NATIONAL REPORT 2020

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Abbreviations

ATC – Available Transmission Capacity

BRM - Romanian Commodities Exchange

CPC - Competitive Market Component

ENTSO-E – The European Network of Transmission System Operators for Electricity

ENTSO-G - The European Network of Transmission System Operators for Gas

SoLR – Supplier of Last Resort

HHI – Herfindahl-Hirschman Index

HV - High Voltage

LV - Low Voltage

MV - Medium Voltage

TSO – Transmission System Operator

DSO – Distribution System Operator

CMBC-OTC – Centralized Market of Bilateral Contracts with Double Continuous Trading

CMBC - Centralized Market of Bilateral Contracts

CMBC-CN – Centralized Market of Bilateral Contracts by public auction with Continuous Negotiation PCR - Price Coupling of Regions

GC – Green Certificates

OHL – Overhead lines

BM - Balancing Market

IDM - Intra-Day Market

DAM – Day Ahead Market

NPS – National Power System

NTS – National Gas Transmission System

1. Foreword

2020 was a year of challenges and unforeseen situations, yet a year in which we all had much to analyse, learn and apply.

Looking back, the year 2020, even if it was an atypical one, showed us that, by working as a team we can overcome any obstacles. The challenges were many, but we identified the optimal solutions even in the new social distancing conditions. Thus, starting with March 2020 and given the pandemic, ANRE took all the necessary prevention measures, managing for their safety, to quickly shift the activity of employees to remote-work, as a result of the accelerated digitization process already started since 2018 and which contributed to the optimization of internal activities, workflows and work procedures in the online environment.

ANRE experts adapted fast to the challenges posed by the year 2020, the authority managing in a short time, to initiate and cover the most extensive and complex revision process of the secondary legislation in recent years, in order to update ANRE regulations in accordance with the changes in primary legislation. Amendments and completions brought to the Electricity and Natural gas Law no. 123/2012 by Law no. 155/2020 also had a major impact on the activity of the regulator, ANRE having the obligation to develop the related regulatory framework within 90 days from the date of its entry into force, more precisely from July 30, 2020. This was particularly difficult for employees, especially with the measures taken to prevent and combat the effects of the pandemic.

Among the most important regulations in the electricity sector we mention: the amendment of the Regulation on the supply of electricity to end consumers; the amendment of the Regulation on the connection of users to electricity networks of public interest; approval of the Procedure regarding the connection to the electricity networks of the consumption places belonging to non-household end consumers through interconnection installations with lengths up to 2,500 meters; modification and completion of the Methodology for evaluating investment financing conditions for the electrification of rural and urban areas or for the extension of the electricity distribution networks; modification of the Procedure for connecting prosumers to electricity networks; amendment of the Rules for the sale of electricity produced from renewable sources belonging to prosumers; approval of the Methodology for monitoring the system for the promotion of electricity from renewable energy sources through green certificates; approval of the Regulation for the calculation and settlement of imbalances of the balancing responsible parties - single imbalance price; approval of the Regulation on the settlement of complaints in the energy sector; approval of the Procedure for complaints settlement from energy stakeholders.

From the evolution of the regulatory framework in the gas sector, during 2020, we mention: the approval of the Regulation on the supply of natural gas as last resort; amendment of the Regulation on the supply of natural gas to end consumers; modification of the Regulation for connection to the upstream pipelines; approval of the Regulation on connection to the natural gas transmission system; approval of the Regulation on connection to the natural gas distribution system; elaboration of the Good Practices Guide on tariffs setting for the distribution service in a closed distribution system.

Having regard to the liberalization of the natural gas market from July 1, 2020, respectively of the electricity market from January 1, 2021 and in order to adopt the regulatory framework necessary to apply European principles, ANRE aimed at implementing a regulatory framework that meets the requirements of a consumer-oriented, truly functional market, also providing cost affordability and fair pricing.

An important even decisive role, with a significant impact on the degree of development of a functioning competitive market, is the information and active participation of end consumers. Thus, in the natural gas sector, measures have been established regarding the supply of natural gas to household consumers with the purpose of eliminating regulated prices, so as to ensure the supply of natural gas to consumers who have not concluded contracts on the competitive market until liberalization.

In the electricity sector, ANRE has completed the regulatory framework in order to increase the degree of information of household consumers about the applicable offers in order to offer them the possibility to benefit from a longer period of time in which to choose an electricity supply offer, according to their needs. In this regard, obligations to inform household consumers, which are required as a result of the liberalization of the electricity market from 1 January 2021, have been imposed on the suppliers of last resort and principles have also been established on contracts applicable to household and non-household consumers benefiting from universal service and on prices applied to household and non-household consumers in the supplier's portfolio benefiting from universal service.

In compliance with European regulations, in order reduce the maximum duration of the process of changing the supplier to 24 hours until 2026, ANRE started, in 2020, the implementation of the Project “Development of the institutional capacity of the National Energy Regulatory Authority to simplify the process of changing the supplier of electricity and natural gas”, financed from non-reimbursable funds within the Administrative Capacity Operational Program 2014-2020. This project will create a unique IT platform at national level dedicated to the process of changing the supplier of electricity and natural gas, which will contribute to the development of a dynamic and competitive energy market.

Last but not least, in 2020, ANRE focused on monitoring, investigation and control activities, in order to identify and manage anti-competitive behaviour that may affect the security of the national energy system. ANRE also emphasized compliance with regulations to ensure the proper functioning of the energy market in efficiency and transparency conditions, with notable benefits to end consumers by ensuring security of energy supply at fair prices. In accordance with the principles of the European Union for the liberalization of the electricity and natural gas markets capable of satisfying consumer demand and in order to create a modern energy sector, in 2020, ANRE elaborated and issued 241 orders, 2512 decisions and 114 permits, in accordance with the obligations which derive from European and primary legislation.

Dumitru Chiriță

President

2. Main developments in the gas and electricity markets

2.1. Evaluation of the market development and regulation

Regulation (EU) 943/2019 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity (Regulation (EU) 943/2019), which is directly applicable under Community law, entered into force on 04.07.2019 The provisions of said Regulation have been applied as of 01.01.2020.
In the application of the provisions of Article 10(5) of the Regulation, which is directly applicable under Community law, the institutions of the State (i.e. Government, Parliament) have drawn up a timetable for the elimination of regulated prices for the period between January 1st, 2020 to June 30th, 2021, by successively reducing the quantities of electricity allocated for regulated contracts, thus:

- for the delivery period between 01.01.2020 and 30.06.2020, 60% of the consumption of household clients benefiting from regulated tariffs;
- for the delivery period between 01.07.2020 and 31.12.2020, 40% of the consumption of household clients benefiting from regulated tariffs,
- for the delivery period between 01.01.2021 and 30.06.2021, 20% of the consumption of household clients benefiting from regulated tariffs.

This calendar is contained both in letter No. 121565/27.09.2019 sent by the Romanian Government to the European Commission and in report No. XXI/100/02.10.2019 of the Senate Committee on Energy, energy infrastructure and mineral resources (https://www.senat.ro/legis/lista.aspx#ListaDocumente).
The two aforementioned documents also establish that, for the three delivery periods referred to above, sale obligations for electricity under regulated contracts are established only for producers who commercially possess/operate dispatch nuclear-electric and/or hydroelectric units/groups, proportionally to the forecast quantities of electricity, to a maximum of 40 % of the aforementioned.

ANRE analysed the legal framework and the subsequent regulations and identified both inconsistencies and incomplete provisions, which do not allow the full application of the provisions of the Regulation, which may have direct or indirect consequences on price formation in what concerns the wholesale electricity market.
Article 10 (5) of the Regulation provides the following: „If a regulatory authority has identified a policy or measure that could contribute to the restriction of wholesale price formation, the former shall take all appropriate measures in order to eliminate said policy or measure or, if that is not possible, to mitigate the impact of the policy or measure in question on auctioning behaviour."

By means of ANRE Order No. 236/2019 for the approval of the rules for eliminating and/or mitigating the impact of measures or policies that may contribute to the restriction of price formation on the wholesale electricity market, the deadline for amending the regulations on the electricity market was set in order to implement certain provisions of Regulation (EU) 943/2019 and in order to eliminate/mitigate the identified restrictions.
The rules set out in Order of President of ANRE No. 236/2019 included provisions on:

- alignment of specific terminology;
- clarification of the categories of market participants;
- access to the market of certain categories of participants, the arrangements required for their authorization;
- obligations of balancing service providers, balancing responsibility;
- the elimination of regulated prices, including energy insurance from producers for this purpose;

- establishing the character of transactions on the competitive wholesale electricity market and establishing derogations in order to enable aggregation activity;
- participation of end clients and aggregators in the market - suspension of market functioning rules under the conditions of application of the applicable EU regulations;
- obligations of manufacturers, etc.

ANRE Order No. 236/2019 formed the basis of Government Emergency Ordinance No. 1/2020 setting the timetable for deregulation of electricity and gas markets, as well as the report provided for in Article 10, paragraph (5) of the Regulation.

On 30.12.2019, the Ministry of Economy, Energy and Business Environment transmitted to the Directorate General for Energy the report provided for in Article 10 (5) of the Regulation, stating that „(…) ANRE has already developed a set of general actions and rules, which have been the basis for the modification of the specific regulatory framework" and „as the main element identified by ANRE in national legislation contributing to the restriction of wholesale price formation, we are looking at the issue of regulated producer prices (GEO 114/2018, with subsequent amendments and completions). In view of the impact that the direct application of the Regulation could have, as of January 1st, 2020, namely a competitive wholesale purchase price and total deregulation of household clients, we believe that mitigation measures are necessary, in order to reduce the price regulation period until December 31st, 2020, by means of maintaining reasonable and easily comparable amounts of regulated tariffs/prices applied to household clients and keeping regulated tariffs/prices applied to household clients in the period between January 1st, 2020 and December 31st, 2020 at a relatively constant level".

Starting with the second half of 2020, the preparation of the regulatory framework had begun, with a view of liberalizing the electricity market as of January 1st, 2021, which is an objective that Romania had undertaken since before actually joining the European Union. Deregulation of the energy market is a return to the principles underpinning a market economy, which take investment efforts into account and which correspond to the demand-offer ratio, with the related market risks. Liberalization also excludes the market's monopoly trend, leading to effective competition between suppliers, with a focus on quality services and competitive pricing policy; liberalization also represents compliance with European Union law, with the ultimate aim of ensuring competitive market prices, for the benefit of the end consumer.

Liberalization will also lead over time to end clients becoming more accountable for energy supply decisions and prices, and awareness raising in this regard will help to create a stronger competitive environment. In the long term, liberalization is an advantage for the whole energy market and, with fair and permanent information to end consumers, the market will be able to mature in a competitive manner, with benefits for both suppliers and consumers, in particular.

Thus, by means of Order of President of ANRE No. 171/2020 on the approval of the conditions for the supply of electricity by suppliers of last resort (SoLR), ANRE has imposed on suppliers of last resort the obligation to inform clients in their portfolio regarding the liberalization of the internal electricity market and the elimination of regulated tariffs for this category of end consumers as of January 1st, 2021.

2.2. Report on the implementation of the Clean Energy Package

The promotion system regarding electricity produced from renewable energy sources by means of green certificates

The system for the promotion of electricity produced from renewable energy sources by means of GC established by Law No. 220/2008 applies to electricity produced and delivered to the electricity grid and/or directly to consumers in new or upgraded/re-used power plants, entered into the GC promotion scheme, including for the amount of electricity produced during the test period of operation of the power groups/power plants, as well as electricity used for other own consumption sites connected to the power plant busbars (excluding own grid losses) and produced from the following renewable energy sources:

a) hydro power used in power plants with a rated capacity ≤ 10 MW;

b) wind energy;
c) solar energy;
d) biomass (irrespective of the form of aggregation) from bio-waste (electricity generation or electricity generation in high-efficiency cogeneration);
e) biomass (irrespective of the form of aggregation) from energy crops (exclusive electricity generation);
f) gas for the fermentation of waste;
g) sludge fermentation gas from sewage treatment plants.

The GC promotion scheme also applies to electricity produced in wind power groups/plants, which have been used to produce electricity on the territory of other States („second hand"), if they are used in isolated systems or were put into service in Romania before the date of application of the promotion scheme provided for in Law No. 220/2008; the period of application of the promotion system regarding this type of produced electricity shall comprise 7 years.

According to the provisions of Article 3, paragraph 6 of Law No. 220/2008, the E-SRE production promotion system does not apply to:

a) electricity produced from imported industrial and/or municipal waste, irrespective of the installed capacity of the power plant;
b) electricity produced in pumped-storage plants from water previously pumped into the superior basin;
c) electricity produced in power plants using renewable and conventional energy sources in the same combustion plant, where the energy content of the conventional fuel thusly used exceeds 10 % of the total energy content;
d) electricity related to the plant's grid losses;
e) electricity produced in photovoltaic power plants situated on land which, after December 31st, 2013, found itself in the agricultural use circuit, in accordance with the law;
f) electricity produced, including during the sampling period, in groups or power plants using renewable energy sources, where the reduced number of GC calculated in accordance with Article 6, paragraph (7), item (b), corresponding to the sum of the aid, is equal to or less than zero.
g) electricity produced in power plants located on vehicles of all kinds, except for electricity produced in renewable power plants, connected to isolated electro-power systems.

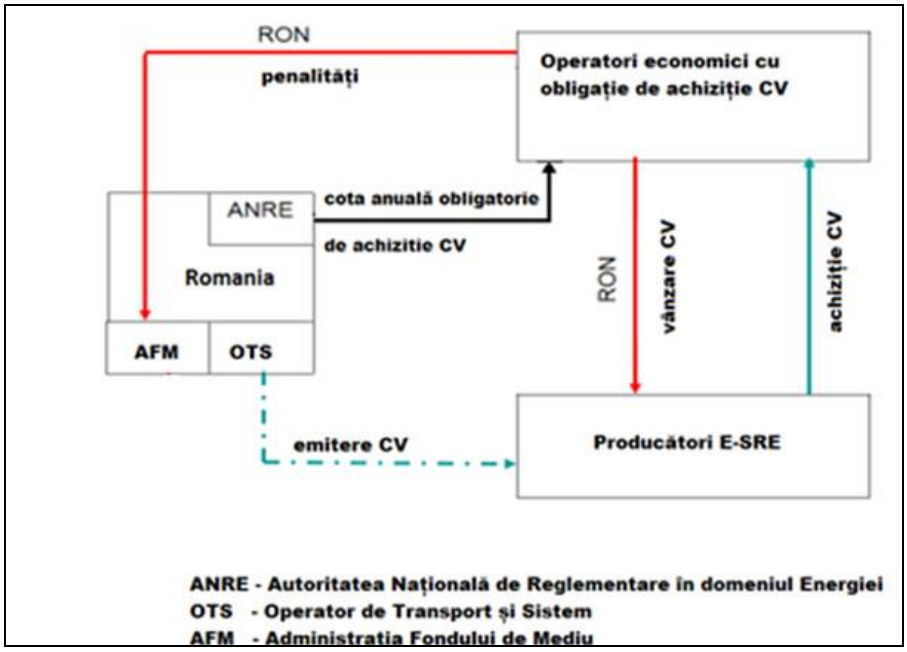
In order for an E-RES producer to benefit from the GC promotion system, the former must have been accredited by ANRE by December 31st, 2016, in accordance with the provisions of the current regulations and granted an accreditation decision for the application of the GC promotion system.

Green certificates are granted by the Transmission system operator (TSO) to E-RES producers on the basis of ANRE Order No. 4/2015, with subsequent amendments and completions.
According to the legal provisions in force at the time of accreditation, the number of GC received by E-SRE producers for each 1 MWh delivered is between 0,5 GC and 6 GC, depending on the type of renewable energy source used and the date when the respective plant was accredited.
Electricity suppliers are obliged to purchase a number of GCs on an annual basis, equivalent to the product of the mandatory share of GC purchase established for said year and the amount of electricity supplied to end consumers annually.

The mandatory annual share of GC purchase established by ANRE is the number of GC that a supplier of electricity is obliged to purchase for each MWh of electricity that is marketed to consumers.

The number of GCs that electricity suppliers/producers are required to purchase annually for each 1 MWh of electricity sold to end consumers shall be determined as a product of the annual mandatory share of GC purchase established for that year and the annual amount of electricity invoiced to end consumers by each electricity supplier/producer subject to the obligation to purchase GCs. In case of non-acquisition of the GCs, penalties apply to the electricity suppliers/producers subject to the obligation to purchase GCs.

The functioning of the green certificate system is shown in the figure below:



Translation: Penalties in RON, Economic operators subject to the obligation of GC purchase, GC purchase, GC sale, Mandatory annual GC acquisition quota, ANRE Romania, AFM, TSO, GC issuance, E-SRE producers
ANRE – Romanian Energy Regulatory Authority
TSO – Transmission and system operator
AFM – Environment fund administration

By means of the entry into force of Law No. 184/2018, electricity suppliers are obliged to purchase, on an annual basis, a number of GCs equivalent to the product of the mandatory GCs purchase quota set for that year, pursuant to Article 4, paragraph (91) of Law No. 220/2008, and the amount of electricity delivered to end consumers, so that the average end-consumer impact is no more than EUR 11.7/MWh in 2018, EUR 12.5/MWh in 2019, EUR 13/MWh in 2020 and 2021 and EUR 14.5/MWh as of 2022.

The value in RON is calculated according to the average exchange rate set forth by the National Bank of Romania (NBR) for the previous year, and the price of green certificates used for the previous year is calculated as a weighted average price of green certificates from transactions in the anonymous centralised spot market for GCs in the previous year.

Within the annual obligation, the quarterly purchase obligation for the quantity of electricity invoiced quarterly to end consumers to which the estimated mandatory GC purchase quota applies, has been established, pursuant to Article 4, paragraph (7) of Law No. 220/2008, as amended by the provisions of Law No. 122/2015.

By means of the entry into force of Law No. 155/2020, prosumers, natural, legal entities and local public administration authorities, which own power plants producing energy from

renewable sources, as well as natural or legal entities who own electricity production units from renewable sources are exempted from the obligation to annually and quarterly purchase GCs provided for in Article 8, paragraphs (2) and (2^1) of (Law No. 220/2008) for electricity produced and used for own end consumption other than the power plant's grid losses.

For the year 2020, ANRE set forth the compulsory purchase quota in what concerns GCs at the value of 0.45074 GCs/MWh, based on the number of GCs supported by the GCs promotion system during that period and the end consumption of electricity reduced by the end consumption of electricity exempted from 7 683. 8355 GWh of the respective period, determined in such a manner that the average consumer impact for 2020 is EUR 13/MWh.

With the entry into force of the Regulation on the functioning of the centralized market for electricity from renewable sources supported by GCs, E-SRE producers have the possibility to trade electricity from renewable sources supported by means of GCs (PCE-ESRE-GC).
The following can register in the centralized market for electricity from renewable sources supported by GCs:

o as sellers:
 E-SRE license holders, which benefit from or have benefited from the GCs promotion system, including natural or legal entities who, according to the applicable legal provisions, can operate in the electricity sector without a license granted by the Romanian Energy Regulatory Authority;

o as purchasers:
 electricity suppliers, including legal entities established in an EU Member State, in relation to which the Romanian Energy Regulatory Authority has confirmed the right to participate in Romanian electricity markets;
 electricity producers using the electricity produced to supply electricity to consumers connected via direct lines to the power plant and/or to their own end consumption, other than their grid losses, as buyers.

When determining the purchase shares for GCs, ANRE took into account the number of GCs issued for electricity produced from renewable energy sources for 2020 and the end electricity consumption for 2020 by March 31st, 2021, so that the average end-consumer impact in 2020 is EUR 13/MWh.

As regards the validity period of the GC, during 2020 on the GCM (Green certificate market), GCs received by E-RES producers as of April 1st, 2017 and green deferred certificates as of July 1st, 2013 were traded, that will be subject to trading until March 31st, 2032 under the terms of GEO No. 24/2017.

From the date of entry into force of GEO No. 24/2017, a GC has the value established at the time of trading and not at the time of issuance, the trading value of green certificates on the GC market has been established between:

- Minimum transaction value of EUR 29.4/GC;
- Maximum transaction value of EUR 35/GC.

The value in lei is calculated at the average exchange rate set forth by the NBR for the previous year.
In case of non-compliance with annual purchase quotas, which represent the number of GCs that an electricity supplier is obliged to purchase for each 1 MWh of electricity sold to end consumers, penalties shall be enforced upon said electricity suppliers, so that they are obliged to pay the counter value of the unpaid GCs to the Environment Fund Administration, at a value

equal to 70 Euro/GC for each unpurchased green certificate, calculated in RON, at the average exchange rate set forth by the National Bank of Romania (NBR) for the previous year.

The system for the promotion of electricity produced in renewable power plants of prosumers with installed electricity capacity of 100 kW or less

The system for the promotion of electricity produced in renewable power plants of prosumers with installed electricity capacity of 100 kW or less shall apply to the relevant prosumers, provided that they do not benefit from the GC promotion system.

Prosumers with renewable power plants of 100 kW or less may sell the electricity produced and delivered to the electricity grids to the electricity suppliers with which they, as end consumers, have concluded/will conclude contracts for the supply of electricity, at the price stipulated by the provisions of Law No. 220/2008.

According to Law No. 220/2008, „the prosumer is the end consumer who owns electricity generation installations, including cogeneration units, whose specific activity is not the production of electricity, who consumes and can store and sell the E-RES produced in their facility, including an apartment building, a residential area, a shared, commercial or industrial service establishment or in the same closed distribution system, provided that, in the case of independent non-renewable energy consumers, these activities do not constitute their primary commercial or professional activity".

A prosumer must comply with all the obligations of a consumer, but also with those of an electricity producer. At the date of entry into force of the contract for the sale and purchase of electricity, electricity suppliers are required to purchase electricity produced in renewable power plants with a prosumer's installed electricity capacity of 100 kW or less delivered to the grid, at a price equal to the weighted average price recorded on the day-ahead market in the previous year, published by the electricity and natural gas market operator „Operatorul Pieţei de Energie Electrică şi de Gaze Naturale OPCOM" - S.A. on its website, on the first business day of January of each calendar year.

The price evolution applicable here is as follows:

- for the year 2018: 223.24 RON/MWh,
- for the year 2019: 251.21 RON/MWh,
- for the year 2020: 196.56 RON/MWh.

Furthermore, the legal provisions in force require distribution system operators to ensure connection to the distribution network, i.e. the obligation for electricity suppliers to take over surplus electricity from prosumers.

Prosumers holding renewable electricity generation units with an installed electricity capacity of 100 kW or less per consumption location benefit from electricity suppliers with whom they have concluded contracts for the supply of electricity by the regulatory service (algebraic sum) between the value of the electricity delivered by the prosumer to the grid (with a minus sign) and the value of the electricity consumed from the grid (with a plus sign).
The value of the electricity delivered shall be clearly reflected on the electricity bills with a minus sign and shall be calculated as the product of the quantity of electricity produced and delivered by the prosumer to the grid and the weighted average price recorded on the day-ahead market in the previous year.

Prosumers holding electricity production units from renewable energy sources with an installed electricity capacity of 100 kW or less per consumption site, accredited to benefit from the GCs

promotion system may opt for the sale of electricity produced in those plants at the legally established price. On the basis of the data submitted by the electricity suppliers or prosumers, during the period of validity of the contract for the sale and purchase of electricity, ANRE suspends the accreditation decision of the electricity production unit for the application of the GCs promotion system. If the prosumer requests the termination of the contract of sale and purchase of the produced energy with the supplier, the prosumer may request, at ANRE level, the cessation of the suspension of the accreditation decision, and thus, after the suspension, the prosumer shall still benefit from the GCs promotion system.

For electricity produced and delivered to the grid and/or own consumption, during the period of suspension of accreditation for the application of the GCs promotion system to electricity generation units, prosumers do not benefit from GCs.
Furthermore, electricity produced in renewable power plants with installed electricity capacity of 100 kW or less belonging to prosumers is exempted from annual and quarterly purchasing obligations.

3. The electricity market

In order to adapt the existing regulatory framework to a liberalized electricity market, it was necessary to develop/amend/supplement certain regulations with effect as of January 1st, 2021. As such, the following regulations were amended:

- Regulation designating suppliers of last resort of electricity (SoLR), suppliers ensuring the supply of electricity to household and non-household consumers benefiting from universal service;

ANRE shall designate, at national level, at least five SoLR. The status of SoLR entitles the relevant electricity supplier, for any network area, to proceed as follows:

a) provide universal service (US) to US clients;
b) ensure the supply of electricity to non-household end consumers who have not made use of the eligibility and do not fulfil the conditions or have not applied for the benefit of the US;
c) last resort (LR) take-over of non-household consumers, for whom no electricity is supplied from any other source.

The designation of a supplier as a SoLR shall be carried out by ANRE:

a) When applying for designation as a SoLR of a holder of a license in what concerns the activity of electricity supply;
b) by means of organizing a selection process where, following applications received as per the provisions of item (a), the number of appointed SoLR is less than 5.

The prices applied by the SoLR shall be determined for each network area in accordance with the applicable regulations and **each SoLR shall publish on their website the prices in accordance with the applicable regulations.**

- Framework electricity supply contracts that apply in the relationship between suppliers of last resort and household and non-household consumers;

In this respect, the Order of President of ANRE No. 88/2015 for approving framework contracts for the supply of electricity to household and non-household consumers by suppliers of last resort, the general conditions for the supply of electricity to end consumers by suppliers of last resort, the model of the electricity bill and the model of the electricity consumption convention used by suppliers of last resort, with subsequent amendments and completions, has been amended in accordance with the provisions of the legislation in force.

- Regulation on the takeover of consumers who do not benefit from supply of electricity from any other source.

The Regulation shall ensure:

- the exchange of data and information between licensee distribution operators and non-licensee distribution operators;
- the establishment of the conditions, deadlines and milestones in situations where end consumers no longer have a supply of electricity;
- the predictability of actions for all market participants involved in this process, including the manner in which to act in case of termination of the electricity supply contract, by means of clearly setting out all the steps to be taken until the process is concluded;
- the diminishing of the exposure of last resort providers to financial risks arising from the inclusion of temporary clients in the portfolio;
- reducing the time limit within which end consumers are informed of the take-over by suppliers of last resort and thereby allowing such clients to switch from the supplier of last resort to a competitive supplier within a shorter time, with the possible effect of reducing the price of electricity consumed, given that the selling prices of electricity to the clients thusly taken over are higher, due to the specific conditions.

The regulations were drawn up in 2020, with entry into force as of 2021.

DIRECTIVE (EU) 2019/944 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 5 June 2019 on common rules for the internal market for electricity contains provisions on the obligation of Member States to ensure that at least household consumers and micro-enterprises with an expected annual consumption less than 100 000 KWh shall have free access to at least one tool for comparing the offers of suppliers, including the offers of dynamic price electricity contracts.

ANRE has implemented in advance, ever since 2015, comparison tools for both the electricity market and the gas market.

Another important measure focused on the compliance with Regulation (EU) 943/2019 of the rules on the programming of balancing resources and the functioning of the balancing market and on the calculation and settlement of balancing parties' imbalances. The changes to the regulatory framework mainly covered the following topics:

1. The possibility of voluntary participation in the balancing market;

2. The introduction of the possibility of aggregate participation in the balancing market, including by means of an aggregate, of generation, consumption or storage units, which may form dispatch units, dispatch consumptions or dispatch storage facilities, following the aggregation;

3. The elimination of any measures having the effect of limiting the supply price on the balancing market; the Regulation included an obligation according to which the offer price on the balancing market should not exceed the value PIP+450 RON/MWh, with the offer price always having a positive value (minimum 0.1 RON/MWh). At present, prices can also be negative, the only limitations being technical ones, adopted by means of ACER decisions at European level;

4. The adoption of the marginal price as the settlement price of the balancing market transactions;

5. The implementation and use of the 15-minute imbalance settlement interval from February 1st, 2021;

6. The settlement of imbalances between balancing responsible parties on the basis of the method of setting a single settlement price, instead of a surplus price and a deficit price.

The introduction of these measures supports energy producers and, above all, renewable producers facing a high risk in terms of production forecasting. Better use of resources, increased economic stability of the participants needed in the context of NPS, increased predictability of the functioning of NPS should, in the medium to long term, lead to lower costs for end consumers in the face of competition in the retail market.

As a continuation of the process of making the Romanian market model more flexible and modernized, in the case of forward markets, ANRE has changed the way in which bilateral electricity contracts are concluded by extended auction, by introducing the possibility to use products in order to ensure the flexibility of the trade in the expanded auction called PCCB-LE-FLEX.

In order **to promote the** necessary **investments** in terms of electricity, to develop a regulatory framework to stimulate the conclusion and unfolding of long-term bankable contracts by economic operators, which seek to carry out investment projects **in electricity generation capacity** using market-based solutions under conditions pertaining to competition, transparency, predictability and non-discrimination, a **Regulation on the organized framework for trading on the centralized market for the award of electricity contracts for long delivery periods** was developed and approved by ANRE .

The main elements of differentiation of the electricity market covered by this Regulation are: the possibility of trading electricity by producers who are not yet licensed to produce electricity, thus allowing companies intending to invest in generation capacity to conclude contracts for the sale of electricity that would be the basis for attracting the necessary financing in this regard; these companies will have to obtain the license to produce electricity no later than 60 days before the date provided in the contract for the start of deliveries. the significant period of time between the date of the transaction and the start of electricity supplies, which will have to facilitate the obtaining of financing and achievement of the investment; long delivery times related to electricity.

3

3.1. Network regulation and technical functioning

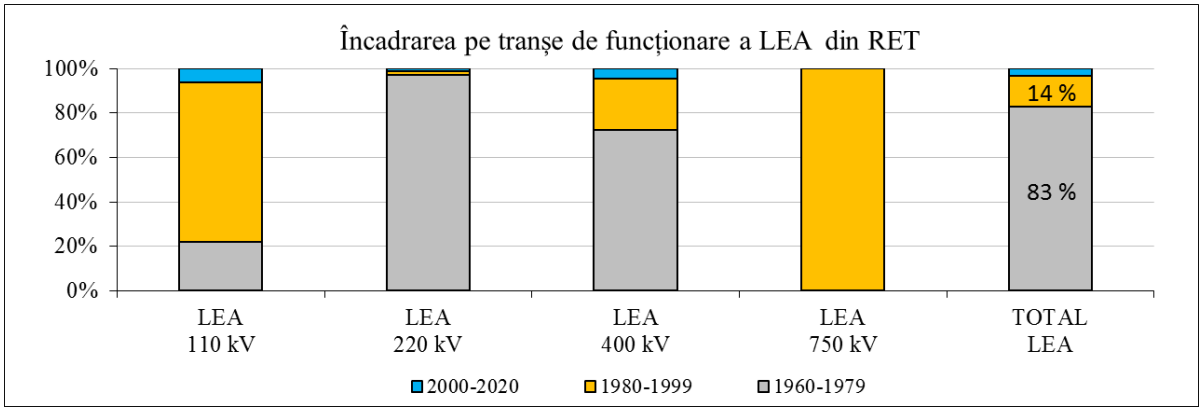
The volume and duration of functioning of the electricity transmission network

The power transmission network (PTN) comprises: overhead power lines (OHL) with nominal voltages of 750 kV, 400 kV, 220 kV, 110 kV and power stations with a voltage above 400 kV and 220 kV.

The total length of the transmission electricity network shall be 8,904.26 km, of which the interconnectors shall be 489.04 km long and the distribution by voltage levels shall be as follows:

	Period Commissioning	OHL Category				
		110 kV	220 kV	400 kV	750 kV	TOTAL
OHL Track length [km]	1960-1979	8.9	3764.28	3613.67	-	7386.85
	1980-1999	29.1	61.12	1,144,42	3.11	1237.75
	2000-2020	2.42	50.55	226.52	-	269.19
	TOTAL	40.42	3,875,95	4,984,61	3.11	8,904,26

The assignment of overhead power lines on functioning periods shall be as follows:



Translation: Assignment of overhead power lines (OHL) per functioning periods from PTN

Of the total length of OHL, 83 % was put into operation between 1960 and 1979 and 14 % between 1980 and 1999. Most components of OHL are coming close to the end of their lifetime, with a physically worn technology level, with a low percentage of commissioning after the year 2000, i.e. of only 3 %.

The utilization rate of OHL is the percentage ratio between the service life and the weighted service life (48 years according to the latest edition of the Catalogue on classification and weighted life of fixed assets, as established by GD 2139/2004) and is shown in the following table:

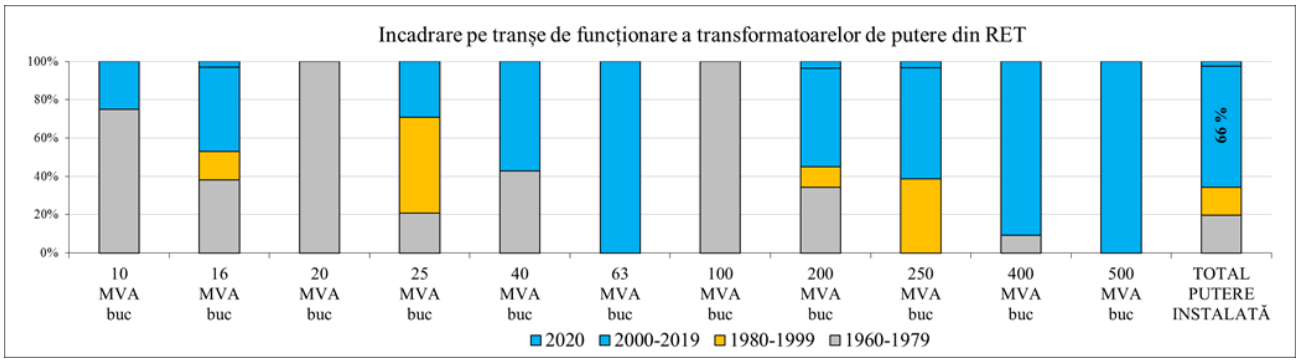
	Period Commissioning	OHL Category				
		110 kV	220 kV	400 kV	750 kV	TOTAL
Medium level use period (%)	1960-1979	116.67	102.22	101.68	-	101.97
	1980-1999	67.47	81.25	75.87	70.83	75.93
	2000-2019	14.58	24.47	20.13	-	21.12

Note: The construction voltages of the OHL were taken into account, in situations in which the same pillars sized for different construction voltages are included in the OHL, the lowest voltage was taken into account.
The average utilization rate per voltage level was calculated as a weighted average of the utilization levels of the OHL, operating at said voltage level.
An average utilization rate of more than 100 % is observed for OHL commissioned up to 1979, as they account for 83 % of the total overhead power lines in TSO management

The number and installed power of transformers/autotransformers in the power stations are shown in the following table:

	Period Commissioning	Apparent power of the transformer [MVA]										TOTAL [MVA/%]	
		10	16	20	25	40	63	100	200	250	400	500	
Number Transformer [pcs.]	1960-1979	6	13	1	5	3		1	28		2		7,033	19.7%
	1980-1999		5		12				9	12			5,180	14.5%
	2000-2019	2	15		7	4	2		42	18	20	2	22,621	63.4%
	2020		1						3	1			866	2.4%

The classification of transformers and autotransformers into service life intervals shall be carried out as follows:



Translation: Classification of transformers from PTN into service life intervals

It is noted that of the total installed capacity in transformers/autotransformers, ca. 66 % are put into service after 2000.

The level of use of transformers/autotransformers is the percentage ratio between their service life and their normal service life (24 years according to the latest edition of the Catalogue on classification and normal operating life of fixed assets established by means of GD 2139/2004) and is shown in the following table:

	Commissioning period	Apparent power of the transformer [MVA]										Total
		10	16	20	25	40	63	100	200	250	400	500	
Level of use [%]	1960-1979	195	187	242	184	192		183	192		194		> 100 %
	1980-1999		152		150				154	133			
	2000-2019	25	24		26	38	33		39	48	56	73	46 %
	2020												

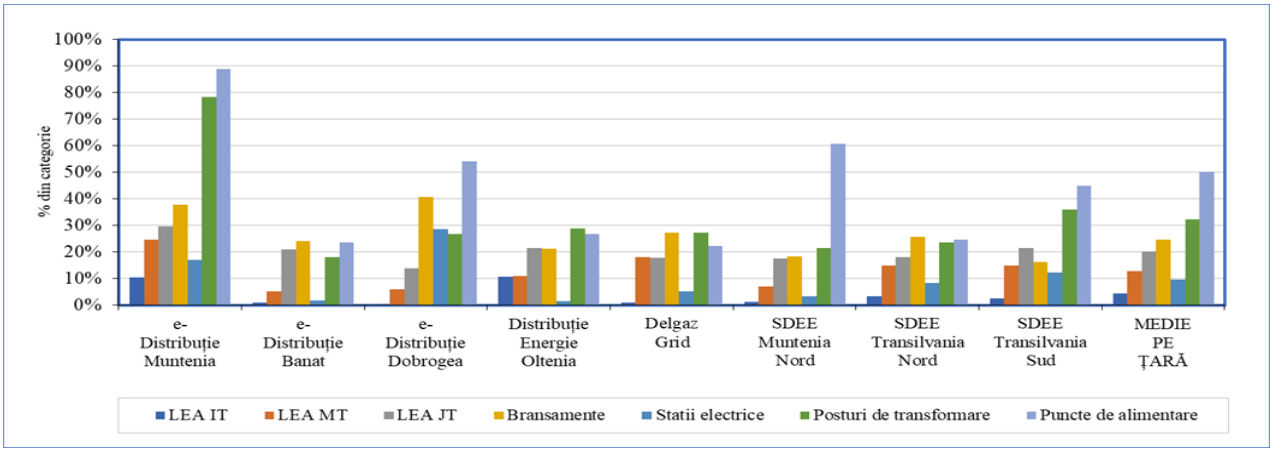
It is noted that most transformers/autotransformers commissioned before 2000 (ca. 34% of the total installed power in transformers and autotransformers) have an exceeded service life.

The volume and duration of operation of electricity distribution networks

The following country-wide mapping shall be observed in what concerns plant service life intervals:

Commissioning	OPL+LES HV [route km]	OPL+LES MV [route km]	OPL+LES LV [route km]	LV connections [route km]	Electricity stations [pcs.]	Transformation posts [pcs.]	Power points [pcs.]
before 1960	1,628	9,897	7,941	7,935	38	2,011	23
1960-1979	14,592	72,751	88,358	70,004	720	29,049	346
1980-1999	5,049	23,292	51,468	49,962	301	18,885	197
2000-2020	950	15,536	37,644	42,143	113	23,903	569
TOTAL	22,219	121,476	185,411	170,045	1.172	73,848	1,135

Most of the electricity distribution grid installations currently in operation have a long operating time, mostly longer than 35 years.
The share of energy capacity commissioned over the period between 2000 and 2020 in total by category of installations and operators shall be as follows:



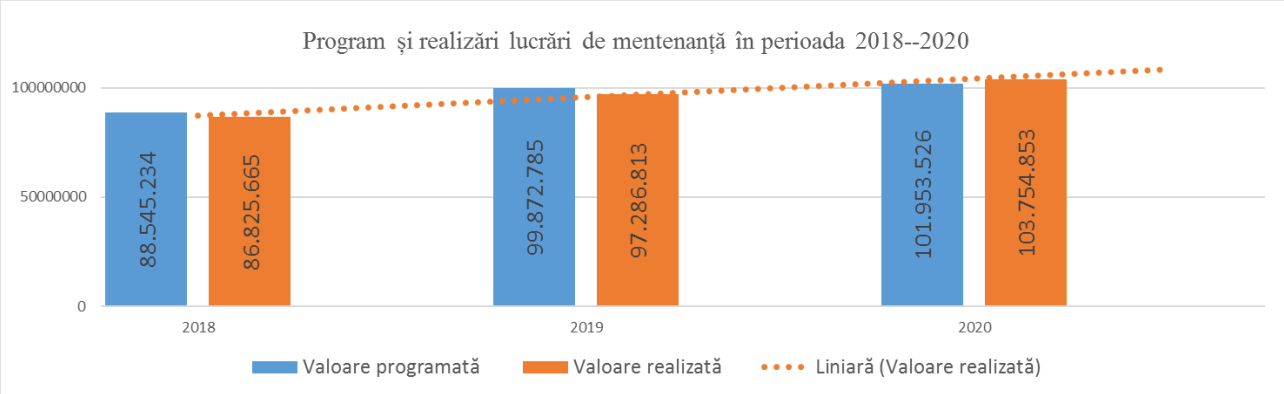
Translation: % of category, Connections, Electricity stations, Transformation posts, Supply points

Maintenance activities should continue to be stepped up and made more efficient, in order to maintain electrical installations in nominal operating parameters, to carry out appropriate monitoring and assessments of the state of the networks, and to implement consistent upgrading and modernization programs for these installations.

Achievement of annual maintenance plans

The degree of achievement of the TSO's PTN maintenance plan in the period 2018-2020, is shown in the following table:

	2018	2019	2020
Scheduled value [RON]	88,545,234	99,872,785	101,953,526
Achieved value [RON]	86,825,665	97,286,813	103,754,853
Achievement degree [%]	98 %	97.41 %	101.8 %



Translation: Planned and achieved maintenance works between 2018 and 2020
Planned value, Achieved value, Limit (Achieved value)

The weighting of scheduled and achieved values for maintenance work by type of maintenance is shown in the following table:

	Program		Achieved	
	Preventive maintenance	Corrective maintenance	Preventive maintenance	Corrective maintenance
Maintenance type	80,272,901	18,918,088	56,372,550	47,382,303
% of total	80.9 %	19.1 %	54.3 %	45.7 %

It is noted that, although the plan has a significant weighting of preventive maintenance, the values achieved show that significant corrective maintenance works have an impact on the performance of the transmission service in what concerns electrical energy. Since corrective maintenance is carried out following network incidents, with an impact on the supply of consumers, the worsening of performance indicators and the decrease in quality of the service provided, it is necessary to fully apply preventive maintenance programs.

The degree of implementation of the maintenance plan per category of works in the electricity distribution networks is shown for each operator in the following table:

	E-Distribuție Muntenia	E-Distribuție Banat	E-Distribuție Dobrogea	Distribuție Energie Oltenia	Delgaz Grid	SDEE Muntenia Nord	SDEE Transilvania Nord	SDEE Transilvania Sud
Scheduled [mio. RON]	84.931	58.315	51.280	142.009	219.804	108.774	102.243	96.727
Achieved [mio. RON]	92.370	59.669	47.332	145.924	235.361	107.407	105.857	92.031
of which % preventive maintenance	36.4 %	42.2 %	50.7 %	68.4 %	65.8 %	70.0 %	74.9 %	65.9 %
Degree of achievement	109.8 %	102.3 %	92.3 %	102.8 %	107.1 %	98.7 %	103.5 %	95.1 %

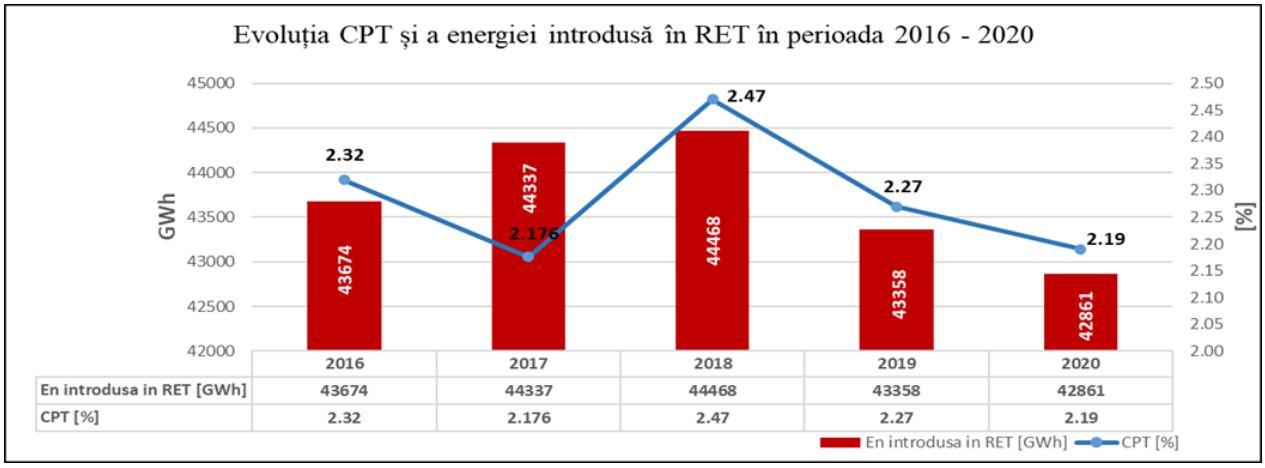
In 2020, all operators fulfilled the condition laid down in Article 36, paragraph (5) of the procedure, concerning the maintenance obligation amounting to at least 90 % of the total value of the annual plan.
Monitoring of transmission, system and power distribution service performance indicators, the reconnection time after planned repairs and unplanned outages

Monitoring of performance indicators is presented in the report on the achievement of performance indicators for electricity transmission, system and distribution services and the technical state of the electricity transmission and distribution networks - 2020 - published on the ANRE website, available at: https://www.anre.ro/ro/energie-electrica/rapoarte/rapoarte-indicatori-performanta.

General performance and continuity indicators for the energy transmission service

Grid losses in PTN, determined as the difference between the electricity input in the PTN and the electricity extracted from the PTN, as compared to the electricity input in the PTN.

A comparative overview of the grid losses over the period 2016-2020 is shown in the following figure:

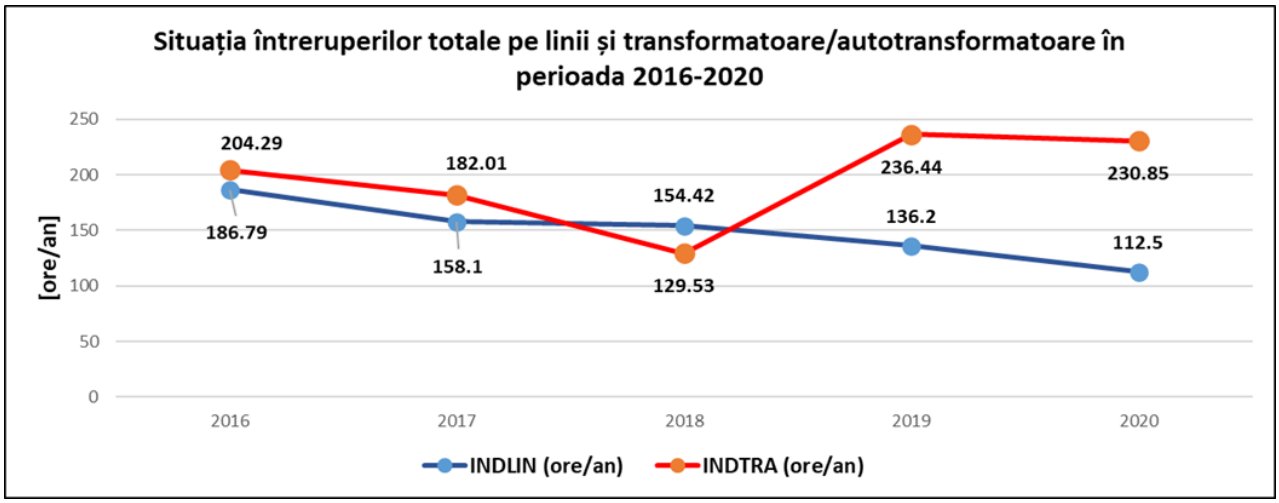


Translation: Development of grid losses and energy introduces in PTN between 2016 and 2020
Energy introduces in PTN, Grid losses

The grid losses registered in the PTN in 2020 was 937,50 GWh, 4,87 % lower than in 2019.
The energy input to the PTN contour was 2,19%, down from 2,27% for the previous year.
The decrease in losses was mainly due to the more favourable distribution of physical flows on interconnectors and the more favourable distribution of production compared to consumption sites, but also to lower energy entering the PTN. Weather conditions (precipitations and wind) were more disadvantageous in 202, as compared to the previous year.

Energy entering the PTN decreased in 2020 by 1.15%, when compared to 2019, as net domestic consumption, which was significantly influenced by restrictive measures taken during the pandemic period, especially in the emergency situation, decreased by around 3 %. The evolution of the energy entering the PTN has been influenced by power plants that flow directly into the PTN, which produced about 4.9% less energy and energy input from RED to PTN, which decreased by approx. 2.5 %, while NPS import increased by approx. 23 %.

The average over time unavailability of INDLIN and INDTRA installations, which is determined by planned or unplanned (incidental) events and relate to the length in km for OPL of the PTN or to the apparent power expressed in MVA for transformers and autotransformers in PTN stations, is shown in the figure below for the period 2016-2020.



Translation: Report on total outages per lines and transformers/autotransformers between 2016 and 2020
Hours/year

In 2020, these indicators have decreased when compared to the 2019 figures, as follows:

The total INDLIN registered in 2020 was about 17 % lower than the 2019 figure, with the major reduction being recorded by the unavailability caused by unplanned events, i.e. about 41 % lower than the 2019 value. The amount of unavailability caused by scheduled events was approximately 16 % lower than the 2019 value. The factors behind the development of this indicator were the low number of accidental events as well as the classification within approved withdrawal periods.

In 2020, there was an average over time non-availability of transformers (INDTRA) that amassed a value that was 2,36 % lower than the one from 2019. The upgrade of protection and automation systems, the installation of monitoring systems of transformation unit parameters, as well as the quality of preventive maintenance have reduced the duration of accidental unavailability of transformation units.

Non-delivered energy to consumers/not produced in ENS plants and average outage time – AIT are quality indicators pertaining to service continuity. The following table summarizes the ENS and AIT values for the period 2016-2020:

Indicator		2016	2017	2018	2019	2020
ENS (MWh)	- planned outages	0	0	0	0	0
	- unplanned outages determined special weather conditions	38.62	0	0 / 476.66	8.983 / 0.249	0
	- unplanned outages determined by other operators, users, producers	0	11.85 / 2.05	0	0	0
	- unplanned outages caused by the TSO	224.69/ 264.70	289.46/ 1105.55	118.81 / 3088.83	91.784 / 6.532	287.98 / 0
AIT (Min/ year)	- planned outages	0	0	0	0	0
	- unplanned outages due to special weather conditions	0.36	0	0 / 4.52	0.0885 / 0.00245	0

Indicator		2016	2017	2018	2019	2020
	- unplanned outages caused by other operators, users and producers	0	0.113 / 0.019	0	0	0
	- unplanned outages caused by the TSO	2.11/ 2.49	2.762 / 10.55	1.127 / 29.302	0.9047 / 0.0643	2.8374 / 0

Note: The performance standard for the electricity transmission service and the system service, approved by means of ANRE Order No. 12/2016, requires the recording of values for undelivered energy to users, as well as undelivered power from power stations due to long-term interruptions. The first value is the ENS/AIT registered with the users and the second is the ENS/AIT registered with the producers, due to long-term interruptions.

2020 saw a deterioration in performance indicators for transmission service continuity, when compared to 2019, based both on an increase in undelivered energy incidents and an increase in undelivered energy to consumers.
These values were largely influenced by the accidental event on 07.08.2020 of the 400/110/20 kV Domnești plant, which was undergoing upgrading, which resulted in a non-delivered energy to consumers amounting to 190 MWh.

General performance indicators of the system service

No breakdown aid was requested/granted in 2020.
The deviation of the NPS balance with the ACE frequency correction is shown in the following table:

Deviation of the NPS balance with ACE frequency correction [MWh/h]			
Year	**2018**	**2019**	**2020**
ACE average value	1.01	2.74	3.43
ACE maximum value	300	256	350
ACE minimum value	-206	-218	-102
Standard deviation	12.98	13.5	14.4

The balance deviation values with frequency correction shall comply with the requirements of the European Regulations in force.

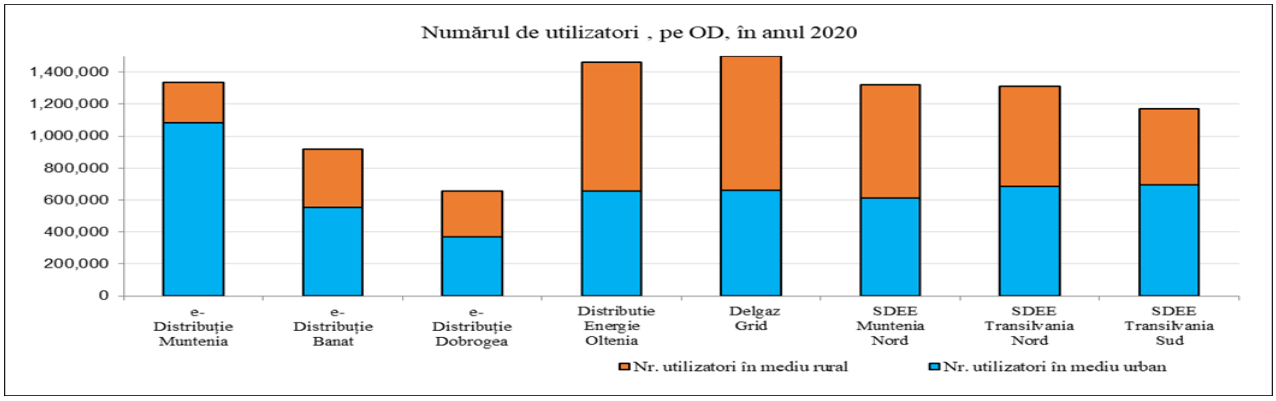
The congestion and network restrictions that caused these congestion in the year 2020 are shown in the following table:

	Congestion caused by emerging network restrictions			
	In the N-element diagram operating in PTN and in the 110kV network of RED	following withdrawal of the PTN items	as a result of the withdrawal from service of the RED elements	in the case of incorrect selection in the balancing market
Amount of electricity used for network congestion management [MWh]	-	-	-	21,217
Cost of congestions [RON]	-	-	-	1,650.42

Out of an error, on the day of 04.09.2020, in the interval 15:35 – 16:00, it was disposed, outside the order of merit for tertiary rapid adjustment, to carry out power reductions at the TA3 and TA6 Rovinari and TA5 and TA7 Turceni plants, respectively. The situation has been corrected for settlement, with selections subsequently marked as used for congestion management.

