





ANRE Annual Activity Report 2023

Content

I. FOREWORD	1
II. THE STATUS AND ROLE OF ANRE, STRATEGIC OBJECTIVES	3
III. THE REGULATORY ACTIVITY OF THE ENERGY MARKET	3
IV. NETWORK TARIFFS AND INVESTMENT MONITORING	12
V. LICENSES, AUTHORIZATIONS AND CERTIFICATES	29
VI. RENEWABLE SOURCES OF ENERGY, COGENERATION AND HYDROGEN	31
VII. MAIN DEVELOPMENTS IN THE ENERGY MARKETS IN 2023	34
VIII. CONTROL ACTIVITY	43
IX. INVESTIGATION ACTIVITY	46

I. FOREWORD



The national energy system has been fundamentally transformed in recent years, it is more flexible, more accessible, and more oriented towards the consumer. The increase in global investments in green energy is spectacular, and Romania is part of this trend. In the short term, financial efforts to develop renewable energy are still important, given the promotion of renewable energy production through the ongoing green certificate promotion scheme; in the long term, investment in research and development makes renewable energy a viable solution for the energy supply.

ANRE is promoting the development of competitive electricity and natural gas markets, which may lead to the need to carry out detailed market analysis and a series of modelling and simulation scenarios, to assess the potential impact of changes on electricity production costs, energy market prices, cross-border exchanges, competition and market liquidity. We must consider the technical state of the networks and the need for investments in the electricity production, transport and distribution network for the optimal integration of renewable energy sources and obtaining flexibility in the operation of the National Energetic System, using appropriate storage systems.

During 2023, there was an increased interest of investors in new energy production capacities, based on renewable energy sources or on conventional sources using modern technologies with low emissions, which materialized through the granting by ANRE of 132 authorizations for energy objectives totalling around 2042.86 MW, a sharp increase from the year 2022 when 55 establishment authorizations were granted, totalling 881 MW, and the year 2021 when 8 establishment authorizations were granted, totalling 80 MW.

The wholesale electricity market regulations aimed to implement various provisions of the primary legislation, both at European and national level, in parallel with the participation in the development of the new European market model. Thus, one of the main results was the creation of competition among market operators, by approving the regulatory framework necessary for the operation of the second market operator, the Romanian Commodity Exchange, and modifying those applicable to the existing operator, OPCOM. And two important approved Orders established the technical requirements applicable to the connection of electricity storage capacities and the implementation of the legal provisions, which allow the transmission and system operator and the distribution operators to be granted the right to own, develop, manage or operate electricity storage facilities that are fully integrated grid components.

The impact of the Russian military aggression against Ukraine has shown that the existing rules regarding the safety of natural gas supply are not adapted to major changes in the geopolitical situation, and measures are needed to strengthen the safety of gas supply at the EU level, and implicitly at the level of Romania. In this context, **the Methodology regarding the determination of the minimum natural gas stock level** that the holders of the natural gas supply licenses have the obligation to constitute in the underground storage warehouses was approved. Establishing a minimum stock of natural gas is in the public interest and is a measure to ensure continuity and safety of supply of end consumers, respectively ensuring own consumption in the case of thermal energy producers for the population. Although the stock obligation was 90% of the storage capacity

of the underground natural gas storage system at the national level, on November 1, 2023, the warehouses were 102.8% full.

In 2023 ANRE continued to verify the data and determine the amounts due for settlement from the state budget, in accordance with the provisions of the Government Emergency Ordinance no. 27/2022 regarding the measures applicable to final consumers in the electricity and natural gas market. Thus, in April 2022 – December 2023, the total amount verified by ANRE and sent for settlement **for the support schemes exceeded 24.5 billion lei.**

ANRE completed the implementation of the project " **Development of the institutional capacity of the Romanian Energy Regulatory Authority to simplify the process of changing the supplier of electricity and natural gas** " through which the Online Platform for changing the energy supplier for electricity and natural gas was implemented at national level (POSF). Through this project, ANRE has optimized operational processes in the energy market, with the aim of reducing bureaucracy and strengthening competition by reducing the duration of supplier change for the benefit of the final consumer.

In 2023, the Comparators available to consumers on the ANRE website and on the Online Platform for Supplier Change (POSF) had **approximately 89% fewer views** (from 2,246,523 to 248,535), due to the decrease in consumer interest to change their supplier and to choose the most suitable offer by comparison, considering that, according to the measures adopted by the Government through GEO 27/2022, suppliers were obliged to invoice final consumers at the capped prices.

In terms of **protecting the rights of end consumers**, one of the activities carried out by ANRE was monitoring the compliance with the obligation to ensure an accurate, comprehensive and complete information of end consumers. In this regard, ANRE has established a unitary reporting system for electricity/natural gas suppliers, to ensure a rigorous and conducive framework for fulfilling their obligations to inform end consumers from their own portfolios.

During 2023, ANRE continued to maintain and develop optimal bilateral relations and appropriate communication with the institutions of the European Union and the national bodies that coordinate the transposition and implementation of European regulations. The purpose of these activities was to participate in the European decision-making process, to strengthen democratic responsibility and to implement the energy union strategy that would guarantee, from the regulator's point of view, an accessible, affordable, safe, competitive and sustainable energy, under the conditions of an increasingly international environment the most difficult, marked by unpredictable events.

Since there is no perfect regulatory system, and at any time we can face unforeseen events, generated both at the global level and at the European or regional level, we strive to continue strengthening ANRE's role in the energy sector.

George-Sergiu NICULESCU

President

II. ANRE'S STATUS AND ROLE, STRATEGIC OBJECTIVES

The regulatory competences of ANRE are spelled out by the primary legislation on electricity, natural gas, energy efficiency and district heating sectors, respectively the Electricity and Natural Gas Law no. 123/2012, with subsequent amendments and additions, Law no. 220/2008 for the establishment of the system for promoting the production of energy from renewable energy sources, republished, with subsequent amendments and additions, Law on public utilities no. 51/2006, republished, with subsequent amendments and additions and the Law on the public utility of district heating supply no. 325/2006, with subsequent amendments.

The annual activity report for the year 2023 has been issued by ANRE to comply with the reporting obligations of the provisions of art. 1, para. (4) from Law no. 160/2012 for the approval of GEO no. 33/2007 regarding the organization and functioning of ANRE.

III. MAIN CHANGES IN THE REGULATION OF THE ENERGY MARKET

III.1. WHOLESALE ENERGY MARKET III.1.1. ELECTRICITY

During 2023, the regulations related to the wholesale electricity market implemented various provisions of the primary legislation, both on European and national level, in parallel with the participation in the development of the new European market model.

The regulations on the wholesale electricity market resulted in the creation of competition among market operators, by approving the necessary regulatory framework for the operation of the second market operator, the Romanian Commodity Exchange, and amending those applicable to the existing operator, OPCOM.

Two of the important orders approved during 2023 were aimed at establishing the technical requirements applicable to the connection of electricity storage capacities and implementing the legal provisions that allow the transmission and system operator and the distribution operators to be granted the right to own, develop, manage or operate electricity storage facilities that are fully integrated grid components.

With regard to the regulations on the connection of electricity production capacities from renewable sources to public interest electricity networks, the provisions of the Council Regulation (EU) 2022/2577 of December 22, 2022 establishing a framework for accelerating the implementation of energy from renewable sources and those of the Government Emergency Ordinance no. 163/2022 for the completion of the legal framework for the promotion of the use of energy from renewable sources have been implemented. These refer to the simplification and reduction of the terms of the connection process for prosumers' renewable electricity production facilities and pilot projects, with installed powers of no more than 10.8 kW for three-phase connections or equivalent to this power for connections other than three-phase ones, respectively for existing power plants/generating units from renewable sources whose retrofitting leads to an increase of up to 15% of the total installed power compared to the value recorded in the valid connection certificate.

III.1.2. NATURAL GAS

During 2023, the regulations related to the wholesale natural gas market aimed at implementing the various provisions of the primary legislation, both on the European and national level, and

aimed at ensuring the continuity and safety of supplying their end consumers/ensuring own consumption and price affordability.

The impact of the Russian military aggression against Ukraine has shown that the existing rules regarding security of supply are not adapted to major changes in the geopolitical situation, as measures are needed to strengthen the security of gas supply at the level of the Union.

In this regard, ANRE approved the *Methodology* regarding the determination of the level of the **minimum stock of natural gas** that the holders of the natural gas supply licenses are mandated to store in the underground storage warehouses. The methodology also provides for a stockpiling trajectory that was taken over according to the Annex to Commission Implementing Regulation (EU) 2022/2301 of November 23, 2022, establishing the stockpiling trajectory with intermediate objectives for 2023 for each member state which has underground gas storage facilities on its territory and directly interconnected to its market area.

Although the stock obligation was 90% of the storage capacity of the underground natural gas storage system at the national level, **on November 1, 2023, the warehouses were 102.8% full**.

In accordance with the provisions of the Government Emergency Ordinance no. 119/2022, for the amendment and completion of the Government Emergency Ordinance no. 27/2022 regarding the measures applicable to final consumers in the electricity and natural gas market during the period April 1, 2022-March 31, 2023, as well as for the amendment and completion of some normative acts in the field of energy, approved by Law no. 357/2022, the obligation of natural gas producers to sell gas at capped priced to suppliers of household consumers was extended until December 31, 2024. To fulfil these provisions, decisions were issued that establish the quantities that natural gas producers, whose annual production in the previous year exceeds 3,000,000 MWh, are obliged to offer, transparently, publicly and non-discriminatory, on the centralized markets for natural gas, in the period January 1, 2023 - December 31, 2023. These decisions lead to an increase in the liquidity of the natural gas market and ensured access to quantities of natural gas offered by the main domestic producers on the centralized markets in Romania.

III.1.3. THERMAL ENERGY

In accordance with the provisions of the Law no. 51/2006 on community services of public utilities no. 51/2006, the activities of production, transport, distribution and supply of thermal energy are subject to the licensing, regulation and control of ANRE.

III.1.4. COLLECTION, ANALYSIS, VERIFICATION OF SUPPORT SCHEMES

The liberalization of electricity and natural gas prices in recent years, and the situation created by the price increase on the energy markets at the international level, and the effects caused by these increases on the markets and consumers in our country, a new legislative framework brought additional responsibilities to ANRE. The Government of Romania established through GEO no. 118/2021, approved with amendments and additions by Law no. 259/2023, GEO no. 3/2022, GEO no. 27/2022, a compensation/capping scheme for electricity and natural gas prices.

In 2023, ANRE continued the implementation of its duties established in this regard. It should be noted that both the Regulation for the verification of reports and the calculation of the amount of compensations requested through the capping scheme, as well as the related Guidelines have been updated to reflect the successive changes in the legislative framework related to the Compensation/Capping Scheme. For the period April 2022 – December 2023, the total amount

verified by ANRE and sent for settlement for the support schemes exceeded 24.5 billion RON (approx. 4.9 billion euro).

For the smooth performance of the activities listed above, the software solutions necessary for the performance of the respective activity has been developed internally. In this context, on ANRE portal <u>spv.anre.ro</u>, a dedicated section was developed *and*, respectively, multidimensional analysis reports of the information uploaded to this section were created.

III.2. MAIN CHANGES IN THE REGULATION OF THE ENERGY RETAIL MARKET III.2.1. REGULATORY ACTIVITY III.2.1.1. Electricity

The electricity market in Romania operates in accordance with the European regulations on the internal energy market, which establish requirements related to the production of energy from renewable sources, environmental policy, the integration of balancing markets, as well as the interconnection of energy systems.

Pursuant to Law no. 123/2012, starting from January 1, 2021, the regulated tariffs applied to household consumers have been eliminated. Prices for the supply of electricity to final consumers are no longer set by ANRE, they are formed freely, based on demand and supply. From the price structure, only network services tariffs remained regulated by ANRE, namely the tariff for the transport service, the tariff for the system service and the tariff for the electricity distribution service.

The supply of electricity on the retail market is conducted based on the electricity supply contract concluded between the supplier and the final consumer in accordance with the legislation in force, at prices negotiated between them or set by standard offers.

Regarding the primary legislation developed at the national level, the provisions of the European legislation regarding interventions in the formation of prices were taken over in the Electricity and Natural Gas Law no. 123/2012, with subsequent amendments and additions, hereinafter referred to as Law no. 123/2012, through the adoption by the Government of Emergency Ordinance no. 143/31.12.2021, published in the Official Gazette of Romania on December 31, 2021.

The Romanian Government has adopted compensation and support schemes for the payment of electricity and natural gas bills between November 1, 2021, and March 31, 2025, so that the electricity and natural gas prices paid by final consumers do not increase the level of energy poverty. Thus, in 2023, suppliers applied capped prices for electricity billed to domestic and non-domestic consumers.

The final prices capped in 2023, by consumer category, were the following:

- 0.68 lei/kWh (0.136 euro/kWh), VAT included, for household consumers whose monthly consumption was between 0 and 100 kWh inclusive, household consumers who used medical devices, appliances or medical equipment powered from the network electricity, necessary for carrying out medical treatments, domestic consumers who had at least 3 children under the age of 18 and single-parent household consumers who had at least one child under the age of 18;
- **0.80 lei/kWh (0.16 euro/kWh), including VAT,** for household consumers whose monthly consumption was between 100.01 and 255 kWh; electricity consumption between 255 and 300

kWh/month was billed at a maximum price of 1.3 lei/kWh, including VAT, and if the consumption exceeded 300 kWh/month, the entire consumption was billed at the price of maximum 1.3 lei/kWh.

- maximum 1 lei/kWh (0.2 euro/kWh), including VAT, for 85% of the monthly consumption, the difference in monthly electricity consumption to be billed at a maximum price of 1.3 lei/kWh, including VAT, for SMEs, operators/regional operators that render/provide public utility services, Metorex SA, airports that are subordinated/coordinated or under the authority of the Ministry of Transport and Infrastructure, economic operators in the field of the food industry, as well as those in the field of agriculture and fishing, public authorities and institutions, decentralized public services of ministries and other central bodies, companies and commercial companies of county, municipal or local authorities, all public and private entities that provide a public service, national research and development institutes and religious institutions/units;
- maximum 1 leu/kWh (0.2 euro/kWh), including VAT, for public and private hospitals, public and private educational institutions, nurseries and public and private providers of social services.
- maximum 1.3 lei/kWh (0.26 euro/kWh), including VAT, for domestic and non-domestic consumers who did not fall into the previous categories.

