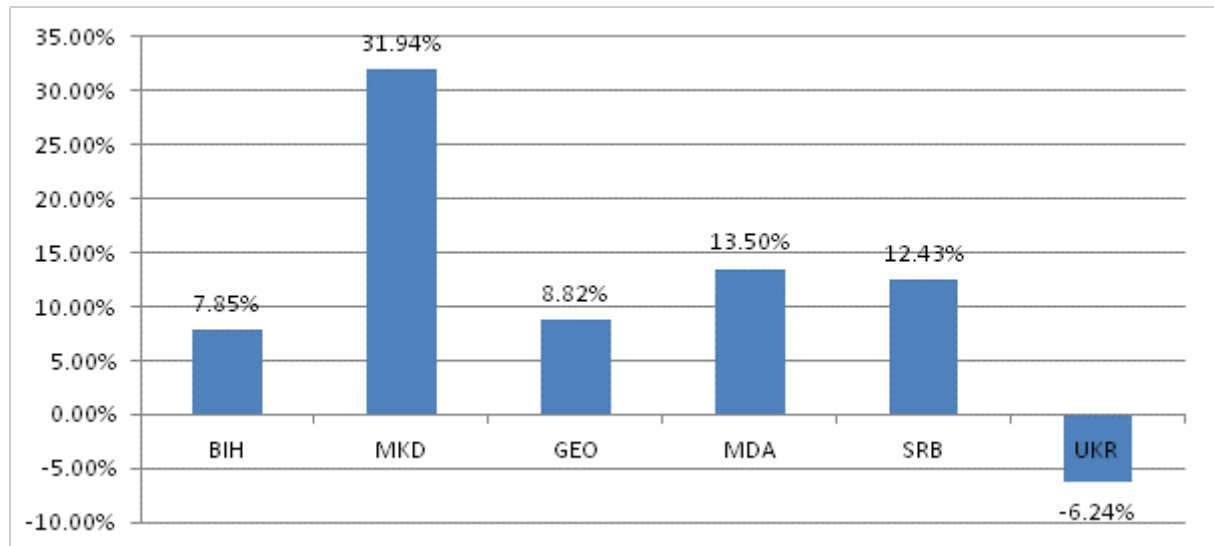
Source: National regulatory authorities

Figure 12 Growth rates of gas demand 2012 to 2017



Source: National regulatory authorities

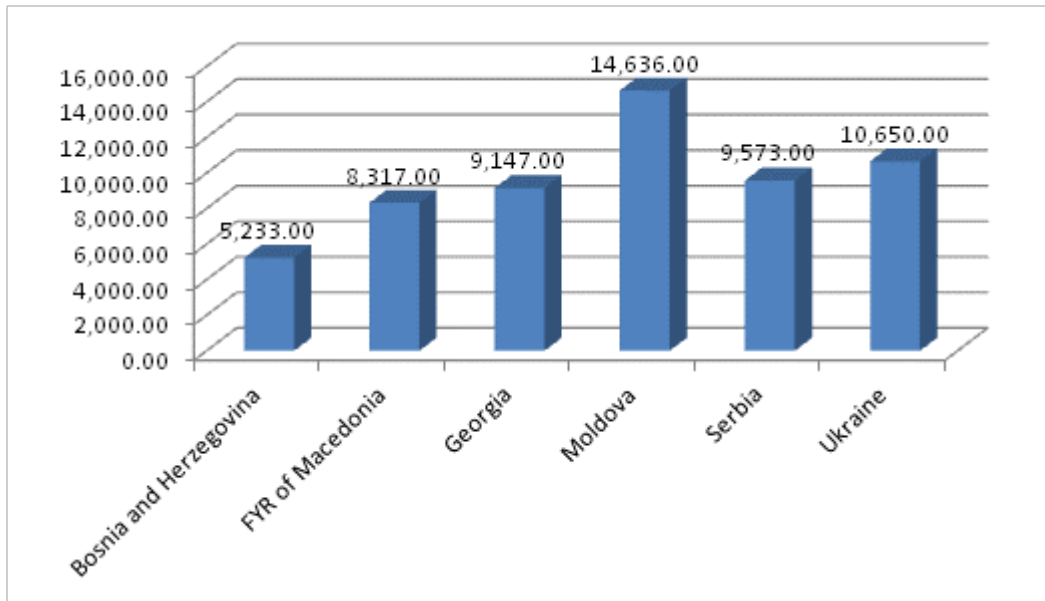
Figure 13 Growth rates of gas demand 2016 to 2017



Source: National regulatory authorities

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

Figure 14 Average annual gas consumption per household in 2017 (in kWh)



End-users of gas in the Contracting Parties were supplied mainly by regional **retail suppliers**<sup>25</sup>, i.e. suppliers offering gas only to a restricted area defined by their license and usually performing also distribution system operator (DSO) functions. The number of active suppliers ranged from three in Bosnia and Herzegovina (Republika Srpska) to 231 in Ukraine. The number of active nationwide suppliers<sup>26</sup> varied from only one in Moldova to 231 in Ukraine (for more details see the table below). In comparison to the previous reporting period, the number of active nationwide suppliers increased by 31 in Ukraine and decreased by 7 in Georgia, whereby in all other Contracting Parties the number remained the same.

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

<sup>25</sup> In Ukraine, regional suppliers are for households only, i.e. there are no regional suppliers for non- households.

<sup>26</sup> Nationwide supplier means suppliers offering their products on the whole territory of a country.

Table 5 Number of active gas suppliers in 2017

	Number of active gas suppliers	Number of active nationwide suppliers
<b>Bosnia and Herzegovina</b>	3	2
<b>fYR of Macedonia</b>	6	6
<b>Georgia</b>	34	34
<b>Moldova</b>	11	1
<b>Serbia</b>	39	30
<b>Ukraine<sup>27</sup></b>	231	231

Source: *National regulatory authorities*

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

- In all Contracting Parties except Ukraine, dominant retail suppliers sell more than 80% of gas to end-users. In Ukraine market shares of retail suppliers are lower. This, however, does not prove immediately absence of monopolies, but, taking into consideration other relevant information provided in this report, rather points to the existence of regional or local monopolies;
- There was often no alternative to the incumbent gas suppliers in the household segments of the analyzed markets, and in cases where there was an alternative available it was hardly used in 2017<sup>28</sup>. However, obstacles to retail market entries mainly stem 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) and regulation of end- user prices.<sup>29</sup>

<sup>27</sup> 40 licensed suppliers and about 160 suppliers without a license.

<sup>28</sup> In Ukraine, there was alternative, but due to the public service obligations which are in place in Ukraine the final gas prices for incumbents are usually lower compared to other suppliers

<sup>29</sup> Especially in Ukraine the prices of gas for households and other protected categories (i.e. district heating companies and religious organizations) are regulated on three levels: (1) the price of domestically produced gas for sell to protected customers is regulated; (2) the price at which public wholesale supplier Naftogaz sells gas to retail suppliers for the needs of protected customers is regulated; and (3), the end- user price for the same customer category is regulated (cf Public Service Obligation (PSO) act of the Cabinet of Ministers of Ukraine).



Table 6 Retail gas market concentration in 2017

	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%
fYR of Macedonia	4	92.97%	100%
Georgia	4	81%	99.2% <sup>30</sup>
Moldova	3	98%	100%
Serbia	1	85.60%	100%
Ukraine	3 <sup>31</sup>	62.86%	100%

## 2. Switching behavior

All natural gas customers in the analyzed Contracting Parties<sup>32</sup> were eligible to choose their supplier. However **household customers** in none of the markets changed their suppliers in 2017<sup>33</sup>. For non- households the information on switching rates has been provided for three Contracting Parties:

- fYR of Macedonia: 0.99% of non-household customers, measured by number of metering points, changed supplier in 2017. The switching rate measured by volume<sup>34</sup> added up to 2.33%.
- Serbia: 0.64% of non- households (42 customers) changed their supplier in 2017 which corresponds to a switching rate of 1.04% by volume.
- Ukraine: 4% of non-households changed supplier in 2017.

In Bosnia and Herzegovina and Moldova none of the customers changed their supplier in 2017, while for Georgia this information was not available.

<sup>30</sup> However it has to be noted that 0.8% of households are supplied by suppliers other than incumbent due to the fact that incumbent supplier left the supply business.

<sup>31</sup> taking into account domination principle (grouping of companies under the same brand)

<sup>32</sup> The exception is the Federation BIH for which information has not been provided. However the legislation of the Federation BIH does not provide for eligibility status of gas customers.

<sup>33</sup> In Ukraine, 12 households changes gas supplier in 2017, however this number cannot be shown in percentages.

