

## **Energy and Water Regulatory Commission (EWRC) Bulgaria**

# Annual Report to the European Commission

#### TABLE OF CONTENTS

#### LIST OF ABBREVIATIONS

1. FOREWORD	4
2. MAIN DEVELOPMENTS IN THE GAS AND ELECTRICITY MARKETS	5
2.1. Evaluation of the market development and regulation	7
2.2. Report on the implementation of the Clean Energy Package	9
3. ELECTRICITY MARKET	9
3.1. Networks regulation and technical functioning	9
3.1.1. Unbundling	9
3.1.2. Network extension and optimization	10
3.1.3. Network tariffs	10
3.1.4. Security and reliability regulation	11
3.1.5. Monitoring balance of supply and demand	13
3.1.6. Cross-border issues	14
3.1.7. Implementation of Network Codes and guidelines	17
3.2. Competition and market functioning	18
3.2.1. Wholesale markets	18
3.2.2. Retail market	22
3.2.3. Consumer protection and dispute settlement	25
4. NATURAL GAS MARKET	27
4.1. Network regulation	27
4.1.1. Network and LNG tariffs for connection and access	28
4.1.2. Balancing	30
4.1.3. Cross-border issues	31
4.1.4. Implementation of Network Codes and guidelines	34
4.2. Competition and market functioning	36
4.2.1. Wholesale markets	38
4.2.2. Retail market	43
4.2.3. Monitoring the level of prices, the level of transparency, the level and	
effectiveness of market opening and competition	46
4.2.4. Consumer protection and dispute settlement	49
4.3. Security of supply (if and insofar as NRA is competent authority)	52

#### LIST OF ABBREVIATIONS

ACER Agency for the Cooperation of Energy Regulators

CCP Commission for Consumer Protection

CCR SEE Capacity Calculation Region South East Europe

CDM Central dispatching management

CEER Council of European Energy Regulators
CPC Competition Protection Commission

DAM Day-Ahead Market

EA Energy Act

EMR Electricity Market Rules

ENTSOE European Network of Transmission System operators – electricity

ENTSOG European Network of Transmission System operators – gas

EPS Electric power system

ESO EAD Electricity system operator EAD ETN Electricity transmission network

EU European union

GDC Gas distribution companies
GDN Gas distribution network
HECG High-efficient cogeneration

IBEX EAD Independent Bulgarian Energy Exchange EAD

ITO Independent Transmission Operator NEK EAD National Electricity Company EAD

OEPR Ordinance №1/2013 on electricity price regulation

OLAES Ordinance №3/2013 on licensing the activities in energy sector

ONGPR Ordinance №2/2013 on natural gas price regulation

OP Operative Programme
PCI Project of common interest
PvPP Photovoltaic power plant

Regulator, EWRC Energy and Water Regulatory Commission

RES Renewable energy sources
SLP Standardized Load Profiles
TSO Transmission System Operator

VTP Virtual trading point WPP Wind power plant

#### 1. FOREWORD

In 2020, the activity of the Energy and Water Regulatory Commission (EWRC, the Regulator) was focused on electricity market liberalization, power and gas exchange trading development, achieving regional connectivity of electricity and gas markets and active participation of the country in the European energy market.

In the electricity sector the Regulator concentrated its efforts on creating the necessary regulatory framework for the full opening of the wholesale electricity market. Regulatory framework was adopted, based on which since 1 October 2020 all non-household customers should buy electricity at freely negotiated prices. In order to support the process, EWRC has launched a web-based public platform for comparing existing offers and concluding electricity supply contracts. The Regulator has also adopted decisions on the implementation of the regulations and network codes of the European electricity market, in order to guarantee supplies, to create a competitive internal electricity market and to reduce carbon emissions. Regulatory support to market coupling processes of the national market area with the regional markets in the day-ahead and intraday segments continued in order to promote competition and increase liquidity.

In support of the natural gas market liberalization and integration, the Regulator has adopted a number of decisions which have increased competitiveness of the Bulgarian gas market and guaranteed unimpeded access for all participants. The leading principle in the undertaken actions was the implementation of the priorities in the sector - ensuring energy supplies, diversification of natural gas sources and routes, achieving a liquid and competitive natural gas market, development of the gas transmission infrastructure, connecting the Bulgarian market with the markets of the countries in the region. In 2020, a new gas infrastructure was built, including two connection points with the gas transmission systems of the Republic of Turkey and the Republic of Serbia. Since 31 Dec 2020 natural gas supplies from Azerbaijan has started, which is a step towards diversification of natural gas supplies and promotion of competition. Number of registered participants and traded volumes in the Balkan Gas Hub platform has increased, which is an evidence of the trading development on the organized natural gas exchange market. The construction of the Bulgaria-Greece IGB gas interconnection has reached its final stage and it would ensure the real diversification of natural gas suppliers.

Assoc. prof. Ivan N. Ivanov, PhD
Chairman
Energy and Water Regulatory Commission

#### 2. MAIN DEVELOPMENTS IN THE GAS AND ELECTRICITY MARKETS

In accordance with its regulatory powers, the Energy and Water Regulatory Commission carries out regulatory activities on: electricity market liberalization; power exchange trade development; electricity markets regional connectivity; participation of Bulgaria in the European energy market and promoting the development of a competitive, secure and sustainable internal electricity market. An important task of the Regulator is to provide to consumers affordable services, based on the principles of legality, protection of national interest, economic justification, transparency and fairness. The independence of the Regulator ensures a balance in the decisions taken, considering the interests of all stakeholders, in strict compliance with regulations. In the conditions of the COVID-19 epidemic, EWRC took the necessary anti-epidemic measures in organizing its work and ensured the implementation of all activities within the scope of its legal powers.

In the electricity sector, the Regulator's efforts were focused on opening the market and providing the necessary regulatory framework. Despite the negative impact of the COVID-19 epidemic in 2020, important changes have taken place in various fields of the Bulgarian energy sector. Since 1 October 2020 all non-household customers have been purchasing electricity at freely negotiated prices, which is an important condition for market liberalization. EWRC activities on market couplings of the national market area with the regional markets kept going. With its pricing decisions the Regulator provided stability on the regulated electricity market.

EWRC provided an opportunity for customers that have not chosen a new supplier by 30 Sep 2020, to conclude standard supply contracts with their current end supplier, but in its capacity as a trader. The standard contract was approved by EWRC and was to be valid from 1 Oct 2020 till 30 June 2021. Thus a smooth transition to liberalized electricity market was ensured and the risk of disconnecting customers was minimized. About 450 000 customers or metering points have already switched to the open market - 66% of them purchase electricity from the end supplier in its capacity as a trader on the open market, and 34% have chosen another trader.

EWRC launched the introduction of a central, web-based and public platform for comparing current offers and concluding contracts with electricity supply traders. The free-of-charge information system aims to help consumers and speed up the process of electricity market liberalization. The administered by EWRC platform provides a comparison of the traders' offers according to different criteria: household or non-household users; type of electricity metering device - hourly or non-hourly; customer's load profile; monthly consumption; term of the contract; penalties, etc. After selecting a specific offer, the customer receives the supply contract at a specific post address or by e-mail.

Supporting the national market zone coupling with regional markets is a priority in the EWRC's activities, as integrated markets promote competition and increase liquidity. The Regulator works closely with the Romanian energy regulator on market coupling and the process of Bulgaria joining the European day-ahead market. With the support of the regulatory authorities of Bulgaria and Greece, the transmission network operators of the two countries have requested to join the Bulgarian-Greek border into the single pan European day-ahead market through the Italian borders. In order for the process to be synchronized with the European legislation, EWRC also adopted decisions on the application of the regulations and network codes of the European electricity market. This ensures security of supply, creation of a competitive market and reduction of carbon emissions.

In its pricing decisions, the Regulator applied a balanced and conservative approach and did not allow sharp price changes. In 2020 electricity prices for the regulated market increased on average by 2.79%. As a result of the renegotiated, lower price of the supplied natural gas, the

Regulator has significantly reduced the central heating energy prices for household consumers. With EWRC decision of 1 July 2020 the approved prices were on average 12.69% lower compared to the prices in the previous 2019-2020 heating season. By amendments in the secondary legislation adopted by the Regulator, estimated annual prices of heating energy produced by district heating companies using natural gas were introduced for the period 1 July 2020 - 30 June 2021, based on estimated annual natural gas price for the same period. In case of lower gas prices, compared to the set annual estimated price, the Regulator would compensate the consumers in the following one-year period, taking into account the surplus revenues of the district heating companies.

In the natural gas sector EWRC's activities aimed at promoting market competition and developing liberalization processes in the sector. Main priorities were security of supply, liquid and competitive market and development of the gas transmission infrastructure. Gas market liberalization in Bulgaria started at the end of 2019, following EWRC's decisions of approving a natural gas trading platform and designating its operator. The Regulator also approved an agreement between the trading platform operator and the public provider for the implementation of a natural gas release programme for the period 2020 – 2024. The adoption of those decisions enabled the realization of deals that demonopolize the market and create a competitive environment. During the reporting year the number of local and foreign participants in the trading platform of Balkan Gas Hub EAD increased, as well as the natural gas volumes traded on it.

Pursuant to the Act on Amendments to the Energy Act, promulgated SG, issue 38 of 2020, the natural gas public provider reimbursed amounts under natural gas supply contracts for the period 5 August 2019 - 31 March 2020 to end suppliers, customers connected to the gas transmission network and to entities granted with a license of heating energy production and transmission. In this regard, EWRC adopted decisions on approval of natural gas prices for each month as of 5 August 2019 till 31 March 2020.

In 2020, with the Act on Amendments to the Energy Act, promulgated SG, issue 57 of 2020, changes were made to the Energy Act, which envisage as of 1 Oct 2021 the activity "trade in natural gas" to be carried out on the basis of an issued license. To this end, the Regulator adopted amendments to Ordinance № 3 of 21 March 2013 on licensing the activities in the energy sector (OLAES) and approved an application sample of a "trade in natural gas" license.

EWRC adopted a Methodology on the amendment and supplement of Methodology on pricing of natural gas access and transit in gas transmission networks owned by Bulgartransgaz EAD, promulgated SG, issue 79 of 8 Sep 2020 r. (MAS on MPNGAT). The amendments to the Methodology were necessitated by the need to comply with Commission Regulation (EU) 2017/460 of 16 March 2017 establishing a network code on harmonised transmission tariff structures for gas (Regulation (EU) 2017/460). The amendments to the Methodology provide for the accumulated balance in the regulatory account to be released at the end of the regulatory period and to be covered by adjusting the allowed annual revenue requirements in the next regulatory period. The requirements of Regulation (EU) 2017/460 for public consultations before the start of the regulatory period and on multipliers, seasonal factors and discounts have also been introduced. The adoption of the MAS on MPNGAT aims at refining and supplementing the norms on the basis of which prices for natural gas access and transmission through the gas transmission system are formed. Article 13 of Regulation (EC) № 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005 (Regulation (EC) № 715/2009) is hereby achieved, as well as the requirements of Article 7 of Regulation (EU) 2017/460, ensuring transparency and predictability in pricing.

As regards to its monitoring and controlling powers under Regulation (EU) № 1227/2011 of the European Parliament and of the Council of 25 October 2011 on the integrity and transparency of the wholesale energy market (REMIT), in 2020 EWRC adopted an amendment to the Rules of

Procedure of the Energy and Water Regulatory Commission and its administration (EWRC RoP, promulgated SG, issue 23 of 14 March 2020). By the amendment a new division was established (Monitoring and control in pursuance of Regulation (EU) № 1227/2011 of the European Parliament and of the Council of 25 October 2011 on the integrity and transparency of the wholesale energy market), which provided for the activities stipulated in the Regulation.

In line with Art.60 of EA, the terms and conditions on the implementation of control in pursuance of REMIT shall be set by an ordinance adopted by EWRC. In this regard, in 2020 EWRC adopted an Ordinance amending and supplementing Ordinance № 3 of 21 March 2013 on licensing the activities in the energy sector (OLAES) (amended and supplemented, issue 111 of 31 Dec 2020, in force as of 31 Dec 2020), in order to regulate in their entirety the public relationships related to the performance of effective control by EWRC on REMIT implementation. A new Chapter Nine "a" has been created in the Ordinance - "Terms and conditions on exercising control under Chapter Seven "a" of the Energy Act", which regulates the controlling procedure.

One of the main Division's activities is to carry out inspections under Chapter Seven "a" of the Energy Act. In particular, Division's officials shall have the power to carry out a preliminary investigation in the event of established initial evidence of market manipulation within the meaning of Articles 3 and 5 of the Regulation. Following the completion of the preliminary investigation, if sufficient evidence of a violation is to be established, EWRC may, by a decision, initiate violation proceedings under Articles 3 and 5 of Regulation (EU) (1227/2011). In 2020 EWRC received a total of 10 reports on suspicious transactions. On the basis of the filed suspicious transactions reports and signals received in the Division, the Regulator considered 7 reports on preliminary investigations resulting in 4 EWRC decisions with proceedings establishing violation of Art.3 and/or Art.5 of Regulation (EU) № 1227/2011, and 3 preliminary investigations were terminated due to lack of data on committed violations. The opened preliminary investigations are less than the number of received reports and signals for the same period, because several signals have been received on one and the same suspicious transaction. In order to achieve procedural savings and full clarification of the investigated cases, these signals were combined in one preliminary investigation.

#### 2.1. Evaluation of the market development and regulation

In the gas sector, a strategic goal of the Republic of Bulgaria is to preserve its role as a country providing cross-border natural gas transportation to the region and the EU. Main priorities in the sector in 2020 were guaranteeing security of supply, ensuring a liquid and competitive natural gas market and developing the country's gas transmission infrastructure. The interconnection of the Bulgarian natural gas market with the natural gas markets of the member states in the region and in Europe will contribute to the implementation of the European energy policy of building a single interconnected pan-European natural gas market.

The natural gas market in the Republic of Bulgaria in 2020 was still supplied by one main supplier, but there was availability of alternative supplies that could be reported, which increased the possibility of choice. Gas market liberalization in Bulgaria depends on the development of the gas transportation infrastructure as well. In 2020, a new gas infrastructure was built, including two connection points with neighbouring gas transmission systems - IP Strandja 2 / Malkoclar (from the Republic of Turkey to the Republic of Bulgaria) and IP Kirevo / Zajecar (from the Republic of Bulgaria to the Republic of Serbia), and since the end of the reported year natural gas supplies from Azerbaijan have been realized. Practically, albeit to a small extent, Bulgaria has achieved some diversification of natural gas supplies, which is a favourable step towards competition.

Another step in that direction was the 20 % participation of Bulgaria, represented by Bulgartransgaz EAD in the share capital of the Greek company GAZTRADE AD, which realizes the

construction of a liquefied natural gas (LNG) terminal near Alexandroupolis, Northern Greece. That has been one of the most significant energy projects implemented in recent years. It is an evidence of the project regional profile and is a catalyst for the gas markets integration in Southeast Europe, providing energy liquidity and a variety of natural gas sources throughout the region. With the implementation of another major infrastructure project - the IGB interconnector, the energy map in the region and Europe will change. Following the adopted in 2019 Final Joint Decision of EWRC and the Energy Regulatory Authority of Greece (RAE) on the exemption from the requirements of Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC (Directive 2009/73/EC) regarding third party access, tariff regulation and ownership unbundling, in 2020 the two NRAs adopted a Joint Decision on the approval of the Network Code of IGB Pipeline including IGB Tariff Code, in compliance with Regulation (EC) No 715/2009 and Commission Regulation (EU) 2017/459 of 16 March 2017 establishing a network code on capacity allocation mechanisms in gas transmission systems and repealing Regulation (EU) No 984/2013.

The effective gas market liberalization in Bulgaria started at the end of 2019, following EWRC's adoption of decisions approving a natural gas trading platform and designating its operator, as well as approving an Agreement for the implementation of a natural gas release programme between the trading platform operator and the public provider. The programme aims at natural gas quantities to be released by the public provider and offered for sale on the organized exchange market on an annual basis for the period 2020 – 2024, in accordance with the agreement on the implementation of the natural gas release programme and in order to enable the market to develop and increase liquidity. With the creation of the natural gas trading platform of Balkan Gas Hub EAD and the implementation of the first transactions under the natural gas release programme, the process of demonopolizing the market has practically started, providing sufficient liquidity and creating a competitive environment for its participants.

The organized exchange market trading was successfully carried out in 2020. The number of registered participants in the Balkan Gas Hub EAD platform continued to grow, and from 30 participants in January 2020, by the end of the year they have increased to 40 - local companies, as well as companies operating in European markets. Traded volumes were limited, but still were significantly higher than those in the beginning of 2020, which showed that there were opportunities for development.