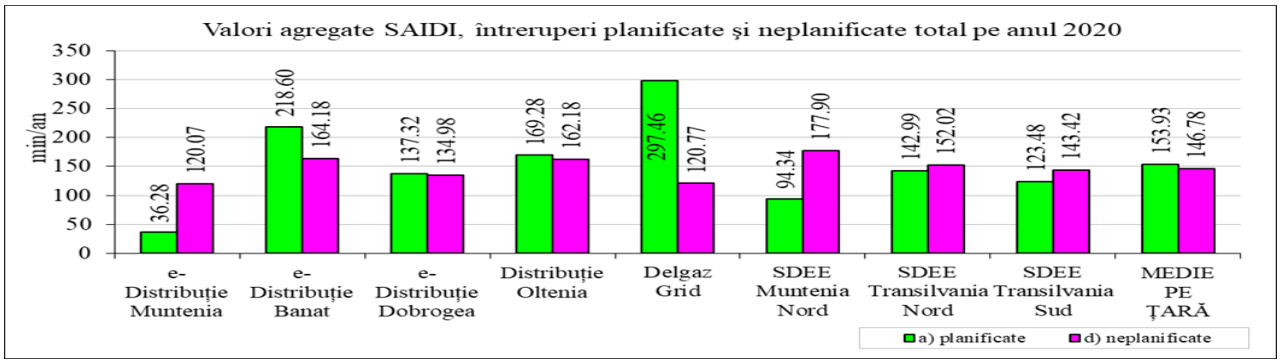
Power distribution service continuity indicators

At the end of 2020, there were 9,673,106 users connected to the electricity networks among the eight distribution system operators (DSOs), up from previous years (9,673,106 in 2019, 9,448,823 in 2018, 9,332,511 in 2017 and 9,260,396 in 2016), of which 5,315,561 in urban areas (54.95% of the total) and 4,357,545 in rural areas, respectively.



Translation: Number of users per DSO in 2020
Number of users in the rural environment, Number of users in the urban environment

The SAIDI users' power continuity indicator, recorded the following values in what concerns 2020:



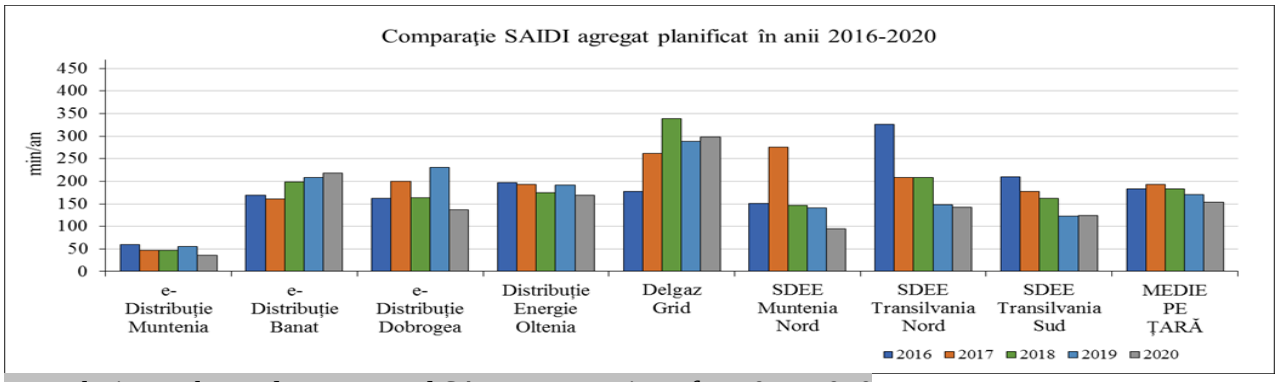
Translation: Aggregated SAIDI values, planned and unplanned outages – total for 2020

SAIDI planned outages register an average value decrease to 153.93 min/year from 171.1 min/year in 2019. However, the value obtained is more than about 40 to 150 min/year, the figure from advanced European countries. Also at country level, the unexpected SAIDI outages are falling to 146.78 min/year compared to 178.9 min/year in 2019, also well above approx. 20 to 100 min/year in advanced European countries.

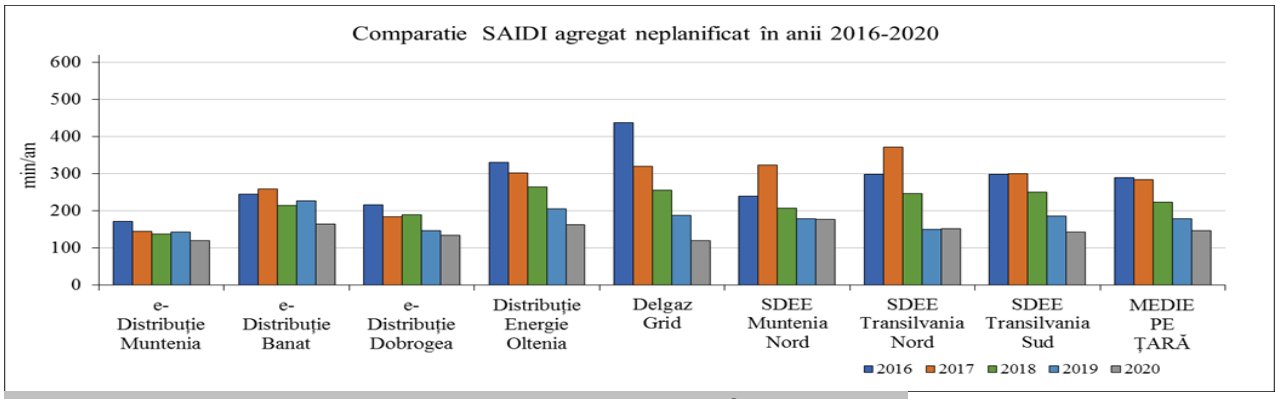
According to the analysis carried out, a slight improvement in the SAIDI values for planned and unplanned outages is observed between 2016 and 2020.

Indicator	2016	2017	2018	2019	2020
SAIDI planned outages (a)	183.5	193.1	183.6	171.1	153.93

[min/year]					
SAIDI unplanned outages (d) [min/year]	289.9	283.9	224.1	178.9	146.78

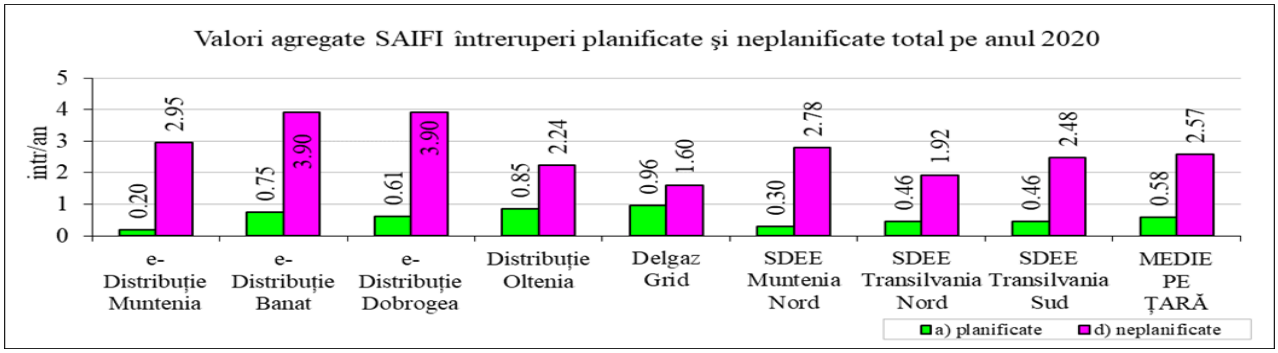


Translation: Planned aggregated SAIDI comparison for 2016-2020



Translation: Unplanned aggregated SAIDI comparison for 2016-2020

The SAIFI users' power continuity indicator, recorded the following values in what concerns 2020:



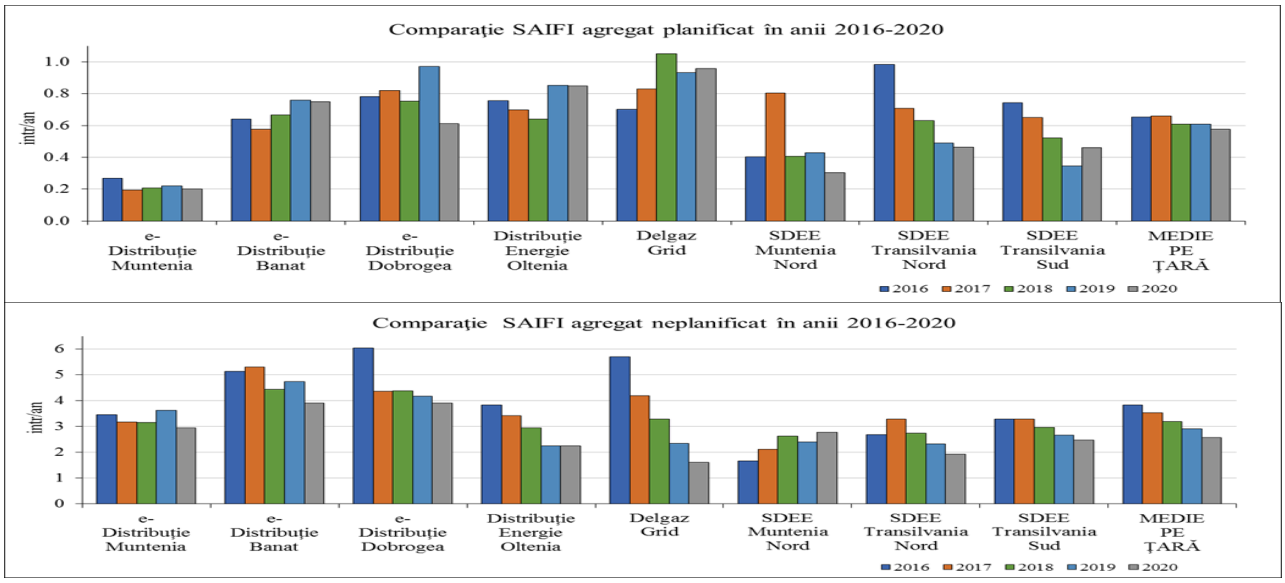
Translation: Aggregated SAIFI values for planned and unplanned outages – total for 2020

SAIFI planned outages (case a) averaged 0.58 outages/year (similar to 0.61 in 2019) and fell to an average of around 0.1 to 1 outages/year, as is the case in advanced European countries. Also at country level, SAIFI unplanned outages (case d) averaged 2.57 outages/year at national level (compared to 2.9 per year in 2019), above the average value of approx. 1 to 2 outages/year in advanced European countries.

According to the analysis carried out, there is little improvement in what concerns the SAIFI values between 2016 and 2020.

Indicator	2016	2017	2018	2019	2020
SAIFI planned outages (a)	0.65	0.66	0.61	0.61	0.58

[outages/year]					
SAIFI unplanned outages (d) [outages/year]	3.83	3.54	3.2	2.9	2.57



Translation: Planned aggregated SAIFI comparison for 2016-2020
Unplanned aggregated SAIFI comparison for 2016-2020

Monitoring of the time required and the cost of connection to the power distribution network

The average duration of the connection process, which is the time between the date of submission of the full supporting documentation pertaining to the connection request and the date of the energization of the user's installation, shall be as follows:

DO		E-Distribuție Muntenia	E-Distribuție Banat	E-Distribuție Dobrogea	Distribuție Energie Oltenia	Delgaz Grid	SDEE Muntenia Nord	SDEE Transilvania Nord	SDEE Transilvania Sud	AVERAGE PER COUNTRY
Average time of the process needed for connection [days]	LV	92	146	130	90	53	81	47	59	87
	MV	509	446	377	171	167	67	152	89	247
	HV	0	470	0	-	-	-	-	-	470

The average duration of the connection process to the LV registered a value of 87 days throughout the country (compared to 96 in 2019 and 89 days in 2018), ranging from 47 days at SDEE Transilvania Nord to 146 days at E-Distribuție Banat. The lowest performance compared to the country average for E-Distribuție Banat, E-Distribuție Dobrogea (similar to 2019).

The average duration of the MV connection process was 247 days across the country (compared to 254 in 2019 and 235 days in 2018), with a minimum value of 67 days related to SDEE Muntenia Nord and a maximum value of 509 days related to E-Distribuție Muntenia. It is noted that the operators E-Distribuție Muntenia, E-Distribuție Banat and E-Distribuție Dobrogea had a low performance (similar to the situation of 2019).

The average cost of the connection process shall be allocated to the DSO as follows:

DO		E-Distribuție Muntenia	E-Distribuție Banat	E-Distribuție Dobrogea	Distribuție Energie Oltenia	Delgaz Grid	SDEE Muntenia Nord	SDEE Transilvania Nord	SDEE Transilvania Sud	AVERAGE PER COUNTRY
The average cost of connection [RON]1)	LV	900	2,313	1,514	1,383	2,996	3,649	2,580	2,000	2,167
	MV	155,005	230,154	65,370	37,299	104,741	114,690	113,276	118,730	117,408
	HV	-	-	-	-	-	7,280.4822)	-	6,308,693)	6,794,475

Average connection cost per connected user paid to the distribution system operator (ATR issuance fee + solution study cost + connection fee),
110/27.5kV transformation station for the consumer CFR SA Bucharest – SRCF Galati, work in progress
Site release works - Highway Brasov-Cluj-Borș Section 1C-Sighisoara-Târgu Mureș Subsections 2 and 3 Târgu Mureș-Ungheni-Ogra and connection road –subsection 2 Târgu Mureș–Ungheni km 0+000-km 4+500 and connection road – Relocation and protection of electrical installations 110 kV. The work in question has not yet been finalised.

The average cost of connection to the LV was RON 2,167 across the country (compared to 2,415 in 2019, 1,775 in 2018 and 1,884 in 2017), with a minimum value of RON 900 at E-Distribuție Muntenia and a maximum value of RON 3,649 at SDEE Muntenia Nord.

The average cost of connection to MV was of RON 117,408 across the country (compared to 98,272 in 2019, 92,033 in 2018 and 68,645 in 2017), with a minimum value of RON 37,299 at Distribuție Energie Oltenia and a maximum value of RON 155,005 at E-Distribuție Muntenia.

Monitoring investments in power grids

The monitoring of investments in power grids is presented in the report on the achievement of performance indicators for electricity transmission, system and distribution services and the technical state of the electricity transmission and distribution networks - 2020 - published on the ANRE website, available at https://www.anre.ro/ro/energie-electrica/rapoarte/rapoarte-indicatori-performanta.

Monitoring of investment projects in cross-border interconnection capacities

Romania is part of priority electricity corridor no. 3 „North-South electricity interconnections in Central-Eastern Europe and South-Eastern Europe „NSI East electricity": Interconnections and internal lines in North-South and East-West directions to complete the internal market and integrate production from renewable sources".

Regulation (EU) No. 347/2013 defines the criteria for the selection and evaluation of projects of common interest (PCI), in order to be eligible for inclusion by the European Commission on the following Union lists; proposals for electricity transmission and storage projects should be part of the latest ten-year electricity grid development plan developed by ENTSO-E.

The value of the electricity transmission network interconnection capacity (PTN) is currently 10-11%, following the upgrade of the powers installed in NPS of the groups included in the commercial exploitation licenses and the increase of the NTC values on the Bulgarian border from 25-300 MW to 900 MW, by eliminating internal congestion in the transmission network of the Bulgarian TSOs, ESO-EAD.

With regard to the achievement of the 15 % interconnection target for the year 2030, proposed in the European Commission Communication No. 330/2014 (the European Energy Strategy) and made operational by the European Commission Communication No. 718/2017 on strengthening European energy networks, this should be achieved mainly by means of the implementation of the PCIs and the achievement of other projects included in the PTN Development Plan.

The following PCIs are included in the fourth European list of Projects of common interest (CIP):

Project 138 „Black Sea Corridor”, consisting of:

- OPL 400 kV d.c. Smârdan – Gutinaş;
- OPL 400 kV d.c. Cernavodă - Stâlpu, with an input/output circuit in Gura Ialomiţei;

Project 144 „Mid Continental East Corridor”, consisting of:

- OPL 400 kV d.c. Reşiţa (RO) – Pancevo (Serbia);
- OPL 400 kV Porţile de Fier – Reşiţa and station expansion 220/110 kV Reşiţa through the construction of the new 400 kV station;
- switch to 400 kV of OPL 220 kV d.c. Reşiţa –Timişoara – Săcălaz – Arad, including the construction of 400 kV Timişoara and Săcălaz stations.

These projects are also identified as candidate projects on the 5th list of Projects of common interest (PCI).

On the basis of regular reporting by TSOs in accordance with the provisions of Article 45, paragraph (3) of the *Procedure for the substantiation and criteria for the approval of investment plans of the transmission system operator and electricity distribution system operators*, approved by means of ANRE Order No. 204/2019, the state of play of the Projects of common interest contained in the PTN Development Plan 2020-2029, is as follows:

PDRET Code 2020-2029	TYNDP Code 2018	Code PCI	Description	Programed Commissioning	Remaining steps
F.4	138.275	3.8.5	OPL 400 kV Smârdan-Gutinaş	2024	Issuance of a government decision for the transfer of the right to administer and change of use; Issuance of government decision for temporary or permanent removal from agricultural circuit; Issuance of a government decision for temporary or permanent removal from the National Forest Fund; Completion of the expropriation procedure;

					Carrying out of the procurement procedure and the signature of the contract; Implementation of the works proposed in the Development Plan for 2020-2029: 2022-2024
F.5+ F.6+ F.7+ F.8	138.273	3.8.4	OPL 400 kV Cernavodă – Stâlpu, with an input/output circuit in the Gura Ialomiţei station	2023	Obtainment by the contractor of the construction permit for the 400 kV two cell extension works of the Gura Ialomiței station; Issuance of the Minister's order for permanent and temporary removal of the 6,513 hectare surface from the National Forest Fund; Implementation of the works proposed in the Development Plan for 2020-2029: 2020-2023.
-	144.238	3.22.1	OPL 400 kV Reșita – Pancevo	2018	The execution work was completed on 30.03.2018. Commercial operation will start after the conclusion of the 400kV Reșița station.
F.1.1+ F.1.2	144.269	3.22.2	OPL 400 kV Porțile de Fier – Anina – Reşiţa	2025	Implementation of the works proposed in the Development Plan for 2020-2029: 2020-2025.
F.2.1+ F.2.2	144.270	3.22.3	The switch to 400 kV of OPL 220 kV Reşiţa – Timişoara/Săcălaz, including the construction of the 400 kV station Timişoara	2025	Filling in and submission of the application file to the Ministry of Energy-ACPIC, as provided for in Regulation EU 347/2013, Article 10, paragraph (1)**;** Obtaining the endorsements of the County Directorates of Culture Caraş Severin and Timişoara; Obtaining the Environmental agreement; Obtaining the construction permits; Obtaining GD approval for the site and launching of the procedure for expropriation of private property buildings that constitute the corridor for expropriation of public utility works of national interest – documentation is ongoing, Execution of the works (OPL 400 kV Reșița – Timișoara/Săcălaz) proposed in the PTN Development Plan 2020-2029: 2021-2025; Execution of the works (400kV and 110kV Timișoara stations)

					proposed in the PTN Development Plan 2020-2029: 2020-2025.
F.3.1+ F.3.2+ F.3.3	144.270	3.22.4	The switch to the 400 kV voltage of OPL 220KV Arad - Timișoara/Săcălaz, including the building of the 400kV Săcălaz station and the extension of the Arad station	2027	Technical project and specification are being developed. The agreements required in the urban planning certificates are being obtained; Execution of the work proposed in the PTN Development Plan 2020-2029: 2022-2027

Monitoring the implementation of the 10-year development plan for the power transmission network

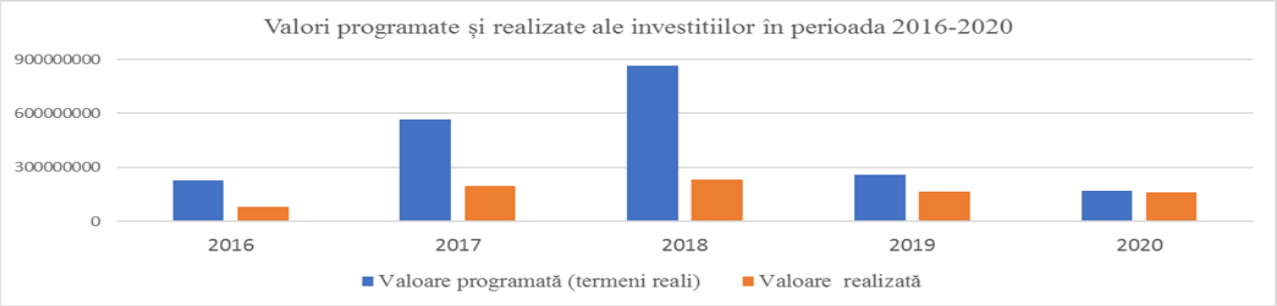
The PTN development plan is updated every two years, so at the time the current activity report is drawn up, the PTN Development Plan for 2020-2029, which was approved by means of ANRE Decision No. 3387/9.12.2020, is in force, document published on the website of the CNTEE Transelectrica SA, available at https://www.transelectrica.ro/ro/web/tel/planului-de-dezvoltare-ret-2020-2029

The categories of work contained in the PTN development plan for the period 2020-2029 in force and their status at the end of 2020 are set out in the following table:

Investment category	Status of the investment works in the PDRET 2020-2029			
	Total works	Completed	In due time	Late
A - Upgrading the existing PTN	55	2	49	4
C - Power supply security	8		8	
D - Integration of production from new plants - Dobrogea and Moldova	8		7	1
E - Integration of production from plants - other areas	2		1	1
F - Increase of interconnection capacity	14	1	12	1
G - Integrated driving platform for NPS + Replacement components of EMS SCADA Areva system + Replacement balancing market platform supporting components	2	1	1	
H - Metering and management system for electricity measurement data on the wholesale market	1		1	
J - Management of information and telecommunications systems	1		1	
K - Critical infrastructure	1	1		
TOTAL	92	5	80	7

Monitoring of the implementation of the TSO's investment plan for the year 2020

The development of the values of investments planned/achieved *from own sources* in the period 2016-2020 is as follows:



Translation: Planned and achieved values of investments in 2016-2020

	2016	2017	2018	2019	2020
Plan [RON][1)]	256,300,431	587,335,286	887,058,261	259,947,721	179,916,000[2)]
Commissioning 2020 [RON]	81,392,087	197,358,724	235,739,485	165,411,524	169,198,004[2)]

Note:

1) The planned values shall be expressed in nominal terms for the year in question

2) The planned and achieved values shall include additional projects: Upgrading the stations 110 kV Bacău Sud and Roman Nord and upgrading the station 220 / 110 kV Iaz

According to the procedure, the TSO was required to make 2020 investments from its own sources resulting in network fixed assets amounting to at least 95 % of their total forecast value contained in the plan approved by ANRE, with the possibility of recovering delayed investments in the first 10 months of 2021.

The main works completed in 2020 were the upgrading of the station 220/110 kV Oțelărie Hunedoara and the partial upgrading of the stations 440/110/20 kV Domnești, 400(220)/110/20 kV Munteni, 220/110/20 kV Ungheni, 220/110 kV Craiova North and 220/110 kV Iaz, changes of conversion units in the stations 220/110 kV Baia Mare 3, Alba Iulia, Târgoviște, FAI, as well as installation of compensation coils in the stations 400kV București Sud, Arad, Bradu and Domnești.

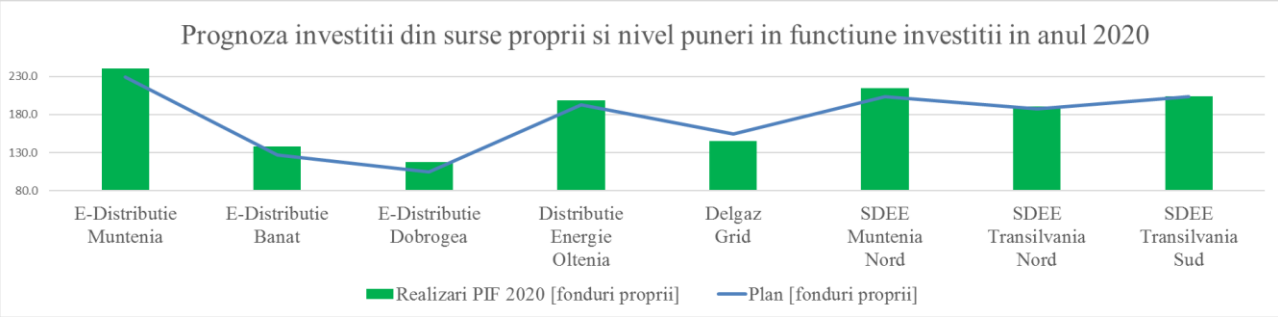
Monitoring the implementation of the 2020 DSOs investment plans

Establishing the need for investment and maintenance work in the distribution networks at a level dimensioned in order to ensure their safety, reliability and efficiency is the exclusive responsibility and legal obligation of distribution system operators. They shall establish investment and maintenance programs based on analyses and evaluations carried out as part of the asset management activity.

The value of investments made from own sources by the licensee distribution operators and commissioned in 2020, expressed in million RON, is shown as follows:

	E-Distribuție Muntenia	E-Distribuție Banat	E-Distribuție Dobrogea	Distribuție Energie Oltenia	Delgaz Grid	SDEE Muntenia Nord	SDEE Transilvania Nord	SDEE Transilvania Sud	TOTAL

Plan	229.3	126.6	104.8	192.8	154.5	203.2	187.1	203.2	1401.5
Commissioning 2020	240.5	138.2	117.5	198.6	145.4	214.6	190.2	204.3	1449.2



Translation: Prognosis of own fund investments and level of commissioning in 2020

The type of work carried out on the electricity distribution networks in 2020 is shown in the following table:

Type	Category name	Total value achieved [RON]	of which own sources:
	TOTAL, of which:	2,088,466,221	1,449,235,902
A	**ESSENTIAL - Total (A1+A2+A3+A4)**	390,573,637	386,990,026
A1	Reengineering and upgrading of existing lines/stations and facilities which are overloaded, considered as work establishments with particular safety conditions, which have inadequate technical parameters	306,074,725	302,491,114
A2	Replacement of existing equipment that is physically and morally worn, for which there are no spare parts and for which proper maintenance can no longer be carried out, replacement of equipment in order to comply with environmental conditions	84,498,912	84,498,912
A3	Installations for the purpose of compensating for the power factor	0	0
B	**REQUIRED - TOTAL (B1+B2+B3+B4+B5+B6)**	1,456,005,049	820,358,339
B1	The replacement of existing equipment which has been depreciated, the technical parameters of which no longer correspond to the existing standards and which no longer ensures compliance with the performance and quality parameters laid down in the legislation	3,928,130	3,928,130
B2	Replacement of equipment, reengineering and upgrading to reduce grid losses, replacement of measurement groups	225,674,090	225,674,090
B3	Improvement of the quality of the distribution service	306,533,581	302,000,305
B4	Building of new capabilities, expansion of existing network to power new users	113,675,196	96,194,182
B5	Implementation of smart metering systems	98,872,226	238,483,748
B6	New connections, including those required by means of primary legislation, reinforcement of the network for new connections, and share not covered by the connection tariff	707,321,827	96,435,386
C	**JUSTIFIABLE - Total (C1+C2+C3+C4+C5)**	241,887,535	241,887,535

C1	Purchase of safety equipment and the acquisition of work equipment	82,977,812	82,977,812
C2	Improvement of work conditions	53,070,088	53,070,088
C3	Take-over of power distribution capacities from third parties	1,908,108	1,908,108
C4	Replacement of measurement groups and replacement of components of fixed assets	94,671,598	94,671,598
C5	Replacements following incidents	9,259,930	9,259,930

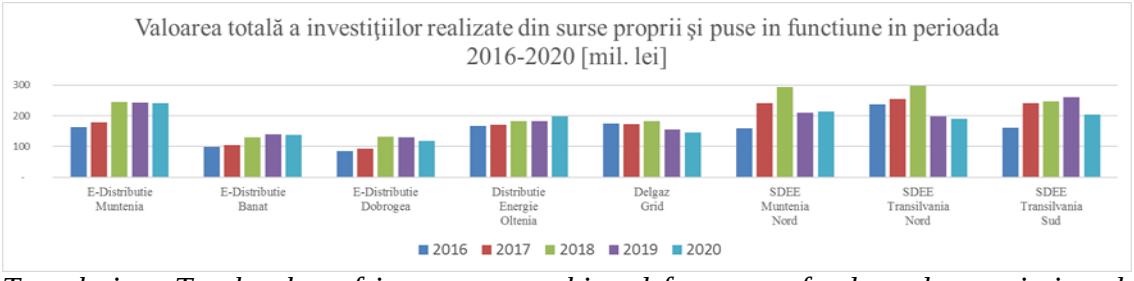
It is noted that out of the total value of investment works carried out in 2020, investment works from own sources represent 71 %.

The development of the investment volume of the licensee electricity distribution system operators from own sources in the period 2016-2020, shall be as follows:

Aspects regarding technical operation (congestion management, performance standards, network security, grid connection, technical cooperation of TSOs with third parties, investment in generation capacity in relation to operational security)

Monitoring of the forecast regarding the balance between resources and electricity consumption over the next 5 years and estimation of the development of supply security for 5 to 15 years

ANRE monitors the forecast regarding the balance between resources and electricity consumption for the next 5 years and the estimation of the development of supply security for a period of 5 to 15 years, which includes planning of the deployment of new generation capacity based on the information and analysis submitted by the TSOs as part of the 10-year PTN development plan and the investment plan in PTN.



Translation: Total value of investments achieved from own funds and commissioned in 2016-2020 (Mio. RON)

Network tariffs

The development of the regulatory framework on methodologies for setting regulated electricity tariffs during 2020

Approval of ANRE Order No. 207/28.10.2020

- The methodology for setting tariffs for the electricity distribution service approved by ANRE Order No. 169/2018, with subsequent amendments and completions, entered into force in 2018, the reference year of the fourth regulatory period.
- By means of Order of the President of ANRE No. 207/28.10.2020, it was approved to amend and supplement some provisions of the methodology, in order to increase the degree of rigor and clarify certain provisions, as well as to harmonize the provisions of the methodology

with the ANRE regulations issued after the approval of Order No. 169/2018 concerning the situation of the merger of distribution operators during a regulatory period applicable to the Electrica Group.

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• Approval of ANRE Order No. 177/07.10.2020 on the amendment of the pricing methodology for the electricity distribution service by operators other than licensee distribution operators approved by means of Order of the Romanian Energy Regulatory Authority No. 102/2016

• The manner in which tariffs are calculated and applied for the electricity distribution service provided by an economic operator holding a distribution network, but that does not have a distribution service concession contract under the terms of the law is established by the methodology for setting tariffs for the electricity distribution service by operators other than concession distribution operators, approved by means of ANRE Order No. 102/2016.

• By means of ANRE Order No. 177/07.10.2020, the amendment and completion of some provisions of the methodology was approved in light of the new legislative amendments introduced by means of Law No. 155/2020 to amend and supplement the Energy and natural gas Law No. 123/2012 and to amend and supplement other legislation, with regard to the fixing of tariffs for the distribution service in a closed distribution system.

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• Approval of ANRE Order No. 75/06.05.2020 to establish the regulatory rate of return on invested capital applied in setting tariffs for distribution services, electricity and natural gas transmission systems until the end of the fourth regulatory period and amending certain regulatory acts issued by the Romanian Energy Regulatory Authority.

• By means of ANRE Order No. 75/06.05.2020, the regulated rate of return on invested capital, applied for setting regulated tariffs for distribution, transmission and system services concerning electricity and natural gas provided by network/system operators, was approved.

• ANRE Decision No. 1047 of 24.06.2020 for the approval of templates for monitoring the expenses and revenues of licensee electricity distribution system operators and the guidelines for their filling in.

• By means of ANRE Decision No. 1047/24.06.2020, the templates through which distribution system operators report relevant data reflecting their activity, namely expenditure, income and energy balance, were approved. The review of the monitoring templates for the activity of licensee electricity distribution operators and the guidance on their filling in, approved by means of ANRE Decision No. 1713/2014, was prompted by the need to adapt the reporting of concession electricity distribution system operators to the new amendments to the ANRE regulations, the methodology for setting tariffs for the electricity distribution service, approved by means of ANRE Order No. 169/2018, with subsequent amendments and completions.

• The following objectives have been pursued in the process of reviewing the monitoring templates: insurance of a necessary, sufficient and conclusive set of information for effective monitoring, increase of transparency in the process of checking the data used to set tariffs for the electricity distribution service, ensuring a uniform reporting of information on the expenses and revenues of licensee electricity distribution operators.

Approval of ANRE Order No. 153 of 27.08.2020 on the amendment and completion of the methodology for setting tariffs for the electricity transmission service, approved by means of Order of the Romanian Energy Regulatory Authority No. 171/2019.

The methodology for setting tariffs for the electricity transmission service, approved by means of ANRE Order No. 171/2019, entered into force in 2019, the reference year of the fourth regulatory period.

In order to implement the new package of European regulations, in particular Regulation (EU) 2019/943 and Regulation (EU) 2017/2195, the methodologies for setting tariffs for the transmission service of electricity and the tariff for the system service were harmonized by means of Order 153/2020, that is, the methodology for setting tariffs for the electricity transmission service, approved by means of ANRE Order No. 171/2019 and the methodology for setting tariffs for the system service, approved by means of ANRE Order No. 45/2017, with subsequent amendments, with the provisions of previous European regulations.

This was achieved by integrating the functional system service component into the transmission service as of January 1st, 2021, with unification being possible thanks to the fact that the principles and rules for determining revenue and charges are similar.

The order also includes amendments and completions to the methodology for setting tariffs for the electricity transmission service, approved by means of Order of President of ANRE No. 171/2019, in order to increase rigor and clarify some of the costs of the service, as well as for the harmonization of the provisions of the methodology with ANRE orders issued after ANRE Order No. 171/2019, i.e. the repealing of the provisions on the treatment of investments, which have been included in the Procedure regarding the rationale and the criteria for the approval of the investment plans of the transmission system operators and the electricity distribution system operators.

Approval of the Order of the President of ANRE No. 180 of 14.10.2020 on the amendment of the methodology for setting tariffs for the system service, approved by means of Order of the Romanian Energy Regulatory Authority No. 45/2017.

In conjunction with the amendments provided for in ANRE Order No. 153/2020, the order amended the methodology for setting the tariffs for the system service, approved by means of ANRE Order No. 45/2017, for the purpose of eliminating the provisions relating to the principles and rules for the pricing of the functional system service that were taken over in ANRE Order No. 153/2020. Thus, as of January 1st, 2021, the tariff for the system service provided by TSOs will be calculated only on the basis of the approved regulatory revenue for the purchase of the services called system technology services. At the same time, the amending order also includes amendments and completions to the methodology for setting tariffs for the system service to clarify some aspects in the calculation of the regulatory price for the provision of STS - reactive energy needed for the voltage control in the PTN and the determination of the estimated costs of system technology services.

Approval of regulated tariffs for public-interest electricity networks throughout 2020

Network regulated tariffs, which ANRE approves in the field of electricity, in accordance with legal provisions, are levied by network operators on the basis of regulated contracts for grid connection, for the use of the network, i.e. for the transmission and system services and the electricity distribution service.

Tariffs for the electricity transmission service

According to the methodology for setting electricity transmission tariffs, approved by means of Order of the President of ANRE No. 171/2019, with subsequent amendments and completions, in the first year of the regulatory period (year 2020), there is a redesign of tariffs for the current regulatory period, as a result of the resumption of the revenue linearization procedure, following the update of the initial target income with the reference year data, i.e. the year 2019.

Thus, the initial target income for the regulatory IVth period was established as the sum of the power transmission service costs and revenues, updated on the basis of the values achieved in

the reference year and the costs and revenues required by the TSOs to perform the functional system service.

The difference in revenue for the first year of the regulatory period constitutes a staggered correction over the current regulatory period, by means of its inclusion when determining the linear revenue.

The closing corrections of the transitional period (2nd half of 2019), the inflation correction related to the end of the third regulatory period (July 1st, 2014 – June 30th, 2019), have also been calculated and applied for the determination of electricity transmission tariffs for the year 2021, and the values of the fixed assets included in the regulated asset base have been subsequently revised.

Thus, by means of Order of President of ANRE No. 214/09.12.2020, the following tariffs were approved in 2021:

Specification:	**M.U.**	**Approved level**
Average transmission tariff	RON/MWh	20.55
Transmission tariff - grid electricity introduction component (T_G)	RON/MWh	1.30
Transmission tariff – electricity extraction from grids (T_L) component	RON/MWh	19.22

The average transmission tariff and the transmission tariff – the extraction component of electricity from the networks shows an increase of 0,44% and 0,33% respectively, when compared to the previously mentioned tariffs, and the transmission tariff – the component of the introduction of electricity into the network was maintained at the level approved by means of ANRE Order No. 218/11.12.2019.

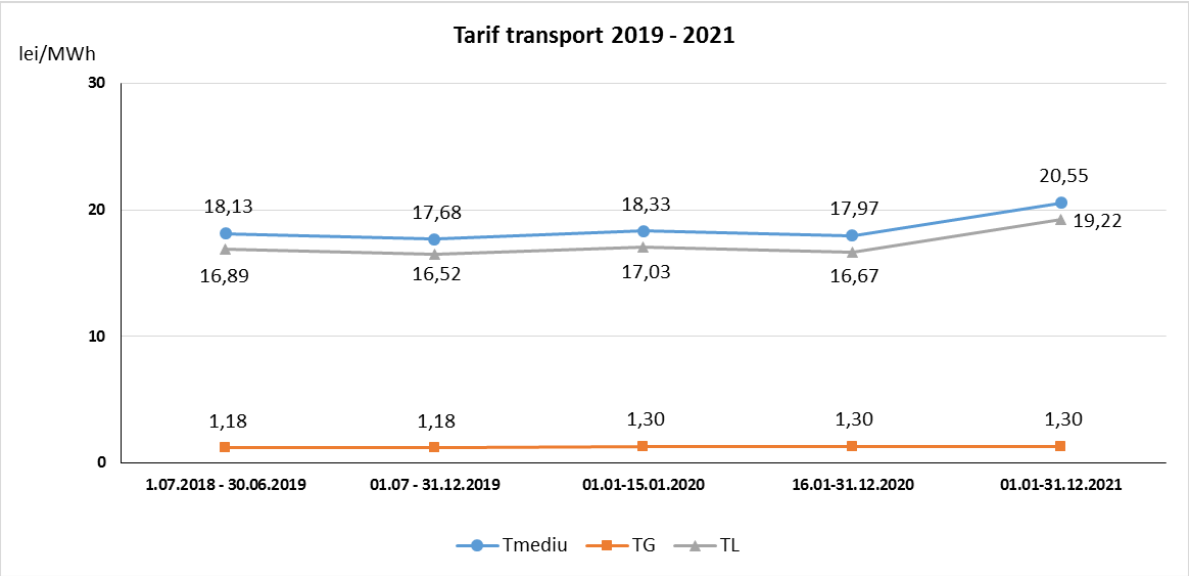
We state that the increase in the two charges is due to the inclusion of the costs of the functional system service, as set out in the following table, in the transmission service as of January 1st, 2021:

Specification	**M.U.**	**2020 tariffs**	**2021 tariffs**
Average transmission tariff	RON/MWh	17.97	20.55
Transmission tariff – electricity extraction from grids (T_L) component	RON/MWh	16.67	19.22
System functional service tariff	RON/MWh	2.49	-
Average transmission tariff plus system functional service tariff	RON/MWh	20.46	20.55
Transmission tariff – the component of extracting electricity from the grids plus the functional system service tariff	RON/MWh	19.16	19.22

- As the transmission tariff - the component of introducing electricity into the networks - remains constant throughout the IVth regulatory period, the costs of the functional system

service have been taken over in the transmission tariff – the component of extracting electricity on the networks.

• The development of the average transmission tariff, the transmission tariff – the component for introducing electricity into the grids and the transmission tariff – the component for extracting electricity from the grids in the period 2019-2021, is shown in the following figure:



Translation: Transmission tariff 2019 – 2021

System service tariffs and regulated prices for the provision of technology system services by manufacturers

System service tariffs

The tariffs for the system service shall be determined on the basis of the system service pricing methodology, approved by means of Order of President of ANRE No. 45/2017, with subsequent amendments and additions. According to said methodology, by January 1st, 2021, the system service tariff was comprised of two components: the functional system service tariff (FSS) and the system technology service tariff (STS).

They shall be reviewed as of July 1st, each year. Therefore, between April and June 2020, ANRE analysed the proposal for substantiation submitted by the TSO, and established and approved by means of ANRE Order No. 142/29.06.2020 the tariffs for the period between July 1st, 2020 to June 30th, 2021, as follows:

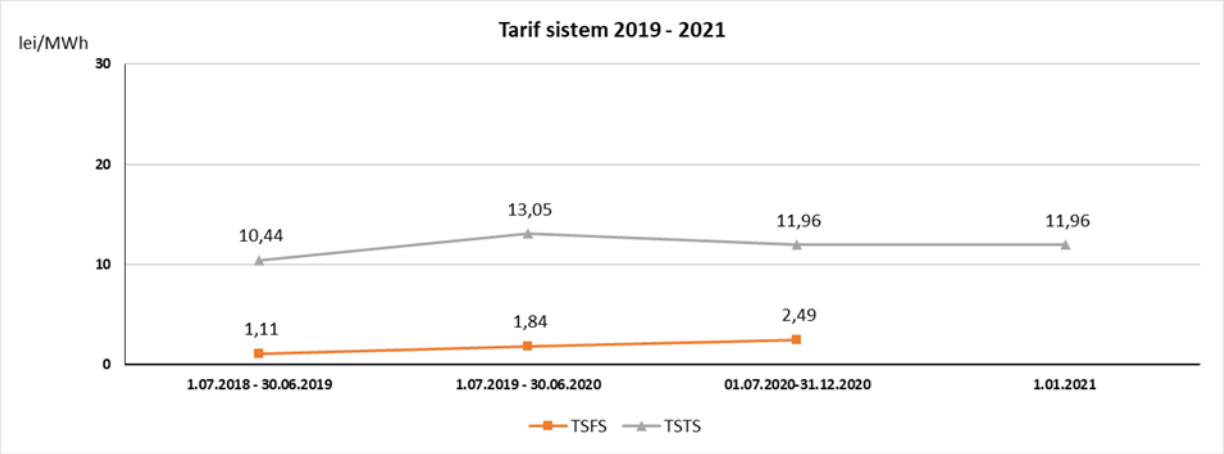
Specification	**M.U.**	**Approved level**
The system service charge, of which:	RON/MWh	14.45
the tariff for system technology services	RON/MWh	11.96
the charge for functional system service	RON/MWh	2.49

We kindly specify the fact that the system technology service tariff covers the costs of purchasing power reserves from manufacturers, and the functional system service covers the TSO's own costs with this service.

Compared to the previously approved tariff for the period 2019-2020, the sum of the two proposed tariffs for the system service (FSS+STS) showed a slight decrease from the previous tariffs, due to the reduction in the STS tariff, as a result of a reduction in the purchase prices of the reserves needed in order to ensure the security of the national electricity system, as well as the quantities of relevant reserves.

By means of ANRE Order No. 214/09.12.2020, the resulting system service tariff was approved at the previous level, approved by means of Order of the Romanian Energy regulatory Authority No. 142/29.06.2020.

The following figure shows the development of the system service tariff over the period 2019-2021, expressed in nominal terms for each year, reflecting changes in the system service tariff components of the regulatory framework:



Translation: System tariffs 2019 – 2021

Prices for the provision of technology system services

In accordance with the methodology for setting the system service tariff, approved by means of ANRE Order No. 45/2017, with subsequent amendments and completions, system technology services are purchased on a competitive basis, except those provided in accordance with the provisions laid down in specific regulatory acts, as well as by producers selected by TSOs in such a manner as to avoid the transformation of a dominant position in the competitive electricity market into abuse of a dominant position in that respective segment.

By means of Government Emergency Ordinance No. 26/2018 on the adoption of measures for the security of electricity supply, it was established that, in order to maintain the level of safety of the national electricity system, the company Complexul Energetic Hunedoara S.A. is required to provide technological system services to the transmission system operator at a power value of at least 400 MW.

By means of Government Emergency Ordinance No. 103/2020, published in the Official Journal of Romania, Part I, No. 565/29.06.2020, the deadline for implementing the measures provided for by Government Emergency Ordinance No. 26/2018 on the adoption of measures for the security of electricity supply was extended until December 31st, 2020.

Thus, by means of implementing the above-mentioned legal provisions, in 2020 ANRE approved the acquisition of the system technology services provided under the regulated regime, specifying the volumes and prices thusly regulated, as follows:

- by means of ANRE Decision No. 1078/29.06.2020 on the regulated price for the purchase of reactive power-system technology services provided by the hydroelectric power plant company Societatea de Producere a Energiei Electrice în Hidrocentrale „Hidroelectrica” S.A.;

- by means of ANRE Decision No. 1211/08.07.2020 on the regulated price of the purchase of technology services - the slow tertiary reserve provided by the company Complexul Energetic Hunedoara S.A, for the period between July and December 2020.

Tariffs for the electricity distribution service

The following figure shows the development of average electricity distribution tariffs applied to end consumers over the period 2019-2021, depending on the voltage levels at which their demand facilities are connected to the distribution grid, expressed in nominal terms:

In the fourth quarter of 2020, ANRE analysed the substantiated requests of operators and approved, by means of ANRE Orders No. 215 to No. 222 of December 9th, 2020, the specific tariffs for the electricity distribution service, applied by licensee distribution operators as of January 1st, 2021.

Thus, the average specific country tariffs per voltage level, calculated as a weighted average of the specific approved tariffs for electricity distribution system operators applicable from January 1st, 2021, with the distributed quantities of electricity, are as follows:

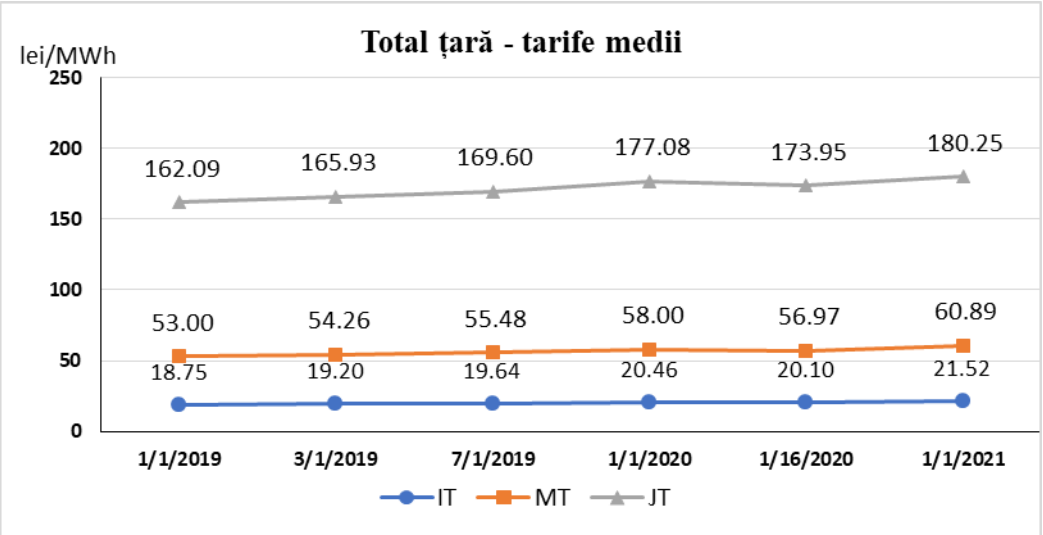
The average specific high voltage tariff – 21.52 RON/MWh,

The average specific tariff for medium voltage – 39.37 RON/MWh,

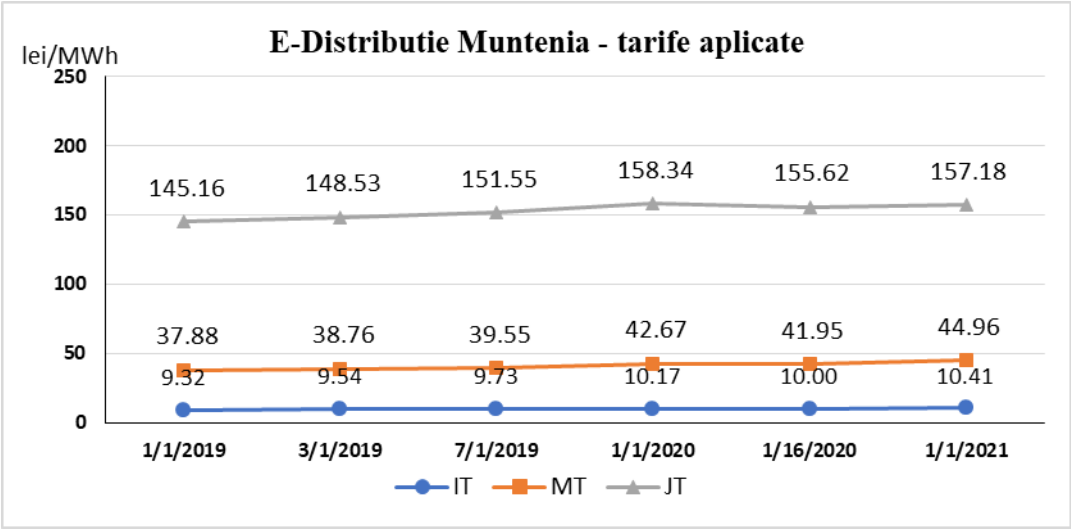
The average specific low voltage tariff – 119.36 RON/MWh.

Compared to the average specific tariffs applicable from January 16th, 2020, average tariffs recorded an increase of 7.07 % for high voltage, 6.77 % for medium voltage and 2.04 % at low voltage, which also applies to household consumers. Thus, the approved distribution tariffs are at a level comparable to the tariffs applied in 2016, in nominal terms.

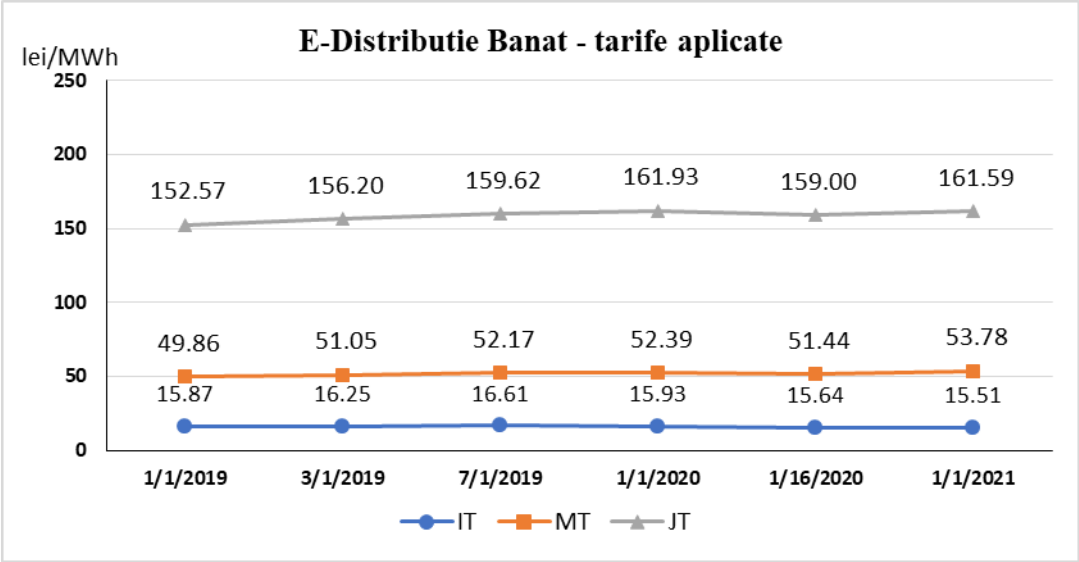
The following figures show the changes in the distribution tariffs applied by each licensee distribution operator between 2019 and 2020, in which the values are expressed in nominal terms and result from the addition of the specific tariffs approved by ANRE, representing the tariffs that end consumers pay, according to the level of voltage to which their installations are connected.