<sup>34</sup> Share of consumption of non- household customers that switched supplier related to the total consumption of non-households.

### 3. End-user natural gas prices<sup>35</sup>

In the period 2013 to 2017, average gas household prices in the Energy Community Contracting Parties, without Ukraine, decreased by 30%. Over the same period, household gas prices in Ukraine rose by more than 170%. This increase in Ukraine is due to the Government's Public Service Decree, applicable as of 2014, which implements a stepwise increase of household gas prices pursuant to an agreement with the International Monetary Fund.

In the same period, average industrial gas prices decreased in the Energy Community Contracting Parties, by 32% on average. However, industrial prices in Ukraine registered a year-on-year increase of 29%, resulting in almost 30% higher prices on average than in the EU in 2017. One of the reasons for increased industrial prices in Ukraine is certainly the rise of the weighted average import price by 13.5% between 2016 and 2017. Average prices for industry segment in the other Contracting Parties are similar to those in the EU Member States.

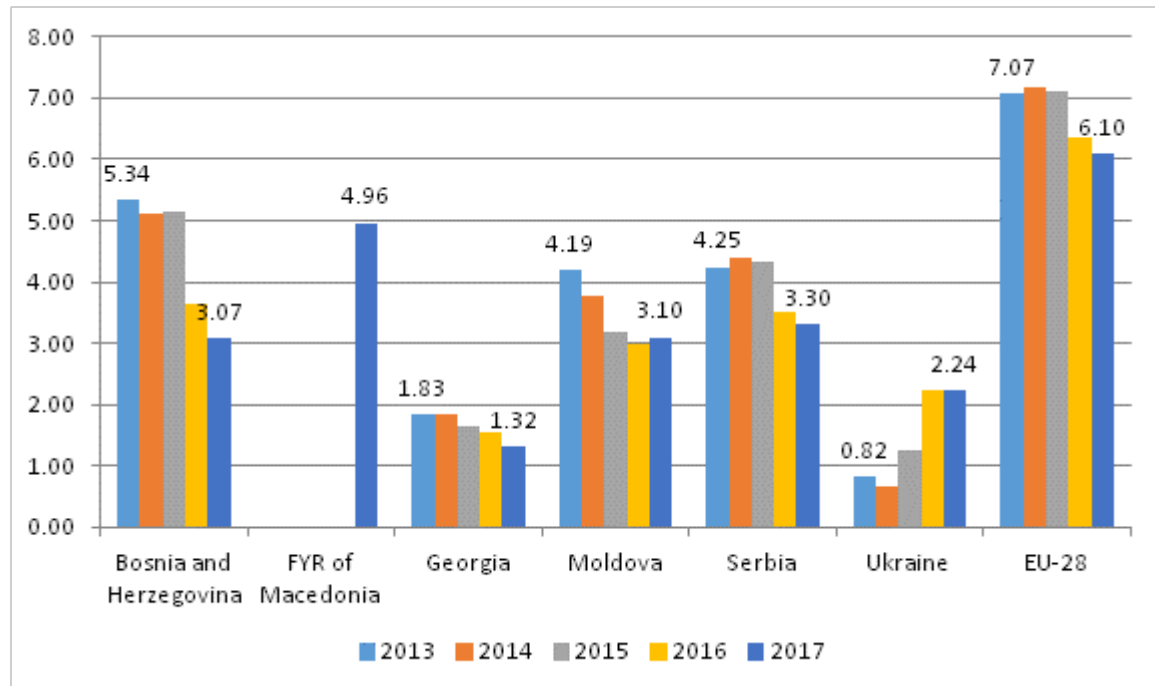
Differences between household and industrial gas prices on national level across the Contracting Parties can be seen from figures 16 and 17 below. In Bosnia and Herzegovina, Georgia and Ukraine, the industry prices are higher than gas prices of households, pointing to the still existent cross- subsidization between these two categories in the process of regulating end-user gas prices. In 2017 household gas prices were regulated in all Contracting Parties except in fYR of Macedonia, while industrial prices were regulated in Bosnia and Herzegovina, Moldova and, partially, Serbia.<sup>36</sup> However, the intensity of cross-subsidization decreased in the reporting period, especially in Ukraine where the household gas price in 2017 (2.24 euro cent/kWh) was almost three times higher than in 2013 (0.82 euro cent/kWh) and industrial prices decreased by approximately 50% (from 4.63 euro cent/kWh in 2013 to 3.16 euro cent/kWh in 2017).

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<sup>35</sup> Information in this chapter was partially provided by the national regulatory authorities also for the purpose of ACER Market Monitoring Report 2017 ([https://www.acer.europa.eu/Official\\_documents/Acts\\_of\\_the\\_Agency/Publication/MMR%202017%20-%20RETAIL.pdf](https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/MMR%202017%20-%20RETAIL.pdf)). The source of other information is EUROSTAT.

<sup>36</sup> Only for small non-household customers consuming less than 3,600 GJ per year.

Figure 15 Gas POTP<sup>37</sup> trends for households in the Contracting Parties- 2013-2017, in comparison to EU-28 average level (euro cent/kWh)

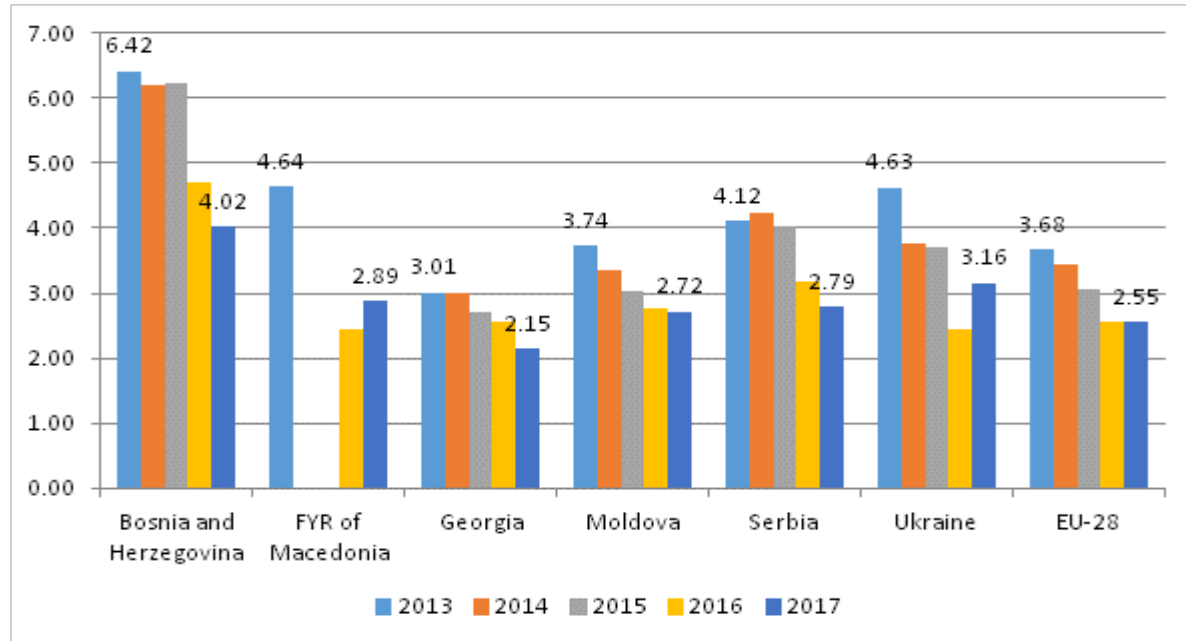


Source: EUROSTAT (June 2017), CP NRAs and Energy Community Secretariat calculations

Note: The figure is based on bi-annual data provided by EUROSTAT for consumption bands D2: 20-200 GJ (household gas consumption) and on the annual data provided by regulators of Moldova, Georgia and Ukraine. Data for FYR of Macedonia is available only as of 2017 due to a very limited number of household customers in the country connected to the distribution system.

<sup>37</sup> Post-tax price i.e. end- user price.