GEO no. 27/2022 was amended by Law no. 206/07.07.2023 so that, starting from 14.07.2023, the final price invoiced by each electricity supplier was the minimum value between the capped price, the contractual price and the final price calculated as sum of the components of purchase, supply, regulated tariffs, taxes and legal contributions. Also, in accordance with the provisions of art. 1 paragraph (11) of GEO 27/2022, the price applicable for the period January 1, 2023-March 31, 2025, from the standard offers for final consumers in the electricity market, cannot exceed the value of the final capped price, specified previously.

In the retail market, suppliers are obliged to present standard offers at least for household consumers and micro-enterprises with an estimated annual consumption below 100,000 kWh.

III.2.1.2. Natural Gas

In accordance with the provisions of the *Electricity and Natural Gas Law no. 123/2012*, commercial transactions are made wholesale or retail, and prices are formed based on demand and supply. **The wholesale market** operates based on contracts concluded bilaterally between economic operators in the natural gas sector, transactions on centralized markets, managed by operators licensed by ANRE or by the operator of the balancing market or other types of transactions or contracts. **The retail market** operates based on contracts concluded between suppliers and final consumers (domestic and non-domestic), at prices negotiated or set by standard offers.

The supply of natural gas on the competitive retail market is carried out based on the natural gas supply contract concluded between the supplier and the final consumer, at the supply price and under the commercial conditions negotiated between them or established by standard offers, with compliance with the legislation in force.

Starting from July 1, 2020, the natural gas market was liberalized, with natural gas being supplied under a competitive regime.

Due to the price increase on the electricity and natural gas markets at the international level, as well as the effects caused by these increases, the economic operators' confrontation with problems generated by the imposed restrictions, the interruption of activities, the decrease in turnover, required the establishment by the Government of temporary measures in order to support the population and mitigate the financial impact in relation to the additional costs for the payment of electricity and natural gas in the cold season 2021-2022 and in the period April 1, 2022 - March 31, 2025. Between April 1, 2022, and March 31, 2025, the final price invoiced by natural gas suppliers is capped as follows:

- a) maximum 0.31 lei/kWh (0.062 euro/kWh), including VAT, for household consumers.
- b) a maximum of 0.37 lei/kWh (0.074 euro/kWh), VAT included, in the case of non-domestic consumers whose annual consumption of natural gas in the previous year is no more than 50,000 MWh, as well as in the case of thermal energy producers; starting from January 1, 2023, non-household consumers in the industrial parks regulated by Law no. 186/2013 on the establishment and operation of industrial parks, with subsequent amendments and additions, as well as those within closed distribution systems defined according to Law no. 123/2012." At the same time, according to the provisions of art. 2 para. (4) of GEO 27/2022, "For the consumers provided for in art. 1 paragraph (1) and (2), the final price invoiced by each electricity/natural gas supplier is the minimum value between:
- a) the maximum final price provided for in art. 1 paragraph (1) and/or (2).
- b) the contractual price.
- c) the final price calculated according to the provisions of art. 5 and 6.

Also, the price applicable for the period January 1, 2023-March 31, 2025, from the standard offers for end consumers in the natural gas market, developed and published by suppliers, cannot exceed the value of the final capped price, specified previously.

III.2.2. EVOLUTION OF REGULATED RATES AND PRICES

Tariffs charged by the designated Operator of the electricity market.

In December 2022, ANRE approved the tariffs applied by the Designated Operator of the Electricity Market (OPEED) for the 2023 tariff period. The methodology provides in art. 25 para. (2) that ANRE can correct the tariffs within the tariff period, with prior notice to the operator in case it finds that:

- a) the establishment of tariffs was carried out based on information proven to be incorrect or incomplete, provided by OPEED.
 - b) there are calculation mistakes/errors/omissions in setting the rates.
- c) there have been legislative changes that lead to changes in the costs related to the activity conducted by OPEED.
- d) the income estimated by OPEED for the first 6 months of the tariff period t is higher by at least 5% compared to the OPEED income related to the 6-month period, calculated as half of the income established by ANRE for the tariff period.

From the analysis of the data and information received from OPEED, ANRE found that the conditions stipulated in letter a) and d) of art. 25 para. (2) were met and conducted, in June of the 2023 tariff period, the correction of the tariffs applied by OPEED. The corrected tariffs were

approved by Order no. 76/28.06.2023. The table below shows the tariffs applied by OPEED for the 2023 tariff period, approved by ANRE Orders no. 139/2022 and no. 76/2023.

Rates	UM	Order no. 139/2022	Order no. 76/2023
Administration fee – Participant Category A	lei/participant/year	21,574	14,648
Administration fee – Participant Category B	lei/participant/year	35,956	24,414
Trading Fee	lei/MWh	0.48	0.29

III.2.3. COMPARATORS OF OFFERS

ANRE has developed two tools to compare the standard offers of supply of electricity and natural gas in Romania intended for end consumers, in the form of interactive web applications, one for electricity and one for natural gas.

These independent and non-commercial tools, whose purpose is to allow the comparison of supply prices and conditions offered by electricity/natural gas suppliers, before choosing a particular supplier or a particular standard offer, can be accessed as follows:

- the interactive application *Comparator offers-type of electricity supply* at the following link https://posf.ro/comparator?comparatorType=electric,
- the interactive application *Comparator offers-type of natural gas supply* at the following link https://posf.ro/comparator?comparatorType=gas.

In 2023, the *Comparators* made available to consumers on the ANRE website and on the Online Platform for Changing the Supplier (POSF) had **248,535 views**, were accessed by **118,391 users** of which **9 4,829 there were unique users**, and **the average time** spent on the *Comparator pages* was **approximately 2.25 minutes**.

Compared to 2022, there is a **significant decrease in the number of views** by approximately 89% (from 2,246,523 to 248,535). We believe that the decrease in the number of accesses was due to the decrease in the interest of end consumers to change their supplier considering that, according to the measures adopted by the Government through *GEO 27/2022*, suppliers were obliged to invoice final consumers maximum capped prices provided by this normative act.

III.2.4. LIBERALIZATION OF ELECTRICITY AND NATURAL GAS MARKETS

III.2.4.1. Electricity

Pursuant to *Law no. 123/2012*, starting from January 1, 2021, the regulated tariffs applied to domestic consumers has been eliminated. In this context, the electricity supply prices for household consumers are no longer set by ANRE, they are formed freely, based on demand and supply.

At the same time, regarding the approval of prices/tariffs in the field of electricity, also starting from January 1, 2021, ANRE has regulatory powers and establishment of only the regulated tariffs for network services, respectively the transport service tariffs, the system service tariff and the distribution service tariff and the price for reactive electricity.

Until the date of the liberalization of the electricity market, i.e. December 31, 2020, out of the total number of **8,924,187 consumption places belonging to household consumers, 34%** of them had concluded contracts related to the supply of electricity under a competitive regime.

Until December 31, 2023, following the liberalization of the electricity market, based on the data reported by the electricity suppliers, it was found that **out of the total number of consumption** places belonging to domestic consumers of 9,486,953, 66% signed contracts related to the supply of electricity in a competitive regime.

Universal service providers of electricity

Starting on January 1, 2022, in accordance with the provisions *of Law no. 123/2012*, the universal service is guaranteed only to household consumers and is provided by electricity suppliers who have concluded contracts in the competitive market with household consumers. The provision of the universal service is based on a framework contract drawn up and approved by ANRE.

Electricity suppliers have the obligation to publish universal service offers and conclude electricity supply contracts if they receive a request from a consumer entitled to universal service. The price applied to consumers receiving universal service is set by each provider, based on competitive criteria, considering that it must be reasonable, competitive, easily comparable, transparent, and non-discriminatory.

Supply of electricity as a last resort

When a final consumer ends up in the situation of not being provided with electricity supply from any other source, a supplier of last resort (SoLR - FUI) among those designated by ANRE has the obligation to take over and temporarily supply electricity. Based on a framework contract for the supply of electricity as a last resort, the consumer has the possibility to change his supplier at any time, respectively to choose another supplier from the competitive market.

The supply of electricity as a last resort is conducted in accordance with the provisions of the Regulation on the last resort supply of electricity (hereinafter referred to as the FUI EE Regulation), approved by ANRE Order no. 91/2022. Since in 2023 the above conditions were met throughout the year, it was not necessary for ANRE to designate other FUIs apart from those already designated, so that, in 2023, the designated electricity FUIs were:

No. crt.	FUI designation	ANRE decision on designation as FUI	Contact
1	CEZ Sale	1879 of 19.10.2022	www.cez.ro
2	Enel Energie SA	2120 of 18.11.2020	www.enel.ro
3	Enel Energie Muntenia SA	2121 of 18.11.2020	www.enel.ro
4	E.ON Energy Romania SA	2122 of 18.11.2020	www.eon.ro
5	Electrica Furnizare SA	2123 of 18.11.2020	www.electricafurnizare.ro

During the application of the support scheme established by GEO 27/2022, by the FUI Regulation EE has established a rotation mechanism for taking over consumers by FUI, in descending order of the market share related to the last month for which there is data published on the ANRE website. Consequently, each FUI is allocated one calendar month, when it has the obligation to take over, automatically, the consumers who end up in the situation of not being provided of the supply of electricity from any source.

Compared to January 2023, when the supply of electricity as a last resort was provided for 78,466 consumers, in December 2023 their number decreased to 61,860.

Final price

During the period of application of *GEO 27/2022*, last resort prices were capped, with FUI billing the electricity consumption of consumers taken over in accordance with its provisions.

III.2.4.2. Natural gas

According to the provisions of the Electricity and Natural Gas Law no. 123/2012, with the subsequent amendments and additions, **starting from July 1, 2020, the internal natural gas market for household consumers was liberalized,** and the regulated final prices for them ceased to be applicable.

The total liberalization of the internal natural gas market on July 1, 2020, implies the need for domestic consumers to conclude, by this date, the contracts related to the supply of natural gas under a competitive regime, to ensure the supply of natural gas after the mentioned date of liberalization previous.

Until the date of liberalization, i.e. on June 30, 2020, of the total number of 3,844,474 household consumers, 12% had concluded contracts related to the supply of natural gas under a competitive regime.

In this context, ANRE was required to issue a set of measures regarding the information and assurance of natural gas supply to household consumers who were in the regulated segment of the market, in view of eliminating regulated supply prices for this category of consumers. By ANRE Order no. 27/2020, measures were established regarding the supply of natural gas to household consumers, with a view to eliminating regulated prices for this category of end consumers. The Order applies in the relationship between natural gas suppliers and household consumers in their own portfolio who have not exercised their right of eligibility and have not opted for the supply of natural gas under a competitive regime.

By December 31, 2023, from the total number of household consumers, approximately 60.48% signed contracts related to the supply of natural gas under a competitive regime.

Supply of natural gas as a last resort

In the context of the liberalization of the natural gas market, for situations in which a final consumer ends up in the situation of not having the supply of natural gas ensured by his current supplier, a supplier of last resort designated by ANRE has the obligation to take over and supply him temporarily natural gas at a supply price of last resort and on the basis of a framework contract for the supply of natural gas in the regime of last resort, the consumer having the possibility to change his supplier at any time, respectively to choose another supplier from the competitive market.

The supply of natural gas as a last resort is still an activity related to the regulated market, this being carried out under the conditions regulated by ANRE through Order no. 173/2020 regarding approval The Regulation on the last resort supply of natural gas, hereinafter referred to as the FUI Regulation GN.

FUI Regulation GN establishes the procedure for the designation by ANRE of the suppliers of last resort (FUI), the conditions for carrying out and terminating the supply of last resort, the pricing

principles applied by the suppliers of last resort to the taken over consumers, as well as the procedure for taking over the places of consumption of final consumers who have not secured the supply of natural gas from any other source.

According to the provisions of art. 4 para. (1) of the FUI Regulation GN, "In order to ensure supply under the last resort regime at the places of consumption of final consumers who have not secured supply from any other source, ANRE designates a number of at least 7 FUIs, whose cumulative market share, calculated for the competitive market by equal weighting of the number of consumption places of final consumers and the amount of natural gas sold to them in the last 12 months for which there is data published on ANRE's website, to be at least 70%. When determining the cumulative market share, the shares on the competitive market of the suppliers designated FUI at the time of the analysis are taken into account, except for those for which the decision was issued stating the termination of the applicability of the decision to designate as FUI." Since in 2023 the above conditions were met throughout the year, it was not necessary for ANRE to designate other FUIs compared to those already designated.

The list of suppliers of last resort is published on the authority's website in the section: Consumers/Gaze Naturale/Suppliers of last resort (FUI) (https://anre.ro/consumatori/gaze-naturale/furnizori-de-ultima-instanta-you/)

At the same time, Law no. 357/2022 regarding the approval of the Government's Emergency Ordinance no. 119/2022 for the amendment and completion of the Government Emergency Ordinance no. 27/2022 regarding the measures applicable to final consumers in the electricity and natural gas market, in the period April 1, 2022-March 31, 2023, as well as for the modification and completion of some normative acts in the field of energy, through the provisions of art. XII, imposed on ANRE the obligation to appoint a supplier of last resort for places of consumption with an annual consumption of more than 28,000 MWh of PET for the period January 1 - March 31, 2023.

In order to achieve the implementation of this obligation imposed by law, the ANRE Decision no. 2289/20.12.2022 the Procedure regarding the method of distribution to last-resort natural gas suppliers of places of consumption with an annual consumption of more than 28,000 MWh of each heat energy producer in the situation of not having the supply of natural gas, to cover consumption between January 1 and March 31, 2023, was approved.

ANRE approved Order no. 16/2023 for the amendment and completion of the Regulation on the last resort supply of natural gas, approved by the Order no. 173/2020. This Order created a mechanism through which, during the application of the support scheme approved by GEO 27/2022, for consecutive periods of 12 months starting from April 1, 2023 - March 31, 2024, ANRE appoints FUI for places of consumption with an annual consumption greater than 28,000 MWh of each PET, for the situation in which they did not ensure the supply of natural gas to cover the consumption requirement, fully or partially.

The prices for the supply of natural gas under the FUI regime

During the period of application of *GEO 27/2022*, the prices for the supply of natural gas under the FUI regime were capped, with FUI invoicing the natural gas consumption of consumers taken over in accordance with its provisions.

III.2.5. END CONSUMER INFORMATION ACTIVITY CONDUCTED BY SUPPLIERS

In terms of protecting the rights of end consumers, one of the activities carried out by ANRE consists in monitoring the compliance with the obligation imposed on suppliers, regarding the information activity they carry out in relation to end consumers from their own portfolios, the aim being to ensure an accurate, comprehensive and complete information of end consumers. In this regard, ANRE established a unitary reporting system for electricity/natural gas suppliers, which would ensure a rigorous and conducive framework for fulfilling their obligations to inform end consumers from their own portfolios.