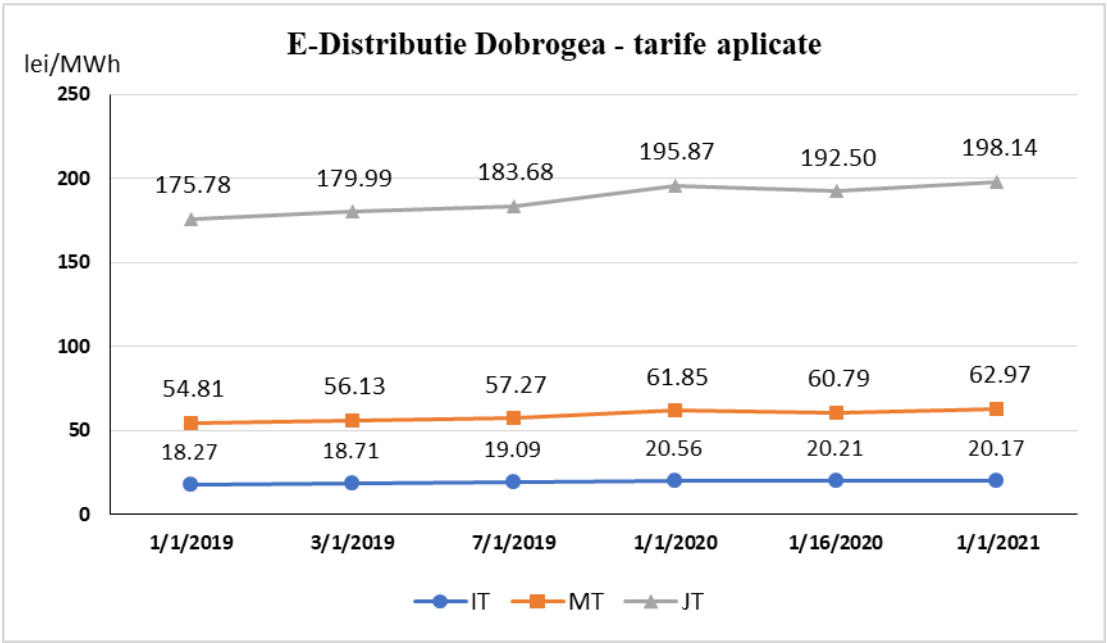
Translation: Total per country – average tariffs



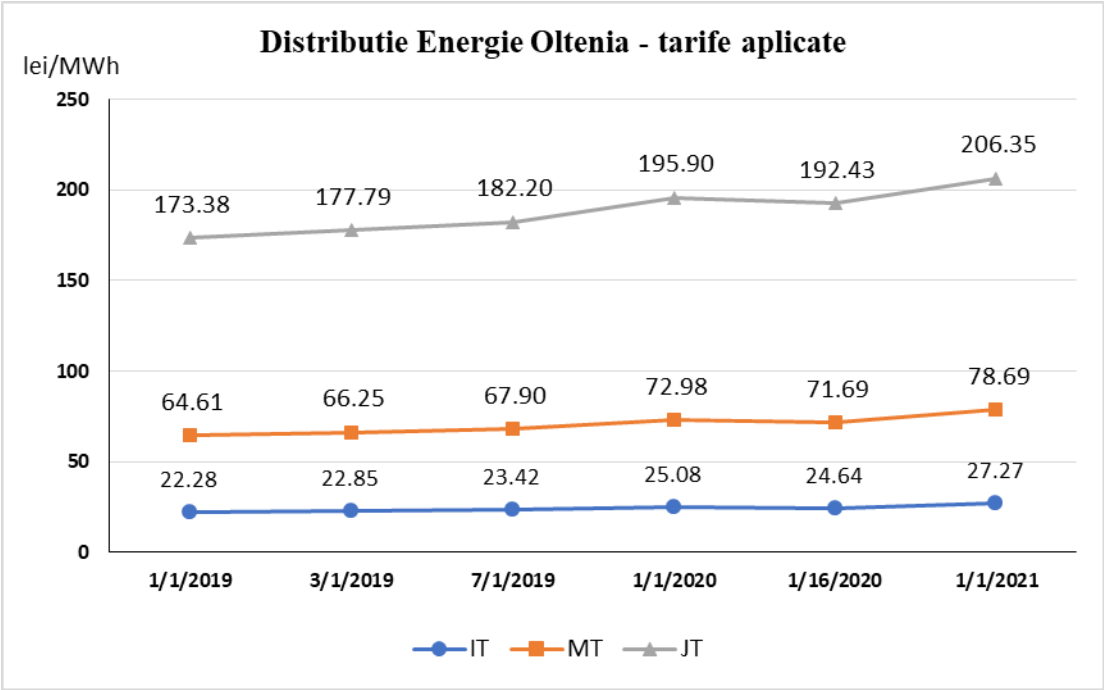
Translation: E-Distribuție Muntenia – applied tariffs



Translation: E-Distribuție Banat – applied tariffs

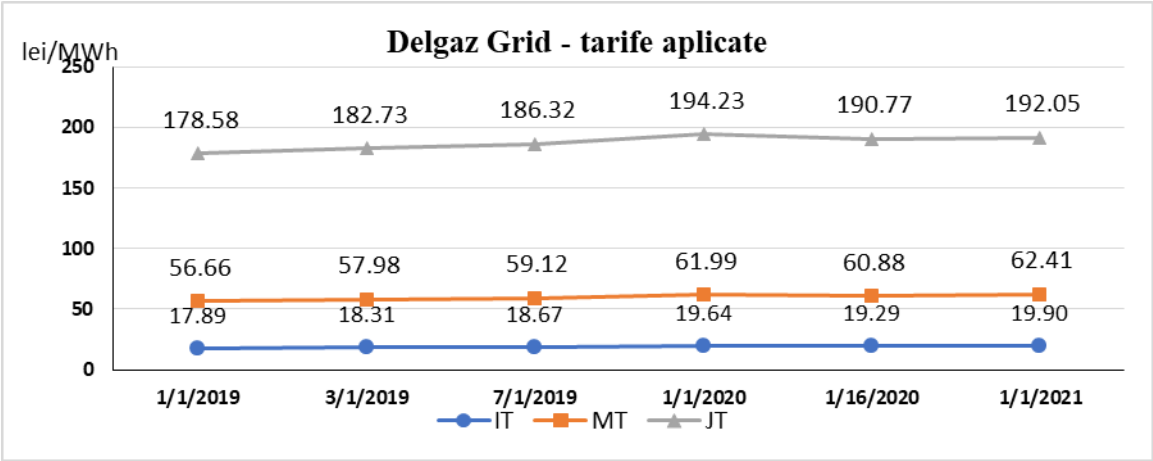


Translation: E-Distribuție Dobrogea – applied tariffs

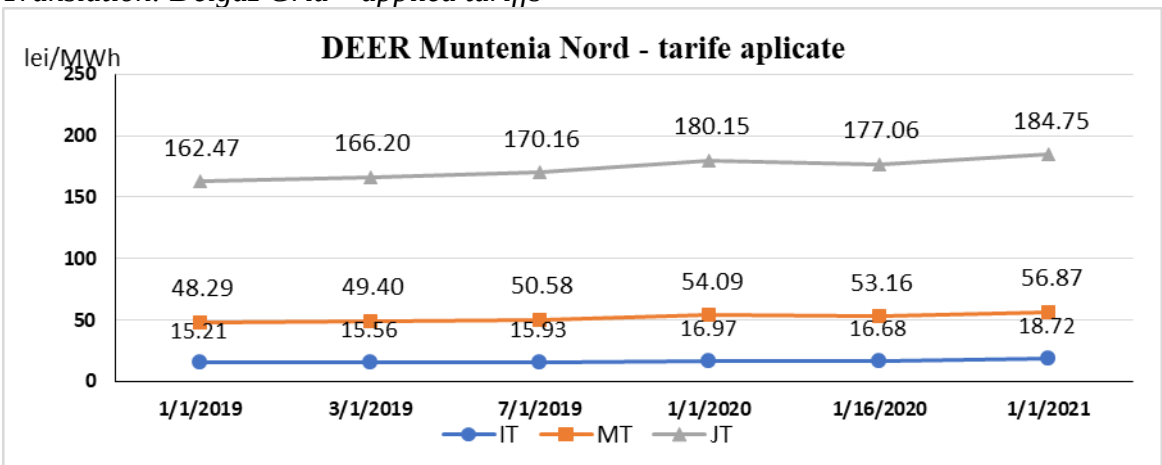


Translation: Distribuție Energie Oltenia – applied tariffs

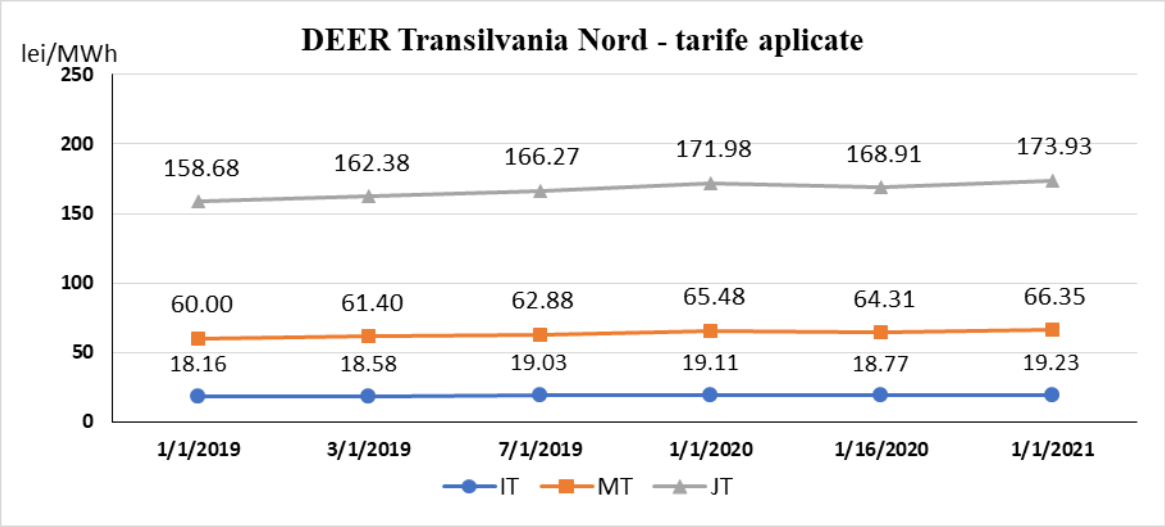
The comparison of the specific distribution tariffs approved by ANRE with effect from 01.01.2021 for the eight licensee electricity distribution operators is reflected in the following figure, in which the values are expressed in nominal terms of 2021.



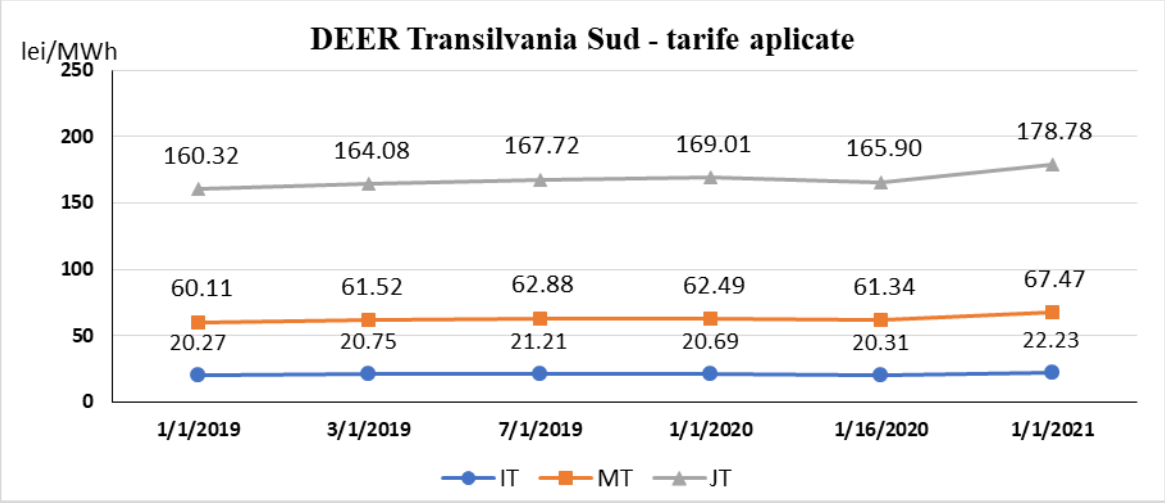
Translation: Delgaz Grid – applied tariffs



Translation: DEER Muntenia Nord – applied tariffs



Translation: DEER Transilvania Nord – applied tariffs



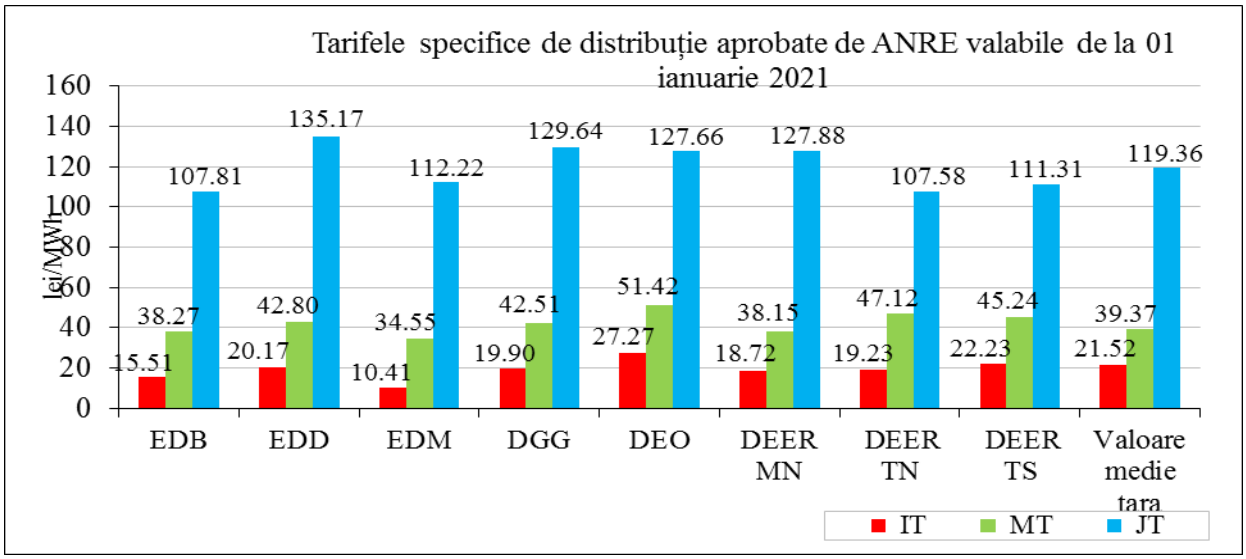
Translation: DEER Transilvania Sud – applied tariffs

Tariffs for the electricity distribution service provided by distribution system operators, other than licensee operators

Tariffs for the electricity distribution service provided by distribution system operators, other than licensee operators shall be approved by ANRE at the request of distribution system operators that own, operate, operate, maintain and develop distribution networks within industrial parks and platforms or heritage-delimited areas, and which have connected users - beneficiaries of the distribution service.

The tariffs are determined on the basis of the tariff-setting methodology for the electricity distribution service by operators, other than licensee distribution operators, approved by means of ANRE Order No. 102/2016, with subsequent amendments and completions.

In the course of 2020, four decisions were approved in what concerns the approval of tariffs for the electricity distribution service provided by distribution system operators, other than licensee operators, as well as two decisions terminating the applicability of decisions on the approval of such tariffs.



Translation: Specific distribution tariffs approved by ANRE, valid as of January 1st, 2021 Average country value

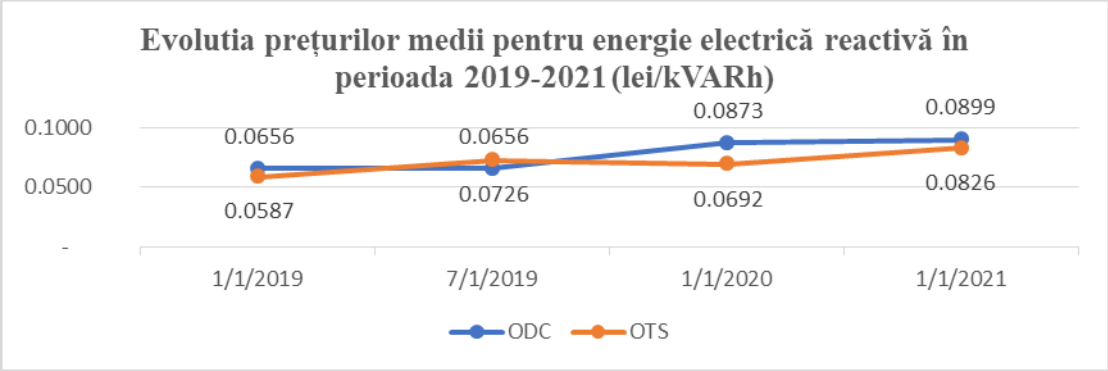
Regulated reactive electricity prices

By means of ANRE Order No. 33/2014, the methodology for determining the payment obligations in what concerns reactive electricity and the regulated price for reactive electricity was approved, with subsequent amendments and completions, which entered into force on January 1st, 2015. In accordance with the methodology, the regulated price of reactive electricity shall be set at 30 % of the regulated price for the purchase of active electricity in order to cover the grid losses of the electricity networks held by the transmission system operator and the licensee distribution system operator, respectively.

The regulated price for reactive electricity applied in 2021 by the transmission system operator was approved by means of ANRE Order No. 214 of December 9th, 2020.

The regulated reactive electricity prices applied by the distribution system operators in 2021 were approved by means of Orders of the President of ANRE No. 215 to No. 222 of December 9th, 2020.

The following figure shows the development of the average approved reactive electricity prices for licensee distribution operators (LDO) and transmission system operator (TSO) over the period 2019-2021.



Translation: Development of average prices for reactive electricity in the period between 2019 and 2021

Congestion management

The allocation of capacity on interconnection lines

The allocation of capacity on interconnection lines of the NPS with neighbouring energy systems shall take place, in order to carry out import/export and transit electricity transactions. At the borders of Romania with Hungary, Bulgaria and Serbia, capacity allocation is achieved by means of market mechanisms, coordinated bilaterally in both directions, for 100% of the allocation capacity, by means of long-term, daily and intraday auctions.

At the Hungarian and Bulgarian borders, long-term (annual and monthly) allocation auctions are explicitly organized by the Joint Allocation Office (JAO), the single allocation platform dedicated to transmission system operators from EU Member States, operating in accordance with relevant European legislation, and owned by 25 transmission system operators from 22 European countries, including Romania. The results of the auctions are available at www.jao.EU.

The daily allocation auctions at the Hungarian border are conducted by means of the 4M MC price coupling mechanism and are implicit, while at the Bulgarian border, they are explicit, organized by the Romanian TSO.

At the same borders, intraday auctions are implicit, and are conducted by means of the SIDC (Single Intra-day Coupling) solution, in order to introduce cross-zonal trading, in order to increase the efficiency of trading on this time horizon at a pan-European level.

At the Romanian border with Serbia, the allocation of capacity is explicit, in what concerns all time horizons. While long-term and intra-daily auctions are conducted by CNTEE TRANSELECTRICA SA, daily auctions are organized by EMS (the Serbian TSO).

At the Romanian border with Ukraine, the allocation of interconnection capacity shall take place by means of explicit long-term auctions only, the use of which shall be subject to the written agreement of the Ukrainian TSO. At the border with the Republic of Moldova, electricity exports can only be carried out on the basis of groups of consumption, the use of the capacity obtained by means of auctions being possible with the agreement of the local distributor.

Border	**Long-term auctions**	**Auctions daily**	**Auctions intraday**
RO - HU	**JAO**	**4M MC** (explicit auctions)	**SIDC** (default auctions)
RO - RS	**TEL***	**EMS**	**TEL***
RO - BG	**JAO**	**TEL**	**SIDC** (default auctions)
RO – UA	**TEL**	---	---

*CNTEE TRANSELECTRICA S.A.

Source: Data published by CNTEE Transelectrica S.A.

At the borders with Hungary, Bulgaria and Serbia, the principle of UIOSI („*use it or sell it*" - in Romanian *„ce nu foloseşti, vinzi"*) is used , whereby interconnection capacity corresponding to

physical transmission rights not nominalized for the day-ahead shall be returned to the TSO, in exchange for remuneration.

Auctions organized by Transelectrica shall be conducted by means of the DAMAS platform, the trading currency being the euro. Also, at these borders, the notification of physical transmission rights is carried out in accordance with the *m:n* nomination principle for all time horizons, and the „netting" principle applies to daily and intraday allocation.

For the borders with Hungary and Bulgaria, the capacity offered in the monthly auctions organized by JAO is calculated taking into account the reservation of a percentage of the cross-border capacity for daily auctions; thus, the capacity for monthly auctions is calculated as 80% of the minimum available capacities of the sub periods of each month.

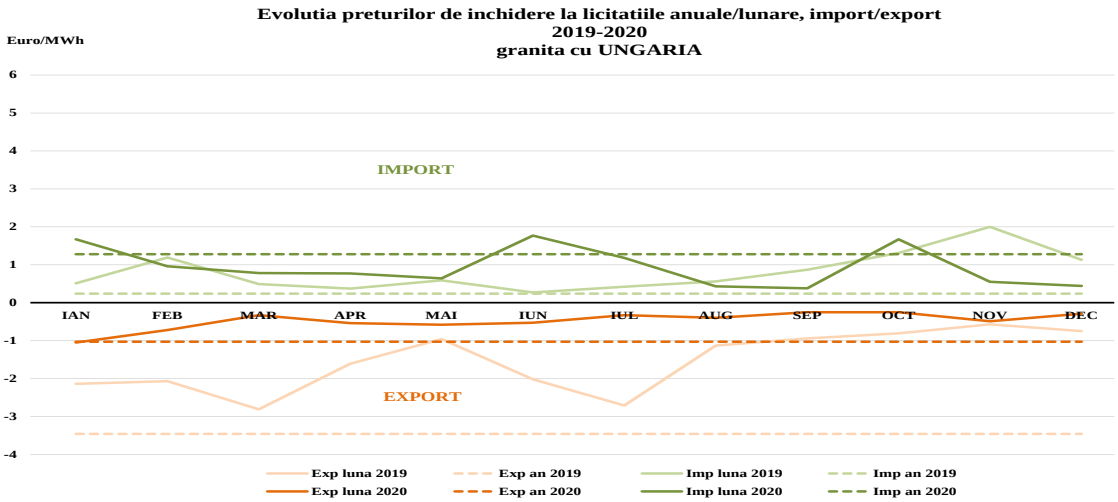
While the capacity auctioned on the Hungarian border (in both directions) remained at the level reflected in the 2018-2019 auctions (350 MW), at the Bulgarian border, the figure increased by 100 MW, when compared to 2019, reaching 250 MW in both directions, the same amount reflecting the capacity at the border with Serbia, in both directions (250 MW).

The capacity requested by the participants in the 2020 annual auction increased from the values requested in 2019, regardless of relevant border or direction, except for the Hungarian Import Directorate, for which capacity demand was 27 MW lower. The largest increase in demand was at the Bulgarian border, where participants requested 2.4-2.6 times more capacity for allocation, when compared to previous year's demand. Thus, the requested capacity at the border with Bulgaria reached 2218 MW for export and 2275 MW for import, which translates to approx. 9 times the capacity allocated in the respective directions. At the border with Serbia, the participants' interest in the annual auction was also increasing, but did not exceed 1000 MW per direction.

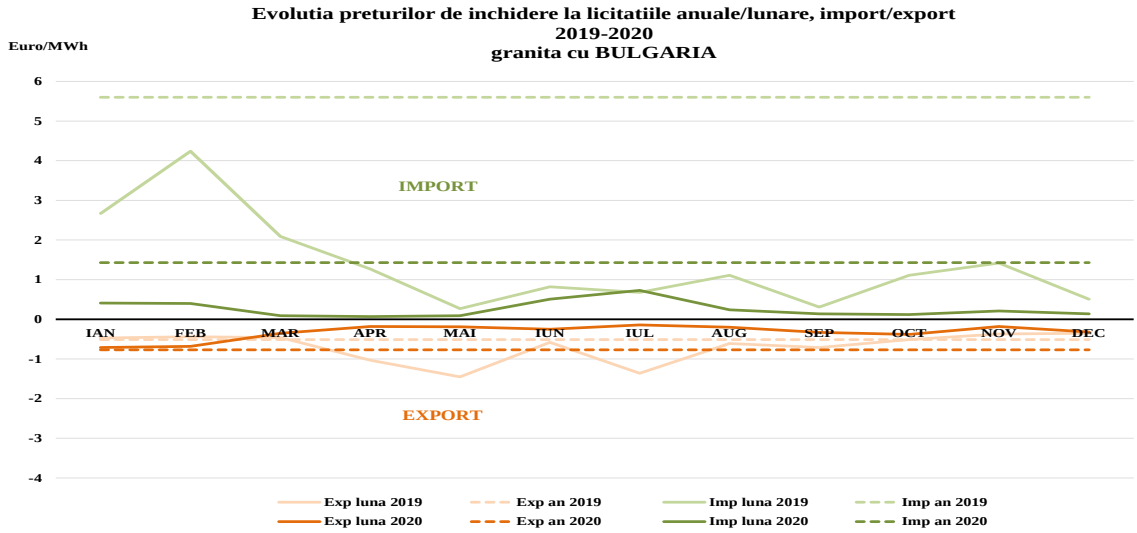
The ratio of the use of total capacity rights, expressed as the ratio of energy related to notified trades and the energy corresponding to the total capacity rights achieved was calculated at the level of each month, for each border and each direction. The highest annual average value, expressed as a percentage and calculated as the average of the monthly values per border and direction, was at the border with Hungary, in terms of import (38,64%), with monthly values ranging between 31 and 52%.

Although the situation improved, when compared to the previous year at certain borders and in certain directions (Hungary import and export, Bulgaria export, Serbia import), overall use was quite low, which shows that many participants achieved capacity rights in auctions over different time horizons, but they did not trade to match the capacities they achieved in this manner.

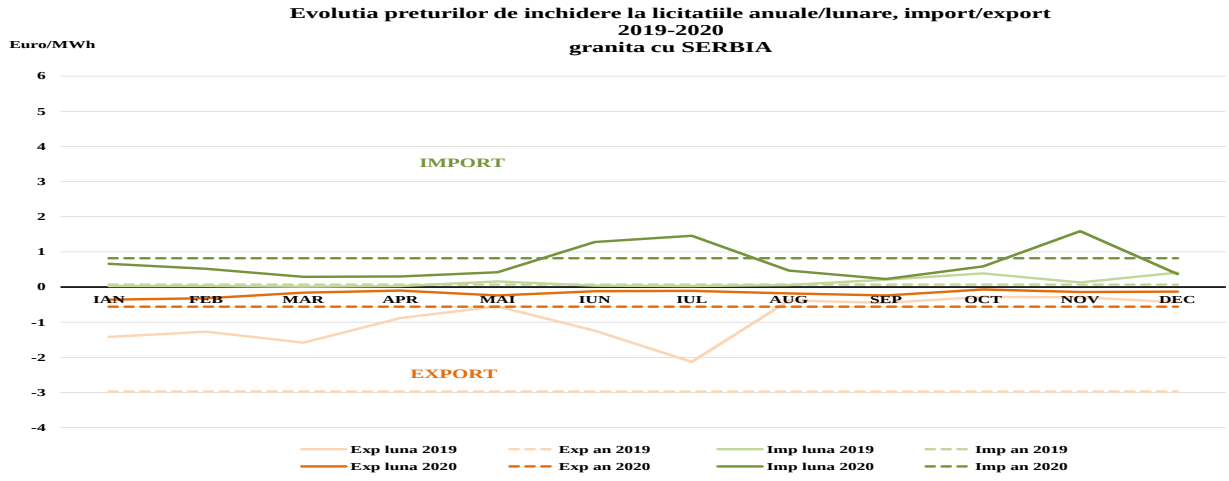
The following charts show the prices resulting in 2020 in long-term (annual and monthly) auctions, organized for capacity allocation in both directions at the Romanian borders with Hungary, Bulgaria and Serbia, as compared to the auction values for the years 2018-2019.



Translation: Development of closing prices for annual/monthly auctions, import/export, 2019-2020, at the border with HUNGARY



Translation: Development of closing prices for annual/monthly auctions, import/export, 2019-2020, at the border with BULGARIA



Translation: Development of closing prices for annual/monthly auctions, import/export, 2019-2020, at the border with SERBIA

Source: The monthly reporting of CNTEE Transelectrica SA
- ANRE processing -

Following the carrying out of the annual auctions for 2020, reduced prices, below 1.5 EUR/MWh, were achieved at the borders with Hungary (JAO organizer), Bulgaria (JAO organizer) and Serbia (Transelectrica organizer) in both directions, as opposed to the situation from the previous year, where the results achieved across the 3 borders are converged, although the volume of capacity requested by the participants exceeded that of the auctioned capacity by far.

The prices resulting from monthly auctions (or shorter monthly periods) followed a seasonal curve, with peaks in the import direction, in June-July 2020 and October-November 2020, which still remained below 2 EUR/MWh.

Throughout the year and across all 3 borders analysed, the interest of the participants was directed toward import, with resulting price values above those from the export direction auctions.

With the exception of seasonal peaks in the import direction from Hungary and Serbia, monthly auction prices remained below those resulting from the annual auctions, with the development recorded after the start of the pandemic indicating that, in general, the cross-border trade opportunities identified by the participants at the time of the annual auction did not materialize throughout the year, amid declining production and consumption in the region.

The revenues registered in 2020 by CNTEE TRANSELECTRICA SA from capacity allocation on the interconnection lines of the NPS with neighbouring energy systems, across all time horizons, decreased by 30%, when compared to the same figure recorded in 2019, reaching ron 58.7 million.

The recorded values resulted from the decrease in the remuneration for the return of capacity from long-term auctions and the *Use it or sell it* (UIOSI) principle for capacities achieved in long-term auctions, but not nominalized, in case of their reallocation for daily auctions. From a border-related point of view, the highest annual values of the revenues obtained from auctions on all time horizons were those obtained at the border with Hungary, especially on the import side.

Monitoring balance of supply and demand

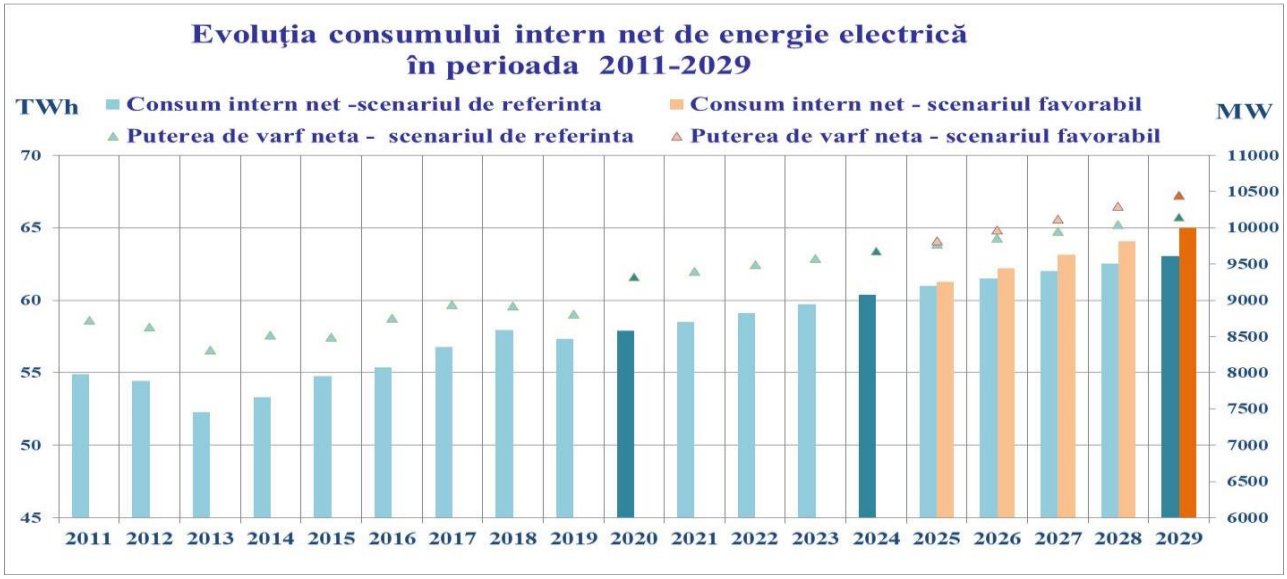
Aspects regarding technical operation (congestion management, performance standards, network security, grid connection, technical cooperation of TSOs with third parties, investment in generation capacity in relation to operational security)

Monitoring of the forecast regarding the balance between resources and electricity consumption over the next 5 years and estimation of the development of supply security for 5 to 15 years

ANRE monitors the forecast regarding the balance between resources and electricity consumption for the next 5 years and the estimation of the development of supply security for a period of 5 to 15 years, which includes planning of the deployment of new generation capacity

based on the information and analysis submitted by the TSOs as part of the 10-year PTN development plan and the investment plan in PTN.

Forecast of the NPS balance between production and consumption over a period of 10 years:



Translation: Development of net domestic electricity consumption in 2011-2029
Domestic net consumption – Reference scenario
Net peak power – Reference scenario
Net domestic consumption – Favourable scenario
Net peak power – Favourable scenario

Electricity consumption-production forecast for 2020-2029:

	U.M.	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
		realizari								estimari	prognoza									
SCENARIUL DE REFERINTA																				
Consum intern net de energie electrica	TWh	54.9	54.4	52.3	53.3	54.8	55.4	56.8	57.9	57.3	57.9	58.5	59.1	59.7	60.4	61.0	61.5	62.0	62.5	63.0
ritm anual de crestere	%	*2.9*	*-0.9*	*-3.9*	*1.9*	*2.7*	*1.1*	*2.5*	*2.1*	*-1.1*	*1.0*	*1.1*	*1.1*	*1.1*	*1.1*	*1.0*	*0.9*	*0.9*	*0.8*	*0.8*
Puterea de varf neta - consum	MW	8724	8627	8312	8522	8488	8752	8940	8920	8813	9325	9400	9490	9580	9680	9770	9860	9950	10050	10150
SCENARIUL FAVORABIL																				
Consum intern net de energie electrica	TWh	54.9	54.4	52.3	53.3	54.8	55.4	56.8	57.9	57.3	57.9	58.5	59.1	59.7	60.4	61.3	62.2	63.1	64.1	65.0
ritm anual de crestere	%	*2.9*	*-0.9*	*-3.9*	*1.9*	*2.7*	*1.1*	*2.5*	*2.1*	*-1.1*	*1.0*	*1.1*	*1.1*	*1.1*	*1.1*	*1.5*	*1.5*	*1.5*	*1.5*	*1.5*
Puterea de varf neta - consum	MW	8724	8627	8312	8522	8488	8752	8940	8920	8813	9325	9400	9490	9580	9680	9820	9970	10125	10300	10450

Translation: Reference scenario – Net domestic energy consumption, Annual growth rhythm, Net peak power – consumption
Favourable scenario – Net domestic energy consumption, Annual growth rhythm, Net peak power – consumption

Analysis of the adequacy of the production park in NPS in the period 2020-2024-2029

The system adequacy shall target the extent to which the national power system (NPS) generation capacities can cover the demand for electricity in all stationary systems where the system may be located.

This condition has been verified for the time of year when the maximum consumption in the NPS, i.e. at the winter evening peak, was reached using the methodology applied at European level within ENTSO-E for seasonal adequacy studies.

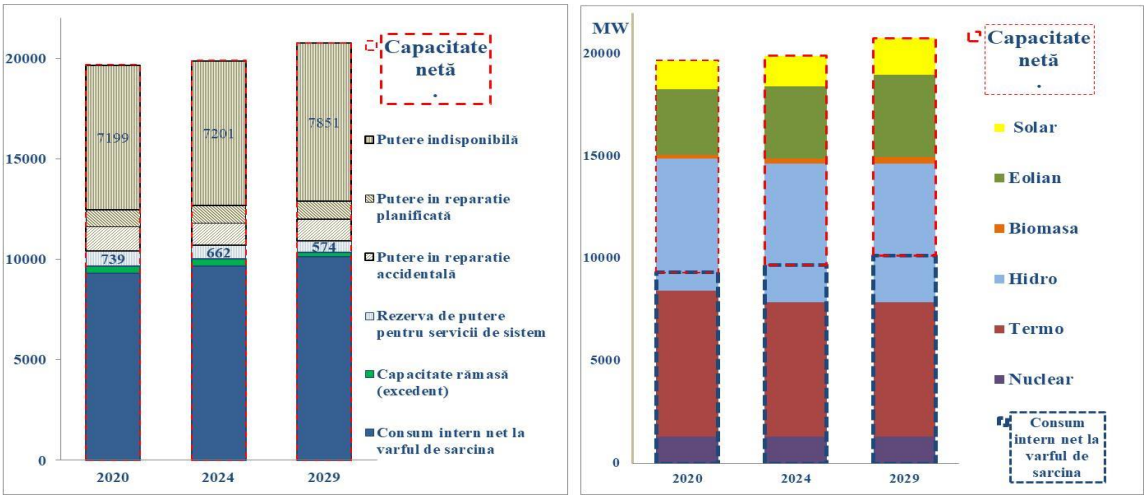
The methodology shall determine the extent to which net production capacity actually available in the NPS can cover net internal consumption at peak winter sections, using net installed capacity in the NPS, from which capacity under planned and accidental repairs has been deducted, as well as capacities with technical, environmental and legal restrictions, that is, the preservation of the primary source of energy, including reserves for system technology services.

The following table shows the estimate of generation system adequacy for the analysed horizons, 2020-2024-2029, in the *Reference scenario* for variation of consumption and generation capacities:

				MW
	Putere netă in SEN	**2020**	**2024**	**2029**
1	centrale nucleare	**1325**	**1325**	**1325**
2	centrale termoelectrice conventionale	**7101**	**6544**	**6544**
	• pe lignit	3112	3112	3112
	• pe huila	1050	430	430
	• pe gaze naturale / hidrocarburi	2939	3002	3002
3	resurse energetice regenerabile	**4779**	**5249**	**6119**
	• eoliene	3200	3500	4000
	• fotovoltaice	1400	1500	1800
	• biomasa	180	250	320
4	centrale hidroelectrice	**6471**	**6778**	**6778**
	• CHEAP	0	0	0
5	**Capacitatea de producţie netă [5=1+2+3+4]**	**19676**	**19896**	**20766**
6	**Putere indisponibilă totala (inclusiv restricţii tehnice, de mediu, legale şi indisponibilitatea sursei primare de energie)**	9992	9850	10393
7	**Puterea efectiv disponibilă [7=5-6]**	**9684**	**10046**	**10373**
8	Consum intern net la varful de sarcina	9325	9680	10150
9	**Capacitate rămasă (fără considerarea schimburilor cu alte sisteme) [9=7-8]**	**359**	**366**	**223**
10	**Capacitate simultana de import**	**1800**	**3000**	**3600**
11	**Capacitate simultana de export**	**2000**	**3200**	**3900**

Translation: Net power in NPS – nuclear plants, conventional thermo-electric plants – lignite, bituminous coal, natural gas/ hydrocarbons, renewable energy sources – wind, photovoltaic, biomass, hydroelectric plants – CHEAP, Net production capacity, Total unavailable power (including technical, environment and legal restrictions and unavailability of the primary energy source), effective available power, net domestic consumption at load peak, remaining capacity (without considering exchanges with other systems), Simultaneous import capacity, Simultaneous export capacity

Adequacy of the generation park in NPS - Reference Scenario:



Translation: Net capacity – unavailable power, planned repair power, accidental repair power, power reserve for system services, remaining capacity (surplus), net domestic consumption at load peak
Net capacity – solar, wind, biomass, hydro, thermal, nuclear
Net domestic consumption at load peak

Power balances - Reference scenario

In this scenario, the excess net power available in the system is about 2% of net production capacity in 2020, which is almost constant.

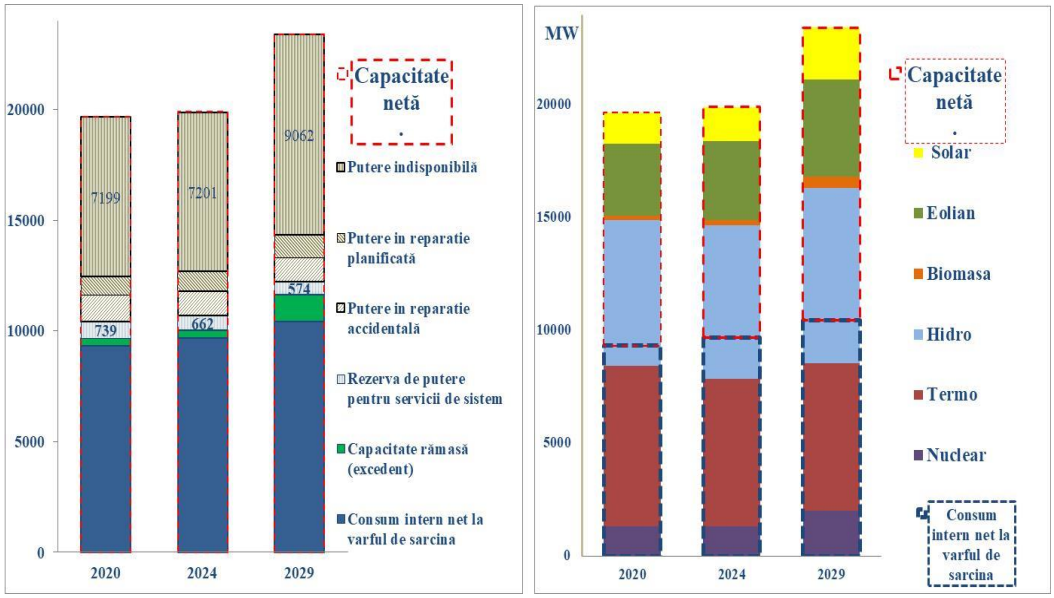
The following table includes the estimation of generation system adequacy for the 2020-2024-2029 timeframe, in the *Favourable scenario* for consumption variation and the *Green scenario* for generation capacity development.

Adequacy of the generation park in NPS– Favourable consumption scenario/Green scenario

				MW
	Putere netă in SEN	**2020**	**2024**	**2029**
1	centrale nucleare	**1325**	**1325**	**1990**
2	centrale termoelectrice conventionale	**7101**	**6544**	**6544**
	• pe lignit	3112	3112	3112
	• pe huila	1050	430	430
	• pe gaze naturale / hidrocarburi	2939	3002	3002
3	resurse energetice regenerabile	**4779**	**5249**	**7100**
	• eoliene	3200	3500	4300
	• fotovoltaice	1400	1500	2300
	• biomasa	180	250	500
4	centrale hidroelectrice	**6471**	**6778**	**7778**
	• CHEAP	0	0	1000
5	**Capacitatea de producţie netă [5=1+2+3+4]**	**19676**	**19896**	**23412**
6	**Putere indisponibilă totala (inclusiv restricţii tehnice, de mediu, legale şi indisponibilitatea sursei primare de energie)**	9992	9850	11747
7	**Puterea efectiv disponibilă [7=5-6]**	**9684**	**10046**	**11664**
8	Consum intern net la varful de sarcina	9325	9680	10450
9	**Capacitate rămasă (fără considerarea schimburilor cu alte sisteme) [9=7-8]**	**359**	**366**	**1214**
10	**Capacitate simultana de import**	**1800**	**3000**	**3600**
11	**Capacitate simultana de export**	**2000**	**3200**	**3900**

Translation: Net power in NPS – nuclear plants, conventional thermo-electric plants – lignite, bituminous coal, natural gas/ hydrocarbons, renewable energy sources – wind, photovoltaic,

biomass, hydroelectric plants – CHEAP, Net production capacity, Total unavailable power (including technical, environment and legal restrictions and unavailability of the primary energy source), effective available power, net domestic consumption at load peak, remaining capacity (without considering exchanges with other systems), Simultaneous import capacity, Simultaneous export capacity



Translation: Net capacity – unavailable power, planned repair power, accidental repair power, power reserve for system services, remaining capacity (surplus), net domestic consumption at load peak
Net capacity – solar, wind, biomass, hydro, thermal, nuclear

Net domestic consumption at load peak

Power balances - Favourable scenario

In this scenario, the excess net power available in the system is increased from around 2 % in 2020 and 2024, to around 5 % in 2029 of net production capacity, due to the assumption that Cernavodă Unit 3 and Tarnița pumped-storage plant will be commissioned. The increase in unusable power is due to the unpredictable component associated with increased generation from renewable sources, in particular wind and photovoltaic.

The adequacy forecast considered that the installation of wind and solar power plants has the effect of increasing the share of unavailable power, as a consequence of the specific intermittent operation of these plants, characterized by a small number of hours of use at maximum power.

The integration of the CEE and the CEF into the NPS requires that conventional power plants provide the frequency control function, in order to compensate for power variations caused by the latter, as a result of primary energy variations. It is therefore necessary to set up high-end plants, as this mode of operation has negative implications in terms of production costs and service life of the groups intended to operate in basic mode.

Peak load system adequacy - sensitivity analysis in relation to the availability of fossil fuel-based power generation units and the probability of non-forecasted new generation capacities

In the context of the assessment of peak load system adequacy, the TSOs conducted a sensitivity analysis in relation to the non-achievement of new forecasted generation capacities. If the projects related to new natural gas groups included in the reference scenario cannot be carried out by 2024 with a total net available capacity of **145 MW** (63 MW in Oradea, 44 MW in Govora and 38 MW in Palas Constanța), and also, existing capacities totalling **3579 MW** could be closed in advance , i.e.:

- 2906 MW per lignite at the Complexul Energetic Oltenia S.A. plant (4 groups in Turceni = 1196 MW, 3 groups in Rovinari = 888 MW, 2 groups inIșalnița = 582 MW, 2 groups in Craiova = 240 MW), as a consequence of the development of the price of CO_2 certificates on the former's financial situation,
- 190,7 MW per lignite at CET Govora, for financial reasons, but also because the plant is dependent on the primary resource stemming from CE Oltenia,
- 130 MW per bituminous coal at the Complexul Energetic Hunedoara (group 4 Paroșeni), which, due to the financial difficulties and restrictions imposed by compliance with environmental requirements, may remain with a single available group (in Deva),
- 352 MW per gas at CET Galati, due to the insolvency situation of the power plant, with the risk of going bankrupt.

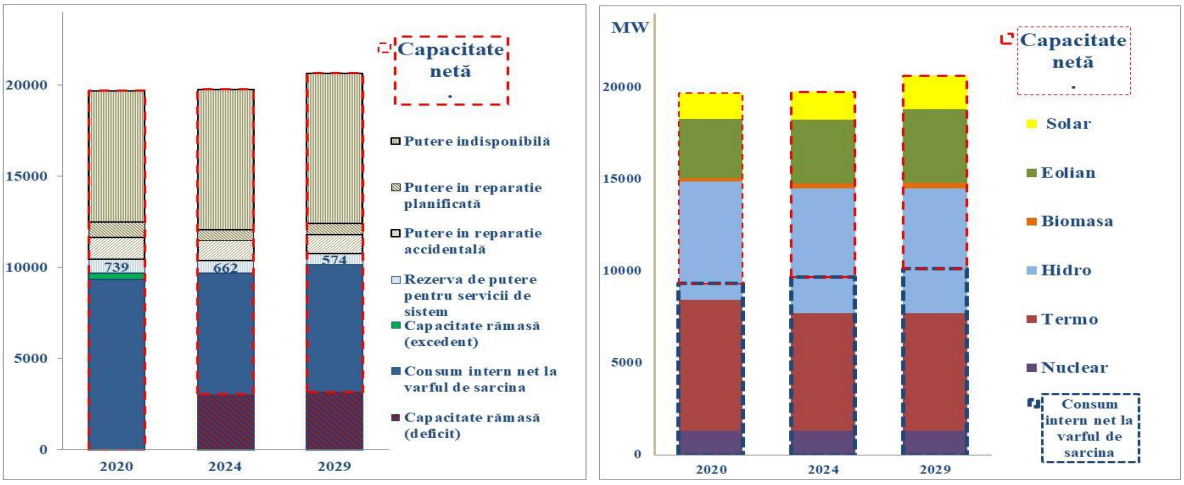
The results of the modelling of this scenario show that, in the absence of measures such as capacity market, **the missing capacity at the estimated peak load** reaches **3 GW in 2024 and 3.2 GW in 2029, respectively**, at the capacity limit of the PTN, which will increase over time, as the interconnection investment projects of CNTEE Transelectrica SA are completed, from an NTC value of 3 GW in 2024 to 3.6 GW in 2029.

Production fleet in the NPS - Sensitivity analysis (critical scenario)

			MW
	Putere netă in SEN	**2024**	**2029**
1	centrale nucleare	**1325**	**1325**
2	centrale termoelectrice conventionale	**6399**	**6399**
	• pe lignit	3112	3112
	• pe huila	430	430
	• pe gaze naturale / hidrocarburi	2857	2857
3	resurse energetice regenerabile	**5249**	**6119**
	• eoliene	3500	4000
	• fotovoltaice	1500	1800
	• biomasa	250	320
4	centrale hidroelectrice	**6778**	**6778**
5	**Capacitate netă de producere [5=1+2+3+4]**	**19751**	**20621**
6	**Putere indisponibilă totala (inclusiv restricții tehnice, de mediu, legale și indisponibilitatea sursei primare de energie)**	13089	13633
7	**Puterea efectiv disponibilă [7=5-6]**	**6662**	**6988**
8	Consum intern net la varful de sarcină	9680	10150
9	**Capacitate rămasă (fără considerarea schimburilor cu alte sisteme) [9=7-8]**	**-3018**	**-3162**
10	**Capacitate simultana de import**	**3000**	**3600**
11	**Capacitate simultana de export**	**3200**	**3900**

Translation: Net power in NPS – nuclear plants, conventional thermo-electric plants – lignite, bituminous coal, natural gas/ hydrocarbons, renewable energy sources – wind, photovoltaic, biomass, hydroelectric plants – CHEAP, Net production capacity, Total unavailable power (including technical, environment and legal restrictions and unavailability of the primary energy source), effective available power, net domestic consumption at load peak, remaining capacity

(without considering exchanges with other systems), Simultaneous import capacity, Simultaneous export capacity



Translation: Net capacity – unavailable power, planned repair power, accidental repair power, power reserve for system services, remaining capacity (surplus), net domestic consumption at load peak
Net capacity – solar, wind, biomass, hydro, thermal, nuclear

Net domestic consumption at load peak

Power balances - Sensitivity analysis (critical scenario)

Covering a significant part of net domestic consumption by means of imports entails major risks related to the potential lack of regional resources in terms of electricity generation capacities, taking into account the annual balance of the countries in the region, which, except Bulgaria and the Czech Republic, are net importing countries (Hungary, Poland, Croatia, Serbia).

In conclusion, the closure of existing groups (particularly coal-based) that are unprofitable in 2024-2029, combined with the failure to develop new groups in order to replace this capacity, shall have a negative impact on the adequacy of the system and energy security at national and even regional level, effect that is multiplied in assumptions of severe weather conditions, leading to an increase in net internal consumption and lack of primary resource for power plants (wind/water) and possible unavailability in the gas transmission network. In such a situation, the missing capacity at the peak load shall exceed the import capacity of the PTN.

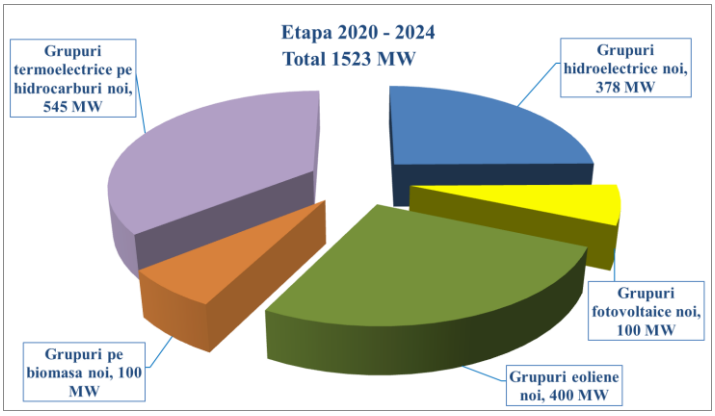
Scenarios on the development of the generation park

The scenarios related to the development of the power plant park analysed are correlated with the scenarios corresponding to the 2025 and 2030 horizons used in ENTSO-E for electricity market modelling studies at pan-European level in the *European electricity grid development plan* (TYNDP 2020) and the Medium-term adequacy study (MAF2019)**.**

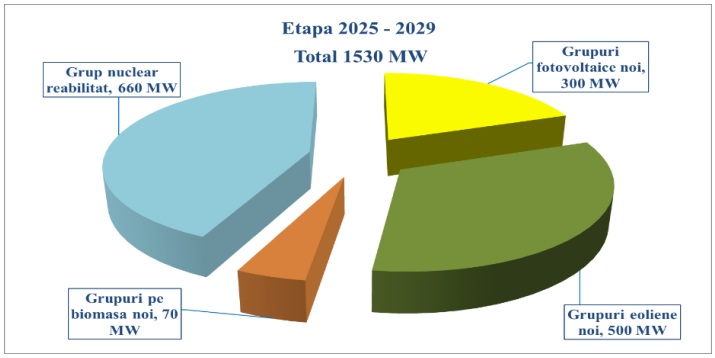
For the period 2020-2029, a baseline scenario for the development of generation capacities was thus considered, that includes a program of **permanent withdrawals of thermal power groups** at the end of their service life or due to non-compliance with EU pollution requirements, **totalling 1094 MW** net power available.

