ROMANIAN
ENERGY REGULATORY AUTHORITY

ANNUAL REPORT 2015

SUMMARY

2016

Table of Contents

ABBREVIATIONS

ANRE – Romanian Energy Regulatory Authority

BM – Balancing Market

BRP – Balance Responsible Party

CMBC – Centralised Market for electricity Bilateral Contracts

CMBC–CN – Centralised Market for electricity Bilateral Contracts with Continuous Negotiation

CMBC–EA – Centralised Market for electricity Bilateral Contracts with Extended Auctions

CM–OTC – Centralised Market for electricity Bilateral Contracts with Double Continuous Negotiation

CMC – Competitive Market Component

DAM – Day-ahead Market

DSO – Distribution System Operator

E-RES – Electricity produced from Renewable Energy Sources

IDM – Intra-day Market

NPS – National Power System

NTS – National Gas Transmission System

OPCOM – Romanian Gas and Electricity Market Operator

SoLR – Supplier of Last Resort

TSO – Transmission System Operator

FOREWORD

To create a modern energy sector in line with the EU principles of liberalisation of electricity and natural gas markets and with the obligations deriving from the national and European legislation to meeting consumer demand, in 2015 ANRE issued approx. 986 orders, decisions and opinions.

The 2015 Regulatory Programme focused mainly on the following activities:

- completing the regulatory framework for natural gas trading,
- non-discriminatory access to natural gas networks and storage facilities, ensuring the minimum level of natural gas stock for license holders,
- adjusting the regulatory framework for the natural gas retail market to legislative amendments regarding the natural gas market structure in Romania as a result of the implementation of prices liberalisation timetable,
- revision of regulations and conditions of validity related to licenses and authorisations in natural gas and electricity sector,
- revision of rules regarding the wholesale electricity market, the Balancing Market and the Day-ahead Market,
- continuing the timetable of eliminating regulated electricity prices correlated to optimal management of energy consumption, completing the implementation of the Universal Service for electricity and reviewing the regulatory framework for the supply of last resort,
- improving the regulatory framework on connecting customers to public electricity networks,
- supporting intelligent metering systems and a specific approach for energy efficiency,
- ensuring technical conditions that allow the development of energy services for final customers,
- improving the regulatory framework for the support schemes on the promotion of electricity produced from renewable energy sources and high-efficiency cogeneration,
- increasing integrity and transparency of electricity and natural gas wholesale markets,
- improving information for electricity and natural gas consumers through the regulatory framework revision regarding the requirements imposed to suppliers,
- establishing rules to solving customer complaints addressed to the suppliers, or against the transmission and distribution system operators as well as settlement of the network / transmission systems owners’ disputes;

Due to the implementation of the timetable for phasing-out natural gas regulated tariffs for non-households, the liberalisation of the natural gas market for non-household customers was completed in 2015.

Niculae HAVRILEŢ

PRESIDENT

I. ANRE ROLE AND COMPETENCIES

ANRE regulatory activity was developed in **2015**, based on :

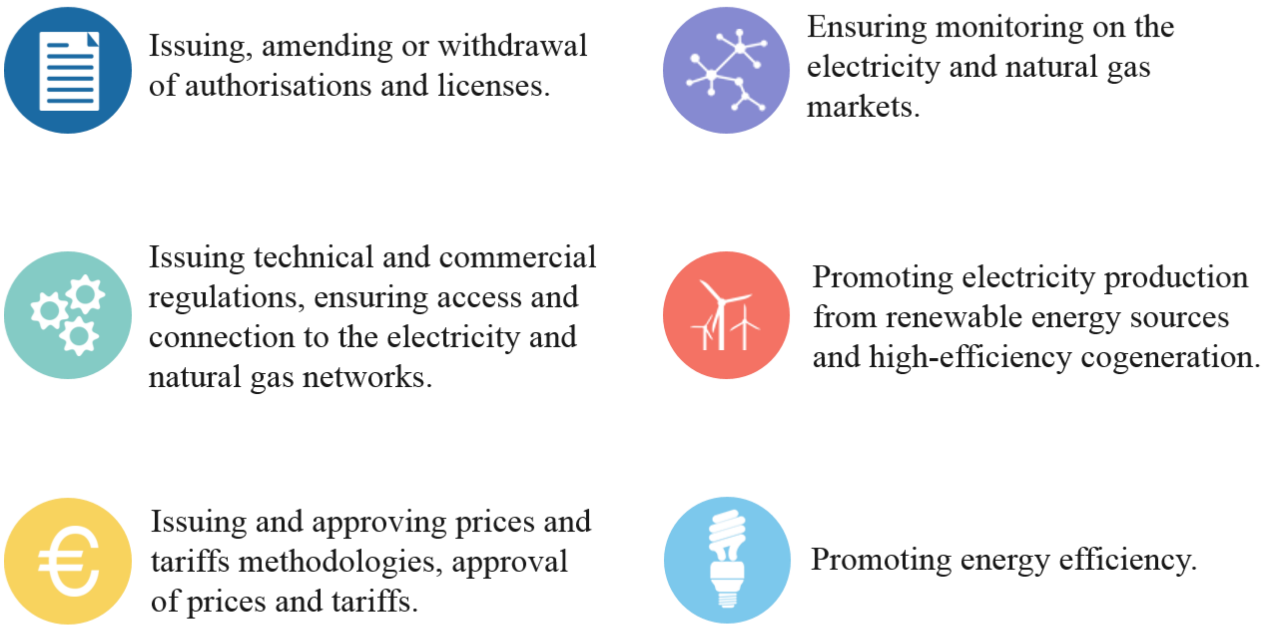
- The Electricity and Natural gas Law No.123/2012, wiht subsequent amendments and complements (Law No. 127/2014 and Law No. 174/2014);
- Law No. 160/2012 approving Government Emergency Ordinance No. 33/2007 on the organization and functioning of the Romanian Energy Regulatory Authority;
- Law No. 23/2014 approving Government Emergency Ordinance No. 57/2013 amending and complementing Law No. 220/2008 for establishing the system for promoting electricity produced from renewable energy sources;
- The Energy Efficiency Law No. 121/2014.

In 2015, ANRE Regulatory Committee issued: 779 decisions, 27 opinions, and 180 orders.

In 2015, the natural gas market liberalisation for the non-households customers was completed.

ANRE Responsibilities - Main responsibilities conferred by primary legislation

Chart 1: Main responsibilities conferred by primary legislation



II. DEVELOPMENTS IN THE ELECTRICITY MARKET IN 2015

II. 1. Licenses and Authorisations

During 2015 ANRE continued the activity of granting, withdrawal or, where appropriate, suspending establishment authorisations and licenses.

Chart 2: Licenses Evolution

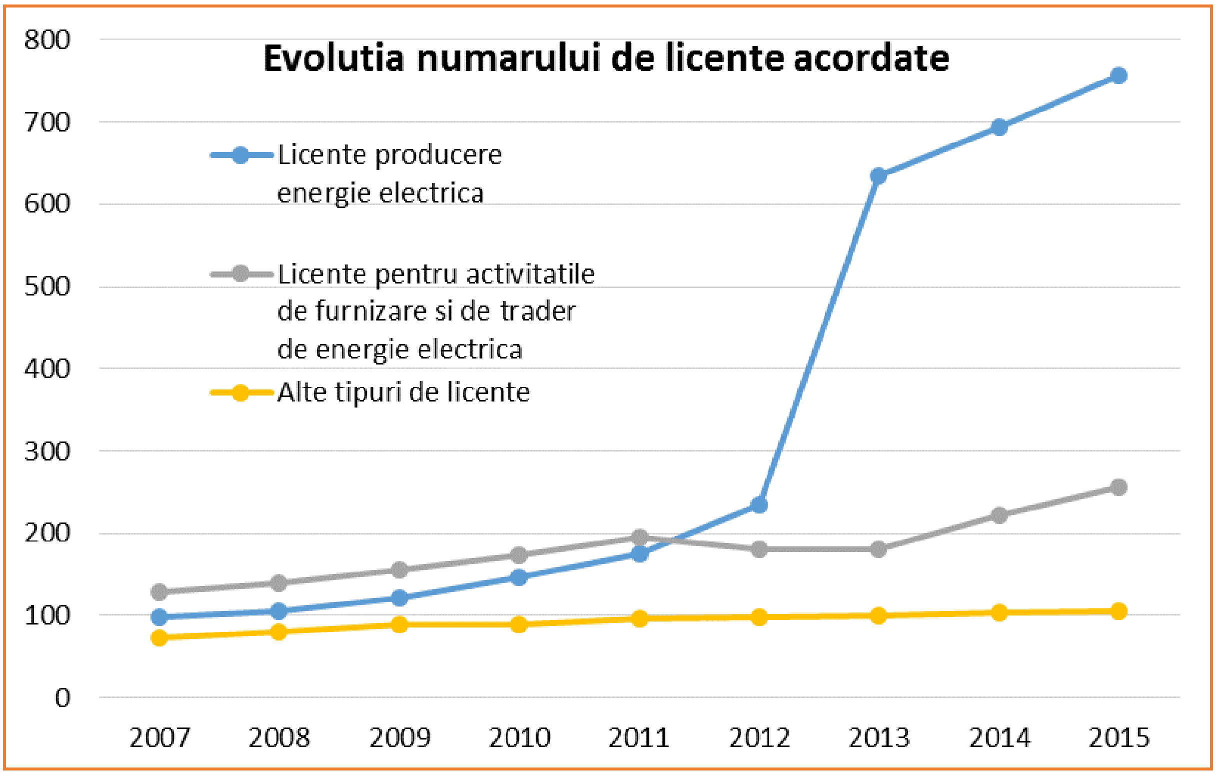
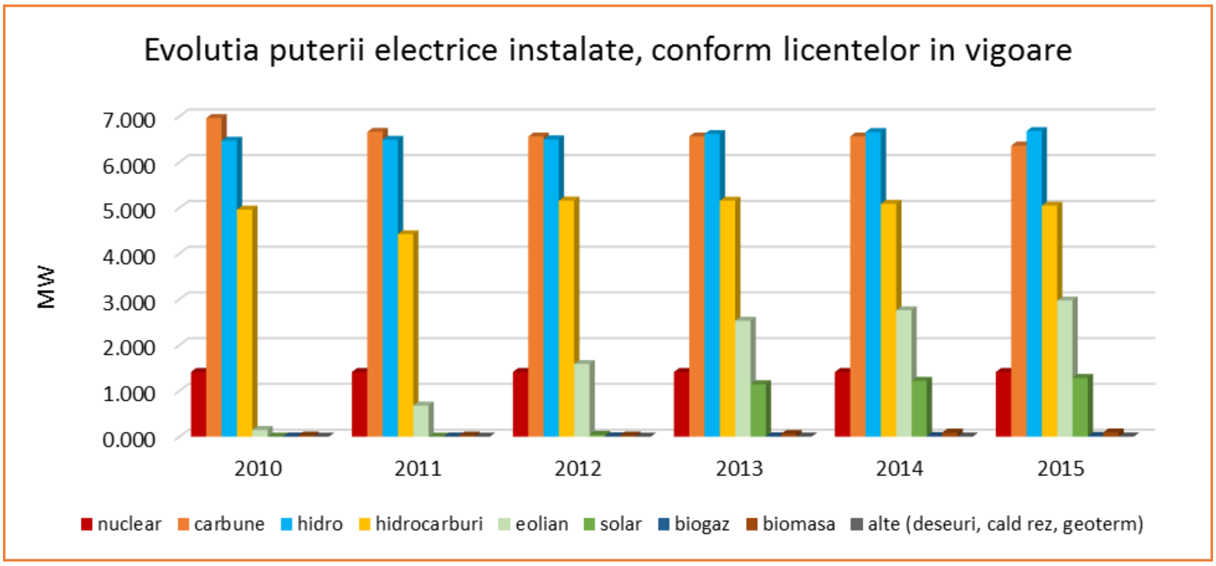


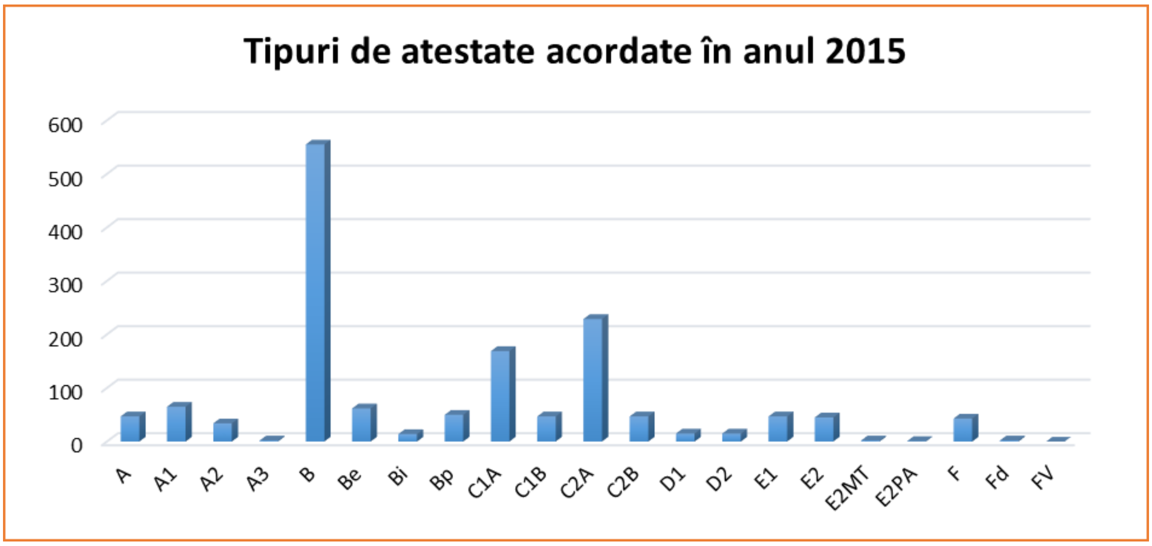
Chart 3: The installed power evolution, within licenses in force



The certification of economic operators

The types of certification issued by ANRE in 2015 (specified for design / build electric power installations and different voltage levels), can be further broken down into:

Chart 4: Types of certification issued by ANRE in 2015



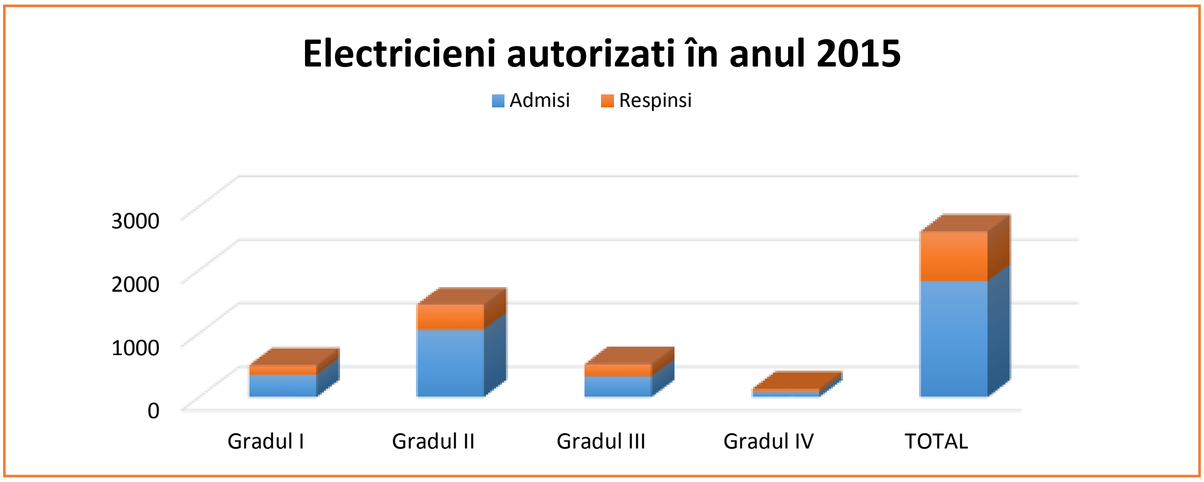
A	A1	A2	A3	B	Be	Bi	Bp	C1A	C1B	C2A
47	65	34	2	555	62	14	50	169	47	229

C2B	D1	D2	E1	E2	E2MT	E2PA	F	Fv	Fd
47	15	15	47	45	2	1	43	0	2

The authorisation of natural persons

For the authorisation of natural persons, during 2015, ANRE granted electricians, project verifiers, persons responsible for the technical execution and for the technical quality and extrajudicial experts in the electric installations domain.