Figure 16 Gas POTP trends for industrial consumers in the Contracting Parties -2013-2017, in comparison to EU-28 average level (euro cent/kWh)



Source: EUROSTAT (June 2018), CP NRAs and Energy Community Secretariat calculations

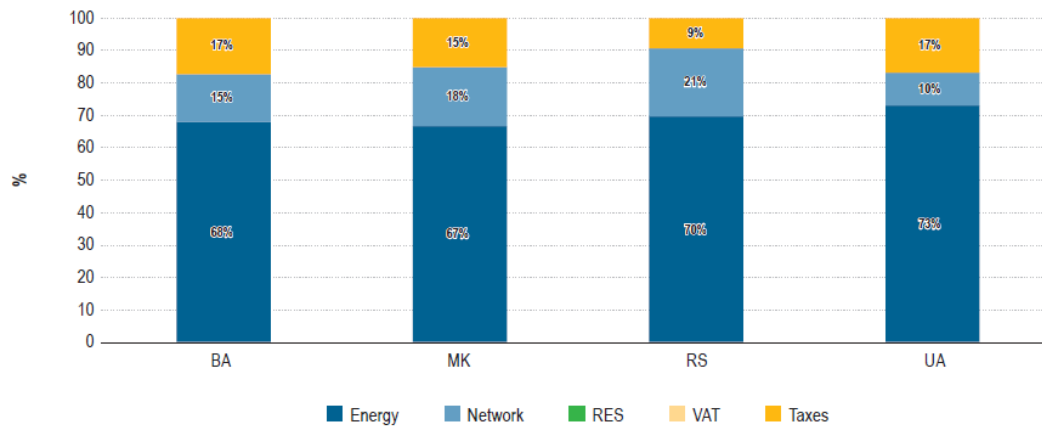
Note: The figure is based on bi-annual data provided by EUROSTAT for consumption bands I5: 1,000,000-4,000,000 GJ (industrial gas consumption) and on the annual data provided by regulators of Georgia.

#### 4. Gas price breakdown for households<sup>38</sup>

The following figure illustrates the breakdown of gas incumbents' standard offers to households in capital cities of the Contracting Parties for an annual consumption profile of 11,000 kWh/year. The share of the energy component in the final gas price in 2017 ranged from 67% in FYR of Macedonia to 73% in Ukraine. Network charges ranged from 10% of the final gas price for consumers in Kiev to 21% for households in Belgrade, whereby the differences are stemming from the different shares of the distribution charges- 3% in Ukraine and 14% in Serbia.

<sup>38</sup> ACER/CEER Annual Report on the Results of Monitoring the Internal Electricity and Gas Markets in 2017 (Electricity and Gas Retail Markets Volume), October 2018  
[https://www.acer.europa.eu/Official\\_documents/Acts\\_of\\_the\\_Agency/Publication/MMR%202017%20-%20RETAIL.pdf](https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/MMR%202017%20-%20RETAIL.pdf)

Figure 17 POTP gas breakdown of incumbents' standard offers for households in EnC capitals – November–December 2017 (%)



Source: EnC Secretariat calculations, based on ACER's methodology and data provided by national regulatory authorities (2018).

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

## 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 levels below costs and/or when cross-subsidization between groups of customers exists.

End-user gas prices for household customers were regulated in all Contracting Parties in 2017<sup>39</sup>, with the exception of FYR of Macedonia where only a limited number of households was supplied at non-regulated prices.

Application of price regulation for industry differs among Contracting Parties:

- In Bosnia and Herzegovina (Republika Srpska), FYR of Macedonia and Georgia end-user prices for industry are not regulated;
- In Serbia and Ukraine certain industry categories may buy gas at regulated prices – i.e. small and medium enterprises with a yearly consumption up to 100.000 m<sup>3</sup> and connected to the distribution system in Serbia<sup>40</sup>; and district heating companies and religious organizations in Ukraine;<sup>41</sup>

<sup>39</sup> 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.

<sup>40</sup> This represents 87% of all non-households, accounting for only 4% of total non-households' gas consumption.

<sup>41</sup> This represents 5% of non-households consuming around 34% of total consumption of non-households.

- In Moldova all industry customers were supplied at regulated prices.

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

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

## D. CONSUMER PROTECTION AND CUSTOMER EMPOWERMENT

### 1. Background

Third Energy Package outlined a set of measures which aims to ensure continuous supply of electricity and gas, participation of customers in liberalized energy market, strengthening of customer's rights and protection of vulnerable customers. On 30 November 2016 The European Commission presented a new package of measures, which put the emphasis on customers as central players on the energy market of the future. The package contains various measures which aim to provide a fair deal for customers and to protect the most vulnerable among them.

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

The topics covered in this chapter are:

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

### 2. Supplier of last resort and disconnections

Electricity Directive stipulates that all household customers, and where appropriate, small enterprises, should be provided with universal service. In order to provide consumers with the right to be supplied with electricity of a specified quality within their territory at reasonable, easily comparable, transparent and nondiscriminatory prices, a supplier of last resort may be appointed.

Functions of the supplier of last resort aren't precisely defined in the Directives, but those which are recognized in national legislation and practice in European Union Member States<sup>42</sup> and Energy Community Contracting Parties are: protection of inactive consumers, precaution for failure of supplier/DSO and protection of consumers with payment difficulties. The role of supply of last resort should be designed in a way to enable and promote consumer engagement in the liberalized market.

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

Table 7 Functions of the supplier of last resort in the Contracting Parties in 2017

In what circumstances may a household customer turn to the "supplier of last resort" to ensure continuous energy supply?	Number of CPs - electricity	Number of CPs - gas
If a household customer does not find supplier on the market	6	4
If a household customer is dropped by its current supplier because of non- payment	4	2
The current supplier has gone bankrupt and is no longer doing business	6	5
The license of the current supplier has been revoked	6	5
If a final household customer does not choose a supplier at market opening	5	4
If a fix- term supply contract expires	5	3
Other reasons (please explain)	0	1 <sup>43</sup>
There is no supplier of last resort in the country	1	0

According to provided data, a supplier of last resort for electricity exists in all Contracting Parties, except in Georgia<sup>44</sup>, and for gas it exists in Bosnia and Herzegovina, FYR of Macedonia, Moldova, Serbia and Ukraine. The data also show that most common cases when a household customer may turn to the supplier of last resort are: when customer doesn't find supplier on the market, when current supplier has gone bankrupt and when the license of their current supplier has been revoked. The aforementioned means that protection of inactive consumers and precaution for failure of supplier is provided through the role of supplier of last resort.

<sup>42</sup> ACER Market Monitoring Report 2017 – consumer protection and empowerment volume [https://acer.europa.eu/Official\\_documents/Acts\\_of\\_the\\_Agency/Publication/MMR%202017%20-%20CONSUMER%20PROTECTION.pdf](https://acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/MMR%202017%20-%20CONSUMER%20PROTECTION.pdf)

<sup>43</sup> In Ukraine if consumer loses supplier and/or is left without sufficient resources (proven natural gas volumes) as a consequence of lack of natural gas resources to meet the consumer needs or in other cases foreseen in the Rules of natural gas supply, the consumer has the right to turn to the supplier of last resort.

<sup>44</sup> According to the Protocol Concerning the Accession of Georgia to the Energy Community Treaty, the deadline for implementation of Directive 2009/73/EC is 31st December, 2020. Therefore the supplier of last resort has not been appointed yet.



In order to protect customers and suppliers in accordance with the Directives 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 reasons for disconnection. Special emphasis is placed on vulnerable customers. Every country is allowed to create its own concept of vulnerable customers which may refer to energy poverty and, inter alia, to the prohibition of disconnection of electricity to such customers in critical times. They shall ensure that rights and obligations linked to vulnerable customers are applied and regulatory authorities are obliged to monitor the level and effectiveness of market opening, prices for household customers, switching rates, disconnection rates, complaints by household customers etc. The review of minimum notice period to disconnect consumer from the network in Energy Community Contracting Parties is shown in the following table.