According to this scenario, in the same period, after rehabilitation, nuclear power group 1 from Cernavodă (stopped for reengineering, in order to prolong its service life) will be commissioned, with a net available capacity of 660 MW.

The figure below shows the rehabilitation and new groups projects for the phases 2020-2024 and 2025-2029, respectively, corresponding to the baseline scenario of the development of the generation park.



Translation: 2020-2024 Stage - Total 1523 MW - Thermo-electric groups on new hydrocarbours, New biomass groups, New wind groups, New photovoltaic groups, New hydroelectric groups



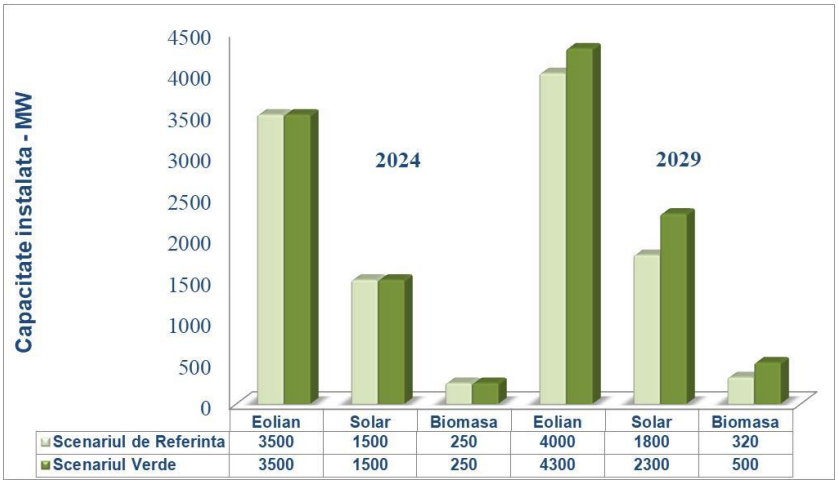
Translation: 2025-2029 Stage - Total 1530 MW - Thermo-electric groups on new hydrocarbours, New biomass groups, New wind groups, New photovoltaic groups, New hydroelectric groups

Rehabilitation and new groups projects

In what concerns the intended **installation of new groups**, according to information received by the TSOs from existing manufacturers, they amount to a net available capacity of **approximately 545 MW**, excluding renewable energy-based projects. **New groups projects include** a combined natural gas cycle plant in Iernut, cogeneration plants in Oradea, Govora, Palas, hydropower plants at different stages of execution, CEF and CEE, as well as new RES groups focused on biomass.

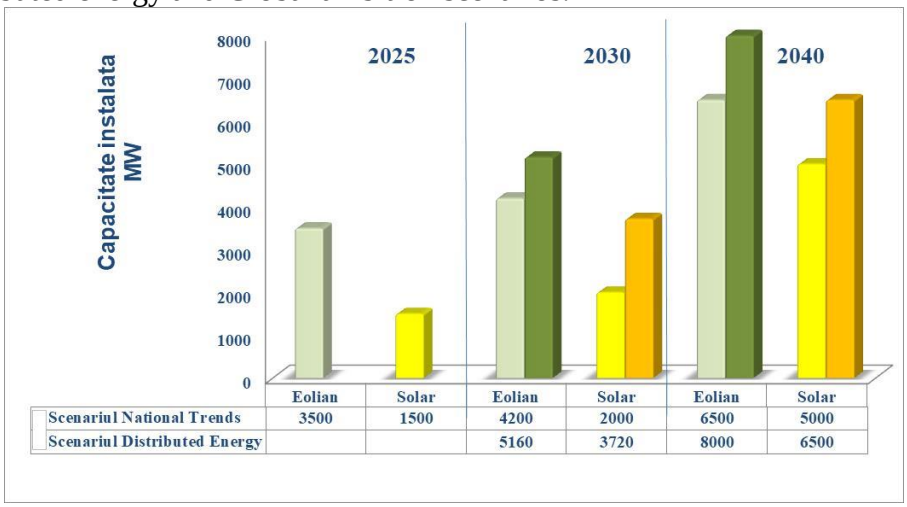
In addition to the *Baseline scenario* for capacity developments, an *Alternative („green") scenario*, corresponding to the favourable scenario in terms of consumption, characterized by economic and financial conditions conducive to the implementation of the energy policies promoted at EU level, was also analysed.

In this scenario, in 2029, the nuclear group 3 in Cernavodă is considered to be operational and a storage capacity of 1000 MW (Tarnița pumped-storage hydropower plant), with the total capacity from renewable sources (hydro-only) reaching 7100 MW.



Translation: Installed capacity, Reference scenario, Green scenario
Development of renewable generation capacity (hydro-only)

For the 2029 timeframe, the following renewable capacities were considered under the National trends, Distributed energy and Global ambition scenarios.



Translation: Installed capacity, National Trends scenario, Distributed Energy scenario
The development of capacity from intermittent renewable sources in ENTSO-E scenarios

Cross-border issues

In 2020, the project to couple the daily energy markets of the EU Member States Romania and Bulgaria was started, a project that entailed the linking of daily energy markets of EU Member States Romania and Bulgaria. On 22.09.2020, the national regulatory authorities of Austria, Germany, Poland and the 4M Market Coupling (4M MC) countries, namely the Czech Republic, Hungary, Romania and Slovakia, received from the European Commission (DG ENER) guidance for appointed electricity market operators (OPEED) and transmission system operators (TSOs) participating in the DE-AT-PL-4M MC project (also known as the „Interim Coupling project" or „ICP") which sets forth the prioritization of the implementation of the ICP solution in a timely manner. This guidance was requested by the respective national regulatory authorities, after several months of debates, as in the first quarter of 2020, bottlenecks in the local implementation process were identified by a number of stakeholders involved in the project. These bottlenecks are due to interdependencies between ongoing parallel projects, such as the

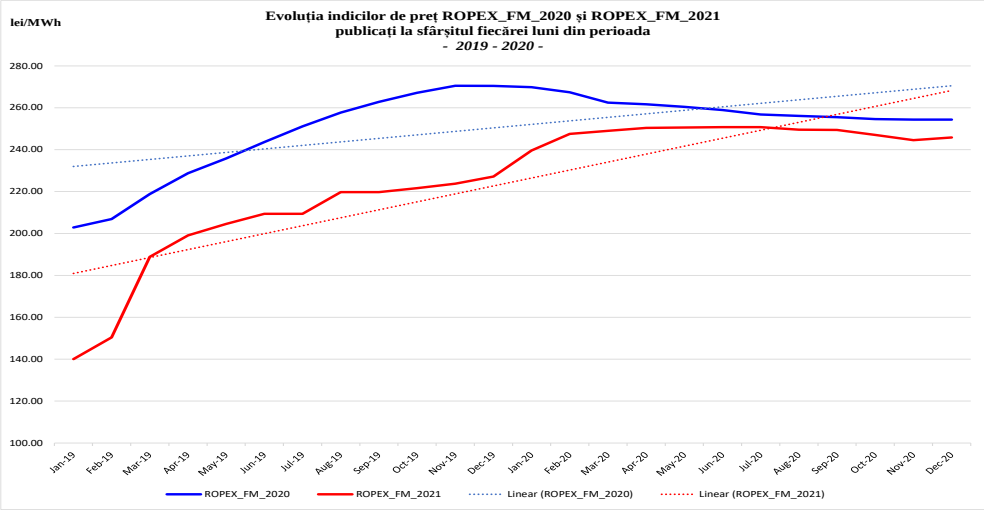
CORE FB MC, Allegro, NorNed, Polish MNA projects, resulting in a delay in the implementation of the Interim Coupling Project, that was actually concluded in early 2021.

3.2. Competition and market functioning

3.2.1 Wholesale markets

In 2020, Romania was a net importer of electricity, after, for a long period of time, it had installed production capacity much higher than the average national consumption rate and a production structure that allowed it to be a net exporter of electricity.

In the given market context, the average price of electricity traded on **forward markets** for delivery in 2022 and 2021 changed its upward trend in 2019, leading to a downward trend in March 2020. The following graph shows the development of the price indices calculated by OPCOM for electricity futures markets, ROPEX_FM_2020 and ROPEX_FM_2021, published at the end of each trading month, from January 2019 to December 2020.



Translation: Development of price indices ROPEX_FM 2020 and ROPEX_FM_2021 published at the end of each month from 2019 and 2020

Qualitative assessment of the level of performance and efficiency of the works carried out by market participants has been carried out by means of estimating the margin of trading for electricity in the PAN, or the margin of supply for the activity of energy supply to competitive end consumers on the REM. The comparative analysis for the years 2020/2019 showed an increase in the average values of the two indicators. The increase in average margins was influenced by the decrease in average purchase prices, the increase in average sales prices and the positive results of the activity carried out in the balancing market. In addition, there was a decrease in the number of active market suppliers with negative trading/supply margin, while the number of active suppliers was not subject to significant variations.

Based on the provisions of REMIT, Implementing Regulation (EU) No. 1348/2014, ACER Decision No. 1/2012 and ANRE Order No. 1/2015, the specialised directorate continued to verify and update the information in the National register of wholesale energy market participants. In 2020 there were 37 new participants on the wholesale electricity and gas markets. At the end of 2020, 703 wholesale market participants had an ACER code.

Data collected monthly from the 123 monitored active electricity producers show that in 2020, the dispatch units produced 53,74 TWh of electricity, down by 5,8%, when compared to the figures from 2019. The electricity delivered to the grid was also approximately 50,79 TWh, almost 2,89 TWh lower than the electricity delivered the previous year by the same dispatch producers, which was mainly driven by the fall of over 30 % (ca. 3.8 Twh), when compared to the figures from 2019, of coal-based production.

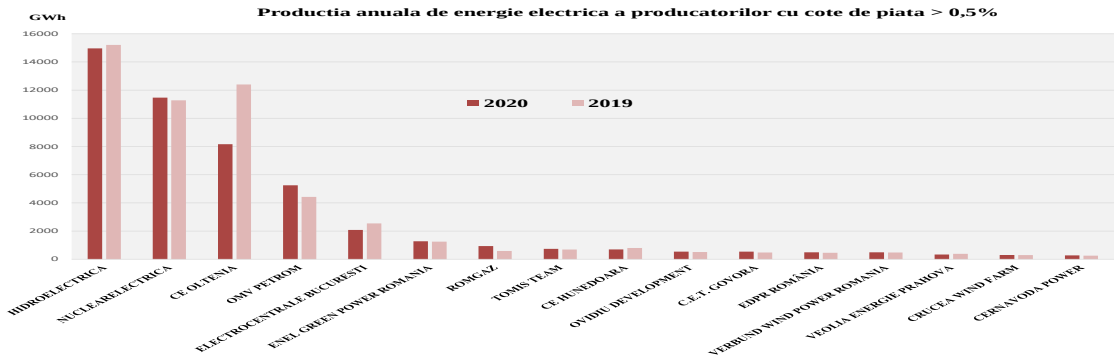
Among the factors affecting the total amount of electricity produced and delivered in the NPS, we can list the measures taken in order to prevent and combat the effects of the COVID 19 pandemic - implementation of emergency and alert status throughout 2020 - a significant decrease in industrial consumption, adverse weather conditions for hydro-power production in the first part of the year, accelerated price increases for CO_2 certificates (greenhouse gas emissions), financial problems for certain producers of energy from conventional sources of production.

The electricity produced from coal and delivered in the NPS was, month after month, less than that recorded in similar periods in 2019, due to the financial difficulties caused by the accelerated rise in the price of CO_2 certificates, in addition to which the effects of the aforementioned emergency and alert state made their presence known, based on the beginning of the COVID 19 pandemic (drastic reductions between April and June 2020).

Another decrease from the previous year, but at a lower level, was recorded in terms of electricity delivered from hydro-power (against the background of reduced hydraulic power in the first semester) and solar power, while electricity delivered from gas, wind and biomass was on the rise.

Similar to the situation in the previous year, the decrease in production from thermal and hydro sources was further exacerbated by the effects of the amendments laid down by Law No. 184/2018, amending and supplementing Law No. 220/2008, which have resulted in a higher amount of wind energy being injected into the grid than the notified one, linked to the priority dispatching rules granted to wind producers (with power reduction provisions on BM applied to producers from hydro and thermo sources).

At the level of 2020, a percentage of 44.4% of the electricity injected in the networks, representing approx. 22.5 TWh, was green energy, up from 42% from the previous year. The following graph shows the structure of the renewable energy mix in the period 2017-2020 and its relevant market share.
Comparison with monthly renewable energy quotas of total energy delivered to EU Member States presented graphically by the European Commission in the quarterly report on European electricity markets (Quarterly Report on European Electricity Markets – Market Observatory for Energy, DG Energy volume 13 issue 4 fourth quarter of 2020, Page 14) indicates the fact that, in Romania, the weighting of renewable energy in total energy delivered was, in most months, above the average monthly EU-wide weightings of SRE energy in the total produced electricity.
Decrease by approx. 240 GWh of electricity supplied from hydro and photovoltaic sources by 23 GWh was largely offset against the background of favourable weather conditions, by wind energy produced in dispatch plants, and the volume of renewable energy thusly registered the same as in 2019, under the circumstance of a reduction in the total energy delivered in the NPS.



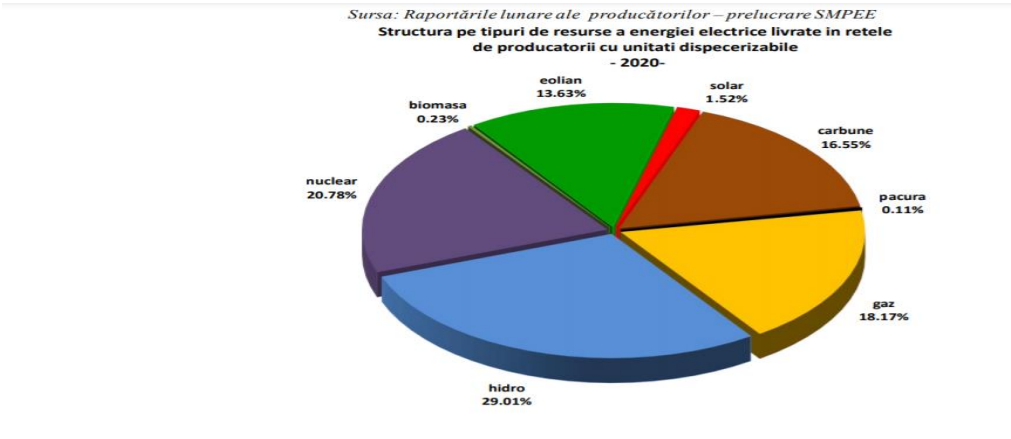
Translation: Annual electricity production of producers with market shares of more than 0.5%

Monitoring the level of pricing, transparency and effectiveness of market opening and competition

The internal electricity consumption (calculated on the basis of the energy delivered to the networks by the dispatch producers and the import-export trade balance) recorded in 2020 was the lowest in the last 4 years, with about 1.6 TWh lower than in 2019 and more than 2 TWh lower than in 2018, when the highest annual value of the compared years was recorded.

Although in seven months of 2020 the monthly values of domestic consumption were lower than in other years, the possibilities for energy coverage at competitive costs of domestic generation capacities, at the same time as the actual availability of generation capacity has led to the need to cover the requirement in terms of electricity consumption by means of imports throughout the year. The monthly amounts of the net import-export balance show that Romania remained in the net importer position in 2020.

Data collected monthly from the 123 monitored active electricity producers show that in 2020, the dispatch units produced 53.74 TWh of electricity, down by 5.8%, when compared to the figures from 2019. The electricity delivered to the grid was also approximately 50.79 TWh, almost 2.89 TWh lower than the electricity delivered the previous year by the same dispatch producers, which was mainly driven by the fall of over 30 % (ca. 3.8 Twh), when compared to the figures from 2019, of coal-based production.



Translation: Source: Monthly producers' reports – SMPEE processing
Structure per type of electricity resources supplied in producers' networks with Dispatchable units
Biomass, wind, solar, coal, oil fuel, gas, hydro, nuclear

The changes in the structure of the wholesale market with the entry into force of Law No. 123/2012 on electricity and natural gas (Law), with subsequent amendments and completions, continued. As of April 2020, it is noted that the centralized market for bilateral electricity contracts is introduced – the manner in which contracts are traded by means of extended auctions and the use of products in order to ensure trading flexibility (PCCB-LE-flex), at the same time as the repeal of the chapter on how to deal with extended auction contracts (PCCB-LE) of the Regulation on manners of conclusion of bilateral electricity contracts by extended auctions and continuous negotiation and by processing contracts, approved by means of Order of President of ANRE No. 78/2014. Also in 2020, starting with September, the centralized market for the award of long-term delivery of power contracts (PCTL) became operational, but no initial bids were submitted by the end of 2020. The day-ahead market (DAM) operates on a coupled basis in the 4M MC project, while the intraday market (IDM) operates on a coupled basis with the markets of 20 other EU member states.

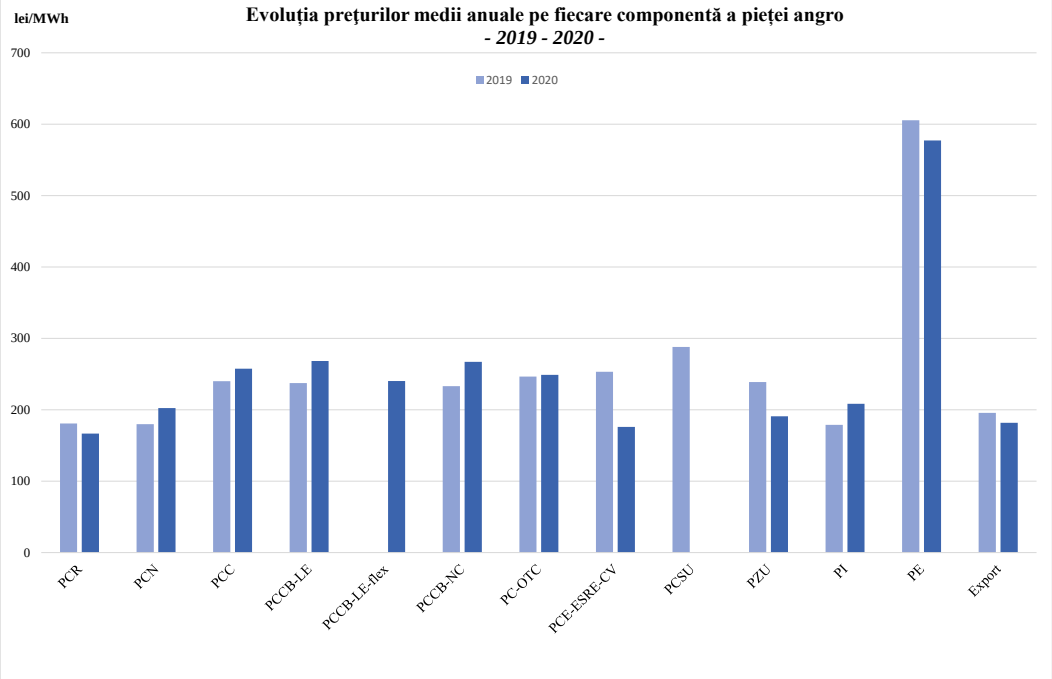
We present below the annual volumes delivered on each of the components of the wholesale market in the period 2016 - 2020 and their development, as compared to the values of the previous year. The monthly development of these volumes, their share of domestic consumption, as well as the average prices achieved on the respective components of the wholesale market can be accessed on the ANRE website, in the *Monthly Reports on the results of the electricity market monitoring*.

The components of the wholesale market	2016 (GWh)	2017 (GWh)	2018 (GWh)	2019 (GWh)	2020 (GWh)	Development compared to 2019 - % -	Internal consumption weighting 2020 - % -
Regulated contracts market (RCM)	4,152	1,741	-	4,317	7,018	▲62.6	13.1
Directly negotiated contracts (NCM)	1,283	616	438	268	279	▲4.0	0.5
Centralised bilateral contract markets (CBCM), of which:	65,337	59,829	67,005	59,799	48,616	▼18.7	90.7
PCCB-LE	21,729	22,821	22,736	18,907	13,898	▼26.5	25.9
PCCB-LE-flex	-	-	-	-	438	-	0.8
PCCB-NC	12,718	11,474	15,273	15,832	8,917	▼43.7	16.6
PC-OTC	30,890	25,534	28,996	25,060	25,209	▲0.6	47.0
PCE-ESRE-GC	-	-	-	0.8	153	▲185.1	0.3
Centralized market for universal services (CMUS)	8,046	5,601	2,208	612	-	▼100.0	-
DAM	25,810	24,716	23,541	23,133	24,924	▲7.7	46.5
IM	131	152	159	375	583	▲55.4	1.1
BM	4,001	4,497	3,305	3,280	3,223	▼1.7	6.0

Export	8,587	6,548	5,479	3,550	4,584	▲29.1	8.6

Source: Monthly reporting of wholesale electricity market participants, OPCOM SA and CNTEE Transelectrica SA - ANRE processing -
Note: The export contract quantity includes both the quantities exported by suppliers/traders and the export carried out through CNTEE Transelectrica, acting as transfer agent for the coupled DAM and IDM

For a comparative analysis with the values of the previous year, the following graph shows the annual average prices for each wholesale market component:



Translation: Development of annual average prices per each component of the wholesale market 2019 – 2020

Source: Monthly reporting of wholesale electricity market participants, OPCOM SA and CNTEE Transelectrica SA
- ANRE processing –

Note: With the exception of the DAM and IDM (deficit price), annual average prices are determined as weighted averages, and the average export price also took into account the export achieved through CNTEE Transelectrica SA, acting as transfer agent for the coupled DAM/IM; all prices include the TG component of the transmission tariff and do not contain VAT, excise duties or other taxes.

The analysis of cross-border electricity trading, presented in the following table, shows an increase in 2020, when compared to the previous year, both on the export side (by approx. 29%) and import side (approx. 45.6%).

Export/import transactions	2017	2018	2019	2020
Export				
Volume (GWh)	6,548	5,479	3,550	4,584
Average price (RON/MWh)	189.7	193.66	195.62	181.80
of which, by means of coupled DAM				
Volume (GWh)	804	1,399	990	1,194
Average price (RON/MWh)	178.25	180.19	179.13	178.30
of which, by means of coupled IM				
Volume (GWh)	-	-	10.34	200
Average price (RON/MWh)	-	-	203.47	219.03
Import				
Volume (GWh)	3,654	2,934	5,068	7,377
Average price (RON/MWh)	242.53	248.66	273.07	223.01
of which, by means of coupled DAM				
Volume (GWh)	2,031	1,123	1,733	1,399
Average price (RON/MWh)	252.70	253.40	285.58	199.13
of which, by means of coupled IM				
Volume (GWh)	-	-	19.84	240
Average price (RON/MWh)	-	-	196.09	212.30

Source: Monthly reporting of wholesale electricity market participants, OPCOM SA and CNTEE Transelectrica SA
- ANRE processing -

Overall, it can be noted that, since 2019, Romania has changed its position as a net exporter in the region, to become a net importer, with a significant upward trend in the export-import balance (an increase of around 84% in 2020, when compared to the previous year), as shown by the following analysis of the values:

BALANCE (Export – import)	2017	2018	2019	2020
Volume (GWh)	2,894	2,545	-1,518	-2,792

Source: Monthly reporting of wholesale electricity market participants, OPCOM SA and CNTEE Transelectrica SA
- ANRE processing –

Characterization of the wholesale market activity of the main categories of participants

In 2020, the volume of electricity supplies related to contracts on the competitive market fell by 7%, when compared to 2019.

It is noted that the majority share of deliveries on PC-OTC traded contracts is maintained, while the share of PCCB-LE is reduced and the share of PCCB-NC is reduced.

Overall, the deliveries related to the sales of the dispatch producers on the competitive market represented a quantity of almost 53 TWh, traded at an annual average price of 223.32 RON/MWh; compared to 2019, there is a 8.1% reduction in the quantities of electricity sold and a 0.8% decrease in the average annual price. Most of that quantity was sold on the centralized markets for bilateral contracts (approx. 28.1 TWh), and, of this, the most prevalent was the sale to electricity suppliers (25.1 TWh, at the average price of 253.99 RON/MWh). Large quantities were also sold through short-term markets (DAM and IDM) – approx. 17.6 TWh (increase of 5.1% compared to 2019), with the average annual price of 195.48 RON/MWh (decrease of approx. 14% compared to 2019). Compared to the previous year, the sales structure of the dispatch producers continued to change, by means of the increase of quantities delivered on the regulated market reintroduced in 2019 (where they were sold for approx. 7 TWh at the average price of 166.55 RON/MWh) and by means of the increase of quantities traded on the short-term markets of DAM and IDM to the detriment of CMUS (where no electricity supplies have been made after two consecutive years of substantial reductions) and centralized markets with forward delivery, down by 22%.

The lowest annual average price achieved by the suppliers upon sale is recorded for the energy supplies related to the contracts traded on the PCCB-LE-flex (238.85 RON/MWh) and the highest price - for the contracts traded on the PCCB-LE (281.33 RON/MWh).

In 2020, the average annual price at which the obligated suppliers of last resort purchased electricity from CBCM-type markets (254.76 RON/MWh) is higher than the one at which they purchased electricity from the DAM (201.30 RON/MWh); both of them were achieved at prices significantly higher than the average annual price at which they purchased electricity on regulated contracts (166.55 RON/MWh).

As a participant in the wholesale electricity market, CNTEE Transelectrica acquired in 2020 the quantities necessary in order to cover losses of electricity on its own electricity networks, both on the centralized bilateral contract markets, by means of transactions with suppliers and producers (PCCB-LE/PCCB-LE-flex and PCCB-NC), as well as on DAM, IDM and BM.

The largest share of the electricity purchase to cover network losses was the energy purchased on the DAM (approx. 450 GWh representing 48.8% of the total purchased amount), at an annual average price of 210.66 RON/MWh. The acquisition on contracts concluded on the

PCCB-LE/PCCB-LE-flex represented approx. 33% of the total energy purchased (almost 305 GWh), and on PCCB-NC, approx. 16,7% (over 153 GWh). Based on the analysed data, it can be inferred that in 2020, TSOs purchased electricity on forward contract markets and on the DAM in almost equal proportions.

If the purchase on the contract markets was carried out at prices that varied in the range of 242.50-291.62 RON/MWh (in the case of PCCB-LE/PCCB-LE-flex) or in the range of 268.75-291.12 RON/MWh (in the case of PCCB-NC), the purchase on the DAM was made at an annual average price of only 210.66 RON/MWh, depending on the time at which the energy was purchased. The pre-delivery adjustment of the energy quantities needed in order to cover network losses was made through the IM, the market in which the TSO participated both in the purchase and the sale. The result of the imbalance recorded by the transmission system operator through BM power acquisition fell by 27.8% year-on-year.

Distribution system operators only purchased 5.3 TWh of electricity via the competitive market, mainly via existing products on PCCB-NC (35.9%) and DAM (23.2%), followed by PCCB-LE (21.9%), PC-OTC (17.4%) and PCCB-LE-flex (1.5%).

Development of the centralized bilateral contract markets

The following represent the annual volumes traded on each of the components of the centralized bilateral contract market, weighted average transaction prices, the number of contracts traded and their development from the previous year's values.

Market Type	Traded volume		Weighted average price		Number of contracts traded	
	GWh	Development compared to 2019 (%)	RON/MWh	Development compared to 2019 (%)	Number	Development compared to 2019 (%)
PCCB-LE	4.213	▼67	261.48	▼9.7	108	▼75.6
PCCB-LE-flex	15.421	▲100.0	254.72	▲100.0	450	▲100.0
PCCB-NC	8.963	▲14.5	249.69	▼10.8	35.387	▲0.4
PC-OTC	35.611	▲58.0	236.05	▼12.4	4.756	▲22.5
PCE-SRE-GC	987	▲722.3	201.61	▼22.8	200	▲525.0

The following tables provide the monthly minimum and maximum values of the market concentration indicators calculated by OPCOM SA on the basis of the monthly traded volumes of participants per CBCM at sale and purchase:

Market type/sales indicators	HHI		C1 (%)		C3 (%)	
	min	max	min	max	min	max
PCCB-LE	3,181	6,160	47.24	76.01	85.88	100.00
PCCB-LE-flex	2,949	8,210	44.83	90.37	80.17	99.60
PCCB-NC	888	3,560	15.32	55.18	40.12	82.06
PC-OTC	662	1,628	15.31	34.61	35.4	63.78
PCE-SRE-GC	909	4,300	17.05	59.13	42.46	100.00

Market type/purchase indicators	HHI		C1 (%)		C3 (%)	
	min	max	min	max	min	max
PCCB-LE	1,908	4,534	31.87	55.78	70.54	100.00
PCCB-LE-flex	1,051	2,410	16.22	39.42	44.29	79.83
PCCB-NC	765	2,193	11.68	40.56	34.29	68.47
PC-OTC	526	1,129	9.65	25.03	26.7	49.98
PCE-SRE-GC	2,362	9,547	29.07	97.68	73.69	100.00

The development of transactions in 2020, when compared to the previous year, on forward markets was as follows:

- on the PC-OTC, the traded volume increased by 58% and the weighted average trading price decreased by approx. 11.4%, from 269.41 RON/MWh in 2019 to 236.05 RON/MWh in 2020,
- on the PCCB-LE, operational until May 8th, 2020, the volume traded decreased by 65.1% and the weighted average trading price decreased by approx. 9.7%, from 289.54 RON/MWh in 2019 to 261.48 RON/MWh in 2020,
- on the PCCB-LE-flex, operational as of May 8th, 2020, a volume of 15421 GWh was traded, at a weighted average price of 254.72 RON/MWh;
- on the PCCB-NC, the traded volume increased by approx. 14.5%, and the weighted average trading price decreased by approx. 10.1%, from 277.69 RON/MWh in 2019 to 249.69 RON/MWh in 2020;
- on PCE-ESRE-GC, the volume traded increased by approx. 722.3%, and the weighted average trading price decreased by approx. 22.8%, from 261.29 RON/MWh in 2019 to 201.61 RON/MWh in 2020.

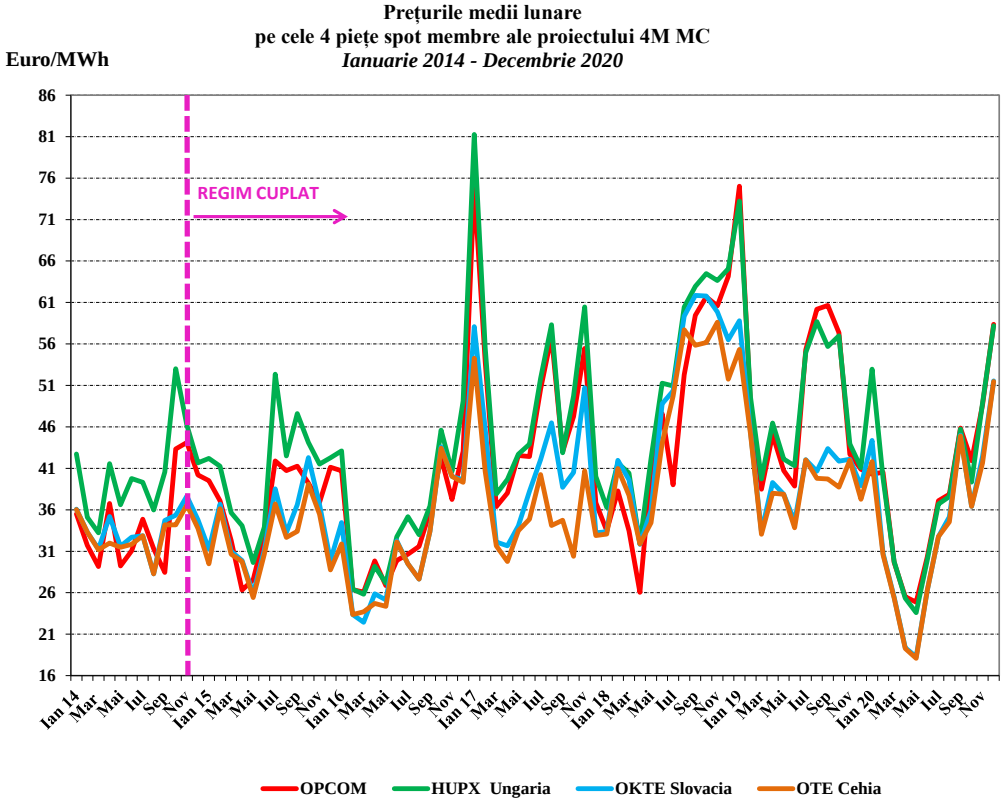
The development of the day-ahead market – DAM

The volume of electricity traded on the DAM in 2020 increased by approx. 7.7%, when compared to the previous year. The monthly share of domestic transactions on the DAM ranged from 37.1% (November 2020) to 55.6% (January 2020), with a marked increase on the year-to-year basis compared to 2019 (46.5% compared to 41.9%).

The average closing price of the DAM of 190.92 RON/MWh (calculated as the arithmetic average of the daily closing prices) decreased by approx. 20.1% compared to the 2019 average.

The coordinated calculation of cross-border allocation capacity shall be governed by the transmission and system operators from the 4 countries, in accordance with European law, and the allocation model used shall be the implicit allocation of available interconnection capacity on the DAM.

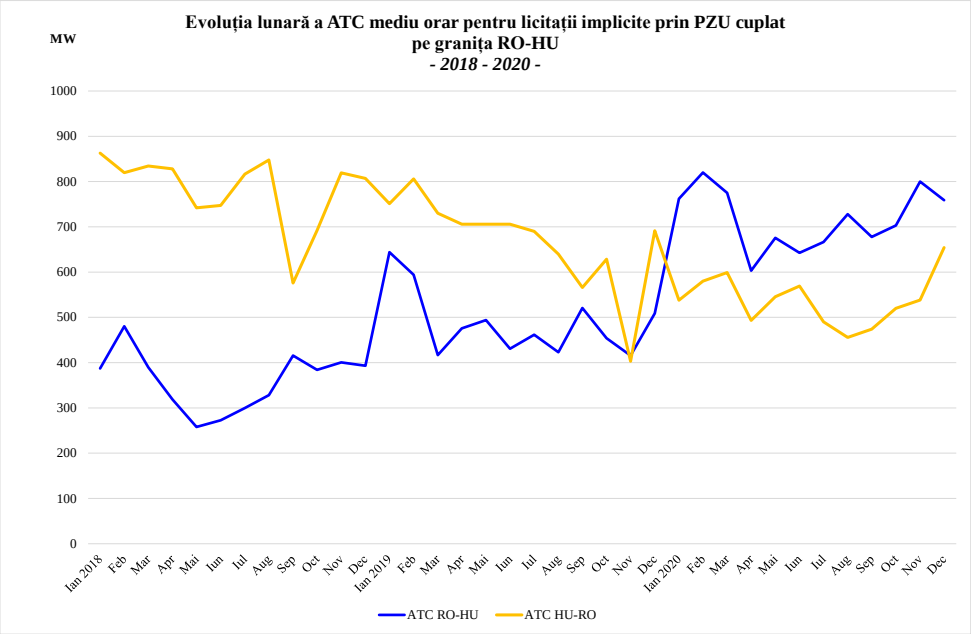
The following graph shows the average monthly spot prices of the 4 day-ahead markets involved in the 4M MC coupling, as of January 1st, 2014, before and after the start of coupled operation.



Translation: Average monthly prices for the 4 spot markets members of the 4M MC project – January 2014 – December 2020

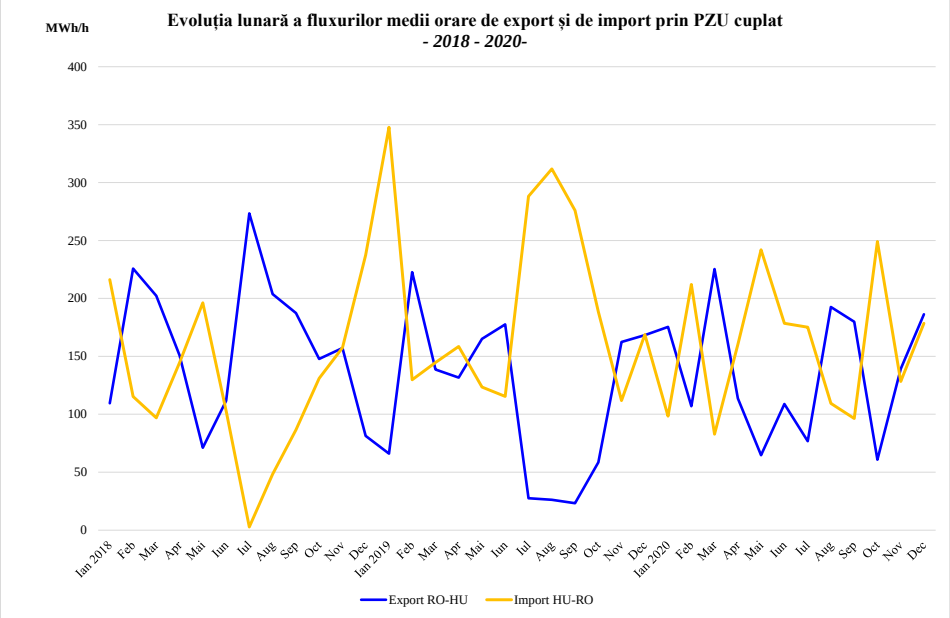
Source: Monthly reports of OPCOM SA - ANRE processing -

The following graphs show the monthly average values of the hourly available transmission capacity for export and import per DAM (first graph) and of the electricity export and import flows, determined as the hourly average of the coupled DAM (second graph) in 2020.



Translation: Monthly development of average hourly ATC for implicit auctions through coupled DAM at the RO-HU border, 2018 - 2020

Source: Monthly reporting of OPCOM SA - ANRE processing -



Translation: Monthly development of average hourly flows of export and import through coupled DAM, 2018 – 2020
Source: Monthly reporting of OPCOM SA - ANRE processing -

In the period 2016-2020, monthly ATC increases for export per DAM have been recorded each year.

In 2020, compared to the previous year, both the ATC allocated for export on the DAM and the electricity flow exported at the RO-HU border via the coupling mechanism increased: the first by approx. 48%, and the latter by approx. 20.7%.

As regards the ATC allocation for implicit auctions for import at the Hungarian border, after applying the "netting" principle, lower ATC values for the coupled DAM resulted for the year 2020. The ATC allocated for import on the DAM has been reduced by approx. 19.3% compared to 2019 and the electricity flow imported through the coupled DAM decreased by approx. 19.4%.

Similar to the previous year, in 2020, the import flows predominated, registering a higher annual value than the export ones. The average degree of utilization of the interconnection capacity at the level of 2020 registered a value of 29.6%, on the import direction, higher than the one registered on the export direction, of 19%.

Despite the relatively low average utilization of the interconnection capacity, there were also time intervals in which the ATC values established for export/import did not allow cross-border exchanges to be carried out at the required level. The following table shows reflects the report on the number of time slots for the years 2019 - 2020 in which the achieved exchanges could not cancel out the price difference between the two areas (the exchanged flow was equal to the allocated hourly ATC, and the difference between PIP DAM in Romania and PIP DAM in Hungary was different from zero).

Year	No. of insufficient ATC export DAM intervals (RO - HU)	No. of insufficient ATC export DAM intervals (HU - RO)
2019	980	494
2020	392	929

Source: Daily data published by OPCOM SA - ANRE processing -

The hourly development of the difference between the closing prices of the coupled DAM for Romania and Hungary, as well as the resulting cross-border flows at the Romania-Hungary border, in both directions, for 2020, are presented in the *Monthly report on the results of the monitoring of the electricity market*, published on the ANRE website.

The price set in the DAM in 2020 incorporates with sufficient accuracy the available information on the level of resources and electricity needs at the respective moment, changes in the legal framework and events with a special impact on the energy sector, while presenting specific high volatility.

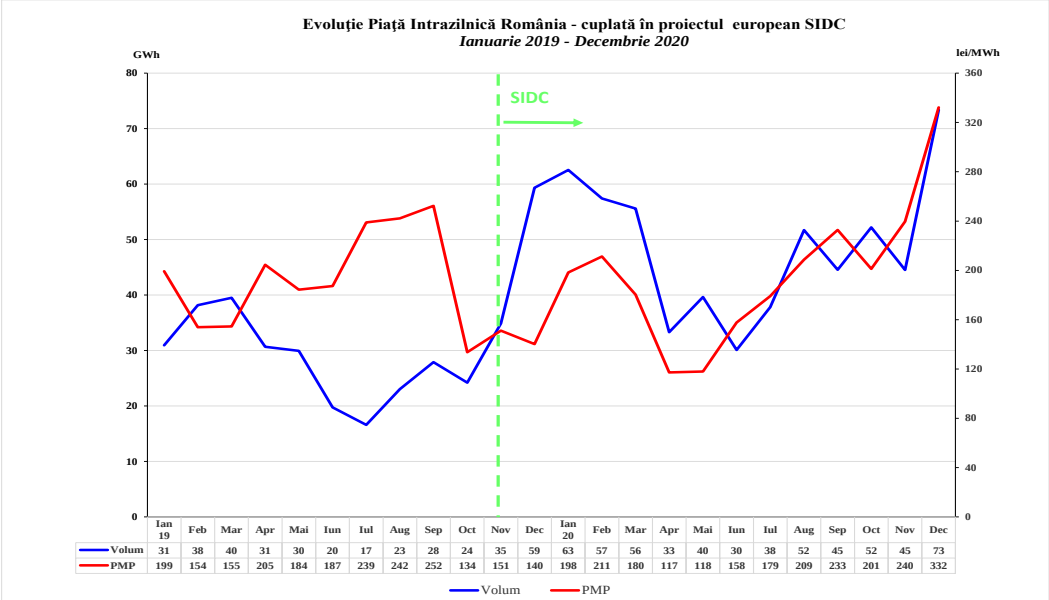
Intra-day market – IDM

IDM is a voluntary market, offering standard trading tools to participants, in order to facilitate the adjustment of the contract portfolio as close as possible to the delivery of electricity and in order to better manage possible imbalances, thus helping to maintain a balance between production and consumption.

IDM has been underused by market participants, which should not be characterized by the functioning of growing renewable electricity generation markets. With the start of the coupled-mode operation of the SIDC project, there is an increase in the volume of

transactions, with the volume of electricity traded in 2020 on IDM being 582.8 GWh, up by around 55%, when compared to the previous year.

The following graph shows: the monthly traded volume and weighted average intra-day market price as of January 1st, 2019, before and after Romania's accession to the European SIDC project.



	Ian 19	Feb	Mar	Apr	Mai	Iun	Iul	Aug	Sep	Oct	Nov	Dec	Ian 20	Feb	Mar	Apr	Mai	Iun	Iul	Aug	Sep	Oct	Nov	Dec
Volum	31	38	40	31	30	20	17	23	28	24	35	59	63	57	56	33	40	30	38	52	45	52	45	73
PMP	199	154	155	205	184	187	239	242	252	134	151	140	198	211	180	117	118	158	179	209	233	201	240	332

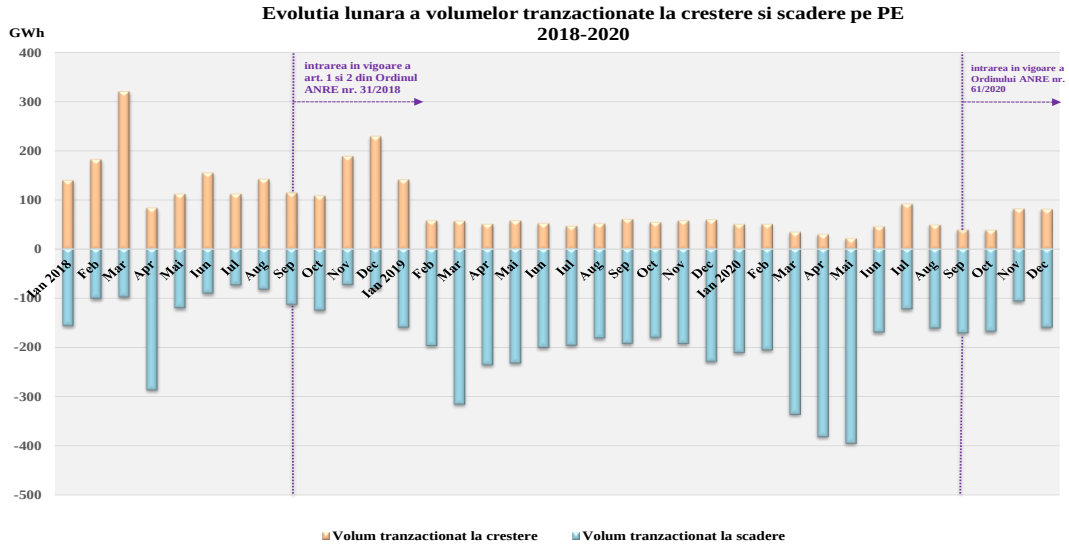
Translation: Development of the Intraday market in Romania – coupled in the European SIDC project, January 2019 – December 2020

Source: Public data OPCOM SA - ANRE processing

The balancing market

At the end of 2020, 99 participants were registered on the balancing market (BM), holding 193 dispatch units in commercial operation. In the same market, 65 balancing responsible parties (BRP) were operating, of which 5 were owned by the transmission system operator (to compensate for unplanned trade with neighbouring countries, to purchase energy to cover losses in the PTN, to purchase energy for the consumption of its stations as a transfer agent for the DAM and IDM).

The following graph shows the monthly volumes of electricity traded, in increase and decrease, for the period 2018-2020.



Translation: Monthly development of volumes traded at increase and decrease on the BM, 2018 – 2020

Entry into force of articles 1 and 2 of ANRE Order no. 31/2018

Entry into force of ANRE Order no. 61/2020

Volume traded at increase, Volume traded at decrease

Source: The monthly reporting of OPCOM SA and CNTEE Transelectrica SA
- ANRE processing -

Overall, the size of the BM in 2020 has been decreasing by approx. 1.7%, when compared to 2019 and 2.5% lower than in 2018. On a monthly basis, the total volumes registered (sum of volumes at growth and decrease) ranged from a minimum of 190 GWh in November 2020 to a maximum of 481 GWh in May 2020.

Similar to the months of the previous year, the falling volume was, for each month, higher than the increase, with the decreasing traded volume being 4 times higher than that registered in what concerns power increase. The same difference between the two types of annual volumes in 2019 was only 3.3 times.

Worth mentioning are the large volumes in decrease between March and May 2020, ranging from 300-400 GWh, the highest monthly volumes in the period 2018-2020, together with the reduced volumes in increase (between 20-30 GWh per month), most likely due to non-notified reductions in consumption during the state of emergency (slowing down or even stopping activity in some industrial sectors).

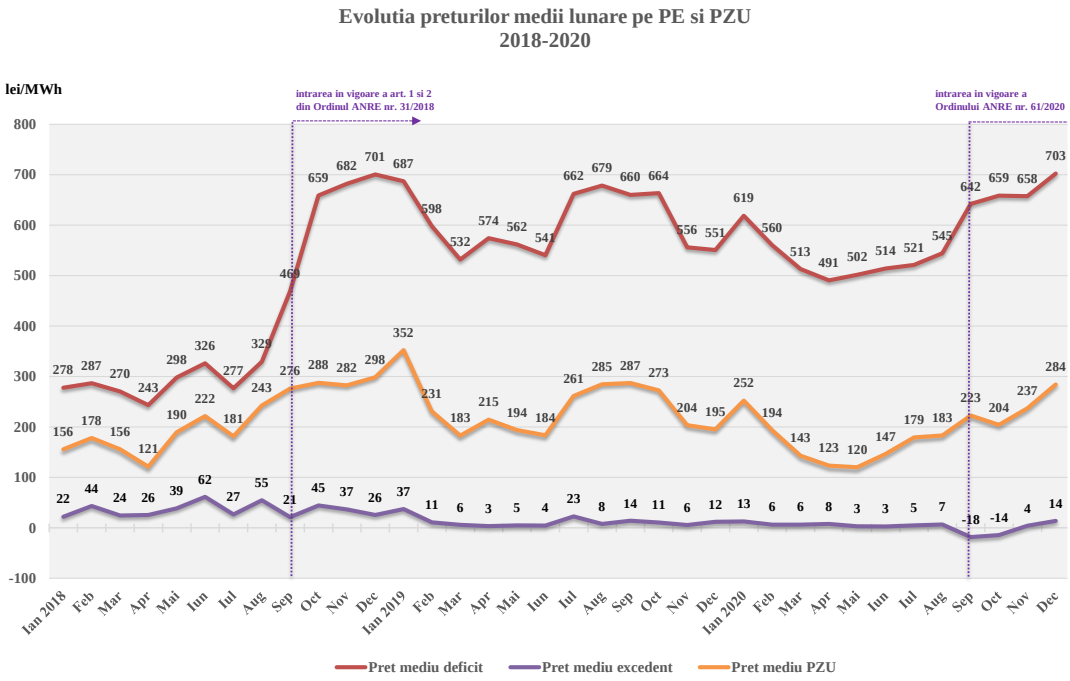
From the analysis of the monthly weightings of the volumes traded on the DAM in the domestic consumption, compared to the corresponding BM weightings, it is noted that, while for the DAM, the monthly weightings were higher than the previous year, for the BM, they remained at a roughly equal level; thus, in 9 out of 12 months, they reached 4-5% of domestic consumption and only in 3 months (March - May) did they exceed this value.

The annual values of the concentration indicators C1 and HHI in the year 2020, determined on the basis of the energy actually delivered by the producers for each type of adjustment and direction, remained, as in previous years, within the range of values specific to a highly concentrated market.

BM participants with annual market shares of over 20% were Hidroelectrica (on increase and decrease on secondary and tertiary adjustment), Complexul Energetic Oltenia (on increase and decrease on all types of adjustments) and OMV Petrom (on increase and decrease on secondary adjustment and decrease on tertiary rapid).

Of these, dominant participants (market share > 50%) were Hidroelectrica (on *secondary adjustment* for growth (56%) and decrease (57%) and on *rapid tertiary* for decrease (51%)) and Complexul Energetic Oltenia (per *slow tertiary* for increase (99%) and decrease (84%)).

The following graph shows the development of the two monthly average pre-imbalance settlement prices, in correlation with the average monthly price recorded on the DAM between 2018 and 2020.



Translation: Development of average monthly prices on the BM and DAM, 2018 – 2020, entry into force of articles 1 and 2 of ANRE Order no. 31/2018

Entry into force of ANRE Order no. 61/2020

Deficit average price, surplus average price, average DAM price

Source: The monthly reporting of OPCOM SA and CNTEE Transelectrica SA
- ANRE processing -

As of September 2020, when the amendments introduced by means of ANRE Order No. 61/2020 for the approval of the *Regulation on the scheduling 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*, the average deficit price recorded values of over 600 RON/MWh every month. At the same time, following the abolition of the price limitation and the introduction of the negative price bid permission, it is considered that negative average monthly surplus price figures were recorded in September and October 2020, a large number of participants (mainly producers from SRE sources) preferring to pay, rather than not producing.

The annual average deficit price (calculated as the arithmetic average of the monthly values) in 2020 was 577.17 RON/MWh, 4.6% lower than the previous year, and the annual average surplus price reached a minimum value of 3 RON/MWh, reaching almost 1/4 of the same price recorded in 2019 (11.67 RON/MWh).

In times of unfavourable weather or hydrological conditions, leading to poor electricity production, the producers demanded high prices for the supply available at increase on the BM. Another cause that prompted producers to introduce high priced increase offers was reduced availability amid the financial issues faced by power producers in what concerns thermal power plants.

The changes in the regulatory framework, according to which green certificates are granted in accordance with production from renewable sources, without being limited to the amount of hourly electricity notified to CNTEE TRANSELECTRICA SA, have led to a systematic increase in the energy produced, compared to the notified one, and wind producers are no longer interested in making the notification as close to reality as possible. Considering the background of the abovementioned legislative changes, the injection into networks of more wind energy than the notified one, linked to the rules of priority for dispatching to wind producers, the subsequent effect was the issuance of certain power reduction provisions on the BM for hydro and thermal power producers, which resulted in a further decrease in the quantities of electricity supplied to the grid by the latter.

Similar to the situation from the previous year, 2020 saw the BRP imbalances at the level of the NPS as positively registered on a monthly basis, with the highest value being in March-May (more than 300 GWh monthly). In the last quarter of the year, monthly imbalances decreased, one explanation being probably the increase in BM deficit prices in the context of changes in the regulatory framework (entry into force of ANRE Order No. 61/2020). The high deficit price, which is highly penalizing, was one of the reasons why participants sought to balance as much as possible in previous BM markets, including by increasing the amount of electricity purchased from imports. That behaviour has led to a decrease in the volume of selections for decrease and increase on the slow tertiary adjustment and a reduction in the number of thermal power groups' starts and hence the costs generated by the latter.