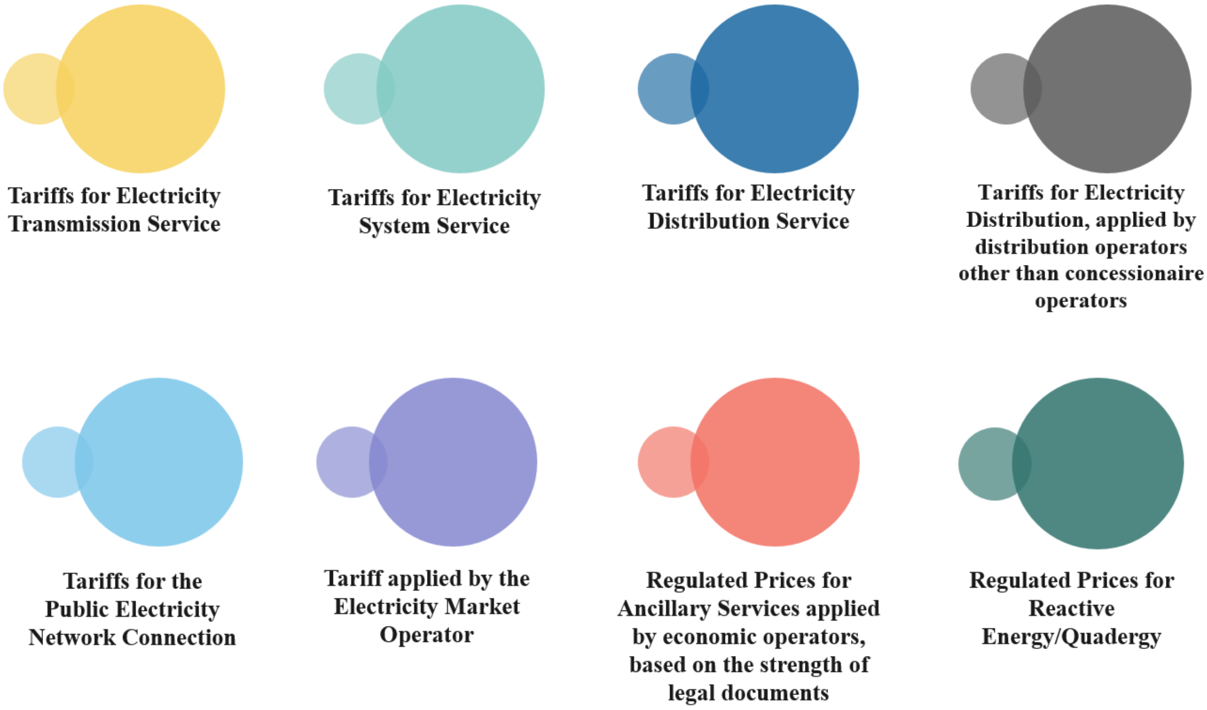
Chart 5: Authorised electricians in 2015



II. 2. Electricity Network Regulations

Regulated network tariffs approved by ANRE, are collected by network operators and are based on regulated contracts for grid connection, for performing transmission and system service and also for electricity distribution activities.

Chart 6: Regulated network tariffs approved by ANRE

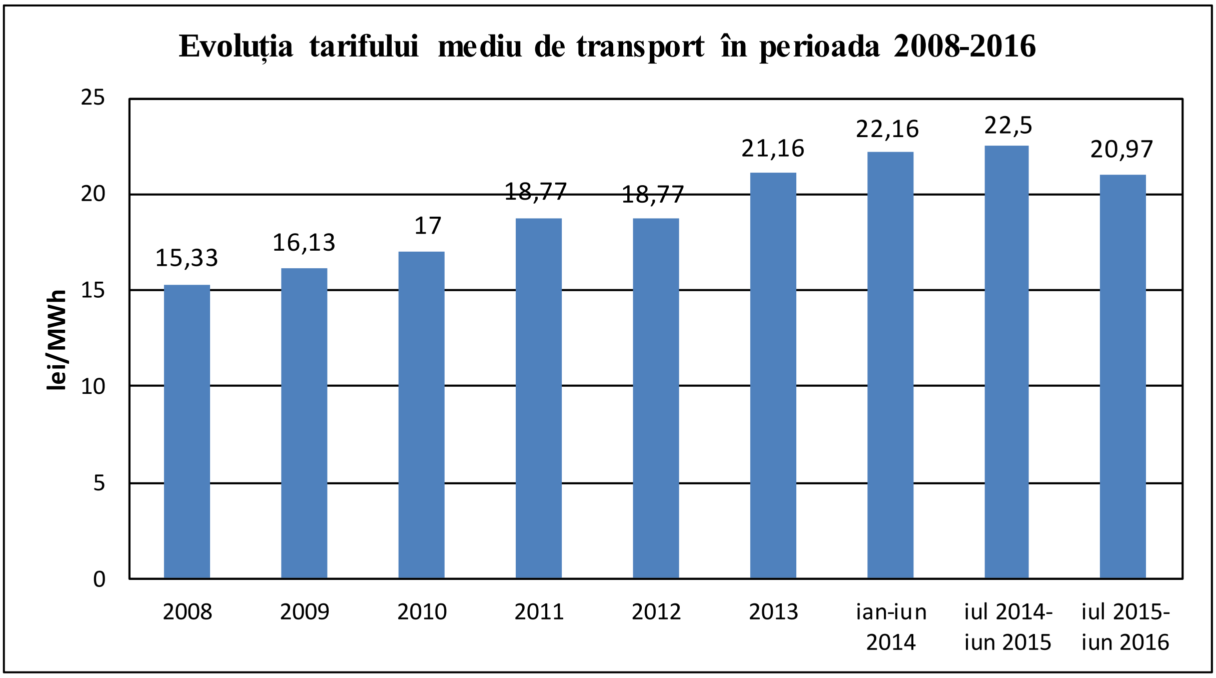


Tariffs for electricity transmission service

From **1st July 2015 to 30th June 2016** were approved the following tariffs:

- the average transmission tariff – 20,97 lei/MWh (a decrease of 6.8% to 2014);
- the average tariff to input electricity in the grid (T_G) - 2,57 lei/MWh, with a range between 0 and 4,57 lei/MWh for the 7 areas of injection;
- the average tariff for electricity off-take from the grid (T_L) - 18,14 lei/MWh, with a range between 15,26 lei and 19,57 lei/MWh for the 8 regions of extraction.

Chart 7: Evolution of the average transmission service tariff from 2008 to 2016



A decrease by 6.8% of the average transmission tariff from 1st July 2015 to the approved one for the tariff period from 1st July 2014 to 30th June 2015, was mainly due to both the increase in electricity consumption and export, as well as to ANRE applying corrections for the completion of the first semester of 2014 and to the estimated achievements for the first year of the regulatory period.

Tariffs for electricity system service

From **2014** to **2016**, tariffs for electricity system service followed a downward trend mainly due to costs reduction and return on capital depreciation in comparison to the forecast of the tariff projection applied in the previous period, on the grounds of the unaccomplished estimated investments for system service.

Chart 8: Evolution of the annual average system service tariff from 2008 to 2015 and from 2015 to 2016

Tariffs for electricity distribution service

National average specific tariffs, on voltage levels, approved for **concessionaire distribution operators of electricity** for **2016** are:

- average specific tariff for high voltage – 19,24 lei/MWh;
- average specific tariff for medium voltage – 37,53 lei/MWh;
- average specific tariff for low voltage – 115,80 lei/MWh.

The average tariffs decreased (**- 11.35%** variation for high voltage**, - 11.90%** for medium voltage and **– 12.84%** for low voltage, relevant for household customers).

The average tariff resulted in our country was 108,03 lei/MWh for **2016 and decreased** by approx. **12.07%** compared to the average national tariff for **2015**, of 122,86 lei/MWh.

Both specific tariffs and specific parameters used to determine tariffs for connecting customers to public electricity networks remained unchanged in 2015.

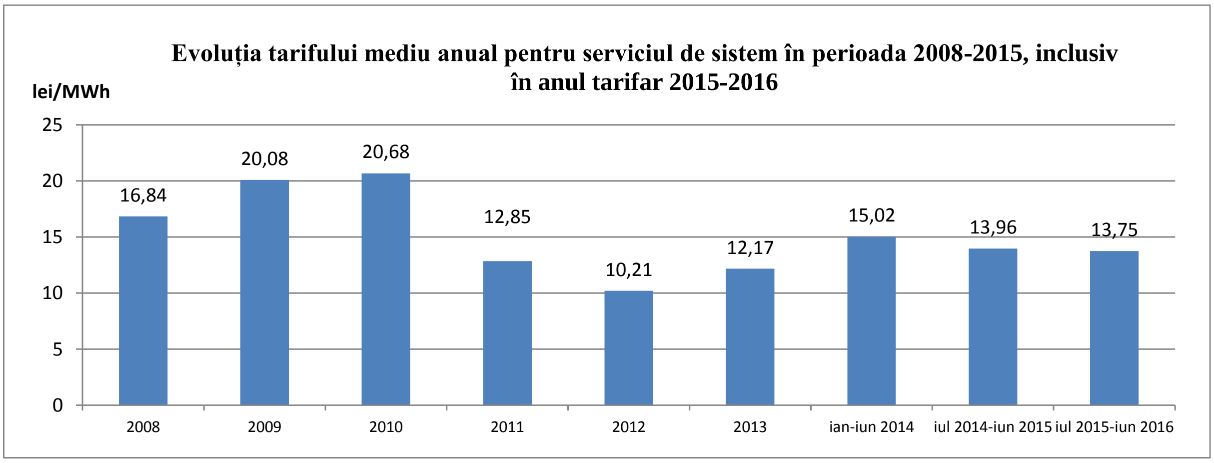
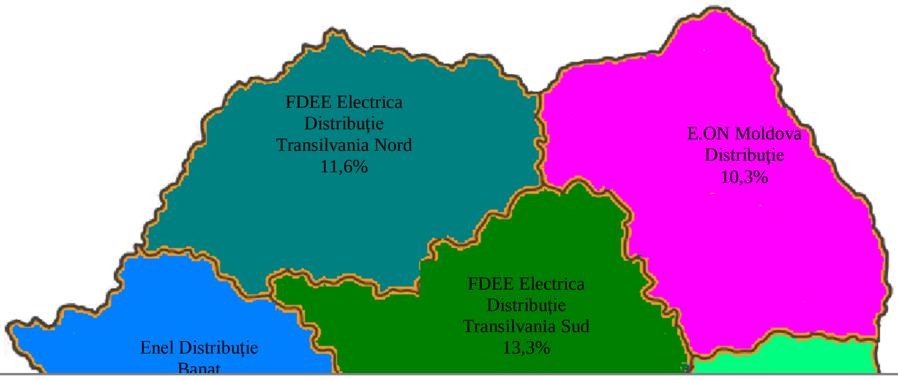
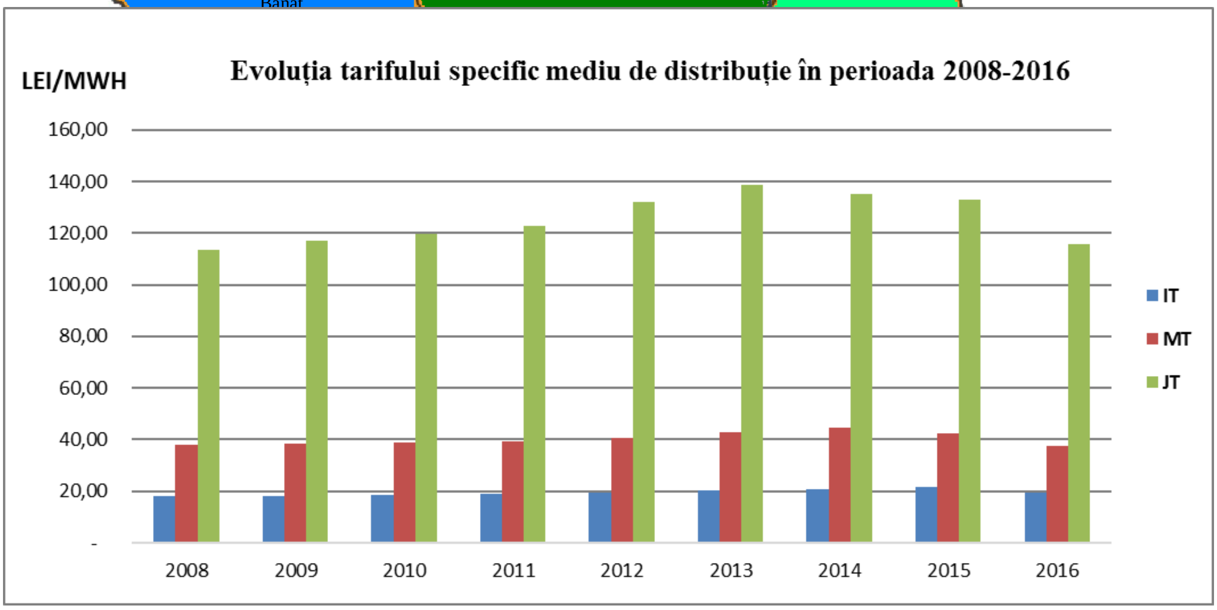


Chart 9: Evolution of the average specific tariff for electricity distribution from 2008 to 2016

Chart 10: Share of electricity distributed by concessionaire distribution operators across the country in 2015 (approx. 42,4 TWh)





	2014		2015	
	Investitii prognozate	Investitii totale realizate*	Investitii prognozate	Investitii realizate 8 luni*
ENEL Distributie Muntenia	180.184.461	166.995.964	161.596.866	57.169.643
ENEL Distributie Banat	72.313.365	66.793.275	92.984.767	24.641.215
ENEL Distributie Dobrogea	65.539.109	61.816.565	76.609.455	18.330.991
CEZ Distributie	155.055.396	155.055.639	161.843.711	81.591.988
E.ON Distributie Romania	173.382.141	155.691.001	183.513.064	60.314.147
FDEE Electrica Muntenia Nord	117.221.622	120.511.911	180.350.659	61.145.970
FDEE Electrica Transilvania Nord	129.780.000	120.387.761	193.689.440	63.552.355
FDEE ElectricaTransilvania Sud	120.510.000	122.216.042	189.478.800	47.697.902

* Valoarea include: investitiile prognozate si realizate in anul curent, investiţiile realizate suplimentar obiectivelor prognozate: din anul anterior și urmare a forței majore, precum și investiţiile realizate suplimentar obiectivelor prognozate: modernizări din mentenanță și urmare a unor condiții excepționale

Tariff applied by the electricity market operator

The tariff reductions set out in the mid of 2015 were aimed at maintaining the regulated profit of 5% for the electricity market operator in the margins which were determined in the Methodology, within 3% ÷ 7%.

Monitoring investment plans for electricity transmission grid and distribution

ANRE approved the annual investment plans values of the concessionaire distribution operators for the regulatory period between 2014 - 2018, accepting the inclusion of fixed assets resulted from prudent investments into Regulated Asset Base (RAB), namely those investments which proved to be necessary, appropriate and effective.

The electricity distribution operators' investments, according to investment plans for 2014 – 2015, presented in *lei* and in nominal terms for each year are the following:

Table 1: The electricity distribution operators' investments from 2014 to 2015

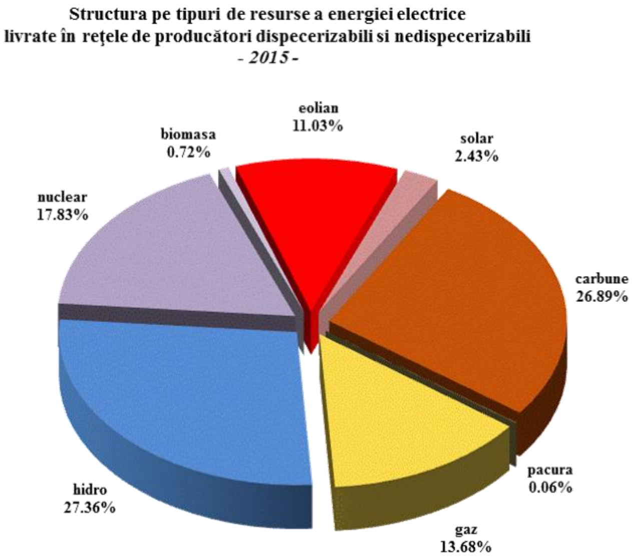
II. 3. Electricity Market Evolution

Electricity market monitoring

According to the results obtained from the achievement of national electricity label for **2015**, the total amount of electricity delivered into the grid by producers (with or without dispatchable units) was **59,97 TWh,** with **0.5%** more in comparison to the energy delivered by the same producers in 2014.

