

Romanian gas and electricity market operator

Opcom

MONTHLY MARKET REPORT
MAY 2019

Day-Ahead Market - May 2019

Number of registered participants on Day Ahead Market: **373**Number of active market participants [participants/month]: **292**Average number of active market participants [participants/day]: **272**

Average price (arithmetic mean) [euro/MWh]: **40.73** Average price (weighted mean) [euro/MWh]: **41.58**

Total traded volume [MWh]: **1,639,334.1** Average traded volume [MWh/h]: **2,203.4**

DAM Share of forecasted net consumption [%]: 37.31

Value [mil. euro]: 68.17

| Period | Total Traded Volume [MWh] | Average Traded Volume [MWh/h] | DAM Share [%] | Average Price [euro/MWh] | Value of Transactions [euro] |
|-----------|---------------------------------|-------------------------------------|------------------|-----------------------------|------------------------------------|
| May 2018 | 1,706,288.6 | 2,293.4 | 39.25% | 40.87 | 72,016,688.12 |
| May 2019 | 1,639,334.1 | 2,203.4 | 37.31% | 40.73 | 68,169,952.19 |
| Variation | -3.92% | -3.92% | -4.96% | -0.32% | -5.34% |

| Period | Total Traded Volume [MWh] | Average Traded Volume [MWh/h] | DAM Share [%] | Average Price [euro/MWh] | Value of Transactions [euro] |
|------------|---------------------------------|-------------------------------------|------------------|-----------------------------|---------------------------------|
| April 2019 | 1,747,524.0 | 2,427.1 | 39.11% | 45.08 | 82,207,217.34 |
| May 2019 | 1,639,334.1 | 2,203.4 | 37.31% | 40.73 | 68,169,952.19 |
| Variation | -6.19% | -9.22% | -4.60% | -9.64% | -17.08% |

Intraday Market - May 2019

Number of registered participants on IDM: 137

Number of active market participants [participants/month]: 67

Average price (weighted mean) [euro/MWh]: **38.75**

Total traded volume [MWh]: **29,944.180**Average traded volume [MWh/h]: **40.248**

IDM Share of forecasted net consumption [%]: 0.68

Value [mil. euro]: 1.16

Centralized Market for Bilateral Contracts - May 2019

Extended Auctions Mechanism - CMBC - EA

Number of registered participants on CMBC-EA: 265

Number of active market participants [participants/month]: 35

Bilateral Contracts Traded in May:

• Number: 22

• Total traded volume [MWh]: **787,333.600**

• Average price (weighted mean) [euro/MWh]: **58.56**

• Value [mil. euro]: **46.11**

Bilateral Contracts with Delivery in May:

• Number: 368

• Total traded volume [MWh]: 1,715,162.880

• Market Share of forecasted net consumption [%]: 39.03

• Average price (weighted mean) [euro/MWh]: 47.28

• Value [mil. euro]: 81.09

Continuous Negotiation mechanism

Number of registered participants on CMBC-CN: 176

Number of active market participants [participants/month]: 66

Standard Contracts traded in May:

Number of forward contracts: 266Total traded volume [MWh]: 769,502

• Average price (weighted mean) [euro/MWh]: **55.97**

• Value [mil. euro]: 43.07

Standard Contracts with Delivery in May:

• Number of forward contracts: **2,015**

• Total traded volume [MWh]: 1,380,192

• Market Share of forecasted net consumption [%]: **31.41**

• Average price (weighted mean) [euro/MWh]: 47.80

• Value [mil. euro]: **65.97**

Centralized Market with double continuous negotiation for Electricity Bilateral Contracts

- May 2019

Number of registered participants on CM-OTC: 99

Number of active market participants [participants/month]: 54

Bilateral Contracts Traded in May:

• Number of market participants with concluded trades [participants/month]:44

Total traded volume [MWh]: 3,395,196

• Average price (weighted mean) [euro/MWh]: 53.33

• Value [mil. euro]: 181.08

Bilateral Contracts with Delivery in May:

• Number of market participants with concluded trades [participants/month]: 55

• Total traded volume [MWh]: 2,422,272

• Market Share of forecasted net consumption [%]: **55.12**

• Average price (weighted mean) [euro/MWh]: 48.34

• Value [mil. euro]: **117.08**

Centralized Market for Universal Service - May 2019

Number of registered participants on CMUS: 23

Number of active market participants [participants/month]: 3

Contracts Traded in May:

• Number: **0**

• Total traded volume [MWh]: 0

• Average price (weighted mean) [euro/MWh]: -

• Value [mil. euro]: 0.00

Contracts with Delivery in May:

• Number: 40

• Total traded volume [MWh]: 29,760

• Market Share of forecasted net consumption [%]: 0.68

• Average price (weighted mean) [euro/MWh]: **55.24**

• Value [mil. euro]: 1.64

Green Certificates Market - May 2019

Number of registered participants on Green Certificates Market: 940

Green Certificates anonymous Centralized Spot Market

Number of active market participants [participants/month]: 162

Green Certificates traded in May:

• Number: **36,966**

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

Green Certificates anonymous Centralized Term Market

Number of active market participants [participants/month]: 73

Green Certificates traded in May:

• Number: **105,750**

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

Day Ahead Market for Natural Gas - May 2019

Number of registered participants on DAM-NG: 37

Number of active market participants [participants/month]: 3

Average price (weighted mean) [lei/MWh]: -

Total traded volume [MWh]: 0

Value [mil. lei]: **0.00**

Centralised Market for Natural Gas - Trading Mechanism PCGN-LN - May 2019

Number of registered participants on PCGN-LN: 24

Number of active market participants [participants/month]: 2

Standard Contracts traded in May:

• Total traded volume [MWh]: 452,184

• Average price (weighted mean) [lei/MWh]: 100.34

• Value [mil. lei]: 45.37

Standard Contracts with Delivery in May:

• Total traded volume [MWh]: **0**

• Average price (weighted mean) [lei/MWh]: -

• Value [mil. lei]: **0.00**

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

| Day Ahead Market Prices (euro/MWh) | | | | | | | May 2019 | |
|------------------------------------|---|--------|-------------|---|---------|--------------|------------|--------|
| Base (1-24) | | | Peak (9-20) | | | Off-Peak (1- | -8, 21-24) | |
| 40.73 | _ | -9.64% | 42.63 | _ | -11.05% | 38.83 | _ | -8.05% |

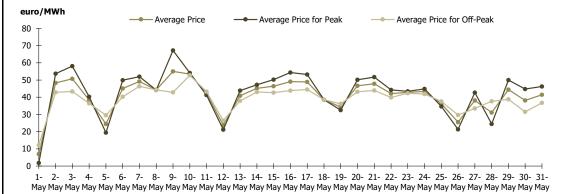


Figure 1: Daily DAM price development (base, peak and off-peak)

| Day Ahead Market | | | May 2019 |
|---------------------|--------|------------------|----------|
| Traded Volume [MWh] | | Market Share [%] | |
| 1,639,334.1 | -6.19% | 37.31 | |

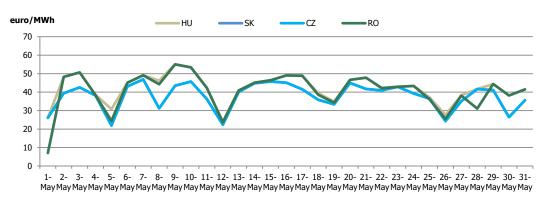


Figure 2: Daily DAM price development (base, peak and off-peak)

| DAM Prices - 4MMC Coupling Results | | | | | | | |
|------------------------------------|-------|-------|-------|-------|--|--|--|
| | RO | HU | SK | CZ | | | |
| Average Price (euro/MWh) | 40.73 | 42.12 | 37.87 | 37.87 | | | |
| Minimum Hourly Price (euro/MWh) | 0.00 | 0.95 | -5.00 | -5.00 | | | |
| Maximum Hourly Price (euro/MWh) | 75.02 | 75.02 | 59.58 | 59.58 | | | |