IV. NETWORK TARIFFS AND INVESTMENT MONITORING

IV. 1. Regulatory framework and network tariffs in the field of electricity

IV.1.1. The evolution of the regulatory framework regarding the methodologies for establishing regulated tariffs in the field of electricity during 2023

ANRE order no. 60/12.04.2023 for the completion and modification of the Methodology for establishing user connection rates to public interest electricity networks, approved by ANRE President's Order no. 11/2014

This Order modifies the Methodology for establishing tariffs for connecting users to public interest electric networks, approved by ANRE President's Order no. 11/2014, so that the costs of specific strengthening works, necessary for the network evacuation of the approved power for production sites or consumption and production sites, are established based on a general estimate. These costs are borne by the users through the connection tariff.

ANRE order no. 79/04.07.2023 regarding the modification and completion of the Methodology for establishing tariffs for the electricity distribution service, approved by the Order of the President of the Romanian Energy Regulatory Authority no. 169/2018

This order completes the Methodology for setting tariffs for the electricity distribution service, approved by Order of the President of ANRE no. 169/2018, with the methodological norms applicable for the year 2024, which is the transition year from the fourth regulatory period, respectively 2018-2023 to the fifth regulatory period, respectively 2025-2029.

ANRE Order no. 82/02.08.2023 regarding the modification and completion of some Orders of the president of ANRE

The following Orders have been amended and supplemented:

- 1. The technical energy norm regarding the determination of own technological consumption in public interest electricity networks NTE 013/16/00, approved by ANRE President's Order no. 26/2016 with Section 8 Method of transit indices. Thus, it is stipulated that the determination of the quotas assigned to the producers and the transport operator from the amount of **own technological consumption (OTC)** related to the additional transit of electricity from the 110 kV electricity networks, should be conducted by the distribution operator according to the method provided in section 8.
- 2. The methodology for establishing tariffs for the electricity distribution service, approved by ANRE Order no. 169/2018 and the Methodology for setting tariffs for the electricity transmission service, approved by ANRE Order no. 171/2019. Thus, the OTC costs caused by the additional energy transits from the networks of concessionaire distribution operators are recovered by them from the transmission and system operator through the TGP component and through the

transmission and system operator, through the TGT component, from the producers who have power plants with an installed capacity of more than 5 MW, connected to the RED in the respective distribution network area, motivated by the fact that in RED surplus areas, the energy produced at these production sites is transported through high-voltage networks to RED deficit areas and therefore, these producers contribute to the transits of the 110 kV network in the surplus areas.

ANRE Order no. 98/01.11.2023 regarding the amendment of the Methodology for establishing tariffs for the electricity transmission service, approved by the Order of the President of the Romanian Energy Regulatory Authority no. 171/2019

This Order introduces clarifications and details on how to calculate the forecasted and realized regulated asset base (RAB), as well as the forecasted and realized RRAB. Clarification was necessary because the year 2024 represents the last year of the 4th regulatory period, when the Methodology provides for the RAB calculation made for the 4th regulatory period and the RAB forecast for the 5th regulatory period. To determine the forecast values of the capital costs, the depreciation is calculated assuming the commissioning of the assets in December, and the return is the result of applying the WACC to the average value of the RAB. To determine the implemented values of the capital costs, depreciation is calculated considering the month of commissioning of the assets, and the return is the result of applying the WACC to the RAB value on December 31. The RAB value on December 31 is calculated considering the input values of the assets correlated with the time intervals corresponding to the amortization periods.

ANRE decision no. 2642/14.11.2023 approving the quantities forecasted by the OTC and the corresponding costs, related to the additional transits of electricity from the 110 kV elect electricity networks for the year 2024, for the company E-Distributie Dobrogea SA

In accordance with the provisions of the Methodology for establishing tariffs for the electricity distribution service, approved by ANRE Order no. 169/2018 in conjunction with those of the Energy Technical Norm regarding the determination of **own technological consumption (OTC)** in public interest electricity networks - NTE 013/16/00, approved by Order of the President of ANRE no. 26/2016, the cost with OTC related to the additional transits of electricity from the 110 kV electrical networks for the year 2024 was approved. This cost was approved separately, respectively corresponding to the quota assigned to energy producers and the quota assigned to the TSO "Transelectrica" - SA for the concessionaire distribution operator E-Distribuţie Dobrogea (currently Reţele Electrice Dobrogea). At the same time, provisions were introduced in the decision regarding the invoicing and payment terms of the cost with OTC corresponding to the additional transits of electricity from the 110 kV networks.

ANRE decision no. 2643/14.11.2023 approving the quantities forecasted by the OTC and the corresponding costs, related to the additional transits of electricity from the 110 kV electricity networks for the year 2024, for the company E-Distributive Dobrogea SA

In accordance with the provisions of the Methodology for establishing tariffs for the electricity distribution service, approved by ANRE Order no. 169/2018 in conjunction with those of the Energy Technical Norm regarding the determination of own technological consumption in public interest electricity networks - NTE 013/16/00, approved by Order of the President of ANRE no. 26/2016, the cost with OTC related to the additional transits of electricity from the 110 kV

electrical networks for the year 2024 was approved. This cost was approved separately, respectively corresponding to the quota assigned to energy producers and the quota assigned to the TSO "Transelectrica" - SA for the concessionaire distribution operator Distribuție Energie Oltenia. At the same time, provisions were also introduced in the decision regarding the invoicing and payment terms of the cost with OTC corresponding to the additional transits of electricity from the 110 kV networks.

ANRE Order no. 104/28.11.2023 regarding the amendment of the ANRE President Order no. 129/2022 for the approval of the Methodological Norms regarding the recognition in tariffs of additional costs with the purchase of electricity to cover own technological consumption compared to the costs included in the regulated tariffs.

The Order includes measures to harmonize the regulatory framework of ANRE and to transpose the provisions of GEO no. 119/2022 for the amendment and completion of the GEO no. 27/2022 regarding the measures applicable to final consumers in the electricity and natural gas market between April 1, 2022, and March 31, 2023, as well as for the amendment and completion of some normative acts in the field of energy, approved by Law no. 357/2022. Through the measures provided by GEO no. 119/2022 which are transposed into secondary legislation by ANRE Order no. 129/2022 with the amendments proposed by this Order, the costs justified with the purchase of electricity to cover the OTC, which are capitalized between January 1, 2022, and March 31, 2025, are recognized.

IV.1.2. Approval of regulated tariffs related to public interest electricity networks for 2023

The regulated network tariffs, approved by ANRE in the field of electricity, are charged by the network operators based on the regulated contracts for connection to the network, respectively for the use of the network, namely for the provision of the transport service, for the purchase of system services and for the provision of electricity distribution service.

IV.1.2.1 Tariffs for the transport service and for the electricity distribution service provided by concessionaire distribution operators

In accordance with the provisions of GEO no. 27/2022, the tariffs resulting from the application of the provisions of para. (1) did not change between April 1, 2022, and March 31, 2023.

IV.1.2.2. Tariffs for electricity transmission service

In the first quarter of 2023, ANRE analysed the substantiated requests of the electricity transmission and system operator and approved, through ANRE Order no. 28/29.03.2023, the following rates applicable between 1 April 2023 and 31 December 2023:

Specification:	UM	Approved level
Average transport tariff	lei/MWh	31.20
Transport tariff - the component of introducing electricity into the network (T G)		4.04
Transport tariff – the component of electricity extraction from networks (T L)	lei/MWh	27.44

Compared to the tariffs in force at that time, the average electricity transmission tariff shows an increase of 11%, and the transmission tariffs the component of introducing electricity into the network ($T_{\rm G}$) and extracting electricity from the networks ($T_{\rm L}$) an increase of 60% and 7%, respectively. The increase in the approved tariffs is due to the increase in the costs of purchasing electricity to cover the OTC. For the year 2023, an increase in the forecasted purchase price was approved at the beginning of the regulatory period. Correlatively, for the implementation of the provisions of GEO no. 27/2022, through the components of capitalized OTC are recognized the additional expenses with the purchase of electricity necessary to cover the own technological consumption generated by the increase in prices on the wholesale market, above the value considered ex-ante when calculating the tariffs for the years 2022 and 2023.

IV.1.2.3. Tariffs for the electricity distribution service provided by concessionaire distribution operators.

In the first quarter of 2023, ANRE analysed the substantiated requests of concessionaire distribution operators and approved, through ANRE President's Orders no. 22 to 27 from March 29, 2023, the tariffs for the electricity distribution service, applied by concessionaire distribution operators starting from April 1, 2023. Thus, the average tariffs per voltage level, calculated as a weighted average of the approved tariffs for concessionaire electricity distribution operators applied from April 1, 2023, with the distributed quantities of electricity are as follows:

tariff for high voltage
 the average tariff for medium voltage
 average tariff for low voltage
 283.85 lei/MWh (56,77 euro/MWh).

Compared to the values applied from 1 April 2022, the average tariffs increased by 20% at high voltage, 18% at medium voltage and 19% at low voltage, which also applies to household consumers. The increase was due to the rise in the costs of purchasing electricity to cover the own technological consumption (OTC) for the year 2023. An increase in the forecasted purchase price was approved at the beginning of the regulatory period. Correlatively, for the implementation of the provisions of GEO no. 27/2022, additional expenses with the purchase of electricity necessary to cover OTC, generated by the increase in prices on the wholesale market, above the value considered ex-ante when calculating the tariffs for the years 2022 and 2023, are recognized.

IV.1.2.4. The tariff for the purchase of system services

The tariff for the purchase of system services is determined based on the Methodology approved by ANRE Order no. 116/2022. In May 2023, ANRE analysed the request of the TSO regarding the revision of the tariff applied from January 1, 2023, resulted from the fulfilment for the first quarter of 2023 of the condition of a variation greater than 5% of the difference between the revenues and the costs realized and those forecasted for the first quarter of 2023, to which the value of the corrections not made related to the previous period/periods and the revenues forecasted for the same quarter is added. A new tariff for the purchase of system services applicable from 01.06.2023 in the amount of 6.64 lei/MWh (1.33 euro/MWh) was approved by ANRE Order no. 67/25.05.2023.

Compared to the previously approved tariff, the approved tariff for June - December 2023 presents a 14% reduction, determined by the number of negative corrections higher than those included in the tariff in force at that time.

IV.1.2.5. Tariffs for electricity distribution service provided by distribution operators other than concessionaire operators.

Tariffs for the electricity distribution service provided by distribution operators other than concessionaire operators are approved by ANRE at the request of distribution operators who own, operate, maintain, and develop distribution networks within industrial parks and platforms or some patrimonial delimited areas and which have connected users - beneficiaries of the distribution service.

The tariffs are determined based on the *Methodology for establishing the tariff for the electricity distribution service by operators, other than the concessionaire distribution operators, approved by ANRE Order no. 102/2016.* During 2023, seven decisions on the approval of tariffs for the electricity distribution service provided by distribution operators, other than concessionaire operators, and twenty-two decisions on the termination of the applicability of decisions on the approval of such tariffs were approved.

IV.2. Monitoring investments in electricity networks (network extensions, investment plans, smart grids, correlation between 10-year plans, PCIs, and national plans)

IV.2.1. The evolution of the regulatory framework regarding the monitoring of the technical condition of public interest electricity networks during 2023

The regulatory framework under which ANRE fulfilled its legal duties in 2023 to monitor investment works and maintenance works for the operation of electricity networks in safe, dependable, and efficient conditions, as well as the technical condition of the electricity networks of public interest, was completed by the approval of the following regulations:

IV.2.1.1. Order no. 1 of 11.01.2023 for the modification and completion of Orders of the president of the Romanian Energy Regulatory Authority

Order no. 1/2023 was developed based on the provisions of art. 17 of Regulation (EU) 2022/869 on guidelines for trans-European energy infrastructures, amending Regulations (EC) no. 715/2009, (EU) 2019/942 and (EU) 2019/943 and Directives 2009/73/EC and (EU) 2019/944 and repealing Regulation (EU) no. 347/2013.

By Order no. 1/2023 was conducted:

- The modification and completion of the Methodology for the evaluation of investments in projects of common interest regarding the infrastructure for the transport of electricity, including the related risks, approved by the ANRE President's Order no. 139/2015.
- Modification of the Methodology for setting tariffs for the electricity distribution service approved by ANRE President's Order no. 169/2018 with subsequent amendments and additions.

The changes and additions included in the Order refer to:

- 1. The modification and completion of the Methodology for the evaluation of investments in projects of common interest regarding the infrastructure for the transport of electricity, including the related risks by:
- extending the scope from electricity transmission networks to:
 - a) electric power transmission and distribution networks.

- b) the offshore networks for energy from renewable sources referred to in Annex II of Regulation (EU) no. 2022/869 regarding the guidelines for trans-European energy infrastructure.
- c) projects that integrate innovative technical solutions and that, although they have low capital costs, involve significant operating costs.
- application of the provisions of the regulation for PCI initiators who can be both the transmission operator and the electricity distribution operators.
- 2. Modification of the provision regarding the promotion of investments in electricity distribution networks made through co-financing from non-reimbursable European funds from the Methodology for establishing tariffs for the electricity distribution service to ensure the granting of a single type of incentive.

IV.2.1.2. Order no. 6 of 08.02.2023 for the modification and completion of the Procedure regarding the substantiation and approval of the development and investment plans of the transport and system operator and of the electricity distribution operators approved by the Order of the President of ANRE no. 98/2022

Order no. 6/2023 was developed based on the provisions of art. 32^1 and of art. 46^1 of the Electricity and Natural Gas Law no. 123/2012. The changes and additions refer to:

- Adding investments in electricity storage facilities (other than those in the next paragraph) to the category of necessary investments.
- Adding investments in installations to produce electricity from renewable sources, with or without installations for its storage, located in an own power station, for the supply of administrative consumption and own technological consumption, to the category of justifiable investments.
- The introduction of a new article stipulating the need for prior approval by ANRE, for the installations provided above, of the NO's request to grant an exception from the provisions of the Law and Directive 2019/944 of the European Parliament and of the Council of June 5, 2019, regarding the common rules for the internal electricity market and amending Directive 2012/27/EU, according to a separate procedure developed by ANRE.
- The introduction within the same article of some provisions regarding the evaluation of the economic efficiency of the investment works mentioned above.
- The introduction of a new annex (no. 8) regarding the evaluation of the economic efficiency of the newly introduced investment categories.