Following the monthly monitoring of producers holding dispatchable units on the electricity market, the amount delivered to the grid by these producers in 2015 was **58,53 TWh** (which includes the producers own consumption and electricity sold directly at generators site).

Chart 11: The structure of the electricity generation sector



A comparison to the values of electricity delivered in **2014** shows an increase of approx. **1%** of the electricity delivered into the National Power System, due to the **increased final consumption** of electricity with approx. **3.9%** and to an intense export activity.

According to data reported by producers, the amount of **nuclear energy** injected into the grid remained approximately **the same as in the previous year** (10,69 TWh in 2015 to 10,87 TWh in 2014**)** and for the **electricity, from hydropower sources,** there is a **decrease** with approx. **13% as compared to 2014** (from 18,92 TWh to 16,40 TWh).

Policy development and integration of power plants based on renewable sources continued in 2015, while production based on **conventional sources** remained predominant and held a share of **86.82%**, with a slight decrease from 88.02% in 2014. Thus, the electricity delivered into the grid from **natural gas** increased by **18%**, while in the case of the electricity from **coal** the delivered quantity exceeded the one from the previous year by only **2%.**

Compared to previous year rates, the largest market share growth was registered in the electricity delivered from photovoltaic power plants (56%), followed by wind power plants (approx. 14%) and biomass power plants (approx. 12%).

From the comparison with individual data from the previous year, is noted that more than **68%** of production was carried out by conventional producers, **Hidroelectrica S.A.** (hydropower source), **C.E. Oltenia** (thermoelectric source) and **Nuclearelectrica S.A.** (nuclear source), the ranking top 3 producers remained the same as in 2014.

The first **8 producers** have produced **over 1 TWh** in **2015,** representing a cumulative rate of over **85% of the total annual production** registered by dispatchable producers, according to monthly producers data.

Table 2: The electricity production registered by dispatchable producers

Dispatchable producer	**Electricity production**	
	TJ	GWh
Hidroelectrica SA	4481	16132
Complexul Energetic Oltenia SA	4155	14957
SN Nuclearelectrica SA	3233	11640
OMV Petrom SA	962	3463
Electrocentrale Bucureşti SA	611	2199
Complexul Energetic Hunedoara SA	512	1842
Romgaz SA	499	1798
Enel Green Power Romania SRL	369	1330
Tomis Team SRL	216	777
CET Govora SA	171	614
Ovidiu Development SRL	149	535
Veolia Energie Prahova SRL	126	454
Others (with market share below the threshold of 0,5%)	1912	6883
TOTAL	**17396**	**62624**

The wholesale electricity market

In **2015,** across the wholesale electricity market, trading was prevalent on the centralised market of bilateral contracts organised by **Opcom S.A.** (CMBC-EA, CMBC-CN, and CM-OTC), **ensuring transactions contracts on medium or long term, in particular,** seconded by **DAM and IDM for short-term transactions.** Transactions on brokerage platforms were suspended in 2014, participants heading towards the centralised market with double continuous negotiation from Opcom S.A.

Table 3: The volumes traded in 2015 on each component of the wholesale electricity market and their evolution compared to those of the previous year

Wholesale market components	**Volumes traded in 2015 -GWh-**	**Evolution compared to 2014- % -**	**Percentage of internal consumption from 2015- % -**
Regulated contracts market	6413	▼ 29,2	12,6
Market of directly negotiated contracts	1509	▼67,3	3,0
Centralised market of bilateral contracts:	56717	▲52,1	109,5
- CMBC-EA	31407	▼8,5	61,9

- CMBC-CN	7915	▲388,3	15,6
- CM-OTC	17394	▲1194,6	34,3
Centralised market for universal service	4592	-	9,1
Day-ahead market	22496	▲5,3	44,3
Intra-day market	76	▲18,8	1,5
Balancing market	4861	▲16,6	9,4
Export*	10504	▲28,0	20,0

* The quantity of export contracts in 2015 resulted from participants data on wholesale electricity market and includes both quantities exported by suppliers, by the only producer that has achieved this type of activity (data reported outside layout monitoring) and those exported by CNTEE Transelectrica, as transfer agent for DAM coupling; export volumes were checked with DAMAS platform notifications, in some cases are small differences.

Compared to 2014, in **2015** is noted an **increase** by approx. **16%** of the **volume of electricity traded on balancing market. The highest increases were registered on CMBC-CN and CM-OTC, the volume of electricity traded on both market multiplied by approx. 4** and by approx. **12**, compared to **previous year**. At the same time, is noted that in **2015, approx. 67% of all transactions** were carried out on three centralised markets administered by Opcom S.A., predominantly used by market participants: **CMBC-EA, DAM,** and **CM-OTC.**

Compared to 2014, a decrease in the quantity of electricity sold on regulated contracts is further noted. The distribution operators purchased 6 TWh of electricity only from the competitive market.

Average prices on the wholesale market	**2015 -lei/MWh-**	**2014 -lei/MWh-**	**Evolution of 2015 compared to 2014 - % -**
Regulated contracts market	140,56	142,68	▼1,5
Market of directly negotiated contracts	147,89	163,75	▼9,7
Centralised market of bilateral contracts:	163,87	173,90	▼5,8
- CMBC-EA	162,01	174,19	▼6,8
- CMBC-CN	167,68	168,11	▼0,3
- CM-OTC	165,50	173,50	▼4,6

Centralised market for universal service	170,52	-	N/A
Day-ahead market*	161,83	153,92	▲5,1
Intra-day market**	112,52	162,63	▼30,8
Balancing Market***	254,74	243,35	▲4,7
Export****	168,05	173,47	▼3,1

Table 4: The average annual prices and comparison to previous year rates

* the average annual price is that published by OPCOM SA and is calculated as simple arithmetic average
** the average annual price is calculated based on the annual traded volume and value, published by Opcom SA
*** the average annual price is calculated as arithmetic average of the monthly average deficit prices
****the average annual price reflects price information on the quantities exported by suppliers, by the only producer to have taken this type of activity (data reported outside layout monitoring) and those exported by CNTEE Transelectrica, as transfer agent for DAM coupling.

A comparative analysis of the **average annual prices** resulting from transactions on the **wholesale market** in **2015,** over the previous year, indicates the following:

- **the average annual prices decreased for all the components of the wholesale market**, except the one registered on **DAM** and the average deficit one from the **Balancing Market**; the most significant decrease was registered on **Intra-day market** and the smallest decrease in price was registered on **CMBC-CN**;
- **the average annual prices on negotiated bilateral contracts registered** much smaller rates than other contracts closed competitively;
- **the average selling price on the centralised market for Universal Service** was the **highest average price** registered on centralised platforms operated by the market operator; it reflects the tendering policy of participants in this sector of the market and the novelty introduced by the implemented regulatory framework, but was also probably influenced by the type / number of products traded.

The cross-border commercial activity increased in 2015, the amount of exported energy based on contracts was approx. 10,50 TWh, 28% higher than the previous year, while the imported energy exceeded that of 2014 by 2,5 times, reaching 3,78 TWh. Is noted that the electricity export activity was performed primarily by suppliers (approx. 98% of the volume traded on such contracts), respectively by CNTEE Transelectrica S.A., as transfer agent for DAM coupling, for import activity (approx.78% of the volume traded).

Regulated bilateral contracts market

In 2015, from the total of 14586 GWh of electricity purchased by suppliers of last resort on the wholesale market, **in order to cover the energy needs of final customers supplied under the regulated regime and Universal Service, a rate of approx. 44% was covered**

by regulated contracts from the producers Hidroelectrica S.A. and Nuclearelectrica S.A., the rest of the purchase was made from the Centralised Market for Universal Service (approx. 31%), DAM (approx. 13%), and from the Centralised Market for Bilateral Contracts organised by Opcom S.A. (approx. 12%).

In **2015, the average electricity buying price** for the five suppliers of last resort was: **158,97 lei/MWh**.

Competitive market

The volume of transactions on the competitive market increased with 34.5% compared to 2014.

Overall, dispatchable producers' sales on the competitive market in 2015 represented almost 55 TWh traded at the average annual price of **164,98 lei/MWh.** There is a **10% increase** in the quantities of electricity sold and a **2% decrease** in the average price per year.

Day-Ahead Market – DAM

The volume of electricity traded on DAM in 2015 increased by approx. 4.6% in comparison with the volume traded in 2014. The average closing DAM price increased by approx. 5% in comparison with the average of 2014.

Intra-Day Market – IDM

The Intra-day market **experienced a positive development** in comparison with the previous year in regard to monthly volumes traded, registering, at **the end of the year, a total volume of 76 GWh, approx. 19% higher than in 2014,** with an annually traded value of 8527 thousands lei. With a total of 111 licensees who signed the intra-day market participation convention, the monthly level of participation (number of participants who have placed bids) ranged between 29% (January 2015) and 49% (November 2015).

Balancing Market – BM

In December 2015, there were 114 producers on this market, with a total 108 registered BRPs. In comparison with the previous year, the total volume of electricity traded on BM increased by 16.6%.

The Ancillary Services Market

In 2015, the balancing market participants that provided ancillary services were: Hidroelectrica S.A., C.E. Oltenia, C.E. Hunedoara, OMV Petrom S.A., Electrocentrale Bucureşti S.A., Romgaz S.A., Electrocentrale Galaţi S.A., Veolia Energie Prahova S.R.L., Veolia Energie Iaşi S.A., Bepco S.R.L. and Electro Energy Sud S.R.L.

Cross-border capacity allocation

In 2015, the highest annual average values of the total capacity utilization allocated as a result of auctioning were registered on the export borders with Hungary (98.12%), Serbia (96.05%), and Bulgaria (72.40%). Import allocation capacity utilization was lower regardless of the border, the highest average value was recorded on the border with Hungary (38.53%).

Electricity retail market

In **2015, 96 suppliers operated on the retail market**, including 21 licensed producers, and 5 suppliers of last resort.

Given the approx. 3.9% increase in final consumption, was registered a 7.1% decrease compared to 2014, electricity supplied by SoLR was approx. **14128 GWh.**

Analysis of the evolution of the structure of electricity consumption for final customers

- the final electricity consumption recorded in 2015 increased by approx. 3.9% from the level recorded in 2014,
- a 3.3% increase in household consumption in 2015 in comparison with 2014, nevertheless maintaining their share in final consumption,
- approx. 9.7 % increase in consumption for the non-households consumers who have switched supplier and an increase in their share in final consumption in comparison with 2014,
- a decrease consumption for the non-households under universal service supply, by approx. 40.8% in 2015 compared to 2014, as well as their share in final consumption.

In December 2015, on the competitive market, there were **112018** non-household customers, and the electricity supplied, in 2015, to them was **32076 GWh.**

Chart 12: Evolution of the customers from the competitive market and electricity supplied to them

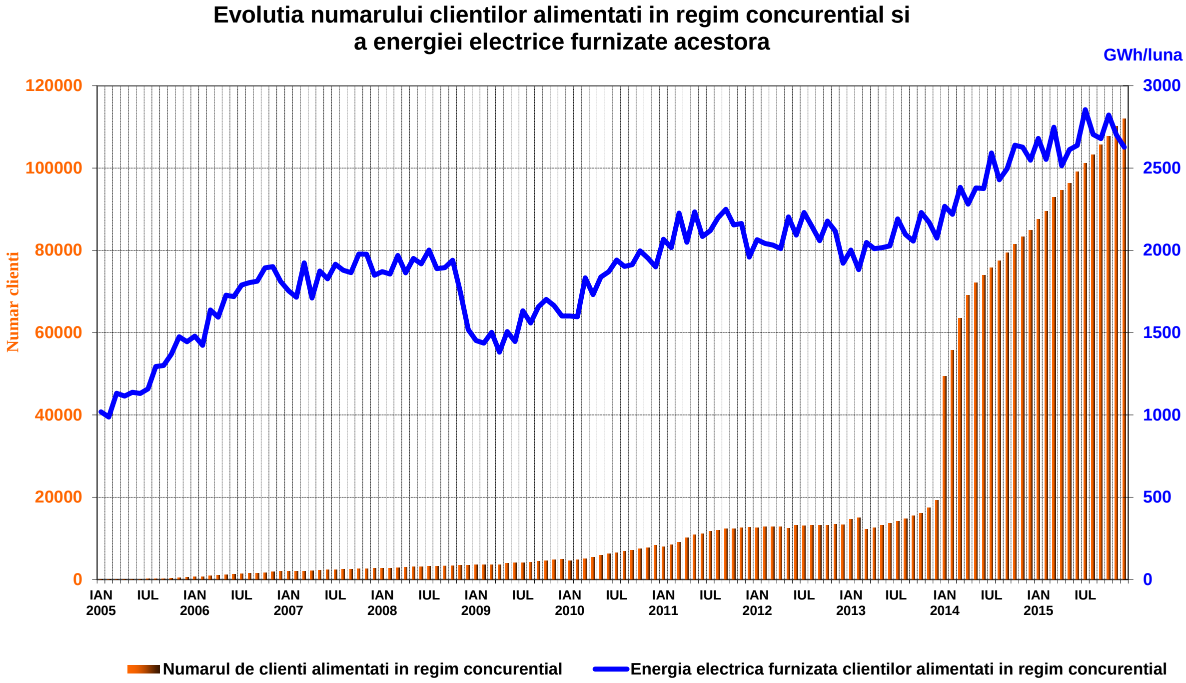
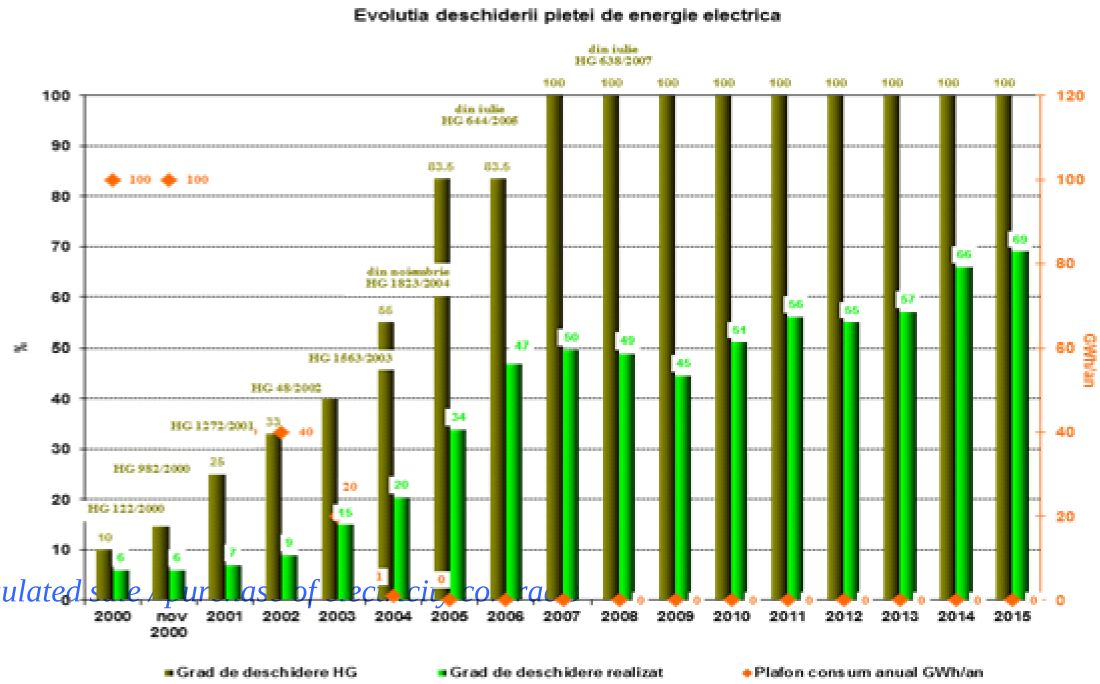


Chart 13: Evolution of the opening degree of the retail market



Regulated sale / purchase of electricity contracts

The electricity consumption supplied at **regulated tariffs in 2015** was ensured by regulated contracts only for quantities of electricity produced by hydroelectric and nuclear power plants, as follows:

- Hidroelectrica S.A. – 4,16 TWh at an average price of 120,2 lei/MWh;
- Nuclearelectrica S.A. – 2,25 TWh at an average price of 158,6 lei/MWh,

with a total of **6,4 TWh** at an average price of **133,7 lei/MWh**.

