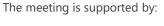




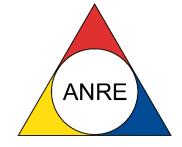
REGULATORY RESPONSE to PRICES INCREASE in ROMANIA

Maria Manicuta
Director at the Network Tariffs and Investments Monitoring
Department
Romanian Energy Regulatory Authority (ANRE)





Electricity Market in Romania

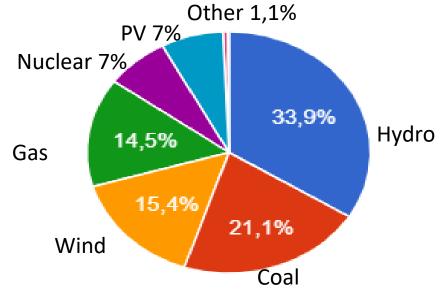


Market Participants:

- **Generation** 19,6 GW installed capacity with 1000 producers (402 producers with Pi greater than 1 MW, 5 significant producers SN Nuclearelectrica SA, SPEEH Hidroelectrica SA, CE Oltenia SA, OMV Petrom SA, SN Romgaz SA);
- 159 **supply** (of which aprox. 90 are active on the markets) and 27 **trader** license holders;
- 1 **Transmission** System Operator certified as TSO- CNTEE Transelectrica SA;
- 6 zonal Distribution System Operators and also 42 small DSO-s
- 1 Market Operator, designated as NEMO
- Consumption 55 TWh/annum
- more than 8,5 mil. final customers
- -No regulated prices to final customers, since Jan 1st ,2021

Breakdown of Installed Generating Capacity, by Technology





Installed capacity of 19612 MW (April 2021)
55 % of the total installed capacity is in RES capacities, from which:

Hydro = 6644,6 MW PV & Wind = 4407 MW

Net Generated Electricity in 2020: 50.79 TWh

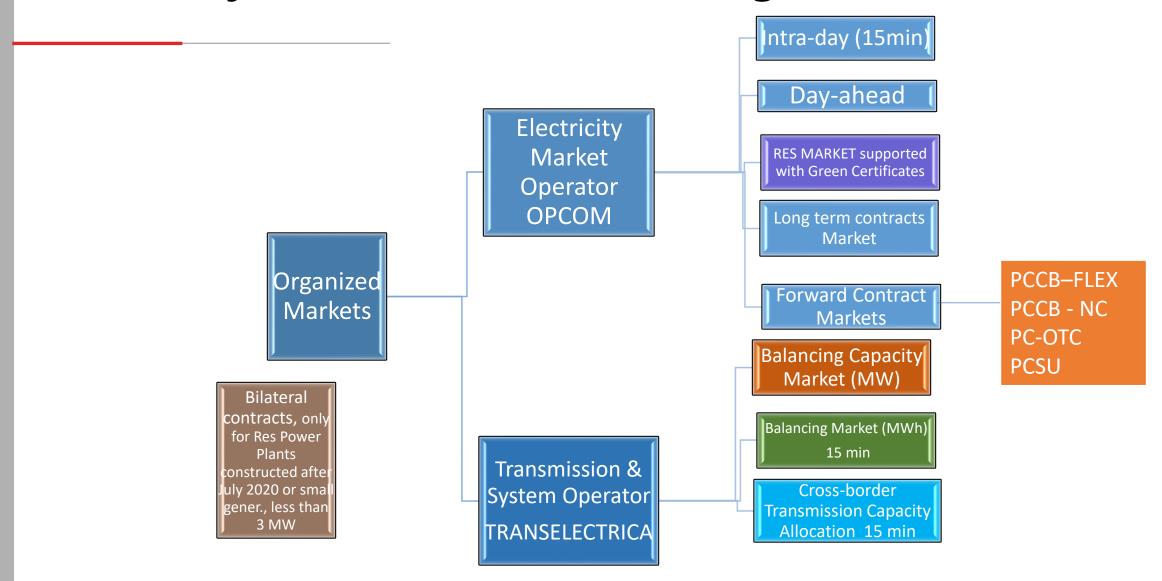
Import: 7.38 TWh

Export: 4.58 TWh

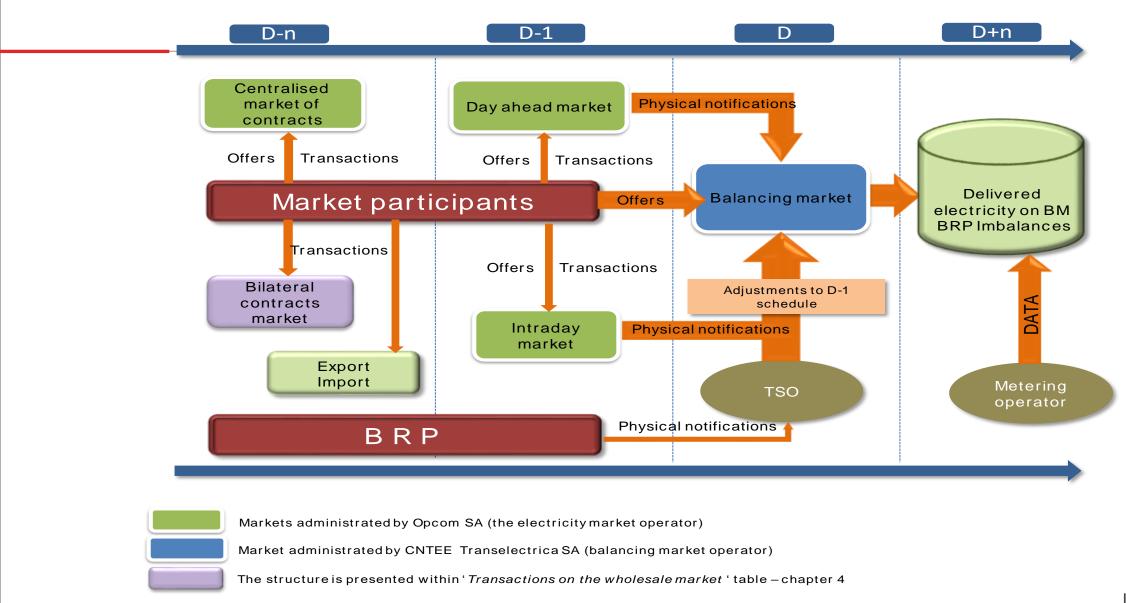
Wholesale Market Overview

- Centralized markets on OPCOM platforms:
 - -Short term: DAM and IDM (zonal coupled);
- Medium and long term: standard and flexible extended auctions (LE Flex), double continuous negotiation (OTC), continuous negotiation (NC), Standard Long-term bilateral Contracts
- Direct Bilateral Negotiated Long Term Contracts (more than one month),
- Balancing market performed by TSO
- Ancillary Services market performed by TSO
- Coordinated auctions for cross-border allocation capacity