In 2020, in compliance with Commission Regulation  $\mathbb{N}_{\mathbb{C}}$  C (2018) 258 of 24 May 2018 on Case AT.39816 – Upstream Gas Supplies in Central and Eastern Europe, and in compliance with signed between OOO Gazprom export and Bulgargaz EAD Annex  $\mathbb{N}_{\mathbb{C}}$  13 of 2 March 2020 to Gas Supply Contract  $\mathbb{N}_{\mathbb{C}}$  02-12-13 of 15 Nov 2012, as well as in compliance with the Act on Supplement of the Energy Act (AS of EA, promulgated SG, issue 38 of 2020), as of 5 August 2019 the public provider reimbursed amounts under gas supply contracts to end suppliers and customers connected to the gas transmission network, including entities that have been granted a license for production and transmission of heating energy. In this regard, EWRC adopted decisions approving the public provider's natural gas selling prices for each period, respectively, 5 Aug 2019 – 31 Dec 2019 and 1 Jan 2020 – 31 March 2020, and by those decisions prices, at which end suppliers sell to customers connected to the respective gas distribution networks were also changed for each of the specified periods. Pursuant to § 4 of Transitional and Final Provisions of the Insurance Act, promulgated, SG, issue 38 of 2020, EWRC provided detailed information to the National Assembly of the Republic of Bulgaria on the reimbursed amounts.

With the Act on amendment and supplement of the Energy Act, promulgated SG, issue 57 of 2020, AS of EA, there were changes that envisage as of 1 Oct 2021 the activity of trade in natural gas to be carried out on the basis of a granted license. To that end, the Regulator adopted amendments to Ordinance № 3 of 21.03.2013 on licensing the activities in the energy sector, which

regulate the terms, conditions and procedure of granting a natural gas trading license. The adopted amendments to the OLAES create clarity regarding the terms and conditions that a legal entity should meet in order to obtain a license for the activity "trade in natural gas", as well as regulate the data, documents and information at by-law level that are to be submitted to EWRC.

With the steps taken by the Regulator and the decisions adopted in the gas sector in 2020, EWRC has promoted market competition, liberalization processes development in the sector and natural gas prices reduction.

#### 2.2. Report on the implementation of the Clean Energy Package

According to the provision of Art.59, para.1 (u) of Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market in electricity and amending Directive 2012/27 / EU (Directive (EU) 2019/944), EWRC has the obligation to monitor the implementation of rules relating to the roles and responsibilities of transmission system operators, distribution system operators, suppliers, customers and other market participants pursuant to Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity. This provision of the Directive has not been transposed into the legislation of the Republic of Bulgaria. In this regard, it should be borne in mind that EWRC has no powers to start up legislative initiative.

#### 3. ELECTRICITY MARKET

#### 3.1. Networks regulation and technical functioning

#### 3.1.1. Unbundling

Pursuant to Article 59 (1), (j) of Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU (Directive (EU) 2019/944), EWRC should ensure that there is no cross-subsidisation between transmission, distribution and supply activities or other electricity or non-electricity activities. In this regard, Article 39, paragraph 1 of the Energy Act describes the types of activities subject to licensing. EWRC issues a license for each of the indicated activities, for a certain period and with specific conditions, which are an integral part of the decision for its issuance.

Pursuant to Article 37 of EA, energy companies keep separate accounting records for each activity subject to licensing, the activities subject to licensing and other activities, for each branch and enterprise, as well as for activities at regulated and freely negotiated prices. The rules for the separate accounting of energy undertakings, including the assets for the purposes of pricing by groups of customers, as well as the accounts form and content for regulatory purposes, shall be determined by a decision of the Regulator. In addition, it should be noted that energy companies subject to an independent financial audit submit to the Regulator an audit report on compliance with the rules for keeping separate accounts.

#### 3.1.2. Network extension and optimization

Pursuant to Article 59, paragraph 1, (k) of Directive (EU) 2019/944, EWRC monitors investment plans of the transmission system operators and providing in its annual report an assessment of the investment plans of the transmission system operators as regards their consistency with the ten-year Union-wide network development plan; such assessment may include recommendations to amend those investment plans.

In connection with the above, with EWRC Decision № ДПРМ -2 of 07.10.2020, Plan for development of the transmission electricity network of Bulgaria for the period 2020 - 2029 was approved. The 2020-2029 ten-year plan contains the basic electricity transmission infrastructure, which is planned for construction, expansion, reconstruction and modernization over the next ten years. It ensures timely and harmonious construction and commissioning of new elements in the electricity transmission network for economical and safe operation of the electric power system (EPS), in compliance with the security criteria and the current quality standards of electricity supply.

In order to ensure safe operation of the electricity transmission network in compliance with the principles of providing the necessary reliability of the transmission system and stability of the generating sources in the 400 kV network of Bulgaria, the Electricity System Operator EAD (ESO EAD) has included in the Development Plan of the transmission network of Bulgaria for the period 2020 - 2029 the construction of the following new electricity power lines of pan-European importance:

- Substation Maritsa East Substation Nea Santa, Greece;
- Substation Sofia West Substation Nish, Serbia, second electricity power line;
- Substation Plovdiv Maritsa East;
- Substation Maritsa East Switchyard of TPP Maritsa East 3;
- Substation Maritsa East Substation Burgas;
- Substation Burgas Substation Varna.

The annual estimated values of all costs for construction, expansion, reconstruction and modernization of the electricity transmission network objects and of the protection and EPS management systems for the period of the 2020 - 2029 Ten-year plan, amount to 1 420 252 thousand BGN, of which 178 167 thousand BGN or 12.54% were attracted European funds, mainly for cofinancing of projects of pan-European importance.

In view of the above, after examining the investment needs, the Regulator considered that the Transmission Electricity Network Development Plan of Bulgaria for the period 2020-2029 submitted by the independent transmission operator covered all investment needs and that it was in accordance with the ten-year plans of the network development in the European Union. The plan has been developed considering the available information on forthcoming changes in generation, supply, consumption and exchange with other countries, as well as the regional networks investment plans and the EU networks.

#### 3.1.3. Network tariffs

Pursuant to Article 21, paragraph 1, item 8 of EA, EWRC regulates prices in the cases provided for in the same act. Pursuant to Article 30, paragraph 1, items 1, 6, 9, 10, 13 and 17 of EA, prices subject to regulation by the Regulator are:

- access and/or transmission through the transmission network;
- access and/or transmission through the distribution networks.

During the period under review, important changes were adopted in the Energy Act (promulgated SG, issue 41 of 2019) and OREP (promulgated SG, issue 50 of 25.06.2019) in the field of network services tariff regulation, as a result of which the obligation of the market participants to pay tariffs for transmission and access to the electricity transmission network for electricity quantities generated in Bulgaria and intended for export has been waived. Also, a price of access to the electricity transmission network for electricity generators has been introduced.

In the pricing decisions during the period, the Regulator consistently applied a balanced approach, taking into account the interests of all participants, in order to avoid sharp price changes.

The network tariffs development for the period 2017 - 2020 is presented in the table below:

			2017	2018	2019	2020
	Access price to the transmission network	BGN/MWh	1.09	1.39	0.41	0.49
	Transmission price through the transmission network	BGN/MWh	8.15	8.45	9.83	11.48
ESO EAD	Access price to the transmission network for PvPP and WPP	BGN/MWh	6.68	3.02	5.14	5.40
	Access price to the transmission network for power generators, excluding PvPP and WPP generators	BGN/MWh	-	-	2.12	2.42
	Transmission price through the distribution network MV	BGN/kWh	0.00923	0.00971	0.01002	0.01076
CEZ Distribution	Transmission price through the distribution network LV	BGN/kWh	0.03098	0.03245	0.03426	0.03636
Bulgaria AD	Access price of non-household customers	BGN/kWh/ day	0.01745	0.01796	0.01989	0.02151
	Access price of household customers	BGN/kWh	0.00505	0.00519	0.00577	0.00605
	Transmission price through the distribution network MV	BGN/kWh	0.00823	0.00884	0.0095	0.00994
ED Was AD	Transmission price through the distribution network LV	BGN/kWh	0.03154	0.03253	0.03576	0.03783
EP Yug AD	Access price of non-household customers	BGN/kWh/ day	0.01651	0.01733	0.01981	0.02060
	Access price of household customers	BGN/kWh	0.00503	0.00516	0.00599	0.00598
	Transmission price through the distribution network MV	BGN/kWh	0.01036	0.0117	0.01274	0.01312
ERP Sever	Transmission price through the distribution network LV	BGN/kWh	0.03008	0.03278	0.03478	0.03583
EAD EAD	Access price of non-household customers	BGN/kWh	0.008	0.00854	0.00896	0.02073 BGN/ kWh/day
	Access price of household customers	BGN/kWh	0.008	0.00854	0.00896	0.00885
	Transmission price through the distribution network LV	BGN/kWh	0.02783	0.03303	0.03125	0.06035
ERP Zlatni Piasaci AD	Access price of non-household customers	BGN/kWh	0.00666	0.00675	0.00644	0.01325
	Access price of household customers	BGN/kWh	0.00666	0.00675	0.00644	0.01325

#### 3.1.4. Security and reliability regulation

Cross-border infrastructure access, including capacity allocation and congestion management procedures

Auction rules on conditions for access to the network for cross-border exchange of electricity (Rules on transmission capacity allocation) and cross-regional cooperation between transmission system operators were developed in line with Regulation (EU) 2019/943, by introducing common

rules and procedures for the allocation and provision of available transmission capacity in both directions on the interconnections of the EPS of Bulgaria and neighbouring power systems. The rules were also drafted in conjunction with Regulation (EU) 2016/1719 of 26 September 2016 establishing a guideline on forward capacity allocation (Regulation (EU) 2016/1719) and Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing guidelines on capacity allocation and congestion management (Regulation (EU) 2015/1222). The purpose of these rules is to ensure optimal transmission network bottlenecks management, promoting energy exchanges development and coordinated allocation of cross-border capacity through non-discriminatory market-based solutions.

The rules on transmission capacities allocation are to be submitted by ESO EAD every year for EWRC approval and the Harmonized allocation rules for long-term transmission capacities at the common borders between EU member states were approved on 29 Oct 2019 by ACER. The auction rules, the user registers and the agreed transmission capacities to be allocated are published on the website of ESO EAD. The results of the annual, monthly and daily auctions organized by ESO EAD are publicly available on the website of ESO EAD and in the public section of the electricity market administration system. According to the above rules, ESO EAD performs the role of auction operator for allocation of 50% in both directions of the agreed transfer capacities on the Bulgarian-Turkish border, as well as the daily transfer capacities on the border Bulgaria-North Macedonia. The Single Allocation Platform JAO allocates transmission capacities on an annual, monthly and daily basis on the Bulgarian-Greek and Bulgarian-Serbian borders, and on an annual and monthly basis on the Bulgarian-Romanian border. TRANSELECTRICA (Romania) is the auction operator of the allocation of daily transmission capacities on the Bulgarian-Romanian border, and MEPSO (North Macedonia) - of the annual and monthly transmission capacities on the border Bulgaria-North Macedonia. ESO EAD reports the data for which it is the auction operator in the ARIS system (ACER REMIT Information System). Data on other auctions are reported by JAO or the relevant auction operator.

#### Cooperation in relation to the implementation of EC Regulations

One of the main tasks related to the implementation of the requirements arising from Regulation (EU) 2015/1222 establishing guidelines on capacity allocation and congestion management (CACM) was the development of a *Common capacity calculation methodology for the day-ahead and intraday market time-frame for the SEE CCR*, as well as other accompanying methodologies. The *Common capacity calculation methodology* was approved by the three NRAs in SEE region in April 2019. The three SEE CCR TSOs chose the calculation method in the methodology to be based on coordinated net transmission capacity. The implementation of the methodology is closely related to the activity of the SEE CCR Regional Security Centre (RSC). Due to delays related to the establishment of the Thessaloniki RSC, the methodology implementation will be delayed too. Another important task related to the implementation of the requirements arising from Art.35 of Regulation 2015/1222 was the development of a *Methodology for redispatching and countertrading* and a *Methodology for cost sharing*.

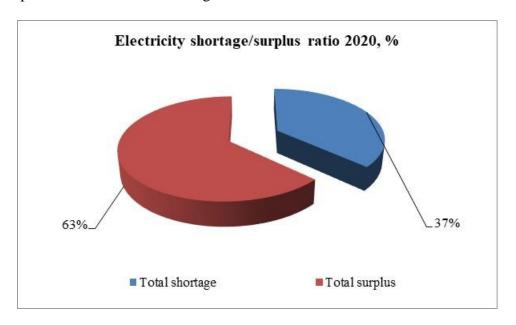
As required by Art.76 and 77 of Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation (Regulation (EU) 2017/1485), a common methodology for the region of Southeast Europe was developed to coordinate the analysis of operational security. The methodology is in compliance with the already developed *Methodology for redispatching and countertrading* and a *Methodology for redispatching and countertrading cost sharing*, as required by Art.76, paragraph 1 of Regulation 2017/1485.

One of the main tasks related to the implementation of the requirements arising from Regulation (EU) 2016/1719 establishing a guideline on forward capacity allocation, is the development of a *Common capacity calculation methodology for long-term time frames for SEE* 

*CCR* under Art.10, as well as the other accompanying methodologies, and the development of a *Methodology for splitting cross-zonal capacity*. The three regional TSOs chose for that methodology the calculating method based on coordinated net transmission capacity.

#### 3.1.5. Monitoring balance of supply and demand

Total energy shortage in 2020 was 524 087 MWh compared to 624 727 MWh in 2019, which is a decrease of approximately 17%. Total energy surplus in 2020 was 899 567 MWh compared to 984 770 MWh in 2019, which is a decrease of approximately 9%. Percentages of electricity shortage and electricity surplus in 2020 are shown in Figure 16.



Pursuant to Art.21, paragraph 1, item 8, proposition 2 of the Energy Act, the Regulator determines annually a marginal price for concluding transactions on the balancing energy market.

In its practice so far, EWRC has established two separate marginal prices, namely - a marginal price for concluding transactions on the balancing energy market for the provision of a systemic upward regulation service and a marginal price for concluding transactions on the balancing energy market for providing a systemic downward regulation service.

The upward regulation marginal price is tied to the achieved price on the day-ahead market, thus achieving interdependence in the two markets and not allowing arbitrage. Such a measure ensures the proportionality of the balancing costs of market participants depending on hourly market prices. The achieved day-ahead market (DAM) price functions as a minimum price for upward regulation proposals. In this way, the imbalances price always is more unfavourable than that the DAM one, and market participants are encouraged to participate in the balancing energy market with their reserve capacity.

With Decision № Ц-45 of 23.12.2020 EWRC has continued to apply a more balanced pricing model, according to which the marginal price for concluding transactions on the balancing energy market for upward regulation is determined as DAM price + supplement of BGN 100/MWh, where DAM price is the DAM price of IBEX EAD for the respective hour. A lower supplement would not cover the variable costs of the plants providing this service to ESO EAD. When using this approach, the Regulator expects marginal upward regulation prices, respectively the shortage costs of market participants, to reduce.

The marginal downwards regulation price should be common for all market participants, regardless of whether the used capacities are generating or consuming. Thus, non-discriminatory and equal treatment is ensured for the plants offering this system service and no benefit is allowed for one participant at the expense of the others or speculative behaviour. Market principles require that downward regulation price to be a positive value. At a negative price value, the plant providing the system service sells shortage, and consumers who are in surplus buy it, which contradicts the principles of the balancing market and leads to extreme values of balancing energy and high imbalance costs. The negative downward price is an excessive sanction for producers and consumers who are in excess, which distorts the market, jeopardizes its operation and contradicts European practices. To this end, with Decision № Ц-45 of 23.12.2020, EWRC maintained the marginal price for concluding transactions on the balancing energy market for downward regulation at BGN 0.00 (zero)/MWh.

#### 3.1.6. Cross-border issues

Regarding the technical cooperation between the EU transmission system operators and third countries, the Bulgarian TSO is in close cooperation with the operators - members of the European Network of Transmission System Operators for Electricity (ENTSO-E). In connection with the entry into force of Regulation (EU) 2019/943, ESO EAD has sent letters with a proposal for cooperation with third countries in the South East Europe Region (non-EU members of ENTSO-E: Turkey, North Macedonia and Serbia) for the coordinated calculation of inter-zonal capacity under ACER methodologies for determining the 70% threshold of the cross-zonal capacity and for the coordinated calculation of operational security.

#### Market coupling projects in the day-ahead timeframe

#### • SDAC (Single Day-Ahead Coupling) Project

The project was created for management and development of the procedures and the technical feasibility of the Single European day-ahead market. The Single European day-ahead market is compliant with the European legislative framework; it was initially launched in Western and Central Europe and is based on the PCR Decision (Price Coupling of Regions) and has been gradually extended. Its main objective is the optimal and full use of energy resources through implicit trade in the day-ahead timeframe.