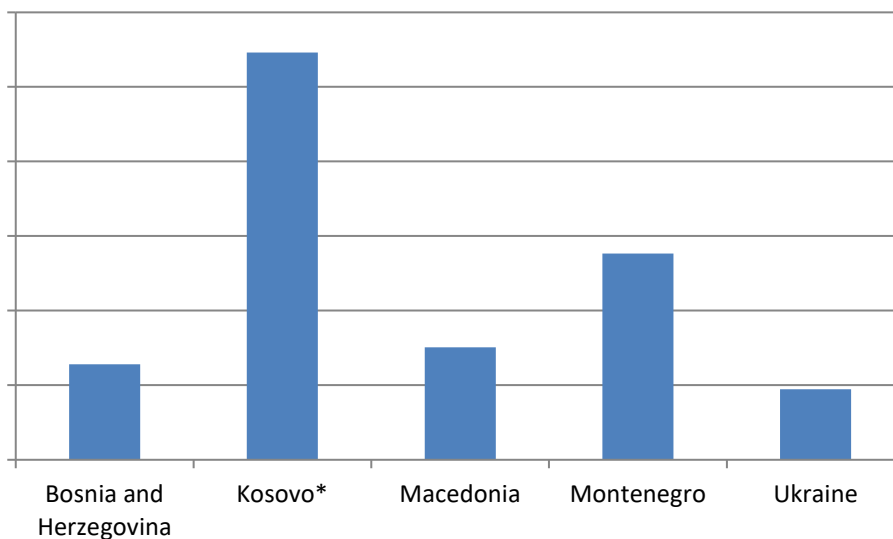
Table 8 Minimum duration of disconnection process for non-paying consumers across Energy Community Contracting Parties in 2017

How many days (at least) does it take to disconnect a final household customer from the grid because of non-payment? Starting date is due date of payment.	Legal	In practice
Albania	30	na
Bosnia and Herzegovina	FBIH 30, RS 21 (8+8+5), BD 60	FBIH & BD approx 60, RS 8 - 25
FYR of Macedonia	na	60
Kosovo*	30	45
Moldova	10	Up to 20
Montenegro	8	More than 8
Serbia	30	30
Ukraine	50	65

From the presented data it is evident that the number of days legally envisaged for disconnection of household consumer because of non-payment varies significantly from country to country (from 8 in Montenegro to 60 in Bosnia and Herzegovina). The actual duration of a disconnection in most cases takes longer than legally binding deadlines.

Important role of the supplier of last resort is in protection of consumers with payment difficulties. As shown in the Table 2, consumers usually have several weeks to settle their due amounts before they are disconnected, which helps them to deal with financial issues. Nevertheless, some households do get disconnected because of non-payment, which is shown in the next figure.

Figure 18 Share of household disconnections due to non-payment of electricity bills in % of household metering points in 2017



The share of household disconnections due to non-payment for electricity in the Contracting Parties varies among countries (1.89% - 10.92%). According to provided data, the smallest share is in Ukraine and biggest in Kosovo\*.

### 3. Vulnerable customers

Different customers have different ability to protect their interests in the energy market and some of them are more susceptible to suffer significant damage than other customers. Therefore it is necessary to provide ways and means to identify and protect vulnerable category of customers. Defining vulnerability of customers properly is not an easy task, 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 life circumstances change in time.

Results of conducted research show that most Contracting Parties (Albania, Kosovo\*, Moldova, Montenegro, Serbia and Ukraine) have introduced definitions of the concept of vulnerable consumers, as required by the Directives. Some Contracting Parties have defined vulnerable customers in their energy laws (Albania, Montenegro, Serbia and Ukraine) and some in legal acts related to social protection (Kosovo\* and Moldova).

There is a variety of national approaches in defining the criteria for obtaining the status of vulnerable customer which makes it difficult to compare the data on the occurrence of vulnerability, but the common criteria is – need for financial support and health and social care.

The following table shows measures used for protection of vulnerable customers in the Contracting Parties in 2017.

Table 9 Measures to protect vulnerable customers in the Contracting Parties in 2017

Measures to protect vulnerable customers	Number of CPs- electricity	Number of CPs – gas
Restrictions on disconnection due to non-payment	8	4
Earmarked social benefits to cover (unpaid) energy expenses	7	6
Special energy prices for vulnerable customers	0	0
Additional social benefits to cover (unpaid) energy expenses (non-earmarked financial means)	1	0
Free energy-saving advice to vulnerable customers	2	2
Right to deferred payment	4	3
Exemption from some components of final customer energy costs (e.g. energy price, network tariffs, taxes, levies...)	0	0
Financial grants for the replacement of inefficient appliances	1	1
Free basic supply of energy	1	1
Other	1 <sup>45</sup>	1 <sup>46</sup>

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 doesn't exist in every monitored country.

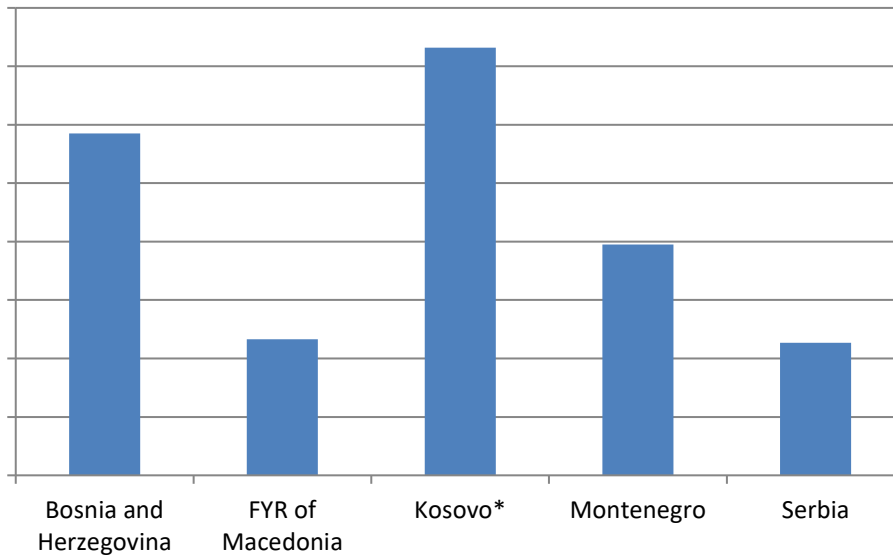
The following figure shows the share of vulnerable electricity customers out of the total number of households metering points in Contracting Parties on 31<sup>st</sup> December 2017<sup>47</sup>.

<sup>45</sup> Montenegro - Subventions for all endangered categories are 40% of the bill if it is up to 60 euro, for bills of more than 60 euro there is fixed subvention of 24 euro. Subventions are financed by the Government.

<sup>46</sup> Moldova - The vulnerable customers sector is in process of being regulated, which is why the current relevant legal provisions do not specify expressly the kind of exemptions or social benefits that the formers are able to make use of.

<sup>47</sup> It is important to note that definitions of vulnerable customers differ in Energy Community Contracting Parties.

Figure 19 Share of vulnerable customers in Contracting Parties on 31<sup>st</sup> December 2017



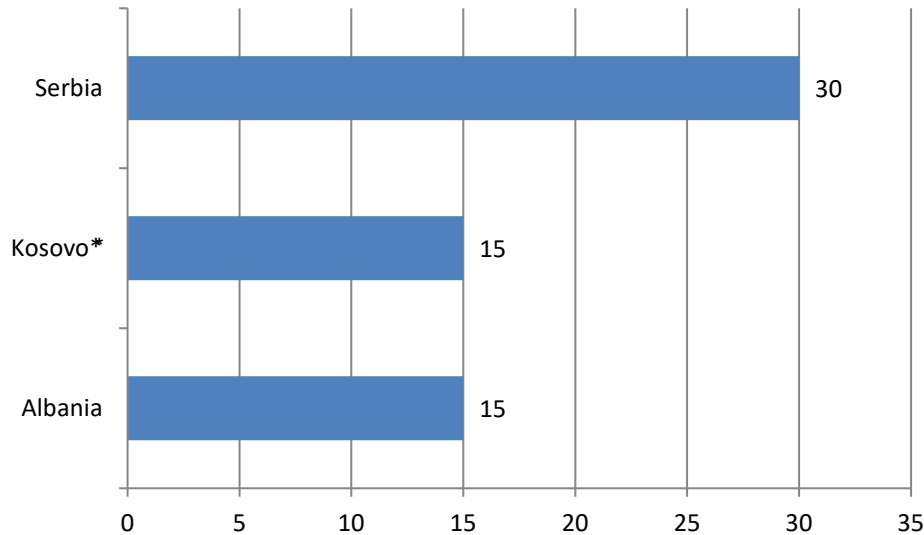
#### 4. Customer information

Directives prescribe that clear and comprehensible information should be made available to consumers concerning their rights in relation to the energy sector. In order to facilitate the participation of customers in the market it is important to have clear and simple procedures and transparent information. 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 look at the practice in this regard in the Energy Community Contracting Parties. Research covered legal requirements for information to consumers about price changes for fixed-price and variable-price contracts, number of days in advance necessary for informing customers about energy price changes, prescribed number of days for DSOs to inform customers on planned disconnection, number of days for supplier switching, number of households with smart meters, information on bills issued by suppliers, choice of payment methods, frequency of billing information based on actual consumption, existence of price comparison tools and single point of contact.

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

Figure 20 Minimal number of days in advance that household customers are informed about energy price changes for variable-price contracts



As shown in Figure 21, minimal number of days in advance that household customers are informed about energy price changes for variable-price contracts is 30 in Serbia and 15 in Albania and Kosovo\*. In Bosnia and Herzegovina this is not defined in universal system supply, but for competitive supply it is defined in the contract. Although requirements for information to household customers on price changes for variable-price contracts are defined in the legal framework in mentioned Contracting Parties, this type of contract is not applied in practice for household consumers and they are still supplied at regulated prices.