The additional amount resulting from the redistribution of additional revenues/costs resulting from the balancing of the system had positive values, with significant revenue for the OTS (rights to be collected) on a monthly basis, and the cumulative additional value at year level

exceeded RON 115.4 million. Monthly additional revenues/costs resulting from balancing the system shall be redistributed to each BRP depending on the contribution to reducing or aggravating the imbalance in the system (except for Unplanned exchanges BRPs and transfer agent DAM and IDM belonging to CNTEE Transelectrica SA).

System services market

The participants in the BM, who provided at least one type of system service in 2020, were the qualified producers Bepco, CE Hunedoara, CE Oltenia, Electrocentrale Bucureşti, Electrocentrale Galaţi, Electro Energy Sud, Hidroelectrica, Romgaz, OMV Petrom, Veolia Energie Iaşi and Veolia Energie Prahova.

In order to meet the need for UNO-DEN reserves in order to maintain the safety level in the operation of the NPS, CNTEE Transelectrica acquired in 2020 the adjustment reserve of secondary frequency-power (RS) and the reserve of rapid tertiary adjustment (RTR) by means of auctions. The acquisition of the slow tertiary adjustment reserve was mainly carried out by means of the conclusion of regulated contracts with CE Hunedoara (for the entirety of 2020, based on ANRE Decision No. 2047/2018 and ANRE Decision No. 1211/08.07.2020) and with Electrocentrale Galaţi (for the period between January and March 2020, according to ANRE Decision No. 1851/30.10.2019 issued on the basis of GD No. 593/2019). In addition, quantities resulting from auctions for the period between January and March and the first 8 days of July 2020 were purchased (until the new ANRE decision was issued for CE Hunedoara, as a result of the enforcement of the provisions of GEO No. 103/29.06.2020, by means of which the time limit for the application of the measures of GEO No. 26/04.04.2018, i.e. the obligation of the producer to provide system services at a power of at least 400 MW under the terms of ANRE-issued regulations, was extended until 31.12.2020).

Having regard to the provisions of Article 6, paragraph (9) of Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the electricity market, as of February 2020, daily auctions have been organised for the purchase of system services from CNTEE Transelectrica, and as of September 2020, they have been split into directions of power increase and decrease.

The UNO-DEN reserve requirement was fully covered each month, with two small exceptions (99.97 % in May and 99.88 % in July).

As of March 1st, 2020, against the background of the decrease in domestic consumption at the level of the NPS due to the triggering of the COVID-19 pandemic and the lower use of the reserves at growth, while using the decreasing reserves in the context of predominantly overshooting notifications, CNTEE Transelectrica has technically assessed the possibility of safe operation of the NPS, in the context of a reduction in the amount of reserves required for purchase. The need for RS was reduced by 50 hMW/h in each hour interval. Moreover, since 25.03.2020, the RTR needs have also been reduced by 150 MW/h in the ranges 7 to 16, and 200 MW/h in the ranges 17 to 23, and for RTL, no further auctions were organized and only the regulated quantity of 400 MW/h was purchased, with a reduction in the purchased quantity of 300 hMW/h at all time intervals.

In the same context, as of 15.05.2020, the amount to be purchased for RTR has been reduced by a further 100 hMW/h in the hourly intervals 1 to 6 and 24. As of 25.11.2020, given the increasing trend in consumption and the use of increasing reserves, the quantities needed to be purchased have increased to the level of those applicable before March 1st, 2020.

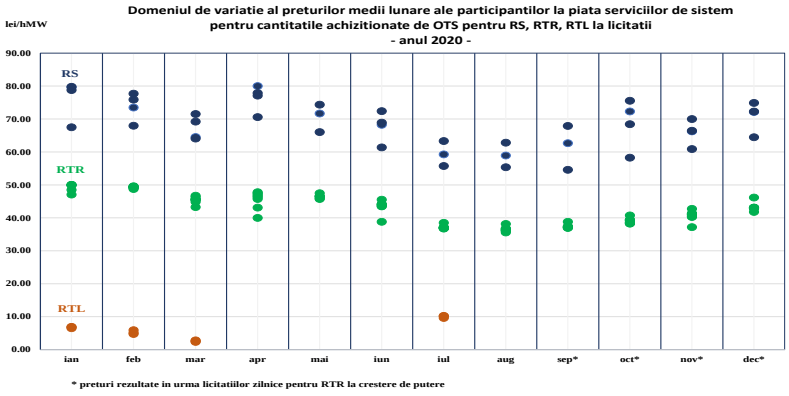
In quantitative terms, in 2020 the purchase of reserves was approximately at the same level, when compared to 2019 for RS and 5% higher for RTR. In the case of RTL, the annual purchase fell to 66 % of the level of the previous year, limiting itself in the period April to December 2020 (except for the first 8 days of July) to the obligation established by GEO No. 26/04.04.2018 of CE Hunedoara.

In the second part of the year, there were participants who assigned part of the contracted quantities on RS or RTR to Hidroelectrica.

Concentration indicators characterizing the system services market in 2020, calculated on the basis of monthly data reported by CNTEE Transelectrica, on the quantities contracted on each type of reserve, on a market-wide basis and detailed in regulated and market-mechanism arrangements (taking into account transfers of quantities) are presented in the report on the monitoring of the electricity market for December 2020. The analysis of these reserves also shows a high degree of concentration on all types of reserves, with the participation of a small number of qualified producers.

As in previous years, the dominant purchase from Hidroelectrica was for RS (56.7%) and RTR (71.4%), while for the slow tertiary adjustment reserve, the producer with the highest market share (45.2%) was Electrocentrale Galaţi, most of the quantity resulting from the auctions organized in the first 3 months, when it was also subject to obligations according to ANRE Decision No. 1851/30.10.2019. The producers that contributed the largest quantities of reserves were Hidroelectrica (with more than 4.28 TWh per RTR and ca. 2.15 TWh per RS) and CE Oltenia (over 955 GWh in RS and ca. 877 GWh per RS).

In the following graph, the range of monthly average price variation recorded by participants that won daily auctions organized by TSOs for all types of increasing reserves is reflected.



Translation: Variation range of average monthly prices of participants to the system services market for quantities purchased by TSOs for RS, RTR, RTL at auctions – year 2020 –

Prices resulted from daily auctions for RTR at increase of power

The highest monthly average prices resulting from the participation in the auctions were recorded by the producers for RS, ranging from 54.61 RON/hMW to 80 RON/hMW, while following the participation in the auctions for the reserve for the increase of RTR, the average monthly price values were between a minimum of 35.57 RON/hMW and a maximum of 50 RON/hMW. Following the auctions organized for RTL on increase, the producers obtained low prices, which did not exceed the average monthly value of 10.23 RON/hMW.

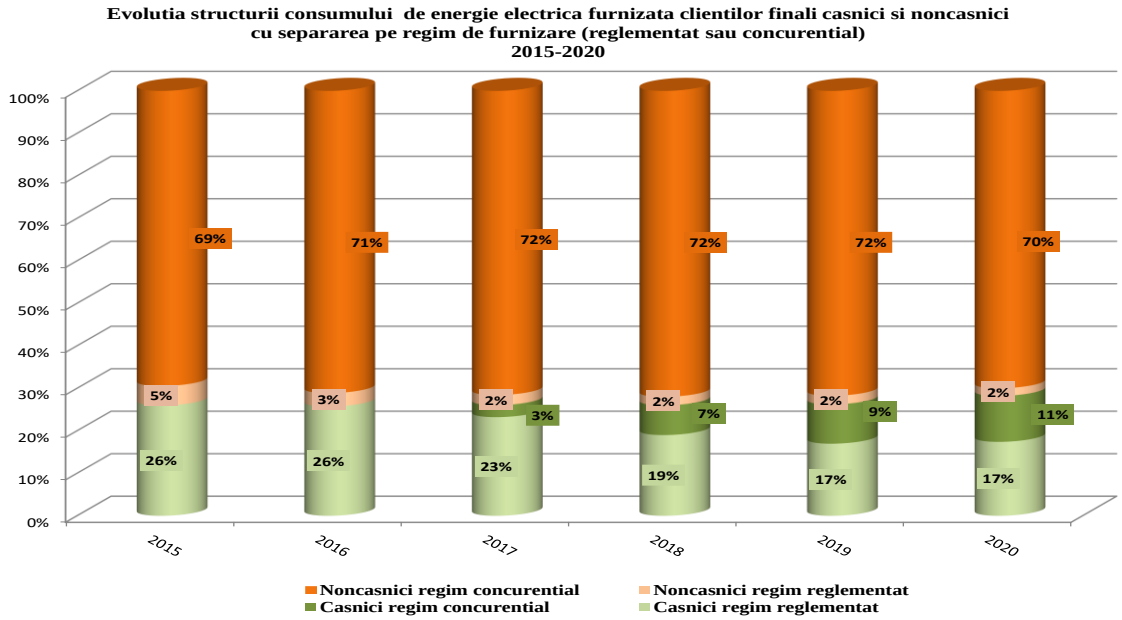
The average prices recorded by the producers that won the daily auctions for RTR at decrease in power, not shown in the above chart, ranged from 13.89 to 18.72 pWh for the period between September and December 2020.

At yearly level, Hidroelectrica was the participant that determined the closing price at daily auctions (organised as of February 2020) for the reserve of RS in approx. 72% of hourly intervals, for RTR at increase in approx. 83% of hourly intervals, and in daily auctions for the decrease RTR reserve (organized as of September 2020) in about 65% of hourly intervals.

3.2.2 Retail market

Monitoring the level of pricing, transparency and effectiveness of market opening and competition

In the course of 2020, 89 license holders for electricity supply activities were active on the retail electricity market (REM), of which 22 are licensed for the commercial operation of dispatching generating capacity.
From the point of view of the applicable regulatory framework, 2020 may be characterized as the last year of the operation of the regulated tariffs/price system established by ANRE and applied by the SoLR (bound or optional) to its own clients who do not wish to benefit from competitive market conditions. In terms of end electricity consumption, this year was marked by the unprecedented impact of the restrictions imposed by the pandemic context, triggered in the first quarter of the year, which resulted in a sharp drop in electricity delivered to the category of non-household end consumers.
The structure of the retail electricity market in terms of end electricity consumption by category of end consumers and supply regime is evolving for the period 2015-2020. The calculation was carried out on the basis of data collected under the regulatory framework in force from suppliers active in the retail electricity market.



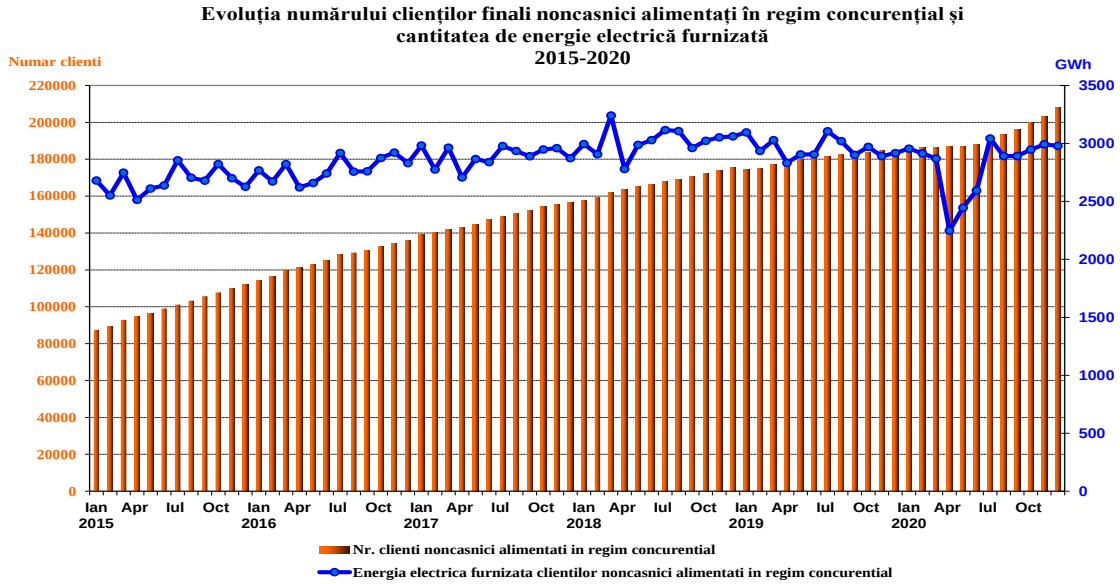
Translation: Development of the consumption structure of electricity supplied to end household and non-household consumers, separated based on supply regime (regulated or competitional), 2015 - 2020

Source: Monthly supplier reporting - ANRE processing -

The decrease in end consumption by more than 1.2 TWh compared to the previous year was driven by a reduction of more than 1.8 TWh in electricity supplied to non-household consumers, which could not be offset by the increase in electricity supplied to household consumers. Compared to the same year, the competitive segment is marked by a drop in the share of non-household consumption in favour of household consumption, while the structure of the regulated segment has remained almost the same.

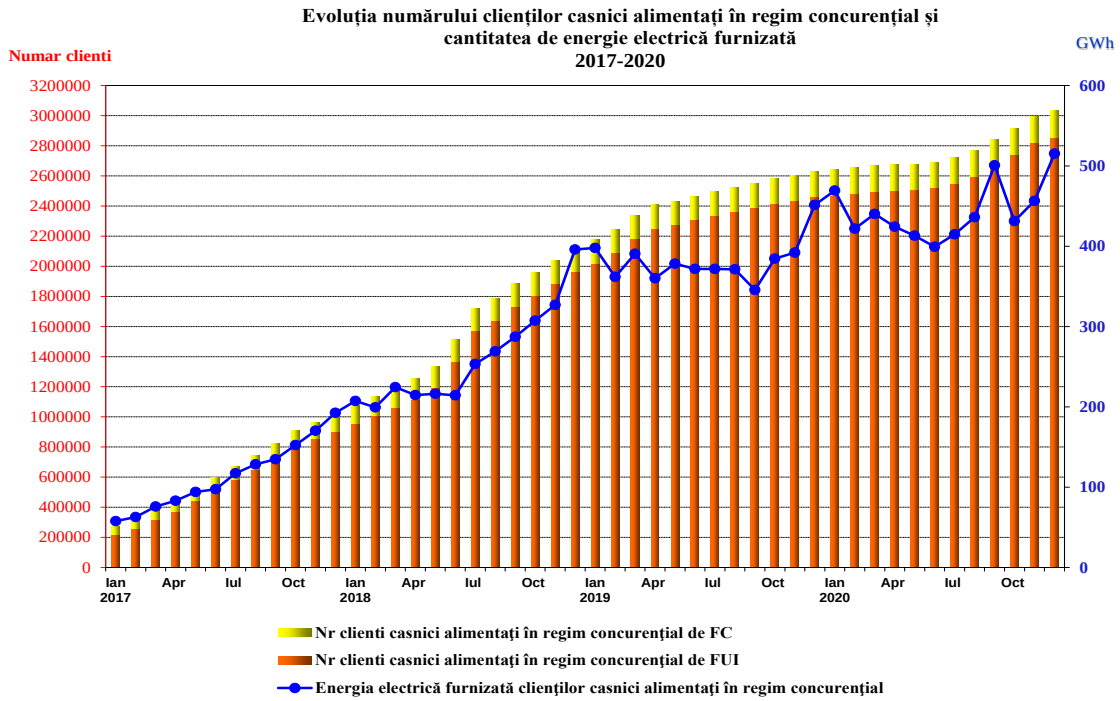
The competitive retail electricity market

The following figures set out the development of the number of non-household consumers, and household consumers supplied on a competitive basis and the end electricity consumption for each category. For non-household consumers, the graph shows the period 2015-2020, while for household consumers, the data is available as of January 2017, and during the period 2015-2016 this component is of insignificant size.



Translation: Development of number of non-household consumers from the competitional market and electricity supplied, 2017 – 2020
No. of non-household consumers from competitional market
Electricity supplied to non-household consumers from the competitional market

Source: Monthly supplier reports - ANRE processing -



Translation: Development of number of household consumers from the competitional market and electricity supplied, 2017 – 2020
No. of household consumers from competitional market in FC regime
No. of household consumers from competitional market in SoLR regime
Electricity supplied to household consumers from the competitional market

Source: Monthly supplier reports - ANRE processing -
In the competitive segment, 94% of all household consumers are supplied with electricity by SoLR subject to an obligation in this regard, choosing to migrate to the competitive market

without switching suppliers, but only by negotiating contract terms with the same SoLR. The number of household consumers who chose to switch to competitive prices in 2020 was over 400 thousand clients.

The following tables show the indicators specific to non-household end consumers or to competitively-powered household consumers, depending on the consumption categories established by means of Regulation (EU) 2016/1952 of the European Parliament and of the Council of 26 October 2016 concerning European statistics on natural gas and electricity prices and repealing Directive 2008/92/EC, compared to 2019.

Non-household consumer consumption bands	2020			2019		
	Annual consumption (GWh)	Average price (RON/MWh)	No. of clients	Annual consumption (GWh)	Average price (RON/MWh)	No. of clients
IA	1,196	486.74	155,136	1,808	453.85	136,243
IB	4,556	477.34	47,116	4,634	443.99	42,535
IC	3,277	417.62	3,828	3,764	396.67	3,449
ID	7,912	389.67	1,607	8,139	367.34	1,486
IE	4,429	355.24	136	4,814	345.86	135
IF	3,548	348.02	40	2,648	339.48	30
IG	8,873	279.57	25	9,779	279.07	27
Total	33,791	369,84	207,888	35,586	355.59	183,905

Consumption bands for household consumers	2020			2019		
	Annual consumption (GWh)	Average price (RON/MWh)	No. of clients	Annual consumption (GWh)	Average price (RON/MWh)	No. of clients
YES	1,084	585.22	1,578,715	1,572	484.61	1,434,246
DB	1,885	588.26	984,251	1,471	503.92	811,959
DC	1,296	566.27	325,066	808	500.76	264,996
DD	735	550.52	129,905	537	502.25	104,997
DE	227	529.84	16,973	188	490.69	12,543
Total	5,228	574.34	3,034,910	4,576	495.99	2,628,741

Source: Half-yearly reporting of suppliers according to Regulation (EU) 2016/1952 - ANRE processing -

Notes: data shall be as reported to EUROSTAT; prices do not contain VAT, excise duties or other taxes;

The following table provides details regarding the consumption ranges for each individual consumption band:

Tranşe de consum clienti noncasnici	Consum anual cuprins in intervalul (MWh):	
Transa - IA		<20
Transa - IB	>=20	<500
Transa - IC	>=500	<2000
Transa - ID	>=2000	<20000
Transa - IE	>=20000	<70000
Transa - IF	>=70000	<150000
Transa - IG	>=150000	

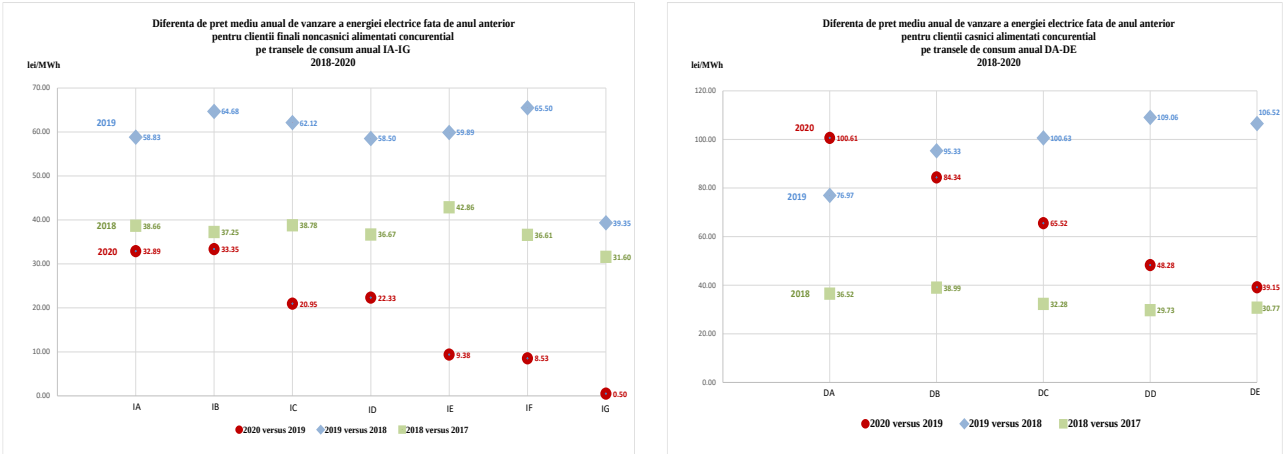
Translation: Non-household clients' consumption band
Annual consumption between (kWh)

Tranşe de consum clienti casnici	Consum anual cuprins in intervalul (kWh):	
Transa - DA		<1000
Transa - DB	>=1000	<2500
Transa - DC	>=2500	<5000
Transa - DD	>=5000	<15000
Transa - DE	>=15000	

Translation: Household clients' consumption band
Annual consumption between (kWh)

Electricity supplied to non-household consumers shall also include self-supply of producers who are dispatchable to other places of consumption, for which annual consumption exceeds 200 GWh.
Following the restrictions imposed in the context of the COVID-19 pandemic (drop in industrial output, switch to the remote work system or technical unemployment), in 2020 there was a reduction in the annual competitive consumption of non-household consumers by about 5% (more than 1.7 Twh), when compared to the previous year. At the same time, the amount of electricity supplied to household consumers with a competitive supply has increased by approx. 14%, when compared to the same period.
With only one exception (non-household consumers with annual consumption above 150 GWh), the number of competitively supplied end consumers increased in 2020 across all categories, in particular category IA (by almost 24000). The same trend continues for household consumers (more than 400.000), which are driven by new connections and the transition from the regulated to the competitive market.

The following figures show the year-to-year increases in the average competitive price of electricity in each consumption band for the period 2018-2020.
Source: Half-yearly supplier reporting according to ANRE Order No. 33/201



Translation: Average annual price difference from the sale of electricity compared to the previous year for end non-household consumers from the competitional market per consumption bands, IA-IG annual, 2018 – 2020

Average annual price difference from the sale of electricity compared to the previous year for end household consumers from the competitional market per consumption bands, DE-DE annual, 2018 – 2020

- ANRE processing -

For all categories of non-household consumers, the average price increases in 2020 compared to the previous year were reduced compared to increases in the previous periods (in 2019 compared to 2018 or in 2018 compared to 2017), while for households, the same type of increases were substantial, especially for the DA consumer category (annual consumption below 1000 kWh), where the average sales price in 2020 was more than 100 RON/MWh compared to the average value in 2019.
The values of the annual concentration indicators calculated at the level of the competitive segment indicate that the REM in the non-centralised market area is still maintained in 2020 due to the large number of active suppliers and their division of market leaders.

The individual market shares of suppliers active in the retail electricity market, determined by the energy supplied to end consumers, are presented on the ANRE website in the monthly reports on the results of the electricity market monitoring and comprise, cumulatively, at period level, the situation of suppliers, both on the market as a whole, and separately, on the competitive and the regulated component.

In 2020, market shares above 5% of the total amount of electricity supplied to non-household and household end consumers in the competitive segment had 7 active suppliers (5 SoLR, TINMAR ENERGY – optional SoLR and GETICA 95 COM - competitive supplier, and for the first two months of the year there was also an optional SoLR). The first place in the hierarchy established according to market share was filled, as in previous years, by ELECTRICA FURNIZARE (10.86%), followed by ENEL ENERGIE (9.52%) and GETICA 95 COM (9.36%, up from the previous year).

Electricity market for end consumers serviced by suppliers of last resort (SoLR)

On the electricity market for end consumers serviced by suppliers of last resort (SoLR), a total of 5 SoLR subject to obligations (SoLRob) were appointed by ANRE and were operational, as well as 11 optional SoLR (SoLRop) for the period between March 1st, 2019 and February 29th, 2020, and 5 SoLR subject to obligation (SoLRob) and 7 optional SoLR (SoLRop) for the period between March 1st, 2020 and February 28th, 2021. From these suppliers, mainly information on the number of consumption sites services, the average wholesale electricity purchase prices, the quantities of electricity sold to end consumers and the average selling price is collected.

- Specific indicators for SoLR subject to obligations
- The number of consumption places serviced by SoLR subject to obligation

In December 2020, the trend of a decrease in the number of serviced consumption places was maintained in the case of SoLR subject to obligation, when compared to December 2019, with 206.023 fewer consumption places, of which 95.95% represent household consumers' consumption places and 4.05% represent non-household consumers' consumption places. This development is the consequence of the campaigns initiated by providers active in the competitive market, in order to attract consumers from the regulated market, but also the fact that on December 31st, 2020 the regulated tariffs for domestic consumers supplied by SoLR subject to obligation ceased to apply.

The submitted data shall refer to the number of consumption places per type of consumer, and shall correspond with those reported by SoLR subject to obligation for December 2020 and December 2019 respectively.

SoLRob Client type	CEZ Vânzare	E.ON Energie România	Electrica Furnizare	ENEL Energie	ENEL Energie Muntenia	TOTAL SoLRob 2020	TOTAL SoLRob 2019
Households	895,086	1,078,898	3,144,256	368,894	414,792	5,901,926	6,099,602
% of households out of total end consumers	99.33 %	98.75 %	96.20 %	94.42 %	97.43 %	97.09 %	97.06 %
Non-households in SU-regime	789	114	24,990	763	350	27,006	31,232
Inactive	5,239	13,492	99,269	20,955	10,529	149,484	153,253
Non-households taken on in UI-regime	0	0	1	101	55	157	509
Non-household	6,028	13,606	124,260	21,819	10,934	176,647	184,994
% non-household consumers out of total end consumers	0.67 %	1.25 %	3.80 %	5.58 %	2.57 %	2.91 %	2.94 %
Total end consumers	901,114	1,092,504	3,268,516	390,713	425,726	6,078,573	6,284,596

Source: Monthly reporting of obliged suppliers of last resort (SoLR) — ANRE processing

The average purchase price of electricity supplied by SoLR subject to obligation
The quantities of electricity purchased for delivery to end consumers during 2020, i.e. the average purchase prices per type of market/contract and type of end consumer for each SoLR subject to obligation and total, are set out in the following tables.

Transaction Type	Type Type Indicator	[MU]	Household consumer	Non-household consumers in SU regime	Inactive consumers	Non-household consumers in UI regime	Total non-household consumers	TOTAL clients
purchase of regulated contracts	quantity	[GWh]	7,017.06	0.00	0.00	0.00	0.00	7,017.06
	value	[thousand RON]	1,168,635.51	0.00	0.00	0.00	0.00	1,168,635.51
	Pmed	[RON/MWh]	166,54	.00	0.00	0.00	0.00	166.54
CBCM purchase (incl. neg.)	quantity	[GWh]	874,84	107.62	661.46	7.62	776.70	1,651.54
	value	[thousand RON]	209,804.76	28,846.71	180,022.60	2,066.52	210,935.82	420,740.58
	Pmed	[RON/MWh]	239,82	268.03	272.16	271.34	271.58	254.76
CMUS+prosum. purchase	quantity	[GWh]	0.70	0.01	0.08	0.00	0.09	0.79
	value	[thousand RON]	176.60	2.58	20.22	0.00	22.80	199.39

	Pmed	[RON/ MWh]	251.21	251.21	251.21	0.00	251.21	251.21
DAM+IDM purchase	quantity	[GWh]	768.02	22.02	150.19	4.57	176.78	944.80
	value	[thousand RON]	152,113.16	4,535.71	32,759.34	922.87	38,217.93	190,331.09
	Pmed	[RON/ MWh]	198.06	205.99	218.12	202.04	216.19	201.45
DAM+IDM sale	quantity	[GWh]	-156.63	-20.85	-76.48	-1.67	-99.00	-255.63
	value	[thousand RON]	-30,388.51	-3,760.18	-12,588.75	-293.09	-16,642.02	-47,030.52
	Pmed	[RON/ MWh]	194.01	180.37	164.60	175.31	168.10	183.98
activity on BM*	quantity	[GWh]	-110.95	10.70	9.50	-1.82	18.39	-92.56
	value	[thousand RON]	25,072.77	6,021.46	18,364.30	-160.39	24,225.36	49,298.13
Net acquisition	quantity	[GWh]	8,393.05	119.51	744.75	8.69	872.95	9,266.00
	value	[thousand RON]	1,525,414.29	35,646.28	218,577.71	2,535.90	256,759.89	1,782,174.18
	Pmed	[RON/ MWh]	181.75	298.28	293.49	291.67	294.13	192.33

*the BM activity is reflected by the algebraic sum of the quantities and values corresponding to the positive and negative imbalances allocated by SoLRob to the different categories of end clients

Source: Monthly reporting of obliged suppliers of last resort (SoLR) — ANRE processing

Transaction Type	SoLRob Type / Indicator	[MU]	CEZ Vânzare	E.ON Energie România	Electrica Furnizare	ENEL Energie	ENEL Energie Muntenia	TOTAL SoLRob 2020	TOTAL SoLRob 2019
purchase of regulated contracts	quantity	[GWh]	959.10	1,096.67	3,719.90	524.89	716.49	7,017.06	4,316.70
	value	[thousand RON]	169,014.56	170,470.37	629,187.91	87,122.65	112,840.01	1,168,635.51	780,647.75
	Pmed	[RON/ MWh]	176.22	155.44	169.14	165.98	157.49	166.54	180.84
CBCM purchase (incl. neg.)	quantity	[GWh]	138.06	201.40	884.37	168.71	259.00	1,651.54	3,755.80
	value	[thousand RON]	31,220.73	51,603.10	232,842.74	41,084.33	63,989.69	420,740.58	973,410.80
	Pmed	[RON/ MWh]	226.14	256.22	263.29	243.52	247.06	254.76	259.18
CMUS+prosum. purchase	quantity	[GWh]	0.01	0.00	0.64	0.10	0.05	0.79	612.68
	value	[thousand RON]	1.72	0.00	161.11	24.75	11.81	199.39	176,387.26
	Pmed	[RON/ MWh]	251.21	0.00	251.21	251.21	251.21	251.21	287.89
DAM+IDM purchase	quantity	[GWh]	166.15	94.91	432.76	113.18	137.79	944.80	1,346.05
	value	[thousand RON]	30,371.26	21,581.73	89,907.63	21,653.44	26,817.02	190,331.09	390,349.19
	Pmed	[RON/ MWh]	182.80	227.38	207.75	191.32	194.62	201.45	290.00
DAM+IDM	quantity	[GWh]	-63.27	-29.29	-64.58	-40.19	-58.29	-255.63	-657.378

sale	value	[thousand RON]	-13,436.05	-4,852.95	-10,818.44	-7,027.52	-10,895.57	-47,030.52	-138,854.54
	Pmed	[RON/MWh]	212.35	165.66	167.52	174.86	186.92	183.98	211.22
activity on BM*	quantity	[GWh]	-16.52	19.84	82.92	-135.19	-43.62	-92.56	32.61
	value	[thousand RON]	2,761.47	11,920.36	50,251.98	-20,829.90	5,194.21	49,298.13	84,159.25
Net acquisition	quantity	[GWh]	1,183.53	1,383.53	5,056.02	631.49	1,011.43	9,266.00	9,406.47
	value	[thousand RON]	219,933.69	250,722.62	991,532.94	122,027.75	197,957.18	1,782,174.18	2,266,099.72
	Pmed	[RON/MWh]	185.83	181.22	196.11	193.24	195.72	192.33	240.91

- *the BM activity is reflected by the algebraic sum of the quantities and values corresponding to the positive and negative imbalances allocated by SoLRob to the different categories of end clients
- Source: Monthly reporting of obliged suppliers of last resort (SoLR) — ANRE processing
-

By analysing the data submitted for the year 2020, compared with the year 2019, it is noted that:

- the net electricity purchase decreased by approx. 1.52% compared to the 2019 recorded data;
- the average price of electricity purchased (net purchase) in 2020 decreased by approx. 20.16% (48.58 RON/MWh), when compared to 2019,
- the amount of electricity purchased on regulated contracts increased by 62.56% in 2020, when compared to 2019;
- the average price of electricity purchased under the regulated contracts in 2020 decreased by approx. 7.91% (14.30 RON/MWh), when compared to 2019 values;
- a reduction in the quantity purchased on DAM+IDM by SoLRob by approx. 30% and a decrease in the related average purchase price by 88.55 RON/MWh (30.53%);
- a reduction in the quantity purchased on CBCM (including negotiated contracts) by approx. 56% and a decrease in the related average purchase price by 4.42 RON/MWh;
- the amount of electricity supplied in 2020 in UI regime to non-household end consumers decreased by approx. 314%, when compared to 2019, and the corresponding number of places of consumption fell by 69% in December 2020, when compared to December 2019.

The sale of electricity to end consumers serviced by SoLR subject to obligation

The following table shows the electricity sales of each SoLR subject to obligation for the two categories of end and total consumers, indicating the quantities sold and the resulting average return price.

SoLR / Type clients	Type indicator	[MU]	CEZ Vânzare	E.ON Energie România	Electrica Furnizare	ENEL Energie	ENEL Energie Muntenia	TOTAL SoLRob 2020	TOTAL SoLRob 2019
household	quantity	[GWh]	1,142.72	1,344.43	4,554.00	529.60	822.30	8,393.05	8,403.43
	value	[thousand RON]	550,784.75	653,713.21	2,098,940.66	240,174.20	338,689.44	3,882,302.27	3,907,175.59
	Pmed	[RON/MWh]	482.00	486.24	460.90	453.50	411.88	462.56	464.95

non-household	quantity	[GWh]	40.81	39.10	502.01	101.89	189.13	872.95	1,003.05
	value	[thousand RON]	21,895.89	22,726.22	296,095.04	82,570.77	120,260.07	543,548.00	497,333.16
	Pmed	[RON/MWh]	536.50	581.21	589.81	810.38	635.86	622.66	495.82
Total clients	quantity	[GWh]	1,183.53	1,383.53	5,056.02	631.49	1,011.43	9,266.00	9,406.48
	value	[thousand RON]	572,680.64	676,439.43	2,395,035.70	322,744.98	458,949.52	4,425,850.27	4,404,508.75
	Pmed	[RON/MWh]	483.88	488.92	473.70	511.08	453.76	477.64	468.24

Note: Prices do not contain VAT, excise duties or other taxes
Source: Monthly reporting of obliged suppliers of last resort (SoLR) — ANRE processing

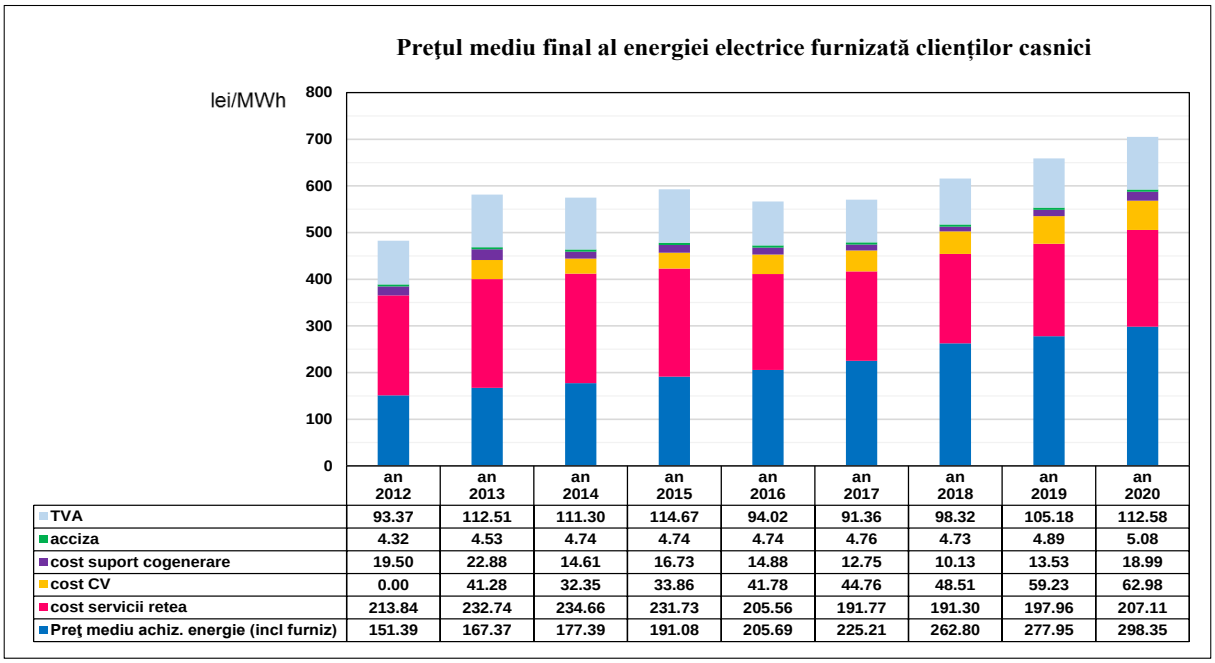
The decrease in electricity consumption in 2020, when compared to 2019, is noted for household consumers, amassing 10.38 GWh, and 130.10 GWh for non-household consumers. For household consumers, the average electricity sales price decreased by 2.39 RON/MWh, i.e. an increase of 126.84 RON/MWh for non-household consumers.

Optional SoLR specific indicators

In December 2020, optional SoLR served 401 places of consumption of household consumers and had no non-household consumers in the portfolio under SU regime or taken over under UI regime.
The net purchase of electricity intended to cover the consumption of the end consumers serviced by the optional SoLR was 0,90 GWh, which was insignificant, when compared to that purchased by SoLRob, due to the small number of household consumers served.
The average purchase price was 218.27 RON/MWh. In 2020, optional SoLR supplied household consumers with a quantity of electricity of 0.90 GWh, at an average price of 426.31 RON/MWh.

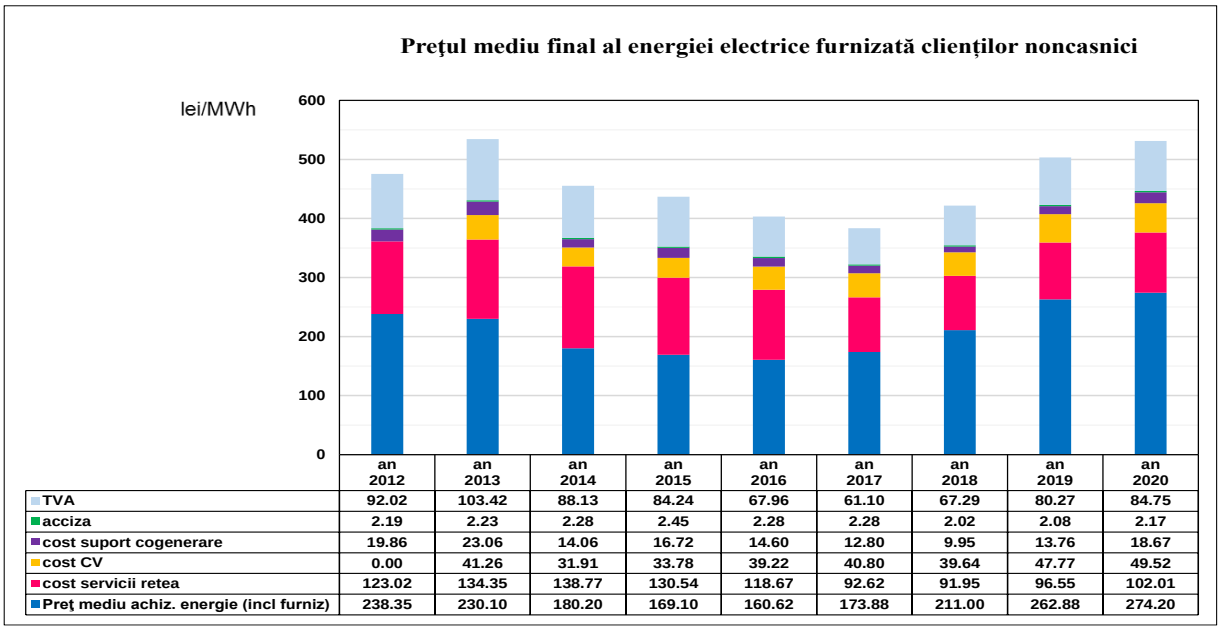
The development of the average price of electricity sales to end consumers

This section gives details regarding data collected by ANRE in accordance with the provisions of Regulation (EU) 2016/1952 of the European Parliament and of the Council of 26 October 2016 concerning European statistics on natural gas and electricity prices, which are transmitted in an aggregate manner, on a semi-annual basis to EUROSTAT.
The following charts present the development of the components of the average selling price of electricity supplied to household and non-household end consumers, both on the regulated and competitive markets, in the period between 2012 and 2020.



	an 2012	an 2013	an 2014	an 2015	an 2016	an 2017	an 2018	an 2019	an 2020
TVA	93.37	112.51	111.30	114.67	94.02	91.36	98.32	105.18	112.58
acciza	4.32	4.53	4.74	4.74	4.74	4.76	4.73	4.89	5.08
cost suport cogenerare	19.50	22.88	14.61	16.73	14.88	12.75	10.13	13.53	18.99
cost CV	0.00	41.28	32.35	33.86	41.78	44.76	48.51	59.23	62.98
cost servicii retea	213.84	232.74	234.66	231.73	205.56	191.77	191.30	197.96	207.11
Preţ mediu achiz. energie (incl furniz)	151.39	167.37	177.39	191.08	205.69	225.21	262.80	277.95	298.35

Translation: Average end price of electricity supplied to household consumers
VAT, excise, co-generation support cost, GC cost, network services cost, average purchase price for energy (including suppliers)
Source: Half-yearly supplier reporting - ANRE processing



	an 2012	an 2013	an 2014	an 2015	an 2016	an 2017	an 2018	an 2019	an 2020
TVA	92.02	103.42	88.13	84.24	67.96	61.10	67.29	80.27	84.75
acciza	2.19	2.23	2.28	2.45	2.28	2.28	2.02	2.08	2.17
cost suport cogenerare	19.86	23.06	14.06	16.72	14.60	12.80	9.95	13.76	18.67
cost CV	0.00	41.26	31.91	33.78	39.22	40.80	39.64	47.77	49.52
cost servicii retea	123.02	134.35	138.77	130.54	118.67	92.62	91.95	96.55	102.01
Preţ mediu achiz. energie (incl furniz)	238.35	230.10	180.20	169.10	160.62	173.88	211.00	262.88	274.20

Translation: Average end price of electricity supplied to non-household consumers
VAT, excise, co-generation support cost, GC cost, network services cost, average purchase price for energy (including suppliers)
Source: Half-yearly supplier reporting - ANRE processing

The average price of energy sales to end consumers, excluding taxes and VAT, increased in 2020, when compared to the previous year, by 5.83% (22.73 RON/MWh). For non-household consumers, the increase was 4.67% and for household consumers, 6.2%, as shown in the following table. This development was driven by the prices at which transactions were concluded on the centralized contract markets and on the DAM, but also by the increase in the value of the network services and the contribution to the high-efficiency cogeneration scheme.

	AN 2019			AN 2020		
Client type	Pmed_ach & supl	Pmed (excluding taxes & VAT)	Pmed (with taxes & VAT)	Pmed_ach & supl	Pmed (excluding taxes &VAT)	Pmed (with taxes &VAT)
	RON/MWh	RON/MWh	RON/MWh	RON/MWh	RON/MWh	RON/MWh
household - competitive market	301.10	495.99	682.99	369.31	574.34	786.61
household - regulated market	265.35	464.98	645.55	254.16	462.56	654.31
Households	277.95	475.91	658.74	298.35	505.46	705.09
non-household - competitive market	261.44	355.59	498.35	270.04	369.84	523.28
non-household - regulated market	314.12	495.84	680.30	435.19	622.67	842.20
Non-household	262.88	359.43	503.34	274.20	376.21	531.31
Total clients - competitive market	265.96	371.58	519.39	283.34	397.24	558.56
Total clients - regulated market	270.55	468.27	549.25	271.21	477.64	672.01
Total clients	266.83	389.94	544.04	281.01	412.67	580.34

For household consumers, the average purchase price including the supply service has increased very slightly, from 42.2% in 2019, to 42.3% in 2020. For non-household consumers, the weighting of the average purchase price including the supply service in the average end selling price fell in 2020 to 51.6 %, when compared to 52.2 % in 2019.

At the same time, in 2020, the average end selling price (with taxes & VAT) of electricity charged to household and non-household consumers was increased as a result of changes in the energy market such as: increase in the purchase price of electricity, network service charges, change in previous years of the regulatory framework specific to green certificate trading (deferred GC).

4. The gas market

General data
Annual gas consumption increased slightly, when compared to 2019, reaching around 127.14 TWh, an increase of 5.02% in 2020, compared to 2019.
The number of participants in the Romanian gas market has constantly changed, as the market was liberalized, especially in the gas supply sector, including in 2020:

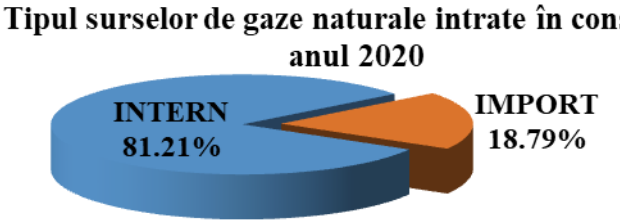
- 1 national transmission system operator - Transgaz;
- 9 producers: Romgaz, OMV Petrom, Amromco Energy, Foraj Sonde, Hunt Oil Company Of România, Mazarine Energy România, Raffles Energy, Serinus Energy România, Stratum Energy România;
- External suppliers bringing natural gas from external sources to Romania: AIK Energy Austria GmbH, AIK Energy Hungary Kft, Axpo Solutions AG, Axpo Bulgaria EAD, Dexia Bulgaria, ERU Management Services, Engie Franţa, Gazprom Schweiz AG, Gazprom Export

LLC, Imex Oil Limited, MET Austria Energy Trade Gmbh, MET Energy Trading Bulgaria EAD, Kolmar NL BV, MET International AG, MOL Commodity Trading Kft, Mytilineos, OMV Gas Marketing&Trading Gmbh, RWE Supply&Trading GmbH, Uniper Global Commodities SE, Vitol Gas and Power B.V. and Wiee Hungary Kft.

- 2 storage operators: Romgaz – subsidiary for natural gas storage of Depogaz Ploiești S.R.L. and Depomureş,
- 30 distribution system operators, the largest being Distrigaz Sud Reţele and Delgaz Grid;
- 90 suppliers active in the gas market.

The natural gas wholesale market

Domestic gas production in 2020, current production and production extracted from storage, which entered consumption, represented about 81.21% of all sources. The first two producers (Romgaz and OMV Petrom) together covered about 94.41% of this source.



Translation: Type of natural gas sources entered into consumption in the year 2020
DOMESTIC, IMPORT

Production extracted from the production perimeters during 2020 and production injected into underground storage facilities are reflected in the table below:

Month	Current production (MWh)	Injection quantity from domestic production (MWh)
January	9,435,118.711	-
February	8,646,266.842	-
March	9,196,630.761	336,355.761
April	8,174,036.966	1,627,371.797
May	7,041,205.032	1,995,784.370
June	6,717,238.737	2,075,381.585
July	6,920,988.504	1,698,017.298
August	7,138,641.259	1,938,736.698
September	7,861,301.224	1,868,656.004
October	8,562,136.911	1,077,120.869
November	8,529,931.366	23,839.902
December	8,787,361.665	24,440.412
Total 2020	97,010,857.978	12,665,704.696

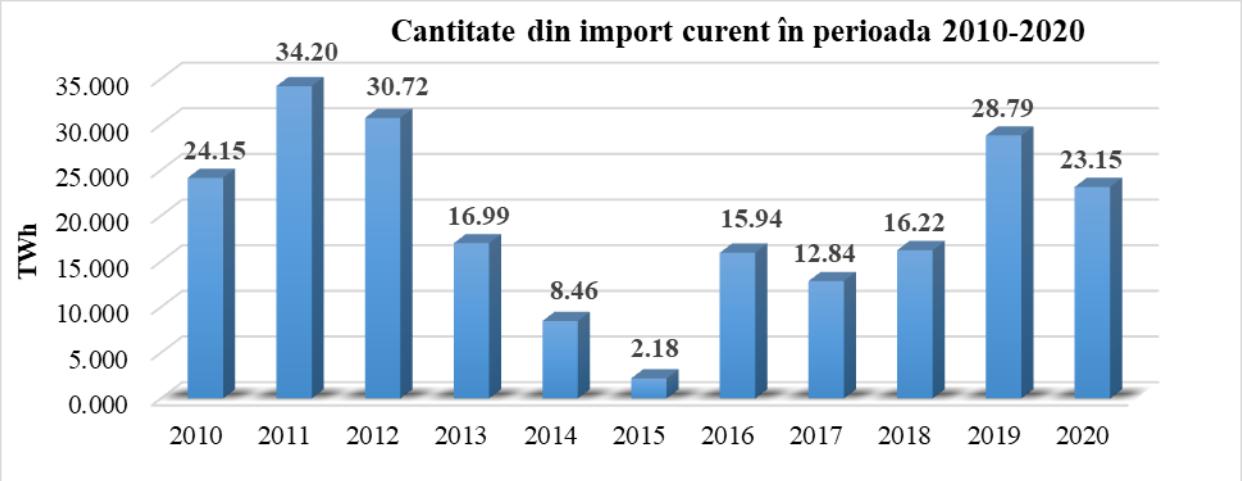
Quantity of natural gas produced in 2020 was 97.011TWh, as follows:

Amromco Energy	Foraj Sonde	Hunt Oil Company	Mazarine Energy Romania	OMV Petrom	Raffles Energy	Romgaz	Stratum Energy Romania	Serinus Energy	Total (TWh)

2.168	0.095	0.842	0.258	43.768	0.043	47.537	1.230	1.070	97.011

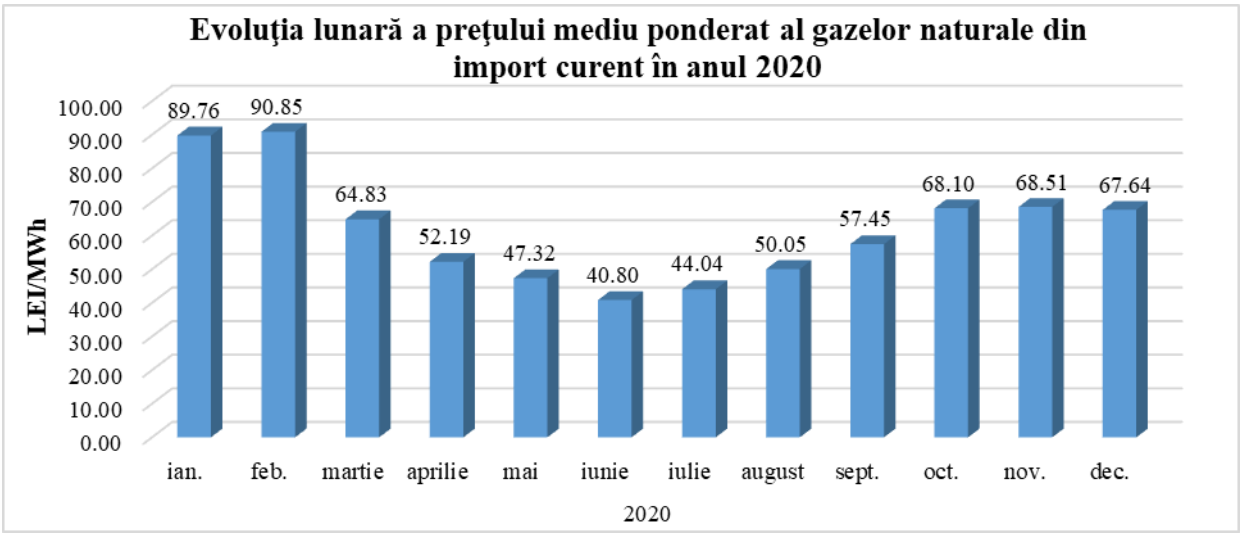
The current imports that entered consumption in 2020 accounted for 18.79% of all sources. The three largest importers - domestic suppliers - accounted together for about 64.38% of these quantities.

Month	Current import (MWh)
January	3,397,402.070
February	2,937,524.894
March	2,209,332.124
April	1,653,139.846
May	1,617,548.008
June	1,844,852.562
July	1,588,459.042
August	1,527,138.263
September	1,056,878.945
October	861,476.028
November	1,994,207.724
December	2,460,768.371
Total 2020	23,148,727.878

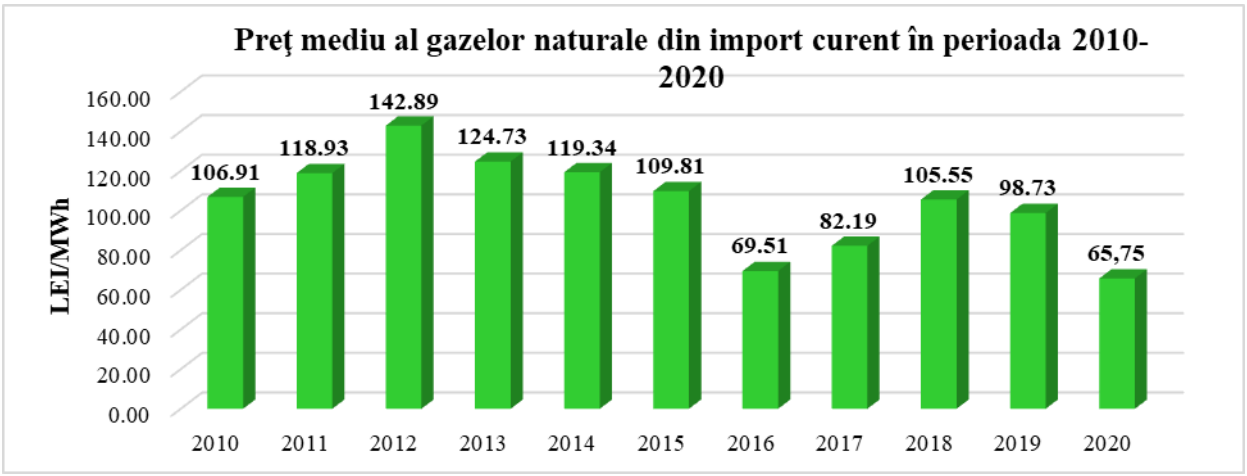


Translation: Current import quantity from 2010 – 2020

In 2020, despite the drop in imported quantities, when compared to the previous year, the current imports are reinvigorated, when compared to the last six years (as can be seen from the chart), resulting from a decrease in the import price of natural gas compared to the domestic production gas price.