Average prices of regulated contracts for 2015, compared to those approved for the 2nd semester of 2014 were higher by 2.85% for Nuclearelectrica S.A. **(158,6 lei/MWh compared with 154,2 lei/MWh)** and respectively 4.45% lower for Hidroelectrica S.A. **(120,2 lei/MWh compared with 125,8 lei/MWh).**

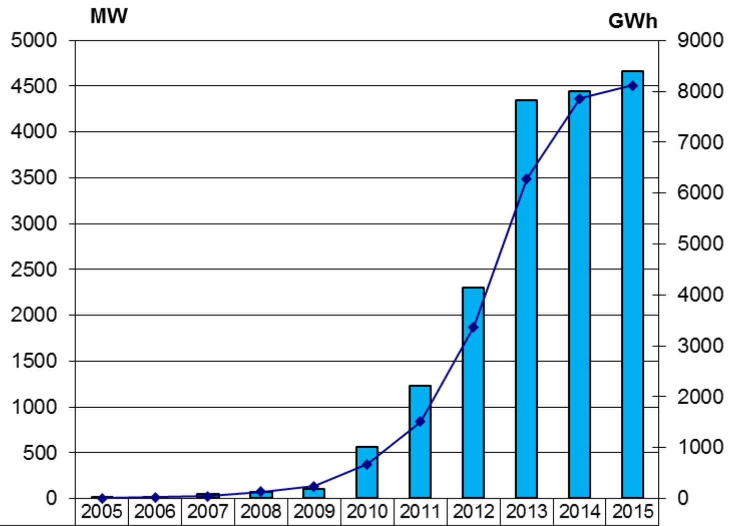
Competition Market Component tariffs (CMC)

According to the timetable for eliminating regulated prices to final customers, pursuant to the Memorandum of Understanding signed by the Romanian Government with the European Commission on 13th March 2012, in 2015 stages 8 and 9 of phasing out regulated tariffs were concluded, the percentage of purchasing electricity from the competitive market for final customers who have not choose to change supplier are:

- 100% of consumption for non-households and 40% of consumption for households, stage 8 of phasing out regulated tariffs (from 1st January 2015 to 30th June 2015);
- 100% of consumption for non-households and 50% of consumption for households, stage 9 of phasing out regulated tariffs (from 1st July 2015 to 31st December 2015);

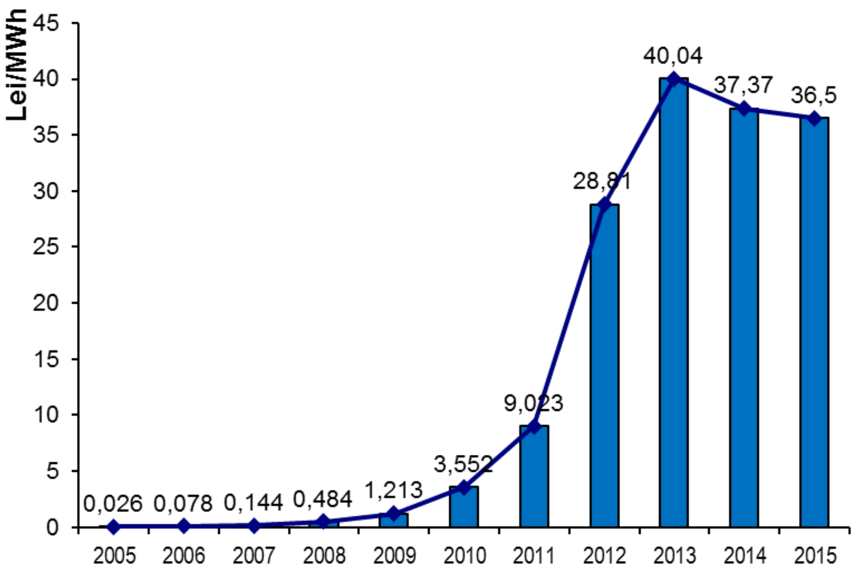
II. 4. Promoting electricity produced from renewable energy sources

Chart 14: Evolution of the installed capacity in power plants that benefited from the RES-E promotion system and electricity produced in these plants from 2005 to 2015 is shown in the following chart:



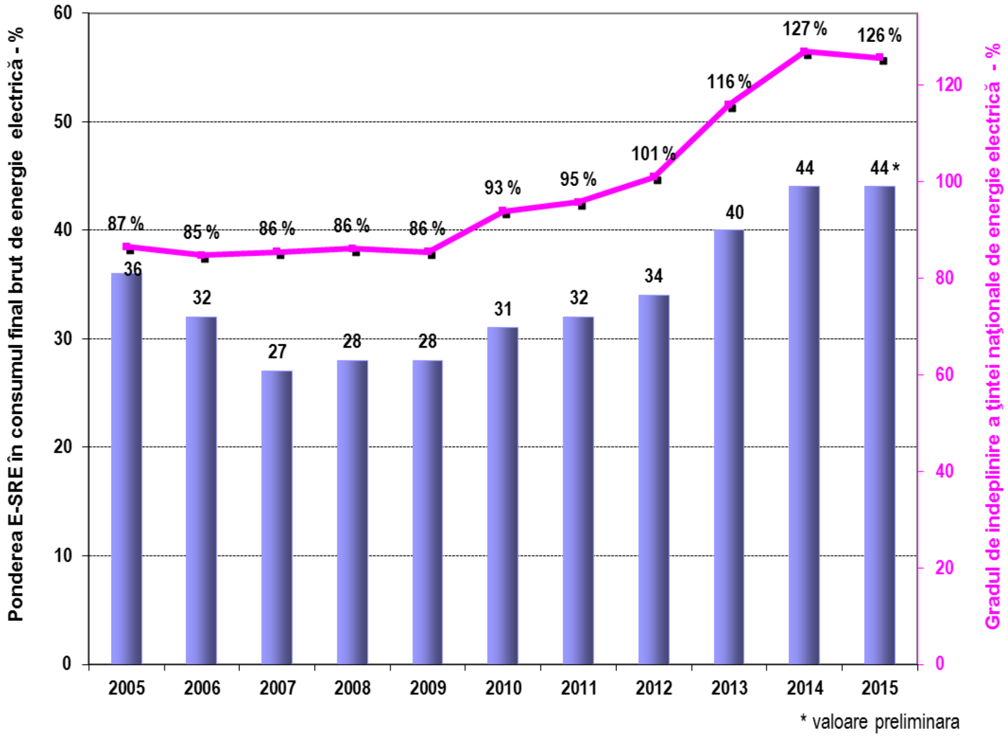
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Capacităţi instalate in centrale electrice care au beneficiat de sistemul de promovare a E-SRE [MW]	21	21	52	75	99	561	1226	2298	4349	4450	4662
Producţia de E-SRE care a beneficiat de sistemul de promovare a E-SRE [MWh]	8	23	43	132	242	677	1510	3365	6279	7859	8118

Chart 15: Evolution of the impact of the RES –E promoting scheme in electricity prices to the final customer, from 2005 to 2015 is shown in the chart below:



* impactul tine seama de un consum exceptat in anul 2015 de cca 3,45 TWh

Chart 16: Evolution of the achievement of the national target of E-RES in Romania's gross final consumption of electricity from 2005 to 2015



Promoting electricity produced from renewable energy sources

ANRE accredited by **31th December 2015**, units for producing electricity from renewable energy sources, with a total installed capacity of **4.662 MW**, of these **2.931 MW were from wind turbines, 1.269 from photovoltaic power plants and 106,5 MW from power plants using biomass**, waste, sludge and waste digester gas from wastewater treatment plants.

Meanwhile, **327,8 MW** were produced in **small hydro power plants,** under 10 MW, of these, 228,8 MW in new installations, 85,5 MW in refurbished installations and 13,5 in old micro hydro power plants. There are 70 accredited wind farm operators, 514 for photovoltaic, 89 for hydro and 25 for biomass and biogas.

Promoting heat and electricity produced in cogeneration

For **38 producers**, the total amount of electricity produced in **high efficiency cogeneration** which received a bonus for the period from January to December 2015 was **4,566 TWh**, before the adjustment carried out in March 2015, respectively 4,717 TWh after the adjustment carried out in March 2016 with a **decrease of 7.5%** from the corresponding value of **2014**.

The amount of bonuses for 2015 was the following:

- **189,18 lei/MWh** for power plants using mainly natural gas from the transmission network;
- **207,61 lei/MWh** for power plants using mainly natural gas from the distribution network;
- **169,75 lei/MWh** for power plants using mainly solid fuel.

Chart 17: Electricity produced from high-efficiency cogeneration that benefited from the bonus support scheme from 1st April 2011 to 31 st December 2015

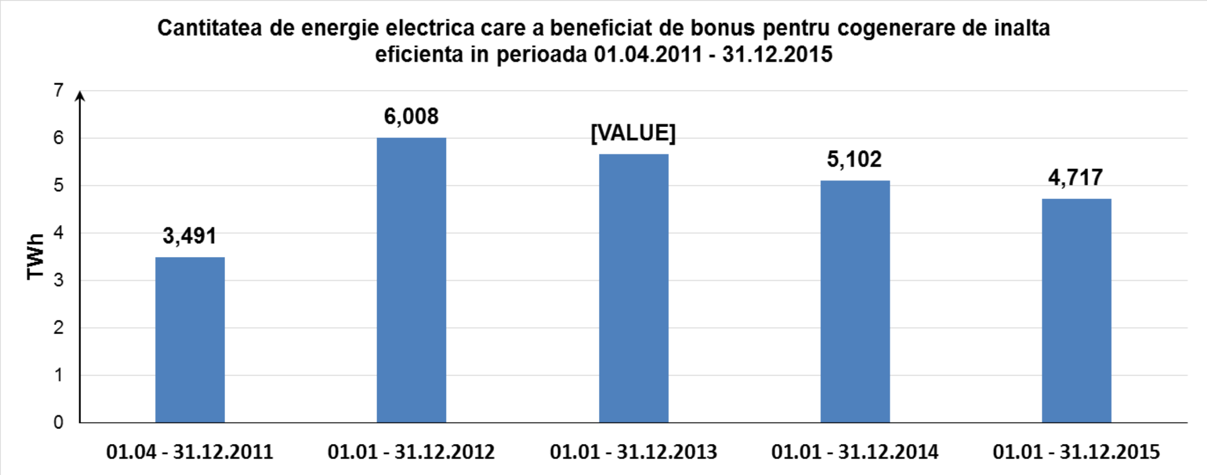
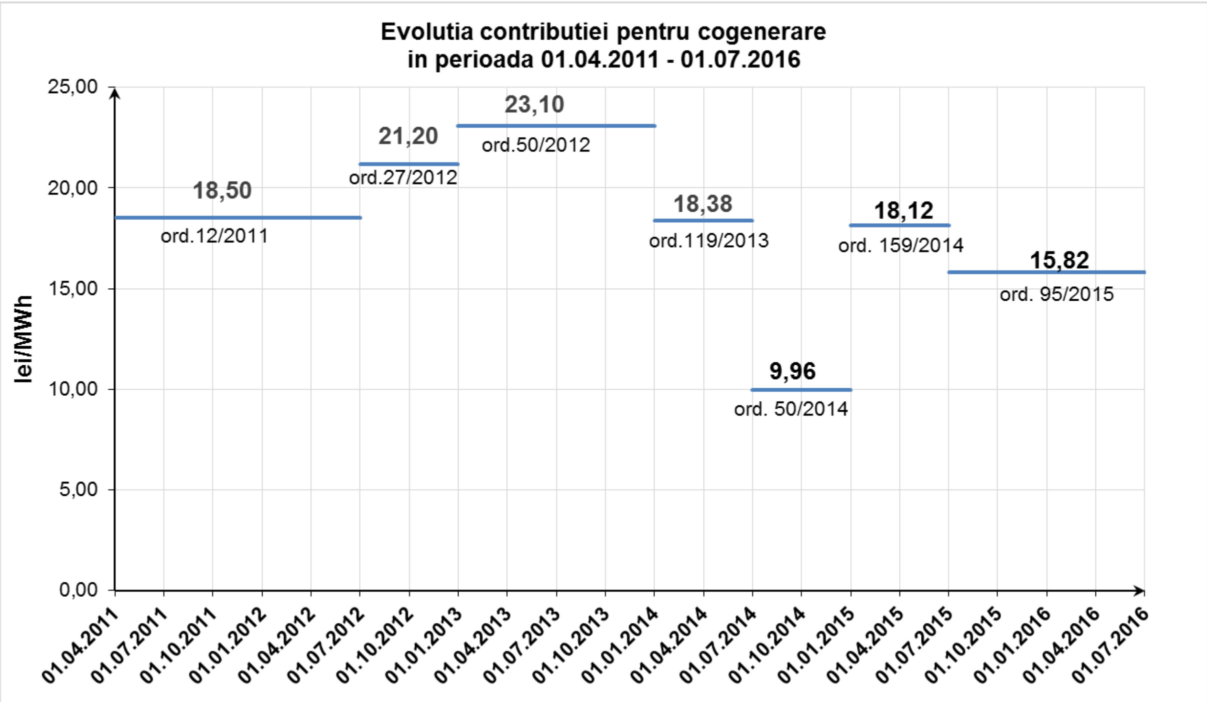


Chart 18: Evolution of the cogeneration contribution from 1st April 2011 to 1st July 2016



III. NATURAL GAS MARKET EVOLUTION IN 2015

III. 1. Licenses and Authorisations

During 2015, ANRE granted authorisations / certificates and licenses to natural and legal persons operating in the gas sector, the largest share was for supply licenses, 72%, and 75% were establishment authorisations for natural gas distribution.