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

In Ukraine, variable-price contracts for households are not applicable because in general prices are regulated. For electricity supplier shall inform households about tariffs (prices) changes in written form or through the media and in the places of payment for electricity not later than 5 days prior the new tariffs (prices) entry into force. For gas according to the Rules of natural gas supply supplier shall inform the customer about price changes prior 30 days the new price entries into force (except in the case when the price is set for the supplier by State Authority).

**Price comparison tools** exist only in Bosnia and Herzegovina (<http://uporedistruju.ba/>) and during 2017 it was in its test phase within USAID EIA project (technical assistance) for PCT-electricity. The development of PCT started in FYR of Macedonia and Montenegro for electricity retail market.

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 price, energy consumption, payment options and the details of the single point of contact. Detailed consumer information could be provided through various other communications channels.

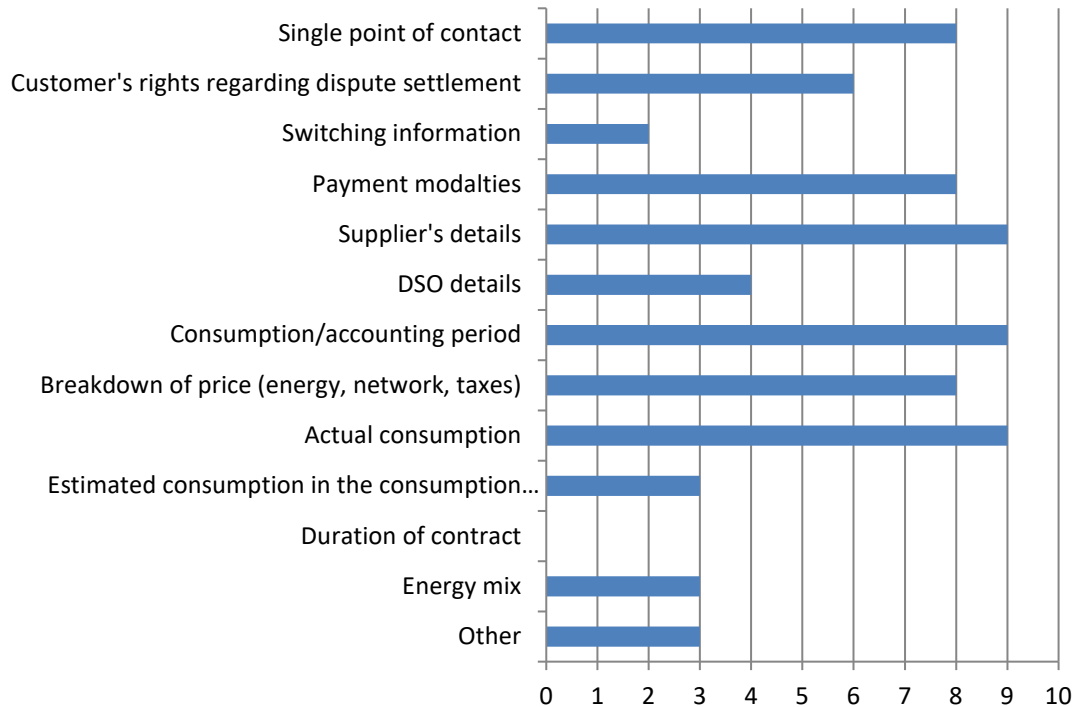
Electricity Directive stipulates that suppliers should make the following information available to final customer (in the bills and in promotional materials):

- 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 CO<sub>2</sub> 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 content of the customer bill 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 observed countries.

Figure 21 Content of electricity bills 2017



Information on the actual consumption, accounting period and suppliers details is included in the bills in all observed energy markets. Information related to energy mix, as one of the mandatory elements, is available only in FYR of Macedonia, Serbia and Ukraine. In Bosnia and Herzegovina, among other information, bills also have information related to the payment deadline, cost of metering point, common area consumption (elevator, water pump) and in Federation of Bosnia and Herzegovina and in Republika Srpska RES incentives. In addition to the information outlined in Figure 21, bills in Georgia should include:

- payment due date;
- compensation granted to the customer, where applicable (if guaranteed standards of service quality are violated, suppliers/DSOs have to pay compensation to the affected customer);
- contact details of 24-hour phone line for the DSO and supplier;
- the rights of the customers, if they receive certain requests from the utility;
- the recommendation by NRA to provide the utility with the customer's email and/or phone number to receive various types of information, including but not limited to planned outages, reasons for unplanned outages and the tentative time for restoring supply, etc.
- Contact information of NRA and Public Defender of Consumers' interests.

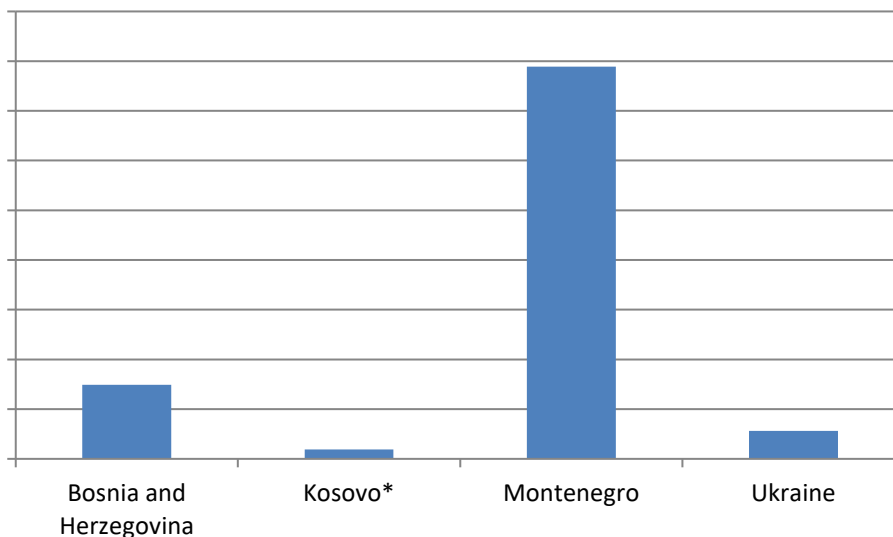
In Moldova bills contain the data about previous consumption and debts if any.

**Frequency of billing information based on actual consumption** was monthly in every Energy Community Contracting Party during 2017. 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.

Electricity Directive requires the implementation of **intelligent metering systems** that shall assist the active participation of consumers in the electricity supply market. The implementation of those metering systems may be subject to an economic assessment of all the long-term costs and benefits to the market and the individual consumer. Where roll-out of smart meters is assessed positively, at least 80 % of consumers shall be equipped with intelligent metering systems by 2020. According to provided data, in 2017 compared to 2016 roll out of smart meters increased in Bosnia and Herzegovina, Kosovo\*, Montenegro and Ukraine. Montenegro has the highest share of household customers with smart meters. The following figure shows share of households with smart meters in Energy Community Contracting Parties where implemented.

Figure 22 Share of households with smart meters (status 31<sup>th</sup> December 2017)



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

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

The customer's **right to switch supplier** is essential for customer protection and empowerment and for competition development in energy market. The process of switching



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

Electricity and Gas Directives stipulate that switching procedure for customers that wish to change supplier should be effected by the operator(s) concerned within three weeks. Research related to this issue showed that prescribed number of working days for supplier switching in Energy Community Contracting Parties usually is 21 (in Bosnia and Herzegovina, Kosovo\*, Serbia and Ukraine). In Albania it is 15, FYR of Macedonia 23, Georgia 10, Moldova 20 and Montenegro 15.

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

- Albania – if the consumer has a debt with previous supplier, if the application is not valid or the required data are missing and if the current supplier has made a complaint to the System Operator and the latter shall inform the customer regarding the failure to fulfill the conditions for switching the supplier;
- Bosnia and Herzegovina - incomplete or inaccurate request for switching, provisions of previous contract between old supplier and a customer, withdrawal of customer request and force majeure;
- FYR of Macedonia - if the DSO concludes that the provided data with the switching request show inconsistency, it sends notification for rejecting switching request to the new supplier and incumbent supplier. If this occurs, the switching procedure ends at this point;
- Georgia – termination of contract between customer and another supplier;
- 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 – if there is a dispute between customer and previous supplier related to non-payment issues;
- Montenegro - if 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;
- Serbia - in case of a complaint of current supplier that the consumer didn't regulate its obligations under the contract;
- Ukraine – in cases of debt of customer under the current supply contract (for gas and electricity) and failure to submit the necessary documents (the shortcomings in the

documents for electricity). Also if the customer system of commercial metering does not meet the requirements necessary to switch supplier (for electricity) and if a new supplier didn't conclude distribution contract with relevant DSO.

