

## Specification CEGHEDI®

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### 1. General introduction

On the natural gas market, indices (plural) are usually simple measures that reflect the performance of a given contract within a certain time period. Indices usually allow natural gas consumers to gain easier access to actual natural gas prices without having to enter the exchange market.

The CEGHEDI provides you with sort of a closing price for the current trading day. End of day trading simply means to make trading decisions very near to the markets close. This way market participants do not need to keep an eye on the market all day or be distracted by news. Generally speaking, end of day trading is usually used by non-professional traders who have day jobs or other time constraints. During this phase, lower prices can often be achieved by cutting out the noise of the day.

### 2. Overview

CEGHEDI is a natural gas spot market index also referred to as End of Day Indices (hereinafter **EEX EOD Indices**). It is primarily based on concluded trades and the order book situation of EEX AG (hereinafter **EEX**) in the respective spot product. EEX EOD Indices are described in the Index Description of EEX currently available on <https://www.eex.com/en/markets/trading-ressources/indices>. In case of any contradiction or conflict between the Index Description and this specification, the prior shall prevail.

CEGHEDI is determined daily and calculated separately for each natural gas spot market product (i.e. each delivery period) tradable on the respective **Exchange Day**. The term Exchange Day is defined in the **Trading Conditions** of EEX available on <https://www.eex.com/en/markets/trading-ressources/rules-and-regulations>. Please be aware that the term Exchange Day may differ for different products (spot versus futures).

### 3. Methodology

CEGHEDI is a volume-weighted average price of all trades in the respective EEX CEGH VTP natural gas spot market contract that was traded within the so-called Calculation Period. The **Calculation Period** is the period during trading hours, in which the relevant trades and order book situation are considered for the calculation. This period is currently

between 17:15 pm and 17:30 pm CE(S)T on the last trading day of each contract. CEGHEDI is rounded to three digits.

Only trades and orders which fulfil the following EEX CEGH VTP specific parameters within the Calculation Period, or in special cases also before that period, are taken into account:

- minimum quantity of traded contracts: 10 contracts = 10 MW
- minimum quantity of contracts per order: 10 contracts = 10 MW
- minimum duration of the cumulated valid best bid and best ask: 3 minutes
- maximum spread per contract: 0,40 EUR/MWh.

The **Maximum Spread** per contract is the maximum price range between buy and sell orders, specified for each contract. The spread to be applied depends on the market situation.

Based on trades and orders qualifying for consideration a **Theoretical Price** is calculated.

In principle, the prices that are taken into account can result from exchange trades, orders, fair values collected in a price committee (Chief Trader Procedure) and from data provided by other price sources.

Cancelled trades, EEX CEGH VTP Natural Gas Within-Day Spot Contracts and OTC cleared (Straight Through Processing) volumes are not taken into account. EEX furthermore reserves the right to exclude individual trades, orders or fair values from consideration if those have been reflected in the actual market situation at the time.

For further information in relation to the relevant contracts, reference is made to the **Contract Specifications** of EEX available on <https://www.eex.com/>, currently on the subpage <https://www.eex.com/en/markets/trading-ressources/rules-and-regulations>. All other definitions, denoted with capital first letters, are described in the relevant rules and regulations of EEX.

## 2.1 Index calculation

The Theoretical Price is determined based on the calculation **algorithms** defined below. In this context, the underlying method depends on the number of valid trades and orders which fulfil the product-specific parameters.

The following overview provides examples of possible scenarios and the corresponding calculation algorithms:

<i>Orderbook situation</i>	<i>Calculation algorithm</i>
There was at least one trade <sup>1)</sup> There were suitable orders	Theoretical price = $0.75 * \text{AverageTradePrice}^{2)} + 0.25 * \text{AverageMid}^{3)}$
There was at least one trade <sup>1)</sup> There were no suitable orders	Theoretical price = $\text{AverageTradePrice}^{2)}$

There was no trade There were suitable orders	Theoretical price = AverageMid <sup>3)</sup>
There was no trade There were no suitable orders	The Theoretical Price can be established based on data of other price sources or on the Chief Trader Procedure.

- 1) EOD Indices based on EEX Natural Gas Spot market data: If there are three or more qualifying trades, only trades are considered.
- 2) The AverageTradePrice is the mean price of exchange trades during the Calculation Period.
- 3) The AverageMid is the arithmetic mean of the time weighted average best bid and the time weighted average best ask which fulfil the minimum order quantity. The time weighted average best bid (the average best ask) is the time weighted average from all highest buy orders (lowest sell orders) which lie within the limits of the Maximum Spread during the time window for the individual contract on the market, considering the period of their existence in the orderbook.

The result of the Theoretical Price calculation is validated against the actual market situation at the relevant time, if available. For the market plausibility check external price sources will be used, including prices from other trading venues, information from data providers and chief traders or prices from trades concluded via Trade Registration. Upon validation, the Theoretical Price becomes the EOD Index.

## 2.2 Source data

All data, necessary for index calculation, are provided by EEX solely.

## 2.3 Publication

The index is published daily after the trading phase between 18:00 pm and 21:00 pm CE(S)T on the respective websites of EEX (currently <https://www.eex.com/en/market-data/natural-gas>) and CEGH (currently <https://www.cegh.at/en/exchange-market/market-data/>). Historical data is available with subscription to EEX Group DataSource services. For more information about subscription and data options, please visit <https://www.eex.com/en/market-data/eex-group-datasource> or reach out to us for guidance (see contacts below under section 5).

## 2.4 Insufficient data

If there are no trades and orders fulfilling the product-specific parameters, EEX can determine the CEGHEDI based on data of the Chief Trader Procedure or other prices sources.

Every trading participant can take part in the Chief Trader Procedure. EEX provides a standardised form to all trading participants, who agree to provide a market price indication or estimates for the respective spot contracts. If required, EEX determines the EOD Index

by calculating the arithmetic mean from all such market price indications after exclusion of outlier values (if any).

Furthermore, especially in the case of having insufficient market data within the Calculation Period, trades and orders in direct temporal connection to the Calculation Period can be used for the market plausibility check.

#### 4. References and disclaimers

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Please also note that website references and links, provided in this methodology, might not be updated promptly as EEX or CEGH websites change. If you experience any error with these links, please visit the following websites and locate the referenced document manually:

- <https://www.cegh.at/>, use the search function marked with a blue magnifier ikon on the upper right-hand corner of the page,
- <https://www.eex.com/>, find the Downloads section and use the search box.

In case of any contradiction or conflict between this document and any EEX or CEGH rule or regulation, the later shall always prevail.

#### 5. Contacts

If you have any questions or comments, do not hesitate to contact the EEX CEGH Gas Exchange Services team via e-mail ([exchange@cegh.at](mailto:exchange@cegh.at)) or reach out to any of our colleagues directly <https://www.cegh.at/en/about-us/organization/gas-exchange-services/>.