IV.2.1.3. Order no. 80 of 19.07.2023 regarding the modification and completion of the Methodology for the evaluation of investment financing conditions for the electrification of localities or for the expansion of electricity distribution networks approved by the Order of the President of ANRE no. 36/2019

The changes and additions include the following provisions:

- The deadline for payment of the regularization amounts is established, which cannot exceed 90 days from the commissioning of the network.
- In the case of works conducted through co-financing, within a maximum of 30 days from the signing of the minutes of acceptance of the commissioning of the work, the concessionaire distribution operator recalculates the investment efficiency rate.

- For the works located in the outskirts of the towns, the concessionaire distribution operator, and the participants in the co-financing, pay the regularization amounts in correlation with the investment efficiency rate within a maximum of 90 days from the signing of the minutes of reception of the commissioning of the work.
- For the above works, 90 days before the expiration of the 5-year term from the commissioning of the network, the concessionaire distribution operator recalculates the investment efficiency rate and returns to the financing co-participants the difference between the co-financing rate that initially returned and the co-financing rate resulting from the efficiency recalculation.
- For the works that are in the urban areas, the concessionaire distribution operator is obliged to return to the co-financing participants the co-financing contribution paid by them and to take ownership of the network elements related to the returned share, until January 31 of the calendar year following the one in when the network was put into operation.

In the situation seen above, the ineffective share of the investment resulting from the recalculation is recognized in the regulated income of the year following the restitution.

IV.2.1.4. Decision no. 2944/20.12.2023 for the approval of the method of covering the expenses forecasted for the year 2024 from the revenues obtained from the allocation of cross-border interconnection capacity

Based on the obligations provided for in art. 19, para. (5) of Regulation (EU) 943/2019, TSO Transelectrica establishes in advance how the revenues obtained from the allocation of cross-border interconnection capacity will be used and submits to the regulatory authority the proposal for the use of these revenues for the following year.

The TSO proposal regarding the coverage of the forecasted expenses for the year 2024 for the priority objectives provided for in art. 19, para. (2) to Regulation (EU) 943/2019, from the revenues obtained from the allocation of interzonal capacity, detailed in accordance with the provisions of art. 4 of the Methodology for the Use of Congestion Revenues, approved by ACER Decision no. 38/2020, was the subject of the analysis, changes and approval decision at the ANRE level regarding the inclusion of the categories of costs provided for in art. 3 of the Methodology for the Use of Congestion Revenues.

IV.2.2. Monitoring investments in electricity networks

The monitoring of investments in electricity networks is presented in the Report on the achievement of performance indicators for the transmission, system and distribution services of electricity and the technical condition of the electricity transmission and distribution networks - 2023 published on the ANRE website at the address: https://www.anre.ro/despre/rapoarte, Reports section - Performance indicators for transportation, supply, and distribution services.

IV.2.3. Monitoring the technical condition and maintenance level of the electricity transmission network

The monitoring of the technical condition of the electricity networks is presented in *the Report on* the achievement of performance indicators for the transport, system and distribution services of electricity and the technical condition of the electricity transmission and distribution networks - 2022, report published on the ANRE website at https://anre.ro/despre/rapoarte/

The technical condition of the electricity networks is monitored by ANRE through the annual follow-up of the operating duration of the installations, in relation to the volume of investment and

maintenance works conducted by the network operators, as well as through the performance indicators of the service.

V. Evolution of network tariffs in the natural gas sector

V.1. The evolution of the regulatory framework regarding the methodologies for establishing regulated tariffs in the field of natural gas during 2023

In accordance with the provisions of the Electricity and Natural Gas Law no. 123/2012, the price and tariff systems on the regulated natural gas market are established by ANRE. The regulated activities related to natural gas systems for which ANRE issued normative acts and/or established regulated tariffs in 2023 are the transport and distribution of natural gas.

Considering the end of the fourth regulatory period on December 31, 2023, for the distribution activity, respectively on September 30, 2024, for the natural gas transportation activity, in 2023 ANRE proceeded to modify and complete its methodologies, as well as to issue some new normative acts, to establish a transition year from the fourth regulatory period to the fifth, as well as for the implementation of the provisions:

- Law no. 357/2022 regarding the approval of the Government Emergency Ordinance no. 119/2022 for the amendment and completion of the Government Emergency Ordinance no. 27/2022 regarding the measures applicable to final consumers in the electricity and natural gas market in the period April 1, 2022-March 31, 2023, as well as for the modification and completion of some normative acts in the field of energy and
- The methodology for calculating technological consumption in the natural gas transportation system approved by ANRE Order no. 85/2023

Regarding the regulatory framework for the natural gas transport activity, in 2023, the following were approved:

- ➤ ANRE Order no. 85/2023 for the modification and completion of some Orders of the ANRE president and approval of the Methodology for calculating the technological consumption in the natural gas transport system (NTS), by which the methodology for determining the technological consumption in the national gas transport system was corrected. By this Order, the Methodology approved by ANRE Order 41/2019, was modified in accordance with the new methodology for calculating the technological consumption and with the new provisions of the Network Code and had the effect of including within the costs of purchasing technological consumption from SNT the cost of unaccounted gases previously treated as controllable operational costs, subject to efficiency.
- ANRE Order no. 102/2023 for the modification and completion of the Methodology for establishing regulated tariffs for natural gas transport services, approved by ANRE Order no. 41/2019, which established the gas year between October 1, 2024, and September 30, 2025, for the natural gas transport activity as a transition year from the fourth to the fifth regulatory period and established specific rules for the calculation of regulated revenues related to this year.
- > ANRE Order no. 103/2023 for the amendment and completion of ANRE Order no. 128/2022 for the approval of the Methodological Norms regarding the recognition in the regulated tariffs for the distribution and transport of natural gas of the additional

costs with the purchase of natural gas to cover the technological consumption, made between January 1, 2022, and August 31, 2023. Specifically, the period of application of the methodological rules regarding the recognition in the regulated tariffs for the distribution and transport of natural gas of the additional costs of the purchase of natural gas to cover technological consumption was extended until March 31, 2025.

Regarding the regulatory framework for the natural gas distribution activity, the following were approved:

- ➤ ANRE Order no. 101/2023 for the modification and completion of the Methodology for establishing regulated tariffs for distribution services in the natural gas sector, approved by ANRE Order no. 217/2018, which had as its main purpose the establishment of methodological rules specific to the year 2024.
- NRE Order no. 103/2023 for the amendment and completion of ANRE Order no. 128/2022 for the approval of the Methodological Norms regarding the recognition in the regulated tariffs for the distribution and transport of natural gas of the additional costs with the purchase of natural gas to cover the technological consumption, made between January 1, 2022, and August 31, 2023, by which the period of application of the methodological rules regarding the recognition in the regulated tariffs for the distribution and transmission of natural gas of the additional costs of the purchase of natural gas was extended until March 31, 2025.

V.1.2. Natural gas transport tariffs

V.1.2.1. Tariffs for natural gas transportation services through the National Natural Gas Transportation System (NTS)

These tariffs are established according to the provisions of *the Methodology* approved by ANRE Order 41/2019 and include a set of "entry/exit" type tariffs established for the group of entry points, respectively for the group of exit points in/from the NTS where the capacity is reserved, as well as a volumetric tariff for the use of the NTS, determined as a postage stamp-type tariff. This tariff system ensures the achievement of the income allowed by ANRE for the transport and system operator, to cover the justified costs, necessary for conducting the natural gas transport activity in a gas year.

The capacity reservation rates related to firm and interruptible transport services, long-term and short-term, for the group of entry/exit points, as well as the volumetric tariff for the use of NTS (with the exception of the Isaccea – Negru Vodă 2 and 3 transport pipelines , for which distinct tariffs apply) applied between October 1, 2023 and September 30, 2024 by SNTGN Transgaz SA, were approved by **ANRE Order no. 68/2023** .

The significant increase in the average transport tariff, respectively the regulated income approved in 2023 was caused by the non-adjustment of tariffs in 2022, as a result of the limitations provided by GEO 27/2022, the significant increase in capital costs following the commissioning of the projects of major investments, the cost increase with the acquisition of technological consumption in 2022, as well as the increased inflation, recorded in 2022 and 2023.

V.1.2.2. Tariffs for the natural gas transportation service through the natural gas transportation pipelines Isaccea 2 - Negru Vodă 2 and Isaccea 3 - Negru Vodă 3

ANRE approved by **Order no. 69/2023** the extension of the term provided for in ANRE Order no. 149/2020 regarding the approval of the total revenue and transport tariffs for the natural gas transport activity on the Isaccea 2,3 - Negru Vodă 2,3 natural gas international transit pipelines and establishing some measures regarding its applicability. This Order was issued under the conditions that:

- in December 2020, by agreement of the parties, it was decided that the historic contract between SNTGN Transgaz SA and Gazprom Export LLC (GPE) for the transport of natural gas through the transit pipeline T3 on the territory of Romania to third countries, will be terminated starting from January 1, 2021. The contract was valid until 31.12.2023,
- starting from 2020, there was no physical flow of natural gas through the two transit pipelines T2 and T3,
- at the time of approval of the Order, there were no interconnection/technical agreements concluded with adjacent TSOs and no real perspective regarding their conclusion or regarding the transportation of natural gas through the pipelines Isaccea 2 Negru Vodă 2 and Isaccea 3 Negru Vodă 3.

V.1.2.3. Tariffs for connection to the natural gas transport system

In 2023, for the connection to the NTS, the rates calculated and approved by the operator were applied based on the Methodology for calculating the rates related to the process of connecting to the transmission and distribution systems in the natural gas sector and determining the average value of a connection, approved by ANRE Order no. 9/2022. In 2023, no changes were made to the regulatory framework regarding the establishment of connection costs to the NTS.

V.1.2.4. Storage activity

Considering the provisions of the Electricity and Natural Gas Law no. 123/2012, the activity of underground natural gas storage is no longer part of the regulated market, in the sense that natural gas storage operators have the right to set competitive prices for this activity.

V.1.2.5. Natural gas distribution activity

The regulated tariffs for the activity of natural gas distribution include tariffs differentiated by consumer category, for each of the licensed distribution operators, established based on *the Methodology* approved by ANRE Order no. 217/2018.

In 2023, differentiated distribution tariffs were established for consumer categories depending on their inclusion in consumption margins, transit tariffs and proximity distribution tariffs by applying cost corrections to regulated revenues, in accordance with the provisions of the mentioned applicable methodology. The particularity of this analysis consisted in the fact that, although according to the Methodology, the approval of the regulated and corrected regulated income, related to each year within the fourth regulatory period, as well as the distribution tariffs is carried out on July 1 of each year, based on the provisions of art. 14, para. (2) from GEO no. 27/2022, for the year 2023, ANRE approved the regulated distribution tariffs applicable starting from April 1, 2023, in compliance with the regulatory framework and the provisions of the GEO.

In 2022, also by exception to the provisions of the Methodology, in the application of the provisions of art. 14, para. (1) from the same ordinance, the adjustment of distribution tariffs was conducted starting from April 1, 2022, exclusively based on additional costs with technological consumption recorded by distribution operators during 2021, the tariffs thus approved remaining unchanged until April 1, 2023.

As a result, when approving the distribution tariffs for the year 2023 applicable from April 1, both the analysis for the establishment of the closing corrections of the year 2021 and the establishment of the regulated income and the corrected regulated income related to the years 2022 and 2023 were conducted.

It should be noted that, when calculating the regulated revenues related to the year 2023, the provision of art. 20 of the *Methodological Norms regarding the recognition in the regulated tariffs for the distribution and transport of natural gas of the additional costs with the purchase of natural gas to cover the technological consumption*, approved by ANRE Order no. 128/2022, using for the end of 2022 estimated adjustment data sent by distribution operators until November 30, 2022, was applied.

V.1.2.6 Evolution of natural gas distribution tariffs

ANRE proceeded to calculate the corrected regulated revenues of the operators and approved 27 orders establishing regulated tariffs for the provision of the distribution service, respectively **ANRE Orders no. 29-55/2023.** For the two large natural gas distribution operators, Distrigaz Sud Rețele SRL and Delgaz Grid SA, the distribution rates entered into force as of April 1, 2023, were approved by:

• ANRE Order no. 48/2022 regarding the establishment of regulated tariffs for the provision of the natural gas distribution service conducted by Distrigaz Sud Rețele SRL, as follows:

Consumer category	Minimum annual consumption MWh	Maximum annual consumption MWh	Distribution Fees lei/ MWh
C.1.		≤ 280	49.08
C.2.	> 280	≤ 2,800	46.23
C.3.	> 2,800	≤ 28,000	44.06
C.4.	> 28,000	≤ 280,000	34.00
C.5.	> 280,000		17,16
C 6.	Consumers benefiting from the proximity distribution tariff		6.00

• ANRE Order no. 39/2023 regarding the establishment of regulated tariffs for the provision of the natural gas distribution service conducted by Delgaz Grid SA, as follows:

Consumer category	Minimum annual consumption MWh	Maximum annual consumption MWh	Distribution Fees lei/ MWh
C.1.		≤ 280	52.78

C.2.	> 280	≤ 2,800	49.86
C.3.	> 2,800	≤ 28,000	45.71
C.4.	> 28,000	≤ 280,000	42.27
C.5.	> 280,000		39.91
C.7.	Consumers benefiting from transit distribution tariff		5.07

V.1.4.7 Connection tariffs to natural gas distribution systems

In 2023, for the connection to the distribution system in the natural gas sector, the tariffs were calculated based on the Methodology for calculating the tariffs related to the process of connecting to the transmission and distribution systems in the natural gas sector and determining the average value of a connection, approved by Order of the President of ANRE no. 9/2022. According to this methodology, in the case of household and similar consumers, the cost of the connection works, including the design, is fully borne by the distribution operator up to the limit of the average value of a connection, approved by ANRE.

V.2. Monitoring investments in natural gas networks (network extensions, investment plans, correlation between 10-year plans, PCIs, and national plans)

V.2.1. Evolution of the regulatory framework during 2023

The analysis of planned and realized investments in natural gas systems is carried out in accordance with the provisions of the Procedure regarding the substantiation and criteria for approving the investment plans of natural gas transport and system, distribution and storage operators, as well as of LNG/hydrogen terminals, approved by ANRE Order no. 38/2019, with subsequent amendments and additions. In 2023, no changes were made to the regulatory framework applicable to the analysis of investments in natural gas networks.