## 5. Customer complaints

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 3<sup>th</sup> 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 2017.

Table 10 Number of household customer complaints for gas and electricity received by different institutions in 2017<sup>48</sup>

	Electricity				Gas			
	Suppliers	DSOs	ADR	NRA	Suppliers	DSOs	ADR	NRA
Albania*	na	na	1	564	nap			
Bosnia and Herzegovina	13,438	31,243		247	511	159	na	na
FYR of Macedonia	31.680		31		na	na	na	na
Georgia	na	nao	na		na	nap		na
Kosovo*	11,350	1,175		233	nap			
Moldova	na	na		534	na	na	na	122
Montenegro	8,831	na	23		nap			
Serbia	na	na		252	na	na	na	71
Ukraine <sup>49</sup>	1,595,510			2,196	na	na	na	NA

In every observed country national regulatory authorities have the role of an Alternative Dispute Resolution body. In Bosnia and Herzegovina, besides the regulator, Ombudsman for customer protection and local/regional court may also be appointed as ADR, in Georgia Energy Ombudsman, in Kosovo\* private mediator licensed by the Ministry of Justice, in Serbia non energy specific third-party body for issues other than connection issues and in Ukraine information and consulting centers at supply companies for electricity.

<sup>48</sup> The following abbreviations apply: NA- not available, NAP- not applicable

<sup>49</sup> In Ukraine number of complaints refers to both suppliers and DSOs, because companies are not unbundled.

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

## 6. Energy poverty

The concept of energy poverty has recently gained significant attention and it has been identified as a policy priority by various EU institutions, most notably in the “Clean Energy for All Europeans” legislative package. EU Energy Poverty Observatory<sup>50</sup> 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.

The concept of energy poverty doesn’t have uniform and straightforward definition. It is often defined as a situation where households are not able to adequately heat or provide other required energy services, using electricity or gas, in their homes at affordable cost. 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.<sup>51</sup>

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

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

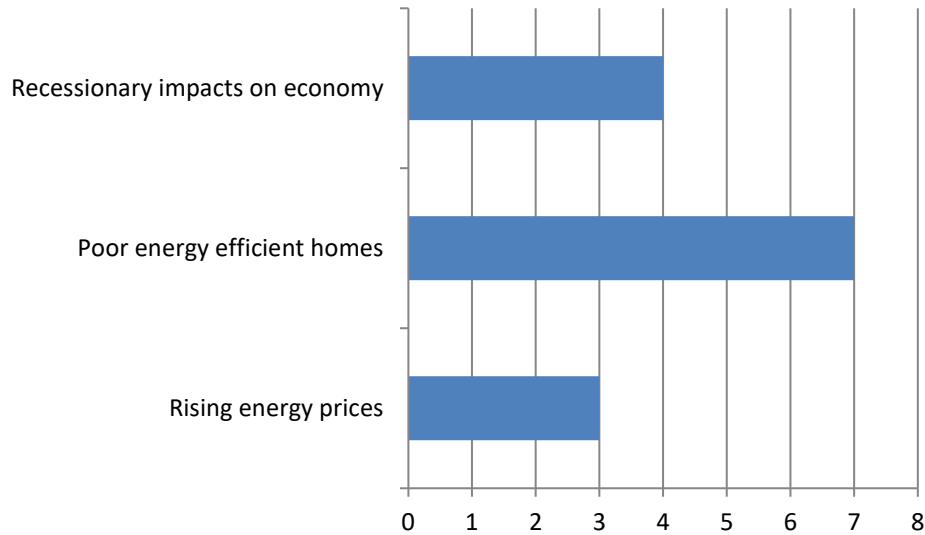
**Definition of energy poverty** does not exist in any of observed countries. However, in majority of observed countries energy poverty is tackled through certain framework, ie. through energy development strategy and national action plans (Albania, FYR of Macedonia, Kosovo\*, Moldova, Montenegro and Serbia). The following figure shows which reasons are perceived as main causes of energy poverty in observed countries.

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<sup>50</sup> <https://www.energy-poverty.eu/>

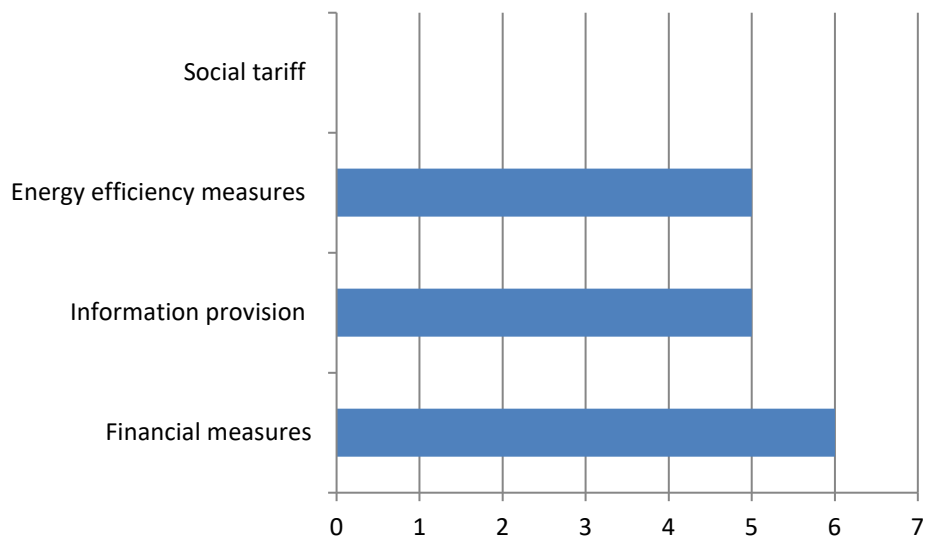
<sup>51</sup> Energy poverty and vulnerable consumers in the energy sector across the EU: analysis of policies and measures [https://ec.europa.eu/energy/sites/ener/files/documents/INSIGHT\\_E\\_Energy%20Poverty%20-%20Main%20Report\\_FINAL.pdf](https://ec.europa.eu/energy/sites/ener/files/documents/INSIGHT_E_Energy%20Poverty%20-%20Main%20Report_FINAL.pdf)

Figure 23 Main causes of energy poverty in Energy Community Contracting Parties



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

Figure 24 Implemented measures in the Contracting Parties



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

In Albania, financial compensation from the Government to the vulnerable customers is provided directly.

In Georgia, a number of mechanisms which aim to provide financial support to households. Financial support is offered, for instance, by the 2015 Law on Development of High Mountainous Regions, which foresees partial subsidization of the electricity costs for the residents of mountainous settlements. Decree No 381 of the Government of 30 July 2015 sets rules for partial subsidization of electricity costs and targets specifically socially vulnerable customers, defined in accordance with a methodology approved by the Government. The decree does not cover the municipality of Tbilisi, which has its own support scheme to help vulnerable households to cover the costs of electricity supply during the winter period. Additional support schemes are offered by various municipalities. For gas, during the cold season, there are subsidies available to populations of certain mountainous municipalities.

In Kosovo\*, the Ministry in charge for social welfare shall develop, in cooperation with the Ministry for energy and Ministry of Finance, a detailed program and measures to protect customers in need. In regards to this, there is fund approved by the Government in value of 4.5 million which is dedicated to customers in needs-social customers. The payments of their electricity needs per month will not excide 20 € per customer. Also the payment is done directly to the supplier on yearly basses.

In Serbia, dependent on income and the number of household members, vulnerable customers have the right to spend a certain amount of electricity or gas free of charge. The supplier collects this electricity or gas from a special fund provided by the Ministry of Social Welfare.

**Social tariffs** are not applied in the Contracting Parties.

**Energy efficiency measures** are widely used across Energy Community Contracting Parties (FYR of Macedonia, Georgia, Kosovo\*, Moldova, Montenegro and Serbia).

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

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

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

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

In Montenegro, activities were carried out in order to develop legal, regulatory and institutional framework for energy efficiency. In addition to this, energy efficiency promotion campaigns, education and implementation of energy efficiency training was implemented.

