

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

# Annual Report to the European Commission

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#### LIST OF ABBREVIATIONS

AAS of EA Act on the Amendment and Supplement of the Energy Act

ACER Agency for the Cooperation of Energy Regulators

AGRS Automatic Gas Regulatory Station
BETP AD Bulgarian Energy Trading Platform AD

BGH EAD Balkan Gas Hub EAD

CCP Commission for Consumer Protection

CCR SEE Capacity Calculation Region South East Europe

CDM Central Dispatching Management
CDP Commercial Dispatching Platform
CPC Competition Protection Commission

CS Compressor Station DAM Day-Ahead Market

DSO Distribution System Operator

EA Energy Act

EMR Electricity Market Rules

ESO EAD Electricity System Operator EAD ESSF Electricity System Security Fund

EPS Electric power system

ERSA Energy from Renewable Sources Act
EWRC, the Regulator Energy and Water Regulatory Commission

GDN Gas Distribution Network
GMS Gas Metering Station
GTN Gas Transmission Network

GTTN Gas Transit Transmission Network

HECG High-efficient cogeneration

IBEX EAD Independent Bulgarian Energy Exchange EAD

IDMIntraday MarketIPInterconnection PointIPAIndustrial Parks Act

ITO Independent Transmission Operator NGMBR Natural Gas Market Balancing Rules

NGTR Natural Gas Trading Rules

OEPR Ordinance №1/2013 on electricity price regulation

OLAES Ordinance №3/2013 on licensing the activities in energy sector
OAS of OLAES Ordinance amending and supplementing Ordinance № 3 of 21

March 2013

ONGPR Ordinance №2/2013 on natural gas price regulation

PCI Project of common interest

PEOR Power Exchange Operational Rules

PPAT Person professionally arranging transactions

RAS of PEOR Rules Amending and Supplementing the Organized Power

**Exchange Operational Rules** 

RMESOCP Rules of maintaining electricity supply offers comparison platform

SEEGAS South-Eastern and Eastern European gas market

SDAC Single Day Ahead Coupling SLP Standardized Load Profiles SLR Supplier of Last Resort

TSO Transmission System Operator

VTP Virtual trading point

#### 1. FOREWORD

EWRC's priority in the **electricity sector** in 2024 was the harmonization of the by-laws with the current European and national legislation. In view of the changes related to the new market model, the main task of the Regulator was to update the secondary legislation. Amendments to the Power Exchange Operational Rules expand and develop the possibilities of electricity exchange trading. A Methodology for setting balancing energy prices was adopted, which created standard and transparent rules for balancing energy price formation. A new Ordinance No. 6 of 28 March 2024 on connecting facilities to the electricity grids has been drafted, which provides new opportunities for the development of the sector.

In its pricing decisions, EWRC consistently applied a balanced and conservative approach, taking into account the interests of all participants. In 2024, electricity prices for the regulated market remained largely unchanged for household customers, increasing by an average of 1.39%. EWRC managed to decrease the marginal prices of heating energy during the 2024-2025 heating season. Price decrease was in average by 8.84% in comparison to 2023-2024 heating season – between 2.44% and 14.11%.

The Regulator continued to exercise regulatory control over the activities of energy companies. In 2024, 22 scheduled and extraordinary inspections were carried out in the electricity sector and 3 inspections in the heating sector.

With regard to the complaints received, EWRC complied with the statutory deadlines for their consideration and ruled 793 decisions. 206 complaints were accepted as well-founded, and the audited companies were given mandatory instructions to eliminate the causes.

In 2024 EWRC's activity in the **natural gas sector** was carried out in conditions of natural gas price decrease and market development. Natural gas prices in 2024 decreased by an average of 28% year-on-year compared to their 2023 levels. The good preparedness of the European gas market for the 2023-2024 winter had a positive impact on natural gas prices. The Regulator continued its activity in issuing licenses for trading in natural gas. 28 new traders have been granted a license, bringing their total number to 136. That contributed to increasing liquidity and competition in the natural gas market. A significant increase in the transactions of the various segments of the Balkan Gas Hub EAD platform was reported. The continued development of gas networks in the country is another positive trend.

EWRC ensured the regulatory aspect of the realization of important projects for the country. During the year, EWRC approved projects for the binding phase of the procedure on incremental capacity of Bulgartransgaz EAD and ICGB AD (together with the Greek Regulatory Authority for energy, waste management and waters). The projects are to increase the natural gas transmission capacity from Greece to Bulgaria and from Bulgaria to Romania and are a key part of the Vertical Gas Corridor. Bulgartransgaz EAD and the Turkish gas transmission operator BOTAŞ A.Ş signed an operational Interconnection Agreement for the Strandzha/Malkochlar point. ICGB AD and the Greek gas transmission operator DESFA S.A. signed an interconnection agreement for the Komotini interconnection point located in Greece. The European Commission approved state compensation for expensive natural gas in UGS Chiren. The aid covered part of the companies' costs arising from the storage of natural gas at UGS Chiren at high prices in the summer of 2022 and the subsequent sale at lower prices. Bulgartransgaz EAD and the Greek gas transmission operator DESFA S.A. held

discussions in connection with a study on the interest in the hydrogen market in Greece and Bulgaria with the participation of producers, consumers, traders, suppliers and industry organizations from Bulgaria and Greece.

In fulfilment of its powers under Regulation 1227/2011 (REMIT) for possible abuse and manipulation of the power exchange trade in the wholesale market, during the said period EWRC initiated three proceedings to establish a violation of Art.3 and/or Art.5 of the Regulation.

In the period 2019-2024, EWRC received a total of 77 reports and alerts of suspicious transactions, based on which a total of 53 preliminary investigations were initiated in accordance with Art.74a of EA. During this period, EWRC imposed property sanctions on nine companies, participants in the wholesale energy trading market, with a total amount of BGN 4 141 755. In 2024, sanctions were imposed for the first time for violations of Art.4 and Art.9 of Regulation (EU) No. 1227/2011. Penalty orders were issued for the violations to five market participants with a total amount of sanctions of BGN 137 000. The amendments to REMIT by Regulation (EU) 2024/1106 of the European Parliament and of the Council of 11 April 2024 strengthen the control on compliance with the Regulation and prevention of market abuse, especially since there is an increase in the trading of financial instruments in traded energy derivatives and an increasing penetration of algorithmic trading in organized markets.

With the upcoming full liberalization of the wholesale market in the second half of 2025 and the expected significantly higher trading volume through the exchange platforms, EWRC's major role in the process of complying with the rules of fair and competitive trading shall be strengthened. The energy regulator will continue to be the guarantor of preventing market participants from manipulating energy markets based on unfair trading practices and non-transparent pricing.

#### PLAMEN MLADENOVSKI

Chairman
Energy and Water Regulatory Commission

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

The Energy and Water Regulatory Commission (EWRC, the Regulator) has taken the necessary actions to develop and improve the by-laws in accordance with its legal powers and taking into account the dynamically developing public relations in the field of energy. The purpose of this activity is to bring the EWRC acts into line with national and European legislation, create conditions for the development of electricity markets, and to overcome problems identified in the practice of implementing EWRC's acts as well.

With Ordinance No. 6 of 28 March 2024 on connecting facilities to the electricity networks, EWRC regulated new public relations and expands the possibilities of the electricity market in terms of electricity storage, closed distribution networks and connection under a temporary access scheme of all or part of the declared capacity of the facility. Amendments to the Power Exchange Operational Rules expanded and developed the possibilities of electricity exchange trading. These amendments include introduction of the mechanisms "Intraday auctions" and "Continuous trading", as part of the Intraday market segment.

The Regulator's activity in the natural gas sector in 2024 was focused on stabilizing natural gas prices and market and market development. The public provider Bulgargaz EAD secured the necessary quantities of natural gas for its customers under the long-term supply contract of piped natural gas with an Azerbaijani company, under supply contracts of liquefied natural gas at prices depending on the indices Title Transfer Facility (TTF) front month of the Dutch Gas Exchange and natural gas quantities provided through extraction from Chiren UGS. LNG supplies have been carried out through terminals on the territory of Greece and Türkiye.

Natural gas price in 2024 decreased in comparison to 2023, with their average level in 2024 being 64.04 BGN/MWh compared to 88.80 BGN/MWh in 2023, or a decrease of 28% in annual terms.

Natural gas prices have also been influenced by the good prepardness of the European gas market for winter 2023-2024. As of 1 Jan 2024 Chiren UGS had been filled to 82.45% of its capacity, and as of 1 April 2024 its capacity was filled at 44.22%. On 1 Nov 2024 Chiren UGS was filled to 99.76%, and the average filling rate of underground gas storages in the EU member states on the same date was 95.21%.

2024 also saw events such as: a sharp increase in the price of natural gas on the Dutch Gas Exchange TTF on certain days, which had an impact on natural gas prices in Europe and, accordingly, in Bulgaria, such as the interruption of natural gas supplies to the Austrian company OMV from Russia in connection with an Arbitration ruling against Gazprom, which raised concerns about larger scale disruptions; interruption of natural gas production in Norway due to a technical failure on one of the platforms of the state-owned energy company Equinor; tension between Israel and Iran, given that 20% of global LNG supplies pass through the Strait of Hormuz; competition between Europe and Asia for liquefied natural gas supplies; low temperatures in the first two weeks of November, which led to an increase in natural gas production from gas storage facilities in Europe, using nearly 4% (4.29 bcm) of the total natural gas storage capacity in Europe and consequently the need for Europe to buy more natural gas in the following year to restore the levels of stored natural gas; end of the transit contract of Russian natural gas through Ukraine as of 01.01.2025.

In pursuance of the requirements of Commission Regulation (EU) 2017/459 establishing a network code on capacity allocation mechanisms in gas transmission systems (CAM NC), EWRC approved projects for the binding phase of the procedure on incremental capacity of Bulgartransgaz

EAD and ICGB AD (together with the Greek Regulatory Authority for energy, waste management and waters). The projects are to increase the natural gas transmission capacity from Greece to Bulgaria and from Bulgaria to Romania and are a key part of the Vertical Gas Corridor. The Vertical Gas Corridor is a strategic initiative of the gas transmission operators of Bulgaria, Greece, Romania, Hungary, Slovakia, Ukraine and Moldova, which aims to improve the security and diversification of sources and routes for the transmission of additional quantities of natural gas from south to north.

Bulgartransgaz EAD and the Turkish gas transmission operator BOTAŞ A.Ş signed an operational Interconnection Agreement for the Strandzha/Malkochlar interconnection point. The technical capacity of the Strandzha/Malkochlar point in the Turkey-Bulgaria direction in the gas transmission network of Bulgartransgaz EAD is set at 117 677 153 kWh/d, and in the Bulgaria-Turkey direction – 504 138 541 kWh/d. The signed agreement helps the diversification of natural gas sources for Bulgaria and the regional and European gas markets.

ICGB AD and the Greek gas transmission operator DESFA S.A. signed an interconnection agreement for the Komotini interconnection point located in Greece. The signed agreement ensures the secure, safe and efficient commercial operation of that point. As a result, in early October 2024, Bulgaria received its first natural gas supplies from the new LNG terminal in the Republic of Greece – Alexandroupolis.

Gas Hub Balkan EAD has concluded an Agreement for the provision of clearing services with KELER CCP and the implementation of clearing and settlement services for the Bulgarian market aims to improve the functioning of the regional gas market and minimize risks for market participants.

The European Commission approved state compensation for expensive natural gas in UGS Chiren. The aid covered part of the companies' costs arising from the storage of natural gas at UGS Chiren at high prices in the summer of 2022 and the subsequent sale at lower prices.

Bulgartransgaz EAD and the Greek gas transmission operator DESFA S.A. held discussions in connection with a study on the interest in the hydrogen market in Greece and Bulgaria with the participation of producers, consumers, traders, suppliers and industry organizations from Bulgaria and Greece. Updated information was presented from the two operators on the progress of planned hydrogen-related projects and initiatives. Bulgaria and Greece are already successfully cooperating in sustainable energy development and implementing priority activities related to the development of a stable hydrogen market in the region. The first list of both projects of common interest and projects of mutual interest of the European Commission, published in November 2023, includes two hydrogen projects of Bulgartransgaz EAD and DESFA S.A., which are also part of the hydrogen corridor in South-eastern Europe.

At the end of 2024, Ordinance №2/2013 on natural gas price regulation was amended, SG issue 100 of 26.11.2024, in force as of 26.11.2024, in order to achieve regulation of public relations on payment of balancing costs for household customers.

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

In 2024 EWRC took necessary actions to develop and improve the secondary legislation in accordance with its legal powers and considering the dynamically developing public relations in the energy field. The purpose of that activity was for EWRC acts to comply with the national and European legislation in the relevant areas, to create conditions for the electricity markets development, as well as to overcome problems identified in the practice of applying EWRC acts.

In 2024 EWRC adopted the following secondary legislation acts:

## Ordinance No. 6 of 28.03.2024 on connection of facilities to the electricity networks, published in State Gazette, issue 28 of 02.04.2024, in force as of 02.04.2024 (Ordinance No. 6)

Exercising its powers under Art.21, para.1, item 3 in connection with Art.116, para.7 of the Energy Act (EA), EWRC, by decision under Protocol No. 30 of 24.02.2014, adopted Ordinance No. 6 of 24.02.2014 on connection of electricity producers and customers to the transmission or distribution networks (Ordinance No. 6, SG issue 31 of 2014). The numerous and significant amendments and supplements to the Energy Act (EA) and the Renewable Energy Act (REA) necessitated the repeal of Ordinance No. 6, SG, issue 31 of 2014, and the development of an entirely new regulatory act.

Given the above, in 2024 EWRC adopted Ordinance No. 6 of 28.03.2024 on connection of facilities to the electricity networks, published in State Gazette, issue 28 of 02.04.2024, in force as of 02.04.2024 (Ordinance No. 6), regulating an entirely new public relationship regarding electricity storage, respectively construction and connection of electricity storage facilities to the power networks. The new ordinance regulates also the obligations of the electricity transmission and distribution network operators related to the connection of electricity storage facilities. The act regulates the terms and conditions for connecting a closed electricity distribution network to another electricity network, as well as connecting facilities of electricity generators and customers to a closed electricity distribution network.

Next, the new Ordinance No. 6 regulates the terms and conditions for connection under a temporary access scheme for all or part of the requested facility capacity, when during the process of connecting a site of an electricity distribution network operator it becomes necessary to carry out an expansion or reconstruction in the electricity transmission network.

Ordinance No. 6 regulates in a new way the procedure for connecting generators of electricity from renewable energy sources to the electricity grid. The administrative burden has been reduced and it is possible to issue a permit for the implementation of an investment in the production of electricity from renewable sources, as well as to submit connection applications to the relevant network. Procedures for connecting facilities of generators of electricity from renewable sources with a total installed capacity of up to 1 MW have been simplified, reducing the deadlines for conducting a due diligence and issuing an opinion on the conditions and method of connection.

The adoption and implementation of Ordinance No. 6 creates clarity and certainty in the relations between entities wishing to connect a facility for generation, consumption or storage of electricity to the relevant network and the relevant electricity network operator, as well as between electricity network operators in cases of connecting facilities of one operator to another. Also, Ordinance No. 6 aims to increase the number of generators of electricity from renewable sources.

The Transitional and Final Provisions of Ordinance No. 6 amend and supplement Ordinance No. 3 of 21.03.2013 on Licensing the activities in the energy sector (OLAES) in order to bring into line the current regulatory framework related to licensing of closed electricity/gas distribution networks operators with the amendments and supplements to the Energy Act, published in SG, issue

96 of 2023. Provisions regarding the procedure for enlisting in EWRC registers and the circumstances subject to entry in these registers have also been clarified.

## Ordinance amending and supplementing Ordinance No. 1 of 14.03.2017 on regulating electricity prices, published in the State Gazette, issue 41 of 10.05.2024, in force as of 10.05.2024 (OAS of OREP)

With the amendments and supplements to the EA (promulgated in SG, issue 96 of 2023), the next stage of the electricity market liberalization has begun, which provides for the full liberalization of the wholesale electricity market while keeping household consumers on a regulated market until 2026. The market player "public electricity provider" and setting estimated monthly electricity production availability for generators from which the public provider should purchase electricity have been removed, as well as the electricity quantity by which the public provider should conclude transactions with end suppliers.

