

Romanian gas and electricity market operator

Day-Ahead Market - November 2017

Number of registered participants on Day Ahead Market: 378 Number of active market participants [participants/month]: 308 Average number of active market participants [participants/day]: 288

Average price (arithmetic mean) [EUR/MWh]: 55.46 Average price (weighted mean) [EUR/MWh]: 57.40

Total traded volume [MWh]: 1,815,178.5 Average traded volume [MWh/h]: 2,521.1

DAM share of net forecasted consumption [%]: 36.96

Value [mil. EUR]: 104.20

Period	Total Traded Volume [MWh]	Average Traded Volume [MWh/h]	DAM Share [%]	Average Price [EUR/MWh]	Value of Transactions [EUR]
November 2016	2.288.016,1	3.177,8	46,79%	37,25	87.252.747,48
November 2017	1.815.178,5	2.521,1	36,96%	55,46	104.195.460,22
Variation	▼-20.67%	▼-20.67%	▼-21.01%	▲ +48.88%	▲ +19.42%

Period	Total Traded Volume [MWh]	Average Traded Volume [MWh/h]	DAM Share [%]	Average Price [EUR/MWh]	Value of Transactions [EUR]
October 2017	1.904.246,9	2.556,0	40,37%	47,24	90.227.718,84
November 2017	1.815.178,5	2.521,1	36,96%	55,46	104.195.460,22
Variation	▼-4.68%	▼-1.37%	▼-8.46%	▲ +17.40%	▲ +15.48%

Intraday Market - November 2017

Number of registered participants on IDM: 131

Number of active market participants [participants/month]: 55

Average price (weighted mean) [EUR/MWh]: 40.93

Total traded volume [MWh]: 15,768.690 Average traded volume [MWh/h]: 21.901

Value [EUR]: 645,417.69

Centralized Market for Bilateral Contracts - November 2017

Extended Auctions Mechanism - CMBC - EA

Number of registered participants on CMBC-EA: 353

Number of active market participants [participants/month]: 51

Bilateral Contracts Traded in November:

• Number of Traded Offers: 65

• Traded electricity volume [MWh]: 2,930,326.100 • Average price (weighted mean) [EUR/MWh]: 46.24

• Value [mil. EUR]: **135.50**

Bilateral Contracts with Delivery in November:

• Number: 538

• Electricity Volume [MWh]: 2,646,689.280

• Market Share out of the estimated consumption [%]: 53.89

• Average price (weighted mean) [EUR/MWh]: 38.46

• Value [mil. EUR]: 101.78

Continuous Negotiation mechanism

Number of registered participants on CMBC-CN: 196

Number of active market participants [participants/month]: 76

Standard Contracts traded in November:

- Number of forward contracts: 1,171
- Traded electricity volume [MWh]: 3,720,020
- Average price (weighted mean) [EUR/MWh]: 47.58
- Value [mil. EUR]: 176.99

Standard Contracts with Delivery in November:

- Number of forward contracts: 1,723Electricity Volume [MWh]: 1,068,888
- Market Share out of the estimated consumption [%]: 21.76
- Average price (weighted mean) [EUR/MWh]: 40.65
- Value [mil. EUR]: 43.45

Centralized Market with double continuous negotiation for Electricity Bilateral Contracts - November 2017

Number of registered participants on CM-OTC: 98

Number of active market participants [participants/month]: 43

Bilateral Contracts Traded in November:

- Number of market participants with concluded trades [participants/month]: 38
- Average price (weighted mean) [EUR/MWh]: 49.45
- Total traded volume [MWh]: 2,989,754
- Value [mil. EUR]: 147.83

Bilateral Contracts with Delivery in November:

- Number of market participants with concluded trades [participants/month]: 63
- Average price (weighted mean) [EUR/MWh]: 39.73
- Total traded volume [MWh]: 2,186,864
- Market Share out of the estimated consumption [%]: 44.53
- Value [mil. EUR]: 86.89

Centralized Market for Universal Service – November 2017

Number of registered participants on CMUS: 30

Contracts with Delivery in November:

- Number of traded contracts: 833
- Total traded volume [MWh]: 511,560
- Average price (weighted mean) [EUR/MWh]: 50.92
- Value [mil. EUR]: 26.05

Weighted average price of the bilateral contracts concluded on CMUS and on CMBC - EA, CMBC-CN, CM-OTC, after the effective date of ANRE Order no. 75/09.08.2017¹, (respectively beginning with 10 August 2017) $p_{PCSU+PC}^{med}$, with delivery in November 2017

• $p_{PCSU+PC}^{med}$ [EUR/MWh]: 49.82

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¹ ANRE Order no. 75/09.08.2017 amending the Regulation concerning the organization and functioning of the simultaneous auctions with decreasing price on the Centralized Market for Universal Service, approved by Order of the president of the Romanian Energy Regulatory Authority no. 65/22.07.2014 and for the modification and completion of the Methodology for establishing the tariffs applied by last resort suppliers to final customers, approved by the Order of the President of the Romanian Energy Regulatory Authority no. 92/2015

Green Certificates Market - November 2017

Number of registered participants on Green Certificates Market: 949

Green Certificates anonymous Centralized Spot Market

Number of active market participants [participants/month]: 156

Green Certificates traded in November:

• Number: 44,233

• Average price (weighted mean)² [EUR/certificate]: 29.40

Green Certificates anonymous Centralized Term Market

Number of active market participants [participants/month]: 106

Green Certificates traded in November:

• Number: -

Average price (weighted mean)³ [EUR/certificate]: -

For more information about the Power Market results of November 2017 the reader is referred to OPCOM website: www.opcom.ro

² For the month in which the average price value by rounding the hundredth order is situated outside the traded limit values approved by ANRE, it will be applied the rounding down or up to the hundredth order taking into account the framing sense of the admissible limits.