Translation: Monthly development of average weighted natural gas price from current import in the year 2020



Translation: Average natural gas price from current import between 2010 and 2020

With regard to the current import gas prices, we specify that they are determined by means of weighting the prices with the monthly quantities delivered, corresponding to the import gas sales transactions reported by market participants, and they do not contain VAT, excise duties or other taxes.
The quantities exported from domestic production throughout 2020 were as follows:

Month	Exported quantity (MWh)
January	22,025.218
February	35,011.394
March	16,654.557
April	5,447.743
May	27,549.165
June	78,196.563
July	56,072.938
August	58,567.001
September	243,262.571
October	716,119.942
November	333,626.792

December	42,009.574
Total 2020	1,634,543.408

4.1. Network regulation

The development of the regulatory framework on methodologies for setting regulated tariffs for natural gas during 2020
In accordance with the provisions of the Law on electricity and natural gas No. 123/2012, with subsequent amendments and completions, and Law No. 238/2004 on petroleum, the price and tariff systems on the regulated gas market are established by ANRE.
The regulated activities related to natural gas systems for which ANRE issued regulatory acts and/or set forth regulated tariffs in 2020 are as follows: transmission of natural gas, underground storage of natural gas, distribution of natural gas.

In order to implement the provisions of Law No. 155/2020, which introduced significant amendments and completions to the Law on electricity and natural gas No. 123/2012, within the framework of the tariff methodologies in the natural gas sector, ANRE approved Order No. 202/2020 to amend and supplement the methodology for setting regulated tariffs for natural gas distribution services, approved by means of ANRE Order No. 217/2018 and Order No. 203/2020 on the amendment of the methodology for setting regulated tariffs for natural gas transmission services, approved by means of ANRE Order No. 41/2019, which introduced provisions relating to:
- recognition of the costs of the connection of applicants to the distribution and transmission systems of natural gas, respectively, within the regulated tariffs corresponding to the two activities;
- elimination from the category of costs recognized under the regulated tariffs for distribution and
- transmission of natural gas, of the royalty fees stipulated in the contracts for the assignment of distribution services and for the transmission of natural gas and/or related assets publicly owned by the State or by an administrative-territorial unit, as from the date of entry into force of the provisions of Law No. 155/2020.

The transmission of natural gas activity
Tariffs for natural gas transmission services by means of the national natural gas transmission system (NTS)

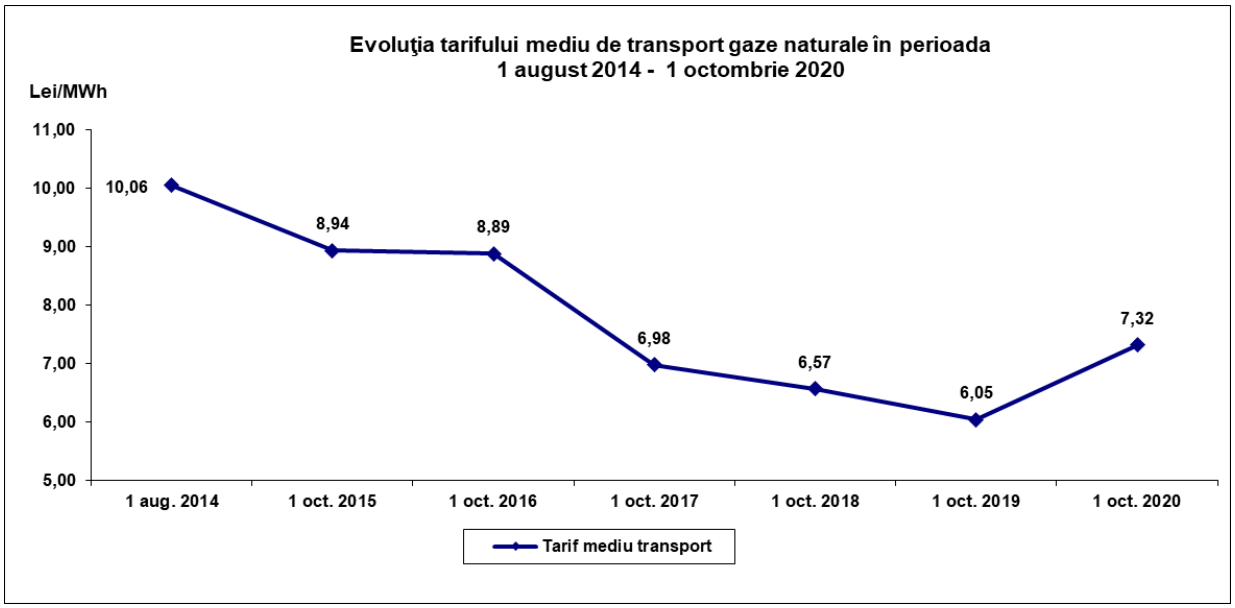
These tariffs shall be established in accordance with the methodology for setting regulated tariffs for natural gas transmission services approved by means of ANRE Order No. 41/2019 and shall comprise a set of „entry/exit" tariffs set for the entry point group, for the group of exit points in/out of the NTS where capacity is reserved, as well as a volume tariff for the use of the NTS determined as a postage stamp tariff.
This system of tariffs ensures that the revenue allowed by ANRE for the transmission system operator is achieved, in order to cover the costs justified as necessary in order to perform the gas transmission activity in one year of the regulatory period.

Tariffs for natural gas transmission services via NTS (except for the Isaccea - Negru Vodă transmission pipelines, for which separate tariffs apply) charged during the period between October 1st, 2020 and September 30th, 2021 by SNTGN Transgaz S.A., were calculated on the basis of the methodological provisions and approved by means of ANRE Order No. 83/27.05.2020, valid until September 30th, 2021.

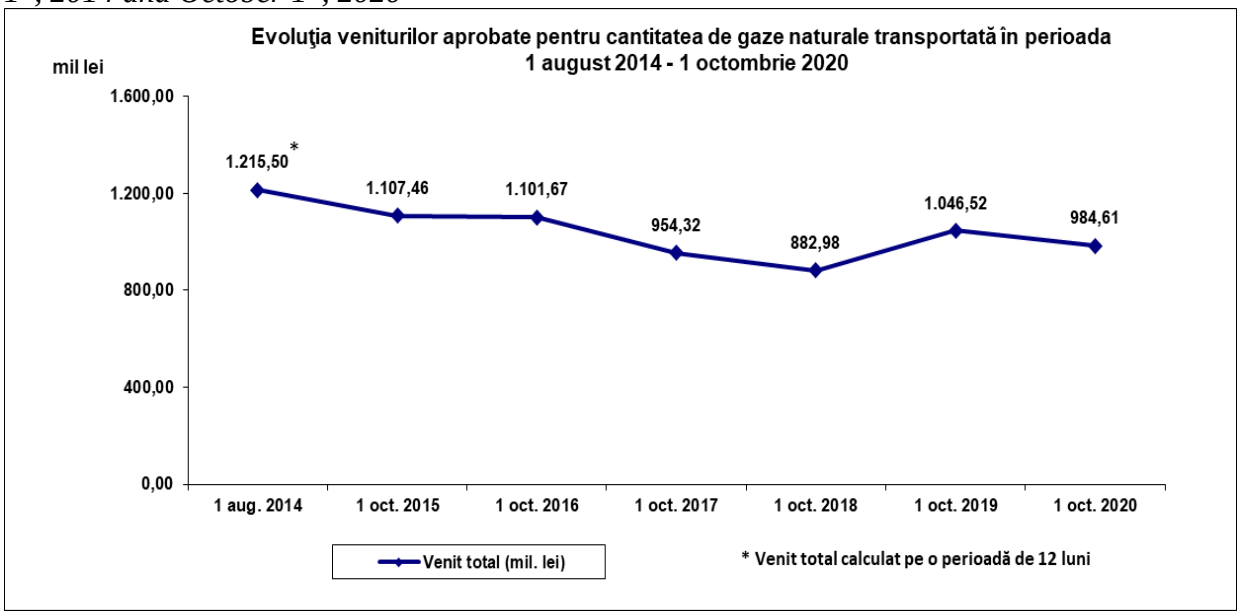
The following tariffs were thusly approved:

long and short-term capacity reservation rates for transmission services, firm and interruptible, broken down per group of entry points and group of exit points, including entry/exit points to storage systems, accompanied by the relevant multiplication coefficients, for the second regulatory year, more precisely October 1st, 2020 and September 30th, 2021, of the fourth regulatory period;
The volume tariff for the use of NTS, at the value of 1.46 RON/MWh transmitted.

The following tables sets out the annual development of the average transmission tariff and regulated revenue for the approved gas transmission service during the period between August 1st, 2014 and October 1st, 2020:



Translation: Development of the average transmission tariff for natural gas between August 1st, 2014 and October 1st, 2020



Translation: Development of approved revenues for the quantity of natural gas transmitted between August 1st, 2014 and October 1st, 2020.

Tariffs for the service of transmission of natural gas via the Isaccea 2 - Negru Vodă 2 gas pipeline
ANRE approved, by means of ANRE Order No. 149/2020, the total revenue and transmission tariffs for the activity of transmitting natural gas through the gas pipeline Isaccea 2 - Negru Vodă 2, for SNTGN Transgaz S.A.

The application of these tariffs was conditional on compliance with the provisions of Article 3 of the Order of President of ANRE No. 34/2016 concerning the approval of the methodology for the reservation of transmission capacity and the establishment of tariffs for the provision of services for the transmission of natural gas through the Isaccea-Negru Vodă transmission pipeline, and the conclusion of interconnection agreements with adjacent transmission system operators.

The transmission tariffs for the reservation of transmission capacity at the entry/exit points of the Isaccea 2 - Negru Vodă 2 gas pipeline, approved by means of ANRE Order No. 149/2020, are long and short-term capacity reservation tariffs for transmission services, firm and interruptible, broken down per group of virtual entry points Isaccea 2 and 3 and group of virtual exit points Negru Vodă 2 and 3, accompanied by the relevant multiplication coefficients, for the second year, more precisely October 1st, 2020 - September 30th, 2021, of the fourth regulatory period.

Gas transmission system connection tariffs

Until July 29th, 2020, gas transmission system connection tariffs were calculated by the natural gas transmission system operator, in accordance with the Methodology for calculating tariffs for the transmission and distribution system connection process in the gas sector, approved by means of ANRE Order No. 71/2018, with subsequent amendments and completions.

As of July 30th, 2020, the connection to the NTS is free of charge, the costs involved being included in the regulated transmission tariffs, as provided for by Law No. 123/2012 on electricity and natural gas, with subsequent amendments and completions, as amended and completed by Law No. 155/2020.

Storage activity

Development of storage tariffs

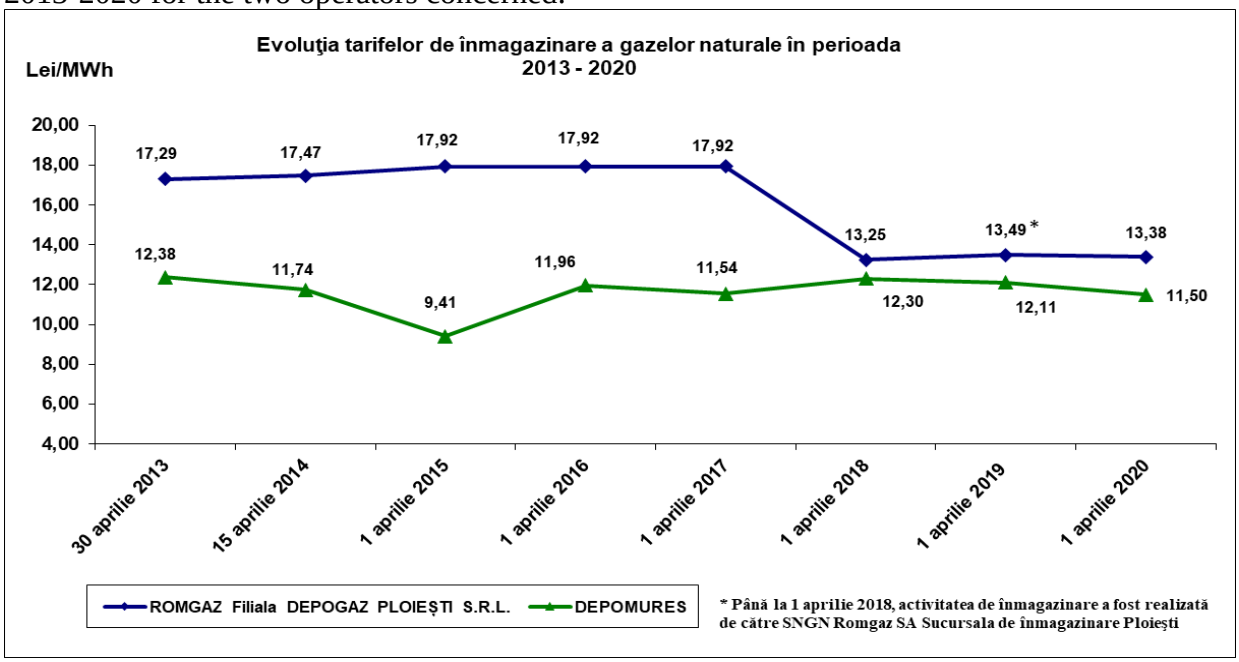
For the storage cycle between April 1st, 2020 and March 30th, 2021, underground gas storage tariffs were established in accordance with the provisions of the Methodology for setting regulated tariffs for underground gas storage services, approved by means of ANRE Order No. 14/2019.

In applying the methodological provisions, ANRE approved, by means of ANRE Order No. 24/2020, the underground storage tariffs for natural gas carried out by the national natural gas company Societatea Națională de Gaze Naturale Romgaz S.A. – natural gas storage subsidiary DEPOGAZ PLOIEȘTI S.R.L., and by means of ANRE Order No. 25/2020, the underground storage tariffs involved in the underground storage of natural gas activities carried out by the company DEPOMUREŞ S.A. Târgu Mureș.

The tariffs for the provision of the underground storage service in the complete underground storage cycle between April 1st, 2020 and March 31st, 2021 are as follows:

Tariff component	M.U.	S.N.G.N. Romgaz SA – natural gas storage subsidiary DEPOGAZ PLOIEȘTI S.R.L.	The company DEPOMUREŞ — S.A. Târgu Mureș
Capacity reservation tariff for underground gas storage services	RON/MWh/annual underground storage cycle	7.58	4.29
Natural gas injection tariff	RON / MWh	3.67	6.92
Natural gas extraction tariff	RON / MWh	2.03	0.29

The following figure shows the development of the average storage tariff over the period 2013-2020 for the two operators concerned:



Translation: Development of storage tariffs for natural gases between 2013 and 2020
By April 1st, 2018, the storage activity was carried out by SNGN Romgaz SA Ploiești storage branch

The activity of distribution of natural gas

The tariff system for the distribution of natural gas comprises differentiated tariffs per client category for each of the licensed distribution operators established on the basis of the Methodology for setting regulated tariffs for gas distribution services approved by means of ANRE Order No. 217/2018.

In 2020, the categories of clients for which the distribution, transit and proximity distribution tariffs were differentiated were as follows:
Clients differentiated according to their annual gas consumption:

	Annual natural gas consumption (MWh)	
Client category	Minimum	Maximum
C.1		≤ 280
C.2	> 280	≤ 2,800
C.3	> 2,800	≤ 28,000
C.4	> 28,000	≤ 280,000
C.5	> 280,000	

Clients benefiting from the proximity distribution tariff – C.6;
Clients benefiting from the transit distribution tariff — C.7.

Changes in gas distribution tariffs

In accordance with the provisions of the current methodology, 31 operators submitted to ANRE the documents containing the dates for adjusting regulated revenues, and the proposals for regulated tariffs for 2020, for the purpose of their subsequent analysis and approval of the tariffs for the period between July 1st, 2020 and June 30th, 2021.

Regulated tariffs were thus set for the provision of the regulated gas distribution services in what concerns natural gas economic operators, by means of the issuance of ANRE Orders No. 96 to 127/24.06.2020.

For the two major natural gas distribution operators, DISTRIGAZ SUD REŢELE S.R.L. and DELGAZ GRID S.A., as of July 1st, 2020, the distribution tariffs approved by means of the following enactments entered into force:

- ANRE Order No. 125/2020 on the setting of regulated tariffs for the provision of the gas distribution service by DISTRIGAZ SUD REŢELE S.R.L., as is presented below:

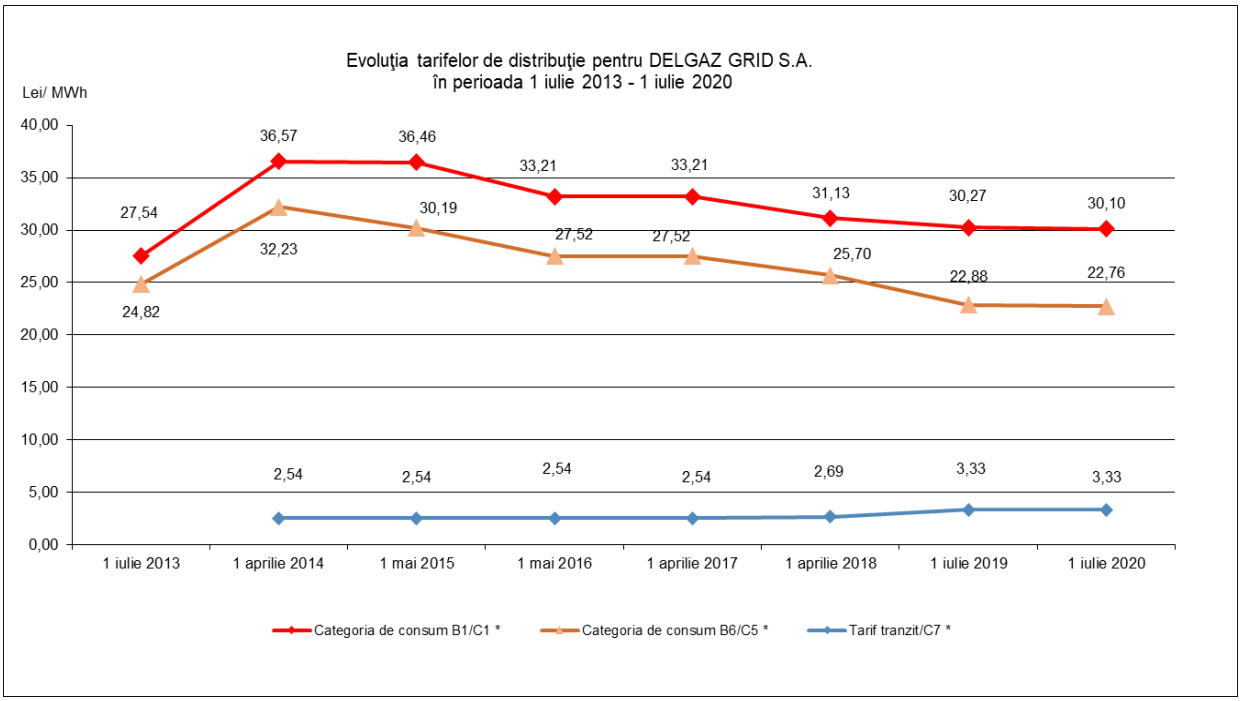
Client category	Minimum consumption annually MWh	Maximum consumption annually MWh	Distribution tariffs RON/ MWh
C.1.		≤ 280	30.24
C.2.	> 280	≤ 2,800	28.49
C.3.	> 2,800	≤ 28,000	27.16
C.4.	> 28,000	≤ 280,000	20.94
C.5.	> 280,000		14.18
C 6.	Clients who benefit from the proximity distribution tariff		4.00

- ANRE Order No. 124/2020 on the setting of regulated tariffs for the provision of the gas distribution service by DELGAZ GRID S.A., as follows:

Client category	Minimum	Maximum	Distribution tariffs

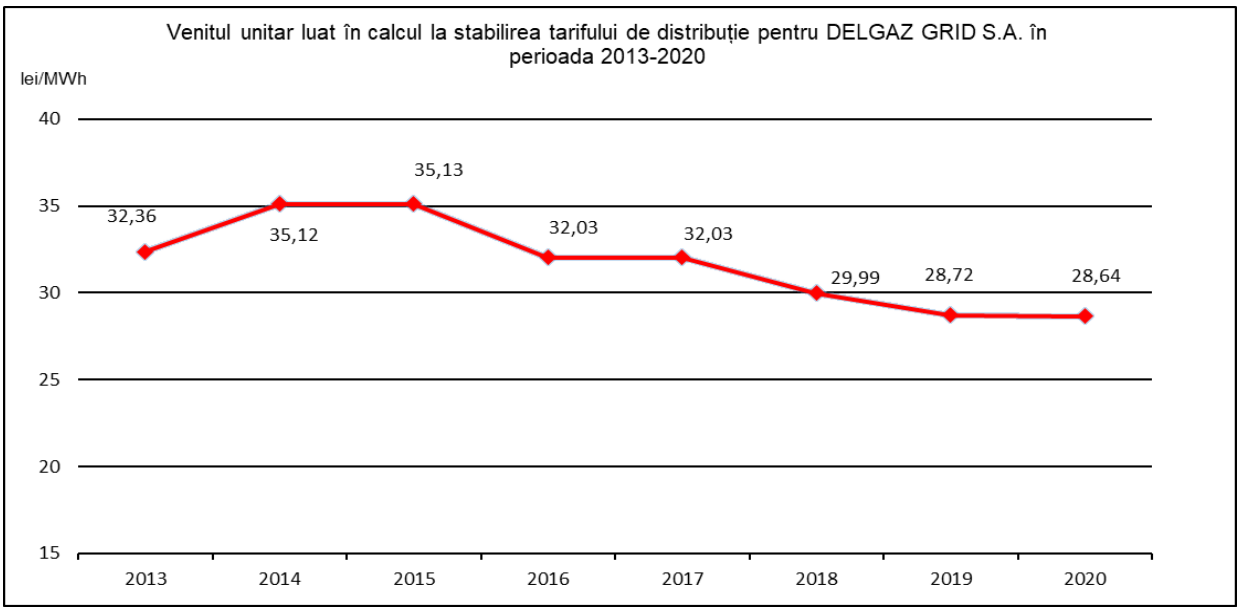
	consumption annually MWh	consumption annually MWh	RON/ MWh
C.1.		≤ 280	30.10
C.2.	> 280	≤ 2,800	28.44
C.3.	> 2,800	≤ 28,000	26.07
C.4.	> 28,000	≤ 280,000	24.10
C.5.	> 280,000		22.76
C.7.	Clients benefiting from the transit distribution tariff		3.33

The figures below show the annual development of gas distribution tariffs and regulated revenues for the two licensed operators distributing natural gas to more than 100.000 clients in the period from July 1st, 2013 until now.

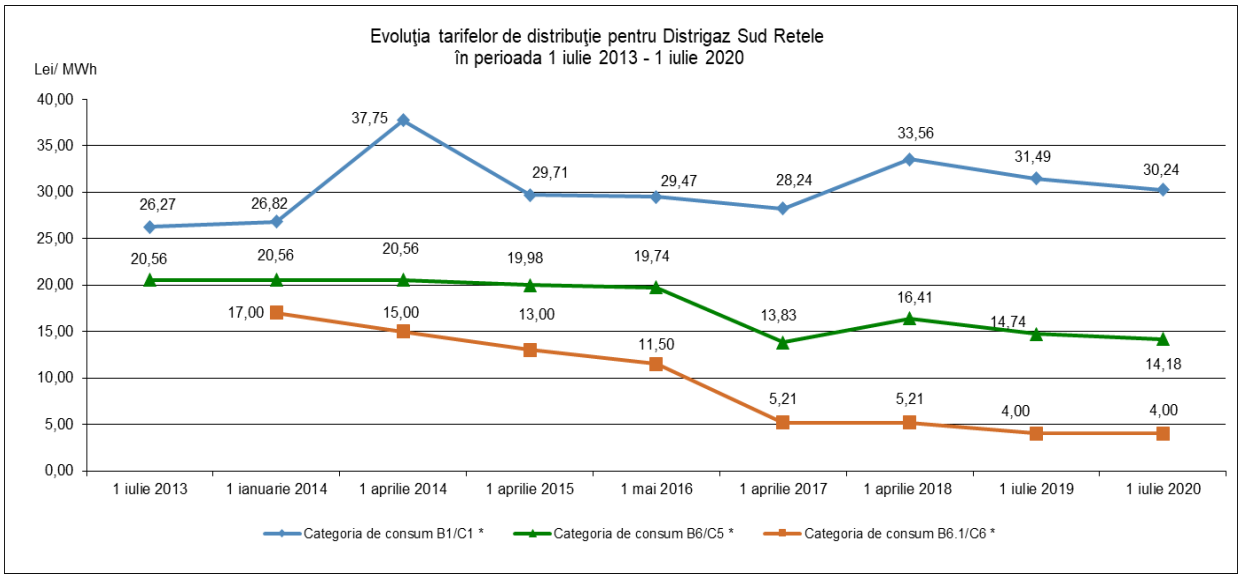


Translation: Development of DELGAZ GRID SA distribution tariffs between July 1st, 2013 and July 1st, 2020

* As of July 1st, 2019, the categories of clients for which distribution tariffs are approved have been amended, in order to bring them closer to the consumption categories laid down in Regulation (EU) 2016/1952 of the European Parliament and of the Council of 26 October 2016 on European statistics on natural gas and electricity prices.

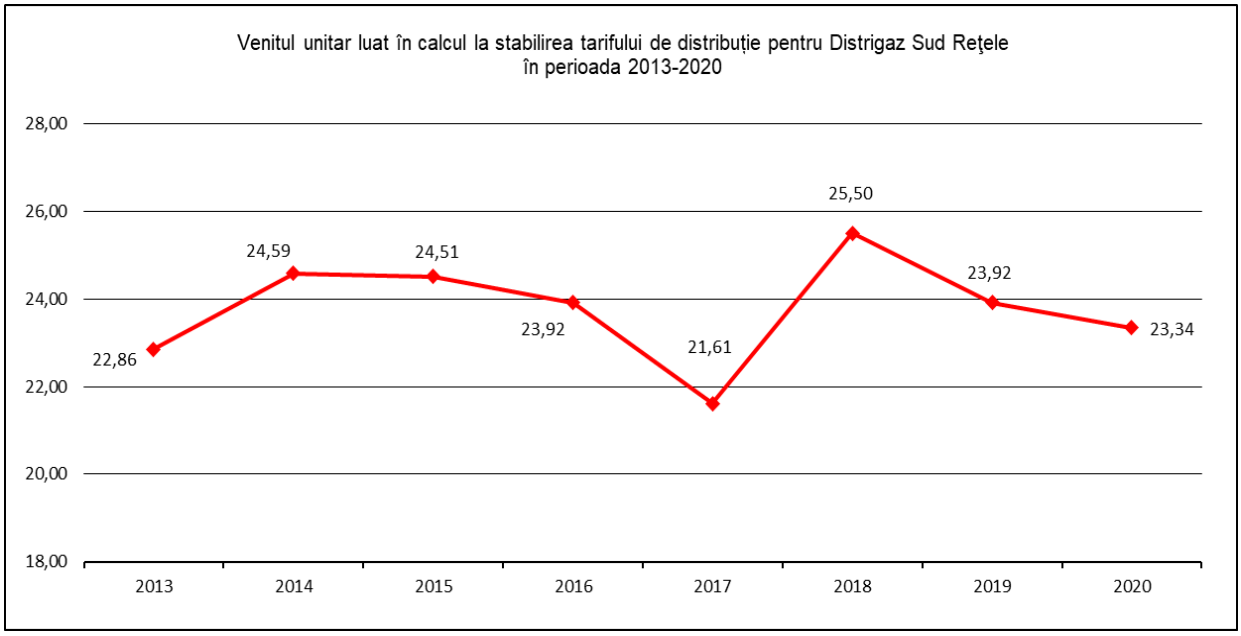


Translation: Monthly income taken into account when computing the distribution tariff for DELGAZ GRID S.A. between 2013 and 2020



Translation: Development of distribution tariffs for Distrigaz Sud Rețele between July 1st, 2013 and July 1st, 2020

* As of July 1st, 2019, the categories of clients for which distribution tariffs are approved have been amended, in order to bring them closer to the consumption categories laid down in Regulation (EU) 2016/1952 of the European Parliament and of the Council of 26 October 2016 on European statistics on natural gas and electricity prices.



Translation: Unitary income taken into account when computing the distribution tariff for Distrigaz Sud Rețele between 2013 and 2020

Connection to the distribution systems

The gas distribution system connection tariffs approved by means of ANRE Order No. 165/2018, established on the basis of the tariff calculation methodology for gas transmission and distribution system connection process, approved by means of ANRE Order No. 71/2018, were applied until July 29th, 2020.

As of July 30th, 2020, upon the entry into force of the provisions of Law No. 155/2020 amending and supplementing Law No. 123/2012 on electricity and natural gas and amending and supplementing other enactments, the connection of applicants to natural gas distribution systems is free of charge, except for the connection of non-household end consumers, within the territory of the territorial-administrative unit for which the DSO has the public distribution service license, whose length of the extension and connection facility exceeds 2,500 meters.

In situations in which the connection is free of charge, the costs of works to achieve the objectives/pipelines necessary for the connection of the consumers located within the territorial administrative unit for which the public distribution service has been licensed shall be financed by the distribution system operators and shall be included in the regulated distribution tariffs.

Monitoring of investments in natural gas networks (grid extensions, investment plans, correlation between 10-year plans, PCIs and national plans)

The development of the regulatory framework during 2020

During 2020, the Romanian Parliament issued Law No. 155, which introduced significant amendments and completions to the Law on electricity and natural gas, i.e. Law No. 123/2012. As regards the investment activity of the natural gas system operators, the aforementioned Law included additional obligations in relation to the investments the latter have to carry out. Thus, operators cannot refuse connection to the system and are obliged to finance the extension works and the necessary connections for connecting consumers located within the territorial-administrative unit for which the service was licensed.

Local public authorities are no longer entitled to participate in co-financing the inefficient quota of the extension of the system in the areas licensed by the operator, as the law provides for operators to bear responsibility for the full cost of the connection to the consumers from own sources. At the same time, the area of concession is extended to all the municipalities belonging to an administrative-territorial unit. The recovery of the costs of connection to the transmission system, i.e. connection to the distribution system of household and non-household consumers with a length of connection less than 2500 m, shall be achieved by means of transmission and distribution tariffs, in accordance with ANRE regulations. In the case of the use of third-party properties for the performance of the transmission or distribution service, the operator shall be entitled, with the consent of the owner, to take over such assets, as own property, up to the rate of effectiveness established in accordance with ANRE regulations.

In order to harmonize the regulatory framework with the new provisions of the above-mentioned primary legislation, the procedure for the ownership of natural gas assets was approved by means of ANRE Order No. 204/2020. The procedure is intended to determine the efficiency conditions under which the transmission system operator or the distribution system operator of natural gas assets can take ownership of natural gas assets, owned by third parties, for the purpose of ensuring natural gas supply to consumers. At the same time, the procedure concerning the lease for use of the objectives/pipelines necessary for the connection in the natural gas sector financed entirely or partly by the administrative and/or territorial unit and/or the applicants and subsequent recovery of the amount invested, approved by means of ANRE Order No. 37/2019, setting out the conditions for co-financing work on extending the systems on economic efficiency principles, has been repealed.

By means of ANRE Decision No. 2288/2020, the model for calculating the efficiency of gas investments at the takeover by the transmission system operator or the distribution system operator of natural gas goods owned by natural persons, legal entities or general government within territorial administrative units and used or required for the provision of said service, was approved.
Amendments and completions to the Procedure on the substantiation and criteria for the approval of investment plans of transmission system operators, distribution and storage of natural gas and GNL terminals, approved by means of ANRE Order No. 38/2019, to contribute to the facilitation of investment and maintenance works on natural gas systems, in order to ensure safety, service performance and continuity of supply, were approved during 2020. Thus, by means of ANRE Order No. 95/2020, provisions concerning the minimum value level and the deadline for submission of the annual investment plan drawn up by the transmission system operator and the length of the recovery period for delayed investments not completed in the year in which they were planned were included. The recovery deadline was set at 12 months for planned investments in 2019, 10 months for planned investments in 2020 and 6 months for planned investments as of 2021 onwards.

By means of ANRE Decision No. 2210/2020, the national natural gas transmission system investment and development plan for the period 2020-2029, drawn up by S.N.T.G.N. Transgaz SA, acting as natural gas transmission system operator (TSO), pursuant to the provisions of Article 125, paragraphs (6) and (7) of the Law on electricity and gas No. 123/2012 was approved.

The monitoring of investments in natural gas networks and the technical state of the systems is presented in the report on the performance indicators for gas transmission and distribution

services and the technical state of gas networks - 2020 - published on the ANRE website, available at: https://www.anre.ro/ro/gaze-naturale/rapoarte/rapoarte-indicatori-de-performanta.

Monitoring of the development plan for the national gas transmission system

The transmission system operator (TSO) shall draw up the ten-year development and investment plan, based on the national strategy and the European development plan developed by ENTSOG, in line with the current state and future development of gas consumption and sources, including imports and exports of natural gas, respecting the principles set forth in Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC, including investments related to projects of common interest. The aforementioned have a cross-border impact and benefit from certain facilities, including funding, granted at national and European level.

The TSO has carried out a national adequacy assessment of the transmission system's capacity, pursuant to Article 8, paragraph (4) of Regulation (EC) No. 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No. 1775/2005. Thus, the need for major cross-border projects and the manner in which they are integrated into the European network were confirmed. The implementation of these projects shall be decided in line with the development of natural gas sources and demand.

The 2020-2029 national gas transmission system development plan (PDSNT 2020-2029) prepared by S.N.T.G.N. Transgaz S.A., acting as TSO, was approved by ANRE, by means of Decision No. 2210/25.11.2020.

The PDSNT 2020-2029 has been updated and now includes investment works on the development and upgrade of the internal NTS in the period 2020-2029 and the update of projects' statuses, their values and their deadlines for commissioning. The operator identified and included in the plan 3 new projects for the development of the NTS, as follows:

- Upgrade of SMG Isaccea 2 and SMG Negru Vodă 2, for the purpose of achieving two-way flow on the international transmission pipeline T2;
- Upgrade of SMG Isaccea 3 and Negru Vodă 3, for the purpose of achieving two-way flow on the international transmission pipeline T3;
- Interconnection of the NTS to the GNL terminal located at the Black Sea shore.

The scenarios analysed under the 2020-2029 PDSNT were correlated with the European and regional development scenarios used by ENTSOG when developing the 10-year European Network Development Plan The European plan drawn up by ENTSOG covers European projects, some of which have the status of investment projects of common interest (PCI) with an impact on the interconnection capacity of the system.

The total value of the major/strategic NTS projects to be carried out over the period 2020-2029 is around EUR 4.12 billion, of which: major FID-status projects have a total value of EUR 766.34 million, major non-FID A-status projects have a total value of EUR 502.31 million, and major non-FID La-status projects have a total value of EUR 2.852 billion. Their financing will be provided as follows: approx. 32% from own sources and approx. 68 % from borrowed and non-repayable sources.

The Romanian projects of common interest included in the development plan of the TYNDP 2020 European natural gas transmission network have an estimated total value of approximately EUR 1.13 billion.
The status of major natural gas transmission projects covered by the 2020-2029 PDSNT submitted by the TSO according to the progress report of the projects in the 10-year investment and development plan approved by ANRE, pursuant to the provisions of Article 40, paragraph (2) of the Procedure concerning the substantiation and criteria for the approval of investment plans of transmission system operators, distribution system operators and storage of natural gas and GNL terminals, approved by means of ANRE Order No. 38/2019, with subsequent amendments and completions, is presented in the table below:

Name of the project	Works included	Status
The development on Romanian territory of NTS on the Bulgaria - Romania - Hungary - Austria BRUA corridor - Phase 1	The construction of 479 km of pipeline on the Podișor-Recaș route and 3 Podișor, Bibești and Jupa compression stations, with the provision of two-way gas flow.	Project finalised
The development on Romanian territory of NTS on the Bulgaria - Romania - Hungary - Austria BRUA corridor - Phase 2 (A non-FID project)	The construction of 50 km of pipeline on the Recaș-Horia route and the capacity enhancement of the 3 compression stations at Podișor, Bibești and Jupa and the SMG Horia station.	The technical design and technical documentation for building permits have been concluded The achievement of phase II depends on the successful unfolding of a market test process, as provided for in the Network code on capacity allocation mechanisms (NC CAM).
The development of the Southern Transmission Corridor to take over natural gas from the Black Sea shore, in conjunction with the implementation charts of the upstream off-shore projects. (FID project)	The construction of 308.3 km of pipeline on the Tuzla - Podișor direction, linking the gas sources available from the Black Sea coast to the BRUA corridor.	The final investment decision was reached. The deadline for completion has been postponed until 2022.
Interconnection of the NTS with the T1 international gas transmission pipeline and reverse flow Isaccea	Interconnection works concerning the NTS and the T1 international transit pipeline in the SMG Isaccea area and repair works on the 66 km Cosmești – Onești pipeline. Works to upgrade the stations from Siliștea, Onești, Șendreni.	Project finalised
Development in the	Construction of a 104.1 km long	Concluded procurement

North-East of Romania, in order to improve the gas supply and to ensure the transmission capacities to/from the Republic of Moldova. (FID project).	pipeline, on the Oneşti–Gherăeşti direction, Construction of a 61.05 km-long pipeline, on the Gherăești–Lețcani direction, The construction of two new gas compression stations in Oneşti and Gherăești	procedures, execution contracts concluded for the Onești-Gherăești-Lețcani pipeline, lot 1 and 2, and the two new compression stations Onești and Gherăești. The estimated deadline for completion is 2021
Enhancement of the bi-directional transmission corridor Bulgaria - Romania - Hungary - Austria BRUA phase 3 (LA non FID project)	Rehabilitation/replacement of existing pipelines belonging to the NTS; construction of new pipelines installed in parallel with existing pipelines; development of 4 or 5 new compression stations, with a total installed capacity of approx. 66-82.5MW; The capacity to transmitt natural gas to Hungary is increased by 4.4 billion mc/year.	The feasibility study on the development of this gas transmission corridor has now been elaborated. In order to optimize and streamline the implementation process and attract non-reimbursable financing, the passage was divided into two projects. Provision of reverse flow on the Romania-Hungary interconnection 2. Development of the NTS between Onești and Băcia: The estimated deadline for completion is 2026
New development of the NTS, in order to take over the gas from the shores of the Black Sea Vadu-T1 to the city of Grădina, Constanţa county (FID project).	The construction of 25 km of pipeline from the Black Sea shore to the international transmission pipeline T1, with a transmission capacity of 1.23 billion mc/year, according to the „open-season" process.	Concluded technical project, building permits and comprehensive decision have been obtained. The deadline for completion was postponed to 2021, in conjunction with the completion of offshore projects and the completed incremental capacity process.
Romania-Serbia interconnection (project A non-FID)	Construction of a new interconnection pipeline in the Recaș-Mokrin direction, totalling approx. 97 km, of which approx. 85 km on the territory of Romania and 12 km on the territory of Serbia. Construction of a gas measurement station (located on Romanian territory).	The feasibility study and the technical project have been concluded and technical documentation is being developed, in order to obtain the building permit and the start of the procedure for the procurement of execution works. The estimated deadline for completion is 2023
Upgrade of SMG Isaccea 1 and SMG Negru Vodă 1 (FID project).	Upgrade of gas measurement stations in bidirectional mode SMG Isaccea 1 and SMG Negru Vodă 1.	SMG Isaccea 1 - completed project, SMG Negru Vodă 1 project expected to be completed during 2021. The deadline for completion depends on the legal

		regulation of the territory
Interconnection of the NTS with Ukraine, on the Gherăești – Siret direction (LA non FID project)	Construction of a 146 km long transmission pipeline and related installations on the Gherăești – Siret direction; Construction of a cross-border gas measurement station; Enhancement of the Onești and Gherăești compression stations, if applicable.	The project is in an early phase, with the capacities to be developed under this project to be established at a later stage; only the pre-feasibility study has now been completed. All the other steps that will follow in the development of this project depend on the setting of parameters for the interconnection point and the project implementation schedule on the territory of Ukraine Expected completion date - year 2026
Development/upgrade of the natural gas transmission infrastructure in the Northwest area of Romania (LA non FID project)	Stage 1: Construction of the transmission pipeline and related installations in the Horia–Borș direction. Stage 2: Construction of the transmission pipeline and its installations in the Borș–Abrămuț direction; Construction of a compression station at Mediașu Aurit; Construction of the transmission pipeline and its installations in the Huedin–Aleșd direction. Stage 3: Construction of the transmission pipeline and its installations in the Abrămuț – Mediașu Aurit direction; Construction of the transmission pipeline and its installations in the Sărmășel–Mediașu Aurit direction.	For each of the three phases, the relevant pre-feasibility studies have been completed, and feasibility studies are currently in progress. The deadline for completion is staggered until 2026
Increase of the natural gas transmission capacity of the Romania-Bulgaria interconnection on the Giurgiu-Ruse direction (LA non FID project)	The construction of a new transmission pipeline and related facilities; Building of a new undercrossing on the Danube; SMG Giugiu amplification.	The estimated deadline for completion is 2027.
Eastring-România (LA non FID project)	Construction of a bidirectional flow gas interconnection pipeline with an annual capacity of between 20 billion mc and 40 billion mc, connecting Slovakia with the EU's external border via Hungary, Romania and Bulgaria,	The feasibility study according to which the project will be implemented in two phases, as follows, has now been completed: Phase 1 – maximum capacity of 20 billion mc/year;

	according to a feasibility study concluded in 2018.	completion deadline 2027, Phase 2 – maximum capacity of 40 billion mc/year, completion deadline 2030.
Monitoring, control and data acquisition system for NTS-related cathode protection stations (LA non FID project)	Implementation of centralized procurement, command and monitoring system for cathode protection stations.	Deadline for completion 2023
Development of the SCADA system for SNTGN (LA non FID project)	Upgrade of the SCADA system in decentralized architecture	Deadline for completion 2023
Upgrade of the SMG Isaccea 2 and SMG Negru Vodă 2, in order to achieve bidirectional flow on the T2 pipeline (LA non FID project)	Upgrade of stations, in order to ensure two-way flow at the border with Ukraine and Bulgaria on the T2 transit pipeline.	The project is currently elaborating the feasibility study and will be developed in the light of the results of the assessment of market demand for incremental capacity for interconnection points located on the T2 and T3 pipelines in the Bulgarian – Romania – Ukraine transmission direction. Estimated completion deadline - 2024
Upgrade of the SMG Isaccea 3 and Negru Vodă 3, in order to achieve bidirectional flow on the T3 pipeline (LA non FID project)	Upgrade of stations, in order to ensure two-way flow at the border with Ukraine and Bulgaria on the T3 transit pipeline.	The project is in its early phase and will be developed depending on the results of the assessment of market demand for incremental capacity for the interconnection points located on the T2 and T3 pipelines in the Bulgarian – Romania – Ukraine transmission direction. Estimated completion deadline - 2028
Interconnection of the NTS to the GNL terminal located at the Black Sea shore (LA non FID project)	Construction of the interconnection of the NTS to the GNL terminal by means of building a transmission pipeline, approximately 25 km long, from the Black Sea shore to the T1 and T2 pipelines.	The project is in its early stages. Estimated completion time: 2028
Upgrade of the storage system in the Bilciurești warehouse (FID project)	Increase of daily delivery capacity by upgrading the Bilciurești warehouse, upgrade of Butimanu plant, upgrade of 39 injection/extraction wells, drilling of 4 new wells, 11 km pipeline	The feasibility study was concluded and the partial upgrading of surface technology facilities was carried out. The construction of the drying station is

	between the Bilciureşti warehouse and Butimanu.	currently being carried out. Deadline for completion 2025
Increase of underground storage capacity at the Gherceşti warehouse (LA non-FID project)	Increase of daily delivery capacity by upgrading the Gherceşti storage facility with the construction of new compression, measurement, drying stations, upgrading of 20 injection-extraction wells and interconnection with NTS.	Feasibility study under development. Deadline for completion 2026
New underground storage of natural gas in Fălticeni (LA non FID project)	Increase storage capacity, in order to ensure security of gas supply, by converting underground production deposits in Pocoleni, Comăneşti, Todireşti or Devideni into underground storage facilities, building of compression, measurement, drying, injection-extraction wells and interconnection with NTS.	The feasibility study is currently under development. The estimated deadline for completion is 2029.
Increase of underground storage capacity at the Sărmășel storage facility (A non-FID project).	Development of the Sărmăşel warehouse, increase of the injection and extraction capacity, increase of the compression capacity, by extending the existing installations, with the following objectives: • drilling of 38 new wells; • 48.6 km supply pipelines, • 8 groups; • 19.2 km collector pipes; • 3 compression units; • 2 gas drying installations, • separation and measurement system (SMS); • renewable energy production system; • connection to the National natural gas transmission system (NTS).	Concluded feasibility study, upgraded 6 injection-extraction wells, in progress - 12 injection-extraction wells. Deadline of completion: 2026.
Storage unit — Depomureş (A non-FID project)	Upgrading and development of the underground storage facility Târgu-Mureş, by increasing the capacity from 300 billion mc to 600 billion mc and increasing the daily injection/extraction capacity from a current average of ca. 1.7 million mc/day to approx. 5 million mc/day, in two stages.	Collector pipes, surface installations, compressor unit, gas drying station are all finalised. Deadline of completion: 2023

Monitoring the achievement of the transmission system operator's annual investment plans

The following summary table presents the total value, in RON, of tangible and intangible assets achieved by the transmission system operator in 2020 and financed from own sources, as compared to the value of the investment plan assumed by the TSO for 2020.

Group/subgroup	Tangible and intangible assets	Investment Plan 2020	Investments achieved in 2020 according to the 2020 plan	Investments achieved in 2020 in addition to the plan	Investments achieved in 2020, recovered since the previous year	TOTAL investments achieved in 2020
Group 1	Constructions	1.213.482.984	654.817.647	15.341.860	392.967.452	1.063.126.959
Subgroup 1.1	Buildings	4.815.107	0	65.495	0	65.495
Subgroup 1.2	Light construction (rods, shelters, etc.)	0	52.800	0	553.141	605.941
Subgroup 1.3	Collector and main pipelines (including technology installations, related facilities and equipment)	1.156.078.774	651.839.183	13.385.193	388.268.643	1.053.493.019
Subgroup 1.5	Steel distribution ducts	0	0	0	21.382	21.382
Subgroup 1.7	Other constructions	52.589.103	2.925.664	1.891.172	4.124.285	8.941.121
Group 2	Technological equipment, machinery and work equipment	42.484.205	5.125.745	0	767.404	5.893.149
Group 3	Measuring, control and adjustment apparatus and installations	6.494.481	5.901.136	196.563	3.549.619	9.647.318
Subgroup 3.1	Volumetric membrane meters, ultrasonic	190.656	185.170	0	356.236	541.406

	meters, other deprimogen element systems					
Subgroup 3.2	Rotary piston meters, turbine meters	3.444.060	467.223	0	136.500	603.723
Subgroup 3.3	Electronic converters, flow calculators, other apparatus and equipment for measuring, checking and regulating	2.859.765	5.248.743	196.563	3.056.883	8.502.189
Group 4	Means of transmission	6.453.018	7.600.390	661.000	0	8.261.390
Group 5	Other tangible and intangible assets	14.796.179	11.644.086	0	5.325.893	16.969.979
TOTAL, of which:		1.283.710.867	685.089.004	16.199.423	402.610.367	1.103.898.794
In system		1.219.525.324	655.875.903	15.498.971	392.371.404	1.063.746.278
In endowments		64.185.543	29.213.101	700.452	10.238.963	40.152.516

Thus, out of the total investments achieved in 2020 by SNTGN Transgaz SA of RON 1,684,480.872, the value financed from own sources is RON 1,103,898,794 and the value financed from non-reimbursable European funds amounts to RON 580,582,078.
From the amount financed from own sources:
approx. RON 685 million represents the planned and achieved investments in 2020;
approx. RON 16.2 million represents the investments achieved in 2020 in addition to the plan;
approx. RON 402.6 million represents the unachieved investments in 2019, which had to be recovered by 31.12.2020, in accordance with the provisions of Article 37, paragraph (4) of the procedure approved by means of ANRE Order No. 38/2019.
Of this value, RON 1,063,746,278 represents the total value of the tangible and intangible assets of the system, i.e. 96% of the total achieved value.
The following projects can be listed among the most significant objectives commissioned in 2020:
The development on Romanian territory of the NTS on the Bulgaria - Romania - Hungary - Austria corridor, phase 1 (BRUA - phase 1), with a value of approximately RON 1494.2 million out of which RON 915.6 million from own sources;
The Craiova-Segarcea-Băilesti-Calafat natural gas transmission pipeline, stage I, Craiova-Segarcea section, with a value of approximately RON 49.3 million;

Reengineering of pipes, connections, adjustment and measurement stations, worth RON 34.7 million.
As regards the achievement of the investment plan for 2019, the OTS carried out during 2019 and recovered in 2020 the outstanding investments, so that the total value of the investments comprised of those included in the investment plan for 2019 was RON 445,711,396, out of which direct investments in the system amounted to RON 411,513,006. By reporting these values to the total planed value of RON 394,210,519 (modified value on October 1st, 2020 according to the provisions of the procedure), out of which the planned value of direct investments in the system was RON 346,487,318, the degree of achievement of the investment plan for 2019 is thusly determined, in accordance with the provisions of Article 34, paragraph (2) of the procedure approved by means of ANRE Order No. 38/2019, namely 118.8 %, which significantly exceeds the minimum degree required of 95 %.
The degree of achievement of the annual investment plan for 2020, established in accordance with the provisions of Article 34, paragraph (2) of the procedure approved by means of ANRE Order No. 38/2019 by comparing the achieved value of tangible and intangible assets in the system of RON 671,374,874 to the planned value of RON 1,219,525,324, was 55.05%.
According to the procedure, the degree of achievement of the 2020 investment plan will be re-assessed after the first 10 months of 2021, and the operator is entitled to recover the unachieved investments in the previous year and a level higher than 95 % must be achieved.
For 2021, SNTGN Transgaz SA estimated investments totalling RON 891,645,073, out of which investments in the system amounted to RON 804,690,475. The TSOs also informed ANRE of their intention to recover late investments in 2020 during the first half of 2021, totalling approximately RON 737 million.
The following projects can be listed among the most significant objectives planned to be put into operation in 2021:
The development on Romanian territory of the NTC on the Bulgaria - Romania - Hungary - Austria corridor, phase 1 (BRUA - phase 1), deadline of works: 2020, worth RON 269.4 million, own sources;
Upgrade of the Silișteand Onești compression stations, in order to interconnect with Isaccea station, worth RON 364 million, own sources;
Upgrade of the Isaccea 1 measuring station, worth RON 65.1 million, own sources;
Natural gas transmission pipeline Mintia - Brad - Ștei, worth RON 22.6 million, own sources;
The development of the NTS in the North-East of Romania, in order to improve the natural gas supply of the area, as well as to ensure the transmission capacities to the Republic of Moldova, with an estimated value of approximately RON 864 million, out of which RON 650 million from the operator's own sources;
New development of the NTS to take over the gas from the Black Sea shore (Vadu-T1), with an estimated value of approximately RON 38 million;
The natural gas transmission pipeline Câmpulung Moldovenesc - Vatra Dornei, Pojorâta - Vatra Dornei section, whose estimated value amounts to over RON 16 million;
Reengineering of pipes, connections, adjustment and measurement stations, worth RON 73 million.

Monitoring of the implementation of the annual investment plans of gas storage operators

The total value of the investments achieved in 2020 by DEFPOGAZ S.A. is RON 27,022,386. Out of this value, tangible and intangible assets related to the storage system represent 91.73% and RON 24,787,637, the rest representing the acquisition of equipment.

