SPECIFIC INDICES PUBLISHED BY OPCOM SA
PRICES AND PRICE/VOLUM INDICES

<table>
<tr>
<td colspan="2" align="center">Day Ahead Market (DAM)</td>
</tr>
<tr>
<td>Prices _{hourly} [lei/MWh] / [euro/MWh]

ROPEX_DAM_H</td>
<td>The sequence of the 24 hourly Day Ahead Market (DAM) clearing prices:

$$ROPEX\_DAM\_H$$

This price index is associated to each hourly interval of the day.

For the day of daylight switching from summer to winter hour, OPCOM publishes the ROPEX_DAM_H for 25 hourly intervals.

For the day of daylight switching from winter to summer hour, OPCOM publishes the ROPEX_DAM_H for 23 hourly intervals.</td>
</tr>
<tr>
<td>Price _{base} [lei/MWh] / [euro/MWh]

ROPEX_DAM_Base</td>
<td>This price index represents the daily arithmetic average of the Day Ahead Market (DAM) clearing prices:

$$ROPEX\_DAM\_BASE = \frac{\sum_{j=1}^{24} p_j}{24}$$

This price index is determined for every day of the year as the arithmetic mean of the prices corresponding to the 24 hourly intervals.

For the day of daylight switching from summer to winter hour, OPCOM publishes the ROPEX_DAM_BASE calculated for 25 hourly intervals:

$$ROPEX\_DAM\_BASE = \frac{\sum_{j=1}^{25} p_j}{25}$$

For the day of daylight switching from winter to summer hour, OPCOM publishes the ROPEX_DAM_BASE calculated for 23 hourly intervals:</td>
</tr>
</table>

	$$ROPEX\_DAM\_BASE = \frac{\sum_{j=1}^{23} p_j}{23}$$
Volume base [MWh]	This index represents the sum of the hourly volumes traded on Day Ahead Market: $$volume_{base} = \sum_{j=1}^{24} volume_j$$ This volume is determined every day of the year by adding up all hourly traded volumes (for 24 intervals). For the day of daylight switching from summer to winter hour, OPCOM publishes the volume calculated for 25 hourly intervals: $$volume_{base} = \sum_{j=1}^{25} volume_j$$ For the day of daylight switching from winter to summer hour, OPCOM publishes the volume calculated for 23 hourly intervals: $$volume_{base} = \sum_{j=1}^{23} volume_j$$
Price for peak hours [lei/MWh] / [euro/MWh] ROPEX _DAM_Peak	This price index represents the arithmetic average of the DAM clearing prices corresponding to the peak hours: $$ROPEX\_DAM\_PEAK = \frac{\sum_{j=9}^{20} p_j}{12}$$ This price index is determined for every day of the year as the arithmetic mean of the prices corresponding to the 12 hourly intervals, considered as *peak* hours (including 9th and 20nd intervals). For the day of daylight switching from summer to winter hour, OPCOM publishes the average price calculated for 12 hourly intervals: $$ROPEX\_DAM\_PEAK = \frac{\sum_{j=10}^{21} p_j}{12}$$ For the day of daylight switching from winter to summer hour, OPCOM publishes the average price calculated for 12 hourly intervals: $$ROPEX\_DAM\_PEAK = \frac{\sum_{j=8}^{19} p_j}{12}$$

Volume for peak hours [MWh] (*volume peak*)	This index represents the sum of the hourly volumes traded on Day Ahead Market, corresponding to peak hours: $$volume_{peak} = \sum_{j=9}^{20} volume_j$$ This volume is determined every day of the year by adding up the hourly traded volumes corresponding to the 12 hourly intervals, considered as day hours (including 9th and 20nd intervals). For the day of daylight switching from summer to winter hour, OPCOM publishes the volume calculated for 12 hourly intervals: $$volume_{peak} = \sum_{j=10}^{21} volume_j$$ For the day of daylight switching from winter to summer hour, OPCOM publishes the volume calculated for 12 hourly intervals: $$volume_{peak} = \sum_{j=8}^{19} volume_j$$
Price for off-peak hours [lei/MWh] / [euro/MWh] ROPEX_DAM_Off-Peak opcom	This price index represents the arithmetic average of the DAM clearing prices corresponding to off-peak hours: $$ROPEX\_DAM\_OFF-PEAK = \frac{\sum_{j=1}^{8} p_j + \sum_{j=21}^{24} p_j}{12}$$ This price index is determined every day of the year as the arithmetic mean of the prices corresponding to the 12 hourly intervals, considered as *off-peak* hours (including 1st-8th and 21rd-24th intervals). For the day of daylight switching from summer to winter hour, OPCOM publishes the average price calculated for 13 hourly intervals: $$ROPEX\_DAM\_OFF-PEAK = \frac{\sum_{j=1}^{9} p_j + \sum_{j=22}^{25} p_j}{13}$$ For the day of daylight switching from winter to summer hour, OPCOM publishes the average price calculated for 11 hourly intervals: $$ROPEX\_DAM\_OFF-PEAK = \frac{\sum_{j=1}^{7} p_j + \sum_{j=20}^{23} p_j}{11}$$
Volume for off-peak hours	This index represents the sum of the hourly volumes traded on