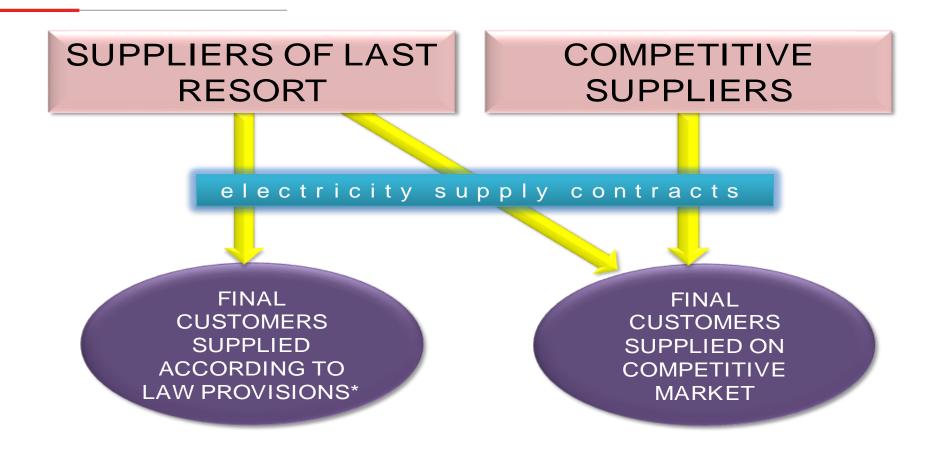
Electricity Wholesale Market Design



Wholesale Market- Contractual Arrangements

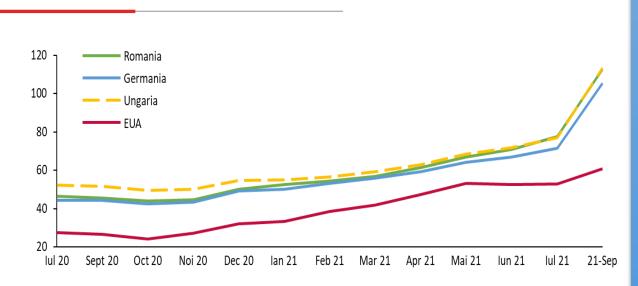


Retail Market –Contractual Arrangements



^{*} art. 53 point (2) and art. 55 point (1) from Electricity and Gas Law no. 123/2012 with subsequent amendments and completions

Increase in Wholesale Electricity Prices in 2021





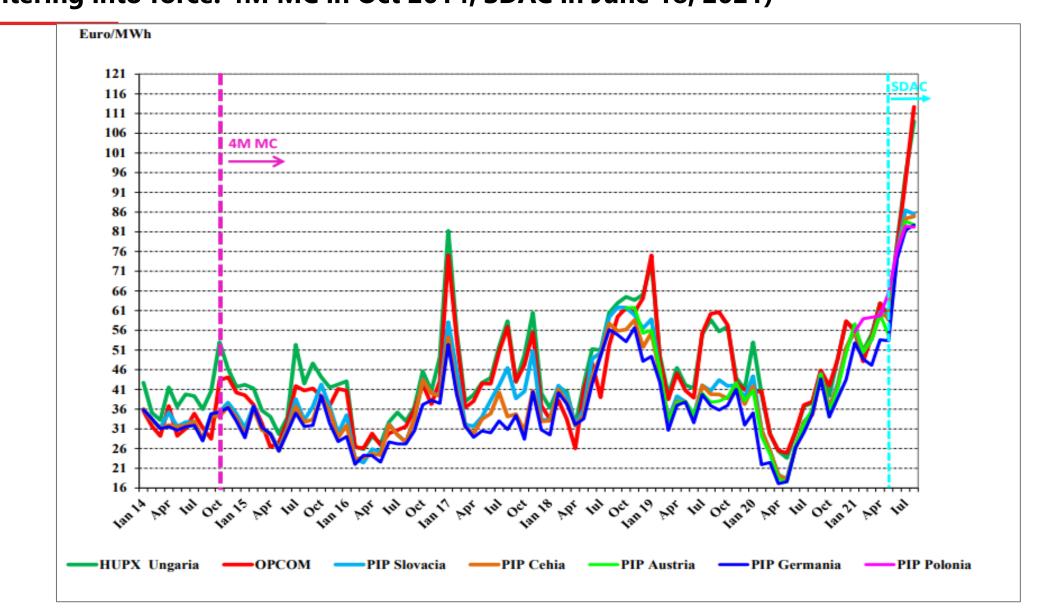
On the electricity market, where DAM prices were usually lower in spring, because of increased hydrology, but in 2021 it wasn't likewise, as the DAM market operates based on European price coupling mechanism 4MMC extended to German, Austrian and Poland markets.

The day ahead market (DAM) and the intraday market (ID) are operated based on the European/regional established price coupling algorithms and procedures.

This price surge is at European level, not just in Romania. As the electricity and gas markets in Romania are fully liberalized (open to competition), the Law doesn't allow any state intervention in the price formation, this being the result of free confront of demand and supply.