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

## 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. 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.

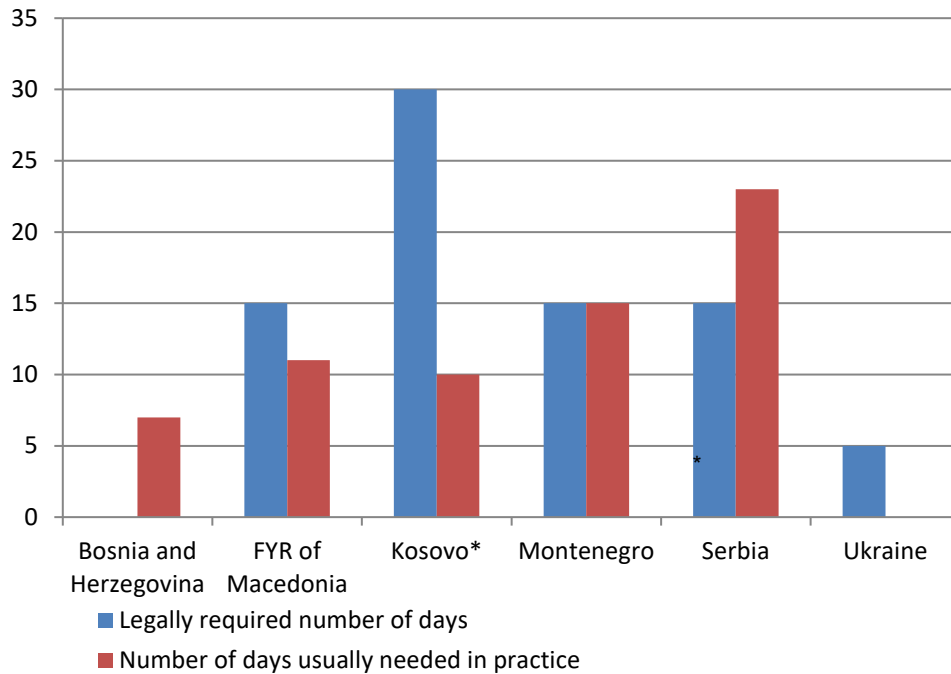
Research has been carried out to look at the legal requirements and practice in Energy Community Contracting Parties related to indicators of DSO service quality. Research covered the following indicators:

- 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 does it take in practice.

Figure 25 Number of days to provide a price offer for a grid connection (from the date of consumer's request for a price offer) – electricity



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

- In Georgia, connection to the distribution network may be regulated or negotiated. Regulated connection is the one where the object to be connected is located within 800 meters from the network, for 0.4 kV voltage level consumer, whereas 6 km radius applies to 6/10 voltage level consumer. For gas distribution network, the distance should be no more than 300 meters. In this case the price and duration of the connection is set by the NRA, in accordance with capacity requested. In case of negotiated connection, DSO issues a technical condition within 5 business days from the date of consumer's request, where the consumer is responsible for construction of the necessary network. After finalisation of works, DSO will install a meter for the fee and during the term fixed by NRA.
- In Montenegro it takes 15 days to 4 months for production and industrial facilities that are connected to the 110 kV or higher voltage level, for which systemic analysis is needed, and distributed production and objects of customers who are connected with an inadequate connection, for which it is necessary to develop a report on connection to the system.

One of explored indicators in conducted research was **number of days to connect to the network and activate energy supply to a consumer**. The results show that there are



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

- In Albania it takes 20 working days to connect the customer to the low-voltage network and 60 days to the medium-voltage network (25 days to assess the application, provide price offer and sign the agreement, 30 days to obtain relevant permits and the realization of construction works if it is necessary and 5 days to install the metering system and connect the customer to the grid)
- In Bosnia and Herzegovina it takes 30 days for DSO's decision on the application, another 30 days is needed for the construction for a low voltage distribution network and 10 days for connecting the facility to the distribution network. For shallow connection in Republika Srpska legally prescribed number of days to connect to the network and activate energy supply to a consumer is 15, and for gas it takes 60 days to connect to gas network, which is the same as legally prescribed.
- In FYR of Macedonia 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 gas network in the case when the customer has finalized internal gas installation and has a usage permit.
- In Georgia it takes the same number of days to connect to the network in practice as it is legally prescribed – 40 business days in case of regulated connection, if the requested capacity is up to 150 kWh, which gradually increases in accordance with the higher requested capacity, and 10 days for installing a meter in case of negotiated connection. For gas, it takes 40 business days, if the requested capacity is up to 16 m<sup>3</sup>/h, which gradually increases in accordance with the higher requested capacity.
- In Kosovo\* legally is defined that the deadline for connection of customer to the grid from the date of application is 2 days, for shallow and for deep connection, but in practice it takes one day for shallow and 2 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 – 2 days.
- In Montenegro it takes 15 days to connect to the grid if the customer fulfills the prescribed conditions before the request.
- In Serbia, it takes 8 days to connect customer after preconditions are met, and no longer than 15 days to activate energy supply after preconditions are met for both electricity and gas distribution system.
- In Ukraine for shallow connection, according to the Connection rules for the first level of connection the time-frame for provisioning the connection service is 20 calendar days from the date of payment by the customer for the cost of connection. For the second and third levels that period is 30 days. In practice, it takes 86 days to connect to electricity network and activate energy supply to a customer. For deep connection, legal requirement is as follows: 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. In practice it takes 272 days on average.

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, if a customer requires to be disconnected, he shall inform the supplier 15 days before and shall execute all the monetary obligations towards the supplier not later than 30 days from the termination of the agreement. The customer is not responsible for any other obligations towards the supplier after 30 days from the submission of his request.
- In Bosnia and Herzegovina prescribed number of days to disconnect the energy following a consumer request is 1 in Republika Srpska and 3 in Brcko District. In practice, it takes 2 days.
- In FYR of Macedonia legally required number of days to disconnect the energy following a consumer request is 30 for electricity, but in practice it takes 2 to 3 days for electricity and 1 for gas.
- In Georgia, it takes the same number of days to disconnect the energy following a consumer request in practice as it is legally prescribed and it is 10 business days.
- In Kosovo\*, legally required number of days is 30, but in practice it takes 14 days.
- In Serbia, disconnection following a consumer request should be realized without delay.
- In Ukraine, according to the Rules of electricity usage for households if household customer wants to terminate the electricity usage contract he shall submit to the supplier a written statement on contract termination not later than 7 working days before, in which the desirable date of household customer facility disconnection should be indicated. The disconnection should be performed at the indicated date. According to the Rules of electricity usage (for legal entities) if the customer leaves occupied premises and/or terminates the electricity usage he shall inform the supplier no later than 20 working days before and provide a statement regarding the termination of the contract. Supplier shall stop supplying electricity and distribution company shall stop distributing electricity at the date of leaving premises or terminating electricity usage indicated by customer. In practice it is 19 days. According to the Gas distribution systems code if a customer makes a request for the suspension of gas supply/distribution to his object or his individual gas appliances for the purpose of repair, reconstruction or technical re-equipment, the customer no later than 7 days before shall notify the DSO in written form and agree with him the date of suspension of gas supply/distribution, and the DSO shall suspend gas supply/distribution at the date agreed with the customer.

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

- In Bosnia and Herzegovina maximum duration of a planned interruption in practice is 6-7 hours.

- In Kosovo\*, prescribed quality standard related to the duration of planned interruption is 6 hours, but in practice it is 2-6 hours.
- In Moldova, prescribed quality standard related to the duration of planned interruption for electricity supply is 24 hours and for gas 120 hours. In practice interruptions last less than legally prescribed standard.
- In Ukraine, the average value in practice is 223 min and the maximum 27,585<sup>52</sup> min and it is related to the reconstruction of 0.4 kV overhead lines.

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<sup>52</sup> The practice of having interruptions day last a few days are very rare, but this one-of 19 days occurred once in 2017

## E. MAIN FINDINGS AND CONCLUSIONS

### 1. Electricity

The **total sale of electricity to final customers** in the Energy Community Contracting Parties increased by 1.49% from 2016 to 2017. A significant increase of electricity consumption was registered in Albania and Kosovo\*- close to 9%. On the other side, electricity consumption rose in Ukraine by only 0.56%. Those changes were caused by the changes in industrial consumption. Consumption of electricity by households decreased in 2017 in comparison to 2016 (1.22%), but excluding Ukraine, consumption of households slightly increased by 0.24%.

Only in Ukraine a large **number of both local and nationwide suppliers** were active in the retail market in 2017. In Bosnia and Herzegovina, fYR of Macedonia and Serbia more than ten suppliers were active in the retail market in the reporting period, while in the other Contracting Parties supply to electricity end-users was offered by one or few suppliers.