Chart 19: Share of licenses granted

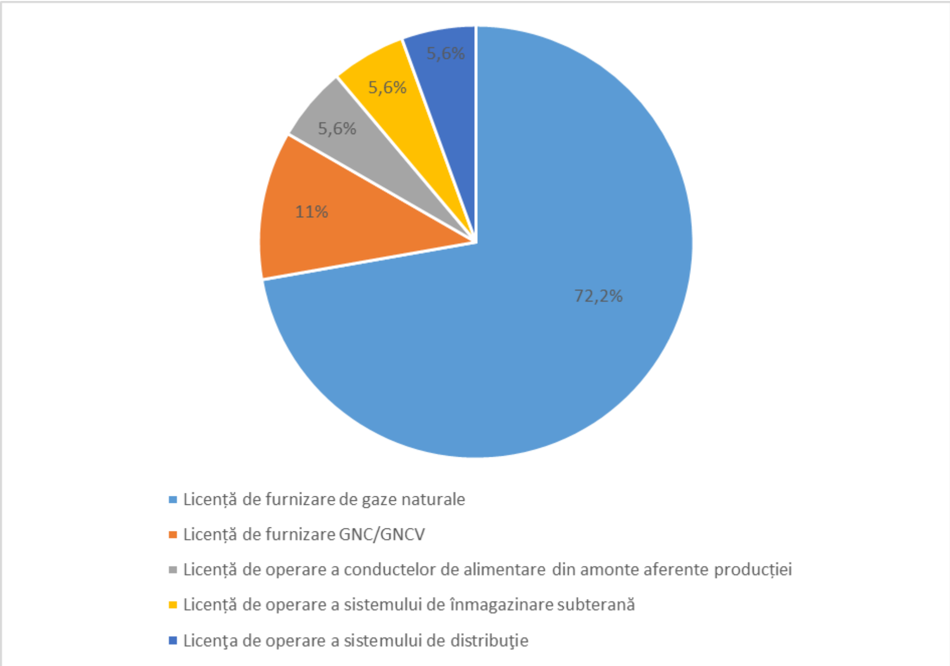
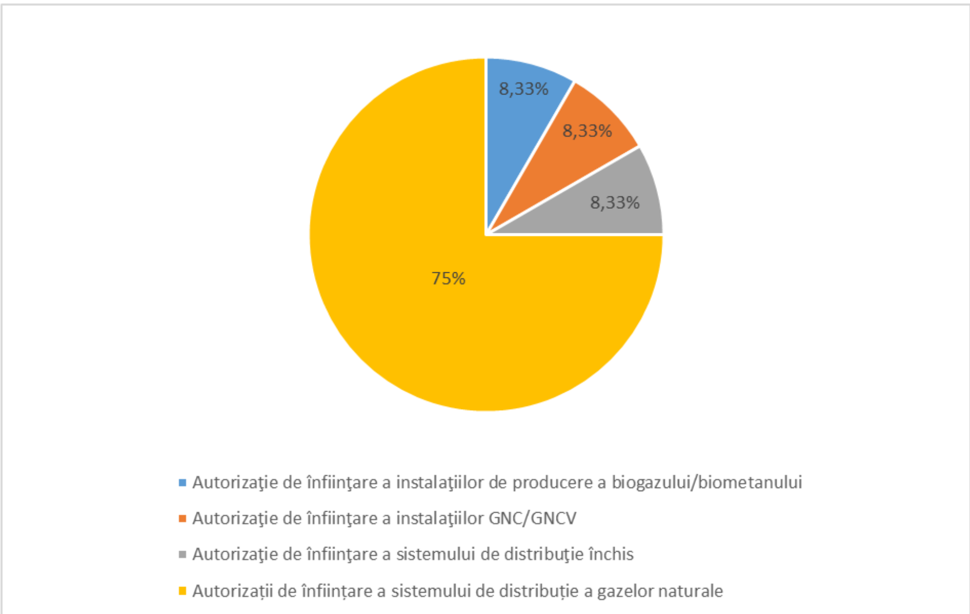
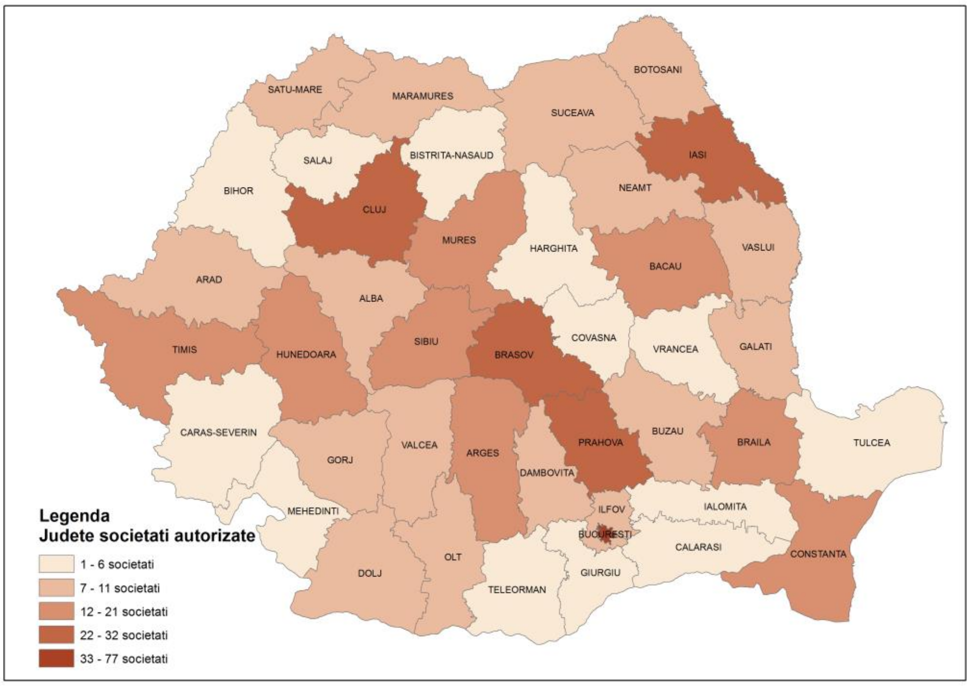


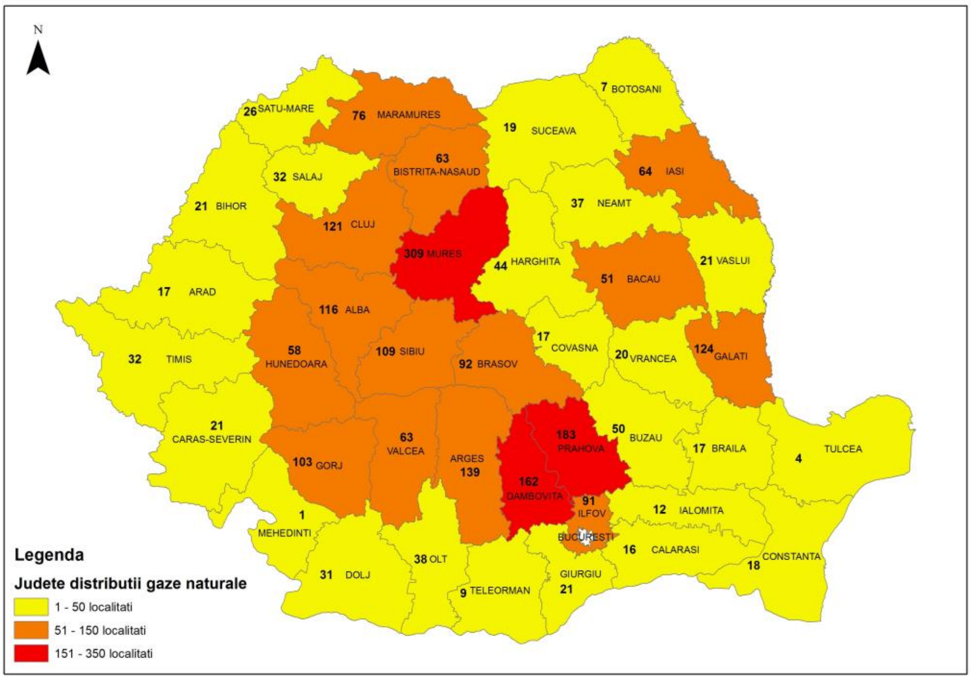
Chart 20: Share of authorisations granted



Requests for participation in the certification of project inspectors and technical experts and for the equivalence of certificates issued by other entities were also processed, 4 exam sessions were held in this regard and 30 certificates were issued in the natural gas sector following these exam sessions. The map below presents the level of natural gas supply to Romania's counties:

Chart 21: Level of natural gas supply to Romania's counties





III. 2. Evolution of the natural gas market

Natural gas consumption has decreased in the last year, reaching about 11,6 billion cubic meters, with a **decrease of about 5% in 2015** compared to 2014, due to a slight decrease in final customers consumption.

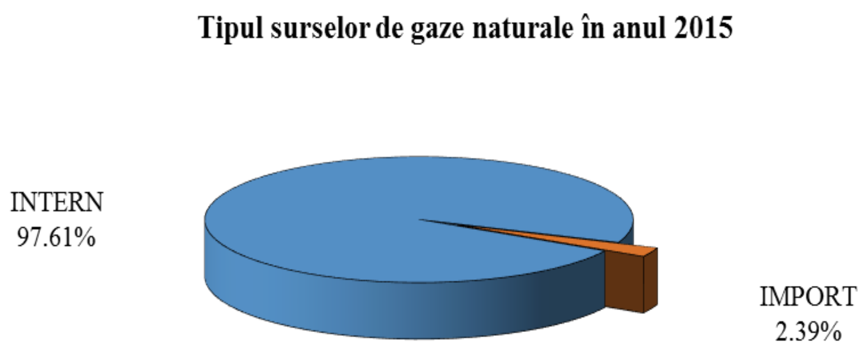
In 2015, **the total natural gas consumption** of final customers was 121.726.748,658 MWh. **The total number of final customers was 3.480.661** out of which **182.265 were non-household customers (5.24%)** and **3.298.396 household customers (94.76%). This year the total natural gas consumption was** 111.244.195,163 MWh, out of which 80.992.734,448 MWh was the **non-household consumption (72.80%)** and 30.251.460,715 MWh was the **household consumption (27.20%).** Consumption is covered both from domestic production as well as imports.

The domestic production was 118.816.674,270 MWh and the **import** was 2.910.074,388 MWh.

The number of **participants on the natural gas market** in Romania has increased steadily as the market was liberalised, especially in the supply of natural gas, including: 1 National Transmission System Operator, 6 producers, 6 external suppliers, 2 operators of underground storage, 40 distribution operators and 76 suppliers.

Domestic production of natural gas in 2015, the current production and the extracted one from storage, which came into consumption, represented **97.61%** of the total sources. **The two main producers (Romgaz and OMV Petrom) covered 94.85% of this source. Imports entering consumption in 2015, current import and extracted from storage, represented the difference of 2.39%.** The top three importers - internal suppliers - achieved together **94.89%.**

Chart 22: Structure of natural gas sources in 2015



Wholesale natural gas market

In 2015, 39 supply license holders authorised by ANRE, operated on the wholesale natural gas market.

In Romania, natural gas was produced by six companies: Romgaz S.A., OMV Petrom S.A., Amromco Energy S.R.L., Raffles Energy S.R.L., Foraj Sonde S.A., Stratum Energy LLC.

The natural gas production in 2015 was **120.303.651,483 MWh.**

Table 5: Quantity of natural gas produced in 2015

Amromco Energy	**OMV Petrom**	**Romgaz**	**Rafless Energy**	**Foraj Sonde**	**Stratum Energy**	**Total**
3.972.651,1	55.493.648,7	58.357.685,2	52.680,5	188.411,4	2.238.574,5	**120.303.651,4**

Chart 23: Import quantities from 2010 to 2015

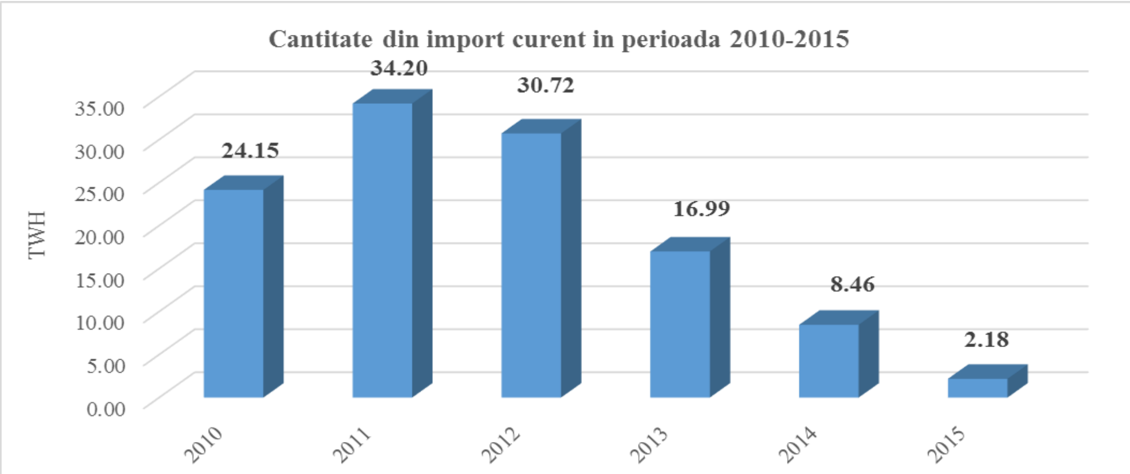
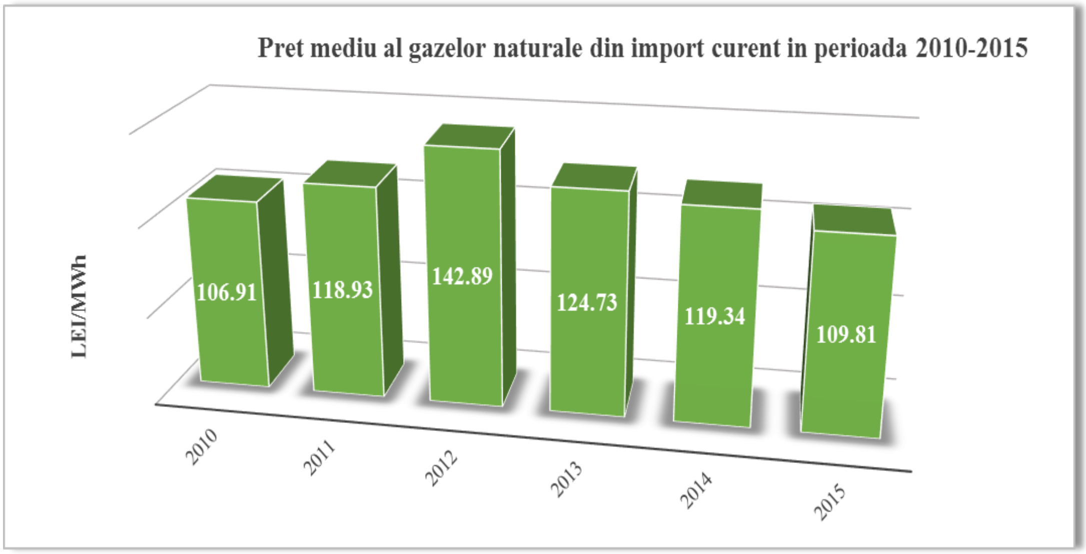


Chart 24: Average natural gas price from 2010 to 2015



In Romania, there are **2 operators of underground storage** S.C. Depomureş S.A. and S.N.G.N. Romgaz S.A.

Table 6: The total capacity and its evolution

Operator for underground storage	Year	Storage Capacity (MWh)	Stock after extraction (MWh)	Injection (Apr-Oct) (MWh)	Utilized capacity (MWh)
Romgaz	2013	29,503,400	6,704,018.854	21,188,550.748	27,892,569.602
	2014		8,141,654.008	18,077,373.958	26,219,027.966
	2015		5,611,283.576	17,869,463.343	23,480,746.919
Depomureş	2013	3,154,550	330,006.289	3,024,810.381	3,354,816.670
	2014		570,191.740	2,587,221.864	3,157,413.604
	2015		272,360.874	2,883,003.902	3,155,364.776

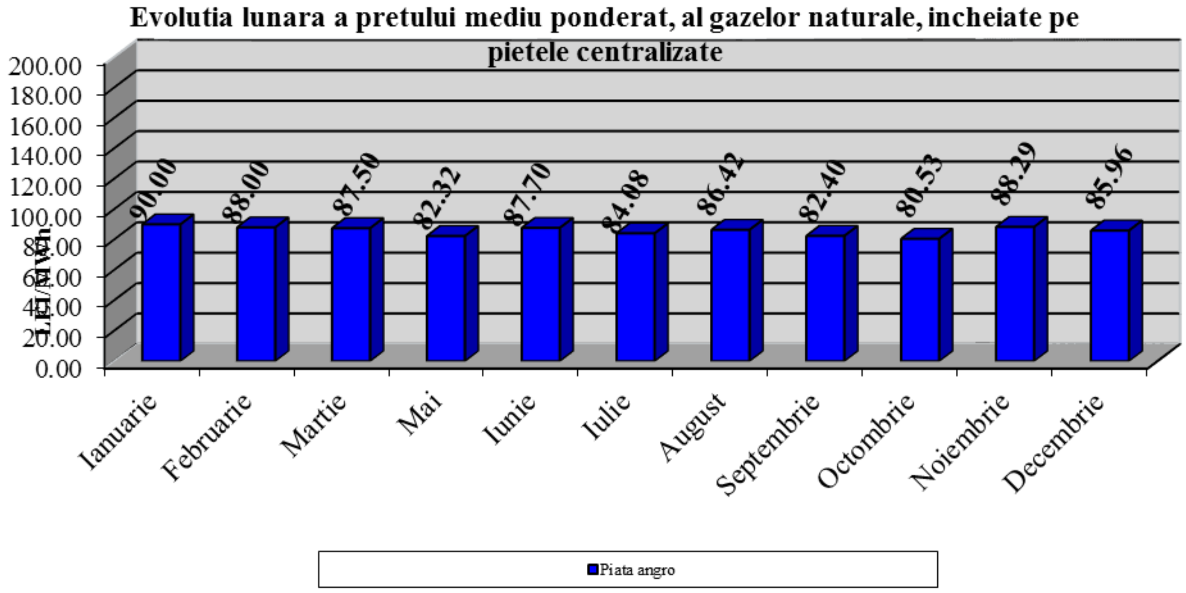
Trading on centralised markets

Pursuant to Law no. 174/2014, producers and suppliers of natural gas operating on the Romanian natural gas market are required to trade on the centralised platforms.