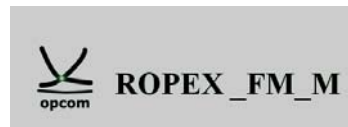| [MWh] (*volume* *off-peak*)	Day Ahead Market, corresponding to off-peak hours: $$volume_{off-peak} = \sum_{j=1}^{8} volume_j + \sum_{j=21}^{24} volume_j$$ This volume is determined every day of the year by adding up the hourly traded volumes corresponding to the 12 hourly intervals, considered as night hours (including 1st-8th and 21rd-24th intervals). For the day of daylight switching from summer to winter hour, OPCOM publishes the volume calculated for 13 hourly intervals: $$volume_{off-peak} = \sum_{j=1}^{9} volume_j + \sum_{j=22}^{25} volume_j$$ For the day of daylight switching from winter to summer hour, OPCOM publishes the volume calculated for 11 hourly intervals: $$volume_{off-peak} = \sum_{j=1}^{7} volume_j + \sum_{j=20}^{23} volume_j$$

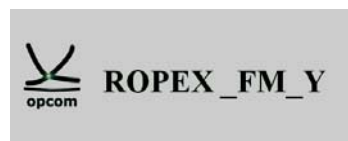|	**Forward Market (FM) for electricity**
Average weighted price calculated for contracts with delivery in month M [lei/MWh] – Order 6/2011 ![opcom ROPEX_FM_M]	This index represents the weighted average of prices resulted from bilateral contracts with delivery in month M traded on forward markets administrated by OPCOM SA: $$ROPEX\_FM\_M = \frac{\sum_{i=1}^{n} p_{Mi} * q_i}{\sum_{i=1}^{n} q_{Mi}}$$ For the moment this price index is custom for Centralised Market for Electricity Bilateral Contracts - Public Auction Mechanism, being calculated as weighted average of all contracts which are in delivery into one month on CMBC. For each delivery month, average price in Euro is calculated taking into account the exchange rate published by National Bank of Romania (BNR) in the day when are traded the contracts with delivery in that month.
Average weighted price calculated for contracts with delivery in year Y [lei/MWh] – Order 6/2011 ![opcom ROPEX_FM_Y]	This index represents the weighted average of prices resulted from bilateral contracts with delivery in year Y traded on forward markets administrated by OPCOM SA: $$ROPEX\_FM\_Y = \frac{\sum_{i=1}^{n} p_{Yi} * q_i}{\sum_{i=1}^{n} q_{Yi}}$$ For the moment this index is custom for Centralised Market for Electricity Bilateral Contracts - Public Auction Mechanism, being calculated as weighted average of all contracts which are in delivery into one year on CMBC. For each delivery year, average price in Euro is calculated taking into account for each month of the year the exchange rate published by National Bank of Romania (BNR) in the day when are traded the contracts with delivery in that month.

Centralised Market for Electricity Bilateral Contracts - Public Auction Mechanism (CMBC) – Order 6/2011

Average price purchase/sale [lei/MWh] *(avg price $_{P/S}$)*	This index represents the average of the prices from the contracts concluded by public auction for the delivery month (p_D) on Centralised Market for Electricity Bilateral Contracts - Public Auction Mechanism: $$avg\ price_{P/S} = \frac{\sum_{i=1}^{n} p_{Dn}}{n}$$ This price is determined as the arithmetic mean of all contracts' prices with delivery in a month, regardless of the moment of contract concluding and it is brought up to date as often as a new contract is traded with delivery in that month. For each delivery month, the average price is converted to euro using the reference exchange rate published by BNR in the day when contracts with delivery in that month are traded. The index is brought up to date as often as a new contract with delivery in that month is traded.
Average price differentiated by offer type – purchase with maximum price [lei/MWh] *(avg price $_P$)*	This index represents the average of the prices from the contracts concluded by public auction, initiated through purchase offers, for the delivery month (p_D) on Centralised Market for Electricity Bilateral Contracts - Public Auction Mechanism: $$avg\ price_{P} = \frac{\sum_{i=1}^{n} p_{Dn}}{n}$$ This price is determined as the arithmetic mean of all contracts' prices with delivery in a month, initiated through purchase offers, regardless of the moment of contract concluding and it is brought up to date as often as a new contract with delivery in that month is traded. For each delivery month, the average price is converted to euro using the reference exchange rate published by BNR in the day when contracts with delivery in that month are traded. The index is brought up to date as often as a new contract with delivery in that month is traded.
Average price differentiated by offer type – sale with minimum price [lei/MWh]	This index represents the average of the prices from the contracts concluded by public auction, initiated through sale offers, for the delivery month (p_D) on Centralised Market for Electricity Bilateral Contracts - Public Auction Mechanism:

(avg price S)	$$avg\ price_S = \frac{\sum_{i=1}^{n} p_{Dn}}{n}$$ This price is determined as the arithmetic mean of all contracts' prices with delivery in a month, initiated through sale offers, regardless of the moment of contract concluding and it is brought up to date as often as a new contract with delivery in that month is traded. For each delivery month, the average price is converted to euro using the reference exchange rate published by BNR in the day when contracts with delivery in that month are traded. The index is brought up to date as often as a new contract with delivery in that month is traded.

Centralised Market for Electricity Bilateral Contracts - Continuous Negotiation Mechanism (CMBC-CN) – Order 6/2011	
Base Average price _instrument [lei/MWh] *(price $_{base\_instrument}$)*	This index represents the average of the prices from the concluded forward contracts for the base load electricity, for the delivery period (p_D) on Centralised Market for Electricity Bilateral Contracts - Continuous Negotiation Mechanism: $$price_{base\_instrument} = \frac{\sum_{i=1}^{n} p_{Dn}}{n}$$ On the Centralised Market for Electricity Bilateral Contracts - Continuous Negotiation Mechanism, the concluded contracts have the delivery period specified by the type of the tradable instrument (week, month, quarter or year). This price is calculated separately for each instrument as the arithmetic mean of all concluded forward contracts for the base load electricity, having the delivery period in the calculation period. For each delivery month, the average price is converted to euro using the reference exchange rate published by BNR in the day when contracts with delivery in that month are traded. The index is brought up to date as often as a new contract is traded on this instrument.
Peak Average price _instrument [lei/MWh] *(price $_{peak\_instrument}$)*	This index represents the average of the prices from the concluded forward contracts for the peak load electricity, for the delivery period (p_D) on Centralised Market for Electricity Bilateral Contracts - Continuous Negotiation Mechanism: $$price_{peak\_instrument} = \frac{\sum_{i=1}^{n} p_{Dn}}{n}$$ On the Centralised Market for Electricity Bilateral Contracts - Continuous Negotiation Mechanism, the concluded contracts have the delivery period specified by the type of the tradable instrument (week, month, quarter or year). This price is calculated separately for each instrument as the arithmetic mean of all concluded forward contracts for the peak load electricity (6:00 – 22:00), having the delivery period in the calculation period. For each delivery month, the average price is converted to euro using the reference exchange rate published by BNR in the day when contracts with delivery in that month are traded. The index is brought up to date as often as a new contract is

	traded on this instrument.
Off-peak Average price _instrument [lei/MWh] *(price off-peak _instrument)*	This index represents the average of the prices from the concluded forward contracts for the off-peak load electricity, for the delivery period (p_D) on Centralised Market for Electricity Bilateral Contracts - Continuous Negotiation Mechanism: $$price_{off-peak\_instrument} = \frac{\sum_{i=1}^{n} p_{Dn}}{n}$$ On the Centralised Market for Electricity Bilateral Contracts - Continuous Negotiation Mechanism, the concluded contracts have the delivery period specified by the type of the tradable instrument (week, month, quarter or year). This price is calculated separately for each instrument as the arithmetic mean of all concluded forward contracts for the off-peak load electricity (00:00 – 6:00; 22:00 – 24:00), having the delivery period in the calculation period. For each delivery month, the average price is converted to euro using the reference exchange rate published by BNR in the day when contracts with delivery in that month are traded. The index is brought up to date as often as a new contract is traded on this instrument.

Valid until 31.12.2014

Centralised Green Certificates Market (CGCM)

Monthly price [lei/GC] **ROPEX_GC_M**	This index represents the weighted average of the prices established on Centralised Green Certificates Market in month M: $$ROPEX\_GC\_M = \frac{\sum_{i=1}^{n} p_{Mi} * q_{Mi}}{\sum_{i=1}^{n} q_{Mi}}$$ For each month, the weighted average price in Euro is calculated taking into account the average exchange rate published by National Bank of Romania (BNR) for December of the year preceding the year for which the trades were made in that month.
Average weighted price calculated for green certicates traded in year Y [lei/GC] **ROPEX_GC_Y**	This index represents the weighted average of the monthly prices established on Centralised Green Certificates Market in year Y: $$ROPEX\_GC\_Y = \frac{\sum_{i=1}^{n} p_{Yi} * q_{i}}{\sum_{i=1}^{n} q_{Yi}}$$ The weighted average price ROPEX_GC_Y is converted to euro using the average exchange rate published by National Bank of Romania (BNR) for December of the year preceding the year for which the trades were made in that month.