The Republic of Bulgaria is a full SDAC member as it joined MRC (Multi Regional Coupling) in isolated regime in January 2016 and is still not an operational party in the project due to objective reasons, arising from specific characteristics of neighbour market zones, and namely the still uncompleted merge of MRC with 4MMC market coupling of which Romania is a part.

Taking into account the significant role of the market integration for the trade participants and consumers and aiming at creating maximised trade conditions, ESO EAD jointly with IBEX EAD has been working intensely for the swiftest possible accession of the Bulgarian market zone to the Single European day-ahead market. In short term market couplings with Romania and the Republic of Greece are expected to be completed through the following projects:

#### • Local project for market coupling with the Romanian market zone

Romania is still part of 4MMC regional market coupling between Hungary, Czech Republic and Slovakia and Bulgaria is part of the European day-ahead market coupling MRC. Until the launch of the Interim project in the end of 2018 (market coupling of DE-AT-PL borders with 4M) which merged 4MMC to MRC in the Single day-ahead coupling (SDAC), it was not possible to launch a coupling project of the Bulgarian-Romanian border markets due to technical incompatibility.

After the Interim project launch it became possible to complete such a market coupling project with a perspective of entering into real operation in three months following the 4MMC - MRC merge.

Considering the significant importance of the local project, the participants therein signed the required documents defining its structure and organisation and immediately started working actively on it. In operational order, the parties approved the organisational architecture of the market coupling and a detailed roadmap, which foresaw the launch in real work until the end of 2020.

In continuation of the active work on the project, in the beginning of April 2020 the countries informed the operational groups (MRC OPSCOM and SDAC MSD) of the central project SDAC about the project that was started and they submitted a request for a change of the existing agreements with the purpose of including the project as geographical extension to SDAC. The project was also officially presented to the General assembly of the Management Committee of the Transmission System Operators (TSOs) and Nominated Electricity Market Operators (NEMOs) for the day-ahead markets.

The timely entering into real market coupling operation with the Romanian market zone directly depends on the timely launching of the Interim project (market coupling of DE-AT-PL borders with 4MMC), which was envisaged for September 2020.

Due to a delay in the tests by part of the countries participating in the Interim project, the implementation of the project was re-scheduled for May 2021; due to a new delay, the new date for the project was announced to be in June 2021. These consecutive delays reflected on the date of launching the local project of Bulgaria and Romania that was set in advance and the date was revised and delayed for the third quarter of 2021.

### • Project of market coupling between the Republic of Bulgaria and the Republic of Greece

The market coupling of the Republic of Bulgaria with the Republic of Greece has been realized through IBWT market coupling project of the Italian borders.

The Republic of Greece launched a local day-ahead and intraday market in accordance with the European legislative framework on 1 November 2020. In order to start a market coupling project as soon as possible, the Greek and Bulgarian transmission and market operators, supported by NRAs, launched a local project by submitting a request for the Bulgarian market zone joining through BG-GR border to the existing regional market coupling initiative of the Italian borders (IBWT – Italian Borders Working Table). In 2018, ESO EAD and IBEX EAD received all the required approvals by the regulatory authorities and the project Managing Committee and also signed the accession documents thereto and entered all the working groups that were part of it. The parties elaborated a roadmap with the specific activities accompanying the market coupling between them and began to work actively on the project. After the successful launching of the Greek-Italian border market coupling on 15 December 2020, the Bulgarian-Greek border market coupling was envisaged to take place with a perspective in May 2021.

#### • Project of market coupling with the North Macedonia market zone

After the memorandum for day-ahead market coupling signed under Western Balkans 6 initiative in April 2018, and the following several project meetings, a stage has been reached, when legislative amendments in the regulatory framework of North Macedonia were required. Those amendments would guarantee an organization of the market pursuant to Regulation 2015/1222.

In 2020, North Macedonia introduced to its local legislation required minimal legislative framework, pursuant to Regulation 2015/1222, as in September 2020 the Ministry of Energy of North Macedonia designated a Macedonian market operator (MEMO) as a Nominated Electricity Market Operator (NEMO).

After the MEMO designation, the Bulgarian and Macedonian transmission and market operators renewed the market integration project and began to actively work on it, with a perspective to implement it into actual operation in 2022, with an interim step in 2021, when a local day-ahead market is also expected to be launched.

In order to organize the activities on the market coupling project with North Macedonia, the parties started holding regular working meetings, where they discussed and approved a road map and the project organization. Memorandum of Cooperation and accompanying Terms of Reference were signed. Currently, activities are being done in accordance with the activities under the agreed roadmap of the joint project.

#### • Project of market coupling with the market zone of the Republic of Serbia

In 2018 negotiations on trilateral coupling between Bulgaria, Serbia and Croatia were launched. In 2019 the countries elaborated an Analysis on the required conditions and the feasibility of the project; the document was agreed between the three parties. The project activities continue and some of the required following steps are connected to legislative amendments in the regulatory framework of the Republic of Serbia that guarantee the market organization in accordance with Regulation 2015/1222. The project will continue after an amendment of the Treaty Establishing the Energy Community or through the implementation of a temporary legislative solution which is to provide the necessary legislative framework.

#### Market coupling projects in the intraday timeframe

#### • SIDC(XBID) project

The single integrated intraday market allows continuous cross-border trade, promotes competition and increases liquidity by allowing a more effective use of the resources for energy production in Europe.

The project has been created for management and development of the procedures and the technical feasibility of SIDC – Single Intraday Coupling. Its main objective is the creation of a decision for a cross-border implicit continuous intraday trade (simultaneous distribution of energy and capacity) in Europe. The trade system XBID allows the cross-border energy trade up to one hour before the real supply, as during the time of active trade phase a continuous update of the active offers and the available capacities in accordance with the signed deals is provided.

The European cross-border intraday initiative (XBID project) started as a joint initiative of the European power exchanges, together with the transmission system operators of 12 countries in Central and Western Europe, aiming at the establishment of Single Intraday Coupling (SIDC), in accordance with the requirements of Regulation 2015/1222.

Initially, the project included the European power exchanges: EMCO, EPEX SPOT, GME and OMIE and the European Transmission Operators: 50 Hertz, Amprion, APG, BritNed, Creos, Elia, Energinet, Finnetwork, National Network Interconnectors, RTE, Statnett, Svenska Kraftnät, Swissnetwork, TenneT BV, TenneT GmbH and TransnetBW. Since the project started, the scope has significantly extended, as to the moment all EU member are part of it, with the objective of

completing the European target model. Several market integration waves are envisaged for the full intraday coupling:

- The first wave is in actual work since June 2018 and includes 14 countries: Austria, Belgium, Denmark, Estonia, Finland, France, Germany, Latvia, Lithuania, the Netherlands, Norway, Portugal, Spain and Sweden;
- The second wave is in actual work since November 2019, and after its successful start Bulgaria also joined the single market together with other six member-states: Romania, Hungary, Croatia, Slovenia, the Czech Republic, Poland;
- The third wave of intraday market integration is to be entered in actual work and its start was initially foreseen for the first trimester of 2021, including the Italian borders and the Bulgarian-Greek border, but due to an announced delay on behalf of some of the parties involved in the project (the Greek NEMO and TSO and the Austrian TSO), the start was postponed for May 2021 and it will include the North Italian borders. Due to an additionally announced delay in the implementation of the necessary functionalities in the local system on behalf of the Greek market operator (HEnEx), the Greek-Bulgarian and Greek-Italian borders are expected to join later, during the fourth trimester of 2021 or with the fourth wave;
- The fourth wave of intraday market integration includes Slovakia and its borders, and the actual work start is expected to be in the fourth trimester of 2021 according to preliminary data. Discussions on the possible integration of the Greek borders into the project as part of the fourth wave are pending. After the introduction of the Bulgarian-Romanian border market coupling into the intraday timeframe in actual work on 19 November 2019 through LIP 15 local project as part of the second SIDC accession wave, ESO EAD became an operational party to the project by participating in the Management Committee of all TSOs and in all permanent and temporary working groups that are part thereof.

Applicable as of that date, the already registered IBEX EAD participants can sign cross-border electricity deals up to 60 minutes before the hour of supply. Following that step, the Bulgarian-Romanian border became the first Bulgarian border, where transmission capacity is allocated in intraday timeframe in implicit way within the single European market.

#### • LIP 14 local project

The market coupling implementation of the Bulgarian-Greek border in the intraday timeframe through LIP 14 local project in which ESO EAD and IBEX EAD were involved, was initially planned to be completed with the third integration wave during the first trimester of 2021. Due to the lack of resources by the Greek NEMO and TSO (HEnEx and IPTO), as well as of the Austrian TSO (APG), the start was postponed for May 2021. As a next step, due to internal delays in certain processes in Italy, the start of the project was again postponed, and the probable new start would be in September 2021. Despite the several delays of the start of the project, in the course of activity, HEnEx announced that it would not be possible to keep with the set deadline due to a delay in the implementation of the necessary functionalities in the local trade system. As a result of that delay announced by the Greek market operator, the Greek-Italian and the Greek-Bulgarian borders were excluded from the envisaged start. Discussions are being held, as the launch of these borders is expected to be done during the fourth trimester of 2021 or possibly through the fourth wave of market integration (envisaged for the fourth trimester of 2021).

#### 3.1.7. Implementation of network codes and guidelines

One of the latest changes in the EMR has introduced the requirements of Regulation (EU) 2019/943 and Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing guidelines for electricity balancing (Regulation (EU) 2017/2195). The objectives of Regulation (EU) 2017/2195 are the integration of balancing markets by enhancing transparency and competition, as well as the introduction of an effective balancing services exchange using EU-wide balancing

platforms. The Regulation provides for the introduction of standard products for balancing capacity and energy, harmonization of cross-zonal transmission capacity allocation procedures, settlement rules applicable to the exchange of balancing energy of replacement reserves, frequency restoration reserves with automatic and manual activation, and imbalance netting process governance. The framework guidelines for the establishment of common platforms for balancing capacity and energy exchange have been approved by ACER. The European platform for the exchange of balancing energy from replacement reserves under Art.19 of Regulation (EU) 2017/2195 (TERRE project) has been operational since January 2020. The European platforms under Art.20 and Art.21 of Regulation (EU) 2017/2195 (MARI and PICASSO projects) for frequency restoration reserves with automatic and manual activation, are under development. All Continental European TSOs are due to join the European platform for imbalance netting process under Art.22 of Regulation (EU) 2017/2195 (IGCC project). The basis for international network management cooperation was laid down in 2010 by the four German TSOs in order to reduce the volume of counter activated balancing energy. ESO EAD actively participated in the mentioned projects, assessed the conditions for joining each of them, signed the agreements for joining the IGCC project, and is currently in the process of signing the agreements for the MARI and PICASSO projects.

EWRC is in the process of amending the Electricity Power System Management Rules (EPSMR) and introducing the requirements of the regulations enlisted below:

- Commission Regulation (EU) 2016/631 of 14 April 2016 establishing a network code on requirements for network connection of generators;
- Commission Regulation (EU) 2016/1388 of 17 August 2016 establishing a network code on demand connection;
- Commission Regulation (EU) 2016/1447 of 26 August 2016 establishing a network code on requirements for network connection of high voltage direct current systems and direct current-connected power park modules;
- Commission Regulation (EU) 2017/2196 of 24 November 2017 establishing a network code on electricity emergency and restoration;
- Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation.

#### 3.2. Competition and market functioning

#### 3.2.1 Wholesale markets

Data on electricity generated in the period 2019 - 2020 is summarized by years in the table below:

Electricity generated by energy	Installed o	•	Electricity §	Change in %	
sources	2019	2020	2019	2020	8
1. NPP	1 893	1 893	15 712 446	15 787 268	0.48%
2. TPP lignite coal	3 522	3 585	15 672 009	12 235 473	-21.93%
3. TPP black and brown coal	289	158	193 778	196 545	1.43%
4. TPP natural gas	1 035	1 126	1 477 734	1 568 609	6.15%
5. HPP, incl.	2 867	2 867	2 690 501	2 731 574	1.53%
5.1. PSHPP generation	1 386	1 386	694 453	820 664	18.17%
5.2. PSHPP pumps *	932	932	659 688	730 017	10.66%
6. RES, incl.:	658	683	1 148 150	1 275 634	11.10%
6.1. WPP	358	358	682 436	769 638	12.78%

6.2. PvPP	275	300	382 960	414 428	8.22%
6.3. Biomass PP	25	25	82 754	91 568	10.65%
Общо: 1+2+3+4+5+6	10 264	10 313	36 894 618	33 795 104	-8.40%

<sup>\*</sup> the PSHPP pumps activity is electricity consumption and the electricity volumes under 5.2. are not included in the sum in item 5

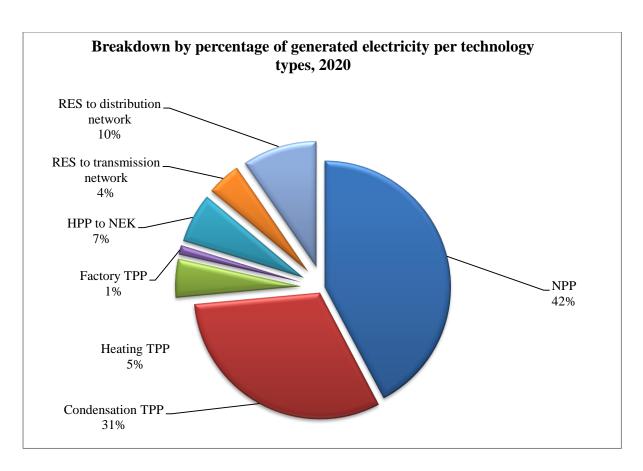
The data used for the installed capacities connected to the transmission network and the generated net electricity in 2019 and 2020 are provided by ESO EAD. The total amount of electricity generated by those capacities is 33 795 104 MWh.

When analysing the differences between the generated electricity quantities of the plants connected to the electricity network for 2020, in comparison to 2019, the following trends can be observed: decrease in the generation by TPP lignite coal (-21.93%), respectively an increase in the generation by NPP (0.48%), TPP black and brown coal (1.43%), TPP gas (6.15%), HPP (1.53%) and RES (11.10%).

Table 2. Installed capacities connected to the electricity gird and the generated electricity for 2020.

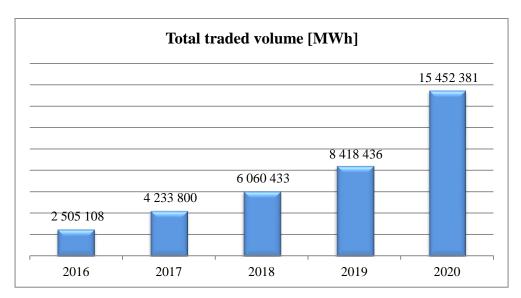
	CEZ Bulgaria Elektrorazpredelenie Yug EAD  Installed Generated Installed Generated capacities electricity capacities electricity		Elektrorazpredo	elenie Yug EAD	Electrodistribution North		
			C 02202000	Installed capacities	Generated electricity		
Coal	26.84	31 073	-	-	0.00	108 060.07	
Natural gas	20.64	165 527	17.25	56 100.07	20.79	22 714.19	
HPP	224.43	444 597	95.11	174 510.24	14.78	626 387.70	
WPP	18.57	23 374	48.20	58 695.59	293.35	154 975.05	
PvPP	160.58	202 045	538.04	705 245.50	123.84	48 784.55	
Other	27.46	60 804	28.62	120 593.25	216.54	960 921.55	
Total	431.04	730 820	709.97	1 059 044.59	648.51	1 791 068.85	

The total amount of generated electricity in Bulgaria in 2020, distributed depending on the primary energy source and the technology used for generation, is systemised in the next figure. The biggest share in the electricity generation belongs to NPP (42%) and condensation TPP (31%), followed by RES connected to the distribution network (10%).

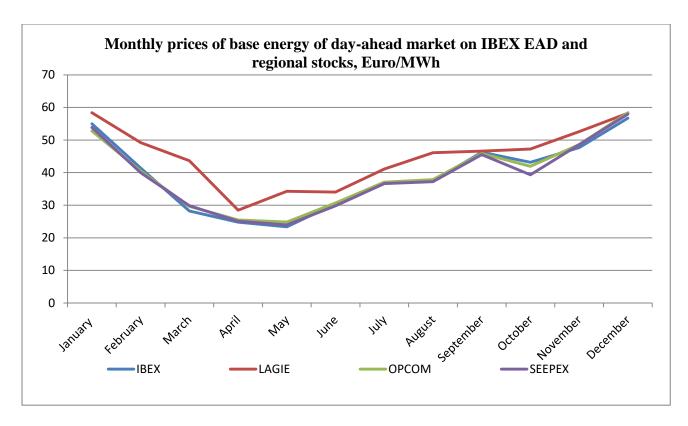


#### **Day-ahead Market**

In 2020, day-ahead market base energy traded volumes (Figure 2) increased by 7 033 945 MWh or by 45.5% compared to 2019. This was the biggest volume increase in absolute value as for the previous years the increase was by 2 358 003 MWh in 2018, compared to 2017, and by 1 826 633 MWh in 2018, compared to 2017.