In this regard, an obligation of EWRC has been removed, namely to approve prices at which:

- generators, within the framework of their set availability, sell electricity to the public provider;
- the public provider sells to end suppliers the purchased electricity for the needs of the regulated market;
- end suppliers sell electricity to household end customers for sites.

During the transitional period, namely until 2026, end suppliers shall be obliged to supply end household customers at regulated prices, while EWRC shall determine a component of this price. It is also envisaged that EWRC shall determine monthly compensation to cover part of the costs of household end customers for electricity purchased from an end supplier at regulated prices, and the way this compensation is to be formed. These new EA stipulations necessitated an amendment to Ordinance No. 1 of 14.03.2017 on regulating the electricity prices (OREP), in order to bring the secondary legislation into line with the aforementioned amendments and supplements to EA.

OAS of OREP aims to bring the act into line with the latest amendments and supplements to EA, related to the new EWRC powers to determine compensations under Art.21, para.1, item 8(c) of EA and the component under Art.30 (a), para.1 of EA. In this regard, a number of OREP provisions have been amended and supplemented, others have been repealed, and a completely new chapter has been created, regulating the terms and procedures for determining the price component for the activity "electricity supply by end supplier" and compensations for household end customers. The amendments and supplements made achieve practical implementation of the legislator's goals contained in the Amendment Act on EA, published in SG, issue 96 of 2023, namely full liberalization of the wholesale electricity market as a necessary stage for the full liberalization of the retail market and in particular of end household customers. In the additional provisions of OREP, amendments and supplements have been made to the legal definitions, which are in line with EA, published in SG, issue 96 of 2023. Transitional and final provisions have been created, which regulate the entry into force of OAS of OREP, as well as rules related to the determination and amendment of the component under Art.37d, para.1 and para.3 of OAS of OREP for the regulatory period starting from 1 July 2024.

### Methodology on determining balancing electricity prices, published in the State Gazette, issue 37 of 26.04.2024, in force as of 01.05.2024

With § 14, item 2 of the Transitional and Final Provisions to the Amendment and Supplement Act to the Nuclear Energy Safe Usage Act (Amendment Act on NESUA, SG, issue 27 of 2024), changes have been made to Art.21, para.1, item 11 of EA, according to which the Methodology on determining balancing electricity prices should not be part of the Electricity Market Rules, but shall be adopted as an independent act of the Regulator. According to § 16 of the Amendment Act on NESUA, till the adoption of the Methodology under Art.21, para 1, item 8 of

EA the methodology that is part of the current Electricity Market Rules shall apply until the entry into force of this Act (EMR, SG, issue 66 of 2013, last amended and supplemented, SG, issue 50 of 2023). Next, § 14, item 1 of the Amendment Act on NESUA repeals EWRC's power under Art.21, para.1, item 8 of EA to determine annually a maximum price for concluding transactions on the balancing energy market, and according to § 15 of the Amendment Act on NESUA, the maximum prices for concluding transactions on the balancing energy market determined by the Regulator for 2024 shall apply until the adoption of the methodology under Art.21, para.1, item 11 of EA. Given that, in 2024, EWRC initiated a procedure for adopting a Methodology on determining balancing electricity prices.

The adoption of the Methodology aims to regulate clear rules and a fair mechanism for determining the balancing energy prices, which will take into account the interests of all market participants. The significant amounts of surplus electricity observed until the adoption of the new methodology, as well as the expectation that they will increase as the warm months of the year approach, threaten the security of the electricity system, as well as the national security of the state. Also, in order to limit the dishonest and speculative behaviour of some trading participants, leading to compromising the market, harming bona fide trading participants and hindering the regulation of the electricity system, the Methodology has introduced additional price and correction mechanisms for more adequate regulation and prevention of significant imbalances in the system, as well as for disciplining all trading participants. In this regard, the Methodology provides for the same price for surplus or shortage for each settlement period without exceptions, with the previous regulation statuses being eliminated. It also regulates the determination of a final price for a surplus or shortage for each settlement period based on four calculation stages, which prevent trading participants from speculating on prices in the Intraday market segment of the organized exchange market, while also taking into account the need for specific pricing when the regulation ranges are exhausted. The Methodology also regulates clear and fair rules for financial payments between the independent transmission operator and the balancing group coordinators, in line with the requirements of Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing guidelines for electricity balancing (Regulation (EU) 2017/2195).

The adopted Methodology guarantees the determination of prices for balancing energy for upward or downward regulation entirely on a market basis and creates conditions for the distribution of system regulation costs through adequate and fair prices for energy surplus or shortage. The implementation of the Methodology aims to achieve a significant reduction in the imbalances of trading participants, as they will be encouraged to forecast their schedules as accurately as possible due to the practical lack of conditions allowing for non-market behaviour - arbitrages with other markets, closing open positions on trading transactions, etc. The adoption of the Methodology will significantly improve the operation of the balancing market and the confidence of trading participants in it, while at the same time leading to more effective regulation and increased security of the electricity system of the Republic of Bulgaria.

## Rules amending and supplementing the Power Exchange Operational Rules, published SG, issue 63 of 2024 dated 26 July 2024, in force as of 26 July 2024 (RAS of PEOR)

In 2024, in connection with Chapter 6 of Commission Regulation (EU) 2015/1222 of 24.07.2015 establishing guidelines on capacity allocation and congestion management (Regulation (EU) 2015/1222), Bulgarian Independent Energy Exchange (IBEX) EAD made a proposal to introduce an "Intraday Auctions" mechanism on the organized electricity exchange market in the Power Exchange Operational Rules, published in SG, issue 55 of 19.06.2020. The aforementioned Chapter 6 of Regulation (EU) 2015/1222 sets out the requirements for single intraday coupling (SIDC), including the preparation of a single methodology for pricing intraday cross-zonal capacity (Art.55, para.3 of Regulation (EU) 2015/1222). The single methodology for pricing intraday cross-zonal capacity is contained in Annex I to Decision No. 1/2019 of the Agency for the Cooperation of Energy Regulators (ACER) of 24.01.2019 on determining a single methodology for pricing intraday cross-zonal capacity. The methodology has been developed in accordance with the provision of

Art.55 of Regulation (EU) 2015/1222. Decision No. 1/2019 of ACER, Section 5.3.8. "Definitions and interpretation", item 38, states that ACER has added two more definitions in order to clarify the scope of the intraday market coupling project. These two definitions clarify that there is only one intraday coupling, consisting of two parts: "continuous trading" and "intraday auctions". In addition, IBEX EAD has also proposed amendments and supplements to individual provisions of RAS of PEOR as a result of the accumulated practical experience related to the operation of the exchange market and its administration, as well as due to the identified need to refine some rules, update them and further regulate them.

The introduction of the Intraday auctions mechanism, as part of the Intraday market segment, aims at capacity allocation and congestion management, including through a single intraday market coupling and application of a single methodology for pricing intraday capacity, which has been developed in accordance with the provision of Art.55 of Regulation (EU) 2015/1222. With the introduction of this new mechanism, two trading mechanisms have been established – continuous trading and intraday auctions. This creates an opportunity for trading participants to participate as fully as possible in the intraday market segment, respectively achieving better prices for the traded quantities of electricity. Some of the amendments and additions aim to simplify the registration procedure on the exchange market, namely by explicitly regulating the possibility of using an electronic signature.

In addition, with the adoption of the RAS of PEOR, editorial changes and changes related to the current practice of the exchange operator have been made, in order to achieve greater clarity and precision in the application of the Rules.

## Methodology on amending and supplementing the Methodology for determining the electricity prices of the supplier of last resort, published in the State Gazette, issue 83 of 1.10.2024, in force as of 1.10.2024 (MAS of the Methodology)

The significant amendments to the EA and the Electricity Trading Rules, as well as the adoption of the Methodology for Determining Prices of Balancing Electricity, published in SG, issue 37 of 2024, required the implementation of amendments and supplements to the Methodology for determining electricity prices of the supplier of last resort, SG, issue 60 of 2021, amended in SG, issue 90 of 2021 (the Methodology). The main reasons that necessitated the adoption of the MAS of the Methodology were the amendments to the aforementioned regulatory acts, since according to Art.4 of the Methodology, imbalance prices were a pricing element of the electricity prices of the supplier of last resort (SLR). Next, the change of the settlement interval from 1 hour to 15 minutes and the introduction of a single price for energy shortage and surplus led to the inapplicability of the definition of the element "balancing market shortage price" from the formula under Art.4 of the Methodology, promulg, SG, issue 60 of 2021, amended in SG, issue 90 of 2021, since according to that version "balancing market shortage price" is a price for shortage on the balancing market for the relevant hour, in BGN/MWh. Given Art.6 and Art.7 of the Methodology for determining prices of balancing electricity, prices for surplus and shortage may be negative or zero, which would result in the calculated selling price being lower than the purchase price of electricity on an organized exchange market. The same risk arises in cases where the price of balancing energy is lower than the price of electricity in the day-ahead market segment.

In view of the above, the MAS of the Methodology aims to bring the mechanism for determining the price of SLR into line with the new regulatory framework regulating the organization and operation of the balancing market, as well as with the current price levels on the day-ahead market and those for energy surplus and shortage. The MAS of the Methodology largely retains the current mechanism for determining the SLR price, but at the same time takes into account the changes that have occurred, especially in terms of the balancing market operation. The latter ensures that, on one hand, prices paid by customers will be significantly higher than the market prices, i.e. customers will have no incentive to stay with this supplier, and on the other hand - prevents unreasonably high supply prices, while ensuring an acceptable return for the supplier.

Ordinance amending and supplementing Ordinance No. 2 of 19.03.2013 on regulating natural gas prices, published in State Gazette, issue 100 of 26.11.2024, in force as of 26.11.2024 (OAS of ORNGP)

In 2024, the Regulator initiated a procedure to amend and supplement Ordinance No. 2 of 19.03.2013 on regulating natural gas prices, SG, issue 33 of 05.04.2013 (ORNGP), taking into account proposals received from companies in the natural gas sector. As a main problem that should be regulated in the ordinance, the companies have indicated the arising costs for balancing the network users, respectively the need for rules on its payment by the persons who caused them. The amendments and supplements to the ORNGP were also necessary due to the need to fill a regulatory gap as a result of the repealed provisions of ORNGP by the Supreme Administrative Court, as well as to refine the norms of the ordinance with a view to its precise and clear enforcement.

In view of the above, OAS of ORNGP regulates rules regarding the recognition and reimbursement of costs arising from public service obligations imposed on energy enterprises. The issue of the balancing costs payment by the persons who caused them has also been regulated. Such unreimbursed costs are incurred by the end natural gas suppliers as a result of the uneven consumption of household customers on the regulated market. To that end, Art.19 of ORNGP has been amended, specifying the method for including balancing costs in the price of the end natural gas supplier. Such a possibility has also been regulated in the event of changes in the natural gas sale prices by an end supplier in accordance with a change in the price of the public supplier. Art.13, para.5 of ORNGP has also been clarified in order to clearly determine the value of the sectoral unleveraged coefficient β when calculating the rate of return on equity of energy enterprises. OAS of ORNGP also amended Art.17 in order to achieve compliance with the amendments to the EA, stipulating that the public supplier sale price shall be approved monthly, as well as eliminating the public supplier's obligation to sell natural gas quantities on the organized exchange market under a release programme. The rule for determining the average exchange rate has been specified as well. OAS of ORNGP has also created a new item 3 in Art.25, para.2 of ORNGP, regulating the possibility of making an annual adjustment of prices by the difference between the estimated investment costs recognized in the approved prices and the reported investments made when regulating through the price regulation methods "price cap" and "revenue cap". In this way, compliance with the principles of Art.23 and Art.31 of EA has been ensured in the context of price regulation based on methods through the provision of incentives.

Ordinance amending and supplementing Ordinance No. 7 of 19 July 2017 on the issuance, transfer and cancellation of certificates of origin for electricity generated from high-efficient combined heat and power generation, published in State Gazette, issue 102 of 03.12.2024, in force as of 01.01.2025 (OAS of Ordinance No. 7)

By Decree of the Council of Ministers No. 232 of 20.11.2023, a schedule (Annex No. 1) was adopted for bringing the registers of administrative bodies into compliance with the Electronic Governance Act through the use of the Information system for centralized creation and maintenance of registers (ISCCMR). In this regard, the Minister of Electronic Governance has informed the Regulator that Annex No. 1 to the Decree of the Council of Ministers No. 232 of 20.11.2023, the following registers maintained by EWRC have been foreseen to be created through the means of ISCCMR: public register of issued licenses; public register of permits issued by EWRC; public register of decisions issued by EWRC under Art.21, para.1, items 1, 4, 5, 9, 10, 15, 18, 25 and 26 of the Energy Act; register of contracts for the assignment of water and sanitation services, as well as a public register of certificates of origin of electricity generated from high-efficient combined heat and power generation. Specifically, with regard to the public register of certificates of origin of electricity generated from high-efficient combined heat and power generation, the letter stated that it could not be created through ISCCMR, as it was found out that its regulatory framework did not meet the requirements of Art.52b, para.1, item 1, b (b) of the Electronic Government Act (EGA), since Chapter Three of Ordinance No. 7 of July 19, 2017 lacked an exhaustive list of the circumstances, acts and facts that were to be entered in the register.

In view of the above, in November 2024, EWRC opened a procedure for amending Ordinance No. 7, in order to bring it into line with Art.52b, para.1, item 1, b(b) of EGA by exhaustively listing the circumstances, acts and facts that are subject to entry in the register. In order to apply more accurately and clearly some of the provisions of Ordinance No. 7, the relevant amendments and supplements have been made with OAS of Ordinance No. 7. Thus, in Art.4, para.1 the deadline for submitting an application for issuing a certificate of origin has been changed from 14 days to 10 days. This amendment is in connection with the new Art.36 (i), para.4 of EA adopted in 2018 (SG, issue 38 of 2018), which provides that the Electricity System Security Fund (ESSF) pays the premium under Art.33a of EA by the end of the month in which a supporting document for expenses has been submitted and monthly certificates of origin have been transferred to it. In order to ensure that generators of electricity from high-efficient cogeneration receive payments for the premium under Art. 33a of EA at the earliest possible moment, they should submit the application for issuing a certificate by the tenth of the month, so that the relevant certificates can be issued and transferred to ESSF before the deadline under Art.36i, para.4 of EA.

The adoption of OAS of Ordinance No. 7 aims to detail and refine the data contained in the register of certificates of origin of electricity generated from high-efficient combined heat and power generation, maintained by the Regulator, as well as to adapt its regulations to the requirements for keeping the register in electronic form. This will allow the register to be built using the ISCCMR. It is also aimed at refining and synchronizing the provisions of the ordinance with the latest amendments and supplements to EA and the Electricity Trading Rules.

In the period 01.01.2024 - 31.12.2024 there were no changes in the secondary legislation, methodologies and rules relating to the activities of the Directorate "Monitoring and Control of the Implementation of Regulation (EU) No. 1227/2011 of the European Parliament and of the Council of 25 October 2011 on wholesale energy market integrity and transparency".

#### Renewable energy sources

In 2024, the Regulator set feed-in tariffs for the purchase of electricity generated from renewable energy sources for energy facilities under Art.6, para.1, item 1 of ERSA, namely, with a total installed capacity of up to and including 30 kW, which are planned to be built on roof and facade structures of buildings connected to the electricity distribution network and on real estate properties attached to them in urbanized areas.

Next, in 2024 EWRC updated the feed-in tariffs of electricity generated from biomass with a coefficient that reflects the change in the value of the price-forming elements - raw materials costs for energy production, fuels costs for transport and costs of labour and wages.

Pursuant to §28, para.3 of the transitional and final provisions to the EA (published SG, issue 9 of 2021), EWRC determined premiums that represent the difference between the feed-in tariff determined until the entry into force of the same act, respectively, the updated feed-in tariff of the site, and the estimated market price determined for that period for electricity generated from renewable sources depending on the primary energy source for electricity generated by power plants with total installed capacity of 500 kW and over 500 kW.

