European Gas Index - EGIX

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1. European Gas Index - EGIX

The EGIX is based on the trades which are concluded in the respective current front month contracts on the exchange (index-relevant trades). Based on these trades, the volume-weighted average price (daily index) is calculated across all trades on every exchange trading day. The EGIX corresponds to the arithmetic mean of all daily indices which refer to identical front month contracts.

Both the daily indices and the EGIX are each calculated for the NCG market area, the GASPOOL market area and a virtual German market area:

- For the EGIX NCG only the trades concluded in this market area are index-relevant. The daily index for this market area is calculated as the volume-weighted average price of all trades which were concluded in front month contracts in the NCG market area (NCG Natural Gas Month Futures with a corresponding maturity).

- For the EGIX GASPOOL only the trades concluded in this market area are index-relevant. The daily index for this market area is calculated as the volume-weighted average price of all trades which were concluded in front month contracts in the GASPOOL market area (GASPOOL Natural Gas Month Futures with a corresponding maturity).

- Both the trades concluded in the NCG market area and the trades concluded in the GASPOOL market area are index-relevant for the EGIX Germany. The daily index for the virtual German market area is calculated as the volume-weighted average price of all trades concluded in front month contracts in the NCG and GASPOOL market areas.

EGIX NCG, EGIX GASPOOL and EGIX Germany correspond to the arithmetic mean of the respective corresponding daily indices for NCG, GASPOOL and Germany.

The individual steps of the EGIX calculation are explained in more detail below.

Index-relevant trades

Index-relevant trades include all trades which are concluded on the EEX Derivatives Market for Natural Gas in the respective current front month contracts (NCG Natural Gas Month Futures with corresponding maturity and GASPOOL Natural Gas Month Futures with corresponding maturity).

OTC trades which are registered for clearing on EEX are not considered in the calculation of the EGIX. Trades which have been reported as mistrades are also not considered in the calculation of the EGIX.

The current front month is the next fully tradable month which follows the trading day. Months for which only Balance-of-Month (BoM) contracts can still be traded on EEX are no longer considered index-relevant front months. The day of the switch between the index-relevant front months depends on the EEX contract specifications which specify the fulfilment of the contracts and the switch to BoM contracts.
Calculation of daily indices

The daily indices for NCG, GASPOOL and Germany correspond to the volume-weighted average prices of the respective trading transactions on this trading day. Mathematical formulas are used to calculate the daily indices (N: number of trades on that specific trading day, P: price of a trade, V: volume of a trade).

\[
\text{Daily index}_{\text{NCG}} = \frac{\sum_{i=1}^{N_{\text{NCG}}} (P_i \cdot V_i)}{\sum_{i=1}^{N_{\text{NCG}}} V_i}
\]

\[
\text{Daily index}_{\text{GASPOOL}} = \frac{\sum_{i=1}^{N_{\text{GASPOOL}}} (P_i \cdot V_i)}{\sum_{i=1}^{N_{\text{GASPOOL}}} V_i}
\]

\[
\text{Daily index}_{\text{Deutschland}} = \frac{\sum_{i=1}^{N_{\text{NCG,GASPOOL}}} (P_i \cdot V_i)}{\sum_{i=1}^{N_{\text{NCG,GASPOOL}}} V_i} = \frac{(\text{daily index}_{\text{NCG}} \cdot V_{\text{NCG}}) + (\text{daily index}_{\text{GASPOOL}} \cdot V_{\text{GASPOOL}})}{V_{\text{NCG}} + V_{\text{GASPOOL}}}
\]

If less than 3 trades were concluded in the index-relevant front month contracts in the NCG market area or the GASPOOL market area on a given trading day, the daily index for the market area corresponds to the settlement price for the front month. In this case, the daily index for Germany corresponds to the arithmetic mean of the daily indices for NCG and GASPOOL on that specific trading day.

Calculation of EGIX

The EGIX for NCG, GASPOOL and Germany corresponds to the arithmetic mean of the daily indices of the respective market areas. In this process, only those daily indices are considered which were calculated for the front month which is index-relevant on the current trading day. On the first day after the transition to a new front month, the daily indices with the EGIX are identical in all market areas as a result.

The following mathematical formulas are used to calculate the EGIX (n: number of trading days with an identical front month which have already been completed).

\[
\text{EGIX}_{\text{NCG}} = \frac{\sum_{j=1}^{n} \text{daily index}_{\text{NCG},j}}{n}
\]

\[
\text{EGIX}_{\text{GASPOOL}} = \frac{\sum_{j=1}^{n} \text{daily index}_{\text{GASPOOL},j}}{n}
\]

\[
\text{EGIX}_{\text{Germany}} = \frac{\sum_{j=1}^{n} \text{daily index}_{\text{Germany},j}}{n}
\]