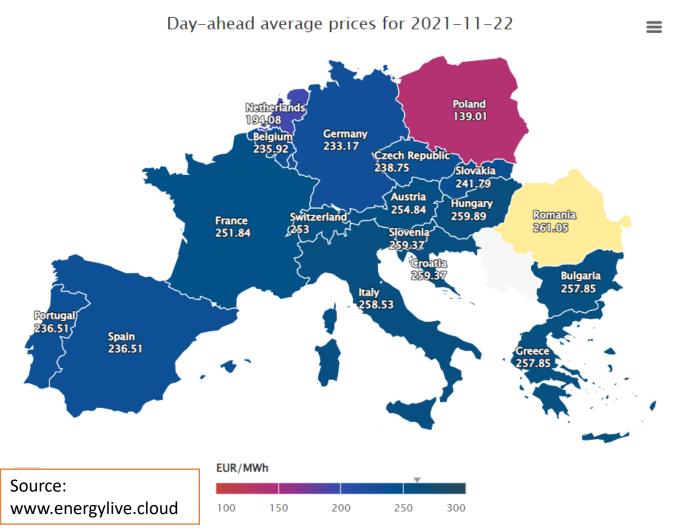
As member of EU and having both electricity and gas markets coupled or linked to other MS markets, Romania faces the same price trends as in the other European markets.

Day Ahead Electricity Prices Evolution in Jan 2014÷Aug 2021 (the surge in electricity price strongly linked to the pan-European coupling mechanisms entering into force: 4M MC in Oct 2014, SDAC in June 18, 2021)



Day Ahead Electricity Prices in EU

Latest European Power Markets data



Index	t) Value 🕦	Month-to-date ↑↓	Year-to-date ↑
AT_price	254.84 ^ 23.4%	192.31	89.85
BE_price	235.92	188.32	87.34
BG_price	257.85	203.50	95.33
CH_price	253.00 16.6%	209.78	95.11
CZ_price	238.75	162.67	85.35
DE-LU_price	233.17 161.0%	161.05	82.08
ES_price	236.51 1 3.0%	181.83	97.05
FR_price	251.84 11.1%	198.68	89.55
GR_price	257.85 14.7%	224.04	102.05
HR_price	259.37	204.59	98.40
HU_price	259.89 1 23.3%	205.45	98.10
IT_PUN_price	258.53 15.7%	212.97	107.31
NL_price	194.08 ↑ 32.2%	176.43	87.43
PL_price	139.01 121.2%	108.57	76.87
PT_price	236.51	181.79	97.12
RO_price	261.05	205.83	97.20
SI_price	259.37	204.38	98.72
SK_price	241.79	169.32	87.36

Electricity Price Increase in 2021

• Spot prices increase in 2021 versus 2019

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-Annual Average Increase :Romania /53%

Hungary /58%

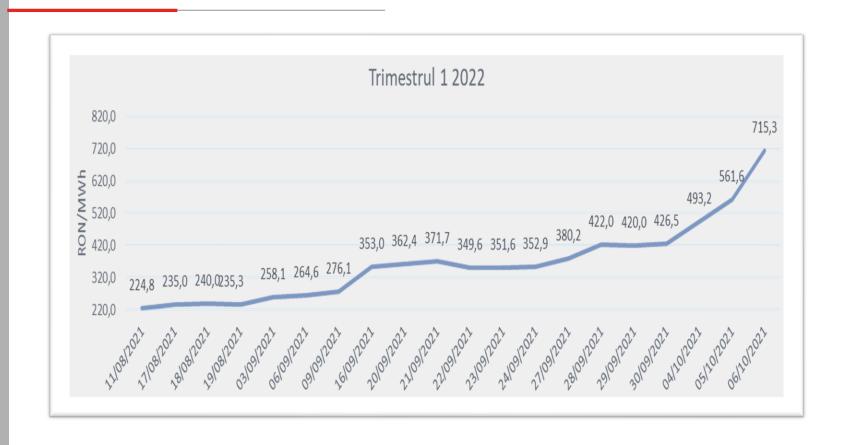
Germany / 82%
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- DAM prices increased on OPCOM Exchange in Oct 2021/2019: Romania / 297%
- Supply offers to final customers Oct 2021/2019 in Romania : between 150% 1150%
- SoLR Price:/300%-/500% (Nov. 2021/2019)