In 2024 EWRC again reported increased investment interest in the implementation of large-scale projects for the construction of solar power plants, including battery storage, as the majority of industrial consumers prefer to invest in facilities of that type, on one hand to reduce their costs by covering their own sites and/or plants electricity needs, or to realize it on one of IBEX EAD platforms, and on the other hand, that enables investors to return their investment funds in a shorter period of time, which makes projects of such a type even more attractive.

## Electronic certificates of origin for electricity generated in a highly efficient combined heat and power (CHP) manner

On the basis of Art.21, para.1, item 18 of EA, the Regulator issues, transfers and cancels monthly certificates of origin to electricity generators of electricity generated from high-efficient

combined generation (HECG) of electricity and heat. The secondary legislation acts regulate the method of determining the amount of electricity generated from cogeneration depending on the type of technological cycle, the technical requirements of the measuring and registering means of the cogeneration power and the criteria for determining cogeneration as highly efficient.

The certificate of origin is an electronic document that is issued for 1 MWh of electricity to a generator for the net electricity generation, measured at the output of the power plant and fed to the relevant electricity grid, subject to compliance with the requirements of accuracy, reliability and impossibility of forgery pursuant to Art.163b, para.1 of EA.

For each unit of CHP electricity, only one certificate of origin can be issued, which is valid for 12 months as of the respective electricity unit and is used by the generator to prove to the buyer of that energy that it was generated from high-efficient cogeneration.

In 2024, amendments to EA regarding the purchase of CHP electricity from combined heat and power plants entered into force on 02.02.2021 (amended and supplemented by SG, issue 9 of 02.02.2021), which are divided into two groups: with installed electric capacity of less than 500 kW and with installed capacity of 500 kW and over 500 kW.

End suppliers must purchase the entire HECG electricity quantity of the first group of power plants that are connected to them, and EWRC issues the corresponding number (pursuant to Art. 163b, para.1 of the Energy Act) of electronic certificates of origin for that quantity. These certificates are transferred to the buyer (end suppliers) pursuant to Art.163b, para.5 in connection with Art.162 of EA. The second group of power plants shall be compensated with a premium from the Electricity System Security Fund (ESSF) for the entire HECG electricity for which electronic certificates of origin have been issued (pursuant to Art.163b, para.1 of EA). These certificates shall be transferred by the generators to ESSF in accordance with Art.163b, para.6 in connection with Art.162a of EA.

In implementation of Art.21, para.1, item 18 of EA, in 2024 the Regulator adopted 12 decisions regarding the issuance and transfer of electronic certificates of origin for the goods electricity.

Main priorities in the **gas sector** in the reported year were guaranteeing security of supply, increasing the stability and sustainable development of the gas market, competitive prices, ensuring liquid and competitive natural gas market and connecting the Bulgarian natural gas market with EU member states gas markets in the region and in Europe in order to realize the implementation of the European energy policy of building a single interconnected pan-European natural gas market. The Bulgarian gas market liberalization and competitiveness depend on diversification of supply sources and the development of the gas transportation infrastructure.

Regulator's activity in the natural gas sector in 2024 aimed at creating prerequisites for achieving a liquid and competitive natural gas market and connecting the Bulgarian market with the natural gas markets of EU member-states in the region and in Europe. In the past year, EWRC licensed 28 natural gas traders, and their total number reached 136. With an increase in the number of market participants, the liquidity and competition in the natural gas market increased as well.

The steps taken by the Regulator in 2024 encouraged competition in the market, as well as the development of the liberalization processes in the sector.

Trading on an organized natural gas exchange market in 2024 was carried out successfully, and the number of registered participants also continued to increase.

#### 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 shall monitor the investment plans of the transmission system operators and provides 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 19.09.2024, the Plan for development of the transmission electricity network of Bulgaria for the period 2024 - 2033 was approved. The 2024-2033 ten-year development 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.

The annual estimated values of all costs for construction, expansion, reconstruction and modernization of the electricity transmission network objects and of the EPS protection and management systems for the 2024 - 2033 Ten-year plan, amount to 1 837 790 thousand BGN. For the period 2024-2026 ESO EAD intends to make investments at the amount of BGN 571 489 thousand or 31% of the total investment amount.

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 2024-2033 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.

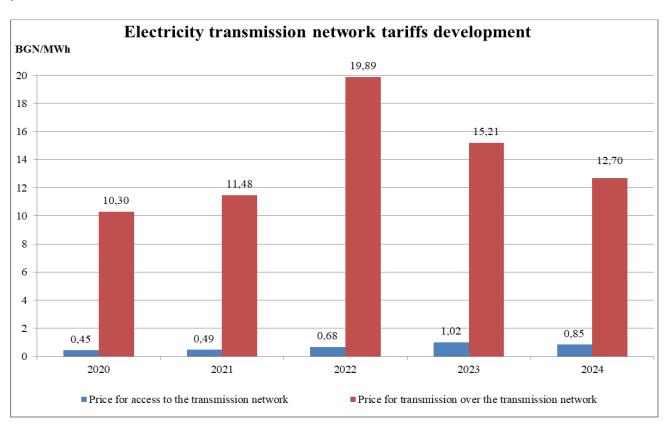
In the pricing decisions during the said period, the Regulator consistently applied a balanced approach taking into account the interests of all participants, in order to avoid sharp price changes.

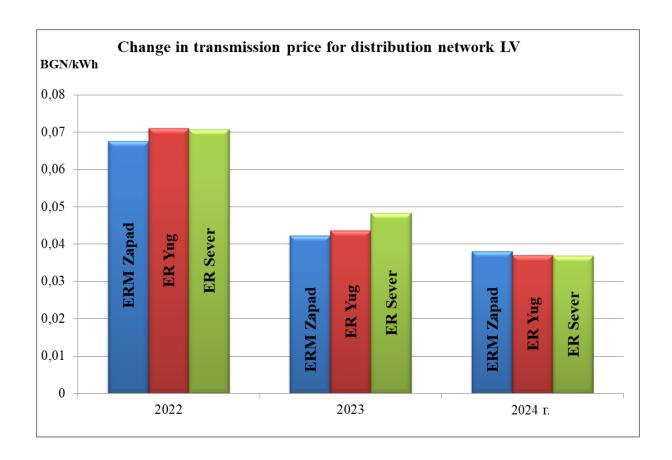
The network tariffs development for the period 2020 - 2024 is presented in the table below:

			2020	2021	2022	2023	2024
	Access price to the transmission network	BGN/MWh	0.45	0.49	0.68	1.02	0.85
	Transmission price through the transmission network	BGN/MWh	10.30	11.48	19.89	15.21	12.70
ESO EAD	Access price to the transmission network for PvPP and WPP	BGN/MWh	5.28	5.40	5.26	4.86	6.15
	Access price to the transmission network for power generators, excluding PvPP and WPP generators	BGN/MWh	2.26	2.42	2.30	2.43	4.66
	Transmission price through the distribution network MV	BGN/kWh	0.00980	0.01076	0.01653	0.01065	0.01173
ERM Zapad	Transmission price through the distribution network LV	BGN/kWh	0.03355	0.03636	0.06759	0.04232	0.03803
EAD	Access price of non- household customers	BGN/kWh/ day	0.01989	0.02151	0.02151	0.02683	0.02741
	Access price of household customers	BGN/kWh	0.00568	0.00605	0.00648	0.00754	0.0077
	Transmission price through the distribution network MV	BGN/kWh	0.00915	0.00994	0.01643	0.0108	0.01149
EP Yug AD	Transmission price through the distribution network LV	BGN/kWh	0.03574	0.03783	0.07105	0.04366	0.3704
	Access price of non- household customers	BGN/kWh/ day	0.01977	0.0206	0.02256	0.02617	0.02672
	Access price of household customers	BGN/kWh	0.00529	0.00598	0.00598	0.00803	0.00819
ERP Sever EAD	Transmission price through the distribution network MV	BGN/kWh	0.01285	0.01312	0.02648	0.02108	0.01279

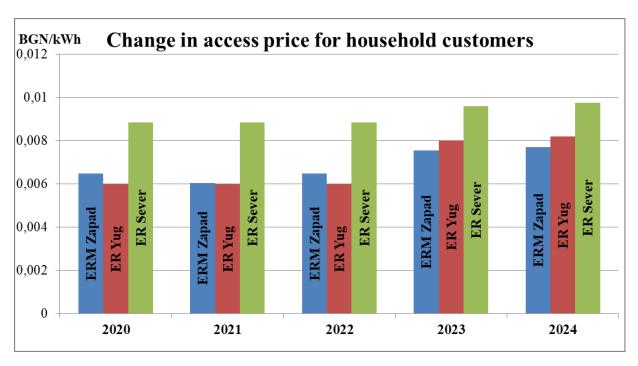
	Transmission price through the distribution network LV	BGN/kWh	0.03531	0.03583	0.07073	0.04825	0.03689
	Access price of non- household customers	BGN/kWh	0.02053	0.02073	0.02311	0.0309	0.02898
	Access price of household customers	BGN/kWh	0.00890	0.00885	0.00885	0.00959	0.00977
	Transmission price through the distribution network LV	BGN/kWh	0.04429	0.06035	0.0453	0.04341	0.03742
ERP Zlatni Piasaci AD	Access price of non- household customers	BGN/kWh	0.01349	0.01325	0.00828	1.02	0.02049
	Access price of household customers	BGN/kWh	0.01349	0.01325	0.00828	15.21	0.00927

The graph below shows the change in transmission and access prices for the last five years.





The graph below shows the movement of the access price for household customers over the last five years.



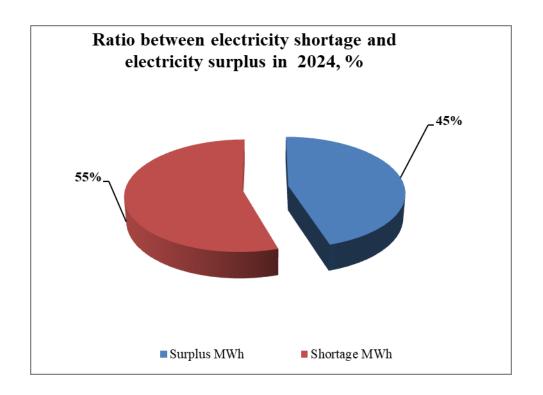
#### 3.1.4. Security and reliability regulation

Auction rules on conditions for access to the network for cross-border exchange of electricity (Rules on transmission capacity allocation) and regional cooperation between transmission system operators have been 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 Bulgarian EPS and neighbouring power systems. The rules have also been 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. Auction rules, users' registers and agreed transmission capacities to be allocated are published on ESO EAD website. The results of the annual, monthly and daily auctions organized by ESO EAD are publicly available on ESO EAD website and in the public section of the electricity market administration system. According to the above rules, ESO EAD performs the role of an auction operator for allocation of 50% of the agreed transfer capacities on the Bulgarian-Turkish border in both directions, as well as the daily transmission 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 to allocate the daily transmission capacities on the Bulgarian-Romanian border, and MEPSO (North Macedonia) - 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.

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

Total energy shortage in 2024 was 1 410 347 MWh compared to 1 646 095 MWh in 2023, which was a decrease of 14.3%. Total energy surplus in 2024 was 1 162 795 MWh compared to 1 194 351 MWh in 2023, which is a decrease by 2.6%. Percentages of electricity shortage and electricity surplus in 2024 are shown in the figure below.



The Rules amending and supplementing the EMR, prom.SG, 76 of 2022, as of 1 Oct 2022 a 15-minutes settlement period has been introduced on the electricity balancing market in compliance with the requirements of Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing and Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity. This amendment leads to a fourfold increase in the number of settlement periods, respectively it can have a significant impact on the way and accuracy of forecasting the purchase/sale electricity quantities. At present, the lack of sufficient real data on the application of the 15-minute settlement interval does not allow an analysis of the achieved price levels for surplus and shortage. To that end, until accumulating a sufficient volume of real data on the reported amounts of imbalances of the balancing groups and the achieved price levels, it is not possible to justify the need to change the approach that EWRC has used in determining the currently applied marginal contract price of transactions on the balancing energy market.

With Decision No. LL-37 of 29.12.2023, in force as of 01.01.2024, determined as follows:

- 1. As of 01.01.2024 until the date on which the independent transmission operator has effectively joined all European balancing platforms according to Commission Regulation (EU) 2017/2195 of 23 November 2017, a marginal price for concluding transactions on the balancing energy market for upward regulation at the amount of "DAM price + BGN 100, but not lower than BGN 360/MWh", where DAM price is equal to the IBEX EAD hour DAM price;
- 2. As of 01.01.2024 until 30.06.2024, but no later than the date, on which the independent transmission operator has effectively joined all European balancing platforms according to Commission Regulation (EU) 2017/2195 of 23 November 2017, a marginal price for concluding transactions on the balancing energy market for downward regulation in an auction for the procurement of a reserve with a volume of up to 200 MW and including at the amount of 30% of DAM price, where DAM price is the IBEX EAD hour DAM price, but not higher than the regulated price of HPP owned by National Electric Company EAD;
- 3. As of 01.07.2024 until the date, on which the independent transmission operator has effectively joined all European balancing platforms according to Commission Regulation (EU) 2017/2195 of 23 November 2017, a marginal price for concluding transactions on the balancing energy market for downward regulation in an auction for the procurement of a reserve with a volume

of up to 200 MW and including at the amount of 30% of DAM price, where DAM price is the IBEX EAD hour DAM price;

- 4. As of 01.01.2024 until the entry into force date of the amended methodology under Art.105, para.13 of EMR, but no later than the date, on which the independent transmission operator has effectively joined all European balancing platforms according to Commission Regulation (EU) 2017/2195 of 23 November 2017, a marginal price for concluding transactions on the balancing energy market for downward regulation in an auction for the procurement of a reserve with a volume of up to 200 MW and including at the amount of 30% of DAM price, where DAM price is the IBEX EAD hour DAM price, but not higher than the regulated price of HPP owned by National Electric Company EAD;
- 5. As of entry into force date of the amended methodology under Art.105, para.13 of EMR till the date, on which the independent transmission operator has effectively joined all European balancing platforms according to Commission Regulation (EU) 2017/2195 of 23 November 2017, a marginal price for concluding transactions on the balancing energy market for downward regulation in an auction for the procurement of a reserve with a volume of up to 200 MW at the amount of BGN 200/MWh;
- 6. Marginal prices determined by that decision do not apply when concluding transactions for balancing energy that is purchased/sold from/to neighbouring energy systems under bilateral agreements or from a regional balancing market.

According to Art.21, para.1, item 11 of EA, the Regulator adopts and controls the implementation of a methodology for determining the prices of balancing electricity as part of the Electricity market rules. By virtue of § 14, item 2 of the Transitional and Final Provisions (TFP) to the Act on Amendments and Supplements to the Act on the Safe Use of Nuclear Energy (AAS on SUNEA, SG, issue 27 of 2024), changes have been made to Art.21, para.1, item 11 of the EA, and the methodology for determining balancing electricity prices should not be part of the Electricity market rules, but is adopted as an independent EWRC act. According to § 16 of TFP of the same act, until the adoption of the methodology under Art.21, para.1, item 11 of the EA, the methodology that is part of the current Electricity market rules (SG, issue 66 of 2013, last amended and supplemented, SG, issue 50 of 2023) shall apply.

Next, § 14, item 1 of TFP of AAS on SUNEA repeals EWRC power under Art.21, para.1, item 8 of EA to determine annually a maximum price for concluding transactions on the balancing energy market, and according to § 15 of TFP of AAS on SUNEA, the marginal prices for concluding transactions on the balancing energy market for 2024 determined by EWRC shall apply until the adoption of the methodology under Art.21, para.1, item 11 of EA.

In view of the above, the Methodology was adopted on the basis of Art.21, para.1, item 11 of the Energy Act by decision of the Regulator under Protocol No. 108 of 22.04.2024, item 1 and entered into force on 1 May 2024.