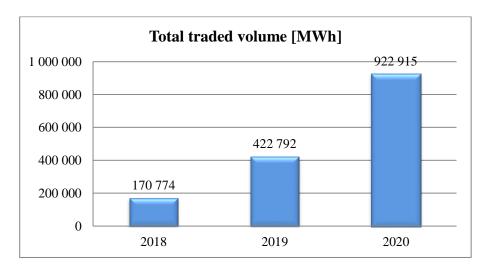
A comparative analysis of prices and traded volumes of day-ahead market of IBEX EAD and the regional exchanges is presented in the next figure.



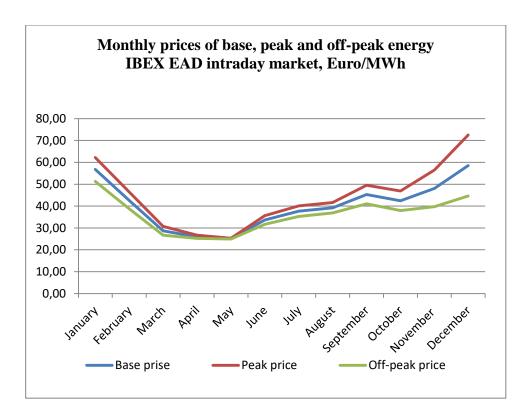
The comparative analysis includes the average monthly prices for baseload Euro/MWh of 2020 day-ahead market traded volumes on the following regional power exchanges: IBEX (Bulgaria), LAGIE (Greece), OPCOM (Romania) µ SEEPEX (Serbia).

#### **Intraday Market**

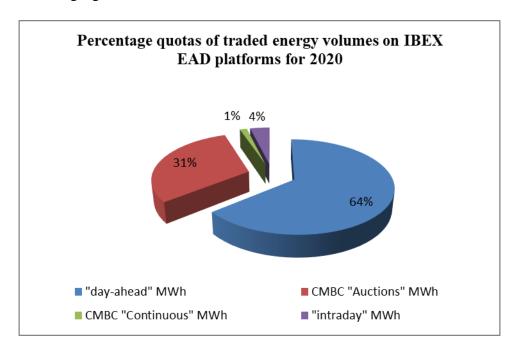
In 2020, the day-ahead market total traded volume was 922 915 MWh in comparison to 422 792 MWh in 2019, or an increase by 54.19%, as in 2019 compared to 2018, when the volume was 170 774 MWh and the increase was by 59.61%.



The graph below shows the average monthly prices of base, peak and off-peak energy traded on the intraday market of IBEX EAD.



The total amount of electricity traded on the IBEX EAD platforms in 2020 was 24 087 GWh, as on the day-ahead market there were 15 452 MWh, on the intraday market - 923 GWh, Centralized Market for Bilateral Contracts (CMBC) "Auctions" there were 7 377 GWh and for Centralized Market for Bilateral Contracts (CMBC) "Continuous" - 335 GWh. The percentage of the quantities is shown on the following figure:



#### 3.2.2 Retail market

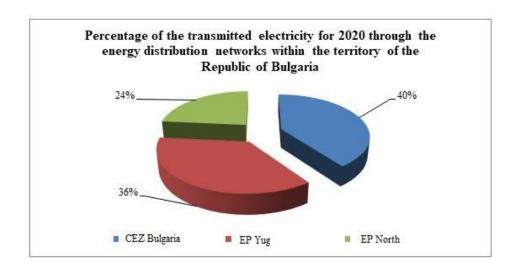
The market consists of three groups of suppliers from supply point of view:

- Free market supplier - a trader/producer/exchange that supplies electricity to household and non-household customers at prices based on demand and supply;

- Supplier of last resort (SLR) a supplier that guarantees the universal service provision as a last resort in accordance with a license obtained from EWRC. It has the obligation to supply electricity to customers connected to the distribution network that have not chosen an electricity trader or when the electricity trader they had chosen failed to provide the supply due to non-customer reasons. The SLR final selling prices are determined under EWRC methodology on electricity prices of a supplier of last resort;
- End supplier (ES) of electricity supplies low voltage electricity to sites of household and non-household end consumers connected to the electricity distribution network at regulated prices determined by EWRC;

Three vertically integrated energy companies, actively operate in the energy retail market: economic groups with brands - CEZ Bulgaria EAD, EVN Bulgaria EAD and ENERGO-PRO Group.

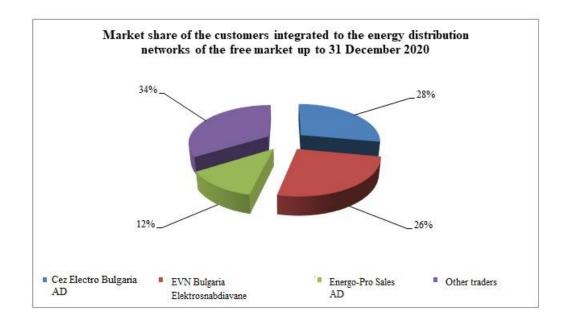
Energy distribution companies' market shares, as electricity quantities, distributed through their own networks, are calculated on the basis of reported by them data for 2020. The largest share of electricity transmission is traditionally for CEZ Bulgaria EAD with 40% or 9 396 067 MWh, second one is Elektrorazpredelenie Yug EAD with 36% or 8 545 693 MWh and third is Electrodistribution North AD with 24% or 5 515 228 MWh. The graphic distribution is shown on the figure below:



With the last amendments in the Energy Act, promulgated in 57/SG of 26 June 2020, as of 1 October 2020, all non-household customers, including sites connected to the energy distribution network at low-voltage level, shall buy electricity for their needs at freely negotiated prices.

For the completion of as smooth as possible transition to the liberalised energy market and to minimize the risk of ceasing activity due to power supply failure, the Energy Act envisages the possibility for each non-household customer connected at low-voltage, that has not chosen a supplier till 30 September 2020, to be supplied by its current end-supplier, but in its capacity as a trader. In this case, the supply shall be executed through a draft contract approved by EWRC and with a term of validity as of 1 October 2020 until 30 June 2021 in accordance with the requirements of the Energy Act.

With regard to the abovementioned amendments that have been adopted in the Energy Act, the percentage quota of the customers connected to the energy distribution networks, who buy energy for their needs from end supplier in its capacity of a trader in the free market, was 66% of all customers and customers, who have chosen another trader in the free market. The rest 34% have chosen other trader in the free market. The market shares of the end suppliers are shown on the figure below:



#### Household customers Household consumer empowerment indicators

A wider range of indicators is reported in the following table; those give an indication about the household customer retail market.

Customer empowerment indicators (electricity – household customers)	2017	2018	Difference 2018/2017 %	2019	Difference 2019/2018 %	2020	Difference 2020/2019 %
Total number of electricity household customers	4 479 397	4 495 926	100.37%	4 513 355	100.39%	4 544 739	100.70%
Number of customers on the regulated market	4 476 283	4 493 660	100.39%	4 511 737	100.40%	4 541 659	100.66%
Number of customers on the free market	2 745	2 092	76.21%	1 514	72.37%	1 847	121.99%
Number of customers supplied by Supplier of last resort (SLR)	618	213	34.47%	114	53.52%	1233	1081.58%
Number of complaints filed by household customers	13 952	10 613	76.07%	11 271	106.20%		0.00%
Number of working days between the bill payment notification and the interruption in cases of actual non-payment	from 3 to 40	from 3 to 40		from 3 to 40	0.00%	from 3 to 40	

#### **Non-household customers**

The table below shows the total number of non-household customers connected to a low voltage network, as well as the number of customers, who switched their supplier with a supplier in the free market.

Retail market indicators (non-household customers)	2017	2018	Difference 2018/2017%	2019	Difference 2019/2018 %	2020	Difference 2020/2019 %
Number of customers	605 990	611 588	100.92%	624 910	102.18%	629 863	100.79%
Number of customers who switched their supplier	86 055	101 932	118.45%	79 290	77.79%	629 863	794.38%

#### 3.2.3 Consumer protection and dispute settlement

Disputes settlement terms and conditions are regulated by EA and by the Ordinance on licensing the activities in the energy sector. EWRC handles complaints of: networks and facilities users against transmission and distribution network operators, extraction companies, natural gas storage facilities operators and LNG operators, related to the way these entities perform their duties under EA; customers against electricity and natural gas suppliers, including end suppliers regarding their duties' performance under EA; as well as licensees against other licensees regarding their duties' performance under EA.

Within two months of filing a complaint, EWRC may assist an amicable dispute settlement. The term may be extended by another two months if the nature of the dispute requires collecting additional data and information by EWRC. The procedure is voluntary and confidential. Under the amicable disputes' settlement EWRC does not make a ruling/decision and the procedure ends with an agreement.

In case no amicable settlement has been achieved or the parties reject amicable settlement, EWRC shall decide on the complaint within two months after receiving it. That period may be extended with another two months if the character of the dispute requires gathering of additional data and information by EWRC. With the agreement of the appellant, the extended period may be extended with two more months. When EWRC finds a complaint being justified, it issues a decision with binding guidelines on the implementation of the law. EWRC decisions are subject to appeal before the Administrative Court - Sofia City under the Administrative Code within a 14-day period of their notification.

In 2020 the total number of electricity complaints filed in EWRC was 981; 851 of them were against licensed companies in the energy sector and under the provisions of art.22, para.1 of EA, administrative proceedings have been started.

The analysis of the administrative proceedings showed that greatest number of complaints was against CEZ Distribution Bulgaria AD and CEZ Electro Bulgaria AD. On second place remained the complaints against Elektrorazpredelenie Yug EAD and EVN Bulgaria Elektrosnabdiavane EAD, followed by Electrodistribution North AD and ENERGO-PRO Sales AD. The complaints against enterprises licensed for electricity trade activities mainly concern changes in the contractual relations between the parties. In 2020, one complaint was filed against Elektrorazpredelenie Zlatni Piasatsi AD and ESP Zlatni Piasatsi OOD. No complaints against NEK EAD and ESO EAD have been registered.

In 2020, 393 complaints from household customers against licensed enterprises of the electricity sector were received in EWRC.

Chapter Three: Regulation of the activities in the Energy Sector, Section VI: Measures for Protection of Energy Service Clients of the Energy Act regulates the protection measures for power consumers that involve also:

- regulated mandatory content of the contracts signed with energy services customers;
- information provided by the energy enterprises that are contracting parties in the contracts with energy customers;
- energy enterprises draft and present for approval to EWRC rules on their work with consumers of energy services;
- energy enterprises, supplying energy, shall establish informational centres for consumers of energy services, as well as information on the work with them;
- energy enterprises, providing services of public interest shall determine special procedures for providing vulnerable consumers with information, related to consumption and supply termination to vulnerable consumers in the general conditions of supply and use of networks and in the rules on work with consumers of energy services;
- end suppliers shall inform customers, together with the last month invoice of every semester, when the electricity or natural gas metered consumption of the end customers in the said semester was higher by more than 50% of the metered consumption in the respective semester of the preceding calendar year;
- the customer may request from the electricity distribution network operator to carry out metrological expert check of commercial measuring device;

- where by initiative of the end supplier the electricity or natural gas supply to the customer is to be terminated, the end supplier shall be obliged to notify the customer thereof by a method chosen by the latter, not later than three days before the date of supplies termination. If the customer has not stated a specific method of notification, notification would be done by a method at end supplier's option.

In fulfilment of its powers, EWRC monitors the implementation of the regulated legal measures on energy services consumers' protection.

As per art.59, para 1(t) of the Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU, the regulatory authority shall have the duty to ensure non-discriminatory access to customer consumption data, the provision, for optional use, of an easily understandable harmonised format at national level for consumption data, and prompt access for all customers to such data pursuant to Articles 23 and 24 of the Directive.

As per art.38b, para.1, items 3 and 8 of EA, energy enterprises, contracting parties, shall provide for their consumers of energy services information on: actual quantities consumed and provided service value in accordance with the agreed metering frequency at no additional cost of that service; the conditions for providing electronic billing information and electronic bills.

In accordance with art.38b, para.2 of EA, the energy supplier shall provide to its customers a wide selection of payment methods, including advance payment systems, which shall be fair and adequately representing the potential consumption.

Art.38b, para.3 of EA stipulates that the energy supplier shall provide to another energy supplier information of a household customer's consumption, if so provided in an explicit agreement between the customer and the energy supplier.

These provisions guarantee customers' access to data on energy consumption and their provision and use in an easily understandable format.

#### 4. NATURAL GAS MARKET

#### 4.1. Network regulation

In exercising its regulatory powers, EWRC is guided by the following basic principles: development of competitive and well-functioning regional markets within the European Union; preventing the restriction or distortion of competition on the energy market; creating incentives for competitive energy market development, where the conditions so permit; creating incentives for effective development of secure, reliable and efficient networks in accordance with the customers interests. EWRC monitors gas networks development for the benefit of all participants, which will ensure sufficient and available capacity for all, monitors the prevention and distortion of market competition and its effective functioning, monitors the degree and efficiency of natural gas market opening. EWRC monitors the security of supply, ensuring a balance between natural gas supply and demand on the national market, the level of expected future consumption and the estimated additional capacity under planning or construction, and the quality and level of networks maintenance and overcoming the shortage of suppliers or traders.

The transmission system operator shall provide cross-border capacity with a view to integrate European gas transmission infrastructure and ensure security of supply requirements.

Indicators	2017	2018	2019	2020
Maximum gas daily consumption (TWh/day).	0.177	0.146	0.166	0.299
Pipeline entry capacity in TWh/y	310.98	319.01	333.245	549.793
Pipeline exit capacity (exports) in TWh/y	232.87	242.725	229.585	382.056
Underground gas storage – working gas volume in mln. m <sup>3</sup> (n)	550	550	550	550
Underground gas storage – maximum withdrawal capacity (TWh/day)	0.046	0.046	0.046	0.046
Number of TSOs	1	1	1	1
Extension of TSO network (km)	0	23	11	478.6
Number of DSOs	24	24	24	24
Extension of DSO network (km)	153	153	187	154

#### 4.1.1. Network and LNG tariffs for connection and access

The prices for network connection, access and transmission of natural gas through transmission and/or distribution networks shall be subject to regulation by EWRC, except in the cases when the Regulator at its discretion approves a methodology determining the price for access and transmission through the transmission network. EWRC regulates and determines the terms and conditions of price formation for connection to gas distribution and transmission networks.

Tariff regulation is carried out in compliance with EA, ONGRP and the Methodology for determining prices for access and transmission of natural gas through the gas transmission networks, owned by Bulgartransgaz EAD.

Tariffs for connecting customers to the gas distribution networks (household and non-household) are formed by customers groups according to the requested maximum capacity and pressure and the relevant recognized costs of the group. The costs for additional connection equipment at the customer's request shall be at its own expense.

Transmission network connection tariffs of extraction pipeline production networks, natural gas storage facilities, liquefied natural gas facilities, renewable gas production units, distribution networks and non-household customers are individual and include the actual construction costs of connection facilities of the undertaking concerned. Tariffs are formed on the basis of incurred costs for all connection activities, the gas pipelines and facilities value in accordance with the regulatory and technological requirements, ensuring a direct connection from the technologically approved connection point of the respective network to the customer/customer group connection point.

The provision of access and use of gas facilities owned by non-household customers to a gas distribution network operator on the respective licensed territory, according to EA, shall be carried out after signing a contract and at a price determined by the Regulator on the grounds of the Methodology determining prices for access provided to a transmission or distribution company by consumers through their own systems and/or facilities to other consumers for the purposes of conversion and transmission of electricity, heat transmission and natural gas transmission, adopted pursuant to Art.117, paragraph 8, Art. 138, paragraph 3 and Art.197, paragraph 9 of the Energy Act. According to item 8 of this methodology, for calculating the access price, EWRC shall annually determine service coefficients for the activity by sectors – electricity transmission and distribution,

heat transmission and natural gas distribution. By Decision under Protocol № 266 of 10.12.2020, item 1, EWRC determined the coefficients for servicing the activity by sectors to be applied in 2021.

Bulgartransgaz EAD operates the gas transmission system, uniting the national gas transmission network for natural gas transmission on the territory of the Republic of Bulgaria and a gas transmission network for transit transportation. According to Art.21 of the *Methodology determining prices for access and transmission of natural gas through the gas transmission networks owned by Bulgartransgaz EAD*, the tariff structure of the prices for access and transmission of natural gas through the national gas transmission system shall be determined by the operator. EWRC approves revenue requirements of Bulgartransgaz EAD regarding the applied "entry-exit" tariff model when setting prices of natural gas access and transmission through the gas transmission system. The tariff setting method used is "revenue cap" regulation. By Decision № БП-16 of 2.10.2020 EWRC approved a business plan for the activity natural gas transmission through the gas transmission networks owned by Bulgartransgaz EAD, for the period 2020-2024, and by Decision № HГП-1 of 2.10.2020 EWRC approved the revenue requirements of Bulgartransgaz EAD for the regulatory period of 5 years - from 1 October 2020 to 30 September 2025. By Decision № K-1 of 10.09.2020 EWRC approved to Bulgartransgaz EAD multipliers, seasonal factors and discounts for the period 1 October 2020 – 30 September 2021.