The monitoring of investments in natural gas networks and the technical condition of the systems is presented in more detail in the Report on the achievement of performance indicators for the transport and system service and the natural gas distribution and system service in the gas year 01.10.2022 - 30.09. 2023 and the technical status of natural gas transmission and distribution systems - 2023, published on the ANRE website at:

https://www.anre.ro/ro/gaze-naturale/rapoarte/rapoarte-indicatori-de-performanta.

V.2.2. Monitoring the development plan for the national natural gas transportation system

The TSO prepares the ten-year development and investment plan, based on the national strategy and the European development plan developed by ENTSOG, in accordance with the current state and future evolution of natural gas consumption and sources, including imports and exports of natural gas, in compliance with the principles set forth in *Directive 2009/73/EC of the European Parliament and of the Council of July 13, 2009 on common rules for the internal market in the natural gas sector and repealing Directive 2003/55/EC*, with the inclusion of investments related to projects of common interest (PCI). They have a cross-border impact on the interconnection capacity of the system and benefit from certain facilities, including grants, given at national and European level.

Considering the approval of the revised restructuring plan of the OLTENIA ENERGY COMPLEX

2021-2016 with the perspective of 2032 of Romania by European Commission Decision C 553 as of 26.01.2022 and the requests addressed to SNTRGN Transgaz SA for the connection to NTS of Electrocentrale Turceni, Electrocentrale Işalniţa and CET Mintia, as well as the assessment at the national level regarding the adequacy of the capacities of the transport system, in accordance with the provisions of art. 8 para. (4) from Regulation (EC) no. 715/2009 of the European Parliament and of the Council of July 13, 2009 regarding the conditions for access to natural gas transport networks and repealing Regulation (EC) no. 1775/2005, in 2023 the TSO identified the need to carry out major projects presented below, not included in the Development Plan of the national natural gas transport system for the period 2022-2031 (PDSNT 2022-2031) approved by ANRE Decision no. 1944/2022.

In 2023, the TSO updated the NTS Development Plan for the next 10 years. At the request of the operator, ANRE approved the revised Plan by **Decision no. 1956/2023**, by including the following investment projects, which have been declared of **national importance in the field of natural gas**:

- The transport pipeline necessary for the supply of natural gas to CET Mintia (HG no. 129 of 13.02.2023),
- Increasing the transport capacity of NTS and the security of natural gas supply of the Işalniţa Electrocentrale Branch, Dolj county (HG no. 549 of 12.06.2023), and
- Increasing the transport capacity of NTS and the security of natural gas supply of the Turceni Electrocentrale Branch, Gorj county (HG no. 551 of 12.06.2023).

By including the above new projects in *the National Gas Transmission System Development Plan for the period* 2022-2031-revised 2023, the value of the long-term planned projects is estimated at approx. 3.4 billion euros (of which 685.7 million euros for (Final Investment Decision) FID and non-FID projects), projects that will result in the creation of new natural gas transport lines essential for the domestic market and the markets in the region, respectively for the transport of natural gas from the Black Sea and for the integration of Romania in the large cross-border routes of the South-East/North-South Corridor of Europe.

The estimated total value of the investment works included in the *PDSNT 2022-2031 – revised 2023* is approx. 3.693 billion euros, of which 1.011 billion euros for FID and non-FID projects, classified as follows:

- modernization and re-technology of the NTS -30.4 million euros,
- development of NTS and related facilities 689.2 million euros,
- expansion of NTS to connect 291.4 million lei (58,2 million euros), of which 251.8 million lei (50,36 million euros) in application of the provisions of art. 130 of the Law.

V.2.3. Monitoring the implementation of the annual investment plans of the natural gas transport and system operator.

Recovery of outstanding works from the investment plan for 2022

Regarding the fulfilment of the investment plan for the year 2022, the TSO recovered during the year 2023 outstanding investments in the amount of 272.136.990 lei (54.427.400 euro), so that the total value of the investments made among those included in the investment plan for the year 2022 was of 386.577.731 lei (77.315.550 euro), of which 307.766.569 lei (61.553.313 euro) from own

sources and 78.811.162 lei (15.762.232 euro) from non-refundable sources. Direct investments in the system financed from own sources had a total value of 287.705.637 lei (57.541.127 euro), representing 93% of the total financed from own sources (provided that the regulatory framework allows a minimum limit of 85%), and those in equipment had a total value of 20.060.932 lei (4.012.186 euro).

By reporting the value financed from own sources of the direct investments in the system made according to the investment plan for 2022 of 287.705.637 lei (57.541.127 euro) to their plan value, of 336.911.382 lei (67.382.276 euro), results a degree of achievement of 85% of the investment plan for the 2022, established in accordance with the provisions of art. 34 para. (2) of the Procedure, below the mandatory minimum grade of 95%.

The most important investments related to the 2022 investment plan, which were recovered during 2023, were:

- The development of NTS in the NE area of Romania to improve the natural gas supply as well as to ensure the transport capacities to the Republic of Moldova.
- Natural gas transport pipeline Sighetul Marmatiei Borşa;
- Improving the safety of the Medieşu Aurit Abramut pipeline.

Implementation of the investment plan for 2023

In 2023, SNTGN Transgaz SA made investments totalling 101,997,945 lei, of which 87,971,269 lei represent financing from own sources and 14,026,676 lei financing from non-refundable funds. Of the total value of the investments made with financing from own sources mentioned above, 75,483,605 lei represents the total value of tangible and intangible assets related to the system, i.e. more than 85% of the total.

The most important investments put into operation in 2023 were:

- Natural gas transport pipeline Campulung Moldovenesc Vatra Dornei (Pojorâta Vatra Dornei route).
- NTS connection works.
- Refurbishment of pipelines, connections, regulation, and measurement stations (the most important being modernization of **technological connection point (TCP)** Schitu Goleşti, replacement of a section of the connecting pipeline of **regulation and measurement stations** (RMS) Poiana Braşov, modernization of RMS Clinceni, modernization of TCP Băcia, modernization of TCP Munteni, establishment of technological connection point within STC Vintu. The purchase of equipment, i.e. automotive equipment, computer technology, computer programs, work equipment and for the improvement of working conditions, security, and surveillance systems.

The degree of implementation of the annual investment plan for 2023, established according to the provisions of art. 34 para. (2) from *the Procedure* approved by ANRE Order no. 38/2019, respectively by reporting the implemented value of tangible and intangible direct assets in the system of 75,483,605 lei (15.096.721 euro) to their planned value of 195.441.989 lei (39.088.400 euro), is 38%.

According to *the Procedure*, the degree of implementation of the investment plan related to 2023 will be re-analysed after the first 6 months of 2024, during which the operator has the right to recover the investments not carried out in the previous year, being mandatory to achieve a degree greater than 95% of the investments planned in the system. The operator submitted the assumption

of the recovery of a total value of 155.514.447 lei (31.102.900 euro).

Among the most important investments originally planned in 2023, which are to be recovered in 2024, the following are mentioned: the DN 500 Plătărești – Bălăceanca transport pipeline, the RMS Timișoara I, RMS Timișoara III transport pipeline, the DN600 Mihai Bravu – Siliștea transport pipeline with the undercrossing of the Măcin and Borcea Danube arms, the safety of the Butimanu - Brazi transport pipeline at the undercrossing of the Prahova river, the modernization of TCP Racova.

The investment plan for the year 2024

For the year 2024, TSO Transgaz forecasts investments financed from own sources in a total amount of 160.001.710 lei (32.000.342 euro), of which investments in the system of 142.373.356 lei (28.474.671 euro) representing 89% of the total and investments in equipment of 17.628.354 lei (3.525.669 euro).

The structure of the investment plan includes 59% of the value of works to increase the NTS capacity, 30% of modernization works, i.e. re-engineering and modernization of pipelines, connections, regulation and measurement stations and 11% of equipment procurement, i.e. automotive machinery, computer technology, computer programs, work equipment and to improve working conditions, security and surveillance systems. Among the most important investments planned for increasing the NTS capacity are: 21 connection works, the Deta - Moraviţa transport pipeline, the Târgu Neamţ - Băltăţeşti transport pipeline.

V.2.4. Monitoring the implementation of the annual investment plans of natural gas storage operators

The total value of investments planned in 2023 by DEPOGAZ was 93,927,035 lei. Of this value, the tangible and intangible fixed assets related to the storage system represented 94.94%, respectively 89,176,933 lei, the rest representing equipment purchases. The investments made had a total value of 76,978,894 lei, financed from own sources.

By reporting the realized value of tangible and intangible assets in the system in the amount of 73,114,376 lei to their planned value of 89,176,933 lei, results a degree of fulfilment of the investment plan of 82% in 2022, established in accordance with the provisions of art. 34 para. (2) from the Procedure approved by ANRE Order no. 38/2019. The most important works conducted consisted of:

- the construction of 4 new storage wells at the Bilciurești Deposit.
- the modernization of 12 storage wells at the Sărmășel Deposit.

For the year 2024, DEPOGAZ has forecasted investments in the total amount of 57,448,612 lei, of which 44,738,706 lei represent tangible and intangible fixed assets intended for the system, wells, installations, and infrastructure related to the modernization of the Bilciurești underground storage deposit (about 78% of the total).

The operator of the DEPOMUREŞ storage system has planned for 2023 investments in the total amount of 761,082 lei, the entire amount being allocated to investments in equipment. As for the investments made, they were in the amount of 706.753 lei (approx. 141.350 euro).

For the year 2024, DEPOMUREŞ has forecasted investments worth 2,515,000 lei, of which

1,900,000 lei are tangible and intangible assets that belong to the system, namely the expansion of the SCADA system at the storage warehouse.

V.2.5. Monitoring the realization of annual investment plans for natural gas distribution systems

Recovery of outstanding works from the investment plan for 2022

Regarding the implementation of the investment plans related to the year 2022, which could be realized until June 30, 2023, according to the regulatory framework, natural gas distribution operators reported that, during 2023, investments of the plan for the year 2022 were recovered in the total amount of 99,179,710 lei (19.835.942 euro), of which financing from own sources in the amount of 78,512,132 (15.702.426 euro). Thus, the total value of investments made in 2022 including both the value made during 2022, of 856,433,612 lei (171.289.722 euro), and the recovered value of delayed investments, of 78,512,132 lei (15.702.426 euro), was 934,945,744 lei (186.989.149 euro), financed from own sources. Their structure was 96% distribution system capacities and 4% equipment. By reporting the value of the investments made in the objectives belonging to the system, of 896,238,527 lei (179.247.705) to their planned value, of 852,828,920 lei (170.565.784 euro), it is found that the obligation to achieve the value of the assumed plan for the year 2022 has been fulfilled in a proportion of 105%, established in accordance with the provisions of the regulatory framework, respectively of art. 34 para. (2) from the Procedure approved by ANRE Order no. 38/2019.

Implementation of the investment plan for 2023

The total value of investments planned by natural gas distribution operators for 2023 was 1,108,992,782 lei (221.798.556 euro), up by more than 6% compared to the previous 2022 plan, of 1,044,692,154 lei (261.173.038 euro).

Of the total planned value, investments with planned financing from own sources were of 1,005,329,043 lei (201.065.808 euro), increasing by more than 8% compared to the value for 2022, of 923,908,341 lei (184.781.668 euro). The structure of these planned investments is 92% investments in system capabilities and 8% endowments.

The investments made, respectively the value of the fixed assets resulting from the investments made by the operators of the distribution systems at the national level in 2023, is 1,042,768,994 lei (208.553.798 euro), of which 948,731,439 lei (189.746.288 euro) are financed from own sources, registering an increase of approximately 128 .5 million lei, respectively an increase of approx. 16% compared to the value of investments made in 2022 from own sources, which was 820,224,146 lei (164.044.829 euro).

Of the value realized from own sources mentioned, 847,624,191 lei (169.524.838 euro), respectively about 89% of the total, are direct investments in the distribution systems and 101,107,248 lei (20.221.449 euro), representing 11% of the total, are investments in equipment.

By reporting the value of the investments made in objectives belonging to the system, of 847,624,191 lei (169.524.838 euro) to their planned value, of 924,021,374 lei (184.804.275 euro), it is found that the obligation to achieve the value of the assumed plan has been fulfilled in proportion to 92%, established in accordance with the provisions of the framework regulation, respectively of art. 34 para. (2) from the Procedure approved by ANRE Order no. 38/2019.

Regarding the investments made during 2023 by the two operators that distribute natural gas for more than 100,000 users, respectively SC Delgaz Grid SA and SC Distrigaz Sud Retele SRL, the

total amount realized amounts to 853,817,070 lei, of which financing from own sources of 788,799,479 lei (157.759.896 euro). From this value, the direct investments in the objectives of the system amount to 695,357,572 lei (139.071.514 euro). Relating this value to the one assumed by the plan, of 782,756,548 lei (156.551.310 euro), results in a degree of achievement on December 31, 2023, of the direct investments in the system from the assumed plan, established in accordance with the provisions of art. 34 para. (2) from the Procedure approved by ANRE Order no. 38/2019, of 89%.

The total value of the investments made by the two big operators represents a percentage of 83% of the investments made in the natural gas distribution systems at the national level.

From the point of view of the investments structure made in 2023 by the two large distributors, 88% of the total represents the value of tangible and intangible assets that belong to the system, a value that complies with the provisions of art. 22, para. (2) of the *Procedure* approved by ANRE Order no. 38/2019, according to which for the OD that distributes natural gas to more than 100,000 consumers, the value of investments resulting in tangible and intangible assets belonging to the system must represent at least 85% of the total value of the annual investment plan.

In accordance with the provisions of art 34, paragraph (2) of the Procedure, the operator has the obligation to make annual investments from its own sources that result in tangible and intangible assets belonging to the system in the amount of at least 95% of their total value contained in the annual investment plan approved by ANRE for that year. In this sense, following ANRE's analysis, it emerged that, among the 26 operators, 12 operators have already met the percentage condition imposed, the rest of the operators having the obligation to recover the unrealized investments in accordance with the provisions of art. 34 paragraph (4) of the same *Procedures*, respectively in the first 6 months of 2024.

The investment plan for the year 2024

For the year 2024, the operators of the distribution systems planned to make investments in a total amount of 1,064,428,622 lei, the amount from own sources being 920,031,826 lei and the amount financed from non-refundable funds being 144,396,796 lei. Of these, 833,175,576 lei represent the value of direct investments in the system, respectively 91% of the total.

The two largest operators, Distrigaz Sud Reţele and Delgaz Grid, have scheduled investments totalling 846,304,869 lei for 2024, of which 816,156,774 lei represent financing from their own sources. The direct investments in the system planned by these operators have a total value financed from own sources of 734,282,813 lei, i.e. 90% of the total. The investments that the two big operators have planned for 2024 represent approx. 80% of the total value scheduled for the same year by all natural gas distribution system operators in Romania.