Given the structure of the natural gas market in Romania, where over 95% of natural gas consumed comes from current production, these quantities are traded on the wholesale market for natural gas, exported quantities having a very low level for 2015, approx. 11.694,640 MWh which is 0.01% of the total production.

In 2015, 30 suppliers have made transactions in centralised markets, their concluded contracts amounting to a volume of **1,720,544.000 MWh.**

Chart 25: Monthly evolution of the average price of natural gas on centralised markets



Retail natural gas market

In 2015, on the retail natural gas market operated:

- **39** suppliers on the regulated market of natural gas;
- **74** suppliers on the competitive market of natural gas.

Based on data collected by ANRE, from January 2010 until 31st December 2015, the number of final customers increased by approximately **15%.**

Chart 26: Evolution of final customers (household and non-household) for the period 2010 to 2015

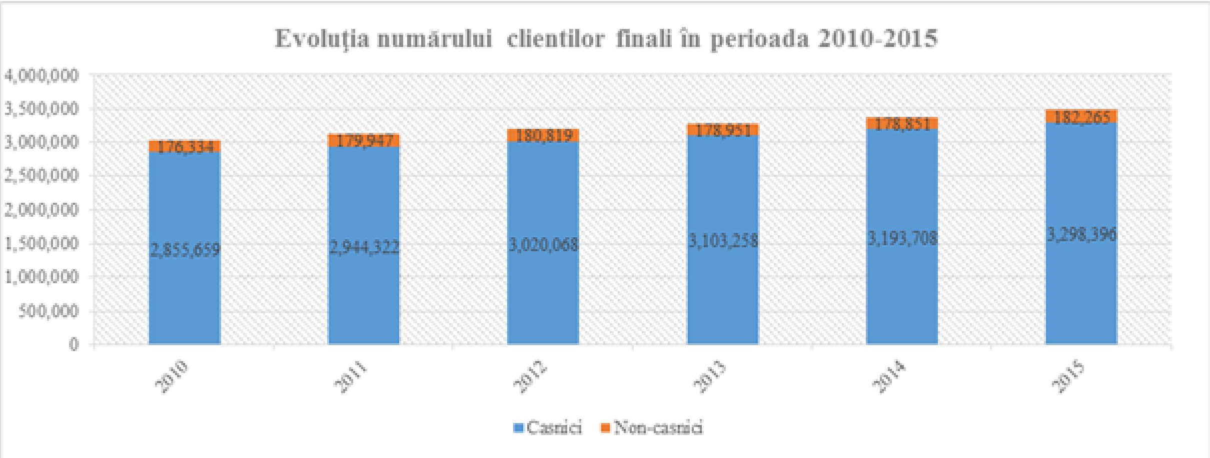


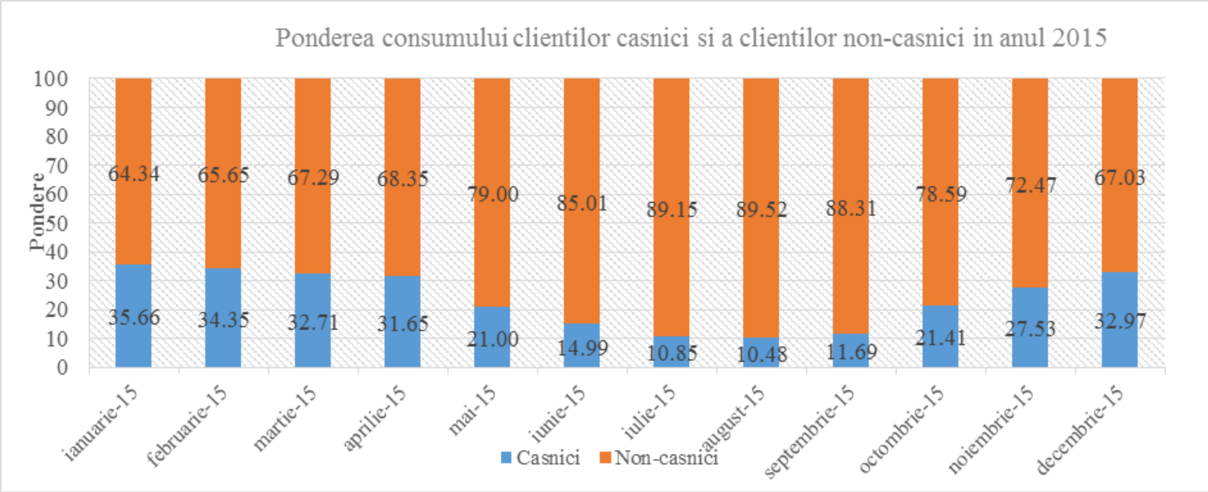
Table 7: Evolution of final customers (household and non-household) in 2015

Month	**Nr. of Customers**		**Total nr. of Customers**	**Total Consumption (MWh)**
January	**Household**	3,200,543	**3,379,680**	**17,014,124.142**
	Non-household	179,048		
February	**Household**	3,205,531	**3,384,600**	**14,883,333.414**
	Non-household	179,069		
March	**Household**	3,212,566	**3,391,241**	**13,089,991.269**
	Non-household	178,675		
April	**Household**	3,216,065	**3,393,642**	**9,004,469.419**
	Non-household	177,577		
May	**Household**	3,222,329	**3,399,243**	**5,633,358.948**
	Non-household	176,914		
June	**Household**	3,231,858	**3,408,476**	**5,698,819.869**
	Non-household	176,618		
July	**Household**	3,238,879	**3,416,047**	**6,634,790.724**
	Non-household	177,168		
August	**Household**	3,246,825	**3,423,353**	**6,506,518.541**
	Non-household	176,528		
September	**Household**	3,256,461	**3,433,992**	**6,285,838.013**
	Non-household	177,531		
October	**Household**	3,270,854	**3,448,449**	**9,600,887.135**
	Non-household	177,595		
November	**Household**	3,285,685	**3,465,189**	**12,228,905.651**
	Non-household	179,504		
December	**Household**	3,298,396	**3,480,661**	**15,145,711.533**
	Non-household	182,265		
Total	**-**	**-**	**-**	**121,726,748.658**

In 2015, the share of quantities consumed by household customers is **27.19%,** from the total consumption delivered by suppliers and these customers represented **94.76%** of all final customers connected to natural gas networks.

Although the non-household customers represented only **5.24%** of all final customers of natural gas, their share of quantities consumed was **72.81%** of total consumption in **2015**.

Chart 27: Consumption shares for household and non-household customers in 2015

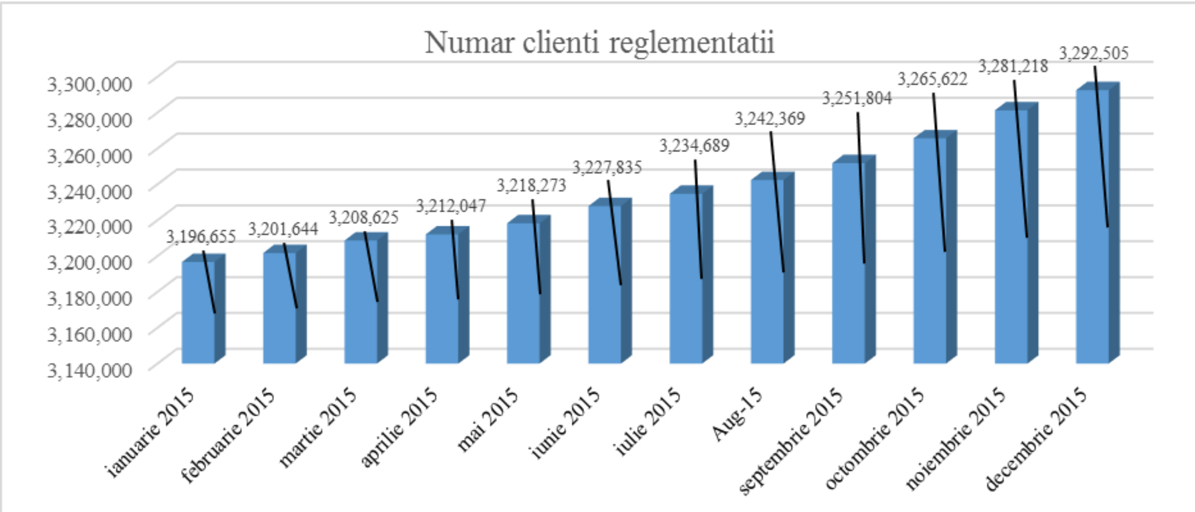


Regulated natural gas market

In 2015 on the regulated natural gas market 39 suppliers operated.

The total number of regulated customers in 2015 was 3,292,505, representing only household customers in the regulated segment.

Chart 28: The situation of regulated customers in 2015



Regulated tariffs apply to the quantities of natural gas supplied on the regulated segment.

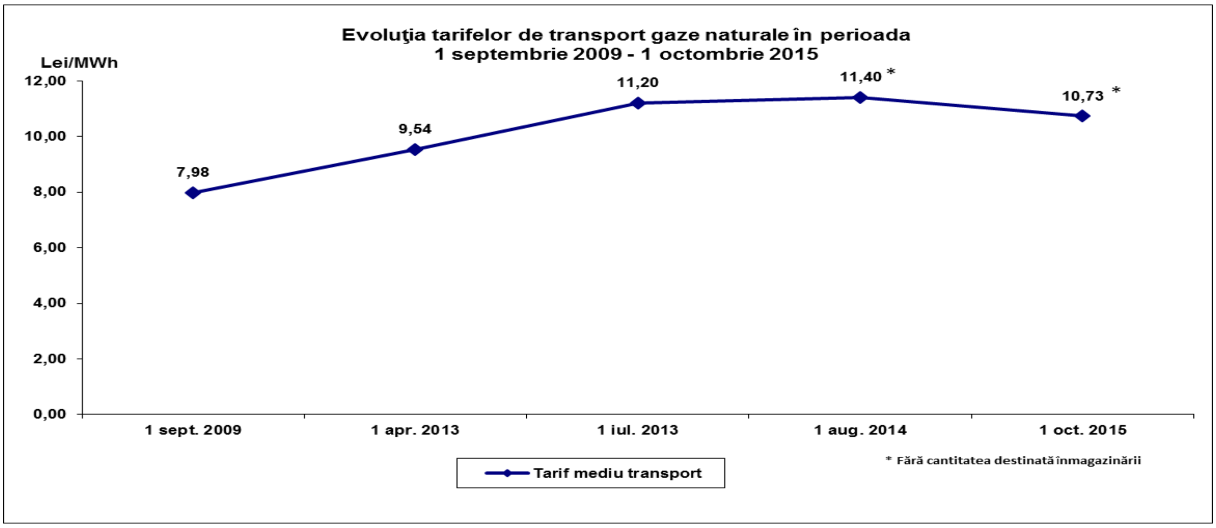
The adjustment percentages of **regulated final prices** for household customers, during 2015, calculated as an average based on the market share of each licensed operator performing the supply of natural gas on the regulated market were:

- From April to May 2015 approx. **- 4%;**
- 1st July 2015 approx. **11%.**

In 2015, regulated prices recorded an **average growth** of about **7% for household customers**, mainly reflecting the price change of the domestic production pursuant to the roadmap for liberalisation of the natural gas market.

Regulated tariffs– Transport

Chart 29: Natural gas transmission tariffs evolution from 1 st September 2009 to 1 st October 2015



Regulated tariffs– Distribution

Chart 30: Distribution tariffs evolution for E.ON Gaz Distribuţie from 1 st May 2009 to 1 st May 2015

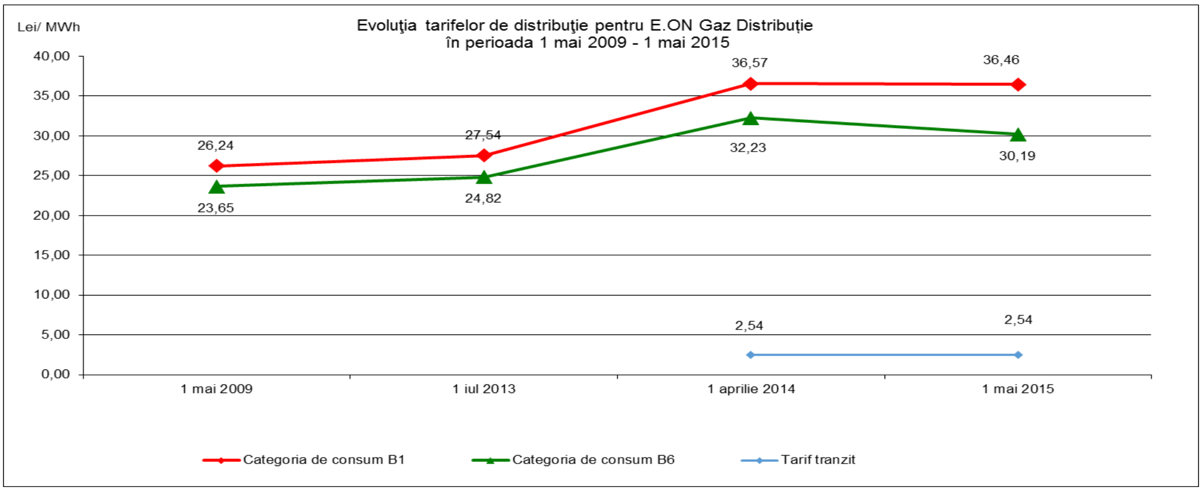
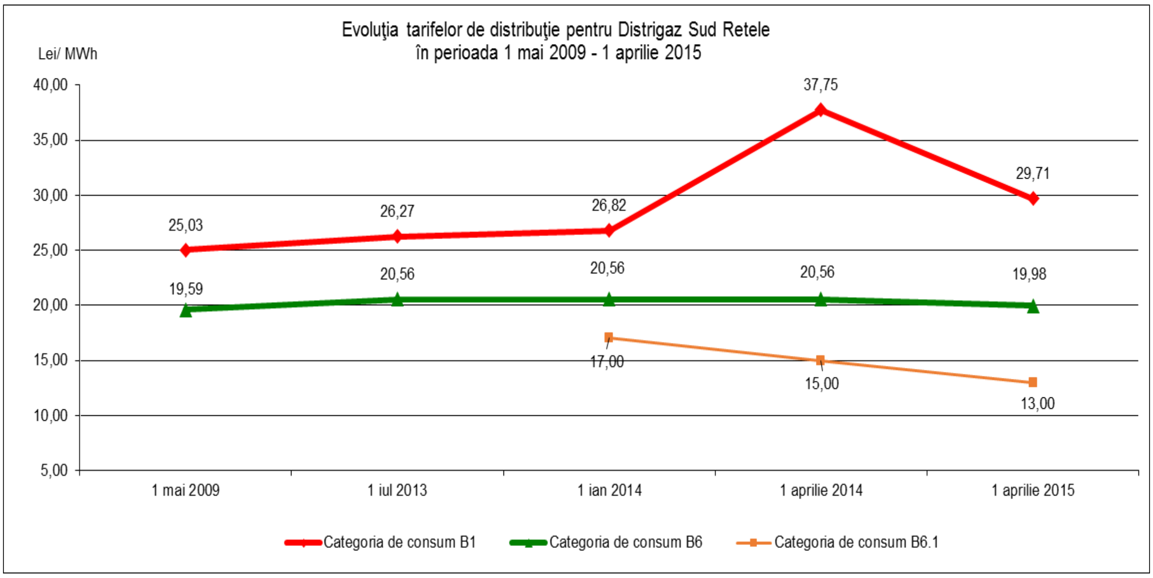
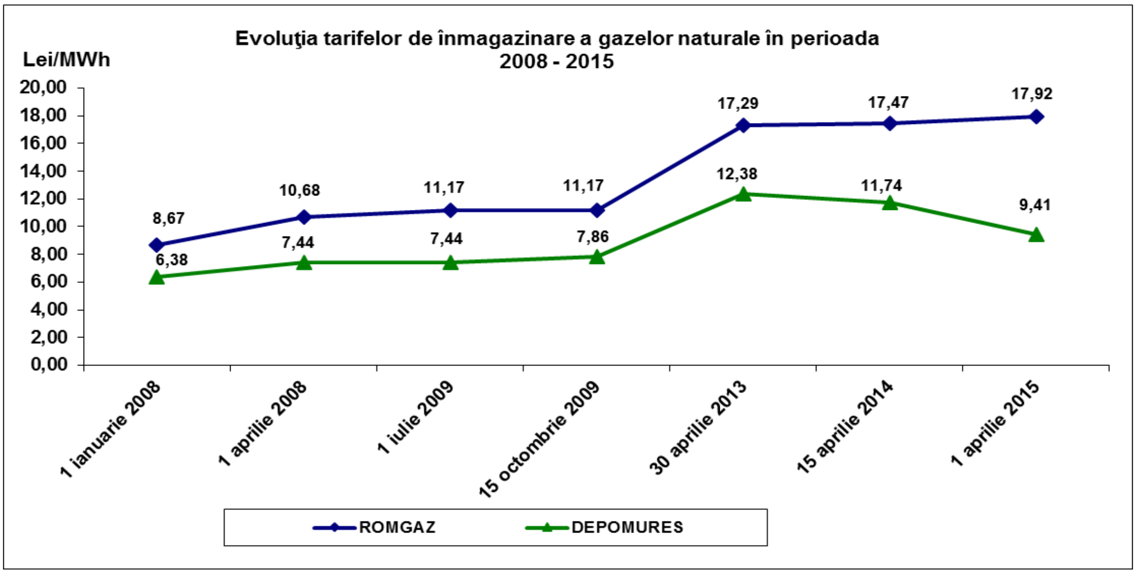


Chart 31: Distribution tariffs evolution for Distrigaz Sud Reţele from 1 st May 2009 to 1 st April 2015



Regulated tariffs– underground storage

Chart 32: Underground storage tariff evolution from 2008 to 2015



Since **1st October 2015** by ANRE Order No.136/2015 the regulated revenue, the total revenue, and the NTS transmission tariffs were approved, valid until 30th September 2016. Monopoly tax and tax on special constructions had a significant share in the structure of transport tariffs.

