Highlights
on the Romanian Commodities Exchange
developments for the natural gas market in Romania
WHO WE ARE

We are an operating commodities exchange founded in 1992 with growing business activity in the field of commodities and a diversified range of products developed on the energy market.

BRM is a private company, regulated by ANRE (the Romanian Energy Regulatory Authority) in accordance with Order no.69 / 09.11.2013, ANRE Order No. 66 – 68/2014, ANRE Order no.52 / 2013 and on the futures market by the Romanian Financial Supervisory Authority.
PORTFOLIO MANAGEMENT

MARKET

SIGNIFICANT EXPERTISE

LOGISTICAL KNOWLEDGE

EXTENSIVE PORTFOLIO MANAGEMENT
Wholesale Gas Market

BRM administrates the following gas markets:

**FUTURES MARKET**

in which BRM organizes trading sessions for futures contracts with physical delivery.

**GAS FORWARD WITH COUNTERPARTY SERVICES MARKET**

in which the suppliers and traders initiate orders and conclude transactions with natural gas, similar to the Gas Forward platform, with Counterparty services offered by BRM.

**GAS FORWARD MARKET**

where suppliers and traders initiate orders and conclude transactions with natural gas for medium and long term products.

**SPOT MARKET**

where providers and suppliers initiate orders and conclude transactions with natural gas for the same day or the next day.

**BALANCING MARKET**

where the providers initiate orders and conclude transactions with natural gas. Orders for sale and purchase are launched for the gas day D-1, within the limits of the daily imbalances communicated by the TSO.
Products

Products included in the wholesale gas markets

Central Counterparty Gas Forward market

**SPOT MARKET**
- **WITHIN DAY**
- **DAY AHEAD**

**BALANCING MARKET**
- **PE_IMB**

**GAS FORWARD MARKET**
- **WEEK**
- **MONTH**
- **QUARTER**
- **SEMESTER**
- **COLD SEASON**
- **WARM SEASON**
- **GAS YEAR**
- **CALENDAR YEAR**

**FUTURES MARKET**
- **MONTH**
- **QUARTER**
- **COLD SEASON**
- **WARM SEASON**
- **CALENDAR YEAR**

The products administrated by BRM on Central Counterparty Gas Forward market are the same as on the Gas Forward market.
RCE (Romanian Commodities Exchange)

- **MARKET LEADER** in trading natural gas in Romania
- **WE TRADE** more than 70% of the national domestic consumption
- **TRADERS** more than 90 traders
- **CLIENTS** more than 200 retail clients

- #1
- 70%
- 96
- 234
BRM estimates a traded quantity of 60 TWh in 2021.
Note 1: Due to legal considerations of the 2018 enacted Government Emergency Ordinance no. 114/2018, which artificially limited the price of natural gas from the current market levels to 14.35 Euro/MWh for both producers and suppliers, which took effect starting with January 2019, the period January - March 2019 saw a 100% regulated regime implementation. Starting with the 1st of April 2019 until December 2019, the market functioned in a 55% regulated regime.

Note 2: The same ordinance functioned during January - June 2020.

The impact of GEO 114/2018 was felt in the traded volumes which amounted 68.226.128,38 MWh in 2018 and 33.426.976,84 MWh in 2019.
BRM NATURAL GAS RETAIL MARKET TRADED VOLUMES

VOLUMES (TWh)

- 2010
- 2011
- 2012
- 2013
- 2014
- 2015
- 2016
- 2017
- 2018
- 2019
- 2020
- 2021
CO2 CERTIFICATES 2017-2021

<table>
<thead>
<tr>
<th>Year</th>
<th>CO2 Certificates 2017 - 2021 (pieces)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>177,536.00</td>
</tr>
<tr>
<td>2018</td>
<td>1,368,998.00</td>
</tr>
<tr>
<td>2019</td>
<td>1,879,191.00</td>
</tr>
<tr>
<td>2020</td>
<td>590,476.00</td>
</tr>
<tr>
<td>2021</td>
<td>7,343,183.00</td>
</tr>
</tbody>
</table>
Weighted average monthly prices of completed transactions and delivered in 2019

<table>
<thead>
<tr>
<th></th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>September</th>
<th>October</th>
<th>November</th>
<th>December</th>
</tr>
</thead>
</table>

Graph showing monthly price fluctuations from January to December 2019.
Weighted average monthly prices of completed transactions delivered and in delivery in 2020