The price in Romanian currency was converted to EUR using the average exchange rate for the last month of the previous year published by National Bank of Romania (NBR). This reference exchange rate respects the provisions of the Law 220/27.10.2008, with further amendments and additions

³ For the month in which the average price value by rounding the hundredth order is situated outside the traded limit values approved by ANRE, it will be applied the rounding down or up to the hundredth order taking into account the framing sense of the admissible limits.

The price in Romanian currency was converted to EUR using the average exchange rate for the last month of the previous year published by National Bank of Romania (NBR). This reference exchange rate respects the provisions of the Law 220/27.10.2008, with further amendments and additions

Day Ahead Market Prices (EUR/MWh) November 2017					
Base (1-24)		Peak (9-20)		Off-Peak (1-8 & 21-24)	
55.46	▲ +17.40%	71.91	▲ +27.14%	39.01	▲ +2.87%

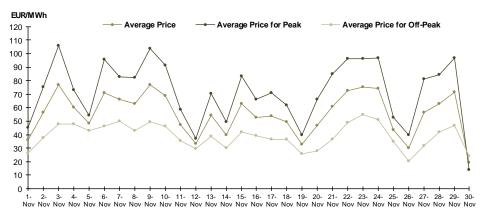


Figure 1: Daily DAM price development (base, peak and off-peak)

Day Ahead Market		November 2017
Traded Volume [MWh]		Market Share [%]
1,815,178.5	V - 4.68%	36.96

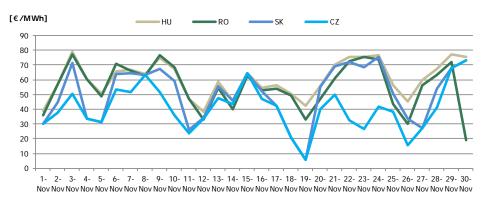
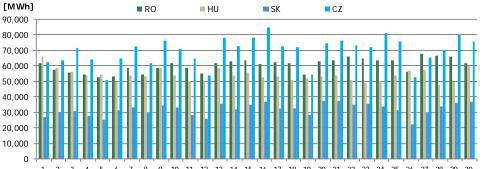


Figure 2: Daily Average DAM Price Development – 4MMC Coupling Results

DAM Prices - 4MMC Coupling Results			Nove	mber 2017
	RO	HU	SK	CZ
Average Price [euro/MWh]	55.46	60.46	50.71	40.71
Minimum Hourly Price [euro/MWh]	2.16	9.95	-20.00	1.50
Maximum Hourly Price [euro/MWh]	126.17	126.13	120.10	120.10

Utilisation Rate of ATC for DAM – 4MMC Coupling Results November 2017						
	RO->HU	HU->RO	HU->SK	SK->HU	SK->CZ	CZ->SK
ATC for DAM (MW)	234,779.0	554,821.0	1,054,080.0	376,320.0	1,225,048.0	924,918.0
DAM Cross Border Flow (MWh)	89,294.2	90,831.5	10,645.3	295,754.7	62,179.4	786,431.3
Utilisation Rate of ATC for DAM (%)	38.03%	16.37%	1.01%	78.59%	5.08%	85.03%



Centralized Market for Electricity Bilateral Contracts (CMBC-EA and CMBC-CN)				
November 2017				
Delivery Volume [MWh]		Market Share [%]		
3,715,577	4.09%	75.65		

Centralized Market with double continuous negotiation for Electricity Bilateral Contracts November 2017				
Delivery Volume [MWh]		Market Share [%]		
2,186,864	▼ -0.74%	44.53		

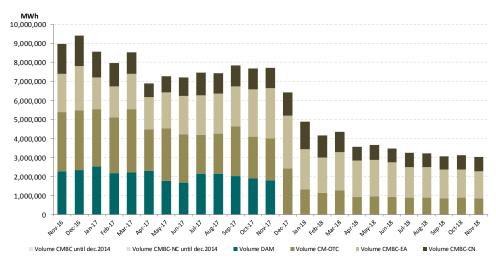


Figure 4: Monthly development for DAM transactions and deliveries according to contracts concluded on centralized market for bilateral contracts

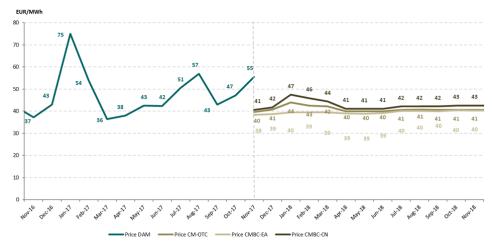


Figure 5: Monthly development for DAM average price and average price for deliveries according to concluded bilateral contracts

Green Certificates anonymous Centralized Spo	November 2017	
Number of Green Certificates	Price* [EUR/certificate]	
44,233	29.40	

Green Certificates anonymous Centralized Terr	November 2017	
Number of Green Certificates	Price* [EUR/certificate]	
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^{*}The price in Romanian currency was converted to EUR using the average exchange rate for the last month of the previous year published by National Bank of Romania (NBR). This reference exchange rate respects the provisions of the Law 220/27.10.2008, with further amendments and additions.