There is a decrease in the quantities distributed by the two license holders between **2009-2015**, while in **2015** in comparison to the previous year, the total unit revenue used for **distribution tariffs** had a relatively constant evolution.

Competitive market

- In 2015, on the **competitive market, 74 suppliers were active.**
- In 2015 there is **an increase by about ten percentage points** of the real degree of gas market opening compared to 2014, which reached approx. **66%** of total consumption.
- The number of customers who have exercised their right to choose the supplier of natural gas has recorded a strong increase in 2015, following the total liberalisation of the internal market for natural gas non-household customers from the beginning of **1st January 2015.**

Chart 33: Number of eligible customers

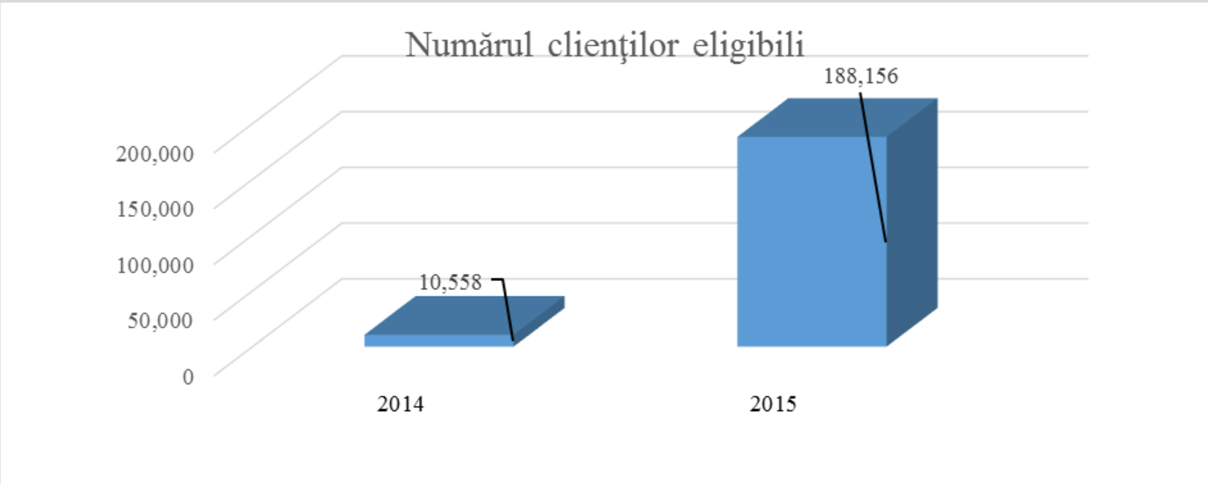


Chart 34: Annual opening rate for natural gas market from 2007 to 2015

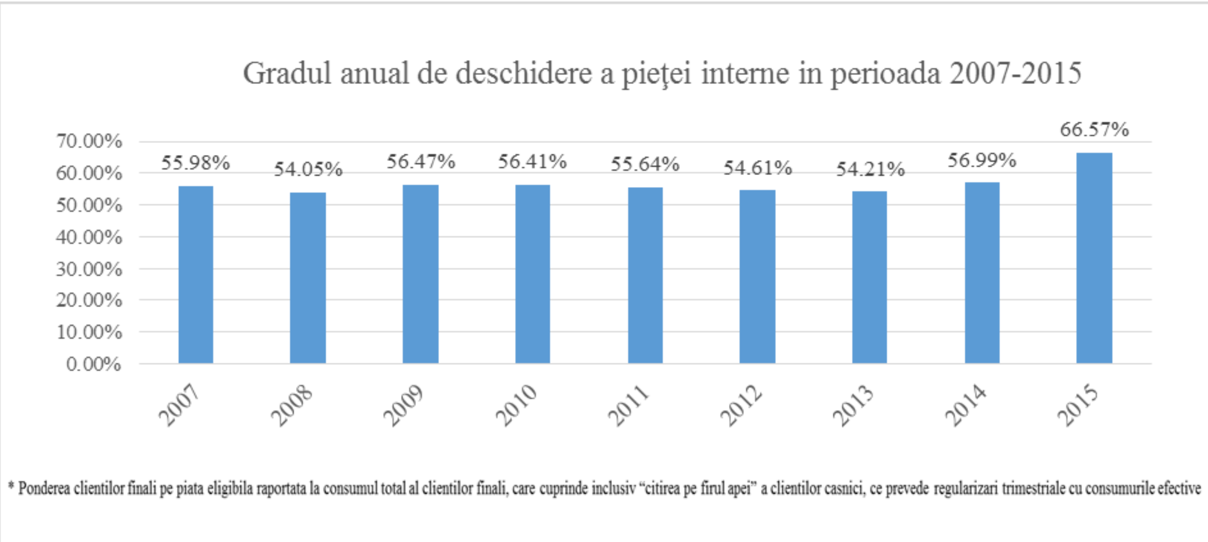
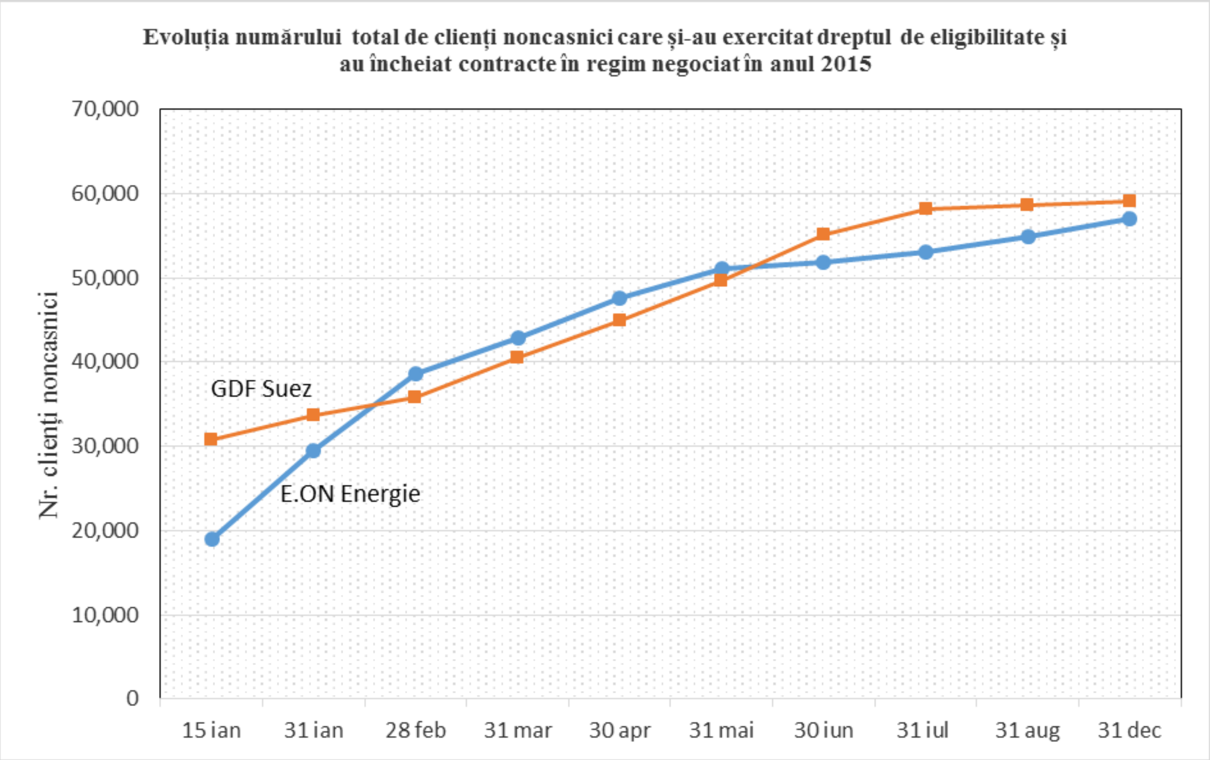


Chart 35: Evolution of the total number of non-household customers who have exercised their eligibility and have concluded negotiated contracts in 2015

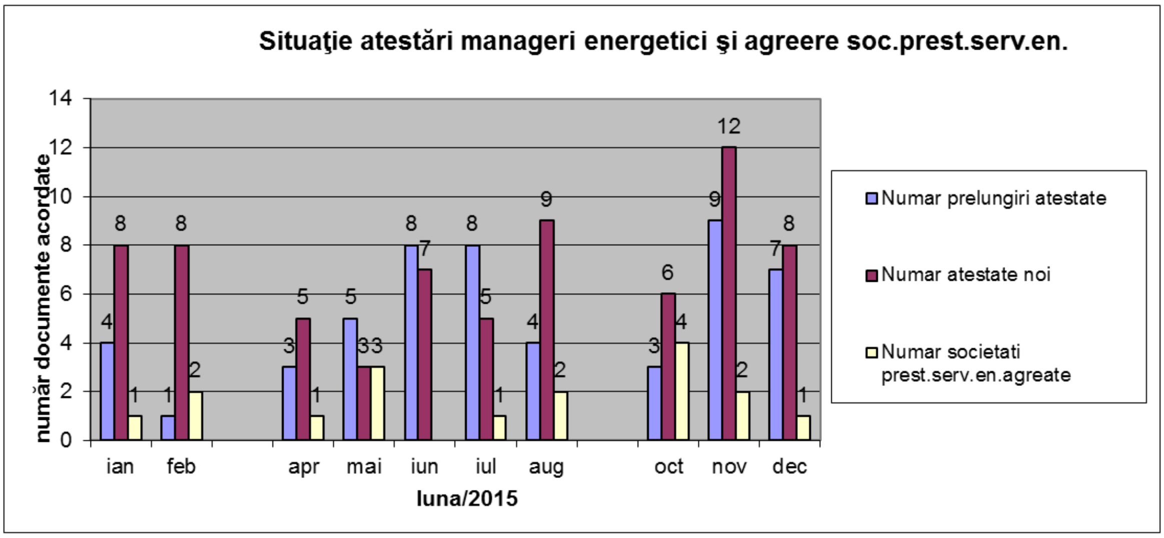


IV. DEVELOPMENTS IN ENERGY EFFICIENCY

Certification of energy managers and authorisation of energy auditors

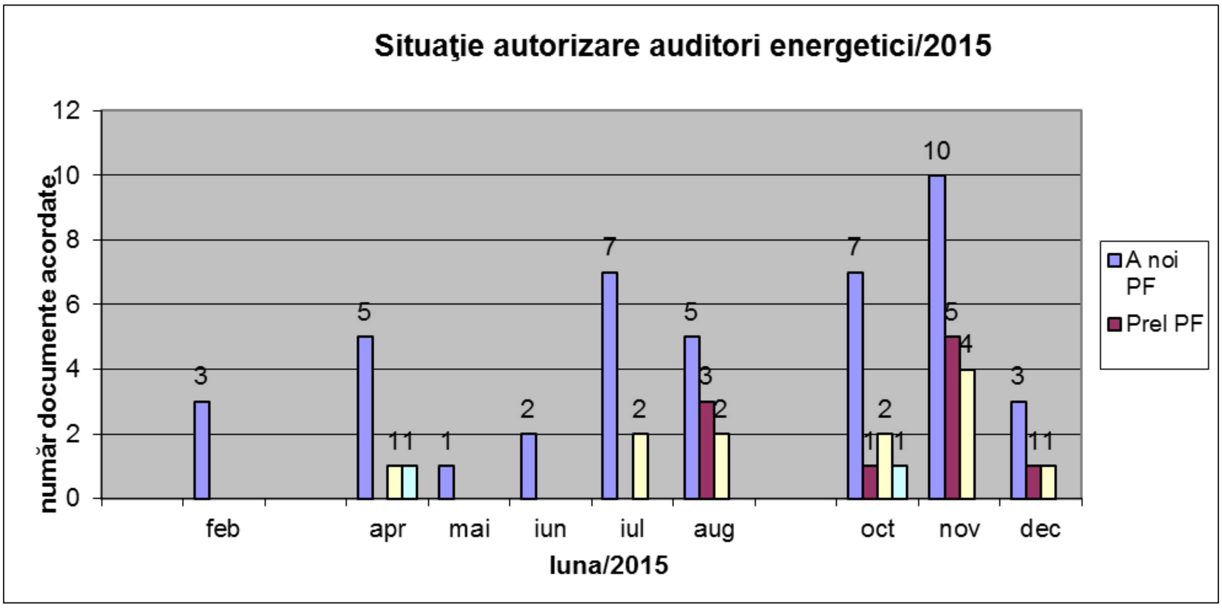
At the end of **2015** were certified / authorised: **431 energy managers**, **233 energy auditors as individuals**, **73 energy auditors as legal persons**, of which 17 energy auditors as natural persons, **59 accreditated energy service companies** (of which 19 authorised natural persons).

Chart 36: Situation of energy managers certification and agreeing energy service companies in 2015



During **2015, 71 energy managers** and **55 energy auditors** were certified / authorised.

Chart 37: Situation of energy auditors authorisation in 2015



The report of the 54 energy auditors showed that there were performed **energy audits to 431 economic operators,** thereupon **1000 measures to improve energy efficiency** have been identified**, representing energy savings estimated at 247.611 toe/year, with an annual investment of approx. 750.761** thousands **lei.**

It is noteworthy that the number of economic operators that achieved energy audits in 2015 increased and also the number of certified energy auditors doubled. Most energy savings can be obtained from complex energy audits.