In compliance with the *Methodology determining prices for access and transmission of natural gas through the gas transmission networks owned by Bulgartransgaz EAD*, the gas TSO has set prices for access and transmission through the gas transmission networks owned by Bulgartransgaz EAD for the gas year 1.10.2019 - 30.09.2020, as well as for the gas year 1.10.2020 - 30.09.2021.

Bulgartransgaz EAD is the operator of the only underground gas storage Chiren (Chiren UGS) with the main purpose of covering seasonal irregularities in consumption and ensuring security of natural gas supply. In accordance with Art.172b, paragraph 1 of the Energy Act and the *Rules on access to gas transmission and/or gas distribution networks and natural gas storage facilities*, adopted by EWRC, the gas storage facility operator publishes Rules on access to Chiren underground gas storage, which regulate the terms and conditions for granting access to the gas storage. The rules are based on the following principles: equality of gas storage users; transparency and non-discrimination in providing access to the gas storage facility. The application of the Rules on access to Chiren underground gas storage ensures the fulfilment of the requirement not to impede the users access of the to the gas storage.

EWRC regulates the prices of natural gas access and storage in storage facilities in compliance with EA, the *Ordinance on natural gas prices regulation* (ONGPR) and the Guidelines on pricing natural gas access and storage in storage facilities, applying "rate of return on capital" regulation adopted by EWRC. Natural gas access and storage prices, which the gas storage facilities operators, respectively a combined operator, charge their customers for one and the same service under equivalent terms and conditions, ensure compliance with the principle of non-discrimination to all network users. At the same time, the national market special characteristics are taken into account. By Decision № БП-14 of 13.08.2020 EWRC approved to Bulgartransgaz EAD a business plan for the activity "storage of natural gas in a storage facility" for the period 2020 - 2024. By Decision № Ц-34 of 13.08.2020 EWRC approved to Bulgartransgaz EAD prices for natural gas access and storage in a storage facility as of 15.04.2021.

According to Art.14 of ONGPR energy companies may propose for approval by the Regulator different tariff structures by customer groups, reflecting the allocated annual revenue requirements needed for the service provision for each group based on submitted service value study, depending on similar consumption characteristics and/or other characteristics.

According to Art.21 of the Methodology determining prices for access and transmission of natural gas through the gas transmission networks owned by Bulgartransgaz EAD, the tariff structure of the prices for access and natural gas transmission through the national gas transmission network and through the gas transmission network for transit transmission or through the transmission system shall be determined by the operator.

According to Art.21, paragraph 1, item 13 of the Energy Act, EWRC shall determine the rules for access to the gas transmission network, the gas distribution network and the natural gas storage facilities, including quality standards of services and supplies, and shall review them if needed in order to ensure effective access. Pursuant to that EWRC has adopted Rules on granting access to the gas transmission and/or gas distribution networks and on access to natural gas storage facilities. The rules aim to ensure that transmission and distribution system operators offer services to all network users on a non-discriminatory basis. These rules shall also ensure that the natural gas storage facilities operator provides access on equal terms to entities meeting the conditions set out therein. According to the rules, access to gas transmission and/or gas distribution networks may also be granted to entities residing in an EU member state or entities registered in countries with which the Republic of Bulgaria has signed international treaties for mutual application of the respective EU laws, provided there are system interconnections in place, and in compliance with the provisions of Article 176a of EA. According to Art.32 of the rules, EWRC shall supervise the implementation of these rules under the terms and conditions of EA. According to Art.76, paragraph 4 of EA, EWRC shall exercise current control over the conformity of the licensed activity with the license conditions, including the obligations to provide access to the networks, to the storage facilities and services for temporary gas storage, as well as the correct implementation of the access conditions. In fulfilment of its control powers under EA, EWRC shall conduct through the persons authorized thereby inspections - scheduled according to an approved schedule and extraordinary on complaints and alerts. Based on the inspection results, the officials may give obligatory instructions to the inspected persons, draw up acts for establishing administrative violations and propose the imposition of coercive administrative measures. EWRC may also notify the specialized control bodies with a view to taking measures within their competence; suspend, amend or withdraw the issued license.

#### 4.1.2. Balancing

Natural gas market balancing is performed on the basis of the approved by EWRC *Natural Gas Trading Rules*, *Natural Gas Market Balancing Rules* and a *Daily Imbalance and Neutrality Charge Calculation Methodology*.

Natural Gas Market Balancing Rules set a balancing regime in accordance with Commission Regulation (EU) № 312/2014 of 26 March 2014 establishing a Network Code on Gas Balancing of Transmission Networks (Regulation (EU) № 312/2014). Conditions have been created for the transmission system operator and all market participants to conclude transactions for short-term standardized products through a natural gas trading platform. The possibility to offer natural gas for purchase and sale through market mechanisms was enabled, so that network users can balance their balance portfolios efficiently and that the transmission system operator can use flexible natural gas products in balancing the transmission network aiming to increase natural gas market liquidity and transparency in transactions with short-term products. The methodology ensures non-discriminatory imbalance charges formation for transmission system users, creating conditions for efficient management of their balance portfolios, as well as for their responsible balancing of incoming and outgoing quantities of natural gas. Full compliance with Regulation (EU) № 312/2014 has also been achieved, in particular with the imbalance charge and the neutrality charge requirements and the credit risk management mechanisms. Clear conditions for imbalance and neutrality charges calculation have been created, both for transmission system operator and for all market participants. Network users are able to balance their balance portfolios efficiently, thus creating preconditions for disciplining gas transmission network users. Implementation of the methodology aims to increase short-term gas market liquidity on the territory of the country through Transparent and non-discriminatory rules as well as transparent imbalance charges, reflecting the actual balancing costs shall increase the short-term gas market liquidity in the country.

#### 4.1.3. Cross-border issues

EWRC monitors the level and effectiveness of market liberalization and competition, monitoring the connection with the energy markets of other countries, and in exercise of its regulatory powers is guided by the following basic principles: development of competitive and well-functioning regional markets within the European Union; preventing the restriction or distortion of competition on the energy market; creating incentives for the development of a competitive market for energy activities, where the conditions so permit; creating incentives for effective development of secure, reliable and efficient networks in accordance with the customers interests. EWRC monitors the implementation of gas network operators investment plans to ensure benefit of all participants, sufficient and available capacity for all, monitors to prevent the restriction or distortion of market competition and its effective functioning.

By Decision № BT-1 of 13.02.2020 pursuant to Art. 18 (1) and (3) of Regulation (EC) № 715/2009, EWRC approved an updated list of important points of the transmission system of Bulgartransgaz EAD, for which information on the technical, contractual and available capacity is publicly disclosed in accordance with Regulation (EC) № 715/2009.

By Decision № K-1 of 27.02.2020 EWRC adopted a Joint Decision of the Energy and Water Regulatory Commission and the Regulatory Authority for Energy of Greece (RAE) on the approval of IGB Network Code and its annexes, incl. IGB Tariff Code.

By Decision № P-BO-1 of 20.03.2020 EWRC adopted a Joint Decision of the Energy and Water Regulatory Commission and the Energy Regulatory Authority of Greece on the amendment of the Final Joint Decision of EWRC and RAE on Exemption Application of ICGB AD, an integral part of EWRC Decision № P-BO-2 of 8.08.2018, in its part concerning the commercial operation date (COD), which is changed to December 31, 2020 (target COD) and not later than 1 July 2021. This amendment is within the limits provided for in item 4.5.2. of the Final Joint Decision, within 5 years of the adoption of the EC decision (Decision (C (2018) 5058 final of 25.07.2018) on the commissioning of the infrastructure. Infrastructure construction is expected to have started within 2 years of the decision's date.

IGB Interconnector is a major infrastructure project, which implementation will change the energy map in the region and Europe. New traders will enter the Bulgarian gas market after the gas pipeline commissioning. When commercial operation starts, the remaining unreserved capacity will be offered, which will create additional potential and opportunities for more new market participants to enter the market. In this regard, the project importance is not only strategic in terms of source diversification and security of gas supply, but also key to a more open, dynamic and competitive gas market development in Bulgaria. Placed in a more competitive market environment, natural gas traders will offer better prices and conditions for customers in Bulgaria, which in turn will have a beneficial impact on natural gas competitiveness and on the country's economy.

EWRC is to issue a license to the project company ICGB AD and certify the company as an independent gas transmission operator in accordance with the Gas Directive and the terms of the Final Joint Opinion of Bulgarian and Greek NRAs on the Exemption Application.

By letter, the Energy Regulatory Authority of Greece (RAE) on the grounds of Art. 36 (3) of Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 on common rules for the internal market in natural gas and repealing Directive 2003/55/EC, as amended by Directive (EU) 2019/692 of the European Parliament and of the Council of 17 April 2019, has sent for consultation a copy of the revised application by GAZTRADE S.A. for exemption of the planned LNG terminal in Northern Greece (Alexandroupolis Floating LNG Storage and Regasification Unit), from the provisions of Articles 9, 32, 33 and Art. 41 paragraphs 6, 8 and 10 of Directive 2009/73/EC for a period of 25 years. In this regard, by Decision under Protocol № 162 of 21.07.2020, item 2, EWRC has adopted an opinion that it does not object to the application of GAZTRADE AD.

By letter, the Romanian Energy Regulatory Authority (ANRE) has requested an opinion from EWRC on the need to adopt a coordinated decision under Art. 12 (4) of Regulation (EU) № 347/2013 regarding the project of common interest (PCI) 6.20.4 "Depomures Underground Gas Storage, Romania", part of the cluster 6.20 – Increase storage capacity in South-East Europe. In this regard, by decision under Protocol № 162 of 21.07.2020, item 3, EWRC has accepted that there is no need to adopt a coordinated decision regarding the cross-border cost allocation for project 6.20.4 between EWRC and ANRE, as according to the cost-benefit analysis the project will provide up to 2% net positive benefits for Bulgaria.

By letter, ANRE has requested an opinion from EWRC on the need to adopt a coordinated decision under Art. 12 (4) of Regulation (EU) No 347/2013 regarding the project of common interest (PCI) 6.20.6 "Sarmasel Underground Gas Storage, Romania", part of the cluster 6.20 − Increase storage capacity in South-East Europe. In this regard, by decision under Protocol № 162 of 21.07.2020, item 4, EWRC has accepted that there is no need to adopt a coordinated decision regarding the cross-border cost allocation for project 6.20.6 between EWRC and ANRE, as according to the cost-benefit analysis the project will provide up to 9% net positive benefits for Bulgaria.

The projects are included in the fourth list of projects of common interest of the European Union, approved by Commission Delegated Regulation (EU) 2020/389 of 31 October 2019 amending Regulation (EU) 347/2013 as regards the Union list of projects of common interest. The implementation of the projects has a number of benefits for other countries, such as Bulgaria, Poland and Slovakia.

In connection with the project of common interest (PCI) 6.8.3 "Gas Interconnection Bulgaria-Serbia (IBS)" and pursuant to Art. 12 (3) of Regulation (EU) № 347/2013 Bulgartransgaz EAD has submitted an investment request to EWRC and RAE for cross-border cost allocation. In this regard, by Decision № II-1 of 26.05.2020, EWRC has adopted an Agreement between the EWRC and RAE on cross-border cost allocation for a project of common interest 6.8.3 "Gas Interconnection Bulgaria-Serbia (IBS)". By the same decision EWRC determined for Bulgartransgaz EAD crossborder distribution of the investment costs for a Project of common interest 6.8.3 "Gas Interconnection Bulgaria-Serbia (IBS)" on Bulgarian territory in the amount of 100%, and the project organizer should ensure 42% of the total eligible investment costs for construction, and the remaining 58% to be provided by applying for a grant under Regulation (EU) № 1316/2013 of the European Parliament and of the Council of 11 December 2013 establishing a Connecting Europe Facility (Regulation (EU) № 1316/2013). IBS is a project whose main goals are: providing an opportunity for diversification of natural gas supplies to the Republic of Bulgaria and the region, by providing new sources and routes for natural gas supply; increasing the security of supply for the Republic of Bulgaria and the region; gradual increase in natural gas consumption; promoting investor's interest in the border regions along the gas pipeline route; generating economic benefits, both for consumers and suppliers. The project will contribute to the achievement of the specific sector goals set in Art. 4(3) of Regulation (EU) 1316/2013. According to country-by-country costbenefit analysis, significant net benefits from the project implementation, exceeding 10% of the total project economic benefits, will be provided to Bulgaria (53.34%) and Greece (15.84%).

According to Art.21, paragraph.3, item 8 of EA, EWRC shall approve a ten-year network development plan of the transmission network, shall monitor and control its implementation under the provisions and in accordance with the Ordinance № 3 on licensing the activities in the energy sector. EWRC shall examine whether the ten-year network development plan covers all investment needs identified during the consultation process, whether it is consistent with the TYNDPs in the European Union and shall monitor and evaluate its implementation. If the ITO fails to execute an investment, which, under the TYNDP is to be executed in the following three years, EWRC shall require the operator to make the investments, in case they are still needed and to provide their reimbursement through the network services prices, unless the failure is due to compelling reasons beyond the network operator's control.

The TSO shall develop, consult with all stakeholders and submit to EWRC, by 30 April each year, a ten-year transmission network development plan. When drawing up the plan, the TSO shall take into account the available information on forthcoming changes in production, supply, consumption and exchange with other countries, with the investment plans of regional networks and networks within the European Union, as well as investment plans for natural gas storage facilities. EWRC shall consult all current or potential network users on the ten-year transmission network development plan in an open and transparent manner. In 2020, EWRC adopted Decision № ДПРМ-1 of 30.07.2020, approving the Ten-Year Plan for Development of the Networks of Bulgartransgaz EAD for the period 2020 - 2029.

A priority in the gas sector for the Republic of Bulgaria is diversification of gas supplies in order to reduce prices and promote competition in the market. Consumption in the country in 2020 was about 31 million MWh and was mainly satisfied by imports from Russia and to a negligible extent, from domestic production. Only since 2020 LNG supplies from Greece and insignificant quantities from Romania were included, and since 31.12.2020 - Azeri gas. The Bulgarian gas market is small and highly dependent on Russian gas supplies, which is why Bulgaria needs to integrate with the markets in the region and in the EU as a whole, in order to diversify gas supply sources, promote competition and reduce market prices.

IGB Interconnector, which has an initial capacity of up to 3 bcm/year and can be upgraded to 5.5 bcm/year is expected to have a major role in diversification of supply and new transit flows through Bulgaria. It is designed as a continuation in northern direction of the Azerbaijani gas main route in east-west direction - from the large offshore field Shah Deniz to EU. The project commissioning, in synergy with the Trans-Adriatic Pipeline (TAP), is of strategic importance. Through IGB our country will receive the agreed 1 bcm/year Azerbaijani gas from Phase 2 of Shah Deniz field. The European Union has given strong support to the Greece-Bulgaria interconnector, providing grants for just over a third of the pipeline value. Bulgaria is also committed to a EUR 110 million state guarantee from the European Investment Bank. The successful implementation of the LNG terminal project near the Greek city Alexandropoulos is of particular importance for the IGB project, as it will create more opportunities for gas transmission through the Greece-Bulgaria interconnector. The implementation of the LNG project is of great importance not only for the Hellenic Republic and the Republic of Bulgaria, but also for the region, as it contributes significantly to the diversification of energy sources and routes for Southeast Europe, increases energy security and competition and supports the creation of a regional gas hub. The project is also among the EU's priorities and has been included in the Union list of projects of common interest since 2013. The LNG terminal is strategically located at the crossroads of the Southern and Vertical Gas Corridors and offers access to LNG to the markets of Greece, Bulgaria, Serbia, Romania, Northern Macedonia to Moldova and Ukraine. The new terminal complements the IGB pipeline importance and is in line with other existing and planned strategic energy infrastructure projects such as TAP, the Bulgaria-Serbia interconnector and projects of increasing the capacity of natural gas storage facilities in Southeast Europe. The two energy projects - IGB and LNG terminal near Alexandropoulos - develop in full synergy, relying on the active support of Bulgaria and Greece.

The Giurgiu-Ruse interconnector, as well as the Podisor compressor station in Romania, which is part of the gas pipeline connecting Bulgaria, Romania, Hungary and Austria are also important for gas supplies diversification. This provides an opportunity for two-way natural gas transportation through the Giurgiu-Ruse interconnector with a capacity of 1.5 bcm/year.