#### 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.

Project on introducing 15-minute resolution products on the Day-ahead market segment

The project is being implemented simultaneously for all market areas, part of the European integrated market (SDAC), with planned start date being 11 June 2025. The transition to 15-minute products in SDAC is a significant achievement in the development of energy markets in Europe. After a re-evaluation of the project schedule by the NEMOs and TSOs, a date has been set for the introduction of the new products -11 June 2025, with a delivery date 12 June 2025. In order to ensure the continuity of the day-ahead market coupling and taking into account the proposals of trading participants, NEMOs and TSOs agreed to follow an approach with a shorter period (1 week) during which the previous configuration of the systems can be returned. The introduction of 15minute products to that market aims to increase the precision of trading operations to better integrate renewable energy sources in support of greater efficiency and flexibility in the market. By improving responsiveness to variable production and consumption, the new products will enable more accurate pricing and scheduling. Comprehensive testing is currently underway to ensure a smooth transition to this market-leading change. The market participant tests, in which the overall market coupling processes will be tested, are planned for early April 2025. Information on the local tests can be obtained from the relevant NEMOs and TSOs. Further information for market participants on the overall project schedule will be available in the relevant SDAC Information Materials sections of the ENTSO-E and NEMO Committee websites.

#### Realized commercial electricity exchange according to schedules of trade participants

EXCHANGES								
Realized commercial electricity exchange according to schedules of trade								
participants								
Border/Direction 2023								
	MWh	MWh						
Bulgaria - Romania	3 993 115	5 852 074						
Romania - Bulgaria	5 414 969	5 849 657						
Bulgaria - Serbia	1 866 188	1 825 562						
Serbia - Bulgaria	1 706 023	2 009 710						
Bulgaria – N Macedonia	2 540 360	2 189 876						
N Macedonia - Bulgaria	775 803	1 455 064						
Bulgaria - Greece	4 149 448	3 669 171						
Greece - Bulgaria	1 387 222	2 921 915						
Bulgaria - Türkiye	800 242	471 531						
Türkiye - Bulgaria	624 772	1 013 291						
Physical electricity exchange between I	Bulgarian EPS and EPS of neig	ghbouring						
coun	tries							
Border/I	Direction							
	2023	2024						
Import	MWh	MWh						
Physical border - total	4 414 018	5 921 469						
Including:								
- Romania	3 524 224	3 164 785						
- Serbia	259 975	544 393						
- North Macedonia	42 870	242 890						
- Türkiye	404 535	1 039 061						
- Greece	182 414	930 338						
Export								
Physical border - total	7 748 401	6 908 453						

	MWh	MWh
	2023	2024
Physical exchange wi	th distribution companies*	
- Greece	2 302 231	1 902 496
- Türkiye	1 289 354	539 528
- N Macedonia	1 592 886	996 703
- Serbia	1 295 368	1 151 420
- Romania	1 268 563	2 318 304
Including:		

Figure exchange with distribution companies						
	2023	2024				
	MWh	MWh				
ESO EAD and ERM Zapad AD	8 961 845	9 066 479				
ESO EAD and ERP Sever EAD	4 658 661	4 863 581				
ESO EAD and EP Yug AD	8 003 397	7 996 634				
ESO EAD and ERP Zlatni Piasaci AD	59 887	63 842				
ESO EAD and NRIC	307 158	304 118				
ESO EAD and OZRM BALKAN AD	-41 917	-114 461				

<sup>\*</sup>net volumes

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

In compliance with European regulations and with the aim of ensuring full transparency and publicity, in 2024 EWRC continued to fulfil its obligations under network codes and regulations. During the said period, activities were carried out on the adoption of methodologies and accompanying papers in implementation of the European regulations in order to ensure the smooth operation of the activities for the single market coupling and to ensure the required available cross-border transmission capacity.

Given the above, in 2024 EWRC approved the following documents:

- Proposal of the SEE CCR TSOs for a Methodology for calculating transmission capacity for the balancing timeframe, as per Art. 37 of Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing guidelines on electricity balancing;
- Proposal of the SEE CCR TSOs for amendment of the Methodology for coordinated redispatching and countertrading (RDCT) for the South-East Europe capacity calculation region (SEE CCR) according to Article 35 of the CACM Regulation;
- Request from IBEX EAD for approval of the Agreement between IBEX EAD and EnEx Clearing House S.A., Greece as central counterparties for the market coupling across the borders of Italy (IBWT) pursuant to Article 77 of Commission Regulation (EU) 2015/1222;
- Request from IBEX EAD for approval of an amended Electricity Supply Contract for Single Intraday Market Coupling, concluded on 14.11.2019 between the Romanian transmission operator Transelectrica S.A. and IBEX EAD pursuant to Art. 77 of Regulation (EU) 2015/1222;
- Proposal of the SEE CCR TSOs for amendment of the Methodology for the Coordination of Regional Operational Security (ROSC) for the South-East Europe (SEE) Capacity Calculation Region (CCR) in accordance with Article 76, paragraph 1 of Commission Regulation (EU) 2017/1485 of 2 August 2017.

#### 3.2. Competition and market functioning

#### 3.2.1 Wholesale markets

Data on electricity generated and installed capacities in the period 2023 - 2024 have been summarized by years in the table below:

Electricity generated by energy	Installed capacity in MW		Electricity a	Change in generated	
sources	2023	2024	2023	2024	power in %
1. NPP	1 893	1 893	15 342 941	14 959 004	-2.50%
2. TPP lignite coal	3 601	3 601	10 844 943	8 372 886	-22.79%
3. TPP black and brown coal	240	240	202 534	234 333	15.70%
4. TPP natural gas	482	504	1 347 727	1 282 001	-4.88%
5. HPP, incl.	2 867	2 867	2 339 993	2 273 115	-2.86%
5.1. PSHPP generation	1 386	1 386	420 668	501 708	19.26%
5.2. PSHPP pumps *	932	932	77 071	173 628	125.28%
6. RES, incl.:	1 502	2 096	2 423 130	3 164 633	30.60%
6.1. WPP	358	358	809 580	715 943	-11.57%
6.2. PvPP	1 120	1 713	1 558 739	2 448 173	57.06%
6.3. Biomass PP	25	25	54 810	518	-99.05%
7. Storage systems		28			
7.1. Storage systems intake		28			
7.2. Storage systems output		28		6 544	
Total: 1+2+3+4+5+6	10 584	11 200	32 501 269	30 285 973	-6.82%

Data used for the installed capacities connected to the transmission network and the generated net electricity in 2023 and 2024 has been provided by ESO EAD. Regarding installed capacities, a sharp increase in photovoltaic power plants has been reported, with 1 713 MW for 2024 compared to 2023 when they were 1 120 MW. The total electricity generated by producers connected to the transmission network for 2024 was 30 285 973 MWh and was by 6.8% less than the net electricity produced in 2023, which was 32 501 269 MWh.

When analysing the differences between the generated electricity quantities of the plants connected to the electricity transmission network in 2024, in comparison to 2023, the following trends can be observed: a significant decrease in the generation from TPP lignite coal (by 46% in 2023 and by 22.8% in 2024), an insignificant decrease in NPP (2.5%) and in HPP (3%). A massive increase in the electricity generation from photovoltaic plants has been observed by 57%.

The following table presents the installed capacity in MW, connected to the electricity distribution networks and the energy produced in 2024 in MWh.

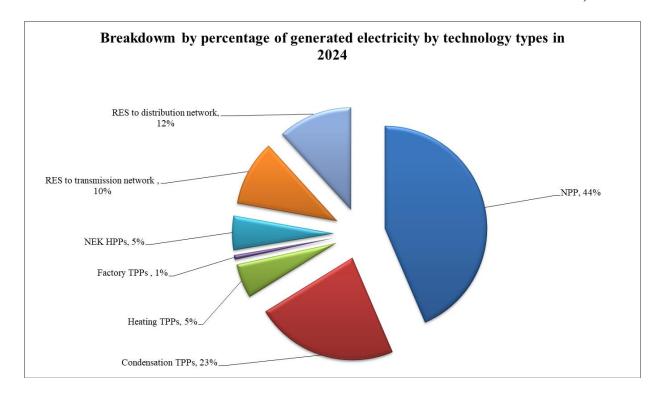
	ERM Zapad EAD		EP Yı	ıg AD	ERP Sev	ver EAD		ni Piasaci D	То	tal
	Installed capacities	Gen. electricity								
Coal	37.20	4 071	0.00	0.00	0.00	0.00	0.00	0.00	37	4 071

Natural gas	0.00	155 477	21.86	42 562	225.68	112 888	0.00	0.00	248	310 927
HPP	221.89	470 219	95.79	143 401	14.58	15 977	0.00	0.00	332	629 597
WPP	18.57	23 989	49.50	51 298	280.35	585 860	0.00	0.00	348	661 147
PvPP	810.58	854 644	1261.08	1 315 583	444.64	425 235	0.20	528.43	2 517	2 595 990
Other	13.65	48 328	28.62	96 157	5.91	18 396	0.00	0.00	48	162 881
Total	1 102	1 556 728	1 457	1 649 001	971	1 158 356	0	528	3 530	4 364 613

From the data presented, it is clear that the largest amount of installed capacities (1 457 MW) for electricity generation were connected to the distribution network of EP Yug AD, respectively, the biggest amount of electricity produced was there (1 649 001 MWh). Total generation capacities connected to the electricity distribution networks were 3 530 MW and the energy produced 4 364 613 MWh. In 2024 installed capacities connected to the electricity distribution companies increased by 29% with the largest increase in PvPP, namely by 47%. An increase of 17% was also noted in the PvPP electricity generation.

The total installed capacity connected to the electricity transmission and distribution networks in 2024 was 14 445 MW, or 11% more than in 2023, and the amount generated was 4% less in 2024 than in 2023. That was mainly due to the decline in electricity production by ContourGlobal Maritsa East 3 AD due to the expiration of the long-term PPA of the plant. Despite the increased production of electricity from PvPPs in 2024, they cannot compensate the shutdown or reduction in the volumes generated by TPPs, given the specifics of their technology and their dependence on sunlight.

The graph below shows the percentage allocation of electricity generated in 2024 by technology type. Total electricity generated by producers connected to the transmission and distribution networks in the Republic of Bulgaria in 2024 was 34 335 588 MWh, allocated depending on the primary energy source and the production technology used. The largest share in the generated electricity was that of NPP with 14 959 004 MWh or 44%, condensation TPPs with 7 771 664 MWh or 23%, followed by RES with 7 626 198 MWh or about 22% (respectively RES allocated to the transmission network - 10% and RES to the distribution network - 12%).



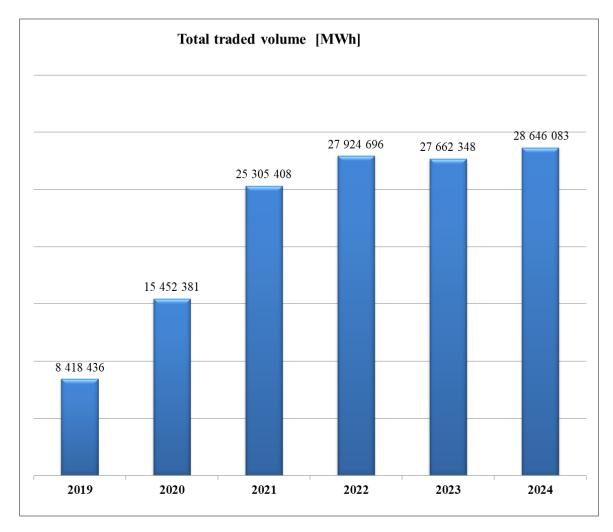
## Monitoring the level of prices, the level of transparency, the level and effectiveness of market opening and competition

In connection with the obligation under Art.59, par.1(n) of Directive (EU) 2019/944, EWRC monitors the level of transparency, including wholesale prices, and ensures that electricity companies fulfil transparency obligations. In this regard, an analysis of the wholesale trade in electricity has been made.

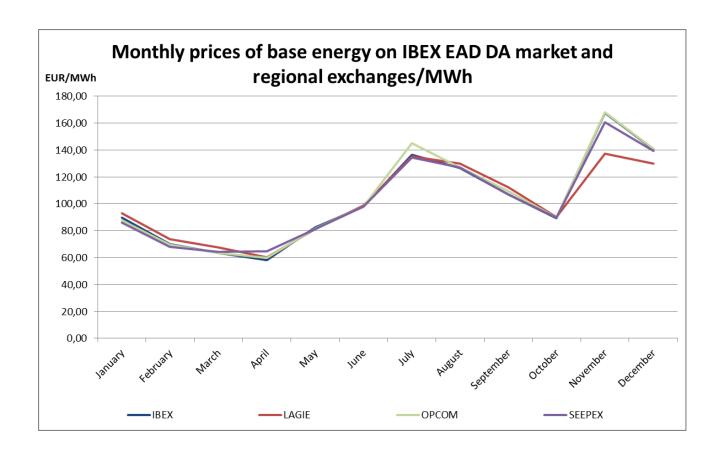
The main wholesale trade is carried out through the three segments of the Independent Bulgarian Energy Exchange EAD (IBEX EAD), namely day-ahead market, intraday market, centralized bilateral contracts market and since 14 June 2024 intraday auctions have been introduced.

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

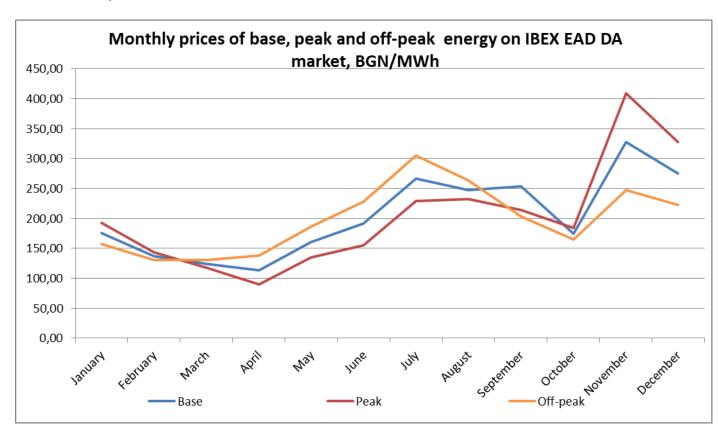
In 2024 day-ahead market base energy traded volumes had no significant change compared to 2023. Data for the last eight years can be seen below.



A comparative graph of prices and traded volumes on IBEX EAD day-ahead market and on regional exchanges is presented in the following figure. The analysis includes average monthly prices for baseload EUR/MWh of traded volumes on the day-ahead market in 2024 on the following regional exchanges: IBEX (Bulgaria), LAGIE (Greece), OPCOM (Romania) and SEEPEX (Serbia).

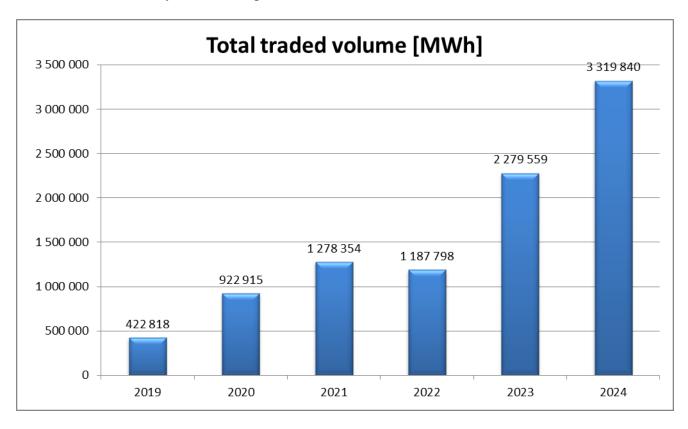


The next graph shows the levels of monthly prices of base, peak and off-peak energy on IBEX EAD day-ahead market, in BGN/MWh.