Chart 38: The number of energy audits by industry and service sector

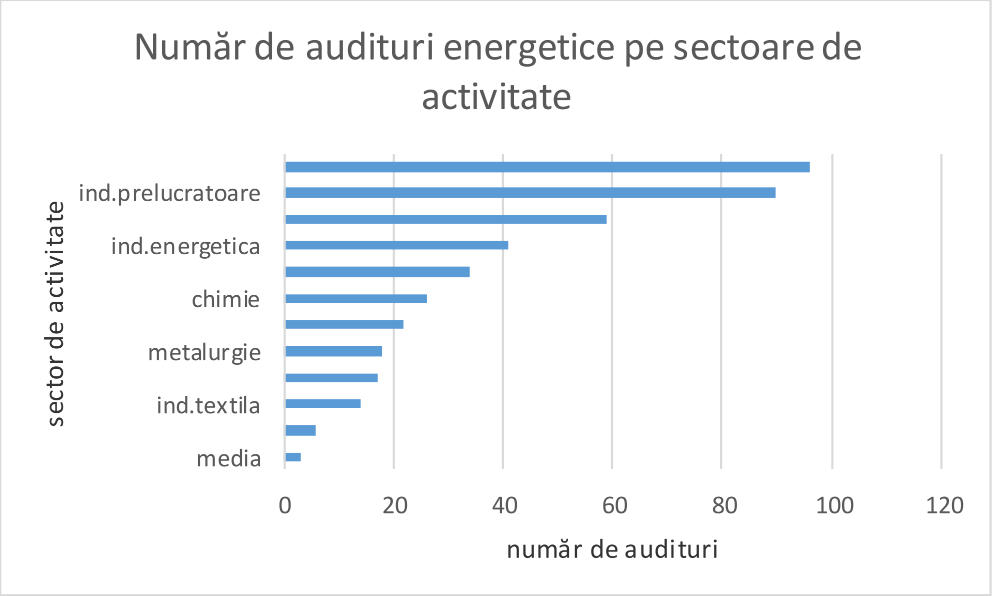
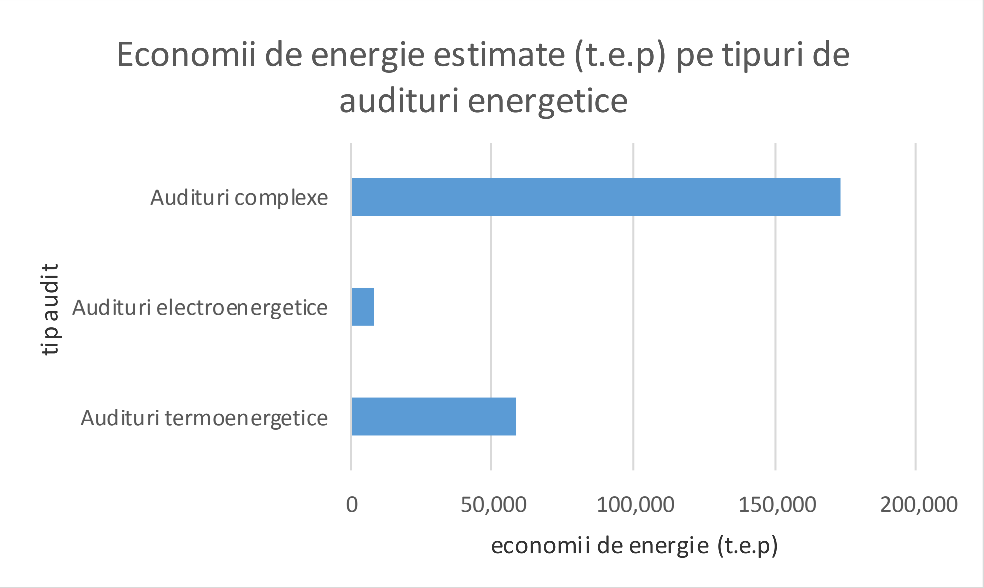


Chart 39: Energy savings estimated by types of energy audits



Most energy audits were performed in services, manufacturing and food industries. **Compared to 2014 a significant number of economic operators working in the transport sector achieved energy audits. Most energy savings can be obtained from energy efficiency measures recommended in the energy industry.**

Regulating and monitoring the implementation of intelligent metering systems for electricity

In **2015** ANRE monitored the guidance of **pilot-projects for implementing intelligent metering systems, as follows**:

- defining a set of performance indicators for intelligent metering systems, so that the evolution of smart grids for electricity can be monitored during the implementation process and a period thereafter;
- defining areas of implementation, establishing data and relevant informations characterizing these areas in terms of: technical, economic, qualitative and socio-demographic.

ANRE analysed the concessionaire distribution operators' proposals and approved in **march 2015 those pilot-projects** that have met the established criteria. There were approved **14 pilot-projects** for **6 concessionaire distribution operators**.

Activities on monitoring energy efficiency

In order to monitor economic operators, quality issues of reported data and the improvement of monitoring process, were taken into account, in particular.

Thus, in 2015, **Guidelines to draw up Programme for Energy Efficiency increase in industry**, have been updated.

Energy management for those **682 final customers** (including 52 subsidiaries, branch offices) with an annual consumption of electricity more than 1.000 toe/year is ensured by **441 energy managers** certified by ANRE.

There has been **98.5%** coverage of certified energy management. The monitored economic operators from various sectors, have reported energy savings measures of 141.767 toe.

In 2015, **Guidelines to draw up Programme for Energy Efficiency increase in cities with over 5000 inhabitants**, were achieved. Moreover, 105 cities with over 20.000 inhabitants and 558 cities with 5000-20.000 inhabitants, have been identified and introduced into the database, in compliance with the stipulations of the Law no.121/2014, on energy efficiency.

Market monitoring energy consuming products

In order to verify the enforcement of **energy labelling** for household appliances, **69** actions of control were initiated through the country and the synthesis of the results was communicated to the Ministry of Economy from Romania with regard to the annual report for notifying the European Commission.

V. CONTROL AND COMPLAINTS

Following the control missions conducted in 2015 ANRE issued **828 inspection reports** of sanctioning contraventions of **which 11 were imposed upon natural persons** and **817 upon legal persons** resulting in fines amounting to **40.151.000 lei**. Simultaneously with the main contraventions listed above, proposals have been made for the implementation of suspension measures for certain categories of activities, for 8 economic operators.

Table 8: Control activity during 2015

Actions	**Licensed**		**Certified/Authorised**		**Energy efficiency**	
	Electricity	Natural Gas	Electricity	Natural Gas	Labelling	Large consumers
Inspection	26	29	253	153	40	132
Verification	92	85	20	32	-	-
Surveillance	576	73	6	9	-	144
Subtotal	694	187	279	194	40	276
Total	**881**		**473**		**316**	

In 2015, ANRE registered, analysed and settled a number of **3625** complaints in the electricity and natural gas sectors, received from natural and legal persons.

Chart 40: Number of complaints resolved from 2010 to 2015

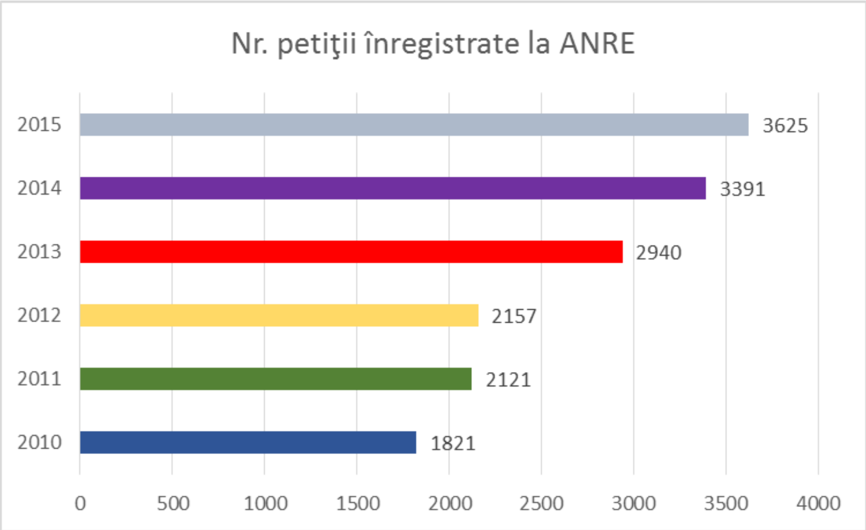


Table 9: Main problems identified as a result of the received complaints regarding the electricity sector

No.	Main issues reported on electricity sector	2015	[%]
1	Electricity billing	576	21,83
2	Suspected theft of electricity	461	17,47
3	Electricity quality	393	14,89
4	Technical connection approval	119	4,51
5	Request for general information (warning/disconnection/reconnection/recission/withdrawal)	110	4,17

Table 10: Main problems identified as a result of the received complaints regarding the natural gas sector

No.	Main issues reported on natural gas sector	2015	[%]
1	Access to distribution system	83	8
2	Connection to the distribution system	157	16
3	Contracting, billing	191	20
4	Supply (disconnection, interruption)	96	10
5	Contracting installations	206	21

VI. ACCOUNTABILITY OF THE REGULATOR

At the end of 2015, pending court litigations were as follows: 494 underway cases during 2015, out of which **111** cases completed.

A classification of disputes handled by ANRE in the courts, during 2015, in electricity and natural gas sectors is presented below:

- Legal Administrative - 127 cases;
- Law Offences - 234 cases;
- Insolvency - 81 cases;
- Employment - 5 cases;
- Claims - 40 cases;
- Criminal Law - 1 case;
- Free access to information – 2 cases;
- Finding actions – 4 cases;

Of the total number of cases concluded in 2015, **111** cases, respectively, **90% were given verdicts favourable for ANRE.**

All complaints made against the findings and the sanctions of the inspection reports of mentioned contraventions, that were resolved during 2015, were favourable to ANRE.

VII. INTERNATIONAL COOPERATION AND COMMUNICATION

ANRE continued to maintain and develop strong relationships with energy regulators in order to ensure bilateral cooperation and exchange of information in electricity and natural gas sectors regulation, for the harmonisation of national legislation with Acquis Communautaire and reforming energy markets.

In this context, ANRE continued to exercise its **full-member mandate of CEER (Council of European Energy Regulators) and of ACER (Agency for the Cooperation of Energy Regulators)** by attending CEER General Assembly Meetings and ACER's Board of Regulators. ANRE drafted and submitted national reports on the evolution of electricity and natural gas markets and liberalisation contributing to the drafting documents for the proposed work plan of CEER and ACER in 2015.
Starting with June 2014, the South-South-East (SSE) GRI is co-chaired by ANRE (Romania) and URE (Poland) and covers 11 member countries.

The communication activities carried out by ANRE throughout 2015, generated **1402** written requests for information, out of which **1337** were resolved favourably, requests that have been answered in full by the authority.

The remaining requests either did not comply with the regulatory powers of ANRE (**64**), or they were requests for exempt information **(1**). Of requests resolved favourably, **261** requests were addressed by legal persons, Romanian and foreign, and **1141** requests were from natural persons, Romanian and foreign. Of the total requests for information submitted in writing, **1365** were transmitted electronically and **18** in written, and approx. **389** were verbally requested information by natural / legal persons, Romanian and foreign.

Another instrument used for the dissemination of information and implementation of the provisions regarding decisional transparency was the Authority's website, permanently updated with data and information regarding the issued legislation and also with the drafts of regulations – **183** documents – published for public consultation, processed by ANRE in 2015.

Informing the public opinion was accomplished through mass media, through press releases sent to daily newspapers, television, and radio interviews and direct answers to journalists. The Authority's proactive communication efforts in 2015, translated into **2224** news stories and articles reflecting the accomplishments, objectives and future plans of ANRE as well as detailing the actions and events organized by our institution, the main themes referring mainly to the obligations deriving from primary and European legislation envisaged by the Regulatory Programme, for example: implementation of the roadmap for liberalisation of the electricity and natural gas markets, regulatory framework for the implementation of energy efficiency and high-efficiency cogeneration and promotion of electricity produced from renewable energy sources, investments in electricity in terms of energy efficiency and consumers benefits, the implementation of intelligent metering systems, regulations on changing suppliers of electricity and natural gas, market integration of electricity and natural gas, documents of secondary legislation regarding the functioning and development of natural gas market, safety in natural gas supply, ANRE competencies and tasks in a liberalised market in terms of consumer protection, etc.

VIII. FUTURE LINES OF ACTIONS

ANRE's Strategic Regulatory Programme activity for 2016 - 2018

For 2016, in the process of drafting regulations, ANRE monitors the implementation of best practices in the field, adapted to national specific in a consultative process required for a transparent decision-making process, because only transparent regulation, stable and reliable can help the process of market consolidation by applying innovative regulatory methods, accessible both for the industry and for the general public.

The overall objective of ANRE for 2016 is upgrading its ongoing regulatory activity by making full use of its human resources, in order to develop a modern regulatory framework, consistent and easy to apply for all market participants, from small household customer to large corporations active in the electricity and natural gas sector.

Through the activities envisaged by the Regulatory Programme for 2016, ANRE contributes in achieving the following objectives:

- **promoting a European internal electricity and natural gas market, through 19 regulations aimed at**:
    - completing the regulatory framework on trading natural gas on centralised and retail markets;
    - ensuring non-discriminatory access to natural gas networks and storage facilities, ensuring the minimum level of natural gas stock for license holders;
    - revision of regulations and conditions of validity related to authorisations and licenses in natural gas and electricity sector;
    - revision of the rules of certification / authorisation in the electricity sector,
    - approving the rules for the allocation of electricity interconnection capacities;
- **customer protection, providing them with complete and correct information, through 14 regulations aimed at:**
    - adjusting the regulatory framework for the natural gas retail market to legislative amendments regarding the structure of the natural gas market in Romania following the implementation of prices liberalisation timetable;
    - establishing a timetable for the implementation of binomial tariff for the transmission and distribution service;
    - supporting intelligent metering systems and practical methods for energy efficiency;
    - reviewing performance standards for transmission, distribution, and supply of electricity,
    - appointment of suppliers of last resort in the electricity sector based on competition;
    - improving consumer awareness of electricity by reviewing electricity labelling regulation;
- **developing a secure, reliable and efficient national energy system, customer-oriented, through 17 regulations aimed at:**
    - improving the regulatory framework for the wholesale electricity market,
    - approving the regulations on the national implementation of European Network Codes,
    - improving the regulatory framework for the support schemes applied to electricity produced from renewable energy sources and high-efficiency cogeneration,
    - implementation of Law no. 121/2014 on energy efficiency regarding the energy audit and developing a framework contract for the service of energy management;

- **increasing transparency** on electricity and natural gas markets through operators' compliance with their obligations**, through 8 regulations aimed at**:
    - reviewing the market monitoring activity for electricity and natural gas market,
    - establishing rules for the elaboration and the reference of regulated accountancy compiled by licensed operators in natural gas based on their own rules for the allocation of assets and liabilities, expenditure and income,
    - reviewing annual reporting requirements for license holders in the electricity sector,
    - increasing integrity of electricity and natural gas markets;
- **facilitating access to the network for new production capacities, through 8 regulations aimed at:**
    - developing the appropriate framework for connecting users to natural gas networks;
    - establishing regulated prices and market conditions for electricity produced from renewable energy sources, respectively, for high-efficiency cogeneration for small and micro power groups;
- **increasing operating efficiency of energy transmission and distribution systems, through 4 regulations aimed at:**
    - determining the method of calculating the tariffs for natural gas storage services,
    - ensuring a specific regulatory framework for setting the tariffs collected by the upstream pipeline operator,
    - establishing a regulated rate of return on capital in the fourth period of regulatory activities of transport and underground storage of natural gas,
    - reviewing the methodology for issuing site approval notices for electricity network operators.

In order to ensure a predictable and transparent regulatory framework as well as the continuous harmonization of ANRE regulations with the national and European legislation in the field, ANRE decided to quarterly review the Regulatory Programme.

The regulatory activity, of ANRE, envisaged for the 2017-2018 will focus mainly on:

- setting regulated tariffs for natural gas distribution service for the 4th regulatory period,
- revision of the secondary legislation in order to improve the performance of retail natural gas and electricity markets,
- revision of the Regulation for metering the natural gas quantities traded in Romania and the Methodology for calculating the technological consumption in the natural gas distribution systems,
- amending and complementing the Network Code for the National Gas Transmission System,
- implementing provisions of the European network codes.

ROMANIAN
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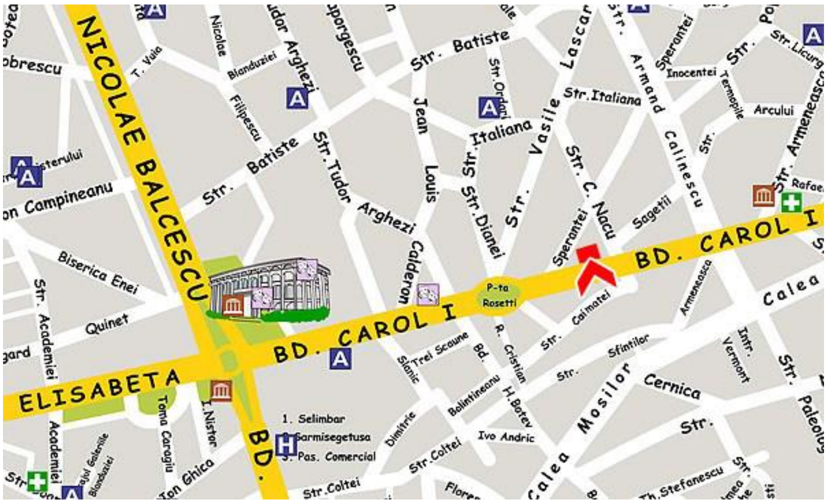

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