V.3. Technical performance (technical status and network maintenance work, performance standards, network connection times)

The monitoring of performance indicators and the technical condition of natural gas networks is presented in the Report on the achievement of performance indicators for the transport and system service and the distribution and system service of natural gas in the gas year 01.10.2022 - 30.09.2023 and the technical state of natural gas transport and distribution systems for 2023, published on the ANRE website at:

https://www.anre.ro/ro/gaze-naturale/rapoarte/rapoarte-indicatori-de-performanta.

V.4. Upcoming priorities regarding the regulation of tariffs and investments in natural gas systems

In 2024 and 2025, the methodologies for setting tariffs for the activities of operating natural gas networks - transport and distribution will be developed and approved, including the regulatory framework regarding the recognition in tariffs of investments made by operators in development, maintenance, repair and rehabilitation natural gas transmission and distribution networks for the fifth regulatory period. Even if the basic methodological principles will be maintained in the fifth regulatory period that will start in 2025, the regulatory framework will be adapted to the new economic and financial conditions of the sector, considering the challenges of the national energy strategy.

In this sense, the method of setting reference operating costs is based on: (a) comparative analysis, (b) establishing the efficiency factor imposed from year to year, (c) rules for recognizing technological consumption in the application of the natural gas systems efficiency strategy, and (d) establishing mechanisms to verify the efficiency of investments, especially for expansion and connection works. Finally, the analysis of the opportunity to introduce binomial tariffs for natural gas distribution will continue. Furthermore, ANRE will approve in 2024 the value of the regulated capital rate of return (WACC) for the same period.

Thus, in accordance with ANRE's 2024-2025 Multiannual Regulatory Program, published on ANRE's website, in natural gas sector the following regulatory priorities are being currently carried out:

- 1. Approval of the Methodology for establishing regulated tariffs for the natural gas distribution service for the 5th regulatory period. The methodology is necessary to establish the norms, mechanisms, methodological rules applicable to the establishment of regulated tariffs for natural gas distribution in the fifth regulatory period, respectively the period 2025-2029.
- 2. Approval of the Methodology for establishing regulated tariffs for natural gas transport services for the 5th regulatory period. The methodology is necessary to establish the norms, mechanisms, methodological rules applicable to the establishment of regulated tariffs for the transport of natural gas in the fifth regulatory period, respectively October 2025-September 2030.
- 3. Approval of the principles for establishing binomial tariffs for the natural gas distribution service. The purpose of the regulation is the implementation in the fifth period of the binomial type of tariff system, a system considered more suitable for a service of operating the natural gas supply network of consumers. The introduction of binomial tariffs aims at a more judicious allocation of capital costs to consumer categories.

VI. LICENSES, AUTHORIZATIONS AND CERTIFICATES

VI.1. ELECTRICITY

Authorizations granted in 2023

During 2023, there was an increased interest of investors in the construction of new energy capacities, based on renewable energy sources or on conventional sources using modern technologies, with a low degree of environmental pollution, which materialized through the granting of 132 establishment authorizations for energy investments totalling around 2042.86 MW,

while in 2022 only 55 establishment authorizations were granted, totalling 881 MW and for the year 2021, 8 establishment authorizations were granted, totalling 80 MW.

Authorization of natural persons

ANRE authorized natural persons as electricians, respectively project verifiers and quality technical experts in the field of technological electrical installations, in accordance with the provisions of the Regulation for the authorization of electricians in the field of electrical installations, respectively of project verifiers and quality technical experts and extrajudicial in the field of technological electrical installations, approved by ANRE President's Order no. 66/2023.

During the year 2023, ANRE organized two authorization sessions, in the spring and autumn of 2023. During these sessions, 4901 applications for licensed electrician were received, analysed, and resolved.

Certification of economic operators

In accordance with the provisions of the Regulation for the certification of economic operators who design, execute and verify electrical installations, approved by the Order of the President of ANRE no. 134/2021, ANRE continued issuing certificates to economic operators who design, execute and verify electrical installations. According to the above-mentioned regulation, ANRE issues 17 types of certificates.

In 2023, 1721 requests from economic operators in the field of electricity for the different types of certificates provided for by the regulation were registered. ANRE issued during the year 2023 a number of 1347 decisions, by which 1462 certificates were granted, respectively 162 certificates were modified/suspended/withdrawn. Also, during the year the validity of 2023, 676 certificates was extended.

VI.2. NATURAL GAS

Establishment authorizations and licenses

In accordance with the provisions of the Regulation for the granting of establishment authorizations and licenses in the natural gas sector, approved by ANRE Order no. 199/2020, with subsequent amendments and additions, during 2023, at the request of economic operators, ANRE granted/amended establishment authorizations and licenses in the natural gas sector. 31 establishment authorizations were granted by ANRE in 2023, and those in force on 31.12.2023 were 48. The number of licenses granted by ANRE in 2023 is 17, and those in force on 31.12.2023 were 170.

Authorization of economic operators for design/execution/exploitation

In accordance with the provisions of the Regulation for the authorization of economic operators carrying out activities in the field of natural gas, approved by ANRE Order no. 132/2021, during the year 2023, at the request of economic operators, a number of 1248 design, execution and exploitation authorizations were granted in the natural gas sector. On 31.12.2023, 4895 design, execution and exploitation authorizations were in force in the natural gas sector.

Authorization and certification of natural persons

In accordance with the provisions of the Regulation for the authorization of natural persons conducting activities in the natural gas sector, approved by ANRE Order no. 65/2023, two exam sessions were organized to obtain the qualification of certified installer. During the year 2023, the

authorized installer authorizations were extended both in the spring and in the fall of 2023. In total, during the year 2023, approx. 3562 files containing applications drawn up to acquire the quality of certified installer in the field of natural gas for a number of 1716 authorizations, as well as the extension of the validity of 1152 authorizations held.

In accordance with the provisions of the Regulation for the certification of project verifiers and technical experts for works/systems in the natural gas sector, approved by ANRE Order no. 22/2013, during the year 2023, ANRE granted 113 certificates for project verifiers, as well as 41 certificates for technical experts for the objectives/systems in the natural gas sector.

On 31.12.2023, there were in force 361 certificates of project verifiers and 145 certificates of technical experts held by natural persons conducting activities in the natural gas sector.

VI.3. THERMAL ENERGY

In accordance with the provisions of *Law no. 325/2006*, ANRE elaborates, establishes and monitors the application of the set of mandatory regulations at the national level, necessary for the operation of the public heat energy supply service in a centralized system, under conditions of efficiency, competition, transparency and consumer protection.

Granting, revision, suspension, or withdrawal of licenses in the field of public heat energy supply service

48 economic operators holding PTESS (Public Thermal Energy Supply Service - SPAET) licenses and 5 economic operators holding licenses for the commercial exploitation of thermal energy production capacities were registered in the ANRE database.

VII. RENEWABLE SOURCES OF ENERGY, COGENERATION AND HYDROGEN VII.1 PRODUCTION OF ELECTRICAL ENERGY FROM RENEWABLE SOURCES

Today, the national energy sector in Romania faces numerous challenges both globally and locally: security of electricity supply, increasing competition and reducing the environmental impact by reducing greenhouse emissions. Romania must overcome the economic performance gap with the more developed EU countries.

Thus, one of the main challenges of the EU and implicitly of Romania is the way in which electricity is provided, using competitive electricity and with as little impact on the environment as possible regarding greenhouse gas emissions, in the context of climate change, global demand in electricity growth and the uncertain future of traditional (electrical) energy sources.

VII. 1.1. Promoting electricity produced from renewable energy sources.

The production of electricity from renewable sources is an imperative, both for the current period and for the next decade, so that by the year 2050, electricity will be provided in a proportion of 100% from renewable sources. The motivation for such an approach is to protect the environment, reduce greenhouse gas emissions, increase energy independence, diversify supply sources, economic and social reasons. Therefore, to cover the investment costs related to the installation of new E-RES capacities ¹, at EU level the member states have established different support systems for electricity from renewable sources.

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¹ E-RES electricity from renewable energy sources

To reach the national target in 2023, the system of mandatory quotas combined with the trading of green certificates, was established by *Law no.* 220/2008 and authorized by the European Commission in July 2011 by *Decision C* (2011) 4938² and amended in 2015 by Decision C (2015) 2886, and in 2016 by Decision C (2016) 8865/2016.

Also, in order to achieve the mandatory objective regarding the share of energy from renewable sources, Romania established through *Law no.* 220/2008, amended in 2018 by Law no. 184/2018 for the approval of GEO no. 24/2017, a support scheme for the promotion of electricity produced in electricity production units from renewable sources with an installed electric power of no more than 27 kW per place of consumption belonging to prosumers, threshold successively increased both in 2020, to 100 kW/ place of consumption through the adoption of Law no. 155/2020 as well as in 2021 at 400 kW/place of consumption through the adoption of GEO no. 143/2021.

Monitoring the functioning of the E-RES promotion system

The monitoring of the promotion system of electricity produced from renewable energy sources through Green Certificates is established based on the provisions of art. 20 of *Law no.* 220/2008 according to which ANRE monitors the development and operation of the green certificates market, prepares and publishes annually on its website, by June 30, a report on the functioning of the system for the promotion of electricity from renewable sources, respectively ANRE publishes annually on its website, the share of electricity produced from renewable sources in the gross final consumption of electricity, for the previous year.

Monitoring the promotion system of electricity produced from renewable energy sources through green certificates

The system for promoting E-RES through green certificates has been operating since 2005. During the application period of the E-RES production promotion system, 778 producers were accredited. At the end of 2023, the number of accredited E-RES producers was 716, reduced from the total number of 778 accredited producers by the number of producers with expired certification. E-RES producers were distributed by types of sources as follows: 53 use wind power, 93 use hydraulic power in power plants with an installed capacity of no more than 10 MW, 552 use solar power and 28 use biomass, including wastewater digester gas and sewage sludge.

At the end of 2023, the certified installed capacity in E-RES production units were 4,653 MW, down 47 MW compared to 2022, representing the electricity capacities for which the accreditation period has expired.

Monitoring the promotion system of electricity produced in power plants from renewable sources with an installed power of no more than 400 kW belonging to prosumers.

The monitoring of prosumers for the year 2023 considered the data and information sent by 9 distribution operators that report information on the prosumers connected to the electricity network and the data and information transmitted by the electricity suppliers regarding the sales-purchase contracts concluded with the prosumers who own power plants producing electricity from renewable energy sources, for the year 2023.

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²Decision C (2011) 4938 regarding state aid SA 33134 (20011/N) for Romania – green certificates for promoting the production of electricity from renewable energy sources

During 2023, to collect the data necessary to monitor the activity of prosumers in Romania, the following IT tools were used at the ANRE level, accessible directly from the ANRE website:

- ➤ the IT application accessible directly from the ANRE website for the reporting data received from the distribution operators related to the prosumers connected to the distribution networks of the distribution operators.
- ➤ the IT application accessible directly from the ANRE website for the reporting data received from the electricity suppliers regarding the sales-purchase contracts concluded with the prosumers who own power plants producing electricity from renewable energy sources.

Monitoring the development and operation of the capacities to produce electricity from renewable sources belonging to the prosumers

Regarding the evolution of the number of prosumers, the analysis conducted for the year 2023 shows a **linear increase in the number of prosumers**, a significant increase in the number of prosumers, from 40 159 reaching 110 355 prosumers in end of the year, an increase of approximately 70,000 prosumers. There is a significant increase in the power installed by prosumers during the year 2023, from the value of 478 MW at the beginning of the year and reaching 1443 MW at the end of the year, an increase of approximately 1000 MW.

The situation of the evolution of prosumers on **31.12.2023** is accessible in the section **Information on prosumers** on the page:

https://anre.ro/consumatori/energie-electrica/cum-devin-prosumator/.

VII.1.2. Guarantees of origin (GO)

Regarding the compliance with the requirements regarding the certification of the origin of E-RES of the European Union, the Regulation on the certification of the origin of electricity produced from renewable energy sources was promoted, based on which ANRE issued **the Procedure for supervising the issuance of guarantees of origin for electricity produced from renewable energy sources, approved by ANRE Order no. 23/2004.** As a result, ANRE established the Single Register of Guarantees of Origin (SRGO) and, between 2005 and 2010, issued guarantees of origin for electricity produced from renewable energy sources, constantly updating the data in this register.

The conclusions of the 2023 activity from SRGO are as follows:

- 2023 represented a year with a noticeable increase in operating actions in SRGO, because of the requests of operators involved in the system of guaranteeing electricity produced from renewable sources, for all relevant actions, issuance/transfer/use of GO.
- Out of the total of 24,023,656 GOs issued, 72.79% were for energy produced from hydroelectric power. Hidroelectrica received 17,007,097 GO, representing 70% of the total GOs issued.
- The total number of GO transferred both from the accounts of E-RES producers and from the accounts of electricity suppliers was 8,775,478 GO, higher by 25.82% compared to the previous year.
- The number of GOs used by electricity suppliers to final consumers was 3,974,829 GOs, representing 48.65% of the number of GOs held by E-SRE suppliers during 2023, with the mention that remaining GOs on their account can be used throughout their validity period.

GO registration is done in electronic format, in SRGO, it contains information about the guarantees of origin issued, transferred, used, or withdrawn. Starting from 2013, the Reports on the monitoring of the holders (producers and suppliers of electricity) of the guarantees of origin for the electricity produced from renewable energy sources and delivered to the electricity networks can be found on the ANRE website:

https://arhiva.anre.ro/ro/energie-electrica/legislatie/surse-regenerabile/garantii-de-origine/rapoarte1467290035

VII.1.3. Invoicing Green Certificates to final consumers

The activities of purchase/transaction/invoicing and regularization of green certificates to final consumers are carried out by electricity suppliers based on the specific provisions of *Law no*. 220/2008, as well as in accordance with ANRE regulations in force. The value of the green certificates is invoiced to the final consumers by the electricity supplier for the electricity billed to them in the billing interval, highlighted separately in the invoice issued for electricity, the green certificates value invoicing interval being the same as the electricity invoicing period.

According to the provisions of art. 15 of *the Procedure*, electricity suppliers submit the following data to ANRE:

- a) until March 31 of each year, data on the monthly invoicing of the GC for the previous year related to the billed electricity.
- b) by September 30 of each year, data regarding the annual regularization of the GC value related to the previous year.