<table>
<thead>
<tr>
<th></th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>September</th>
<th>October</th>
<th>November</th>
<th>December</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weighted Average Price (GasForward, SPOT)</td>
<td>22.28</td>
<td>21.11</td>
<td>19.88</td>
<td>15.75</td>
<td>17.32</td>
<td>16.58</td>
<td>17.71</td>
<td>15.43</td>
<td>14.03</td>
<td>12.83</td>
<td>13.47</td>
<td>13.72</td>
</tr>
</tbody>
</table>
Weighted average monthly prices of completed transactions delivered and in delivery in 2021

<table>
<thead>
<tr>
<th>Month</th>
<th>GasForward</th>
<th>SPOT</th>
<th>Weighted Average Price (GasForward, SPOT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>13.75</td>
<td>17.96</td>
<td>14.23</td>
</tr>
<tr>
<td>February</td>
<td>14.05</td>
<td>19.00</td>
<td>14.43</td>
</tr>
<tr>
<td>March</td>
<td>14.00</td>
<td>20.27</td>
<td>14.78</td>
</tr>
<tr>
<td>April</td>
<td>13.43</td>
<td>21.57</td>
<td>14.95</td>
</tr>
<tr>
<td>May</td>
<td>14.98</td>
<td>23.96</td>
<td>16.51</td>
</tr>
<tr>
<td>June</td>
<td>15.98</td>
<td>25.65</td>
<td>16.93</td>
</tr>
<tr>
<td>July</td>
<td>17.21</td>
<td>30.98</td>
<td>18.50</td>
</tr>
<tr>
<td>August</td>
<td>18.29</td>
<td>39.46</td>
<td>21.08</td>
</tr>
</tbody>
</table>
Traded Quantities - Balancing Market - 2020-2021

<table>
<thead>
<tr>
<th>Month</th>
<th>Jan 20</th>
<th>Feb 20</th>
<th>Mar 20</th>
<th>Apr 20</th>
<th>May 20</th>
<th>Jun 20</th>
<th>Jul 20</th>
<th>Aug 20</th>
<th>Sep 20</th>
<th>Oct 20</th>
<th>Nov 20</th>
<th>Dec 20</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity MWh</td>
<td>33,963.58</td>
<td>42,053.05</td>
<td>12,049.41</td>
<td>2,805.65</td>
<td>2,026.41</td>
<td>1,529.69</td>
<td>19,632.58</td>
<td>21,782.10</td>
<td>23,315.51</td>
<td>32,950.27</td>
<td>50,569.56</td>
<td>32,970.67</td>
<td>275,652.74</td>
</tr>
</tbody>
</table>

Year 2021

<table>
<thead>
<tr>
<th>Month</th>
<th>Jan 21</th>
<th>Feb 21</th>
<th>Mar 21</th>
<th>Apr 21</th>
<th>May 21</th>
<th>Jun 21</th>
<th>Jul 21</th>
<th>Aug 21</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity MWh</td>
<td>101,955.00</td>
<td>118,209.00</td>
<td>145,650.00</td>
<td>97,400.79</td>
<td>62,044.69</td>
<td>58,519.45</td>
<td>45,857.68</td>
<td>38,285.11</td>
<td>667,921.72</td>
</tr>
</tbody>
</table>
Traded Quantities - SPOT Market - 2020-2021

<table>
<thead>
<tr>
<th>Year</th>
<th>Jan 20</th>
<th>Feb 20</th>
<th>Mar 20</th>
<th>Apr 20</th>
<th>May 20</th>
<th>Jun 20</th>
<th>Jul 20</th>
<th>Aug 20</th>
<th>Sep 20</th>
<th>Oct 20</th>
<th>Nov 20</th>
<th>Dec 20</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>423,192.92</td>
<td>391,184.18</td>
<td>733,745.57</td>
<td>969,541.42</td>
<td>501,442.29</td>
<td>511,279.88</td>
<td>308,024.76</td>
<td>452,297.40</td>
<td>582,467.80</td>
<td>405,214.15</td>
<td>490,484.15</td>
<td>604,625.75</td>
<td>6,373,500.25</td>
</tr>
<tr>
<td>2021</td>
<td>601,111.30</td>
<td>419,482.60</td>
<td>817,237.79</td>
<td>1,033,191.58</td>
<td>711,487.99</td>
<td>421,786.29</td>
<td>371,735.22</td>
<td>561,021.97</td>
<td>4,937,054.74</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