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

In 2017 in the majority of the Energy Community Contracting Parties (namely: Bosnia and Herzegovina, Kosovo\*, Moldova, Montenegro and Serbia), all customers had the **right to choose the supplier**. In Ukraine, all non-household customers can change supplier and in the other Contracting Parties (Albania, Georgia and fYR of Macedonia) the dynamics of giving customers the right to choose a supplier on the free market are defined by the law or by sub-legal acts.

During 2017 only a limited number of eligible customers **changed their suppliers** in Bosnia and Herzegovina, fYR of Macedonia, Kosovo\*, Serbia and Ukraine. Except for Serbia only non-household customers changed their suppliers. In Serbia a very small number of household customers left electricity supply at regulated prices and choose new supplier. The increasing number of switching requests monitored in Bosnia and Herzegovina as well as fYR of Macedonia is a proof for market liquidity development. It is worth mentioning that in Bosnia and Herzegovina, fYR of Macedonia, Montenegro and Serbia some customers<sup>53</sup> were obliged to leave the regulated market and choose a supplier already several years ago.

**End-user electricity prices for household** customers in the Energy Community Contracting Parties vary substantially from 3.88 euro cent/kWh in Ukraine to 9.95 euro cent/kWh in Montenegro and are still much lower than the EU 28 average price for households of 20.40 euro cent/kWh in 2017.

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<sup>53</sup> Mainly related to the voltage level of their connection to the network and exclusively reacted to customers that are not households or small customers.

**Electricity prices for industrial** customer are more harmonized among Contracting Parties varying from 5.14 euro cent/kWh in Georgia and Kosovo\* to 6.58 euro cent/kWh in Serbia<sup>54</sup>.

End-user electricity prices for household customers were **regulated** in all Energy Community Contracting Parties in 2017, except in Montenegro. Also the great majority of non-household customers were still supplied at regulated prices in 2017. In FYR of Macedonia and Serbia all categories of consumers, except households and small sized non-household customers, are supplied under unregulated prices. In Bosnia and Herzegovina small and medium enterprises connected to the 0.4 kV network were entitled to supply under regulated end-user electricity prices. In Albania there is no price regulation for non-households connected to 35kV network. In Kosovo\*, only customers that are connected to TSO network are supplied with unregulated prices. In other Contracting Parties, all non-household customers had the possibility to be supplied at regulated prices. In Montenegro, transitional and final provisions of the Energy Law prescribe that, following January 1, 2017, the Supplier which had the status of public supplier until the day of entry into force of this Law, shall be in a position to change prices for households and small sized non-household customers, in line with changes of prices on the market, but under certain restrictions.

Providing an adequate approach for protecting **vulnerable customers** in the Energy Community Contracting Parties is also an important step in the process of price deregulation. Namely, only when the vulnerable customers are properly defined and targeted, price regulation will lose one of its main alleged justifications,<sup>55</sup> i.e. protection of customers by not exposing them to potential effects of liberalized market.

Another precondition for successful transition towards complete deregulation of end-user prices is allowing customers to switch from and to regulated prices as customers, especially households, typically consider regulated energy prices as more stable. Switching in and out of regulated prices for households is allowed in Kosovo\*, Moldova, Montenegro, Serbia and Ukraine.

## 2. Gas

**Total sale of gas to final customers** in the Energy Community Contracting Parties decreased in the period 2012-2017 by 35%, mainly because of the substantial drop of gas consumption in Ukraine. While gas consumption in Ukraine and FYR of Macedonia show clear backward or upward trends, consumption in other countries varies depending on industry performances and winter temperatures.

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<sup>54</sup> Industry prices were the highest in Moldova in 2016 (close to 10 eurocent/kWh), however the information for 2017 is not available.

<sup>55</sup> ECRB in its reports on protection of vulnerable customer treatment (2011, 2013) pinpointed to the negative effects of price regulation on market development and liquidity, in particular when too extensive, not targeted, not cost-covering. ECRB thus urged for de-regulation of prices and establishment of customer protection mechanism outside from and neutral to the energy market.

In the reporting period end-users of gas in the Energy Community Contracting Parties were mainly supplied by regional retail suppliers. The number of **active suppliers** ranged from three in Bosnia and Herzegovina to 231 in Ukraine.

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

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

In the reporting period 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 changed their supplier in 2017. The exception is Ukraine, where 12 households changed supplier;
- Some non-household customers in fYR of Macedonia, Serbia and Ukraine changed their supplier in 2017.

**End-user gas prices for household and industrial customers** decreased in all Energy Community Contracting Parties, except Ukraine.<sup>56</sup> While household prices were still much lower than in the EU average, decreasing industry prices came almost to the EU level. This is mainly due to the continuous process of abandoning cross- subsidization between the two customer categories.

End-user gas prices for household customers were **regulated** in all Energy Community Contracting Parties in 2017, with the exception of fYR of Macedonia, where a limited number of households was supplied at non-regulated prices.

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

If market liberalization is to bring benefits to customers, not only by allowing choice of suppliers, but also offering the lower prices, end-user price regulation should be abandoned.

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<sup>56</sup> Stepwise increase of household prices in Ukraine is part of the Government Public Service Decree.

Abandoning of end- user price regulation in countries where prices are regulated at levels below costs will, most evidently, not lead to lower prices in the first step. Only once all suppliers offer gas at market prices, market liberalization and competition can bring benefits to customers in terms of lower prices.

### 3. Customer protection

The **supplier of last resort** is appointed for electricity in all Energy Community Contracting Parties, except in Georgia, and for gas it exists in Bosnia and Herzegovina, Macedonia, Moldova, Serbia and Ukraine. Electricity and gas suppliers of last resort usually supply customers in the following circumstances: when customer doesn't find supplier on the market, when the license of their current supplier has been revoked and when current supplier has gone bankrupt. The aforementioned means that protection of inactive consumers and precaution for failure of supplier is provided through the role of supplier of last resort.

Non-payment of energy bills is one of the main problems electricity and gas suppliers face in the Contracting Parties. Therefore **easy and transparent procedures for disconnection** that protect both suppliers and customers are very important. Minimal number of days that are legally envisaged between payment due date and actual disconnection of a customer varies significantly among observed countries (between 8-60 days). The actual duration of a disconnection usually takes longer than legally binding deadlines.

The **shares of household disconnections due to non-payment** for electricity in the Contracting Parties vary substantially among countries. The share of household disconnections due to non-payment for electricity in the Contracting Parties varies among countries (1.89% - 10,92%).

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

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

The share of vulnerable customers in the total number of household metering points, showing how well targeted vulnerable customers are, varied between 2.10% in Serbia to 7.70% in Albania.

Consumers should receive transparent information on applicable electricity and gas prices. This means also that they need to be informed in advance about the **change in energy**

**prices.** In majority of analyzed markets there is a legal requirement for information to household consumers on price changes, including the provision on minimal number of days for informing consumers before the new prices apply.

**Price comparison tools** exist only in Bosnia and Herzegovina (<http://uporedistruju.ba/>) and during 2017 it was in its test phase within USAID EIA project (technical assistance) for PCT-electricity. The development of PCT started in FYR of Macedonia and Montenegro for electricity retail market.

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

**Frequency of billing information based on actual consumption** was monthly in every Contracting Party during 2017. This means that the requirement of the Directives that stipulate that consumers should have the right to be properly informed about their energy consumption is met in every observed energy market.

Electricity Directive requires the implementation of **intelligent metering systems** that shall assist the active participation of consumers in the electricity supply market. According to provided data, smart meters roll-out is carried out in Bosnia and Herzegovina, Kosovo\*, Montenegro and Ukraine. The share of household customers with smart meters varies between 1.87% in Kosovo\* to 78.87% in Montenegro. Contracting Parties could consider introduction of incentive schemes in order to motivate and facilitate smart meters roll-out.

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

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

Besides being continuously supplied by energy and informed about various aspects of their consumption, consumers may be properly protected and empowered only if their **complaints** are efficiently treated and if there are clearly defined dispute resolution procedures. When monitoring level and effectiveness of market opening and competition, regulatory authorities should monitor also the complaints of household customers. Research showed that in every observed country national regulatory bodies have the role of Alternative Dispute Resolution body. In Bosnia and Herzegovina, besides the regulator, Ombudsman for customer protection and local/regional court may also be appointed as ADR, in Georgia Energy Ombudsman, in Kosovo\* private mediator licensed by the Ministry of Justice, in Serbia non energy specific



third-party body for issues other than connection issues and in Ukraine information and consulting centers at supply companies for electricity.

The majority of complaints during 2017 refers to bills. The great part of them is related to the quality of supply in Bosnia and Herzegovina and Ukraine.

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

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