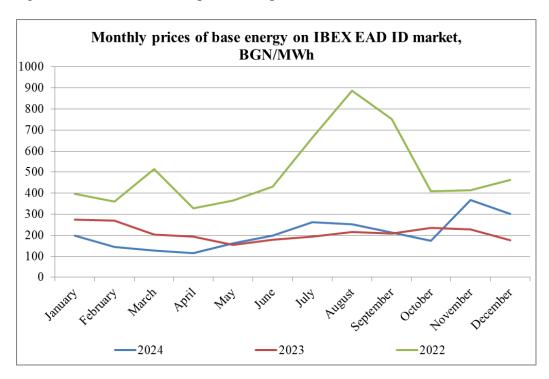
#### **Intraday Market**

In 2024 the intraday market total traded volume was 3 319 840 MWh and it marks a considerable increase by 46% in comparison to 2 279 559 MWh in 2023. Data can be seen below:

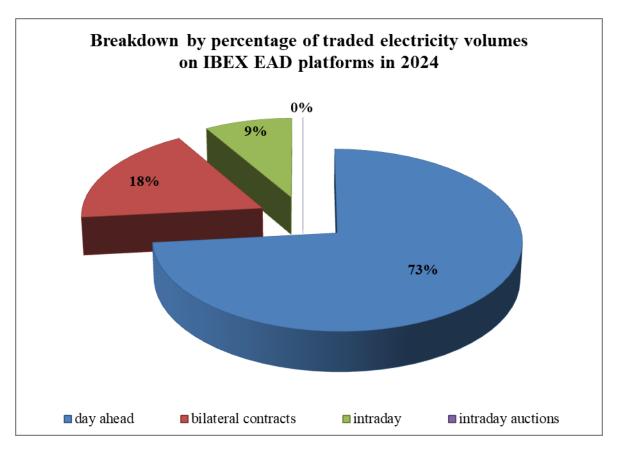


The graph below shows the average weighted monthly prices of electricity traded on IBEX EAD intraday market in the last three years.

In 2024 monthly prices of electricity in BGN/MWh traded on IBEX EAD intraday market no significant difference was reported compared to 2023.



Total electricity amount traded on the IBEX EAD platforms in 2024 was 39 053 GWh (8% more than in 2023): 28 646 GWh (73%) on the day-ahead market, 3 320 GWh (18%) on the intraday market and 7 082 GWh on bilateral contracts. Quantities percentage can be seen in the following figure:



Summary indicators that characterize the dynamics of the wholesale electricity market development for the period 2020-2024 are shown in the table below:

Wholesale electricity market indicators	2020	2021	2022	2023	2024
Total electricity generation, GWh	36 799	42 521	41 900	32 501	30 286
Total number of active electricity traders	38	40	65	128	156
Total electricity consumption, excl. pumps, GWh	36 723	38 631	29 653	29 029	29 125
Import volume, GWh	3 707	1 857	1 469	4 414	5 921
Export volume, GWh	7 115	10 634	13 664	7 748	6 908

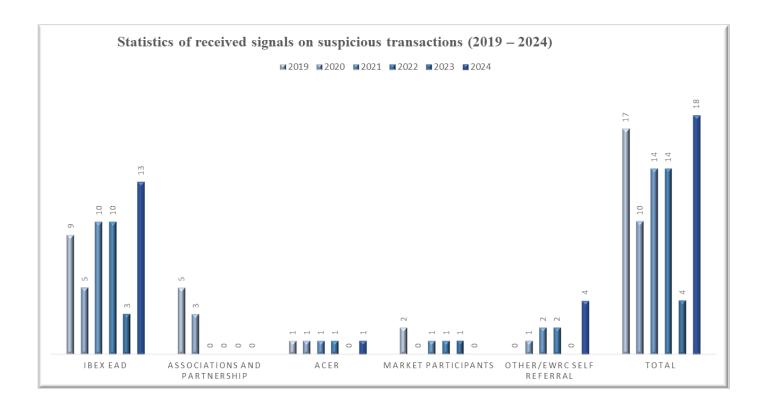
## Statistical data for the day during the year with the highest electricity consumption in the country

Day with highest electricity consumption in:	Electricity consumption (gross), GWh	Registered on
2016	148	Thursday, 21 Jan 2016
2017	164	Tuesday, 10 Jan 2017
2018	148	Tuesday, 27 Feb 2018
2019	150	Tuesday, 08 Jan 2019
2020	137	Tuesday, 21 Jan 2020
2021	143	Tuesday, 19 Jan 2021
2022	151	Wednesday, 26 Jan 2022
2023	150	Wednesday, 08 Feb 2023
2024	147	Tuesday, 23 Jan 2024

## Implementation of Regulation (EU) No. 1227/2011 of the European Parliament and of the Council of 25 October 2011 on wholesale energy market integrity and transparency

"Monitoring and Control of the Implementation of Regulation (EU) No. 1227/2011 of the European Parliament and of the Council of 25 October 2011 on wholesale energy market integrity and transparency" Division (REMIT Division) at EWRC is committed to the implementation of Regulation (EU) No. 1227/2011. Through the REMIT Division, EWRC continues ensuring equal access of market participants to the wholesale electricity power exchange markets, monitors the observance of transparency in trade and deters and sanctions market abuses within the meaning of Regulation (EU) No. 1227/2011. One of the main activities of the REMIT Division is finding violations of Art.3 and Art.5 of Regulation (EU) No. 1227/2011, pursuant to Chapter Seven "a" of the Energy Act.

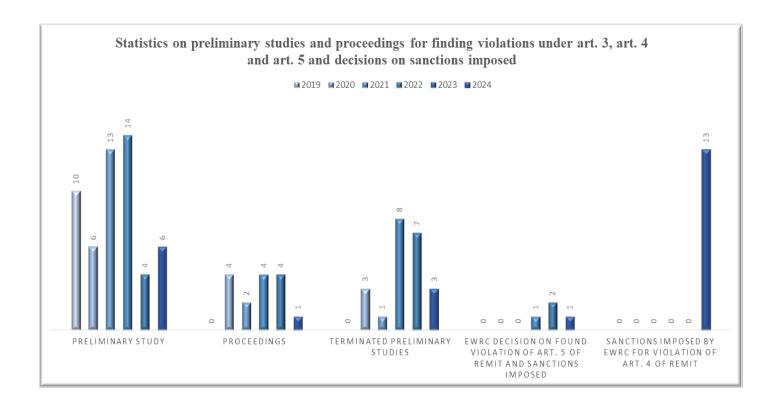
In 2024, in accordance with Art.15 of REMIT, the REMIT Division received 13 reports on suspicious transactions from Independent Bulgarian Energy Exchange EAD (IBEX EAD). In accordance to Art.16 of REMIT, 1 report was received from the Agency for the Cooperation of Energy Regulators and one statistical assessment of a potential violation of Art.5 of the Regulation. Over the past year, the Regulator has not received any signals from associations, unions, market participants and individuals. In the period 2019-2024, total number of 77 reports was filed at EWRC pursuant to Art.74a, para.1 of EA with suspicions of violation of Art.3 and/or Art.5 of REMIT Regulation.



In case of found initial data on market manipulation within the meaning of Art.3 and/or Art.5 of REMIT, the REMIT Division officials, by EWRC Chair's order, carry out a preliminary investigation on the presence of a justified assumption of a violation. After completion of the preliminary investigation, if sufficient evidence of a violation has been found, EWRC may, by decision, initiate proceedings to establish a violation under Art.3 and/or Art.5 of Regulation (EU) No. 1227/2011. These investigations are carried out in partnership with ACER, in accordance with Art.16 of the Regulation. For each individual case, EWRC shall regularly exchange information on the development of cases with ACER. This exchange follows strict rules to ensure complete confidentiality and prevent leakage of information on ongoing cases outside REMIT Division staff.

In view of the stated requirements for guaranteeing complete confidentiality in the investigation of ongoing cases, EA provides for EWRC decision and minutes of sittings related to the preliminary investigation and the establishment of a violation under Art.3 and/or Art.5 of Regulation (EU) No. 1227/2011, not to be published on EWRC website. Based on the above, EWRC cannot provide specific information on the progress and outcome of ongoing investigations, as it would be in violation of the requirements of ACER and Art.74a, para 8 of EA.

Based on all received reports of suspicious transactions and signals, a total of 53 cases of preliminary investigation were formed in the REMIT Division pursuant to Art.74a of EA for the period 2019-2024, all relating to the wholesale electricity market. The formed preliminary investigations were less than the number of received reports and signals for the same period, because several signals were received for one and the same suspicious transactions. For the purpose of procedural economy and to achieve a complete clarification of the investigated cases, these signals have been incorporated into one preliminary investigation. The purpose of the preliminary investigation is to establish whether there is sufficient data in the report, on the basis of which a reasonable assumption can be made that a violation of Art.3 and/or 5 of Regulation (EU) No. 1227/2011 is in place. When EWRC considers that the suspicion of a violation is supported by the facts presented in the preliminary investigation report, it initiates proceedings by a decision under Art.74a, para.5 of EA to establish a violation of Art.3 and Art.5 of Regulation (EU) No. 1227/2011.



In 2024, EWRC conducted six preliminary investigations, initiated one proceeding to establish a violation of Art.3 and/or Art.5 of Regulation (EU) No. 1227/2011, and due to lack of data on committed violations, terminated three preliminary investigations.

In 2024, in accordance with Art.74 (n) of EA, EWRC took one decision establishing a violation of Art.3 of Regulation No. 1227/2011 (prohibition of inside information trading) and imposed property sanctions to one market participant – NPP Kozloduy EAD amounted BGN 604 064.

Pursuant to Art.74(n) of EA and Art.155(u), para.2 of Ordinance No.3 of 21.03.2013 on licensing the activities in the energy sector, REMIT Division officials have carried out preventive, current and subsequent control for compliance with the obligations under Articles 4, 8, 9 and 15 of Regulation (EU) No. 1227 /2011. For the results of the inspections, the officials prepare a report of findings according to Art.74 (n), para. 3 of EA, and for violations, prepare an act of administrative violation (AAV) according to Art.74 (n), para.4 of EA.

In 2024, the officials drew up 15 reports of findings and 13 acts of administrative violation.

AAV drawn to a market	Violation under Regulation	Number of the reports	Number of AAV
participant	(EU) No 1227/2011	of findings	
AES 3C MARITSA EAST I	Art. 4	3	2
EOOD			
CONTOURGLOBAL	Art. 4	2	1
MARITSA EAST 3 AD			
TPP – BOBOV DOL AD	Art. 4	8	8
ELECTRICITY SYSTEM	Art. 9	1	1
OPERATOR EAD			
ENERGY SUPPLY EOOD	Art. 9	1	1
Total:		15	13

Most of the acts issued are for establishment of administrative violation of the obligation

to comply with Art. 4 of Regulation (EU) No 1227/2011 for disclosure of inside information regarding unplanned unavailability of electricity generation facilities on a licensed by ACER inside information platform.

The violations under Art.9 of the Regulation, for which the officials drew up acts for establishment of administrative violation, are for changes in the market participants' registration according to Art.9, para. 1 of the Regulation and for failure to reflect changes in the platform of the Centralized European Register of Energy Market Participants, and this constitutes lack of immediate notification to the national regulator, which is violation of paragraph 5 of the same article.

Regarding Art.15 of Regulation (EU) No 1227/2011 – obligations of the persons conducting wholesale energy transactions by occupation, the officials carried out inspections of companies that have the obligation to monitor the wholesale market and in case of finding suspicious behaviour of market participants, to provide EWRC with detailed reports on suspicious transactions.

At the beginning of February 2024, Electricity System Operator EAD (ESO EAD) fulfilled the instructions of the officials from the previous year (issued in a Report of findings No R-1 of 20.06.2023), establishing working rules and plan of the established in 2023 by prescription of EWRC operationally independent unit "Market Surveillance Committee" at ESO EAD. Employees in the "Market Surveillance" unit of IBEX EAD and EWRC's REMIT Division officials took part in the operational meeting where changes in the Regulation (EU) No 1227/2011 were discussed, as well as the quality improvement of the reports of alleged violations that IBEX EAD prepares for the national regulator.

Market participants that carry out transactions with wholesale energy products, for which there is a requirement to be reported to ACER in accordance with Art. 9(1) of REMIT shall be registered with the national regulatory authority. In this regard, in 2024 EWRC registered 20 new market participants for trading in wholesale energy products (electricity) and updated the data of 144 registered market participants. The total number of market participants trading wholesale electricity by the end of 2024 and registered by EWRC in CEREMP was 242.

In 2024, the use of algorithmic trading by market participants increased. This has led to an increase in the volume of primary data required for processing to identify and report market manipulation. Given the dynamics of the energy markets and the update of the ACER criteria for establishing market manipulation, it is necessary to upgrade and modernize the software products that the REMIT Division uses.

#### 3.2.2 Retail market

In the retail market, there are four electricity distribution network operators that are licensed to distribute electricity to customers connected to the distribution network at low and medium voltage level in the respective designated territories:

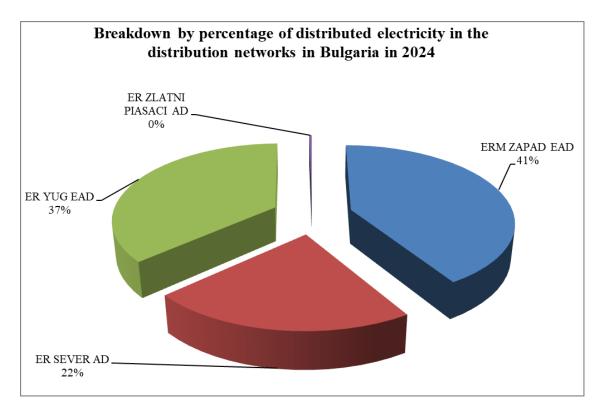
- ERM Zapad EAD operates on the territory of 10 districts in Western Bulgaria;
- Electrodistribution North AD operates on the territory of 9 districts in North Bulgaria;
- Elektrorazpredelenie Yug EAD operates on the territory of 9 districts in South Bulgaria;
- Elektrorazpredelenie Zlatni Piasaci AD has a limited geographical area of activity in Varna region.

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

- Free market supplier - a trader/producer/power 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 end selling prices are determined under EWRC methodology on electricity prices of a supplier of last resort;
- End supplier (ES) supplies low voltage electricity to sites of household and non-household end consumers connected to the low voltage electricity distribution network at regulated prices determined by EWRC.

Energy distribution companies' market shares, as electricity volumes, distributed through their own networks, are calculated on the basis of reported by them data for 2024 by ESO EAD. The largest share of electricity transmission is traditionally for ERM Zapad EAD with 41% or 9 066 479 MWh, the second one is Elektrorazpredelenie Yug EAD with 36% or 7 996 634 MWh and third is Electrodistribution North AD with 22% or 4 863 581 MWh. The graphic allocation is shown on the figure below:



From a demand perspective, the retail market consists of two segments: household customers and non-household customers. Total number of customers connected to distribution companies in 2024 was  $5\,340\,905$ , of which household  $-4\,760\,505$ . Total number of customers with an end supplier was  $4\,757\,979$ , and total number of customers in the free market, including with SLR, was  $582\,926$ .

#### Retail market development indicators

Rapidly falling costs of installations using renewable energy sources (RES), persistent increase in electricity prices, the need to reduce the energy and carbon intensity of the economy, etc. give impetus to the development of the decentralized market of photovoltaic installations for households and enterprises, i.e. household and commercial producer-consumers (prosumers) in Bulgaria. Prosumers are individuals or companies that use their own photovoltaic system to meet

part of their electricity needs, some of whom use photovoltaic systems solely to meet the needs of the site without the ability to feed excess electricity back into the grid (with entirely self-consumption), while others configure their systems with the ability to feed excess electricity back into the grid.

The following table shows data from electricity distribution companies for producer-consumers as of the end of 2024.

Consumers - producers (prosumers), number	3489
Including Household customers with installed photovoltaic power plant, number	564
Volume of energy generated by consumers who produce energy for their own needs, in GWh	205.4

#### **Household customers**

Consumption in the household customers market increased in 2024 compared to 2023 by 15.4%.

The number of household customers increased from 4 513 355 in 2019 to 4 760 505 in 2024.