By comparing the achieved value of tangible and intangible assets in the system to their planned value of RON 23,576,676, a degree of achievement of the investment plan in 2019 of 105.14% was computed.
The operator DEPOGAZ S.A. applied for and obtained, in the course of 2020, the issuance by ANRE of Decision No. 838/25.05.2020, approving the cross-border cost allocation method for the project of common interest No. 6.20.6 - „Underground gas storage unit in Sărmăşel, Romania!, part of the 6.20 project group — Increasing storage capacity in South-East Europe, in accordance with the provisions of Regulation (EU) No. 347/2013 of the European Parliament and of the Council of 17 April 2013 on guidelines for trans-European energy infrastructure, repealing Decision No. 1364/2006/EC and amending Regulations (EC) No. 713/2009, (EC) No. 714/2009 and (EC) No. 715/2009. The project has economic benefits for the NTS and at regional level, established in accordance with the calculation principles set out in ENTSOG methodology for cost-benefit analysis for gas storage projects, but is only feasible if non-refundable financing is obtained through the Connecting Europe Facility mechanism.
For 2020, the storage system operator DEPOMUREȘ S.A. did not plan any investments. The operator intends to carry out the project of European interest „Storage Unit Depomureș, Romania" - phase 1, part of the project group 6.20 — Increase of storage capacity in South-East Europe from the fourth list of projects of common interest of the European Union approved by means of Commission Delegated Regulation (EU) 2020/389 of 31 October 2019 amending Regulation (EU) No. 347/2013 of the European Parliament and of the Council as regards the European Union list of projects of common interest. In the course of 2020, this operator submitted an investment request to ANRE, in accordance with Regulation (EU) No. 347/2013 of the European Parliament and of the Council of 17 April 2013 on guidelines for trans-European energy infrastructure, repealing Decision No. 1364/2006/EC and amending Regulations (EC) No. 713/2009, (EC) No. 714/2009 and (EC) No. 715/2009, indicating that the project is only feasible if non-reimbursable funding is obtained through the Connecting Europe Facility mechanism. ANRE approved, in this regard, Decision No. 754/12.05.2020 for the approval of cross-border allocation of project costs.
For 2021, DEPOGAZ S.A. estimated investments totalling RON 41,115,104, out of which the value allocated to tangible and intangible assets destined for the system amasses RON 39,868,709, representing 97% of the total, while DEPOMUREȘ S.A. predicted investments totalling RON 160,000, out of which the value allocated to tangible and intangible assets destined for the system amasses RON 150,000, or 93.75% of the total.

Monitoring the implementation of the annual investment plans for gas distribution systems

The total value of the achieved investments, i.e. the value of the fixed assets resulting from the investments achieved by the distribution system operators at national level in 2020, amasses RON 492.5 million, with an increase of about RON 105 million (approx. 27%), when compared to the investments achieved in 2019. This includes the investments in the proposed plan for 2019, which were recovered throughout 2020, in the legal period of 12 months. The net value of investments achieved in 2020, corresponding only to those included by operators in the plans they took on for 2020, amasses RON 453 million.
As regards the investments that the two operators distributing for more than 100.000 users, i.e. S.C. Delgaz Grid S.A. And S.C. Distrigaz Sud Rețele SRL, achieved in 2020, according to the plans taken on for 2020, the total value thusly achieved amounts to approximately RON 381.5 million, representing 84.2% of the total value of investments achieved in the natural gas distribution systems at national level.

From the point of view of the structure of the value of the investments achieved in 2020 by the two major distributors, approximately RON 308.2 million, and 80.7% of the total, represent the value of the tangible and intangible assets belonging to the system. Compared with the provisions of Article 22, paragraph (2) of the procedure approved by means of ANRE Order No. 38/2019, with subsequent amendments and completions, according to which for DSOs distributing natural gas to more than 100.000 consumers, the value of the investments resulting in tangible and intangible assets belonging to the scheme must represent at least 85 % of the total value of the annual investment plan, we consider that this percentage is to be reached after the operators have recovered in the legal period, i.e. by 31.10.2021, works included in the 2020 investment plan.

Acting in accordance with the provisions of Article 34, paragraph (2) of the abovementioned procedure, the operator is required to make annual investments from own sources, resulting in the system's tangible and intangible assets amounting to at least 95 % of the total value contained in the annual investment plan approved by ANRE for that relevant year. In this respect, the analysis of ANRE showed that 31 of the 18 operators fulfilled the percentage requirement thusly imposed, with the remaining operators being obliged to recover the unachieved investments in accordance with Article 34, paragraph (4) of the same procedure, in the first 10 months of 2021, respectively. The cumulative value of the investments unachieved and that are to be recovered within the above deadline is approximately RON 23.2 million.

The situation which reflects the degree of achievement of the investments from own sources, undertaken by operators in the 2020 plans, is summarized in the following table.

Operator	TOTAL planned investments	TOTAL achieved investments	Total degree of achievement	Planned system investments	Achieved system investments	Degree of achievement of investments in the system
	(mio. RON)	(mio. RON)	(%)	(mio. RON)	(mio. RON)	(%)
Distrigaz Sud Rețele	224.95	205.97	91.56	191.86	170.31	88.76
Delgaz Grid	180.30	175.56	97.37	140.18	137.87	98.35
Others (29 DSOs)	77.94	71.53	91.77	71.72	65.36	91.13
TOTAL	483.19	453.06	93.76	403.77	373.54	92.51

In order to assess the degree of achievement of the 2019 investment plans, the recovered works, i.e. those included in the 2019 investment plan, but commissioned in 2020, were extracted from the total value of the investments achieved by the operators throughout 2020, within the legal deadline of 12 months.

Thus, as regards the degree of achievement of the investment plans for 2019, the situation is presented in the following table:

Operator	Planned investments for 2019	Achieved investments for 2019	Investments recovered in 2020	TOTAL investments for 2019	The degree of achievement of investments
	(mio. RON)	(mio. RON)	(mio. RON)	(mio. RON)	(%)
Distrigaz Sud Rețele	178.5	152.5	33.36	185.86	104.1
Delgaz Grid	164.2	162	0	162	98.6
Others (29 DSOs)	78.8	72.15	6.13	78.28	99.3
TOTAL	421.5	386.6	39.49	426.14	101.1

For 2021, distribution system operators have proposed to carry out own-source investments totalling approximately RON 727 million, up by approx. 50 %, when compared to the total amount of the plans for 2020. Of this, RON 646 million represent direct investments in the system.
The two operators that distribute for more than 100.000 clients, Distrigaz Sud Rețele and Delgaz Grid scheduled investments worth approximately RON 641.7 million for 2021, representing approx. 88 % of the total value scheduled for 2021 by all Romanian gas distribution system operators.

Aspects regarding technical operation (congestion management, performance standards, network security, grid connection, technical cooperation of TSOs with third parties, investment in generation capacity in relation to operational security)

The monitoring of performance indicators and the technical state of the natural gas networks is presented in the report on the performance indicators for gas transmission and distribution services and the technical state of the natural gas networks - 2020 - published on the ANRE website, available at: https://www.anre.ro/ro/gaze-naturale/rapoarte/rapoarte-indicatori-de-performanta.

Technical state of the national gas transmission system

The activity of transmission of natural gas is carried out by S.N.T.G.N. Transgaz S.A. under the gas transmission system operating license No. 1933/20.12.2013, issued by ANRE, valid until 08.07.2032.

Natural gas is transmitted through main pipelines and supply connections, amassing over 13,925 km in length and between 25 mm and 1200 mm in diameter, and through relevant installations, equipment and endowments, at pressures between 6 bar and 63 bar, ensuring the take-over of natural gas extracted from the production perimeters, underground storage and imported storage facilities and subsequent transmission for delivery to end consumers in the internal and external gas market. As regards the operating pressure of the transit pipelines, it is set at 54 bar.

Main components of the NTS in terms of natural gas as of 31.12.2020

- 13,925 km of main pipelines and gas supply connections, of which 369 km are transit pipelines and 479 km are connected to the BRUA main line;
- 1,128 gas measurement stations / 1,233 directions of measurement;
- 4 gas measurement stations for international transmission;
- 7 gas measurement stations for import;
- 58 valve/technological node control stations (SCV, NT);
- 7 physical entry/exit points connected to storage facilities,
- 6 gas compression stations (GCS);
- 1,041 cathode protection stations (CPS);
- 982 gas odorisation stations (GOS).

The report on the service life of the NTS components, which were in use on 31.12.2020, is shown in the following table:

Service life	Transmission lines and supply connections at 31.12.2020 (km.)	Total number of measuring directions for the measurement adjustment stations (SRM) at 31.12.2020	Number of measurement adjustment stations on gas transit pipelines (SMG) at 31.12.2020	Number of imported gas measurement adjustment stations (SMG) at 31.12.2020	Number of cathode protection stations (SPC) at 31.12.2020	Number of valve control stations (SCV-NT) at 31.12.2020	Number of gas compression stations (SCG) at 31.12.2020
≥ 40 years	7,413	150	0	2	73	13	1
between 30 and 40 years	1,839	59	0	0	25	2	1
between 20 and 30 years	1,095	308	2	2	59	2	0
between 10 and 20 years	2,248	549	2	0	761	14	0
between 5 and 10 years	679	117	0	1	105	3	0
≤ 5 years	651	50	0	2	18	24	4
TOTAL	13,925	1,233	4	7	1,041	58	6

Changes since the previous year are highlighted in the following summary table :

Crt. No.	Objective name/NTS component	M.U.	Total as of 31.12.2019	Achievements in 2020	Total as at 31.12.2020	Change compared to 2019 (%)
1	Main transmission lines and supply connections,	km	13,061	495	13,556	+3.8

	except transit (					
2	Transit pipelines	km	369	0	369	0
3	Total number of gas measurement stations/directions of measurement	pcs.	1,128 /1,233	0	1,128 /1,233	0
4	Interconnection points with storage facilities	pcs.	7	0	7	0
5	Gas measurement stations located on the transit pipelines	pcs.	4	0	4	0
6	Gas measurement stations – import	pcs.	7	0	7	0
7	Cathode protection stations (SPC)	pcs.	1,038	+3	1,041	+0.3
8	Valve / technology nodes control stations (SCV-NT)	pcs.	58	0	58	0
9	Gas compression stations (SCG)	pcs.	5	1	6	+20
10	Gas odorisation stations (SOG)	pcs.	902	+80	982	+8.8

Throughout 2020, the national transmission system registered the following changes:
- the overall length of pipes and connections has increased by 3.7 %, by means of 497.5 km of new pipeline and supply connections and decommissioning of 2.5 km of pipes;
- 8 new regulation-measurement stations have been upgraded
- three new cathode protection stations have been put into operation, bringing the total number up to 1041,
- the international transmission pipeline T1 and Isaccea 1-Negru Vodă 1 was connected to the NTS, so today the NTS has two new interconnection points with neighbouring transmission systems, which increases the efficiency of the operation of the NTS by increasing import/export capacity;
- 80 new gas odorisation stations have been commissioned, bringing the total number of these stations up to 982, representing an increase of approx. 9 % compared with the previous year;
- a new gas compression station (SCG) has been set up, bringing the total up to 6, in order to balance the pressure in the internal network with that of adjacent systems and to increase the amount of gas transmitted internally.

Technical state of the gas distribution systems

The 31 natural gas distribution operators, licensed by ANRE, held, as of 31.12.2020, gas distribution pipelines and subsequent connections of a total length of over 54,209 km. Of that, 64.10% of the total were polyethylene networks, which have seen a sharp increase over the last 20 years.
The following table shows the service life of ducts and connections of polyethylene and steel gas distribution systems at the end of 2020:

Age of the network	Objective length OL	Objective length PE	Total objective length	
(years)	(km)	(km)	(km)	(%)
≥40	1,626	0	1,626	3.0
[30;40)	2,477	0	2,477	4.6
[20;30)	11,911	1,732	13,643	25.2
[10;20)	3,139	17,821	20,960	38.6
10	291	15,192	15,483	28.6
Total	19,464	34,745	54,209	100

Of the total of **54,209 km**, more than 28% represent networks that are less than 10 years old, and 38.66% of them are between 10 and 20 years old On the other hand, 25.17% represent pipelines and connections between 20 and 30 years old, while only 7.61% are more than 30 years old

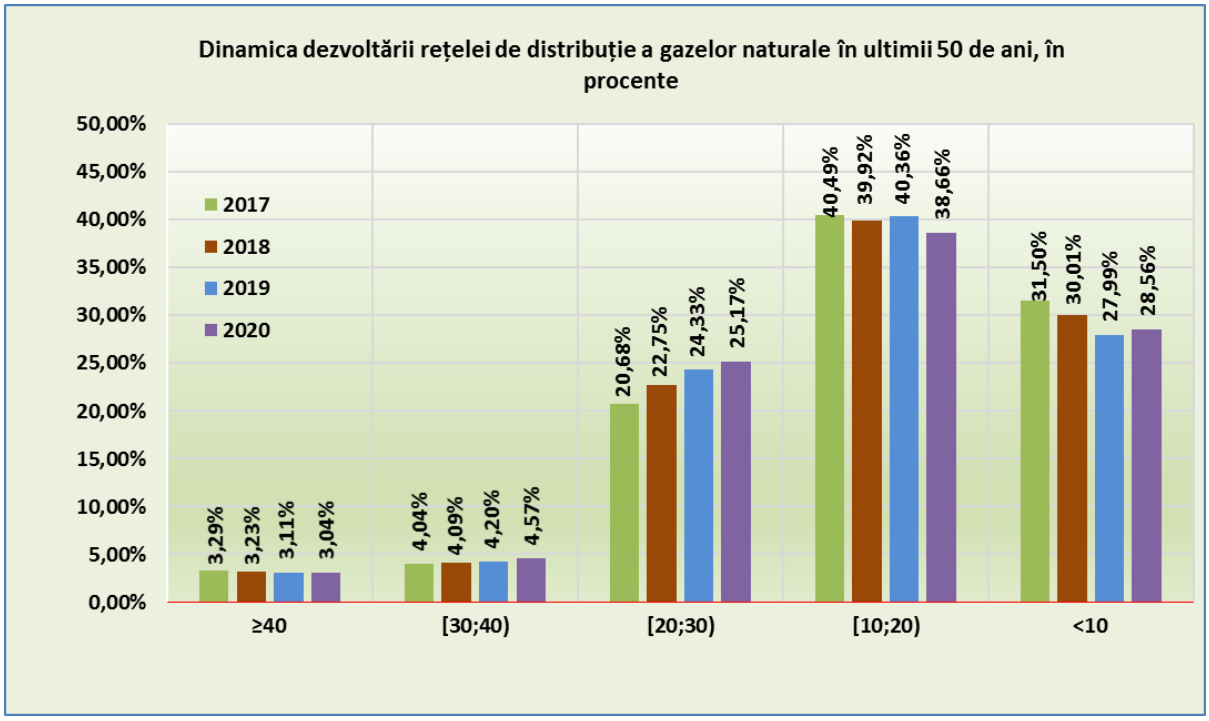
Compared to the previous gas year, it is noted that the national gas distribution network has expanded by 1,950 km, which represents an increase of around 3.7%.
It is noted that the total value of the gas distribution network as of 31.12.2019, as specified in the ANRE activity report for 2019, of 56,694 km, was affected by a material error. Thus, at the end of 2019, the gas distribution system amounted to a total length of 52,259 km. The increase compared to 2018 was of 1,244 km, which represents an increase of 2.44%.

The share of polyethylene and steel pipelines, broken down by age bands of the total length of pipelines of natural gas distribution systems, is shown in the following table:

Network age (years)	Percentage OL (%)	Percentage BM (%)
≥40	3	0
[30;40)	4.6	0
[20;30)	22	3.2
[10;20)	5.8	32.8
10	0.6	28
Share of total (%)	36	64

The following table shows the dynamics of the development of the gas distribution network over the last 3 years, depending on its age:

Network age (years)	In the year 2018	In the year 2019	In the year 2020
≥40	3.3 %	2.9 %	3.0 %
[30;40)	4 %	3.9 %	4.6 %
[20;30)	22.7 %	23.2 %	25.2 %
[10;20)	40 %	43.5 %	38.6 %
10	30 %	26.5 %	28.6 %



Translation: Dynamic of the development of the natural gas distribution network in the past 50 years, in percentages

Monitoring of the time taken for transmission system connections

The performance standard for the transmission and gas system service states that for the construction of a new connection to the ST or for the modification/relocation of an existing one, the TSO shall complete the works and operate the connection installation within the time limit set in the connection contract. From the records submitted at Transgaz level, no connection installations were executed and commissioned in the gas sector-relevant year 2019-2020.

Monitoring of the time needed for connections in distribution systems

In the year 2019-2020, all distribution operators (DSOs) registered a total of 69,671 connection requests, a value close to that of 01.10.2018-30.09.2019.
In this context, for the 41,217 connections that the distribution system operators commissioned in the period 01.10.2019-30.09.2020, the average duration of the connections was 132 days, calculated from the date of registration of the applicant's request in this regard, accompanied by the full documentation.

As compared to the previous year, there is a 17-day increase in the waiting period for the applicants (the average time taken for the connection to be carried out between October 2018 - Sept. 2019 amassed 115 days). According to the substantiations provided by the operators, this situation was mainly caused by the significant increase in the number of connections implemented in the context of the restrictions imposed by the Covid-19 pandemic. The substantial volume of works, generated mainly by real estate development, but also by the increase in consumption by directing clients toward the use of natural gas instead of other traditional fuels, and the entry into force of Law No. 155/2020, which provides for the financing of connection works with the operators' own funds, it has had a significant impact on the ability of authorized economic operators to comply with the contractual deadlines.

However, during the previous year (01.10.2018-30.09.2019), only 29,066 connections had been commissioned, which represents a 41.8 % increase in the volume of works during the monitored period, which have been carried out with the same labour force and under special conditions caused by the emergency and alert state.
With regard to the 4,098 extensions/resizes of the gas objectives/pipelines commissioned by distribution system operators during the period 01.10.2019-30.09.2020, the duration of their achievement has entailed an average 217-day delivery period, calculated from the date of submission of the application by the applicant, accompanied by the full documentation. In this case, too, it is noted that, although the number of pipeline extensions practically doubled from the previous year, the execution period remained almost the same, the increase amassing only one day (the average time of completion between October 2018 - Sept. 2019 amassed 216 days).

Monitoring of the performance indicators of the gas transmission service

The performance indicators for the transmission and system gas services shall relate to:
- recording and handling of user requests/complaints concerning the transmission and gas system service;
- access to the gas transmission system;
- connection to the natural gas transmission system;
- restoration of land and/or property affected by work carried out on the infrastructure of the gas transmission system;
- compliance with the conditions for delivery and take-over of natural gas;
- limitation/interruption of the transmission and system service of natural gas.

The transmission system operator shall be released from the obligation to comply with the standard performance indicators in emergency and force majeure instances, instated in accordance with the legal provisions, and in the emergence of partial or total technical restrictions on an upstream system.

The summary of the specific transmission service and gas system performance indicators and their development, compared to the previous year, is outlined in the following table:

Summary of the transmission service performance indicators

Specific performance indicator	Reference value of the indicator (%)	Analysis year 2019-2020 (%)	Fulfilment of the performance condition %	Prior year 2018-2019 (%)	Development of the indicator (±%)
IP01	90	99.58	yes	97.15	+2.43
IP11	95	---	-	100	---
IP12	95	---	-	100	---
IP13	95	100	yes	99.38	+0.62
IP14	95	100	yes	---	---
IP15	95	100	yes	---	---
IP21	95	97.37	yes	100	-2.63
IP22	95	---	-	---	---
IP31	95	100	yes	100	0
IP32	95	---	-	100	---

IP33	95	---	-	100	---
IP34	95	---	-	100	---
IP41	95	---	-	---	---
IP51	98	100	yes	99.61	+0.39
IP52	98	100	yes	100	0
IP61	98	100	yes	100	0
IP62	98	100	yes	100	0
IP71	80	93.88	yes	97.27	-3.39
IP81	98	100	yes	100	0
IP82	98	---	-	---	---
IP91	90	---	-	---	---

NOTE: The fields marked with (-----) are those for which the indicators have not been calculated, because there were no requests or referrals on the basis of which they are to be determined.
In conclusion, it can be noted that all gas transmission and system performance indicators for the year between 1.10.2019 and 30.09.2020 have values above the reference values and that their degree of achievement, in terms of compliance with the minimum levels laid down in the standard, is 100%. Compared to the previous gas year (01.10.2018 to 30.09.2019), the values of performance indicators are high, which means that the quality of service standard offered by S.N.T.G.N. Transgaz S.A. is maintained.

Monitoring of performance indicators of the gas distribution service
The performance indicators for the distribution and system service shall relate to:
- recording and handling of complaints/referrals/requests from users concerning the gas distribution and system service;
- contracting the gas distribution service;
- compliance with the delivery and take-over of natural gas;
- connection to the gas distribution system;
- restoration of land and/or property affected by the execution of works on the objectives of the gas distribution system;
- limitation/interruption of the supply of the gas distribution and system service.

Natural gas distribution system operators (DSOs) are exempted from the obligation to comply with the performance indicators imposed by the standard in emergency situations and in case of force majeure events, instated in accordance with the legal provisions, and from the emergence of partial or total technical restrictions on an upstream system.

In order to show the quality of service provided by distribution operators in the year under consideration, as compared to the previous year, the average recorded values of performance indicators in these two years are shown in the following table.

Summary of distribution service performance indicators – country-weighted averages

Specific performance indicator	Reference value of the indicator (%)	Analysis year 01/10/2019 - 30.09.2020 (%)	Fulfilment of the performance condition %	Prior year 1.10.2018 - 30.09.2019 (%)	Development of the indicator (±%)
IP01	90	99.92	yes	93.49	+6.43
IP11	90	99.96	yes	99.34	+0.62

IP12	95	97.36	yes	98.02	-0.66
IP13	95	96.30	yes	98.25	-1.95
IP14	95	99.05	yes	95.16	+3.89
IP21	95	Repealed	----	96.47	----
IP22	95	Repealed	----	90.83	----
IP31	95	95.90	yes	86.58	+9.32
IP31-1	95	93.29	no	89.77	+3.52
IP32	95	95.36	yes	83.67	+11.69
IP33	95	93.87	no	83.30	+10.57
IP34	95	97.53	yes	94.40	+3.13
IP35	95	94.46	no	84.59	+9.87
IP35-1	95	95.72	yes	96.64	-0.92
IP35-2	95	95.42	yes	84.35	+11.07
IP41	90	89.40	no	92.86	-3.46
IP51	95	100	yes	99.90	+0.10
IP61	98	100	yes	99.97	+0.03
IP71	80	97.58	yes	90.46	+7.12
IP81	98	99.10	yes	97.71	+1.39
IP91	90	98.19	yes	100	-1.81

The situation presented shows that, in general, the performance indicators of the gas distribution service have been met or the average values are close to the minimum threshold set out in the standard. Three of the eight indicators that are part of the general indicator IP3 regarding the connection to the system do not fall within the limits imposed by the standard, but are close.

Although the improvement compared to the previous gas year is obvious, thanks to the increase of the levels, there are still difficulties for operators in connecting applicants to gas distribution systems.

Given the improvement of the indicators compared to the previous year in view of the difficulties experienced since March 2020, the results achieved can be classified as positive.
The IP3 indicator is one of the most important ones, and operators need to intervene with the necessary measures, in order to reduce the connection time and to meet the regulatory deadlines in what concerns the following:

- drawing up the necessary documentation;
- submitting it to the competent institutions, for the purpose of obtaining endorsements and authorizations;
- execution of pipe extensions and connections;
- commissioning of the objectives.

Implementation of these measures could lead to higher than the minimum values set out in the standard for all IP3 indicators.

The following table shows the status of planned and unplanned outages in the provision of the gas distribution and system service and the notification performance indicators for users affected by such outages.

The status of planned and unplanned outages in the provision of the gas distribution and system service

No.	DSO	Intr. Planed	Number of users affected by planed outage	Notification degree within 12 hours (%)	Intr. Unplanned	Number of users affected by unplanned outage	Notification degree at least 2 days in advance (%)
1	DELGAZ GRID	2,795	441,278	100	121	12,064	100
2	DISTRIGAZ SUD RETELE	3,308	455,199	100	169	29,789	100
3	Distributors for less than 100.000 users	805	27,455	100	810	15,584	100
4	TOTAL	6,908	923,932	100	1,100	57,437	100

The resulting conclusion is that all distribution system operators paid particular attention to notifying clients affected by both unplanned and planned outages, and managed to fully notify the affected users.

Achievement of the annual maintenance plan for the gas transmission system

In order for the natural gas transmission and system operator SNTGN Transgaz S.A. (TSO) to be able to fulfil its legal obligations regarding the maintenance and rehabilitation of the system it operates, under conditions of efficiency and environmental protection, it is obliged to carry out specific annual maintenance operations, according to an annual plan taken on based on the procedure approved by means of ANRE Order No. 38/2019.
The maintenance work is carried out in accordance with the technical standards for the design and execution of natural gas transmission pipelines, approved by means of ANRE Order No. 118/2013, with subsequent amendments and completions. In the year 2020, the TSO carried out maintenance work according to the data shown in the following table. The degree of implementation of the maintenance plan in the year 2020 is approx. 36%, well below the 90% minimum threshold imposed by the regulatory framework.

Year 2020		Planned	Achieved	Degree of achievement
		(RON)	(RON)	(%)
Maintenance work	Preventive	20,249,962	6,193,634	30.59
	Corrective	11,655,438	5,333,069	45.76
	Total	31,905,400	11,526,703	36.13
Maintenance services		32,150,052	11,338,939	35.27
Total maintenance, of which:		64,055,452	22,865,641	35.70

Among the causes that led to the failure of the planned maintenance plan objectives reported by the gas transmission operator were the following:
-emergency/alert states;
-epidemiological status of the execution staff;
-impossibility of stopping the flow of natural gas throughout the cold season;
-late completion of procurement procedures for part of the planned works;
-problems related to the delay in granting access rights to the national forest fund;
-failure to complete the design for part of the planned works;

-issues with the supply of materials to workers, mainly due to the Covid-19 pandemic, which has severely affected the activity of many suppliers.
Internal problems have also been encountered as a result of the development of the SARS COV2 pandemic: travel reduction, home-based deployment (work from home) for most activities, cumbersome communication infrastructure, reduction of partners' activity, etc.
Given the low degree of achievement of the TSO maintenance plan, ANRE intends to verify the reasons invoked by the operator, in order to determine whether they are objective or reflect defective internal management, as well as to determine the necessary measures to be taken.
For 2021, SNTGN Transgaz SA forecasted works and maintenance services totalling RON 49,879,064.

Achievement of the annual maintenance plan for gas distribution systems
The operation, maintenance, repair and rehabilitation of natural gas systems shall be carried out in accordance with the Technical norms for the design, execution and operation of natural gas supply systems, approved by means of ANRE Order No. 89/2018, with subsequent amendments and completions.
According to the provisions of the procedure approved by means of ANRE Order No. 38/2019, with subsequent amendments and completions, DSOs are required to carry out annual maintenance work of at least 90% of the total value of the annual maintenance plan.
The following table shows the values of the total preventive and corrective maintenance works carried out during 2020 by the two major national gas distribution system operators (Delgaz Grid and Distrigaz Sud Rețele) and the other 29 operators (aggregated).
The conclusion that can be drawn from the information submitted is that distribution system operators have carried out the maintenance plans they have undertaken for 2020, in terms of the minimum degree of achievement.

Operator	Total planned maintenance	Total carried out maintenance	Degree of achievement	Planned preventive maintenance	Achieved preventive maintenance	Degree of achievement	Planned corrective maintenance	Carried out corrective maintenance	Degree of achievement
	(RON)	(RON)	(%)	(RON)	(RON)	(%)	(RON)	(RON)	(%)
Distrigaz Sud Rețele	345,394,602	342,282,436	99 %	220,907,993	211,437,006	96 %	124,486,609	130,845,430	105 %
Delgaz Grid	270,600,579	255,259,397	94 %	153,482,548	160,786,052	105 %	117,118,031	94,473,345	81 %
Others (29 DSOs)	18,171,098	19,036,839	105 %	13,541,079	14,841,260	110 %	4,630,018	4,195,579	91 %
TOTAL	634,057,821	616,578,672	97 %	387,809,723	387,064,318	99.8 %	246,248,097	229,514,354	93 %

Implementation of the annual maintenance plan for gas storage systems

The following table shows the values of the total, preventive and corrective maintenance works carried out during 2020 by the two gas storage operators, with the mention that only Depomureș met the condition set out in the procedure, relating to the 90% minimum achievement degree in what concerns maintenance works.

Operator	Total planned maintenance	Total carried out maintenance	Degree of achievement	Preventive maintenance planned	Preventive maintenance achieved	Degree of achievement	Planned corrective maintenance	Carried out corrective maintenance	Degree of achievement
	(RON)	(RON)	(%)	(RON)	(RON)	(%)	(RON)	(RON)	(%)
DEPOGAZ	17,619,956	11,665,257	66 %	12,289,770	9,383,412	76 %	5,330,186	2,281,845	43 %
DEPOMUREȘ	1,840,842	1,788,621	97 %	432,364	410,168	95 %	1,408,478	1,378,453	98 %
TOTAL	19,460,798	13,453,878	69 %	12,722,134	9,793,580	77 %	6,738,664	3,660,298	54 %

As the operator of Depogaz has not provided justification for the low level of maintenance, ANRE will take similar measures as for the transmission system operator.

Storage of natural gas

The activity of storing natural gas during the summer period is necessary for the optimum functioning of the Romanian market, as current production together with the current import fails to cover the monthly consumption requirements during the winter period. As current production is in excess of consumption in the summer period, storage actually becomes a necessity for natural gas producers, above the minimum inventory obligation calculated annually by ANRE, in case suppliers do not purchase the quantities for storage necessary for cold-weather consumption.

Economic operator type	Inventory as of October 31st, 2020 (MWh)
Producers	9,294,872.103
Other market participants	21,410,976.078
Total stored	30,705,848.181

Following the application of the provisions of ANRE Order No. 35/2016, which approves the methodology for annually determining the minimum natural gas inventory level for holders of natural gas supply licenses, the minimum inventory obligation for the storage cycle 2020-2021 was calculated, related to each supplier that holds end consumers in their portfolio. The following table shows the annual development of the total minimum inventory, which the holders of the gas supply licenses had to comply with in underground storage facilities by October 31st, each year:

Level of minimum annual gas inventory (MWh)	
2013	24,248,110.943
2014	19,765,212.051
2015	17,477,030.807
2016	18,340,862.385

2017	18,649,242.677
2018	21,361,797.373
2019	23,358,764.055
2020	20,542,060.180

The following table shows the monthly development of the existing gas inventory in underground storage facilities during 2020:

Inventory 2020	Total (MWh)*
January 2020	23,337,529.385
February 2020	19,940,564.803
March 2020	18,878,818.284
Inventory at the end of the extraction cycle 2019-2020	18,878,818.284
April 2020	20,235,811.762
May 2020	22,374,089.145
June 2020	24,774,234.575
July 2020	26,625,255.530
August 2020	28,587,704.785
September 2020	30,476,544.912
October 2020	30,705,848.181
Inventory at the end of the injection cycle 2020*	30,705,848.181
November 2020	26,447,595.773
December 2020	20,887,037.208

*extractions carried out during the summer have also been taken into account

The national gas market is open to two operators for underground storage of natural gas, Depomureş S.A. and S.N.G.N. Romgaz SA – subsidiary of the storage of natural gas branch Depogaz Ploiești S.R.L. The total capacity and the development of the utilization of this capacity are set out in the table below:

Underground storage operator	Year	Storage capacity (MWh)	Inventory after extraction* (MWh)	Quantity injected (Apr.-Oct.) (MWh)
Romgaz	2013	29,503,400	6,704,018.854	21,188,550.748
	2014		8,141,654.008	18,077,373.958
	2015		5,611,283.576	17,869,463.343
	2016		8,521,425.916	14,894,617.259
	2017		5,311,927.379	16,121,839.816
	2018		3,486,578.156	18,095,856.140
	2019		3,350,173.024	26,183,951.444
	2020		17,632,619.755	11,510,603.344
Depomureş	2013	3,154,550	330,006.289	3,024,810.381
	2014		570,191.740	2,587,221.864
	2015		272,360.874	2,883,003.902
	2016		378,675.860	2,084,214.398
	2017		172,135.518	3,021,150.985

	2018		664,282.762	2,362,868.907
	2019		354,952.744	2,579,950.000
	2020		1,246,198.529	1,748,920.000

*does not include the remaining natural gas inventories from the previous injection cycles after the extraction activity.

4.2 Competition and market functioning

4.2.1 Wholesale market

The structure of transactions on the wholesale gas market

The following table shows the quantities of natural gas delivered in the year 2020, when compared to 2019, as a result of the transactions concluded on each type of market/trading platform and the average achieved prices:

WHOLESALE MARKET TRANSACTIONS	TOTAL 2019	TOTAL 2020
1. QUANTITIES TRADED ACC. TO ART. 124 OF LAW NO. 123/2012		
Quantities traded (MWh)	25,637,551.089	15,240,678.932
Price (RON/MWh)	68.00	68.00
2. MARKET FOR BILATERALLY NEGOTIATED CONTRACTS		
Quantities traded (MWh)	47,648,014.462	28,831,158.899
Average price (RON/MWh)	98.33	71.68
3. PUBLIC PROCUREMENT (SEAP)		
Quantities traded (MWh)	691,329.575	596,386.577
Average price (RON/MWh)	101.68	118.23
4. IMPORT		
Quantities traded (MWh)	27,341,292.558	23,148,727.878
Average price (RON/MWh)	100.35	65.75
5. BRM ORGANIZED MARKETS	48,649,650.360	42,039,409.722
5.1. Manner of trading - SIMPLE COMPETITIVE GAS-FORWARD platform		
Quantities traded (MWh)	28,673,762.003	21,769,569.468
Average price (RON/MWh)	97.09	84.89
5.2. Manner of trading - DOUBLE COMPETITIVE FORWARD GAS platform		
Quantities traded (MWh)	10,213,212.000	13,733,763.000
Average price (RON/MWh)	102.17	65.62
5.3. Manner of trading - GAS - FORWARD CENTRAL COUNTERPARTY platform		
Quantities traded (MWh)	560.000	49,560.000
Average price (RON/MWh)	99.00	44.67
5.4. Manner of trading - DAY AHEAD platform		
Quantities traded (MWh)	1,183,557.738	3,048,876.611
Average price (RON/MWh)	92.43	56.08
5.5. Manner of trading - WITHIN DAY platform		

Quantities traded (MWh)	2,057,392.916	3,312,266.643
Average price (RON/MWh)	98.91	57.43
5.6. Manner of trading - STEG platform		
Quantities traded (MWh)	6,521,165.703	125,374.000
Average price (RON/MWh)	103.33	108.58
6. OPCOM CENTRALIZED MARKETS	12,406,087.000	21,024,675.001
6.1. Manner of trading - DAM-GN		
Quantities traded (MWh)	20,195.000	0.000
Average price (RON/MWh)	126.34	
6.2. Manner of trading - IM-GN		
Quantities traded (MWh)	0.000	0.000
Average price (RON/MWh)		
6.3. Manner of trading -PCGN-LN		
Quantities traded (MWh)	12,385,892.000	21,024,675.001
Average price (RON/MWh)	105.89	103.82
6.4. Manner of trading -PCGN-LP		
Quantities traded (MWh)	0.000	0.000
Average price (RON/MWh)		
6.5. Manner of trading -PCGN-OTC		
Quantities traded (MWh)	0.000	0.000
Average price (RON/MWh)		
7. THE BALANCING MARKET FOR NATURAL GAS	83,402.254	318,037.076
7.1. Ring PE_DA_CC		
Quantities traded (MWh)	2,163.920	4,727.633
Average price (RON/MWh)	68.00	63.74
7.2. Ring PE_IMB_CC		
Quantities traded (MWh)	69,575.079	36,269.461
Average price (RON/MWh)	67.68	66.77
7.3. Ring PE_IMB_PET		
Quantities traded (MWh)	6,632.174	30,045.499
Average price (RON/MWh)	67.95	67.79
7.4. Ring PE_WD_CC		
Quantities traded (MWh)	277.283	68.400
Average price (RON/MWh)	68.00	68.00
7.5. Ring PE_DA_PET		
Quantities traded (MWh)	4,750.238	16,831.263
Average price (RON/MWh)	68.00	68.00
7.6. Ring PE_WD_PET		
Quantities traded (MWh)	3.559	5,129.258
Average price (RON/MWh)	68.00	68.00
7.7. Ring PE_IMB		
Quantities traded (MWh)		224,965.562
Average price (RON/MWh)		60.86

The previous year's comparison in terms of quantities and prices of natural gas sold by gas producers participating in the wholesale market for delivery in 2020 based on each market type/trading platform/participant shall be as follows:

Transaction Type	2019		2020	
	Quantity (MWh)	Price (RON/MWh)	Quantity (MWh)	Price (RON/MWh)
Quantities acquired acc. to Art. 124 of Law no. 123/2012	25,637,551.089	68.00	15,241,086.931	68.00
Negotiated, producers	104,216.388	96.23	108,245.427	51.88
Negotiated, suppliers	19,406,376.945	90.92	6,701,569.570	61.34
Negotiated, TSO	488,537.133	85.29	408,262.079	51.13
Contracts on central BRM markets, of which:	24,320,148.492	96.34	29,614,058.363	75.21
Simple competitive gas forward platform	21,295,073.973	93.40	16,936,001.952	83.89
STEG platform	1,057,259.000	97.27	89,116.346	107.96
Day ahead market gas platform	323,764.633	89.10	556,486.459	58.92
Within day market gas platform	606,939.257	96.86	1,227,813.428	58.89
Dual competitive gas forward platform	1,478,891.000	110.62	10,777,646.586	64.02
The balancing market	-	-	30,424.268	61.56
Contracts in the centralised markets of OPCOM SA, of which:	2,815,225.301	112.29	9,909,951.775	108.59
PCCB-LN	2,797,880.301	112.18	9,909,951.775	108.59
PCCB-NC	0.000	0.00	0.000	0.00
PC-OTC	0.000	0.00	0.000	0.00
DAM	17,345.000	129.16	0.000	0.00

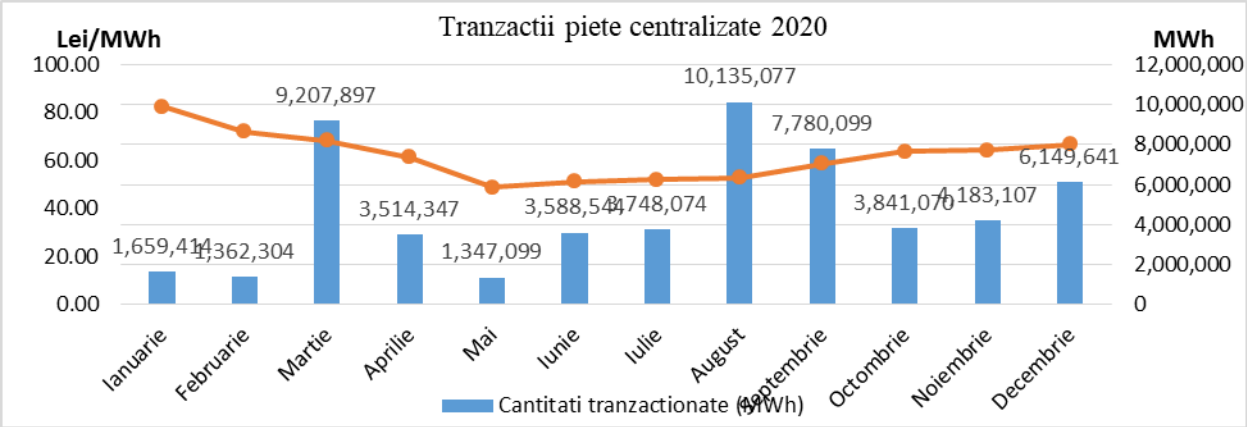
Centralized markets

In 2020, the quantities traded on centralized markets on platforms managed by OPCOM and BRM operators amounted to 56.52 TWh.
The following table contains the quantities traded in the year 2020 on each of the BRM trading platforms: Gas Forward single and double competitive, gas forward central counterparty, intra-daily market and day ahead market and OPCOM, respectively: Central market for bilateral gas contracts - the mode of trading by means of auctions and negotiation, together with the corresponding prices, determined as a weighted average of the prices of the quantities of transactions entered into on the respective platforms, the quantities traded being delivered at a later date.

The monthly trend of the total quantities traded on centralized markets in 2020 and the related average prices are shown in the following graph:

Month	Gas Forward single and double competitive BRM (MWh)	Gas Forward price Single and Double competitive BRM (RON/MWh)	Gas forward central counterparty BRM (MWh)	Gas forward price central counterparty BRM (RON/MWh)	Day ahead BRM (MWh)	Day ahead price BRM (RON/MWh)	Within day BRM (MWh)	Within BRM price (RON/MWh)	PCGN-LN OPCOM (MWh)	Price PCGN-LN OPCOM (RON/MWh)

Total year 2020	45,908,901.000	60.76	49,560.00	44.67	3,060,582.611	56.06	3,319,063.643	57.41	4,178,565.000	69.20



Translation: Centralised market transactions 2020 – Traded quantities

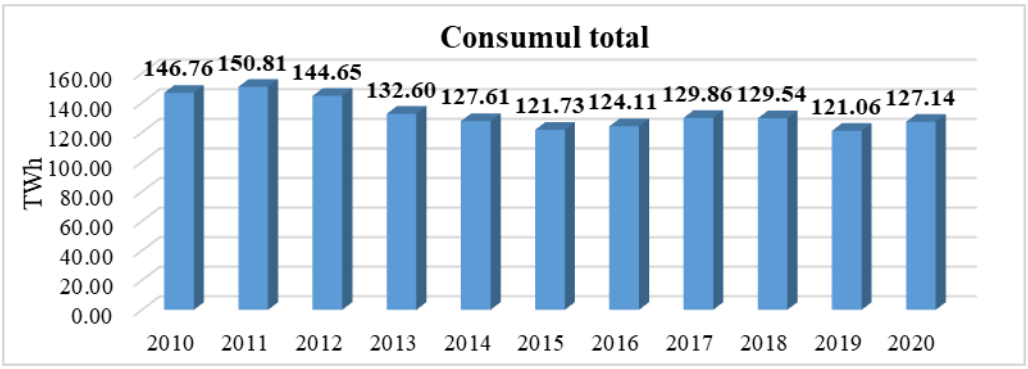
4.2.2 Retail market

In 2020, 88 suppliers were active on the retail gas market, of which:

- 31 suppliers - on the regulated retail gas market; and
- 76 suppliers - on the competitive retail gas market.
- The total number of natural gas end clients in December 2020 was 4,171,782, of which 228,854 non-household consumers (approx. 5.49%) and 3,942,928 household consumers (approx. 94.51%).

Total gas consumption in 2020 was around 127.14 TWh, increasing by 5.02% in 2020, when compared to 2019.

Within the total consumption of the natural gas sector, a part is the consumption specific to the activities of the sector or the consumption of operators in relation to specific technological processes: technological consumption, energy consumption and deviations from measurement instruments.



Translation: Total consumption

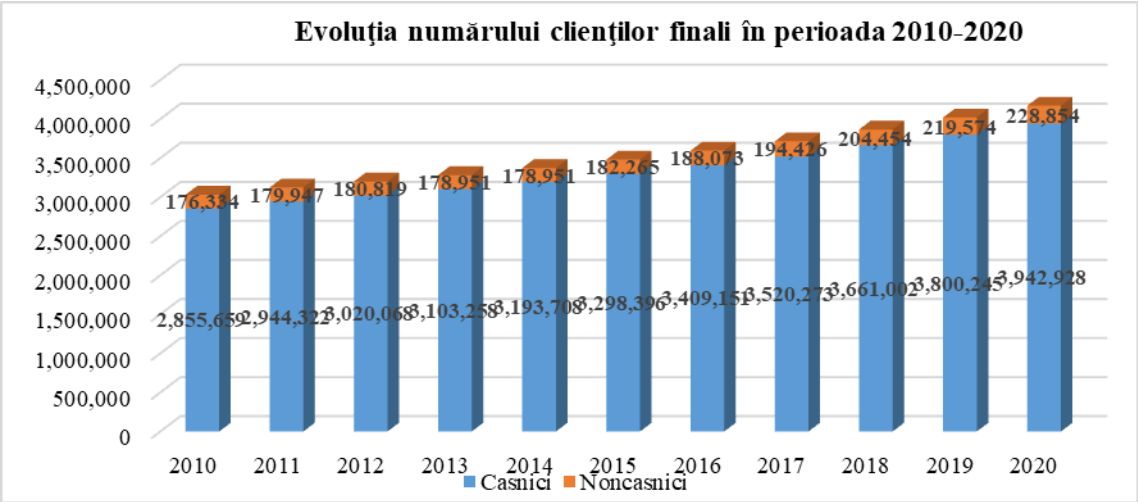
Except for the specific consumption mentioned, in 2020, end consumer consumption provided by the suppliers was around 119 TWh, of which approx. 83.29 TWh accounted for non-household consumption and 35.68 TWh for household consumption, as follows:

End consumers	No. of clients	Consumption* (TWh)	Total consumption weighting
Households	3,942,928	35.68	29.99 %

Non-household consumers	228,854	83.29	70.01 %
Total	4,171,782	118.97	

In 2020, the share of end consumption by household consumers is 29.99% and the number of end consumers accounts for 94.51% of the total number of natural gas end consumers. Although the number of non-household consumers accounts for only 5.49% of all end consumers of natural gas, the share of their consumption is 70.01% of the total end consumption.

Month	No. of clients		Total number of clients	Total consumption (MWh)
January	Household	3,804,267	4,022,689	17,412,400.572
	Non-household	218,422		
February	Household	3,789,079	4,000,296	14,545,566.888
	Non-household	211,217		
March	Household	3,822,459	4,041,314	12,013,292.540
	Non-household	218,855		
April	Household	3,829,361	4,051,074	8,448,180.677
	Non-household	221,713		
May	Household	3,835,783	4,057,846	6,169,576.159
	Non-household	222,063		
June	Household	3,844,474	4,065,390	5,848,162.617
	Non-household	220,916		
July	Household	3,860,485	4,082,665	6,210,290.553
	Non-household	222,180		
August	Household	3,874,817	4,096,642	6,260,097.644
	Non-household	221,825		
September	Household	3,887,192	4,107,440	6,376,055.355
	Non-household	220,248		
October	Household	3,906,646	4,132,025	7,510,474.091
	Non-household	225,379		
November	Household	3,927,842	4,155,225	12,602,627.131
	Non-household	227,383		
December	Household	3,942,928	4,171,782	15,575,265.769
	Non-household	228,854		
Total 2020	-			118,971,989.997



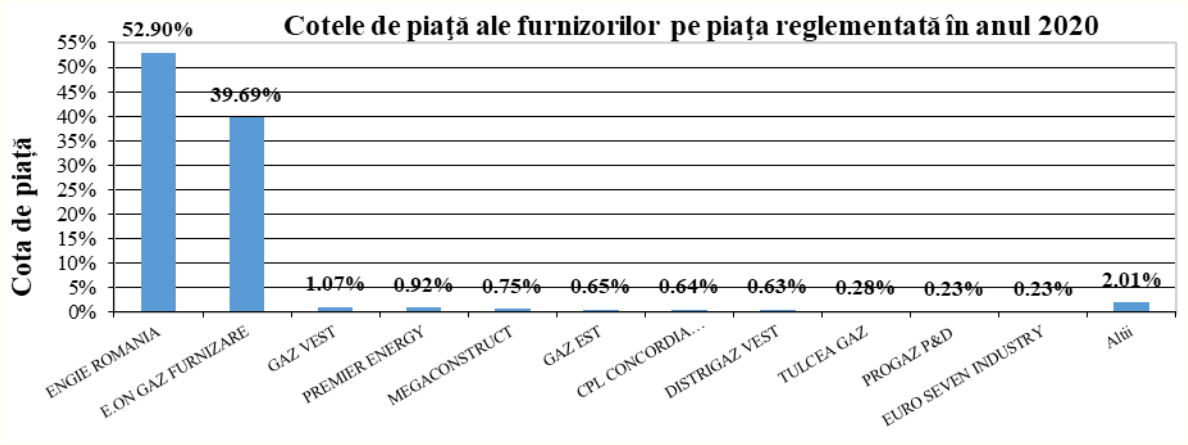
Translation: Development of end clients' number between 2010 and 2020

Sales prices by category of end consumer, depending on the connection system and the class of consumption are shown as follows: the average selling price per category of end consumer does not include VAT, excise duties or other taxes. Average sales prices to end consumers shall not include tariffs for transmission, distribution and storage services:

Client type	Connection system	Consumption class	Price (RON/MWh)
Household end consumers	End clients connected to upstream pipelines	A1 Annual consumption up to 280,000.00 MWh	82.26
	Clients connected to NTS	B1 Annual consumption up to 280,000.00 MWh	95.46
	Clients connected to the distribution system	C1 Annual consumption up to 280.00 MWh	93.98
		C2 annual consumption between 280.01 MWh and 2,800.00 MWh	91.01
		C3 annual consumption between 2,800.01 MWh and 28,000.00 MWh	91.36
Non-household end consumers	End clients connected to upstream pipelines	A1 Annual consumption up to 280,000.00 MWh	87.78
		A2 annual consumption of more than 280,000.01 MWh	90.01
	Clients connected to NTS	B1 Annual consumption up to 280,000.00 MWh	85.58
		B2 annual consumption of more than 280,000.01 MWh	61.85
	Clients connected to the distribution system	C1 Annual consumption up to 280.00 MWh	124.37
		C2 annual consumption between 280.01 MWh and 2,800.00 MWh	111.52
		C3 annual consumption between 2,800.01 MWh and 28,000.00 MWh	95.42
		C4 annual consumption between 28,000.01 MWh and 280,000.00 MWh	82.54
		C5 annual consumption above 280,000.01 MWh	75.18

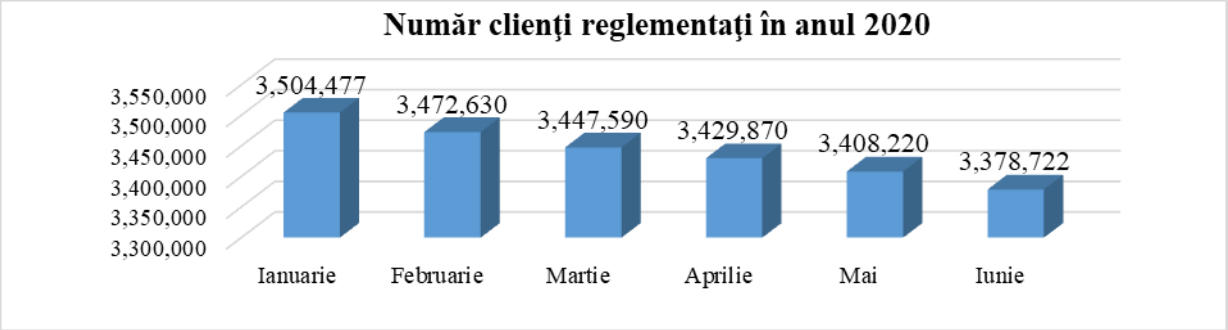
The regulated retail market

Between January and June 2020, 31 suppliers were active on the regulated gas market, the market shares of which are shown in the following chart:



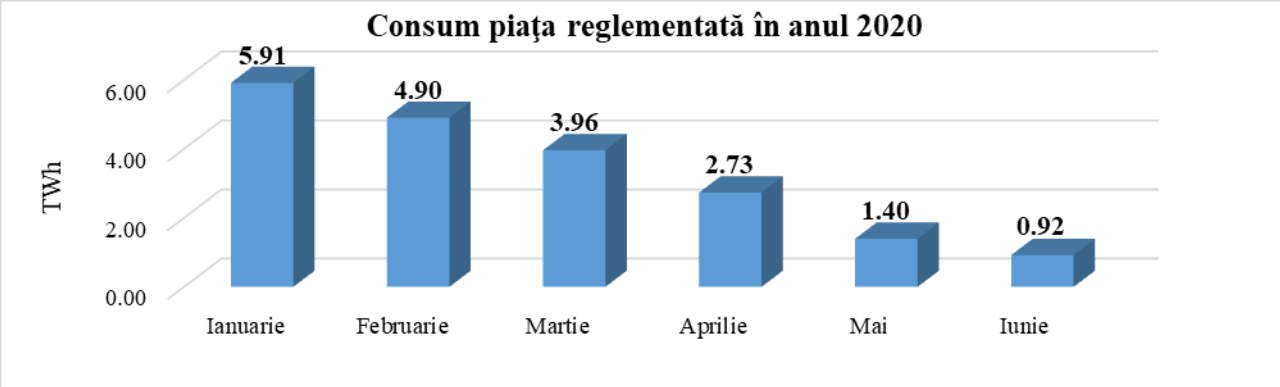
Translation: Market shares of suppliers on the regulated market in 2020, Market share

The total number of regulated clients as of July 1st, 2020 was 3,378,722, representing only household consumers, and their development throughout 2020 is shown in the following graph:



Translation: Number of regulated clients in 2020

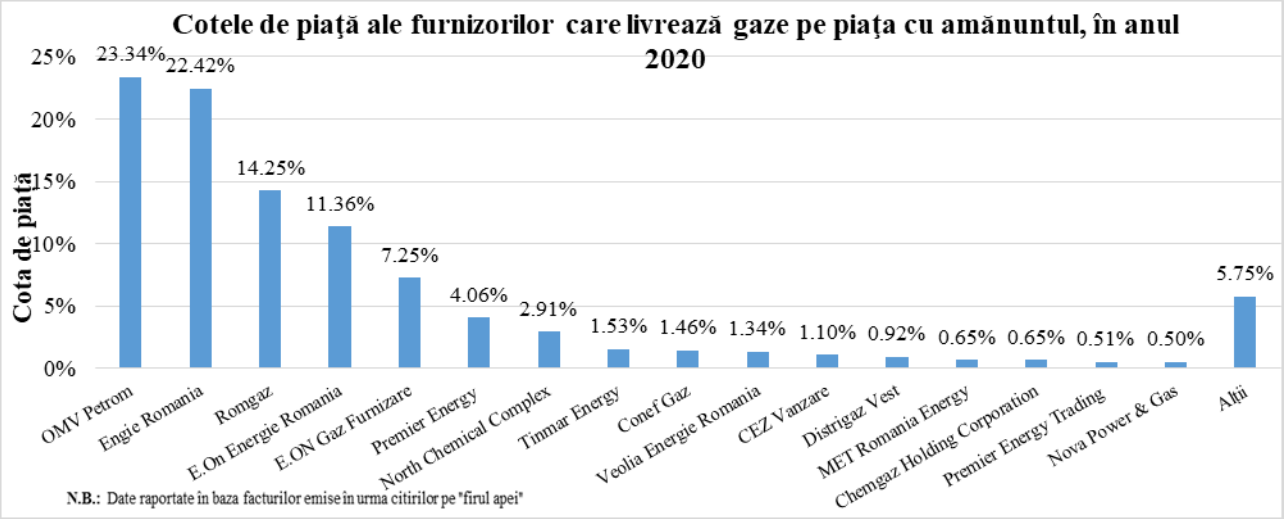
The consumption of regulated consumers in 2020 was around 19.83 TWh and developed as follows:



Translation: Consumption on the regulated market in 2020

The competitive retail market

In 2020, 76 suppliers were active on the competitive retail gas market, whose market shares are shown in the following chart:



Translation: Market shares of suppliers of gas on the retail market, in the year 2020

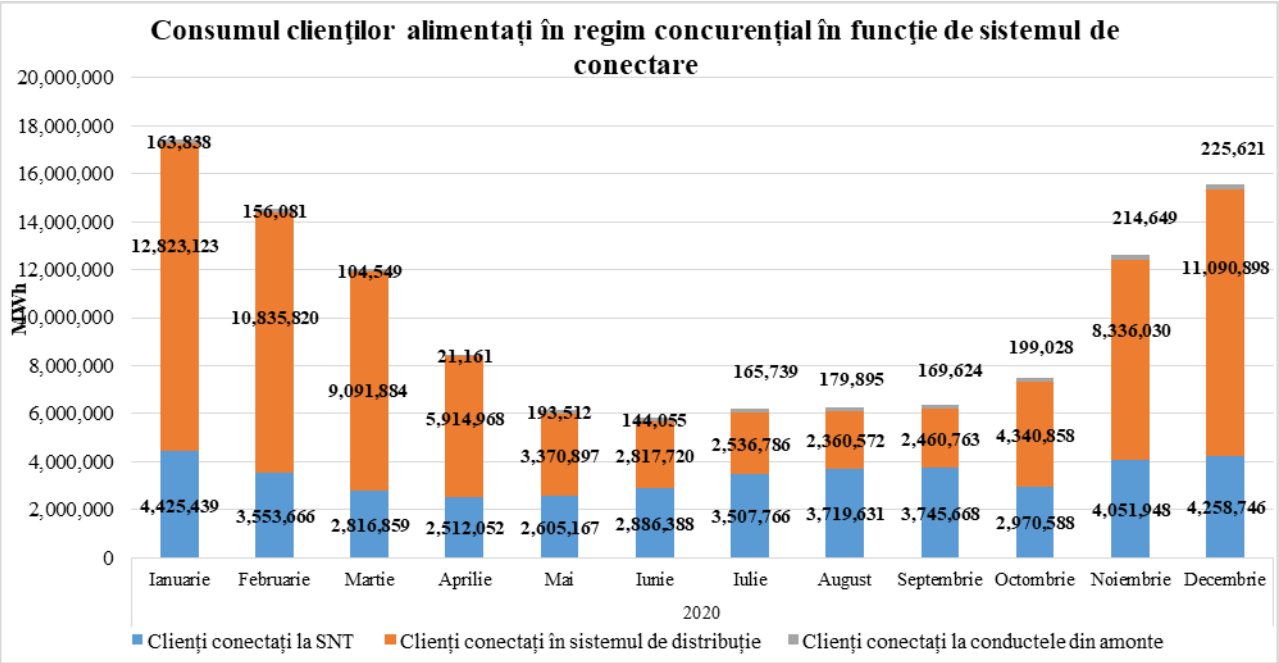
* the **Others** category includes 65 suppliers with a market share of less than 0.5% of all retail deliveries

The total consumption of competitively-powered consumers in 2020 was 99,151,775.097 MWh.