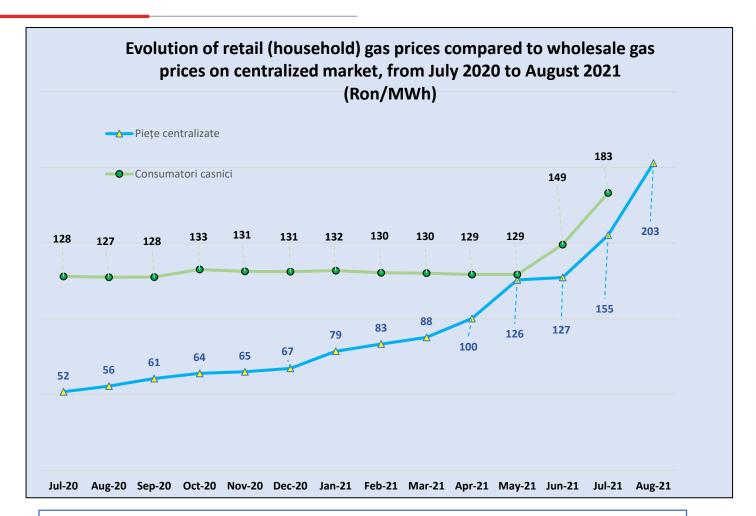
Gas Market Participants

- 9 gas natural **producers**, but 2 significant: OMV Petrom SA, SNGN Romgaz SA (cover 80% of national consumption)
- 2 **storage** operators SNGN Romgaz (storage branch legally separated) and Depomureş SA;
- 29 **Distribution** System Operators , but 2 significant large -Distrigaz Sud Reţele SRL and Delgaz Grid SA (92% of the customers);
- 15 **trader** license holders;
- 184 **supply** license holders , but active in the market 88;
- 1 **Transmission** System Operator: SNTGN Transgaz SA;
- 3 Market operator license holders
- Consumption: 120-130TWh/annum and 4,1 mil. Customers
- No final customers regulated prices since July,1,2020

Increase of the Natural Gas Price in 2021 with delivery in Q1 of 2022



Increase of the Natural Gas Prices in July 2020 – Aug 2021



The retail market price increase is a direct consequence of the price level to which the suppliers buy gas on the wholesale market.

State-of-the -art

The graph shows a continuous increase of the wholesale gas price in the current year compared to the previous year, as follows: the weighted average price has increased in **2021** by **70%** compared to **2020**. In **July 2021** the weighted average price is 3 fold greater than that of **July 2020**, the trend being maintained for **2022** as well.

Triggers

In 2020 (because of the Covid-19 pandemic) the gas suppliers have been in the situation to sell on the DAM (at very low prices) the gas bought previously on forward contracts that exceeded their clients reduced consumption.

The suppliers have been more reluctant to buy as much gas on forward market for 2021 and, as a consequence, they faced the unprecedented raise in DAM prices arising in 2021 (In Romania, the summer prices are usually lower, which was not the case in 2021).

Gas Natural Prices Increase in 2021

- Spot price increase 2021 versus 2020
 -August /346%
- Quotation for next winter: Romania / 277%
- Supply offers to final customers Oct 2021/2019 in Romania : between / 200%- 400%

Price SoLR: / 300%-500% (Nov.2021)

The average price of forward contracts on Romanian Gas market concluded during Jan 1th, 2021-Aug 31, 2021 with delivery in 2022

- ➤ The weighted average price (WAP) of gas set on the centralized markets in February 2021, is by 15% greater than the February 2020 WAP. Likewise, each month WAP was greater in 2021 than WAP of the same month of 2020.
- From June 2021, the price trend on the wholesale market has reflected itself on the retail prices.
- ➤ Since May 2021, the Romanian electricity market has showed early termination of some forward contracts, followed by some suppliers insolvencies and/or notifications to customers about price increases, even though they were on fixed price contracts. Also, most of the new offers were set at much higher prices, since July/August.