Opportunities for gas supplies diversification in Bulgaria are also related to LNG supplies from Greece, which is becoming a factor in the world gas trade globalization. In 2020, Bulgargaz EAD purchased natural gas quantities for the domestic market from the main Russian supplier, an Azerbaijani company, a local gas production company and from four traders.

Bulgaria has a serious potential and a long tradition in natural gas transit. From the beginning of 2020, the natural gas supply from Russia is already carried out successfully through the new entry point – IP Strandja 2/Malkochlar, from Turkey. Through this entry point, both Northern Macedonia and Greece receive natural gas. Since 1 Jan 2020 no natural gas flows pass through the Trans-Balkan gas pipeline. The reverse flow, part of the Vertical Gas Corridor concept, is operational and, in case of market interest, natural gas can be transported in all directions.

The implementation of the natural gas release programme in the period 2020-2024, the successful functioning of an organized natural gas exchange market, as well as the commissioning of the IGB interconnector and the expansion of the gas transmission infrastructure from the Bulgarian-Turkish to the Bulgarian-Serbian border, will contribute to achieving the main priority in the gas sector - diversification of gas supplies in order to reduce prices and promote competition in the market.

#### 4.1.4. Implementation of the Network Codes and Guidelines

#### • Capacity Allocation Mechanisms NC (CAM NC)

Pursuant to Commission Regulation (EU) 2017/459, Bulgartransgaz EAD has introduced an electronic capacity booking platform - Regional Booking Platform (RBP). On the RBP platform network users shall book capacity at entry and exit gas transmission network points, using standard capacity allocation mechanisms as required by CAM NC. Registered network users have the right to book and use capacity products in the national gas transmission network. The procedures for allocating annual, quarterly, monthly, daily and intraday capacity products shall be carried out according to the timetables set out in the Capacity Auction Calendar published by ENTSO-G.

Bulgartransgaz EAD cooperates with the adjacent transmission network operators in order to coordinate the maintenance (network repairs) in accordance with Art.4 of Regulation (EU) 2017/459.

The TSO regularly exchanges information with the adjacent transmission network operators as per Art.7 of Regulation (EU) 2017/459 on the basis of the Interconnection Agreements concluded.

Firm capacity products, announced by Bulgartransgaz EAD, go through a bundling procedure under Art.19, §1 of Regulation (EU) 2017/459. If impossible to ensure the bundling at RBP of firm capacity products, as well as in case of differences between the technical and bundled capacities, these capacities are offered as unbundled capacity products (providing capacity at the respective interconnection point only in Bulgartransgaz EAD gas transmission network).

#### • Balancing NC (BAL NC)

In compliance with Regulation (EU) № 312/2014, the TSO Bulgartransgaz EAD has determined the trading platform of Balkan Gas Hub EAD for trade in natural gas as complying with regulation requirements and criteria. EWRC has approved the Balkan Gas Hub EAD Trading Platform and has designated the company as an operator of the trading platform. Trading on the platform shall be carried out on an anonymous basis, in accordance with the provisions of Regulation (EU) № 312/2014. Through the platform, trading participants may post and accept, as well as revise and withdraw, bids and offers for gas purchase and sale in order to meet short term fluctuations in gas demand or supply, under the applicable rules of the trading platform, on which the transmission system operator trades for balancing actions. The trading platform offers short-term standardized products intraday and day-ahead - title, locational, temporal and temporal locational. The platform complies with the requirements of Regulation (EU) № 312/2014 regarding the transaction notification content, the continuous trading regime for short-term standardized products, as well as the types of such products, the criteria to be met by the trading platform for providing trading participants with sufficient information to confirm the transaction after its conclusion, as well as to submit transaction notifications to the transmission system operator and to provide information on the change of the marginal purchase price and the marginal selling price after each transaction.

Marginal purchase and sale prices applicable for the purposes of determining the imbalance charge by the transmission system operator shall be calculated in accordance with the terms and conditions of the Daily Imbalance and Neutrality Charge Calculation Methodology, and shall be published by the transmission system operator. As of 1 October 2018, the small adjustment to the natural gas balancing price has been reduced from 10% to 8%.

For the purposes of balancing the natural gas market, the TSO introduced a Commercial Dispatching Platform (CDP), which assumes the functions of a virtual trading point (VTP). It has been operational since 1 January 2017. Network users and traders have access to CDP with individual credentials where they can submit their bids, transaction notifications and receive data on their imbalances every hour, as well as daily and monthly reports. Since 1October 2017, trade notifications have been submitted directly to the CDP. A re-nomination procedure cycle has been introduced in accordance with Regulation (EU) № 312/2014 at both interconnection points, as well as at all entry and exit points in the country.

The Bulgarian TSO provides network users with information under Art.32 of Regulation (EU) № 312/2014 on the general state of the transmission network in accordance with point 3.4 (5) of Annex I to Regulation (EC) № 715/2009 on its website. Information with real data and forecast of the linepack until the end of the gas day shall also be provided and this information shall be updated every hour. The gas transmission operator shall provide information on balancing actions, incl. information on the gas purchased and the corresponding costs. Bulgartransgaz EAD has chosen Regulation (EU) № 312/2014 "Option 1" of information provision scheme where the information on daily and non-daily measured outflow is based on the distribution of measured flows during the gas day, and this information is provided to users individually through the CDP platform.

Bulgartransgaz EAD procures balancing services carried out on a market basis, through a transparent and non-discriminatory public tender procedure according to the Natural Gas Market Balancing Rules approved by EWRC, concluding gas supply contracts at the gas transmission system entry point with a maximum duration one year. The contracts shall be concluded after a transparent, non-discriminatory and market-based procedure and in accordance with the maximum amount of possible natural gas imbalances in the gas transmission network. Purchased gas pursuant to Art.8 (b) (a) of Regulation (EU) № 312/2014 shall be stored in the own gas storage facility −

Chiren UGS and shall be used (extracted and injected) where necessary, depending on the cumulative imbalances of network users.

#### • Interoperability and Data Exchange NC

In compliance with Commission Regulation (EU) № 703/2015 of 30 April 2015 establishing a network code on interoperability and data exchange rules, Bulgartransgaz EAD has signed Interconnection agreements (IA) with the Romanian gas TSO TRANSGAZ SA and Greek gas TSO DESFA SA for the interconnection points Negru Voda 1/Kardam IP, Negru Voda 2,3/Kardam IP, Ruse/Giurgiu IP and Kulata/Sidirokastron IP. Essential parts of IA are common nomination and renomination procedures for booking capacity products, as well as a default nomination rule establishment.

#### • Tariff (TAR NC)

Regulation (EU) 2017/460 provides for the obligation to carry out consultations on the proposed reference price methodology. Pursuant to Article 6 (1) of Regulation (EU) 2017/460, the reference price methodology shall be set or approved by NRA as referred to in Article 27 of Regulation (EU) 2017/460. The reference price methodology to be applied shall depend on the findings of the periodic consultations carried out in accordance with Article 26 by TSO or NRA, as decided by NRA.

In connection with the above, by Decision № PTПГ-1 of 01.12.2017, pursuant to Article 6 (1), Article 26 (1) and Article 30 of Regulation (EU) 2017/460, EWRC has designated Bulgartransgaz EAD, in its capacity as a gas transmission system operator, to conduct consultations under Article 26 of Regulation (EU) 2017/460, as well as to publish before the tariff period beginning the information under Art. 30 and the conditions set in the Regulation. Pursuant to Regulation (EU) 2017/460 and EWRC decision, Bulgartransgaz EAD held a consultation on the proposed methodology for reference price, as well as the related data, justifications and elements according to Art. 26 of Regulation (EU) 2017/460.

In this regard, the Agency for the Cooperation of Energy Regulators (ACER) has prepared a report of 16 December 2020, containing an analysis of the consultation paper on gas transmission tariff structure for Bulgaria, addressed to EWRC and Bulgartransgaz EAD. In view of the report conclusions and recommendations, there was a need for amendments to Reference Price Methodology after a new consultation on the whole required information under Art. 26 of Regulation (EU) 2017/460. Only after conducting that new consultation, EWRC could adopt a decision under Art. 27 of Regulation (EU) 2017/460 on the basis of an updated ACER analysis. Bulgartransgaz EAD has been informed of the need for a new consultation and in this regard the company has provided an analysis of the data in the consultation carried out in connection with ACER report, which provides additional justifications and arguments on its conclusions. In view of the above, EWRC has requested from Bulgartransgaz EAD within one month to submit an updated and supplemented consultation document under Art. 26 of Regulation (EU) 2017/460 in accordance with ACER recommendations, an updated and supplemented simplified tariff model, as well as a proposal for the reference price setting rules according to Regulation (EU) 2017/460, which should be separated in a different section of the Methodology determining prices for access and transmission of natural gas through the gas transmission networks owned by Bulgartransgaz EAD (the Methodology). Bulgartransgaz EAD has submitted draft amendment to the Methodology, but has not provided the other requested data and documents, given the company's position that there is no reason for conducting a second two-month consultation under Art. 26 of Regulation (EU) 2017/460. In this regard, EWRC has requested from Bulgartransgaz EAD to take action to supplement the consultation document with all the necessary systematic information under Art. 26 of Regulation (EU) 2017/460, as well as with data, detailed justifications and arguments in accordance with ACER conclusions and recommendations, with a view to conducting a new consultation by EWRC under Art. 26 and adoption of a decision by EWRC under Art.27 of this Regulation.

## 4.2. Competition and market operation

In 2020, key natural gas market participants in the Republic of Bulgaria were:

- Bulgartransgaz EAD combined operator, performing gas transmission and gas storage in storage activities;
- Bulgargaz EAD public provider in Bulgaria, providing gas supplies to end suppliers and to persons who have been issued a license for heat production and transmission at prices regulated by EWRC;
- Gas traders concluding gas supply transactions with the public provider, end suppliers, customers, other gas traders, production companies, gas storage undertakings and with gas transmission and distribution network operators. Since 1 October 2021, the trade in natural gas will be carried out on the basis of a license issued under Art. 39, paragraph 1, item 5 of the Energy Act;
- Gas distribution companies performing activities "natural gas distribution" and "natural gas supply by end suppliers suppling natural gas to customers connected to the distribution networks in the respective licensed territories";
  - Non-household customers connected to the gas transmission network;
- Market Makers entities, having concluded an agreement with the natural gas exchange market operator for natural gas demand and supply with the purpose to provide liquidity on the natural gas exchange market and forming price signals;
- Liquidity Providers entities that have concluded an agreement with the natural gas exchange market operator for demand and supply of natural gas with the purpose to provide liquidity on the natural gas exchange market.

According to the Energy Act, the transmission network operator shall perform expansion and reconstruction of the gas transmission network related to the connection of gas distribution network sites, extractive enterprises, natural gas storage facilities, liquefied natural gas facilities and sites for production of gas from renewable sources, as well as sites of non-household natural gas customers.

The total length of Bulgartransgaz EAD gas transmission networks as of the end of 2020 was 3276 km, including network built in 2020 with a length of 476 km. In 2020 a compressor station Rasovo was built.

Gas transmission network user structure of users that carried out transmission in 2020, was the following:

- public provider;
- three end suppliers;
- six non-household customers;
- thirty natural gas traders.

In 2020 Bulgartransgaz EAD transported 36 092 096 MWh natural gas from imports and local production intended for export.

In 2020 Bulgartransgaz EAD transported 31 337 081 MWh natural gas from imports and local production intended for the domestic market.

According to Bulgartransgaz EAD, 515 402 MWh were purchased from users in 2020, respectively 267 083 MWh natural gas was sold for balancing the gas transmission system.

Currently there is only one underground gas storage facility in Bulgaria – Chiren UGS, which has 22 exploitation wells, a compressor station with a total installed capacity of 10 MW and other technological facilities needed to ensure the injection, production and quality of stored natural gas. The technological process related to the operation of "natural gas storage" service is seasonal (cyclical) and consists of extraction and injection of gas from/into the underground gas storage. By storing natural gas quantities at Chiren UGS, seasonal fluctuations in supply and consumption in the country are compensated. To ensure the security of natural gas supplies in the country, Chiren UGS natural gas quantities are mainly relied upon. Another important role of the gas storage is the provision of gas for balancing, as well as to maintain gas transmission system stability. In 2020, Bulgartransgaz EAD injected 362 million m³ of natural gas and withdrew 413 million m³, and as of 31.12.2020 there have been 1113 million m³ of natural gas in the gas storage, of which 750 million m³ buffer gas. Chiren UGS expansion is an important prerequisite for the implementation of the concept for the establishment of a gas distribution center in Bulgaria.

## 4.2.1. Wholesale markets

In 2019 and 2020, amendments were made to the Energy Act in order to promote market competition, liberalization processes in the sector and reduction of natural gas prices. Natural gas transactions are now carried out on an organized natural gas exchange market. Natural gas transactions, in addition to supply, transmission through gas transmission and distribution networks and storage, are also transactions in transfer of natural gas ownership in view of balancing and trading at a physical point or virtual trading point of the gas transmission networks. A market maker and liquidity providers have been added to the natural gas transactions parties. The organized natural gas exchange operator provides a natural gas trading platform and may be a party to natural gas transactions. Extracting companies, natural gas traders, end suppliers, transmission networks' operators, natural gas storage facility operators, LNG facilities' operators, customers connected to the gas transmission network, market-makers and liquidity providers shall conclude natural gas transactions at freely negotiated prices. The public provider shall conclude transactions at freely negotiated prices in its capacity as a liquidity provider, a trader and a market maker. Transactions at freely negotiated prices with short-term standardized products and with products with a delivery period of less than or equal to one year, shall be concluded on the gas exchange. Extracting companies shall supply at least 15 percent of the natural gas extracted in the country on the organized gas exchange. Since 1 January 2025, these transactions, with the exception of short-term standardized products, shall also be conducted outside the organized gas exchange market. The transmission system operators and the operators of the natural gas storage facilities shall purchase gas for their own needs, including for technological needs and for balancing, on the organized gas exchange market.

Natural gas contracts are concluded at prices regulated by EWRC for services of public interest regarding transmission, distribution and supply of natural gas and outside these cases – at freely negotiated prices. Natural gas prices shall not be subject to regulation when the Regulator confirms the existence of competition, which creates preconditions for free negotiation of prices under market conditions.

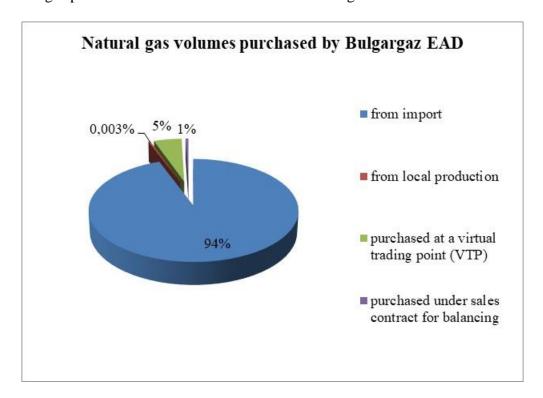
Since the beginning of 2020, natural gas supply from Russia has been already carried out successfully through the new entry point – IP Strandja 2/Malkochlar, via Turkey. Through this entry point, both Northern Macedonia and Greece receive natural gas. Since 1 Jan 2020 there have been no natural gas flows through the Trans-Balkan gas pipeline. The reverse flow, part of the Vertical Gas Corridor concept, is operational and, in case of market interest, natural gas can be transported in all directions.

In 2020 natural gas supply for the domestic market was carried out by the public provider Bulgargaz EAD, by extractive companies – Oil and Gas Exploration and Production AD, Petroceltic Bulgaria EOOD and natural gas traders.

In 2020 Bulgargaz EAD has purchased natural gas for the domestic market under gas supply Contract No 02-12-13 of 15 November 2012 with OOO Gazprom Export, natural gas sales contracts with Kolmar NL B.V., Protos Energy EAD, Vitol Gas and Power B.V., Engie Energy Management Romania SRL, Petroceltic Bulgaria EOOD and a contract with an Azerbaijani company.

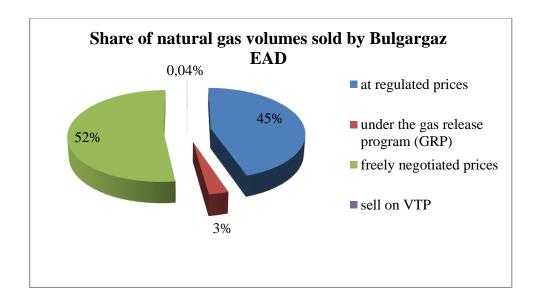
Natural gas quantities purchased by Bulgargaz EAD, both imports and local production, were as follows:

- -imports 23 605 367 MWh;
- local production 83 322 MWh;
- natural gas purchased at a virtual trading point (VTP) 1 220 950 MWh;
- natural gas purchased under sales contract for balancing 128 627 MWh.