| Utilisation Rate of ATC for DAM – 4MM | | May 2019 | | | | |
|---------------------------------------|-----------|-----------|-----------|-----------|-------------|-------------|
| | RO->HU | HU->RO | HU->SK | SK->HU | SK->CZ | CZ->SK |
| ATC for DAM (MWh) | 367,536.0 | 525,264.0 | 919,440.0 | 785,760.0 | 1,278,912.0 | 1,131,688.0 |
| DAM Cross Border Flow (MWh) | 122,823.7 | 91,912.2 | 1,044.6 | 683,453.4 | 14,049.1 | 481,907.1 |
| Utilisation Rate of ATC for DAM (%) | 33.42% | 17.50% | 0.11% | 86.98% | 1.10% | 42.58% |

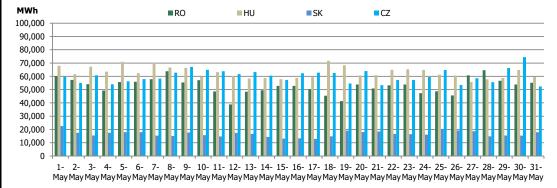


Figure 3: Daily DAM Traded Volume Development – 4MMC Coupling Results

| Centralized Market for Electricity Bilateral Contracts (CMBC-EA and CMBC-CN) | | | | | | | | |
|--|---------------|------------------|----------|--|--|--|--|--|
| | | | May 2019 | | | | | |
| Delivery Volume [MWh] | | Market Share [%] | | | | | | |
| 3,095,355 | +4.15% | 70.44 | | | | | | |

| Centralized Market with double continuous negotiation for Electricity Bilateral Contracts | | | | | | | |
|---|--|--------|------------------|--|--|--|--|
| | | | | | | | |
| Delivery Volume [MWh] | | | Market Share [%] | | | | |
| 2,422,272 | | +8.39% | 55.12 | | | | |

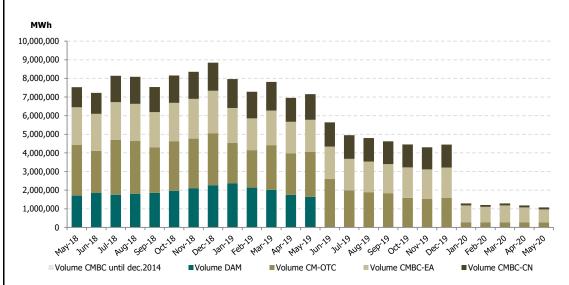


Figure 4: Monthly development for DAM transactions and deliveries according to contracts concluded on centralized market for bilateral contracts

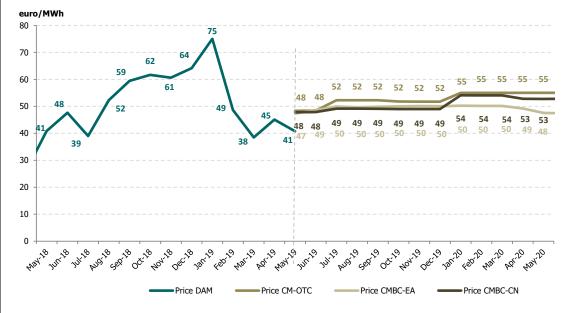


Figure 5: Monthly development for DAM average price and average price for deliveries according to concluded bilateral contracts

| Green Certificates anonymou | s Centralized Spot Market | | May 2019 |
|------------------------------|---------------------------|---------------------------|----------|
| Number of Green Certificates | | Price* [euro/certificate] | |
| 36,966 | -96.80% | 29.40 | |

| Green Certificates anonymou | s Centralized Term Market | | May 2019 |
|------------------------------|---------------------------|---------------------------|----------|
| Number of Green Certificates | | Price* [euro/certificate] | |
| 105,750 | -0.24% | 29.40 | |

^{*}The price in Romanian currency was converted to euro 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.