Delivery in:	Total traded volumes -MWh-	Weighted average price - euro/MWh -	
Q1 2022	245.700	49	
Warm season 2022	146.400	33	
First semester 2022	354.579	32	
Calendar Year 2022	3.857.685	29	

Critical Gas forward market price level on Sep. 9, 2021

Since September 2021, forward contracts with delivery in 2022 are settled on the centralized markets at significant higher prices compared to 2021 prices, as shown in the table below:

Delivery in:	Weighted average price - euro/MWh -	
Q I 2021	13	
Q I 2022	32 (↗246%)	
Cold season 2021	14	
Cold season 2022	32 (7/228%)	
Calendar year 2021	13	
Calendar year 2022	29 (↗223%)	

- ➤ On September 9th, 2021, a critical price level has been reached, the highest for the last years, namely 276 lei/MWh for Q1 2022 delivery.
- ➤ The surge in gas prices in Romania has been strongly linked to the gas prices on the European trading platforms. The prices settled on CEGH Austria have been continuously rising since January 2021.
- ➤ The main driver for this situation of the energy markets is the post pandemic economic recovery together with the ambitious goal of the EU to climate neutrality (which drove to the very high ETS prices and to the perceiving of gas as the transition fuel).
- ➤ The activities and technologies (such as those hydrogen based) designed to support the EU climate neutrality ambitious goal are not yet sufficiently available, mature and cheap.

Authority Response to the Electricity prices rise

Government + Parliament (1)

the Law 259/October 29,2021 on establishing an electricity and gas consumption compensation scheme for the cold season 2021-2022

Electricity customers- measures to be applied for Nov 1st 2021÷ March 31, 2022

Residential: Price cap for all consumption 1 Ron/kWh (0,2Ec/kWh) and a Subsidy of 0.291 Ron/kWh for 330 kWh/month

Small Enterprises: Waive to pay network tariffs, cogeneration tax, GC obligation, excise duties

Hospitals, schools, NGO, churches, social service providers: Price cap for all consumption 1 Ron/kWh

Authority Response to the Gas prices rise

Government + Parliament (2)

- Social subsidies for Vulnerable customers heating aid for this winter
- + the new Law 259/October 29,2021 on establishing an electricity and gas consumption compensation scheme for the cold season 2021-2022

Gas customers - measures to be applied for Nov 1st 2021 + March 31, 2022

Residential: Price cap for all consumption at 0,37 Ron/kWh (0,08 Ec/kWh)+ a Subsidy of 33% of the gas price, if the consumption is less than the reference monthly consumption:

	Nov 2021	Dec 2021	Jan 2022	Feb 2022	Mar 2022
Reference Gas	1649,5	2405,61	2762,51	2512,56	2330,27
Consumption in kWh					

Small Enterprises: Waive to pay network tariffs, excise duties **Hospitals, Schools, NGOs, churches, Social service providers:** Price cap at 0,37 Ron/kWh, independent of the consumption level.

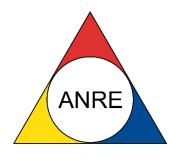
Energy Regulator's Solutions to alleviate the impact on the market players



☐ Modify tariff methodologies to allow to recognize ex-ante costs related to electricity acquisition to cover the network losses ☐ Postpone for 3 months the approval of increased Network tariffs for Electricity (from January 1st to Aprilst 2022) ☐ Modify the SOLR regulation to allow/oblige these suppliers to serve the customers of a supplier that is no more capable to provide the service ☐ Modify the conditions to repeal/withdraw a supply license at the holder's request (with the prerequisite that the licensee is not active in the retail market) ☐ Postpone entering into force of new regulation regarding performance standards for supply activity.

Conclusions

- The Romanian electricity and gas markets are consistent with the European regulations regarding internal energy market, requiring E-RES development, environment policy, integrated balancing markets, as well as increasing connection of energy networks.
- The current sustained price surge, both for gas and electricity, is of very much concern, since we consider it rather durable, even if not at the present high levels.
- The high prices shown this year on the Romanian centralized markets will affect the energy bill of final customers in 2022.
- Currently, the Romanian Energy Regulatory Authority, together with the Parliament/Government, is enforcing a set of measures and is assessing possible new solutions in order to compensate the increase of electricity and gas prices, with equal focus on the market players and final consumers.





THANK YOU FOR YOUR ATTENTION!

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