Analysing the following graph, which shows the monthly development of gas consumption achieved by competitively-supplied end consumers during 2020, distinctly highlighted depending on type of connection, namely in the National Transmission System, in the distribution systems and in upstream pipelines, a lower variation in consumption by consumers connected to the NTS and upstream pipelines can be observed, when compared to that of consumers connected to distribution systems.

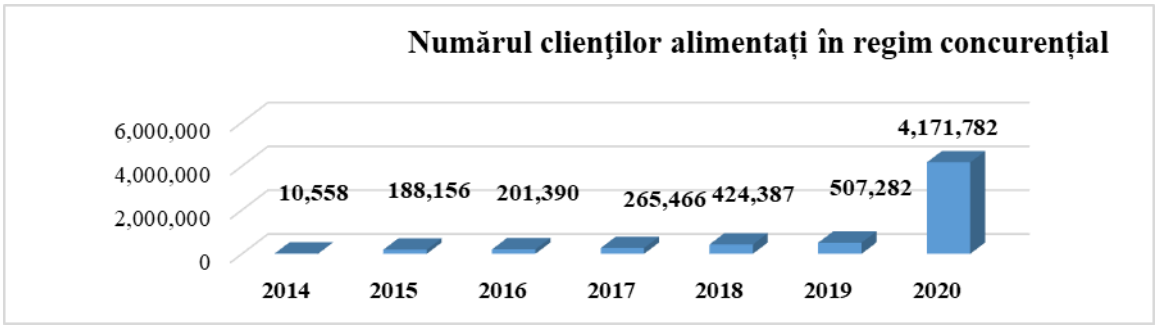
Please note that out of the total number of clients connected to the NTS, the largest share of their consumption is the industrial clients' category and the lower share is the other non-household clients carrying out economic activities.

A greater variation in the consumption of natural gas related to consumers connected in distribution systems compared to other connection systems can be observed, and this is due to the higher number of consumers connected in distribution systems, including household and non-household consumers, of which industrial and other non-household consumers engaged in commercial, professional and social activities.



Translation: Consumption of clients supplied in competition circumstances, depending on the connection system
Clients connected to the NTS, Clients connected to the distribution system, Clients connected to the upstream pipelines

The total number of consumers competitively powered at the level of December 2020 was 4,171,782. In light of the fact that, since July 1st, 2020, the internal market in natural gas has been fully liberalized, in accordance with the provisions of Article 179, paragraph (2), item (b) of the Law on electricity and gas No. 123/2012, with subsequent amendments and completions, the total number of these consumers has increased considerably since the year prior to the liberalization, i.e. 2019. We are presenting an annual development of this figure from that time to the present time:



Translation: Number of clients supplied in competition circumstances

Smart meter use

Based on data submitted by DSOs on the state of implementation of the SMI by the end of 2020, summary statements reflecting the state of implementation of the SMI and the results achieved by the implementation of the SMI in the license areas of the power distribution service have been produced, from the first pilot projects carried out in 2015, until the end of 2020. The report on the state of implementation of smart metering systems for electricity as of 31.12.2020, according to the implementation calendar for smart metering systems at national

level for the period 2019-2028, approved by means of ANRE Decision No. 778/08.05.2019, is published on the ANRE website, available at https://www.anre.ro/ro/energie-electrica/informatii-de-interes-public/info-sisteme-de-masurare-inteligenta.

Report on the number of places of consumption integrated in the SMI up to 31.12.2020 in each area of concession

The table below shows the number of users integrated into the SMI up to 31.12.2020. The report includes the places of consumption integrated in the SMI following the pilot projects under the provisions of ANRE Order No. 145/2014 and the implementation of the SMI according to the timetable for the implementation of the national smart metering systems for the period 2019-2028, (approved by means of ANRE Decision No. 778/08.05.2019, for 2020).

DO	Total number of users integrated into the SMI at the end of 2020, of which:	Total number of household end consumers integrated in the SMI	Total number of non-household end consumers integrated in the SMI	Total number of prosumers integrated in the SMI	Total number of producers integrated in the SMI
E-Distribuție Muntenia	435,632	417,367	18,195	40	30
E-Distribuție Banat	261,318	245,730	15,480	67	41
E-Distribuție Dobrogea	235,161	221,692	13,414	40	15
Distribuție Energie Oltenia	76,244	70,418	4,862	964	0
Delgaz Grid	324,630	309,327	15,265	33	5
SDEE Muntenia Nord	50,539	47,795	2,744	0	0
SDEE Transilvania Nord	21,300	20,244	1,056	0	0
SDEE Transilvania Sud	27,767	25,005	2,762	0	0
Country total	1,432,591	1,357,578	73,778	1,144	91

Note: SDEE Muntenia Nord, SDEE Transilvania Nord and SDEE Transilvania Sud are currently integrated within the DEER – Power distribution in Romania (Distribuție Energie Electrică România).

The extent of implementation of the SMI as of 31.12.2020 per area of concession

The table below shows the level of fulfilment of SMI obligations implementation set out in the National smart power measurement system implementation calendar for the period 2019-2028, approved by means of ANRE Decision No. 778/2019, for the year 2020.

DO	The number of places of consumption proposed to be integrated into the SMI during 2020 according to the agreed upon timetable	The number of places of consumption integrated in the SMI during 2020	The degree of achievement of the number of users integrated in the SMI for the year 2020
E-Distribuție Muntenia	80 425	101 998	127 %
E-Distribuție Banat	49 311	59 689	121 %
E-Distribuție Dobrogea	40 944	59 400	145 %
Distribuție Energie Oltenia	70 805	41 465	59 %
Delgaz Grid	58 538	3 475	6 %
SDEE Muntenia Nord	32 109	37 448	117 %
SDEE Transilvania Nord	31 465	7 639	24 %
SDEE Transilvania Sud	30 875	500	2 %
Country total	394 472	311 614	79 %

Notification of users regarding the progress of the SMI implementation process carried out by the DSOs in accordance with the regulatory requirements in force

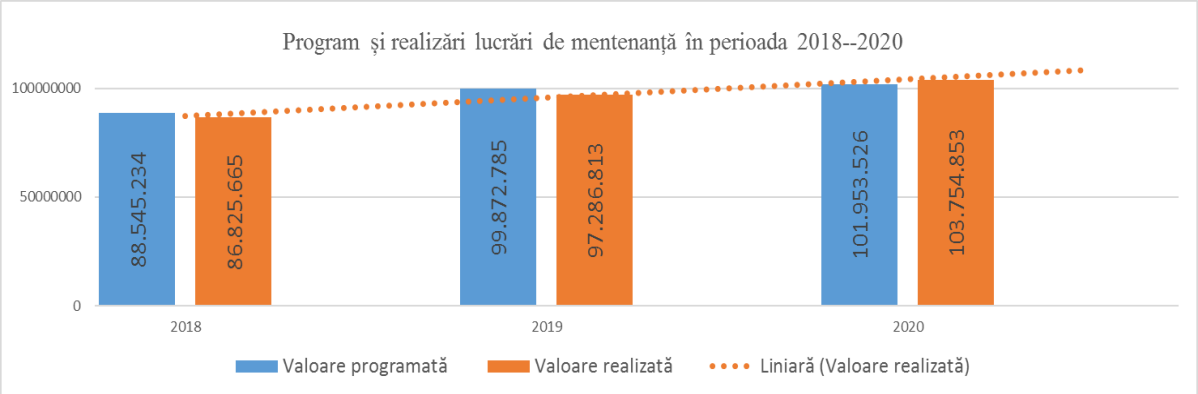
A major objective of European legislation, applicable in all Member States, when it comes to the implementation of smart metering systems, is to create the conditions required in order to enable and support the active participation of end consumers in the energy market in order to achieve benefits. As a result, Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 concerning common rules for the internal market for electricity and amending Directive 2012/27/EU contains provisions conferring consumers the right to benefit from smart metering, to have near-real-time access to consumption data and to actively participate in the energy market, and, thus, entails obligations of regulatory authorities and network operators to ensure that consumers can attain benefits by capitalising on the functionalities made available by the implemented SMI.

To this end, ANRE has included provisions in the regulatory framework concerning DSOs' obligations in terms of user notification. The state of implementation of these obligations by each DSO is detailed in the annual monitoring report of the SMI implementation process published on the ANRE website.

Achievement of annual maintenance plans

The degree of achievement of the TSO's PTN maintenance plan in the period 2018-2020 is shown in the following table:

	2018	2019	2020
Scheduled value [RON]	88,545,234	99,872,785	101,953,526
Achieved value [RON]	86,825,665	97,286,813	103,754,853
Achievement degree [%]	98 %	97.41 %	101.8 %



Translation: Schedule and achieved maintenance works in 2018 – 2020

Planned value, Achieved value, Liniar (Achieved value)

The weighting of scheduled and achieved values for maintenance work by type of maintenance is shown in the following table:

	Program		Achieved	
	Preventive maintenance	Corrective maintenance	Preventive maintenance	Corrective maintenance
Maintenance type	80,272,901	18,918,088	56,372,550	47,382,303
% of total	80.9 %	19.1 %	54.3 %	45.7 %

It is noted that, although the plan has a significant weighting of preventive maintenance, the values achieved show that significant corrective maintenance works have an impact on the performance of the transmission service in what concerns electrical energy. Since corrective maintenance is carried out following network incidents, with an impact on the supply of consumers, the worsening of performance indicators and the decrease in quality of the service provided, it is necessary to fully apply preventive maintenance programs.

The degree of achievement of the maintenance plan by category of works in the electricity distribution networks is shown for each operator in the following table:

	E-Distribuție Muntenia	E-Distribuție Banat	E-Distribuție Dobrogea	Distribuție Energie Oltenia	Delgaz Grid	SDEE Muntenia Nord	SDEE Transilvania Nord	SDEE Transilvania Sud
Scheduled [mio. RON]	84.931	58.315	51.280	142.009	219.804	108.774	102.243	96.727
Achieved [mio. RON]	92.370	59.669	47.332	145.924	235.361	107.407	105.857	92.031
of which % preventive maintenance	36.4 %	42.2 %	50.7 %	68.4 %	65.8 %	70.0 %	74.9 %	65.9 %
Degree of achievement	109.8 %	102.3 %	92.3 %	102.8 %	107.1 %	98.7 %	103.5 %	95.1 %

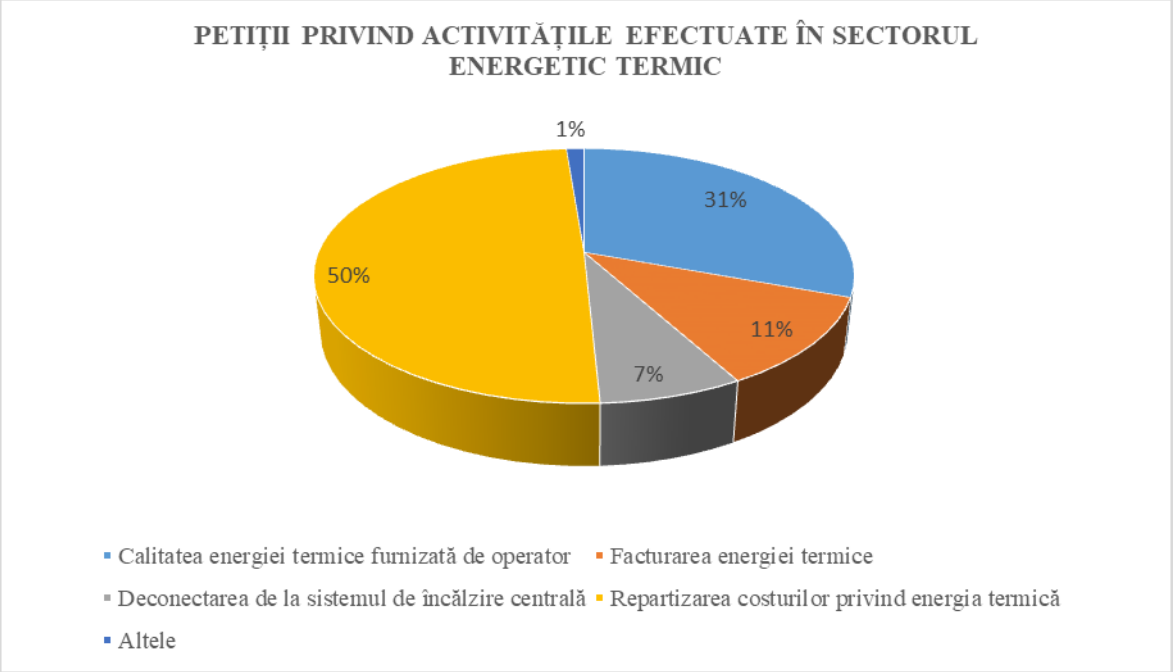
In 2020 all operators fulfilled the condition laid down in Article 36, paragraph (5) of the *Procedure* concerning the maintenance obligation amounting to at least 90 % of the total value of the annual plan.

4.3. Security of gas supply

In accordance with the provisions of Article 102 of the Law on electricity and gas No. 123/2012, the responsible Ministry shall monitor security of supply issues, in particular the balance of supply/demand on the national market, at the level of expected future demand and available reserves, at the envisaged additional capacity, planned or under construction, at the quality and level of maintenance of the networks, as well as the measures necessary in order to deal with peak demand and supply shortfalls of one or more suppliers. To this end, the former shall publish every 2 years, by July 31st, a report outlining the findings reached in the monitoring of these issues, as well as any measures taken or envisaged to address them, and shall immediately submit said report to the European Commission.

5. Consumer protection and dispute settlement in the electricity and natural gas sector

Handling of petitions/complaints



Translation: Petitions regarding activities carried out in the thermal energy sector, Quality of thermal energy supplied by operator, Billing of thermal energy, Disconnection from the central heating system, Allocation of thermal energy costs, Others

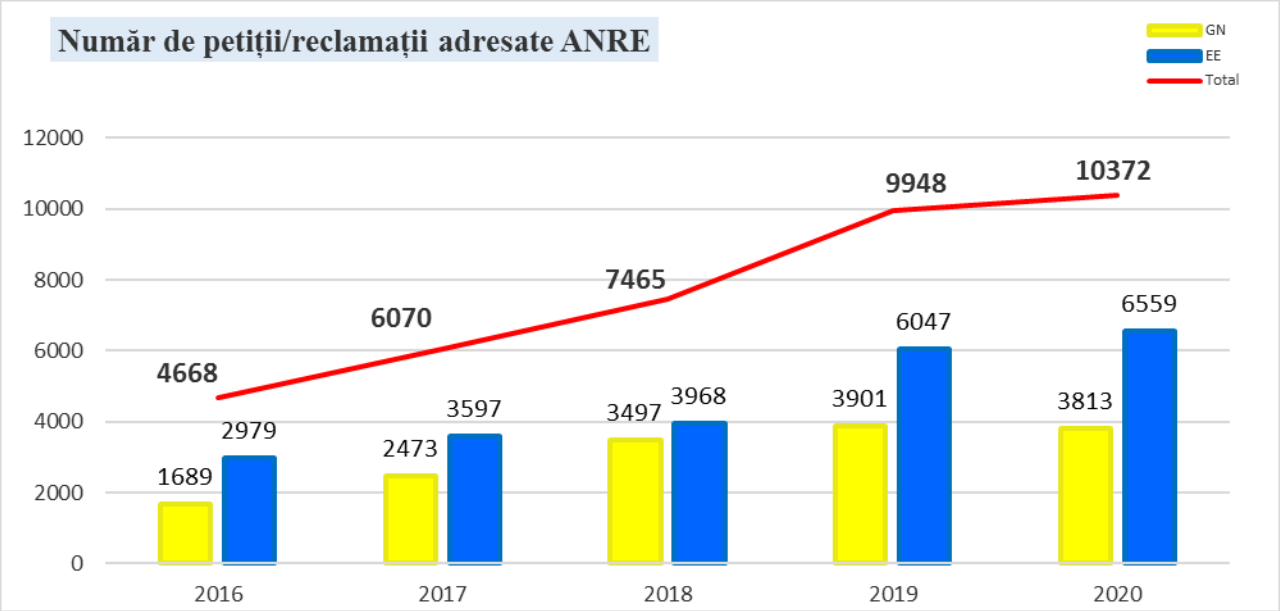
Handling of petitions/complaints, pre-contractual disputes arising from the conclusion of contracts, as well as complaints against network operators submitted by electricity and gas market participants to the Romanian Energy Regulatory Authority (ANRE), is carried out by means of the Electricity-related complaints handling service (SSPEE) and the Gas-related complaints handling service (SSPGN), under the direction of the Petitions settlement directorate (DSP) of the Control Directorate-General (DGC).

The analysis and response regarding the issues raised in petitions/complaints was carried out in accordance with the provisions of Ordinance No. 27 of 30 January 2002 regulating the handling of petitions, with subsequent amendments and additions, of the procedure dealing with complaints from energy stakeholders, approved by means of order of the President of ANRE No. 194/2020 and the legislation applicable to the electricity and gas sectors.

The manner in which petitions/complaints were handled was different, depending on the issues raised: from written responses, including clarifications, explanations and references to existing legislation, on-the-spot checks, to direct discussions with the concerned parties.

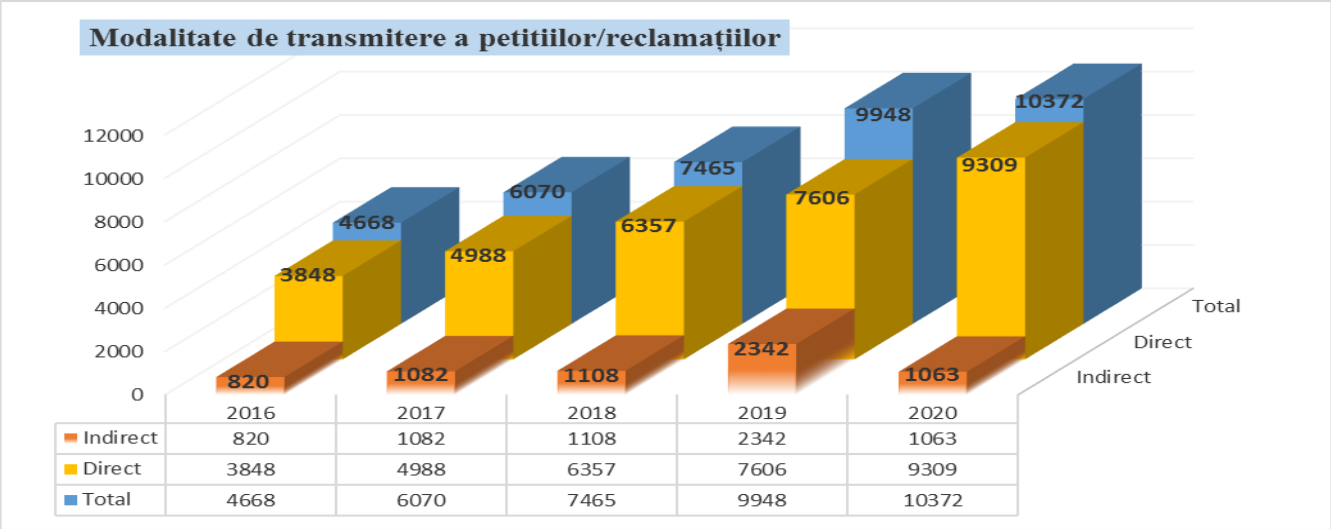
If issues encountered in the petitions/complaints relating to non-compliance with legal provisions by electricity market participants were proved to be justified, ANRE sent letters of warning in order to comply with the legal provisions in force and/or deploying the legal measures in order to enforce certain penalties.

In 2020, **10372** petitions/complaints from natural persons and legal entities benefiting from the services provided by economic operators in the electricity and gas sectors were registered and settled. In the electricity sector, **6559** petitions/complaints were recorded, and in the gas sector, **3813** petitions/complaints. Compared to 2019, there has been an increase in the number of petitions, namely **4**%, caused by issues experienced by electricity consumers in the competitive electricity market, with issues related to the contracting and billing of electricity being reported in most cases, the problems arising from the connection to the gas/electricity systems/networks and the manner in which new legislation has been implemented.



Translation: Number of petitions/complaints addressed to ANRE

Petitions/complaints were sent to ANRE directly - **9309**, and indirectly, redirected via other public institutions – **1063**.



Translation: Method of transmission of petitions/complaints
Total, Direct, Indirect

The report regarding indirectly addressed petitions is as follows:

REPORT ON PETITIONS REDIRECTED BY OTHER PUBLIC INSTITUTIONS TO ANRE		
NO.	INSTITUTION	NUMBER
1	Residential Administration/Chairmanship	7
2	Romanian Government	64
3	Government General Secretariat (SGG)	30
4	Romanian Parliament - Chamber of Deputies	3
5	Romanian Parliament - Senate	6
6	Ministries	81
7	Competition Council	7
8	National Authority for Administration and Regulation in Communications (ANCOM)	4
9	National Authority for Consumer Protection (ANPC)	803
10	National Regulatory Authority for Community Utilities (ANRSC)	8
11	Ombudsman	7
12	Association for the Protection of Citizens (APPC)	1
13	General Inspectorate for Emergency Situations (ISU)	12
14	Prefectures, County Councils, City Halls	15
15	Others	15
	Total	**1063**

The main issues reported by applicants/complainants are set out in the following tables and are under consideration for identifying, where appropriate, the legislative provisions that should be amended in order to improve customer service and in order to improve customer satisfaction.

The main categories of issues identified in settled petitions/complaints are as follows:

MAIN PROBLEM CATEGORIES IDENTIFIED IN THE SETTLED PETITIONS IN THE ELECTRICITY SECTOR

NO.	MAIN ISSUES RAISED	NUMBER	PERCENTAGE
1	Free market electricity billing	1387	19.43 %
2	Continuity in the electrical supply	842	11.79 %
3	Electricity billing regulated market	753	10.55 %
4	Electricity contracting free market	631	8.84 %
5	Electricity quality	376	5.27 %
6	Receivers' damage compensation, damages	241	3.38 %
7	Faulty metering unit	225	3.15 %
8	Fitting of metering unit	223	3.12 %
9	Disconnection / cessation / termination / disconnection / notice / reconnection	203	2.84 %
10	Connection to the network	201	2.82 %

MAIN PROBLEM CATEGORIES IDENTIFIED IN THE SETTLED PETITIONS IN THE GAS SECTOR

NO.	MAIN ISSUES RAISED	NUMBER	PERCENTAGE
1	Connection to the system	1427	25 %
2	Contract, billing, quality	1014	23 %
3	Equipment for use (checks/revisions, detectors)	921	8.6 %
4	Change of supplier	352	2.67 %
5	Metering	109	35 %
6	Natural gas distribution/transmission services	89	2.18 %

Settlement of the pre-contractual misunderstandings

By means of the specific work carried out by the DSP in 2020, a single request for settlement of disagreements arising when the electricity supply contracts were concluded was registered, being settled in accordance with the provisions of the *Procedure for the settlement of disagreements arising when contracts were concluded in the field of electricity and heat produced in high-efficiency cogeneration*, approved by means of Order of President of ANRE No. 35/2013.

Solving complaints against network operators

By means of the specific work carried out by the DSP, in 2020, 3 complaints against network operators were registered and settled, in accordance with the provisions of the *Regulation on the handling of complaints against network/system operators in the field of energy* , approved by means of Order of President of ANRE No. 150/2015.

Control activity

The control activity of the national Authority for Energy Regulation (ANRE) is carried out by means of the Department of territorial Control (DCT) of the General Control Directorate (DGC).

This work has been carried out on the basis of the powers laid down by the legislation in force and has been carried out in accordance with the annual control program, approved by the President of ANRE, by means of inspection type control actions and, in addition, by means of verification and surveillance type control actions, resulting from the current activities of the specialist divisions of ANRE.

In **2020**, 512 inspection control actions were carried out.

The control activity was carried out in accordance with the annual control program and was carried out on the basis of the powers established by the legislation in force.

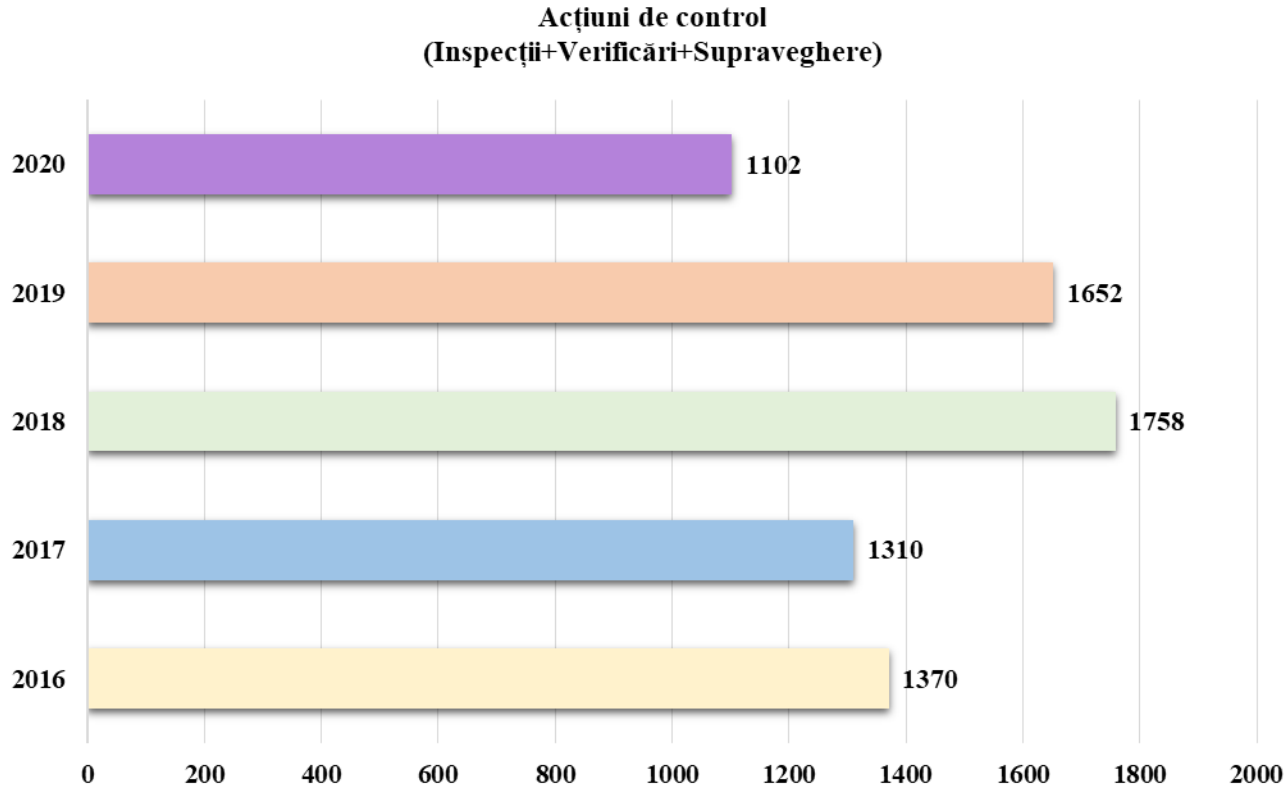
In addition to the inspection type control actions provided for in the 2020 control program, an additional set of actions has been carried out: **120** verification control actions and **470** surveillance control actions.

The control actions predominantly targeted the holders of licenses/authorizations/certifications issued by ANRE.

The report regarding control measures by category of economic operators subject to verification is presented in the following table:

Type control action	**Licensed**		**Certified/ Authorized**		**Energy renewable**		**Energy efficiency**	**Others**	
	Electric power	Natural gas	Electric power	Natural gas	Licensed (GC accreditation)	Licensed (GC obligations)		Electric power	Natural gas
Inspection 512	42	6	251	177	33	0	3	0	0
Check 120	48	24	9	12	17	2	0	7	1
Surveillance 470	213	153	0	14	66	24	0	0	0
Sub-total	303	183	260	203	116	26	3	7	1
Total	**486**		**463**		**142**		**3**	**8**	

The development of the total number of control actions carried out by ANRE over the last five years is rendered in the following graph:



Translation: Control actions (Inspections+checks+surveillance/monitoring)

The subjects of the control actions carried out by license holders in the field of electricity and natural gas were mainly to verify compliance with the legal provisions in force concerning:

- carrying out of the periodic metrological check of the measuring instruments for electricity and natural gas;
- compensation to end clients for non-compliance with electricity performance standard indicators;
- compensation to end clients for non-compliance with gas performance standard indicators;
- change of supplier of electricity;
- conclusion of energy supply contracts:
- ensuring the quality of the distribution service in the field of electricity;
- installation of natural gas detectors;
- compliance with performance indicators set by performance standards for electricity and gas distribution services, electricity and gas supply activities, for the transmission and system service related to electricity and natural gas and the payment of the related compensation for subsequent non-compliance;
- update of the technical characteristics of the licenses for the operation of upstream supply pipelines related to the production of natural gas;
- update of the technical characteristics of gas distribution systems;
- connection to electricity grids of public interest, including prosumers;
- connection to the gas distribution system;
- access to the gas distribution and transmission system;
- ensuring the decision-making independence of electricity distribution system operators and the vertically integrated company and exclusion of discriminatory practices;

- obligation to purchase green certificates;
- certification of conformity of photovoltaic and/or wind power plants;
- consistency between the technical characteristics in the field of the main equipment constituting accredited power plants for the production of electricity from renewable energy sources;
- design, verification, execution, acceptance and commissioning of natural gas installations;
- design, verification, execution, acceptance and commissioning of electrical installations;
- compliance with the conditions of validity of the certifications and authorizations held;

Following the carried out control actions, 489 reports of infringements were drawn up in 2020 (222 in the field of electricity, 176 in the field of natural gas, 90 in the field of renewable energy and 3 in the field of energy efficiency); 1963 non-criminal penalties have been applied for subsequent irregularities, broken down as follows:

- **1407** in the field of electricity;
- **444** in the field of natural gas;
- **109** in the field of renewable energy;
- **3** in the field of energy efficiency.

By means of the records of findings and (subsequent) penalties pertaining to contraventions, fines totalling RON 27,698,556.88 were imposed.

Out of the total 489 records of findings and (subsequent) penalties pertaining to contraventions, 2 were applied to natural individuals and 487 were applied to the economic operators.

The distribution of the penalties and the amount of the fines imposed is presented in the following table:

The distribution of sanctions per type of economic operator

Operator type	Total no. of sanctions applied	Total amount of fines imposed (lei)
EE licensed	1389	8,425,000.00
GN licensed	396	6,013,523.99
EE certification	12	75,000.00
GN authorized	48	211,000.00
EE licensed - GC accredited	81	228,923.79
Licensed EE – GC obligations	28	12,720,109.10
Energy efficiency	3	5,000.00
Other EE (private individuals, authorised private individuals, developers, DSO)	6	20,000.00

Total	**1963**	**27,698,556.88**

Solving petitions/complaints

Solving the petitions/complaints,the pre-contractual disputes arising from the conclusion of contracts, as well as complaints against network operators from electricity and gas market participants submitted to the Romanian Energy Regulatory Authority (ANRE), is carried out by means of the Electricity-related complaints handling service (SSPEE) and the Gas-related complaints handling service (SSPGN), under the direction of the Petitions settlement directorate (DSP) of the Control Directorate-General (DGC).

The analysis and response regarding the issues raised in petitions/complaints was carried out in accordance with the provisions of Ordinance No. 27 of 30 January 2002 regulating the handling of petitions, with subsequent amendments and additions, of the procedure dealing with complaints from energy stakeholders, approved by means of order of the President of ANRE No. 194/2020 and the legislation applicable to the electricity and gas sectors.

The manner in which petitions/complaints were solved was different, depending on the issues raised: from written responses, including clarifications, explanations and references to existing legislation, on-the-spot checks, to direct discussions with the concerned parties.
If issues encountered in the petitions/complaints relating to non-compliance with legal provisions by electricity market participants proved to be justified, ANRE sent letters of warning in order to comply with the legal provisions in force and/or deploying the legal measures in order to enforce certain penalties.

In 2020, 10372 petitions/complaints from natural persons and legal entities benefiting from the services provided by economic operators in the electricity and gas sectors were registered and settled. In the electricity sector, 6559 petitions/complaints were recorded, and in the gas sector, 3813 petitions/complaints. Compared to 2019, there has been an increase in the number of petitions, namely 4%, due to issues encountered by electricity consumers in the competitive electricity market, with issues relating to the contracting and billing of electricity being reported in most cases, the problems arising from the connection to the gas/electricity systems/networks and the manner in which new legislation has been implemented.

Petitions/complaints were sent to ANRE directly - 9309 and indirectly, redirected via other public institutions - 1063.

The report regarding indirectly addressed petitions is as follows:

Report on petitions redirected by other public institutions to ANRE

No.	Institution	Number
1	Presidency/Presidential Administration	7
2	Romanian Government	64
3	General Secretariat of the Government (SGG)	30
4	Parliament of Romania - Chamber of Deputies	3
5	Parliament of Romania - Senate	6
6	Ministries	81
7	Competition Council	7

8	National Authority for Administration and Regulation in Communications (ANCOM)	4
9	National Consumer Protection Authority (ANPC)	803
10	National Regulatory Authority for Community Utilities (ANRSC)	8
11	Ombudsman	7
12	Association for the Protection of Citizens (APPC)	1
13	General Inspectorate for Emergency Situations (ISU)	12
14	Prefectures, County Councils, City Halls	15
15	Others	15
	Total	**1063**

The main issues reported by applicants/complainants are set out in the following tables and are under consideration for identifying, where appropriate, the legislative provisions that should be amended in order to improve customer service and in order to improve customer satisfaction.

The main categories of issues identified in settled petitions/complaints are as follows:

The main problem categories identified in the settled petitions in the electricity sector

No.	Main issues raised	Number	Percentage
1	Electricity billing on the free market	1387	19.43%
2	Electricity supply continuity	842	11.79%
3	Electricity billing on the regulated market	753	10.55%
4	Electricity contracting on the free market	631	8.84%
5	Power quality	376	5.27%
6	Damaged receiver compensation, damages	241	3.38%
7	Faulty metering unit	225	3.15%
8	Fitting of metering unit	223	3.12%
9	Disconnection / cessation / termination / disconnection / notice / reconnection	2032	84%
10	Network connection	201	2.82%

The main problem categories identified in the settled petitions in the gas sector

No.	Main issues raised	Number	Percentage
1	Connection to the system	1427	25%
2	Contracting, billing, quality	1014	23%
3	Facilities (checks/revisions, detectors)	921	8,6%
4	Change of supplier	352	2,67%
5	Metering	109	35%
6	Gas distribution/transmission services	89	2,18%

Pre-contractual misunderstandings

By means of the specific work carried out by the public service delegation in 2020, a single request for settlement of disagreements arising when the electricity supply contracts were concluded was registered, being settled in accordance with the provisions of the Procedure on the settlement of disputes arising at the conclusion of contracts in the field of electricity and heat produced in high-efficiency cogeneration, approved by means of Order of President of ANRE No. 35/2013.

Complaints against network operators

By means of the specific work carried out by the DSP, in 2020, 3 complaints against network operators were registered and resolved in accordance with the provisions of the Regulation on the handling of complaints against network/system operators in the field of energy, approved by means of Order of the President of ANRE No. 150/2015.

Control activity

The control activity of the national Authority for Energy Regulation (ANRE) is carried out by means of the Department of Territorial Control (DCT) of the General Control Directorate (DGC).

This work has been carried out on the basis of the powers laid down by the legislation in force and has been carried out in accordance with the annual control program, approved by the President of ANRE, by means of inspection type control actions and, in addition, by means of verification and surveillance type control actions, resulting from the current activities of the specialist divisions of ANRE.

In 2020, 512 type-inspection control actions were carried out.
The control work was carried out in accordance with the annual control program and was carried out on the basis of the powers established by the legislation in force.

In addition to the inspection type control actions provided for in the 2020 control program, an additional set of actions has been carried out: 120 verification type control actions and 470 surveillance type control actions.
The control actions predominantly targeted the holders of licenses/authorizations/certifications issued by ANRE.

The report regarding control measures by category of economic operators subject to verification is presented in the following table:

Type action control	Licensed Electricity/natural gas		Certified/authorised Electricity - natural gas		Renewable energy Energy efficiency Electricity natural gas				Others	
	License (GC authorisation)				License (GC obligations)					
Inspection	512	42	6	251	177	33	0	3	0	0
Verification	120	48	24	9	12	17	2	0	7	1
Surveillance	470	213	153	0	14	66	24	0	0	0
Subtotal	303	183	260	203	116	26	3	7	1	
Total	486	463	142	3	8					

The development of the total number of control actions carried out by ANRE over the last five years is rendered in the following graph:

The subjects of the control actions carried out by license holders in the field of electricity and natural gas were mainly to verify compliance with the legal provisions in force concerning:

- carrying out of the periodic metrological check of the measuring instruments for electricity and natural gas;

- compensation to end clients for non-compliance with electricity performance standard indicators;
- compensation to end clients for non-compliance with gas performance standard indicators;
- change of supplier of electricity;
- conclusion of energy supply contracts:
- ensuring the quality of the distribution service in the field of electricity;
- installation of natural gas detectors;
- compliance with performance indicators set forth by performance standards for electricity and gas distribution services, electricity and gas supply activities, for the transmission and system service related to electricity and natural gas and the payment of the related compensation for subsequent non-compliance;
- update of the technical characteristics of the licenses for the operation of upstream supply pipelines related to the production of natural gas;
- update of the technical characteristics of gas distribution systems;
- connection to electricity grids of public interest, including prosumers;
- connection to the gas distribution system;
- access to the gas distribution and transmission system;
- ensuring the decision-making independence of electricity distribution system operators and the vertically integrated company and exclusion of discriminatory practices;
- obligation to purchase green certificates;
- certification of conformity of photovoltaic and/or wind power plants;
- consistency between the technical characteristics in the field of the main equipment constituting accredited power plants for the production of electricity from renewable energy sources;
- design, verification, execution, acceptance and commissioning of natural gas installations;
- design, verification, execution, acceptance and commissioning of electrical installations;
- compliance with the conditions of validity of the certifications and authorizations held;

Following the carried out control actions, 489 reports of infringements were drawn up in 2020 (222 in the field of electricity, 176 in the field of natural gas, 90 in the field of renewable energy and 3 in the field of energy efficiency); 1963 non-criminal penalties have been applied for irregularities, broken down as follows:
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The distribution of the penalties and the amount of the fines imposed is presented in the following table:

The distribution of sanctions per type of economic operator

Operator type	No. of total penalties imposed	Total amount of fines imposed (lei)
EE licensed	1389	8,425,000.00
GN licensed	396	6,013,523.99
EE certified	12	75,000.00
GN authorized	48	211,000.00
EE licensed - GC authorised	81	228,923.79
EE licensed - GC obligations	28	12,720,109.10
Energy efficiency	3	5,000.00
Other EE (private individuals, authorised private individuals, developers, DSOs)		
	6	20,000.00
Total	1963	27,698,556.88

6. Investigations

The investigation work shall be carried out on the basis of the provisions of Article 9, paragraph 1, items (y) and (z) and Article 10, paragraph (1), item (b) and paragraph 6, item (d) of Government Emergency Ordinance No. 33/2007, on the organization and functioning of the Romanian Energy Regulatory Authority, approved with amendments and completions by Law No. 160/2012, with subsequent amendments and completions, and by the provisions of Article 84 and Article 183 of the Law on electricity and natural gas No. 123/2012, with subsequent amendments and completions.

Furthermore, the investigation work within ANRE is carried out in accordance with the provisions of the Regulation for the organization and unfolding of the energy investigation work on the functioning of the wholesale energy market, approved by means of Order of President ANRE No. 25/2017, with subsequent amendments and completions.

At European level, rules prohibiting abusive price practices affecting wholesale energy markets are consistent with the rules applicable to financial markets and the proper functioning of wholesale energy markets, are laid down in Regulation (EU) No. 1227/2011 of the European Parliament and of the Council of 25.10.2011 on the integrity and transparency of the retail energy market (REMIT).

As per the above legal basis, the ANRE investigation structure ensures the following objectives:
a) to conduct investigations, based on own initiative, in response to a registered complaint by a natural person or legal entity, who is actually and directly affected by a potential breach of legal provisions on the proper functioning of the wholesale electricity and gas market, as well as upon the request of ACER, only in areas where ANRE has competencies in terms of investigation according to the law.
b) to pursue market rules and promote open and fair competition on the wholesale electricity and gas market for the benefit of end consumers and remove and/or eliminate behaviour affecting wholesale energy market integrity and transparency.
c) direct correspondence with ACER in what concerns initiated, ongoing and/or finalized investigations concerning the wholesale electricity and gas markets, as a result of circumstances notified in the ACER notification platform concerning breaches of the provisions of REMIT.

In 2020, the ANRE investigation directorate concluded 10 (ten) investigations in what concerns licensed electricity and gas producers and suppliers active on the wholesale energy market, 6 (six) of which started in 2019. The purpose of the ANRE investigations is to verify that wholesale energy market participants comply with the provisions of Regulation (EU) No. 1227/2011 of the European Parliament and of the Council of 25 October 2011 on the integrity and transparency of the wholesale energy market (REMIT) and other specific European regulations.

Following the 10 (ten) concluded investigations, ANRE sanctioned 5 (five) participants in the wholesale energy market (three participants in the wholesale electricity market and two participants in the wholesale natural gas market), with fines totalling RON 2,200,000 (3 sanctions of RON 400,000 for electricity market participants and 2 sanctions of RON 500,000 for natural gas market participants). These economic operators were penalized for breaching Article 5 of the REMIT.

The investigated economic operators have carried out transactions on the wholesale electricity market which are qualified as „market manipulation acts", which are likely to give false or misleading indications as to „the supply, demand or price of wholesale energy products", as provided for in Article 2, (2), item (a) and sub-item (i) of the previous legislative act.

In 2020, the Investigation directorate also opened another 15 (fifteen) investigations into wholesale energy market participants, which are currently being finalized.
As of 25.09.2020, the penalties imposed on wholesale energy market participants have been increased, so that wholesale energy market participants who will manipulate or attempt to manipulate the wholesale energy market will be liable to pay a fine of 5-10% of the turnover of the year preceding the sanction, without having the possibility to pay half of the minimum fine value. The purpose of increasing the value of the fine was to discourage and prevent actions that violate the requirements in terms of transparency and manipulation of the energy market, to be proportionate to the damage caused by wholesale energy market participants.

In 2020, the investigation department, along with other ANRE divisions, participated in the conclusion of the bill to amend and supplement the Law on electricity and natural gas No. 123/2012, with subsequent amendments and completions.

Following the amendment of the Regulation on the organization and functioning of the Romanian Energy Regulatory Authority, as of December 2020, the Investigation directorate ensures permanent correspondence with the Agency for the Cooperation of Energy Regulators (ACER) on the investigations initiated, ongoing and/or finalized in what concerns the wholesale electricity and gas markets, as a result of cases notified in the ACER notification platform for breach of the provisions of REMIT, establishing a direct interface with ACER for this purpose. In addition, individuals from the Investigation directorate were nominated to different ACER-level working groups, who actively participated in ACER's work sessions in December 2020.

Dissemination of information

Increasing the communication capacity in order to strengthen the institution's position as a reliable, secure and transparent source of information on the rights of energy consumers provided for in issued European, national and regulatory legislation was also the main

objective of the communication activity throughout 2020, and timely information to the public and dialog partners on consumer achievements and actions taken to empower economic operators in the energy sector represented an essential part of this work.

Thus, the information activity in the reference year mainly focused on the provision of the requested information, in writing, in electronic, telephone and hard copy form.

In implementing the legal provisions on access to information of public interest, ANRE responded to 2181 requests for information. Of these, 372 were requests from legal, Romanian and foreign entities and 1809 represented requests from natural, Romanian and foreign persons. Out of the total requests for information submitted, 1694 were submitted electronically and 5 in hard copy form, and 482 represented verbal information requests by Romanian and foreign natural persons/legal entities.

Although most of the requests for information concerned issues specific to the consultancy sector, ANRE responded within the legal minimum of 10 days to more than 98% of the requests for information received in 2020. The report on the results of the evaluation of the implementation of Law No. 544/2001 on access to public interest information, with subsequent amendments and completions, is presented in Annex 2 to this report.

Another effective way of disseminating information, achieved through the implementation of the provisions regarding decision-making transparency was the institution's website, which has been kept up to date with data and information on both the regulations issued, as well as on draft regulations – 216 in total – which were subject to public consultation processes launched by ANRE in 2020. The report on the assessment of the implementation of Law No. 52/2003 on decision-making transparency is set out in Annex 3 to this report.

For the purpose of increasing information and awareness regarding the rights of electricity and gas end users in relation to market participants and ensuring an appropriate framework for communication, ANRE continued and improved the information activity through the call-centre service, extending the scope of information provided in light of legislative changes throughout the year. As a result, the number of users of the call-centre information service who requested information on consumer rights in a liberalized energy market and the issued regulatory framework totalled 3,669.

Another important channel of communication with the public was also the mobile application, which allows access to standard offer comparisons for electricity and gas supply, and energy information. The mobile application is available to any user who has access to Google Play and Apple Store shops and has been managed successfully, including in terms of compliance with legal provisions on decision-making transparency.

In the context of the liberalization of the gas market as of July 1st, 2020, and of the electricity market as of January 1st, 2021 and for the purpose of providing household consumers with means of informing them of their choices in the process of switching from the regulated market to the competitive market and for rapid and efficient communication, ANRE has developed the informative materials entitled „Liberalization of the natural gas market – recommendations for the household consumer" and „Liberalization of the electricity market – recommendations for the household consumers", displayed on the main page of the website.

In addition, ANRE has signed a partnership with the National Consumer Protection Association – INFOCONS, in order to disseminate printed leaflets and display them at the contact points of major interest institutions, throughout the country. In addition, in order to build a fair perception regarding all aspects of the liberalization process, ANRE asked suppliers to distribute the information material, including recommendations, developed by ANRE to their household consumers and to display it at the single point of contact, in customer service centres and on the home page of own websites.

Public information was also carried out by means of media, press releases and statements for daily newspapers, television and radio channels (63), interviews and answers to questions directly addressed by journalists. As a result of the media information, in the written press, on-line, TV and radio, 1774 articles and notifications were published in 2020, in which ANRE's actions, achievements, events, objectives and forward-looking plans were mentioned, with the main topics addressed referring, mainly, to the following areas: the obligations arising from primary and European legislation contained in the regulatory program, such as, for example: the liberalization of domestic gas and electricity markets for household consumers; prices for the supply of natural gas and electricity, respectively, to household consumers, until the date of liberalization of markets, i.e. July 1st, 2020 and January 1st, 2021, respectively, and after; functionality of the web-based application for comparing the standard offers for gas/electricity supply; the state of liberalization of the gas and electricity markets and the state of contracts concluded under competition circumstances; the obligation to offer gas on centralized markets; the obligation of last resort suppliers to inform household consumers about the supply of electricity; and the supply of last resort natural gas; the new rules on the connection of household and non-household consumers to the electricity grids of public interest, the gas distribution system and the gas transmission system; launch of the project „Development of institutional capacity of the Romanian Energy Regulatory Authority to simplify the process of switching of electricity and natural gas supplier" funded by the Operational Administrative Capacity Program (POCA); amendment of the rules for marketing electricity produced in prosumers' renewable power plants; new rules for the functioning of electricity markets in the context of the application of Regulation (EU) No. 2019/943; fulfilment by ANRE of the REMIT data security requirements; results of the ANRE investigations on the wholesale electricity and gas markets. All the information, press releases, materials produced and published on the official website of the authority, www.anre.ro, were 100% taken over in the local and central press.

ANRE has used the levers provided by the law and has disseminated practical information to end consumers on the effects of electricity market liberalization, choice of optimal supply, solutions with regard to the signing of new contracts, etc. At the same time, in accordance with the regulatory powers provided for by law, ANRE has set out, through the relevant secondary legislation, concrete obligations to inform operators and to report to ANRE on how and to which extent these obligations are fulfilled.

In addition to the above measures, and in the context in which ANRE's intention was to provide access to information related to the liberalization of the markets to as many end consumers as possible in 2020, ANRE started the process of getting the approval of the National Audio-visual Council (CNA), to broadcast a message of public interest on the liberalization of energy markets, free of charge, by audio-visual means.

Considering the public's great interest in learning as much information as possible about the liberalization of the electricity market and the need to disseminate the necessary information to household consumers from authorized sources, ANRE, throughout 2020, disseminated, by means of official social media accounts, on Facebook, Linkedin and Youtube, information material, statements and press releases related to the subject of market liberalization, as well as other results of the regulatory work carried out within the authority.