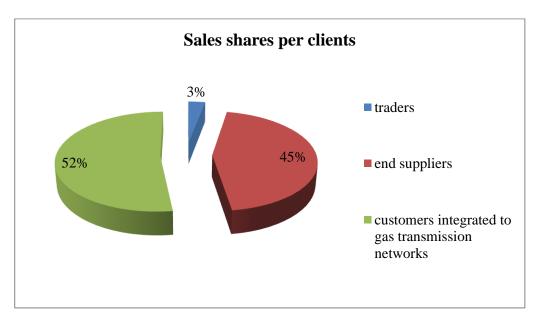
Natural gas quantities sold by Bulgargaz EAD in the Republic of Bulgaria were as follows:

- at regulated prices 11 147 105 MWh;
- under the gas release program (GRP) 739 016 MWh;
- at freely negotiated prices 12 986 390 MWh;
- at a virtual trading point (VTP) -9941 MWh.



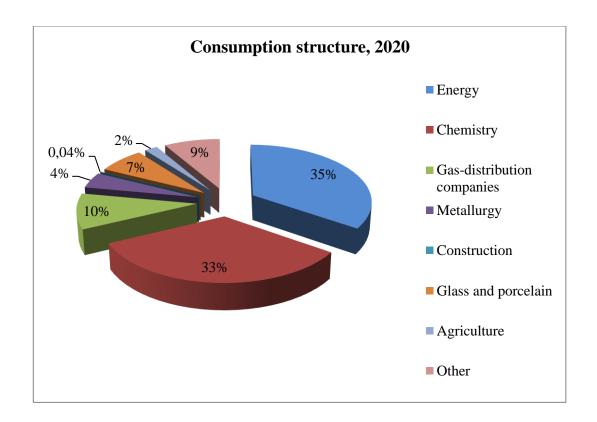
Bulgargaz EAD had no transactions at freely negotiated prices in its capacity as a liquidity provider and as a market maker. The quantities that Bulgargaz EAD has sold as a natural gas trader were the quantities sold at freely negotiated prices.

In 2020, Bulgargaz EAD sold natural gas to customers connected to the gas transmission network, end suppliers of natural gas and to traders.



The structure of natural gas consumption sold by Bulgargaz EAD by sectors, was as follows:

- energy -8778297 MWh or 35%;
- chemical industry 8 455 191 MWh or 33%;
- distribution companies 2 538 295 MWh or 10%;
- metallurgy 1 126 722 MWh or 4%;
- construction sector 9 688 MWh or 0,04%;
- glass and porcelain -1812321 MWh or 7%;
- agriculture 504 333 MWh or 2%;
- other -2 151 998 MWh or 9%.



There are two extractive companies on the territory of Bulgaria. Oil and Gas Exploration and Production AD has extracted 102 450 MWh of natural gas from local extraction, of which 18 633 MWh were sold to one end customer, 29 892 MWh to four gas distribution companies and 47 386 MWh to four traders. For its own use, the extractive undertaking has consumed 6 539 MWh. Petroceltic Bulgaria EOOD has extracted and sold 410 847 MWh of natural gas to traders. The extractive companies did not offer or sell natural gas quantities on the organized natural gas exchange market.

For the reporting period, the activity "trade in natural gas" was not subject to licensing under EA. EWRC does not keep a register of natural gas traders and accordingly does not have any information on the quantities of natural gas sold by natural gas traders to customers in 2020.

In 2020, natural gas trade was carried out on the approved by EWRC trading platform of Balkan Gas Hub EAD (BGH EAD). The registered members of the trading platform by the end of 2020 were 40. About 40% of the total numbers of participants were international companies with experience in natural gas trading in European markets. The other participants were local natural gas traders, including large industrial consumers in the country.

The short-term (spot) segment of the platform offers short-term standardized products intraday and day-ahead as well as temporal and locational products for the TSO network balancing purposes. The long-term segment of the trading platform offers products traded on a medium and long-term basis - weekly, monthly, quarterly and calendar year(s). Gas Hub Balkan EAD also provides an opportunity to administer bilateral contracts, as well as a gas release program segment.

In 2020, the following natural gas quantities by products were traded on the different natural gas trading platform segments, including the participation of Bulgartransgaz EAD:

Short-term segment: WD (intraday) products - 252 505 MWh; DA (day ahead) products - 298 489 MWh; Weekend products - 25 002MWh; Extended Weekend Products - 14,050 MWh;

Long-term segment: Week products - 539 896 MWh; Month products - 2 428 763 MWh on the non-anonymous segment of the platform, including a brokerage service, whose share was 841 219 MWh; Month products of the anonymous segment of the platform - 18 910 MWh.

On the natural gas trading platform the lowest weighted average price for monthly product was BGN 17.29/MWh in July 2020, and the highest price reached for monthly product was BGN 40.88/MWh in February 2020. The largest amount of natural for per monthly product was sold in December 2020 at 346 270 MWh, and the lowest amount was in September 2020 at 80 330 MWh.

### Gas Release Program (GRP)

In 2020, out of 40 registered trading platform members, 31 companies were eligible to participate in the tenders under the program on the basis of agreements signed with BGH EAD for participation in the GRP segment. The results of the auctions held in 2020 (realization of 739 016 MWh or 33.29% of the total offered natural gas quantities at the amount of 2 220 000 MWh), as well as the low activity of the registered participants in the auctions conducted, show a low level of implementation of the target quantities for release set in EA.

## Brokerage service

In 2020, a brokerage service was used by 4 district heating companies and 3 industrial consumers, and by the end of 2020 and the beginning of 2021 another 117 agreements were signed for the use of a brokerage service by public provider clients with a view of starting the use of the service from the beginning of 2021.

In order to fulfil the obligations under Regulation (EU) № 1227/2011, BGH EAD has taken action to carry out market research and selection of a reporting service provider. Based on the analysis, such reporting option was selected and an agreement for reporting to ACER the files received from the information system of BGH EAD was concluded with Solien, s.r.o, RRM company. The functionalities of the BGH EAD informational system for generating reports for each of the applicable business scenarios and types of transactions are developed by an IT service provider on the basis of a concluded contract. At the same time, as an organized market place within the meaning of Regulation (EU) № 1227/2011, BGH EAD provides a trading platform and environment for wholesale natural gas transactions. According to the provision of Art.8, item 4, b "d" of Regulation (EU) № 1227/2011, BGH EAD is a person professionally arranging transactions. Any person professionally arranging transactions in wholesale energy products who reasonably suspects that a transaction might breach Article 3 (prohibition of insider trading) or 5 (prohibition of market manipulation) shall notify the national regulatory authority without further delay. Persons professionally arranging transactions in wholesale energy products shall establish and maintain effective arrangements and procedures to identify breaches of Article 3 or 5 (Article 15 of Regulation (EU) № 1227/2011). In order to meet these requirements, in its capacity as a person professionally arranging transactions, BGH EAD has developed rules and procedures for establishing violations.

By the end of 2020, out of a total of 40 trading platform members, 20 used the reporting services, two of which have ceased operations on the platform and terminated their agreements accordingly. The other members of the platform have stated that they will not take the opportunity to conclude a reporting agreement with BGH EAD, and for the purposes of reporting data on the transactions with their participation will use another reporting organization (RRM), with which they already have established relationships and practices in other markets.

Gas wholesale market indicators	2017	2018	2019	2020
Number of companies to which Bulgartransgaz EAD has transported natural gas	9	22	38	39
Biogas injected into the gas transmission network, TWh/y	0	0	0	0
	Russian	Russian	Russian	Russian
Main origin of gas imports (and %)	Federation	Federation	Federation	Federation
	99.9	99.8	81.4	75.3
Number of suppliers with different origin of gas supplies	2	3	3	21

Natural gas quantities transported through the gas transmission network in 2020 were 69 474 TWh, of which for Bulgargaz EAD were 24 134 TWh, for traders -42 316 TWh and others -3 024 TWh.

#### 4.2.2. Retail market

Natural gas supply on the territory of Bulgaria is carried out through a gas transmission network owned by Bulgartransgaz EAD for directly connected customers and through gas distribution networks owned by the respective gas distribution companies – for end customers.

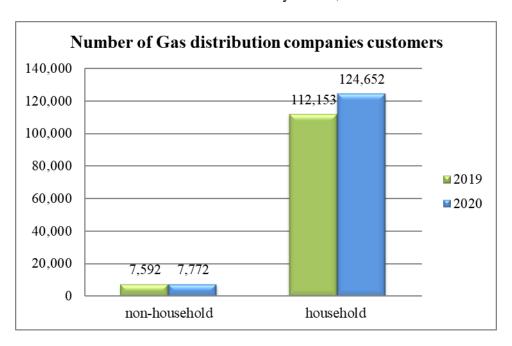
At the end of 2020, 24 gas distribution companies encompassing 35 areas were licensed on the territory of Bulgaria, covering 173 municipalities, representing 65% of all municipalities in the country. Nine companies delivered supplies of compressed natural gas to customers in municipalities that have no connection to the transmission network. An important prerequisite for increasing the number of natural gas non-household and household customers in the country is the construction of gas pipelines connecting the gas distribution networks of the licensed areas with the gas transmission network.

The necessary infrastructure for natural gas distribution in the country is under construction and the number of connected to the gas transmission network household customers is low. The regulatory mechanism implemented by EWRC provides for incentives for the gas distribution enterprises to continue the development of the gas distribution networks and the connection of new customers aiming at the gradual increase of the natural gas consumption. Accordingly, EWRC approves marginal prices for natural gas sale, which gives possibility to the gas distribution companies to sell to end customers at prices, lower than the approved ones, thus stimulating households' gasification.

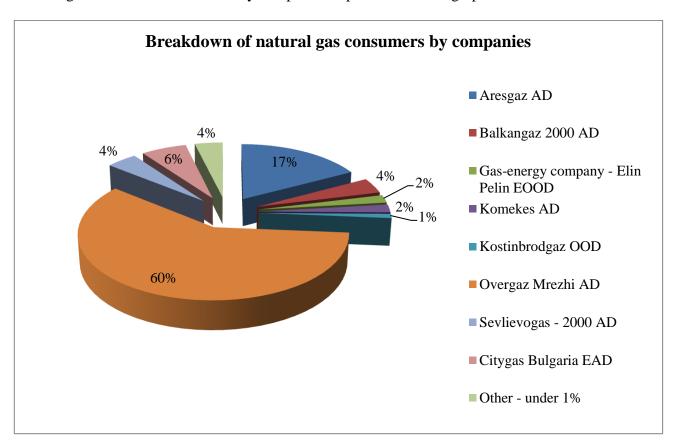
The established network of the gas distribution enterprises in 2020 was 154 347 m, and the total length of the gas distribution network within the country was 5 292 039 m. The investments done by the gas distribution networks in 2020 were 27 031 BGN.

Part of the gas distribution enterprises provide their customers with compressed natural gas, due to the lack of connection between their distribution network and the gas transmission network, which increases the natural gas final price. This circumstance prevents the service from reaching out to a larger number of clients.

The total number of clients of the gas distribution companies up to 31 December 2020 was 132 424, of which non-household 7772 (5.9%) and 124 652 household customers (94.1%). The number of customers has increased with 10.6% over one year - from 119 745 in 2019 to 132 424 in 2020. The household customers have increased by 11.1%, and the non-household – by 2.4%.



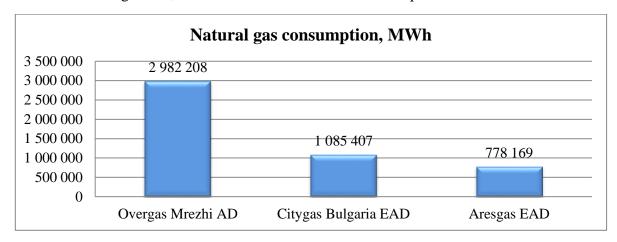
Natural gas consumers breakdown by companies is presented in the graph below:



Overgas Mrezhi AD serves the largest number of customers – 78 757, which is 60% of all natural gas customers in the country, followed by Aresgaz AD with 17%, Citygaz Bulgaria EAD with 6%, Sevlievogas 2000 AD with 4% and Balkangas 2000 AD with 4%.

Total consumption by distribution companies' customers in 2020 was 5 605 628 MWh, of which 4 314 224 MWh of non-household customers (77%) and 1 291 404 MWh of household customers (23%).

The customers with the largest consumption are those of Overgas Mrezhi AD, Citygaz Bulgaria EAD and Aresgaz AD, as the market share of the three companies is 86%.



In 2020, an increase in the number of household customers has been observed, compared to 2019, which is associated with the implementation of the project Demand Side Residential Energy Efficiency through Gas Distribution Companies in Bulgaria (Project DESIREE GAS). This project aims to provide a dedicated and efficient mechanism to support gasification of Bulgarian households in accordance with the requirements of EU Energy Efficiency Directive. It encourages the most efficient technologies and supports the transition from carbon-intensive sources of energy to natural gas, thereby reducing energy consumption and carbon emissions in the residential sector in Bulgaria. Grants for Bulgarian households' gasification under the project DESIREE GAS amount to 30% of eligible expenditure for housing installations. In addition, the connection fee is 100% funded.

In 2020, a lower increase of the gasification of non-household customers in comparison to 2019 could be observed. The reason for this is the economic crisis related to COVID-19. Considering the crisis, many companies have been forced to cease activity, others have decreased their production volumes. Some of the potential non-household customers have changed their investment plans and have delayed the gasification.

<u>Information about the natural gas retail market (non-household customers connected to the gas transmission network).</u>

Retail market	2017	2018	2019	2020
Number of customers connected to the gas transmission network	237	239	241	246
Number of customers connected to the gas transmission network to which Bulgargaz EAD supplies natural gas	183	178	175	171
Number of customers, connected to the gas transmission network, whose gas suppliers are different than Bulgargaz EAD	54	61	66	75
Gas quantities transported for Bulgargaz EAD and other suppliers for customers, connected to the gas	33.079	31.663	30.465	31.337

transmission network in TWh				
Number of customers who have switched their supplier	2	5	3	4
Average switching time, days	14	14	14	14

<u>Information about the natural gas retail market (non-household customers connected to the gas distribution network).</u>

Non-household customers connected to gas distribution networks	2020
Natural gas consumption, TWh	4.314
Number of natural gas customers	7 772
Number of customers who have switched their supplier	0
Number of suppliers of those customers (the suppliers are the end suppliers licensed for the respective territory)	24

<u>Information about the natural gas retail market (household customers connected to the gas distribution network).</u>

Household customers connected to gas distribution networks	2020
Natural gas consumption, TWh	1.291
Number of natural gas customers	124 652
Number of customers who have switched their supplier	0
Number of suppliers of those customers (the suppliers are the end suppliers licensed for the respective territory)	24

# 4.2.3. Monitoring the level of prices, the level of transparency, the level and effectiveness of market opening and competition

In exercising its regulatory powers with regard to price levels, EWRC is guided by the main principles of developing competitive and well-functioning regional markets within the European Union and preventing the restriction or distortion of competition in the energy market.

Gas price regulation is carried out in accordance with EA and Ordinance № 2 of 19 March 2013 on Natural Gas Price Regulation (ONGPR) adopted by the Regulator. Pursuant to Art.30, paragraph 1, items 8, 11 and 12 of EA, the prices at which end suppliers sell natural gas to customers connected to the relevant gas distribution networks, connection prices and prices for access and transmission through the transmission networks shall be subject to regulation by EWRC. Pursuant to Art.30, paragraph 1, item 7 of EA, EWRC shall approve prices at which the public provider sells natural gas to end suppliers and to entities holding a license for production and transmission of heat energy.

ONGPR sets out natural gas price regulation methods, rules for price formation or determination and amendment, procedure for providing information, submission of price proposals and their approval; methods for energy enterprises compensation of costs incurred by imposed public service obligations under EA; terms and conditions on networks connection price formation; terms and conditions on natural gas access and transmission through transmission and/or distribution networks price formation. Prices subject to regulation are formed by the energy companies in accordance with EA and ONGPR. The Regulator's guidance on price regulation is binding for energy companies. EWRC approves prices for transmission through the gas distribution networks, prices for natural sale from end suppliers and prices for connection to the gas distribution networks

based on analysis of the data presented in the applications and based on reasoned justification by applicants that the proposed prices will enable the companies to realize the investment and production programme parameters in their business plans.

Prices of "natural gas distribution" and "natural gas supply by end supplier" are regulated under the "price cap" method under Art.3 of ONGPR. EWRC approves tariff structures by customers' groups, reflecting the allocated annual revenue requirements for the service for each consumer group, based on submitted cost service study. The existing tariff structures and prices for end customers of the gas distribution companies are differentiated depending on consumption type (household and non-household), consumption evenness and unevenness and the relevant consumption. EWRC approves prices for transmission through the gas distribution networks to end customers upon proposals of the gas distribution companies.