In 2023, 99 economic operators involved in electricity supply and production activities and 10 distribution operators, other than non-concessionaires, who invoiced electricity to final consumers, uploaded the billing data to the ANRE Portal. There were no economic operators that did not fulfil their reporting obligations.

VIII. MAIN DEVELOPMENTS IN THE ENERGY MARKETS IN 2023

VIII.1. Main developments in the natural gas market

In 2023, the annual consumption of natural gas in Romania reached approximately 102.46 TWh, a decrease of 6.51% compared to 2022.

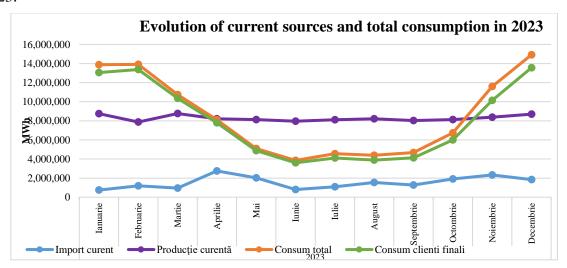
The number of participants on the natural gas market in Romania has been constantly changing since the market was liberalized, especially in the natural gas supply sector, including, in 2023:

- 1 operator of the National Transmission System S.N.T.G.N. Transgaz S.A.
- 12 gas producers: S.N.G.N. Romgaz S.A., OMV Petrom S.A., Amromco Energy S.R.L., Black Sea Oil&Gas S.A., Dacian Petroleum S.R.L., Foraj Sonde S.A., Gas Plus Dacia S.R.L., Mazarine Energy România S.R.L., Petro Ventures Resources S.R.L., Raffles Energy S.R.L., Serinus Energy România S.A., Stratum Energy România LLC.
- 2 storage operators: S.N.G.N. Romgaz S.A. Natural Gas Storage Subsidiary Depogaz Ploiesti S.R.L. and Depomureş SA.
- 27 distribution operators, the largest being Distrigaz Sud Reţele SRL and Delgaz Grid SA.
- 76 suppliers active on the natural gas market.
- 16 traders active on the natural gas market.

Wholesale natural gas market

The amount of natural gas produced in Romania in 2023 was 99.242 TWh. The domestic production (current production and gas extracted from storage) which entered consumption accounted for approximately 83.54% of the total sources. The first two producers (Romgaz and OMV Petrom) together covered about 86.78% of this source.

The import of natural gas that entered consumption in 2023 accounted for 16.46% of the total sources. It includes, in addition to current imports, the extraction of natural gas from external sources from underground storage deposits, but excludes quantities stored in underground storage deposits from current imports. The top three importers together accounted for about 70.20% of these quantities. The graph below shows the evolution of current sources and total consumption in 2023:



Natural gas storage

The natural gas storage activity in the summer period is necessary for the optimal functioning of the Romanian market, because the current production together with the current import fail to cover the monthly consumption needs in the wintertime. Since the current production is more than consumption in the summer period, storage even becomes a necessity for natural gas producers, in the situation where suppliers do not purchase quantities for storage, necessary for consumption in the cold season.

Type of economic operator	Stock as of October 31, 2023 (MWh)
Producers	4.101.570,133
Rest of the market participants*	30.697.872,388
Total stored	34.799.442,521

^{*}Suppliers and transport

There are two underground natural gas storage operators on the national gas market: Depomureş S.A. and S.N.G.N. Romgaz S.A. – Natural Gas Storage Subsidiary Depogaz Ploiesti S.R.L.

The comparative situation with the previous year of the quantities and prices of natural gas sold by natural gas producers, participants in the wholesale market, for delivery in 2023, made on each type of market/trading platform/participant is as follows:

T	202	2	2023	
Transactions of the producers	Quantity (MWh)	Price (Lei/MWh)	Quantity (MWh)	Price (Lei/MWh)
Quantities traded according to GEO 27/2022*, of which:	18.804.146,851	152,51	47.382.189,592	150,00
Quantities traded	10.004.140,031	132,31	47.302.107,372	130,00
according to GEO 27/2022				
- Households	17.375.463,183	150,00	41.098.428,992	150,00
Quantities traded	17.575.105,105	120,00	11.090.120,992	120,00
according to GEO 27/2022				
- PET	1.428.683,668	183,10	4.874.876,609	150,00
Quantities traded	11.120.000,000	100,10		100,00
according to GEO 27/2022				
- Technological				
consumption	N.A.	N.A.	1.408.883,991	150,00
Quantities traded under			,	
bilaterally negotiated				
contracts**, of which:	22.357.009,575	394,23	14.594.840,224	212,49
-Producers	1.411.136,116	253,14	31.735,963	226,74
-Suppliers	20.945.873,459	403,74	14.563.104,261	212,46
Balancing with TSOs	452.636,776	497,29	202.241,558	181,48
Contracts on BRM's				
centralized markets***,				
of which:	19.956.791,419	359,68	7.842.806,146	271,68
Competitive Simple Gas				
Forward Platform	2.561.970,727	339,42	0,000	0,000
Day ahead market gas				
Platform	470.385,511	486,00	2.257.158,965	180,84
Within day market gas				
Platform	531.499,673	492,35	1.390.935,481	178,88
Double competitive gas				
forward platform	16.160.228,501	347,97	3.985.311,264	358,89
- transferred to the central				
counterparty through				
novation	329.639,872	430,22	835.854,712	419,50
Balancing Market	232.707,007	536,07	209.400,436	207,45
Contracts on the				
centralized markets of				
OPCOM SA, of which:	0,000	0,00	0,000	0,00
PCGN-LN	0,000	0,00	0,000	0,00
PCCB-LP	0,000	0,00	0,000	0,00
PC-OTC	0,000	0,00	0,000	0,00
PZU	0,000	0,00	0,000	0,00

^{*} According to the provisions of GEO no. 27/2022, the average prices achieved for the natural gas traded do not include tariffs.

**The average prices achieved for the natural gas traded, in the case of bilaterally negotiated contracts, include tariffs.

The average prices for natural gas traded on the centralized markets administered by the Romanian Commodity Exchange include tariffs.

Centralized markets

In 2023, the quantities of natural gas traded on the centralized markets, on the platforms managed by the BRM operator, totaled 13.97 TWh. On the platforms managed by the OPCOM operator there was no transaction.

Natural Gas Retail Market

In 2023, 65 suppliers operated on the competitive natural gas retail market. The total number of final natural gas consumers in December 2023 was 4,611,800, of which 221,172 non-household consumers (approximately 4.8%) and 4,390,628 household consumers (approximately 95.20%).

The total natural gas consumption recorded in 2023 was approximately 102.46 TWh, a decrease of 6.51% in 2023 compared to 2022.

In 2023, the share of natural gas quantities used by household consumers in the total final consumption of natural gas is 35.88%, and the number of these consumers represents 95.20% of the total number of final consumers. Although the number of non-household consumers represents only 4.80% of the total final natural gas consumers, the share of natural gas quantities used by them is 64.12% of the total final consumption.

Average sale price of natural gas to end consumers in 2023

The sales prices by categories of end consumers (including for consumers supplied in the last resort regime - UI), depending on the consumption tranches, are presented as follows, in 2023:

Type of client		Annual consu	mption (MWh)	Price without tariffs*	Price with tariffs**	
		Minimum	Maximum	(lei/MWh)	(lei/MWh)	
	D1		≤ 5,56	184,69	238,32	
Household end consumers	D2	> 5,56	≤ 55,56	175,38	229,85	
	D3	> 55,56		184,56	236,60	
	I1		≤ 280,00	252,47	303,06	
	I2	> 280,00	≤ 2.800,00	249,51	297,16	
Non-household end	13	> 2.800,00	≤ 28.000,00	233,35	277,93	
consumers***	I4	> 28.000,00	≤ 280.000,00	215,13	234,95	
	I5	> 280.000,00	≤ 1.120.000,00	194,87	203,34	
	I6	> 1.120.000,00		218,67	224,19	

^{*} The average selling price corresponding to each category of final consumers does not include the tariffs related to the transmission and/or distribution services necessary for the transmission of natural gas to the final consumer's place of consumption, other taxes, excise duty or VAT.

The categories of consumers in the chemical industry and producers of electricity and heat were excluded, except for the consumption of the population.

^{**} The average selling price corresponding to each category of final consumers includes the tariffs related to the transmission and/or distribution services necessary for the transport of natural gas to the final consumer's place of consumption and does not include other taxes, excise duty or VAT

Competitive retail market concentration indicators, year 2023	C1 (%)	C3 (%)	ННІ
Value	24,93	66,99	1.690,05

These indicators were calculated by relating the quantity sold by a supplier on the retail market to the total quantities of natural gas sold in that year by suppliers on the retail market.

The results of the monitoring activity can be accessed on the ANRE website, within the Monthly Reports on the natural gas market (https://anre.ro/despre/rapoarte/).

Bilateral Gas Contracts

Between January 1 and December 31, 2023, the conclusion of 548 directly negotiated bilateral sale-purchase contracts was reported, of which 411 were new contracts, signed starting with January 2023, and 137 were added to the contracts already in force.

VIII.2. Main developments in the wholesale and retail electricity market in 2023

Structure of electricity produced and delivered from dispatchable units

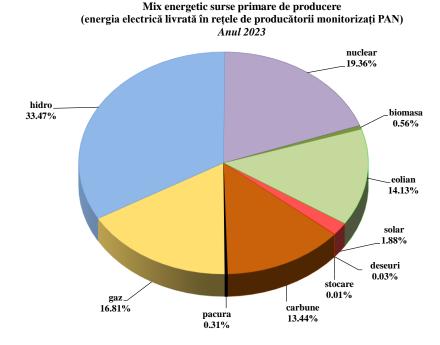
In 2023, the amount of electricity produced in production units with an installed capacity of more than 5 MW was 56.03 TWh, of which approx. 53.17 TWh were delivered to the transmission and distribution networks.

The values of concentration indicators calculated based on electricity produced continue to be within the limits between markets with a moderate degree of concentration and those with a high degree of concentration.

Indicatori de concentrare energie electrică produsă	2021	2022	2023
C1 (%)	29.64	25.45	32.33
C3 (%)	66.60	63.55	64.24
ННІ	1699	1542	1708

The 4 most important producers, which dominate the production sector year after year, are Hidroelectrica, Nuclearelectrica, Oltenia Energy Complex and OMV Petrom. These producers together account for almost 74% of the total energy production in 2023. The main producer, Hidroelectrica, had a market share of over 32% in 2023, up from the previous year, with a production higher by approx. 4.5 TWh. The decreasing share of electricity produced by the Oltenia Energy Complex in 2023 compared to the previous year was also partly determined by the partial division process that the producer went through in the autumn of 2022 and the takeover of CET Craiova II by Electrocentrale Craiova, a newly established producer.

We present below Romania's energy mix by types of primary sources of electricity production delivered to the networks by the PAN monitored producers in 2023:



The most important source of energy production was hydropower this year as well, followed by nuclear and gas and coal-based, like the structure of the primary source in previous years.

Developments on the wholesale electricity market

Considering the situation caused by the increase in the price on the international energy markets, as well as the effects caused by these increases on the markets and end consumers in our country, the legislative framework established by the Romanian Government through GEO no. 27/2022, with subsequent amendments and completions, applying the centralized electricity procurement mechanism established within OPCOM.

The Day-Ahead Market (DAM) has been operating since June 2021 in a mechanism coupled in the European SDAC project and through flow-based coupling since June 2022. The intraday market (IP) operates in conjunction with the markets of 23 other EU Member States in the European SIDC project.

Since March 2022, Bursa Română de Mărfuri (BRM) has become the holder of the license for the activity of the electricity market operator in Romania, organizing and managing the following centralized forward contract markets: Large Consumers Market (PMC), Electricity Forward Contracts Market (PCT) and OTC Electricity Market. Since July 2023, BRM has also received the status of designated electricity market operator (NEMO), the Day-Ahead Coupled Market (EDP) and the Intraday Coupled Market (IP) for a period of 4 years.

The evolution of electricity delivered on each of the components of the wholesale market in 2021 – 2023 and their evolution in 2023 compared to the values of the previous year, their share in the domestic consumption achieved by the SEN, as well as the average prices on the respective components of the wholesale market are published monthly on the ANRE website: https://anre.ro/despre/rapoarte/.

The analysis of the cross-border commercial activity with electricity shows that, in 2023, compared to the previous year, there was a substantial increase in the export volume (by approx. 87.6%), the

volume of imported energy remaining at approximately the same level as in 2022 (with a slight decrease of approx. 2.9%). Overall, in 2021-2023, Romania gradually transformed its position as a net importer, with energy volumes exceeding 2 TWh in 2021, into that of a **net exporter in 2023**, exporting almost 3 TWh:

Trade balance (export – import)	2021	2022	2023
Volume (GWh)	-2199	-1247	2992

Evolutions on the wholesale electricity market

In 2023, the volume of electricity deliveries related to wholesale market components was 63.64 TWh, down 23% compared to 2022. Compared to the previous year, increases in the volumes delivered were recorded on the market of directly negotiated bilateral contracts, export contracts, PMC (large consumers market), organized at BRM, and PI, while the volumes delivered on the centralized markets of contracts organized at OPCOM, PZU and PE (balancing market) were decreasing.

Against the background of the application of the provisions of the primary legislation on support schemes (GEO no. 27/2022 with subsequent amendments and completions), **the size of the electricity market has shrunk**, with the centralized contract markets registering a sharp decrease, with a low number of transactions with delivery in 2023, mainly determined by the obligation established for producers to sell 80% of the available electricity through MACEE (centralized electricity purchase mechanism). Thus, the volume of electricity conveyed through MACEE accounted for 25.3% of the volume of deliveries on the wholesale market in 2023.

In 2023, OPCOM was the only market operator on whose platform's electricity transactions were concluded.

The market for directly negotiated bilateral contracts

In accordance with the provisions of the primary legislation, wholesale market participants can conclude directly negotiated bilateral contracts for all time intervals. The total quantity delivered for sale in 2023 on directly negotiated bilateral contracts increased by approx. 7% compared to 2022, while representing 15.4% of the domestic consumption made in the NES (national energy system).

Day-ahead market - PZU

The volume of electricity traded on the PZU in 2023 decreased by approx. 33.4% compared to the previous year. The monthly share of transactions carried out on the PZU from the domestic consumption made by the SEN varied between 24.2% (October) and 42.8% (January).

The average annual price per PZU, calculated by ANRE as an average of the average monthly prices per PZU weighted with the monthly volumes traded in 2023 (RO hours), was 536.23 lei/MWh (107.24 euro), registering a decrease of approx. 59.8% compared to the average of 2022.