Retail market indicators (households)	2019	2020	2021	2022	2023	2024
Electricity consumption, MWh	14 729 883	13 979 423	12 088 565	11 865 505	12 256 090	14 140 126
Total number of electricity household customers	4 513 355	4 544 739	4 586 448	4 664 328	4 719 330	4 760 505
Number of customers at regulated tariffs	4 511 737	4 541 659	4 581 982	4 660 949	4 717 006	4 757 979
Number of customers supplied by Supplier of last resort (SLR)	114	1 233	4 644	3 101	2 118	2 326
Number of working days between the bill payment notification and the interruption in cases of actual non-payment	3 to 41	3 to 40				

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

The average time for switching supplier was between 20 and 30 days for different electricity distribution companies. An increase in the number of active electricity suppliers has been reported.

Retail market indicators (non- households)	2018	2019	2020	2021	2022	2023	2024
Number of customers	611 588	624 910	629 863	631 433	578 845	575 702	582 926
Number of customers who switched their supplier	101 932	79 290	20 754	23 920	171 672	10 461	123 411
Active traders	46	45	40	40	65	128	156
Average time for switching supplier (days)	18	18	18	18	18	20	20

#### 3.2.3 Consumer protection and dispute settlement

The terms and conditions of complaints' filing and handling 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 within a 14-day period of their notification.

In 2024 the total number of electricity complaints filed in EWRC was 1 029; 972 of them were against licensed companies in the electricity sector and under the provisions of art.22, para.1 of EA, administrative proceedings have been started.

The largest number of complaints was against ERM Zapad EAD and Electrohold Sales EAD. Next were complaints against Electrodistribution North EAD and ENERGO-PRO Sales AD, followed by Elektrorazpredelenie Yug AD and EVN Bulgaria Elektrosnabdiavane EAD. No complaints were filed against Elektrorazpredelenie Zlatni Piasatsi AD and ESP Zlatni Piasatsi OOD. Complaints against enterprises licensed for electricity trade activities mainly concerned contractual relations between the parties.

In 2024, 10 complaints were filed against ESO EAD. One complaint against NEK EAD has been registered.

In 2024, EWRC received 614 complaints from household customers against licensed electricity sector enterprises.

EA, 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 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 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.

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

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 transmission and distribution networks.

Regarding the prices for access and transmission of natural gas through the transmission network, EWRC has approved the Methodology for determining prices for access and transmission of natural gas through the gas transmission networks, owned by Bulgartransgaz EAD. According to Art.18a, para.1 of the Methodology for each price period by 1<sup>st</sup> March, the operator shall submit to the Regulator a proposal for: entry and exit points/zones, for which access and transmission prices are set; access pricing coefficients for booking short-term capacity products based on the price of reference firm capacity; seasonal multipliers to determine the prices for the reservation of short-term capacity products; discount on the formation of access prices for booking interruptible capacity products; discount in determining access prices for entry/exit points to/from natural gas storage facilities; discount on the formation of access prices for entry points from liquefied natural gas (LNG) facilities and for entry points from and exit points to infrastructure designed to overcome the isolation of Member States with regard to their transmission systems. EWRC shall adopt a decision to approve the multipliers, seasonal factors and discounts after carrying out a consultation in accordance with Art. 28 of Commission Regulation (EU) 2017/460 of 16 March 2017 establishing a network code on harmonised transmission tariff structures for gas (Regulation (EU) 2017/460) -Art.18a, paragraph 2 of the Methodology. By Decision № M-1 of 09.05.2024 EWRC approved pricing elements for Bulgartransgaz EAD for the period 01.10.2024 - 30.09.2025. Pursuant to Art.21 of the Methodology, the tariff structure of prices for access and transmission of natural gas through the gas transmission system shall be determined by the operator. On the basis of the revenue requirements and pricing elements approved by EWRC Decisions № HΓΠ-1 of 2.10.2020 and № M-1 of 09.05.2024, Bulgartransgaz EAD has set prices for access and transmission through the gas transmission networks owned of Bulgartransgaz EAD for the gas year 01.10.2024 - 30.09.2025. Access and transmission prices have been published on Bulgartransgaz EAD website: https://www.bulgartransgaz.bg/files/useruploads/files/prozrachnost-tarifi/TAR%20Period%202024\_2025/Prices\_2024\_2025.pdf.

Prices for access and transmission through the IGB interconnector are determined according to the IGB Tariff Code approved by EWRC together with the Regulatory Authority for Energy, Waste and Water of the Republic of Greece.

Prices for natural gas access and transmission through the gas distribution network may include the following components: access price (capacity price) and transmission price (price for transported natural gas quantities) under the contract for transmission through the gas distribution network. The transmission price through the distribution network shall be formed on the basis of the approved annual revenue requirements for the approved estimated natural gas quantity for distribution. According to Art.44, para 4 of EA any persons whom have been granted natural gas distribution licenses shall not be granted licences for other activities, subject to licensing under EA, except licences for natural gas supply from an end supplier, if the customers connected to the gas distribution network in the respective area are less than 100 000. EWRC has also issued licenses for the activity "natural gas supply by end supplier" to the companies holding a license for the activity "natural gas distribution". Prices for natural gas supply by end suppliers to customers connected to the respective gas distribution networks shall be determined on the basis of costs for purchasing natural gas and approved estimated annual revenue requirements for natural gas supply. In exercising its regulatory powers with regard to price regulation, the Regulatory Authority is guided by the principles under Art.23 and Art.31 of EA. According to Art.3, para 2, item 2 of ONGPR, when applying the "price cap" method for gas distribution companies, the regulatory period lasts from 2 to 5 years. The gas distribution companies' price regulatory period allows for avoiding large price fluctuations over the years and ensures predictability for the end customers. Energy companies shall submit applications for price approval no later than three months before the expiry of the previous price period.

There is one underground gas storage facility in Bulgaria – Chiren UGS, built on the depleted gas condensate field site near the village of Chiren, Vratsa region. Bulgartransgaz EAD is the owner and operator of Chiren UGS and provides natural gas storage services based on license № Л-214-10 of 29.11.2006 for natural gas storage issued by EWRC. Chiren UGS is connected to Bulgartransgaz EAD gas transmission network. UGS main purpose is to cover seasonal irregularities in consumption and guarantee security of natural gas supply. Tariff structure for natural gas access and storage in the storage facilities is proposed by the operator according to Art.53 of the Guidelines on pricing natural gas access and storage in storage facilities, applying "rate of return on capital" regulation (published State Gazette, № 2 of 9 January 2015). By Decision № Ц-34 of 13.08.2020, EWRC has approved prices for natural gas access and storage in the storage facilities to Bulgartransgaz EAD.

#### 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 (Imbalance Methodology).

Natural Gas Market Balancing Rules set a balancing regime in accordance with Commission Regulation (EU) No. 312/2014 of 26 March 2014 establishing a Network Code on Gas Balancing of Transmission Networks (Regulation (EU) No. 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 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. Imbalance 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) No. 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, and prerequisites for disciplining them are established. 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

Transparency requirements concerning transmission system operators are set in Art.18 of Regulation (EC) No 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. Each transmission system operator shall make public the information on technical, contracted and available capacities in digital expression for all relevant important points including entry and exit points on a regular and rolling basis and in a user-friendly and standardised manner. According to Art.18, paragraph 4 of Regulation (EC) No 715/2009, the relevant points of a transmission system on which the information is to be made public shall be approved by the regulatory authority after consultation with network users. In this regard, by Decision № BT-1 of 14.11.2024 EWRC approved a Joint Decision of the Energy and Water Regulatory Commission and the Regulatory Authority for Energy, Waste and Water of the Republic of Greece (RAAEY) for the approval of the amended list of important points of ICGB AD gas transmission system, for which transparency guidelines shall apply and the data shall be published, as specified in paragraph 3 of Annex No I to Regulation (EC) No 715/2009. Thus, an entry-exit IP Komotini-DESFA/ICGB 21Z000000005398 was included in the List of important points of ICGB AD gas transmission system.

By Decision № P-BO-4 of 21.03.2024, EWRC approved an amendment of the Final Joint Decision of the Energy and Water Regulatory Commission and the Energy, Waste and Water Regulatory Authority of the Republic of Greece on the Exemption Application of ICGB AD (Joint Decision), an integral part of Decision № P-BO-2 of 08.08.2018 of EWRC, in its part under Article 4.2, item 3 and Article 4.3, item 9.

By Decision № ПДК-1 of 26.04.2024, EWRC adopted a Joint Decision of the Energy and Water Regulatory Commission and the Energy, Waste and Water Regulatory Authority of the Republic of Greece for approval of a Project for incremental capacity at the interconnection point of gas transmission network of National Natural Gas System Operator S.A. and the gas transmission network of ICGB AD – Komotini.

By Decision № ПДК-2 of 26.04.2024, EWRC adopted a Joint Decision of the Energy and Water Regulatory Commission and the Energy, Waste and Water Regulatory Authority of the Republic of Greece for approval of a Project for incremental capacity at the interconnection point of the gas transmission system of Bulgartransgaz EAD and the gas transmission system of ICGB AD - Stara Zagora.

By Decision № ПДК-3 of 26.04.2024, EWRC approved a project for incremental capacity at the interconnection point of the gas transmission system of Bulgartransgaz EAD and the gas transmission system of Transgaz S.A. - Negru Voda 1/Kardam.

By Decision № ПДК-4 of 26.04.2024, EWRC approved a project for incremental capacity at the interconnection point of the gas transmission system of Bulgartransgaz EAD and the gas transmission system of National Natural Gas System Operator S. A. - Kulata/Sidirakastro.

#### 4.1.4. Implementation of 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). Network users book capacity on the RBP platform 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 ENTSOG.

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 Bulgarian 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 of firm capacity products at RBP, as well as in case of differences between the technical and bundled capacities, these capacities shall be offered as unbundled capacity products (providing capacity at the respective interconnection point only in Bulgartransgaz EAD gas transmission network).

Pursuant to the provisions of Regulation (EU) 2017/459, ICGB AD has implemented and has been using electronic capacity booking platforms. ICGB AD network users have the opportunity to request capacity through auctions on PRISMA and RBP capacity booking platforms. Auctions for the interconnection points at Komotini with the transmission system operators TAP and DESFA have been performed on PRISMA. Auctions for the interconnection point at Stara Zagora with the Bulgarian TSO Bulgatransgaz EAD, as well as for the exit point at Kardzhali have been held on RBP. Available capacity is offered in accordance with the ENTSOG' auction calendar.

## • Balancing NC (BAL NC)

In compliance with Regulation (EU) 312/2014, gas TSO Bulgartransgaz EAD has admitted the Balkan Gas Hub EAD trading platform for natural gas trade as complying with Regulation requirements and criteria. EWRC has approved the Balkan Gas Hub EAD Trading Platform and has designated the company as a trading platform operator. 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 purposes. The trading platform offers short-term standardized products "within-day", "day ahead" and "weekend", as well as temporal and locational products for the gas transmission network balancing purposes. The long-term segment of the trading platform offers products on a medium and long-term basis - weekly, monthly, monthly balance, quarterly and yearly. In this segment, Balkan Gas Hub EAD also offers the following services: conclusion of screen-traded anonymous standardized contracts; administration of non-anonymous bilateral contracts traded on the platform through their registration in the Trayport "Transactions" module, as well as a brokerage service. Given its functionalities, the trading platform complies with the requirements of Regulation (EU) 312/2014 regarding the transaction notification content, continuous trading regime for shortterm 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. In 2024 the small adjustment to the natural gas balancing price was 8%.

For the purposes of balancing the natural gas market, the TSO introduced a Commercial Dispatching Platform (CDP). 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. Trade notifications are 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.

Pursuant to Regulation (EU) 312/2014, ICGB AD provides network users with access to a virtual trading point (VTP) for balancing trading portfolios. ICGB AD VTP is included as a separate segment of the Balkan Gas Hub EAD trading platform. ICGB AD also has implemented a Daily Imbalance Charge Calculation Methodology for IGB, approved by EWRC and the Greek regulatory authority.

## • 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 concluded interconnection agreements (IA) with the Greek gas TSO DESFA SA for the Kulata/Sidirokastron IP and with the Romanian gas TSO TRANSGAZ SA for the interconnection points Negru Voda 1/Kardam IP, Negru Voda 2,3/Kardam IP, Ruse/Giurgiu IP. Bulgartransgaz EAD has concluded interconnection agreements with the Turkish gas TSOs: with BOTAS for the Strandja/Malkochlar IP and with TAGTAS for the Strandja 2/Malkochlar IP; with the Serbian TSOs: with Gastrans d.o.o. for the Kireevo/Zajecar IP and with Transportgas Srbija d.o.o. for the Kalotina/Dimitrovgrad IP and with the gas transmission operator of North Macedonia GA-MA AD for the Kyustendil/Zhidilovo IP.

ICGB AD has concluded an Interconnection Agreements with the Trans-Adriatic Pipeline (TAP) TSO for the Komotini IP, with the Greek gas TSO DESFA SA for the Komotini IP and with Bulgartransgaz for the Stara Zagora IP.

#### • Tariff (TAR NC)

Regulation (EU) 2017/460 provides for the obligation to carry out consultations on the proposed reference price methodology. Pursuant to Art.6 (1) of Regulation (EU) 2017/460, the reference price methodology shall be set or approved by NRA as referred to in Art.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 Art.26 by TSO or NRA, as decided by NRA.

In connection with the above, EWRC adopted Decision № PTПГ-1 of 03.01.2025, pursuant to Art.6 (1), Art.26 (1) of Regulation (EU) 2017/460, according to which EWRC will conduct the

final consultation of the reference price methodology on the basis of a consultation document according to Art.26 and Art. 27 of Regulation (EU) 2017/460, as well as will publish before the start of the relevant tariff period of Bulgartransgaz EAD the information under Article 30 of the same Regulation.

With regard to multipliers, seasonal factors and discounts for each tariff period, pursuant to Art.28(2) of Regulation (EU) 2017/460, an obligation to carry out subsequent consultations with the national regulatory authorities of directly connected Member States and with relevant stakeholders is foreseen, and following such consultation the national regulatory authority shall take a motivated decision on the multipliers and seasonal factors levels and the calculations referred to in Art.15 of Regulation (EU) 2017/460 and the discounts values referred to in Art.9, paragraph 2 and Art.16 of Regulation (EU) 2017/460. In this regard, the TSO submitted a consultation document regarding the multipliers, seasonal factors and discounts that Bulgartransgaz EAD will apply for determining the transmission tariffs for the 2025/2026 gas year at RAAEY and EWRC for opinion. Following the consultation, EWRC by its decision, approved for Bulgartransgaz EAD multipliers, seasonal factors and discounts in setting access prices for short-term capacity products for the period 1 Oct 2025 – 30 Sep 2026.

## 4.2. Competition and market operation

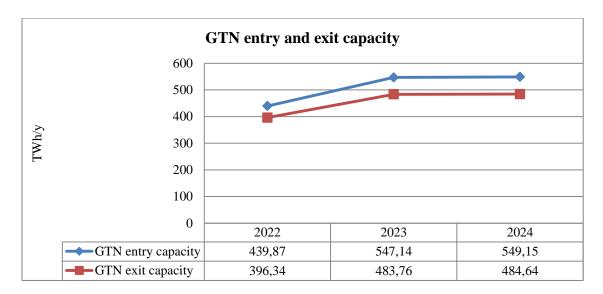
In 2024, key natural gas market participants in the country were:

- Bulgartransgaz EAD combined operator, performing gas transmission and gas storage activities;
  - ICGB AD Gas Interconnector Greece-Bulgaria (IGB) operator;
- Bulgargaz EAD public provider, ensuring gas supplies to end suppliers and to license holders for heat production and transmission at prices regulated by EWRC;
- Gas extraction companies carrying out natural gas extraction on the territory of the country;
- 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;
- Gas distribution companies performing activities "natural gas distribution" and "natural gas supply by end suppliers" and delivering natural gas to customers connected to the distribution networks in the respective licensed territories;
  - Non-household customers connected to the gas transmission network;
  - Non-household and household customers connected to the gas distribution network.

## **Bulgartransgaz EAD**

According to EA, the gas transmission network operator shall be obligated to make gas transmission network extension and reconstruction related to the connection of the gas distribution networks facilities, mining enterprises, natural gas storage facilities, LNG facilities and facilities for gas production from renewable sources, as well as non-household customers.