MWh
# Traded Volumes in a Gas Year

<table>
<thead>
<tr>
<th></th>
<th>2018 - 2019</th>
<th>2019 - 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Forward</td>
<td>SPOT</td>
</tr>
<tr>
<td>October</td>
<td>8,196,037.40</td>
<td>549.62</td>
</tr>
<tr>
<td>November</td>
<td>7,327,539.00</td>
<td>39,885.53</td>
</tr>
<tr>
<td>December</td>
<td>5,983,837.00</td>
<td>119,903.66</td>
</tr>
<tr>
<td>January</td>
<td>134,432.00</td>
<td>227,272.39</td>
</tr>
<tr>
<td>February</td>
<td>181,565.00</td>
<td>152,436.04</td>
</tr>
<tr>
<td>March</td>
<td>113,266.00</td>
<td>230,798.23</td>
</tr>
<tr>
<td>April</td>
<td>477,297.98</td>
<td>526,260.89</td>
</tr>
<tr>
<td>May</td>
<td>27,171.00</td>
<td>193,609.34</td>
</tr>
<tr>
<td>June</td>
<td>2,760,742.00</td>
<td>128,199.62</td>
</tr>
<tr>
<td>July</td>
<td>1,173,087.73</td>
<td>312,060.31</td>
</tr>
<tr>
<td>August</td>
<td>12,280,549.00</td>
<td>250,344.09</td>
</tr>
<tr>
<td>September</td>
<td>5,138,697.00</td>
<td>271,166.59</td>
</tr>
<tr>
<td>TOTAL</td>
<td>46,246,707.42</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No. of participants in a gas year</th>
<th>2018 - 2019</th>
<th>2019 - 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>64</td>
<td>76</td>
</tr>
</tbody>
</table>
Cleared volumes & participants

**SPOT MARKET**
- +67% Market Share
- +100% increase in traded volumes
- estimated for end 2021

**FORWARD MARKET**
- +15% Market Share

5 NEW MEMBERS IN 2021 (SPOT & FORWARD MARKET)

- The BRM CCP cleared volume traded currently amounts 3 TWh
- 40 unique participants
Romanian Commodities Exchange was registered on ACER REMIT Information System.

September 2019
BRM has launched counterparty services for natural gas with physical delivery contract, services offered by BRM.

May 2019
BRM has been operating the Balancing market on behalf of Transgaz (TSO), within the limits of the daily imbalances communicated by the TSO.

2015
Romanian Commodities Exchange was registered on ACER REMIT Information System.

August 2020
BRM has launched the Novation Option, in which the suppliers and traders can transfer their obligation to BRM, as a CCP. Main advantages: diminished guarantees, flexibility, daily settlement, 100% executed contracts and obligations.

November 2020
BRM has launched the Futures market, in which BRM organizes trading sessions for futures contracts with physical delivery.

Today BRM offers CCP services for both SPOT and Gas Forward Markets and gives its participants the benefits of clearing also bilateral transactions.
Chronological Highlights

2021

BRM has launched its own Guarantee Management Option, in order for participants to have the facility to resize their guarantees threshold according to their needs.

BRM managed to obtain the approval for the future instruments and the Futures Market will be launched mid October 2021.

Following the recent completion within the list of standard products with future contracts, approved by ANRE (through Ordinance 29/2021), BRM is keen on making the futures market trading a Strategic TOP Priority.
WHAT BRM AIMS FOR?

In the current European energy architecture, BRM is actively supporting and encouraging Romania to play an important role in strengthening regional cooperation, especially in the perspective of future Black Sea gas supplies.

HOW?

In order to achieve this, BRM is planning on promoting strong relations with similar entities and other stakeholders (TSO’s, traders etc.), contributing to a CEE top priority energy developing features.
Regional Strategy

BRM plans on diversifying its activity within the region, in order to create the premises for generating new opportunities for market participants to conduct trans-border trading in a more efficient way, as well as to apply complex trading options like:

01/ ACCESS
Access to market information of various local operators (national), including real time data with regards to market quotes

04/ INTERCONECTIVITY
The development of interconnectivity and interoperability between energy exchanges in order to facilitate access and trading within the various regional markets

02/ ADVANTAGES
Diminished costs for traders and consistent advantages for small & medium participants

03/ DATABASE
The development of a common database of products offered by exchange operators, dedicated to the participants in the region.
SEEGAS Joint Steering Committee proposals

- Completing the feasibility study with stakeholders’ opinion regarding common interests of cooperation through the region; agreeing on standardized product use having the aim of trading optimization;

- Adding an analysis on the status of implementation of the European Network Codes in the region, aiming to establish a common tariff policy; developing tools for synchronizing capacity allocation with SPOT transactions for cross-border allocation;

- Interoperability of trading systems (connecting market operators acting like GCMs by creating a common framework-procedures, rules, protocols);

- Regional CCP solution;

- Analysis on the regional support for accessing European Hubs (quotations, orders, etc.).
THANK YOU!