The Regulator shall publish on its website the energy enterprises' price proposals together with all initial data, open and closed sessions and public discussions minutes, price decisions, adopted regulations, rules, methodologies and guidelines.

Within the price approval procedures, EWRC shall monitor the fulfilment of the obligation of energy undertakings supplying natural gas at regulated prices and transmission and distribution system operators, to disclose in the mass media their new prices proposals or current prices amendment within one month prior to submission of price proposals to the Regulator.

After receipt of the applications for price approval and/or adjustment, the Regulator shall adopt a report from the officials concerned and a draft decision, which shall be announced on its website. The Regulator shall hold an open session to discuss the report and a public discussion on the adopted draft decision with stakeholders according to Art.14 of EA. At the open session, the Regulator shall discuss the report with the energy companies and shall set a deadline for submitting opinions. EWRC shall consider any comments received from stakeholders and give reasonable opinion publishing the reasons on its website.

Gas market liberalization is an important part of European energy policy and is linked to the strategic objectives of improving security of supply and natural gas supply sources diversification, as well as building an interconnected and single pan-European gas market.

As of 2 January 2020, multilateral trading on the organized gas exchange has started, using the trading platform of Balkan Gas Hub EAD, including a short-term segment (spot), a long-term segment and a brokering service. The short-term (spot) segment of the platform will offer short-term standardized "intraday" products, "day-ahead" products and products for the purposes of balancing the TSO network. Trade will be conducted on an anonymous basis in accordance with the provisions of Regulation (EU) No 312/2014. The long-term segment of the trading platform will offer products traded on medium-term and long-term basis, anonymously, as follows: monthly (up to 60 months ahead); quarterly (up to 20 quarters ahead) and annual (up to 5 calendar years ahead).

The brokering service enables conclusion of gas purchase contracts by end customers/end suppliers directly connected to the Bulgarian gas transmission system, without incurring costs for membership of the trading platform and without the need to obtain access to network access and transmission services through the network. The brokering service will also provide the environment of administration of contracts concluded before 2 January 2020 regarding gas purchase and sale for a period after 1 January 2020, less than or equal to one-year, in compliance with the requirements of Art.176, paragraph 3 of the Energy Act.

One of the main EWRC guiding principles is to prevent restriction/distortion of competition in the energy market, as well as to ensure a balance between the interests of energy companies and

consumers. The Regulator monitors the existence of restrictive contractual practices and exclusivity provisions which may prevent non-household customers from concluding contracts with more than one supplier at a time or restrict their choice of suppliers. In exercising its powers, EWRC shall analyse the performance of regulated energy companies, in order to prevent abuse of monopoly position or restriction/distortion of competition in the energy market in Bulgaria. EWRC may refer to the Commission for Protection of Competition (CPC), which in turn shall review the submitted information and after assessing the data on a case-by-case basis may initiate proceedings under the Law on Protection of Competition. In exercising its powers to approve corporate transformation of licensees, to authorize the execution transactions of uncompleted construction sites or assets disposal, and to authorize the establishment of a guarantee deposit/mortgage on property and assets, which constitute a means of exercising the licensed activity, EWRC has the right to request the opinion of CPC on a specific case before making a decision or giving permission. When, in exercising its powers, EWRC finds that a licensee distorts or restricts competition, it shall refer the matter to CPC. EWRC shall assist CPC by providing any necessary information and documents that may be used by CPC with regards to the case. In case CPC finds by a decision that the licensee distorts or restricts competition, EWRC may impose coercive measures provided for in EA, and in case of a systematic violation of competition rules established by CPC, EWRC may revoke the license.

EWRC continuously monitors the market in order to ensure non-discrimination between all market participants, as well as between participants of one and same category and to promote efficient competition and proper market operation. EWRC is in close cooperation with the Commission for Consumer Protection (CCP), as well as with other non-governmental consumer protection organizations.

Within the framework of Balkan Advisory Forum of the Balkan Peninsula regulators, EWRC exchanges data on the most important market processes in natural gas sector at regional level.

EWRC monitors the level and efficiency of market opening and competition and is guided by the following basic principles: development of competitive and well-functioning regional markets within the European Union; preventing the restriction or distortion of competition on the energy market; creating incentives for the development of the competitive market for energy activities, where conditions permit so; creating incentives for effective development of secure, reliable and efficient networks in accordance with the customers interests. EWRC monitors gas networks development for the benefit of all participants, which will ensure sufficient and available capacity for everyone. All pricing decisions of the Regulator are publicly available on its website in order to ensure transparency.

According to Art.6 of ONGPR, energy enterprises may apply lower prices than the approved by EWRC provided this do not lead to cross-subsidization among separate activities and among customers groups too. On this regulatory basis and taking into account the energy market situation, energy enterprises can implement an effective pricing strategy, the most important being: maintaining a competitive gas price levels compared to the alternative energy sources prices, maintaining sustainable price levels for a longer period of time and ensuring the long-term efficiency of the projects through prices. According to Art.40 of ONGPR, within 7 days as of receipt of EWRC new prices decisions, the public provider, end suppliers, gas transmission and distribution network operators and storage facilities operators shall publish on their websites the approved prices, including prices by tariff structures and prices which they shall apply under the contracts with customers in the following price period. In case of price regulation on the basis of a methodology approved by EWRC, the energy company shall publish the set prices on its website within 7 days as of the date of the decision regarding their determination.

EWRC monitors the natural gas market, ensuring non-discrimination between all market participants, as well as between participants of one and the same category, which also promotes retail market competition and proper market operation. In this regard, when exercising its control powers, EWRC carries out scheduled inspections of energy companies, as well as surprise inspections in case of filed complaints and signals.

## 4.2.4. Consumer protection and dispute settlement

EA transposes the requirements of Directive 2009/73/EC aiming to ensure effective and adequate consumers rights and interests protection, strengthen and guarantee their rights and ensure greater transparency of market relations. The requirements of Annex 1 to Directive 2009/73/EC are enforced regarding the energy services contracts content that should be disclosed to consumers prior to the conclusion or confirmation of the contract.

In exercising its regulatory powers, EWRC is guided by general principles defined in EA, including ensuring a balance between the interests of energy companies and customers, equality between different categories of energy companies and between consumer types and establishing end customers' protection measures. To protect energy customers' rights EWRC closely cooperates with the Commission for Consumer Protection, the Ombudsman of the Republic of Bulgaria, as well as a number of consumer protection NGOs.

As a specialized state authority EWRC regulates the activities in the energy sector, approves the General conditions of contracts provided for in EA and the Rules on work with energy services consumers developed by energy companies that provide services of public interest. These contracts have mandatory content defined in EA, guaranteeing consumers' rights protection. The contracts shall state: term of the contract; temporary suspension conditions, termination of service provision and of the contract; rights of energy services consumers, including information concerning the procedure of considering complaints and making decision on them within three months as of the receipt of any such complaints, conditions for unilateral termination of the contract by the user of energy services including upon a change of the contractual conditions and prices, incl. the possibility for such termination without additional payment. They provide for conditions and procedures of setting-off and reimbursement of sums in case of failure to comply with the requirements for quality of the contracted services. Licensees providing services of public interest are obliged to guarantee consumers' rights protection and equality between customer groups in the contracts' General conditions and Rules on work with energy services consumers. EWRC shall ensure that the approved General conditions include the content of invoices or bills which reflect the actual consumption and contain specific data on the metering device number, natural gas consumption, value added tax (VAT) and a price breakdown by components, if approved.

Energy companies provide to their customers information about: payment methods; prices of supply suspension or resumption; prices of maintenance services and prices of other services related to the licensed activity; procedure of switching supplier and information that energy services users do not owe additional payments when switching supplier, including a final equalizing bill at each supplier switching; a procedure of handling complaints and ruling on the actual quantities consumed, as well as the service provided value in accordance with the agreed metering frequency at no additional cost. The information shall be presented in the invoices or together with them in informational materials and on the websites of the energy companies. In accordance with that procedure, the energy and natural gas suppliers shall provide also to energy services users a checklist adopted by the European Commission, containing practical information about their rights.

Energy companies shall provide customers with detailed information on daily, week, month and annual consumption where smart metering systems are used, by providing the final customers (via the Internet or via the metering device interface) with data for a period covering not less than 24 previous months or since the entry into effect of the supply contract, if that is more recent. Natural

gas suppliers shall provide customers with a wide range of payment methods, including advance payment systems that are fair and adequately reflect the expected consumption. Energy companies shall notify the domestic energy services customers of each proposed change to the contractual conditions and prices of the services provided, as well as of the customers' right to terminate the contract unilaterally within 30 days as of the notification date, if they do not accept the new conditions and/or prices. Price increase notification shall be effected within the billing time limit after the entry into effect of the price increase. The end supplier shall inform the customer, together with the invoice, on the last month of each 6-month period, when the reported electricity or natural gas consumption of the end customer for that 6-month period is higher by more than 50 percent than the reported consumption for the respective 6-month period of the previous calendar year.

Energy companies performing natural gas supply shall establish information centres where they will both provide users with information on energy services and customers' relations.

Energy companies providing services of public interest shall determine in the General conditions for supply and networks use and in the Rules on work with users, special procedures of providing vulnerable customers with information related to consumption and suspension of supply.

Under the legislation, EWRC has the power to fulfil the obligations set out in Directive 2009/73/EC, namely to act as a dispute settlement body in respect of any complaint/appeal against transmission or distribution operators in relation to their obligations and to issue a decision which shall have binding effect, if or until it is revoked as result of an appeal.

Complaints handling terms and conditions are regulated by EA and Ordinance №3 on licensing the activities in the energy sector. EWRC shall consider complaints of: networks and facilities users against transmission and distribution network operators, extraction companies, natural gas storage facilities operators and LNG operators related to the way these entities perform their duties under EA; customers against energy and natural gas suppliers, including end suppliers, regarding their duties under EA as well as licensees against other licensees regarding their duties' performance under EA.

Within two months of filing a complaint, EWRC may assist an amicable dispute settlement. The term may be extended by another two months, if the nature of the dispute requires collecting additional data and information by EWRC. The procedure is voluntary and confidential. Under the amicable dispute settlement the Regulator does not make a ruling/decision and the procedure ends with an agreement. It involves the dispute parties and a conciliator - a member of the EWRC working group that has been designated to handle the complaint. The conciliator uses all reasonable means and efforts to resolve the dispute by proposing to the parties a resolution and if consent is achieved - to draft a written agreement.

In case no amicable settlement is achieved or the parties reject amicable settlement, the Regulator shall decide on the complaint within two months after receiving it. This period may be extended by another two months, if the nature of the dispute requires the Regulator to collect additional data and information. Upon complainant's consent the extended period may be extended again by another two months. When EWRC finds a complaint being justified, it issues a decision with binding guidelines on law implementation. EWRC decisions are subject to appeal before the Administrative Court - Sofia City under the Administrative Procedure Code.

The number of complaints in gas sector filed at EWRC in 2020 remains low compared to the other three sectors. Out of 133 424 natural gas customers, complaints were filed by 0.018 % of them. The main reason for the insignificant number of complaints is the small number of gasified sites in the country, both household and non-household. The tendency of maintaining a low level of complaints in the sector is due to the small number of household and non-household gas customers, as well as the fact that energy companies promptly examine the complaints and satisfy the reasonable ones. The companies provide their customers with the general terms of the contracts and the users' procedures rules and inform them of their rights and obligations regulated thereof, including the order for filing and handling complaints.

EWRC shall verify and control the fulfilment of licensees' obligations related to the establishment of a specialized unit for work with customers in the company structure, in which sufficient and qualified personnel must be appointed; maintaining a sufficient number of centres for work with customers to cover the needs of the licensed area; provision of services to customers in accordance with the quality indicators of natural gas supply adopted by EWRC; maintenance of a quality management system for the licensed activity, certified by an independent competent organization; maintaining a system for receiving and handling complaints.

The number of clients' complaints filed to the gas distribution companies is 87. The customers, who have filed complaints to the gas distribution companies, represent less than 0.07% of all natural gas clients; the trend of a low number of complaints compared to the household customers has continued; it was below 0.09% in 2019 and below 0.08% in 2018. From a total of 35 licensed areas in Bulgaria, complaints were filed in 13 of them. The number of natural gas customers in these 13 territories (120 606) accounts for 91% of all natural gas customers in the country. Most complaints were filed with Overgas Networks AD for the licensed territory of Sofia Municipality and Bozhurishte Municipality - 30 (0.09% of all customers of the company). This represents 34% of all complaints in the sector.

Out of 29 complaints related to connection to the gas distribution network, 7 were found as justified and were satisfied, 22 were found non-justified. Seven complaints, related to inaccurate metering of the natural gas consumed, were determined to be non-justified. Six complaints that related to the price paid to gas distribution companies by the end customers were found as nonjustified and thus were not satisfied. Four complaints with regard to disconnection due to nonpayment were non-justified. Out of 4 complaints regarding the contents of the invoices – one was justified, and the other 3 were non-justified. Of 32 other complaints, 8 concerning restauration of road pavements, the translocation of gas regulatory metering board (GRMB), and the low-quality execution of construction works, have been found justified and have been satisfied. The non-justified complaints were connected to disagreement with a GRMB placement; a complaint against gas smell and disagreement with the establishment of building gas installation. The complaints classified as other were mainly linked to irregularities in the construction works of gas pipelines and the installation of gas equipment as well as to reimbursement of funds under the project Demand Side Residential Energy Efficiency through Gas Distribution Companies in Bulgaria (Project DESIREE GAS. The project is managed by the Ministry of Energy and as of 17 February 2020 the acceptance of documents for new applications has been suspended due to exhaustion of the budget. The gas distribution companies have handled the complaints, have found them justified and respectively have satisfied 18 of them.

Companies use different sources to raise customer awareness about the services provided and the possibilities to receive information about disputes settlement, clarification of their rights on filing complaints, and the possibility to address EWRC in case they are not satisfied with the received answer. Many companies inform their clients via company's webpage, telephone, e-mail. In the event of visit to the customer support centres, the clients can be granted information about the general terms of natural gas sales and client procedure rules, as well as to be informed about their right of filing a complaint to EWRC in order to settle a dispute under the current legislation.

Household customers indicators	2017	2018	2019	2020
Number of household natural gas customers	89 199	100 412	112 210	124 652
Number of natural gas household customers,				
having been connected to the gas distribution	0	0	0	0
network of the company and which have	0	0	U	U
switched natural gas supplier				

Number of disconnections of final household	1 796	1 497	2 104	1 741
consumers due to non-payment				
Number of working days between notification to				
pay a bill and disconnection in cases of non-	18	18	18	18
payment in practice				
Number of household customers who are	2	7		0
vulnerable customers according to paragraph 1,	3	/	6	8
item 66c of EA Supplementary Provisions				
Number of household customers with smart	510	653	3 281	5589
meters				

There has been a significant increase in installed smart meters of household customers, which increased from 510 in 2017 to 5 589 in 2020. However, the number is only 4% of all installed meters of household customers.

The average percentage of household customers who have been disconnected due to non-payment in the period 2017 - 2020 is relatively constant and amounts to about 2%.

Although all gas distribution companies provide their customers with information on the switching procedure and that energy service users do not owe any additional payments when changing supplier, there has been no change of supplier by household customers yet. They remain customers of the end suppliers. The lack of a well-developed liquid gas market caused by the dominant role of the public provider Bulgargaz EAD can be cited as the reason.

## 4.3. Security of supply (if and insofar NRA is competent authority)

The Ministry of Energy is the state body that conducts the energy policy in the country. The Minister of Energy is the competent authority concerning security of supply in the meaning of Art.3, paragraph 2 of Regulation (EU) 2017/1938 of the European Parliament and of the Council of 25 October 2017 concerning measures to safeguard the security of gas supply and repealing Regulation (EU) N 994/2010 (Regulation (EU) N 2017/1938).

Pursuant Art. 8, para 2, letters (a) and (b) of Regulation (EU) 2017/1938 the competent authority of each Member State, shall, after consulting the natural gas undertakings, the relevant organizations representing the interests of household and industrial gas customers, including electricity producers, electricity transmission system operators, and, where it is not the competent authority, the national regulatory authority, establish: a preventive action plan containing the measures needed to remove or mitigate the risks identified, including the effects of energy efficiency and demand-side measures in the common and nationals risk assessments and in accordance with Article 9; an emergency plan containing the measures to be taken to remove or mitigate the impact of a disruption of gas supply in accordance with Article 10.

In compliance to Regulation requirement, an interdepartmental group has been established, appointed by the Minister of Energy, which shall draft the above-mentioned documents. Representatives of EWRC have been included; they have participated in the documents drafting process by giving opinions and specific proposals on texts falling under the scope of the Regulator's activity. Their opinions and proposals have been taken into account and have been reflected into the content of the documents.