The total length of Bulgartransgaz EAD gas transmission network as of the end of 2024 was 3484 km. In 2024 a new gas transmission network with a length of 41 km was built. The company's investments made in the transmission system and facilities amounted to BGN 272 165 thousand. There were 234 customers connected to the Bulgartransgaz EAD gas transmission network. Gas transmission network entry capacity is 549.15 TWh/year, and the exit capacity is 484.64 TWh/year.



EWRC shall approve to Bulgartransgaz EAD a ten-year network development plan of the transmission network and shall monitor and control its implementation. In drawing up the 10-year plan, the transmission system operator shall take into account the information available on upcoming changes in production, supply, consumption and exchange with other countries, investment plans for regional networks and networks within EU, as well as natural gas storage facilities investment plans. The Regulator shall consult all current or potential network users on the 10-year network development plan of the transmission network in an open and transparent manner. By Decision N0 ДПМР-1 of 01.08.2024, EWRC approved the Ten-Year Network Development Plan of Bulgartransgaz EAD for the period 2024-2033.

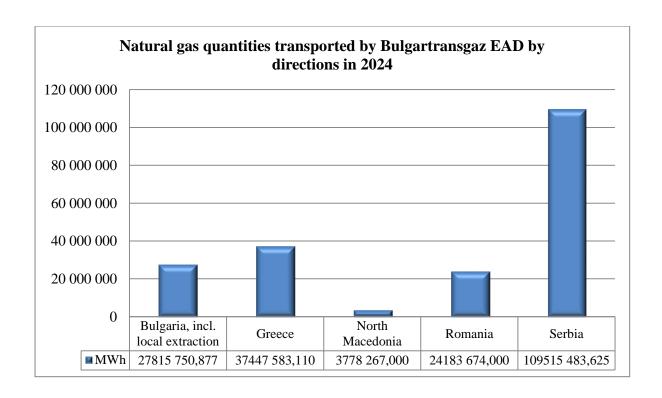
The structure of gas transmission network users who carried out transmission on territory of the Republic of Bulgaria in 2024 was as follows:

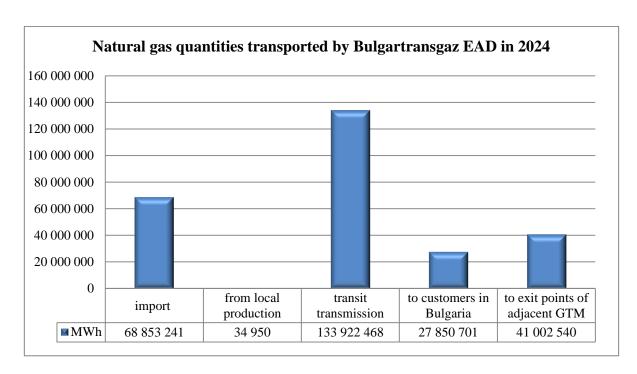
- public provider;
- two end suppliers;
- two non-household customers
- twenty-four natural gas traders.

Transmission network users who transported natural gas to the transmission network exit points in 2024 were 34 natural gas traders.

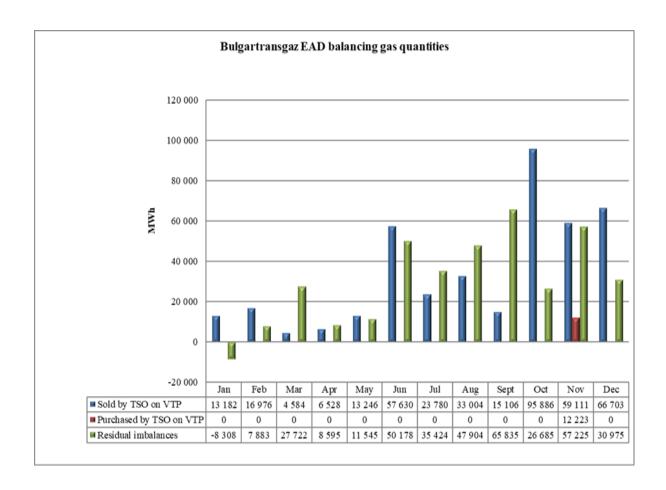
In 2024, natural gas quantities from imports and local production transported by Bulgartransgaz EAD through the gas transmission network were 202 775 709 MWh, including 34 950 MWh from local production.

Natural gas quantities transported by Bulgartransgaz EAD in 2024 by direction are indicated in the following graph:





For balancing the network, in 2024 Bulgartransgaz EAD sold 405 736 MWh and purchased 12 223 MWh natural gas at a VTP, indicated by months in the following graph:



Currently there is only one underground gas storage facility in Bulgaria – Chiren UGS, which has 24 exploitation wells, a compressor station with a total installed capacity of 10 MW and other technological facilities to ensure injection, production and quality of stored natural gas. Chiren UGS is owned and operated by Bulgartransgaz EAD. The investments made in 2024 in Chiren UGS injection facilities amounted to BGN 173 401 thousand. In 2024, 4 209 585 MWh of natural gas were injected into Chiren UGS, including 1 057 729 MWh under the Emergency Plan and 3 158 856 MWh for commercial storage. Natural gas extracted in 2024 amounted to 4 906 573 MWh, incl. 1 390 029 MWh under the Emergency Action Plan and 3 516 544 MWh commercially stored natural gas. Stored natural gas for 2024 was 4 079 062 MWh, incl. 2 734 426 MWh under the Emergency Action and 1 344 636 MWh commercial storage. Through the gas quantities stored at Chiren UGS, seasonal fluctuations in supply and consumption in the country are compensated. The UGS has essential role to ensure security of gas supply in the country, provision of balancing gas, as well as to maintain gas transmission system security and stability.

## ICGB AD

IGB interconnector started commercial operation on 1 October 2022. ICGB AD is the owner and operator of IGB gas pipeline. IGB connects the Greek gas transmission network near the town of Komotini with the Bulgarian transmission network at Stara Zagora. It is also connected to the Trans Adriatic Pipeline (TAP). The overall length of IGB is 182 km (151 km in Bulgaria and 31 km in Greece) and the technical capacity is 3 bcm that could be increased to 5 bcm per year.

IGB entry capacity at IP Komotini-DESFA, IP Komotini-TAP and IP Stara Zagora is 39.09515 TWh/y. IGB exit capacity at IP Komotint-TAP and IP Stara Zagora is 39.09515 TWh/y, and at the exit IP Kardzhali it is 1.38707 TWh/y.

The total natural gas transported through the IGB in 2024 was: 11 115 991 MWh/y in direction Greece – Bulgaria and 1 636 335 MWh/y in direction Bulgaria – Greece. The natural gas transported during the year within the released capacity amounted to 14 926 984 MWh/y, and within the unreleased capacity – 746 742 MWh/y. The maximum daily amount of natural gas transported is 51 835 MWh/d.

The purchased quantities of natural gas for balancing are 3000 MWh and the sold quantities of natural gas for balancing are 1330 MWh.

The investments made in 2024 in the IGB gas pipeline and its facilities amounted to BGN 36 992 thousand.

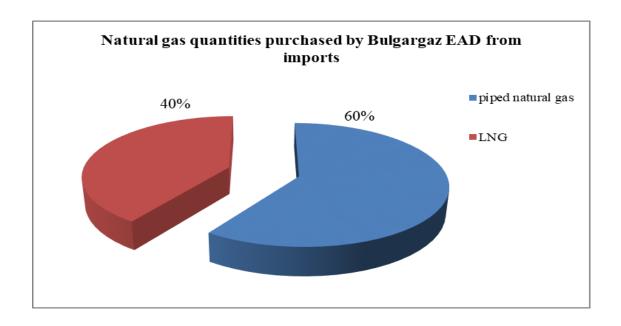
#### 4.2.1. Wholesale markets

The main quantities of natural gas needed for domestic consumption are provided by imports with a small part of local production. Natural gas supply on the territory of the Republic of Bulgaria is carried out through a gas transmission network owned by Bulgartransgaz EAD for directly connected customers and through gas distribution networks (GDN), owned by the relevant gas distribution companies to which non-household and household customers are connected. Through the gas transmission network, natural gas is also transferred to neighbouring countries of the Republic of Bulgaria, as well as from and to Chiren UGS. In 2024 natural gas supply for the local market was carried out by Bulgargaz EAD, Gas Exploration and Production AD, Petroceltic Bulgaria EOOD and natural gas traders.

## **Bulgargaz EAD**

In 2024, Bulgargaz EAD purchased natural gas for the domestic market under the long-term gas supply contract with an Azerbaijani company and from natural gas traders.

To ensure its customers demand, Bulgargaz EAD has purchased 17 234 269 MWh natural gas, as follows: 10 273 659 MWh of pipeline gas from the Azerbaijani company and 6 960 611 MWh LNG.



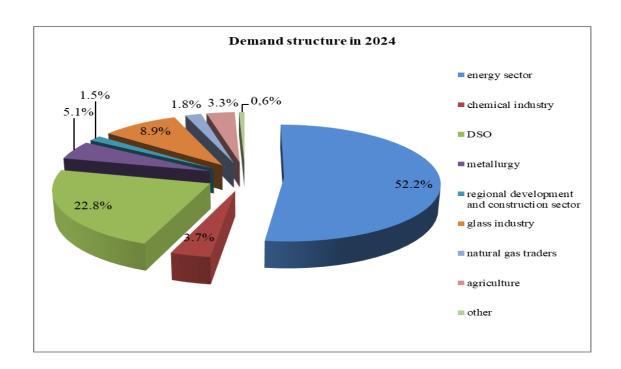
Natural gas sold by Bulgargaz EAD amounted to 17 058 402 MWh, of which 16 879 233 MWh MWh were sold in Bulgaria and 179 169 MWh were sold abroad.

Bulgargaz EAD purchased 242 980 MWh natural gas on the gas exchange market in Bulgaria. Natural gas sold by Bulgargaz EAD on the organized exchange market in Bulgaria amounted to 529 416 MWh. Bulgargaz EAD purchased 132 247 MWh natural gas for balancing and sold 218 4691 MWh for the same purpose.

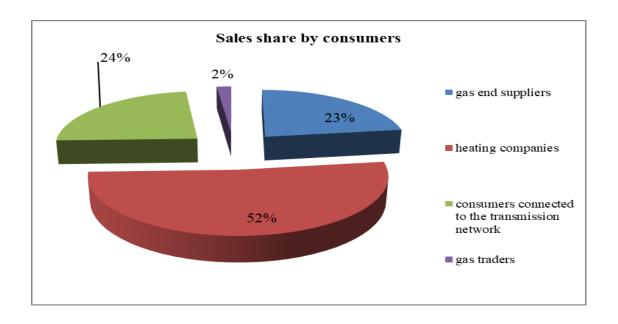
Consumption structure of the natural gas sold by Bulgargaz EAD in 2024 was as follows:

- energy sector 8 970 485 MWh;
- chemical industry 643 844 MWh;
- distribution companies 3 920 246 MWh;
- metallurgy 880 112 MWh;
- regional development and construction sector 257 665 MWh;
- glass industry -1538973 MWh;
- agriculture 559 344 MWh;
- natural gas traders 318 338 MWh;
- other 108 565 MWh.

Consumption structure by industry of the natural gas sold by Bulgargaz EAD is presented in the chart below:

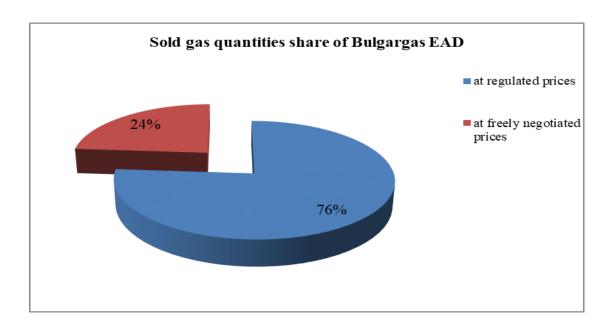


In 2024 Bulgargaz EAD sold natural gas to end suppliers, district heating companies, customers connected to the gas transmission network and natural gas traders. Share sales per clients are presented in the chart below:



In 2024 Bulgargaz EAD sold to clients in Bulgaria the following quantities of natural gas:

- at regulated prices 12 858 251 MWh;
- at freely negotiated prices 4 020 982MWh.



Natural gas quantities stored by Bulgargaz EAD in Chiren UGS, including the available storage, withdrawal and injection in 2024, were as follows:

- available storage as of 1 Jan 2024 3213387 MWh;
- withdrawal -2199675 MWh;
- injection 1 477 723 MWh;
- available storage as of 31 Dec 2024 2 570 234 MWh.

Bulgargaz EAD customers' structure as of 31 Dec 2024 was as follows:

- at regulated price -25;
- at freely negotiated price -117;
- on the anonymous segment 50, incl. 47 on Balkan Gas Hub and 3 on BETP AD.

## **Extraction companies**

Oil and Gas Exploration and Production AD and Petroceltic Bulgaria EOOD are the extraction companies in the country.

In 2024 Oil and Gas Exploration and Production AD extracted 53 279 MWh natural gas and sold 44 749 MWh, of which 17 257 MWh were sold to one end customer, 20 007 MWh to two gas distribution companies and 7485 MWh to two traders. The remaining quantities were for the company's own needs. The extraction company did not sell natural gas on the gas exchange market.

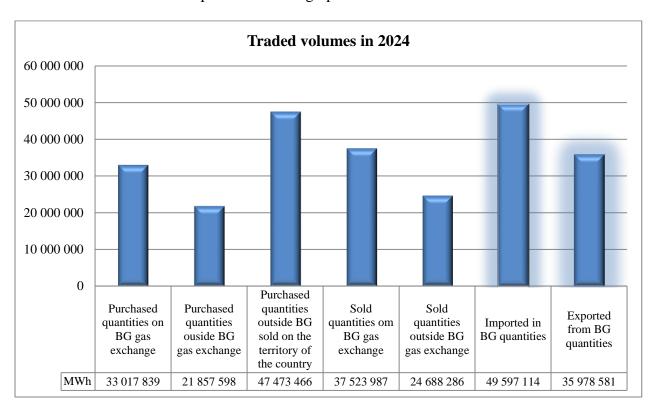
In 2024, Petroceltic Bulgaria EOOD extracted and sold 34 950 MWh natural gas to a natural gas trader under a bilateral contract, and has on the gas exchange market 9 222 MWh natural gas.

## Natural ags traders

Out of 136 licensed natural gas traders as of 31.12.2024, 72 companies have carried out natural gas transactions, 61 companies have not carried out licensing activities, and 3 companies have not provided information. 17 natural gas traders have stored natural gas in Chiren UGS.

In 2024, natural gas traders purchased 54 875 437 MWh natural gas in the Republic of Bulgaria, including: 33 017 839 MWh on the gas exchange market and 21 857 598 MWh outside the gas exchange market. The natural gas purchased outside Bulgaria and sold in the country in 2024 was 47 473 466 MWh.

The natural gas sold in Bulgaria was 62 212 273 MWh, including: 37 523 987 MWh on the gas exchange market and 24 688 286 MWh outside the gas exchange market. In 2024 the natural gas imported in of Bulgaria was 49 597 114 MWh, and the natural gas exported from the country was 35 978 581 MWh. The data is presented in the graph below:



As of 1 Jan 2024 the natural gas stored in Chiren UGS by natural gas traders amounted to 4 978 351 MWh, extracted quantities being 4 853 086 MWh, and the injected - 4 105 057 MWh. Accordingly, the availale natural gas as of 31.12.2024 was 4 074 477 MWh.

## Natural gas exchange markets

## **Balkan Gas Hub EAD trading platform**

The number of registered Balkan Gas Hub EAD members as of 31.12.2024 was 108, of which about 42% were international companies with experience in trading natural gas on European markets and managing a rich portfolio. About 55% of the participants were local natural gas traders, among whom large industrial natural gas consumers in the country. The number of platform members increased by 19% (from 91 to 108) compared to the end of 2023.