As of June 8, 2022, the Romanian day-ahead market has moved to the next stage provided for by Commission Regulation (EU) 2015/1222 of July 24, 2015, establishing guidelines on capacity allocation and congestion management (CACM Regulation), through the implementation of the *CORE FB MC* (flow-based coupling) project.

Intraday Market - IP

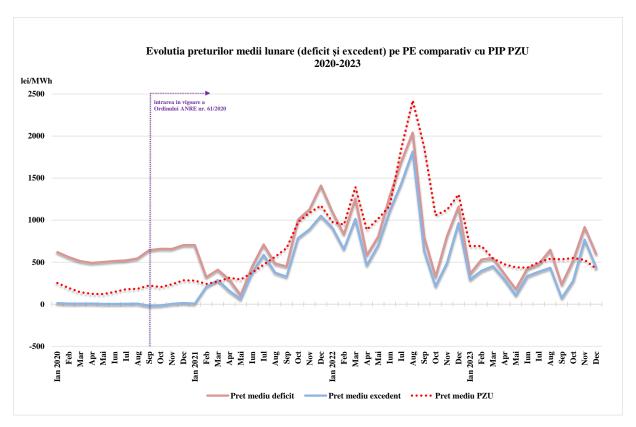
Since November 19, 2019, the intraday market in Romania has been operating in conjunction with the markets of 23 other EU member states participating in the *European SIDC* (Single Intra-Day Coupling) project. The new trading rules have been developed and approved by all regulatory authorities in the participating countries and by ACER in accordance with the provisions of the CACM Regulation.

Compared to the values of the previous year, the volume of electricity traded in 2023 on IP registered an increase of approx. 32%, while the weighted average trading price, calculated by ANRE as the average of the monthly average prices per IP weighted with the monthly volumes traded in 2023 (RO hours), recorded a decrease of approx. 60,5%.

Balancing Market

At the end of 2023, 92 participants were registered on the balancing market (PE), owning 181 dispatchable units in commercial operation. On the same market, 115 Balancing Responsible Parties (PREs) operated, of which 11 PREs were responsible for balancing for at least one other participant, 3 separate PREs belonging to TSOs (for the purchase of energy for the consumption of its own stations, for fulfilling the quality of transfer agent for PZU and PI), another 3 belonging to OPCOM (to ensure the role of counterparty for PZU and PI and sole purchaser for MACEE) and 1 PRE belonging to BRM as operator of the electricity market.

In the following graph we present the evolution in 2020-2023 of the two average monthly prices for the settlement of PRE imbalances, in correlation with the average monthly price recorded on the PZU. During the period presented, the rules of operation and settlement of the balancing market were modified. Important changes were introduced by ANRE Order no. 61/2020 for the approval of the Regulation on the programming of dispatchable production units, dispatchable consumers and dispatchable storage facilities, the Regulation on the operation and settlement of the balancing market and the Regulation on the calculation and settlement of imbalances of the parties responsible for balancing entered into force in September 2020, which, among other things, eliminated the price limits for energy offers, implemented the 15-minute settlement interval and the single imbalance price on the EP.



System services market

To cover the reserve needs established by UNO-DEN to maintain the level of safety in the operation of the SEN, CNTEE Transelectrica SA acquired in 2023 the secondary frequency-power regulation (RS) reserve and the one corresponding to the rapid tertiary regulation (RTR) by organizing auctions, according to the legal provisions in force. In 2023, no tenders were organized for the purchase of the slow tertiary regulation reserve, assessing that imbalances in the EP can be covered by SR and RTR under the conditions of an interconnected operation at the European Imbalance Clearing Platform (IGCC).

Retail electricity market

During 2023, 94 economic operators operated on the PAM, of which 53 are license holders whose main activity is the supply of electricity (including suppliers of last resort who operate both in the last resort and competitive segments) and 41 are license holders for the commercial operation of electricity generation capacities with installed capacities over 5 MW, whose main activity is the production of electricity, but which have complementary supply rights.

During 2023, the share of vulnerable household consumers in the total number of household consumers was 1.1%.

At the level of non-household end consumers, there is a decrease in total consumption for 2023 compared to the previous year, given a slightly reduced number of consumers, while the consumption of household consumers decreased by approx. 3% while the number of consumers was higher by about 2.5%.

On the whole of the PAM, the consumption of final consumers in 2023 was approx. 46.09 TWh, down 2.3% compared to the consumption recorded in the previous year.

The following tables show the values of the structural indicators of the competitive component of the retail market and the number of active suppliers in 2023, calculated for each consumption bracket defined for household and non-household consumers by Regulation (EU) 1952/2016.

Concentration indicators Total PAM	Consumption tranches Household consumers					
- Anul 2023-	DA	DB	DC	DD	DE	Total
C1 (%)	31	34	34	32	64	32
C3 (%)	68	65	63	69	86	61
ННІ	2066	2028	2009	2039	4367	1890
Consumption (GWh)	2108	5259	3306	1511	909	13092
No. of active suppliers	30	31	30	26	27	34

Concentration indicators Total PAM	Consumption tranches Non-household consumers							
-Anul 2023-	IA	IB	IC	ID	IE	IF	IG	Total
C1 (%)	39	23	16	19	15	20	16	14
C3 (%)	64	61	41	35	37	51	40	32
ННІ	2089	1520	971	737	743	1190	812	588
Consumption (GWh)	2378	6000	3408	7546	4440	1911	7320	33003
No. of active suppliers	65	73	61	55	35	15	27	93

In 2023, the rate of switching providers by household and non-household consumers, defined as the voluntary action by which an end consumer chooses to switch to another supplier, determined according to the volume of electricity in accordance with the criteria established by ACER and CEER for the Annual Report on the Monitoring of the Internal Energy Market, was 22.01%. The rate of change of supplier by non-household consumers, calculated according to the volume of electricity supplied, was 30.21% in 2023, up from 2022, which stood at 26.22%.

Bilateral Electricity Contracts

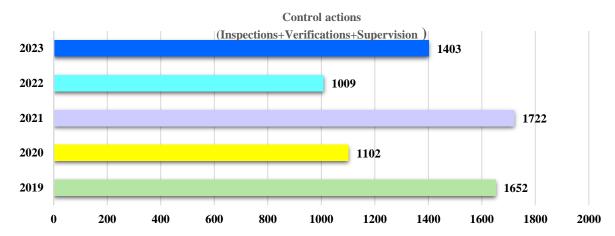
Between January 1, 2023, and December 31, 2023, the conclusion of 1112 directly negotiated bilateral sale-purchase contracts was reported, of which 646 were new contracts, signed starting with January 2023 and 466 were added to the contracts already in force.

IX. CONTROL ACTIVITY

The control activity of ANRE is carried out based on the attributions established by the legislation in force and was carried out in accordance with the annual control program, approved by ANRE's President, through inspection-type control actions and additionally through verification and supervision-type control actions, resulted from the current activities of the specialized departments within ANRE. In 2023, 352 inspection control actions were conducted.

Apart from the inspection-type control actions the following were additionally conducted: **121** control-type actions and **930** surveillance control type actions. The control actions targeted license holders/authorizations/certificates issued by ANRE.

The evolution of the total number of control actions conducted by ANRE in the last five as follows:



The topics of the control actions, conducted at the holders of licenses in the field of electricity and in the field of natural gas, consisted in checking the way in which they comply with the legal provisions regarding:

- compliance with GEO 27/2023, regarding the release and sale of natural gas.
- the connection to the electricity distribution network of the installations belonging to the beneficiaries of the ElectricUp Program.
- the fulfilment for the year 2022 of the implementation target of at least 90% of the total number of users provided for integration in the SMI (smart metering systems) implementation calendar at the national level.
- the implementation of the investment plan for the year 2021, regarding electricity distribution networks.
- compliance with the provisions of the regulations regarding access and/or connection to natural gas distribution systems and/or upstream supply pipes.
- compliance with the regulations regarding access and/or connection to electricity transmission/distribution systems.
- compliance with the legal obligations regarding the MACE centralized electricity purchase mechanism).
- compliance with the way of calculating the tariffs for connection to the electricity distribution network.
- issuing invoices related to the consumption of electricity / natural gas to end consumers.
- issuing invoices for the electricity produced and delivered by prosumers.
- the quantitative compensation between the electricity produced from renewable sources and that delivered to the electricity network by natural and legal prosumers who own power plants from renewable sources with an installed power of no more than 200 kW per place of consumption.
- change of electricity supplier.
- the obligation to purchase green certificates.

- compliance with the validity conditions of certificates and authorizations held in the electricity and natural gas sector.
- design, verification, execution, reception, and commissioning of natural gas use installations.
- design, verification, execution, acceptance, and commissioning of electrical installations.
- compliance with the legal obligations regarding the electricity distribution activity of nonconcessional distribution operators.
- the activity of distribution and supply of electricity in residential complexes.
- providing compensation to end consumers for non-compliance with performance standard indicators in the field of electricity and natural gas.
- updating the technical characteristics of the operating licenses of upstream supply pipelines related to natural gas production.
- updating the technical characteristics of natural gas distribution systems.

As a result of the control actions carried out, in 2023, **870 reports** of detection and sanctioning of contraventions were drawn up (484 in the field of electricity, 300 in the field of natural gas, 82 in the field of renewable energy and 4 in the field of thermal energy), **1,855** sanctions were applied for the detected irregularities, distributed as follows:

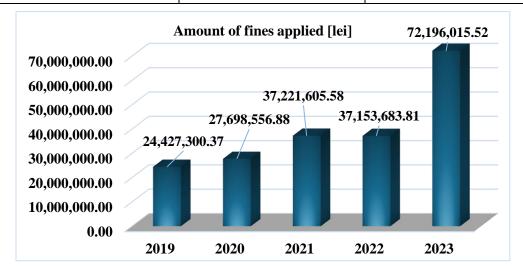
- 1245 in the field of electricity.
- 514 in the field of natural gas.
- 92 in the field of renewable energy.
- 4 in the field of thermal energy.

By means of the reports of detection and sanctioning of contraventions, fines were applied in the total amount of 72,196,015.52 lei.

Out of the total of 870 reports of detection and sanctioning of contraventions, 2 were applied to natural persons/authorized natural persons and 868 were applied to economic agents, legal entities. The manner of distribution of sanctions and the number of fines applied as follows:

Distribution of sanctions by types of economic operators							
Economic Operator Type	No. total penalties applied	Total amount of fines applied (lei)					
License EE	1181	24,952,240.53					
License GN	437	9,275,000.00					
License ET	1						
Authorize EE	53	80,000.00					
Authorize ET	3						
Authorize GN	76	250,000.00					
Accredited green certificates	21	20,000.00					
EE Licensed - Purchase Obligations green certificates	71	37,559,309.99					
Other EE (PF, PFA, Developers, OD)	11	59,465.00					

Others GN (PF, PFA, Developers, OD)	1	
Total	1855	72,196,015.52



The main acts committed by natural/legal persons subject to control actions, for which contravention sanctions were applied in 2023, consisted in non-compliance with the legal provisions regarding:

- the obligation to purchase/pay the equivalent value of unpurchased green certificates by licensed economic operators in the field of electricity.
- the performance indicators established by the performance standards for electricity and natural gas distribution services, for electricity and natural gas supply activities,
- access to natural gas distribution systems.
- connection to public interest electricity networks.
- connection to the natural gas distribution system.
- non-compliance with the validity conditions of certificates and authorizations held in the electricity and natural gas sector.
- design, verification, execution, reception, and commissioning of natural gas use installations.
- design, verification, execution, acceptance, and commissioning of electrical installations.
- failure to provide/present data, documents and/or information requested within the deadlines set by ANRE or their incomplete or erroneous provision/presentation, as well as/or failure to take measures within the deadlines set by ANRE and/or unjustified refusal to comply with the summons addressed by ANRE.
- issuing invoices related to the consumption of electricity / natural gas.

At the same time, complementary compliance measures were applied.

X. INVESTIGATION ACTIVITY

The investigative activity is conducted based on the provisions of GEO no. 33/2007, regarding the organization and functioning of the Romanian Energy Regulatory Authority the Electricity and Natural Gas Law no. 123/2012, the Regulation for the organization and conduct of

investigative activity in the field of energy regarding the operation of the wholesale energy market, approved by Order no. 25/2017, and Regulation (EU) no. 1227/2011 of the European Parliament and of the Council of 25.10.2011, regarding the integrity and transparency of the wholesale energy market (REMIT). Starting from the legal basis presented previously, ANRE ensures:

- a) Carrying out investigations, in accordance with the law, ex officio, in response to a registered complaint, formulated by a natural or legal person genuinely and directly affected by a potential violation of the legal provisions regarding the proper functioning of the wholesale electricity market and natural gas, as well as at the request of ACER, only in the fields in which ANRE has investigative competence according to the law.
- b) Pursuing compliance with market rules and promoting open and fair competition on the wholesale electricity and natural gas market for the benefit of final consumers and the removal and/or elimination of behaviours that affect the integrity and transparency of the wholesale energy market.
- c) Direct correspondence with ACER regarding the investigations launched, ongoing and/or completed on the wholesale electricity and natural gas markets because of the cases notified in the ACER Notification Platform regarding the violation of REMIT provisions.

In 2022, 4 (four) investigations were completed at licensed electricity and natural gas producers and suppliers operating on the wholesale energy market. Following the four investigative actions completed, ANRE did not apply sanctions. In addition to the four completed investigative actions, the analyses conducted in 10 (ten) other investigative actions started in previous years were continued. Also, in the year 2023, another 12 (twelve) new investigations were started on participants in the wholesale electricity market.

For the investigation activity, as a result of the provisions of Emergency Ordinance no. 143 of December 28, 2021 for the amendment and completion of the Electricity and Natural Gas Law no. 123/2012, as well as for the amendment of some normative acts, the establishment and individualization of sanctions in the case of the commission of contraventions for which sanctions are provided from the turnover of the year prior to the application of the sanction is made by the Regulatory Committee, according to the provisions **Procedures regarding the establishment and individualization of sanctions related to the turnover by the Regulatory Committee of ANRE, as a result of investigative actions**, approved by Order of the President of ANRE no. 13/2022.

Contravention fines applied by ANRE constituted as income to the state budget.

The principle that governs the application of sanctions is that of applying the sanctions in a way and in an amount that ensures their dissuasive and/or preventive effect, to protect the participants in the electricity and natural gas market and/or the end consumers.

ROMANIAN ENERGY REGULATORY AUTHORITY

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