The short-term segment of the trading platform offers short-term standardized products within-day, day ahead and weekend, as well as temporal and locational products for the TSO network balancing purposes. The long-term segment of the trading platform offers products on a medium and long-term basis - weekly, monthly, monthly balance, quarterly and yearly. In this segment, Balkan Gas Hub EAD also offers the following services: conclusion of screen-traded anonymous standardized contracts; administration of non-anonymous bilateral contracts traded on the platform through their registration in the Trayport "Transactions" module, as well as a brokerage service.

In 2024, a total of 29 886 transactions were concluded on Balkan Gas Hub EAD trading platform and a total of 42 283 659 MWh of natural gas was traded, including by Bulgartransgaz EAD, as follows:

Short term segment

Number of transactions on the short-term segment increased from 23 604 in 2023 to 28 034 in 2024. In January 2024 there were 1525 transactions, reaching their highest number in October 2024-4397 transactions. The average monthly transactions during the year were 2336. Traded natural gas increased from 12 796 928 MWh in 2023 to 16 153 381 MWh in 2024.

Long-term segment (including VTP transactions and a brokerage service)

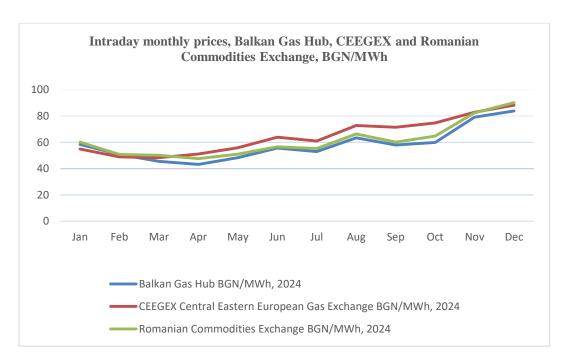
Number of transactions on the long-term segment increased from 1723 in 2023 to 1852 in 2024. In January 2024 there were 174 transactions, which was the highest number in the reporting year and in December 2024 there were 154 transactions. The average monthly transactions during the year were 154. Traded natural gas decreased from 33 329 709 MWh in 2023 to 26 130 314 MWh in 2024.

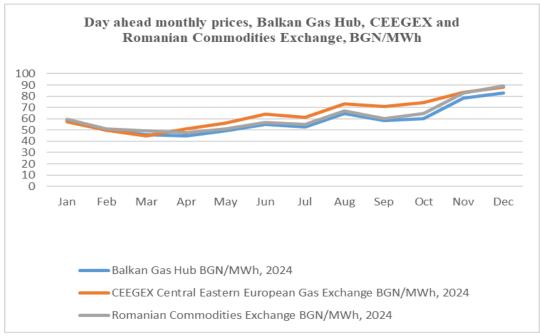
The lowest price reached on the trading platform for a monthly product was BGN 20/MWh in September 2024, and the highest price reached for a monthly product was BGN 94.50/MWh in December 2024.

Bulgartransgaz EAD has conducted a total of 10 successful auctions for natural gas purchase for technological needs.

Brokerage services - through which products and services for end customers are offered to natural gas consumers and end suppliers directly connected to the gas transmission system, who do not have access to the gas transmission networks and to VTP, but would like to purchase natural gas at exit points from registered Balkan Gas Hub EAD (BGH) members for their own needs. In this case, the end customer/end supplier has the status of a non-trading user and shall not pay membership and transactions fees under the applicable price list. A non-trading user shall be entitled to use BGH brokerage services by signing a Brokerage Services Agreement, and shall be granted with special rights to access a specialized section of BGH website.

Comparison of Balkan Gas Hub within-day and day-ahead product prices to prices on neighbouring gas exchanges:





# **Bulgarian Energy Trading Platform AD**

As of 31.12.2024, 10 members are registered at Bulgarian Energy Trading Platform AD (BETP AD). During the reported year, 2 transactions under bilateral contracts were concluded for a total of 157 440 MWh in February and in December.

#### 4.2.2. Retail market

Non-household customers and gas distribution networks are connected to Bulgartransgaz EAD gas transmission network.

The number of non-household customers connected to the gas transmission network at the end of 2024 was 234. Most of the gas distribution networks in the country are also connected to the gas transmission network. Three gas distribution networks are connected to local extraction facilities and receive natural gas from local extraction, and two of these networks simultaneously receive alternative supplies. There are gas distribution networks not connected to the gas transmission network, and gas supply is carried out through trucks delivering natural gas with bottles.

The main supplier of customers connected to the gas transmission network is Bulgargaz EAD. Supplies to customers connected to the gas transmission network have also been carried out by natural gas traders.

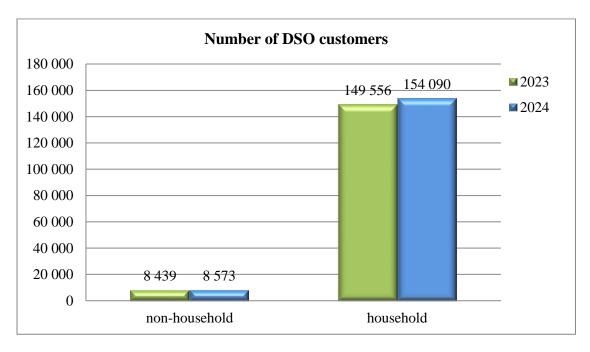
At the end of 2024, 25 DSO companies licensed for the activities "natural gas distribution" and "natural gas supply from an end supplier", operate in 36 license territories of Bulgaria, covering 174 municipalities, representing 65% of all municipalities in the country.

The necessary infrastructure for natural gas distribution in the country is under construction and the number of household customers connected to the gas distribution network (GDN) is low. The regulatory mechanism applied by EWRC provides incentives for gas distribution companies to continue GDN development and new customers' connections in order to gradually increase natural gas consumption.

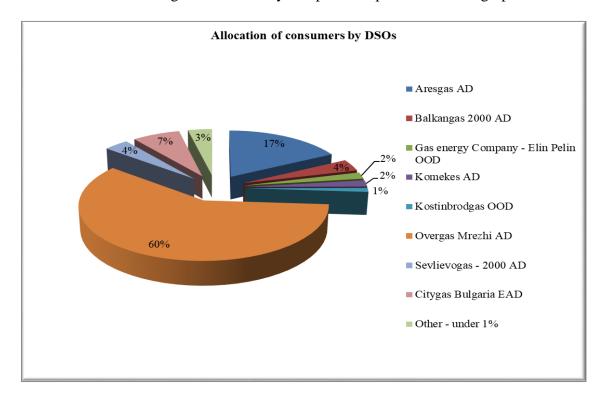
The constructed gas distribution network in 2024 was 51 008 m, and the total GDN length within the country was 5 733 855 m. The investments made by the distribution companies in 2024 were BGN 16 986 thousand.

Total number of the gas DSOs' clients as of 31 Dec 2024 was 162 663, of which 8 573 (5.3%) non-household customers and 154 090 household customers (94.7%). The customers' number has increased from 157 995 in 2023 to 162 663, an increase of 3%. The non-household customers have increased by 3%, and the household – by 1.6%.

The numbers of non-household and household customers in the licensed territories for 2023 and 2024 are presented in the graph below:

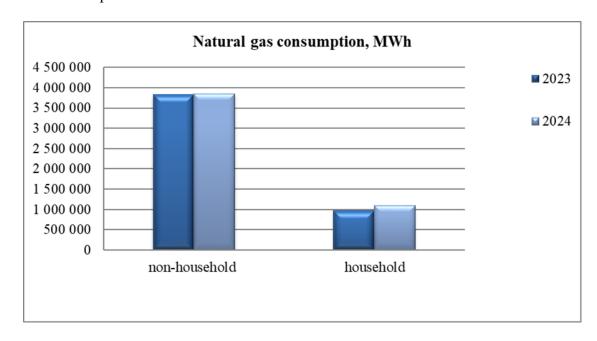


Breakdown of natural gas consumers by companies is presented in the graph below:

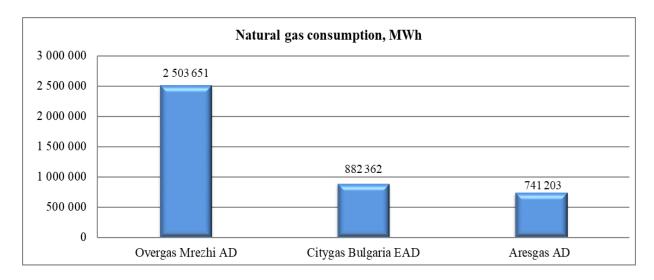


Overgas Mrezhi AD serves the largest number of customers – 97 046, which is 60% of all natural gas customers in the country, followed by Aresgas AD with 17%, Citygas Bulgaria EAD with 7%, Sevlievogas 2000 AD and Balkangas 2000 AD - with 4% each.

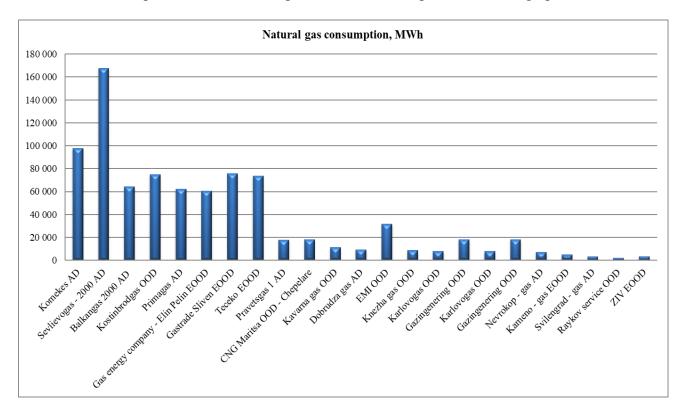
Total DSOs customers' consumption in 2024 was 4 946 768 MWh, which is an increase of 3.2% compared to 2023, when consumption was 4 794 853 MWh. Non-household customers' consumption increased from 3 826 322 MWh in 2023 to 3 850 658 MWh in 2024, and household customers' consumption increased from 968 531 MWh in 2023 to 1 096 110 MWh in 2024. The share of non-household customers' consumption in 2024 was 78% and the share of household customers' consumption was 22%.



Customers of Overgas Mrezhi AD, Citygas Bulgaria EAD and Aresgas AD had the highest consumption in 2024:



Gas consumption of the other companies' customers is presented in the graph below:



# 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). According to 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. The Regulator 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.

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.

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. 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 the 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.

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 and monitors market competition and its effective functioning.

## Implementation of Regulation (EU) No 1227/2011

In the conditions of increasing competition on the gas market and growth in the gas exchange trade volumes, in accordance with Regulation (EU) No 1227/2011 of the European Parliament and of the Council of 25 October 2011 on wholesale energy market integrity and transparency, EWRC monitors the market in order to prevent opportunities for market manipulations.

In 2024 no signals were received from the two persons professionally arranging transactions in wholesale energy products (PPATs), according to Art.15 of the Regulation: Balkan Gas Hub EAD and Bulgarian Energy Trading Platform AD, for possible violations of Art.3 and/or Art.5 of Regulation (EU) № 1227/2011.

EWRC have requested information from Balkan Gas Hub EAD on the lack of reported cases of violations of Art.3 and Art.5 of the Regulation. In response, the company indicated that it strictly complies with its obligations under Art.15 of the Regulation and that the 2020 "Market Surveillance Strategy" of Balkan Gas Hub EAD has not identified any potential violations of Art.3 and Art.5 of Regulation (EU) No.1227/2011. In addition, the company has updated the "Market Surveillance Strategy", which represents the company's internal rules, with EWRC prescriptions given by Statement of findings № R-3 of 29.06.2023 and in connection with the amendments to REMIT.

In 2024, EWRC registered 11 new market participants for wholesale energy trading (in natural gas) and updated the data of 23 registered participants in CEREMP.

## 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, 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 shall 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. The end supplier shall inform the customer, together with the invoice, on the last month of each 6-month period, when the reported natural gas consumption of the end customer for that 6-month period is higher by more than 50% 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.

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.

EWRC may assist an amicable dispute settlement on a complaint. 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.

Periodically EWRC checks the licensees' obligations fulfilment regarding the creation of a specialized unit for work with consumers within the company's structure, in which a sufficient number and qualified personnel must be appointed; the maintaining of a sufficient number of

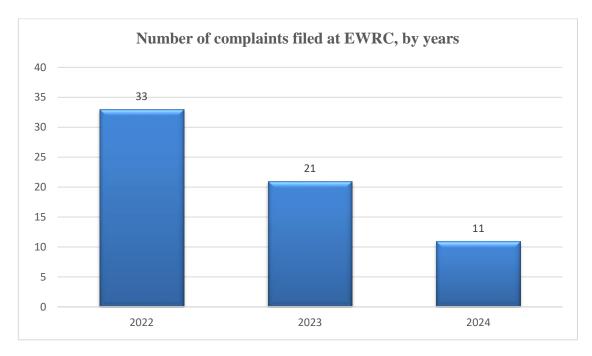
customer service centres to cover the needs of the license territory; provision of services to customers in accordance with the quality indicators of natural gas supply adopted by EWRC; maintenance of a quality management system for the licensing activity, certified by an independent competent organization; maintaining a system for receiving and processing complaints.

## Complaints filed at EWRC

The total of 11 complaints in the gas sector was filed at EWRC in 2024. They represent 0.007% of natural gas customers in the country, which are 162 663. For another consecutive year, there has been a decrease in the number of complaints submitted to EWRC. This is primarily due to the relatively small number of natural gas domestic and business customers, but also to the periodic inspections carried out by the Regulator of licensed companies with regard to:

- fulfillment of their obligations related to the creation of a specialized unit for working with clients within the company's structure, which must have a sufficient number of qualified personnel;
- maintaining a sufficient number of customer service centres to cover the needs of the licensed territory;
- the ways in which companies inform their clients about their rights and obligations regulated in the General Terms and Conditions of Contracts and in the Rules for Working with Consumers;
- providing services to customers in accordance with the indicators for the quality of natural gas supply adopted by EWRC;
- maintaining a quality management system for licensing activities, certified by an independent competent organization;
  - maintaining a system for receiving and processing complaints.

The graph below presents information on complaints filed by year for the period 2022 - 2024.



The subject of the complaints received by EWRC was as follows: connection to the gas distribution network, incorrect billing of natural gas, suspension without prior notice, requirement of the company to provide an annual inspection report as proof of the suitability of the gas installation, suspension of the gas supply, incorrect reading of the natural gas meter, inoperative gas appliance.

EWRC shall take decisions on each complaint. For those that the Regulator considers as well-founded, it issues mandatory instructions to the companies against which the complaints have been filed, setting deadlines for their implementation.

## Complaints received at gas distribution companies

The number of customer complaints submitted at the gas distribution companies in 2024 was 43. Customers filing the complaints were 0.03% of all 162 663 DSO customers in 2024. There was an increase of complaints filed in gas distribution companies compared to those in 2023, when there were 33.

Companies use various sources to raise customer awareness of the services provided and the possibilities to receive information on dispute settlement, clarification of the customers' rights on filing complaints, and the possibility to address EWRC in case they are not satisfied with the answer received. The companies inform their clients via the company's website, telephone, e-mail.

Household customers indicators	2020	2021	2022	2023	2024
Number of household natural gas customers	124 652	138 087	144 130	149 556	154 090
Number of natural gas household customers, having been connected to the gas distribution network of the company and which have switched natural gas supplier	0	0	0	0	0
Number of disconnections of final household consumers due to non-payment	1 741	2493	2981	2 088	2 316
Number of working days between notification to pay a bill and disconnection in cases of non-payment in practice	18	18	18	18	19
Number of household customers with smart meters	5589	14 316	45 409	74 356	92 065

There has been a significant increase in installed smart meters of household customers, which increased from 5 589 in 2020 to 92 065 in 2024.

The average percentage of household customers who have been disconnected due to non-payment in the period 2020 - 2024 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 switching supplier by household customers yet. They remain customers of the end suppliers.

# 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) № 994/2010 (Regulation (EU) № 2017/1938). Pursuant to 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 inter-institutional group has been established, appointed by the Minister of Energy, which shall draft the above-mentioned documents. Representatives of EWRC have been included and they have participated in the documents drafting process.