

ceegex

CENTRAL EASTERN EUROPEAN
GAS EXCHANGE



CEEGEX explained for consumers

Gas trading in short

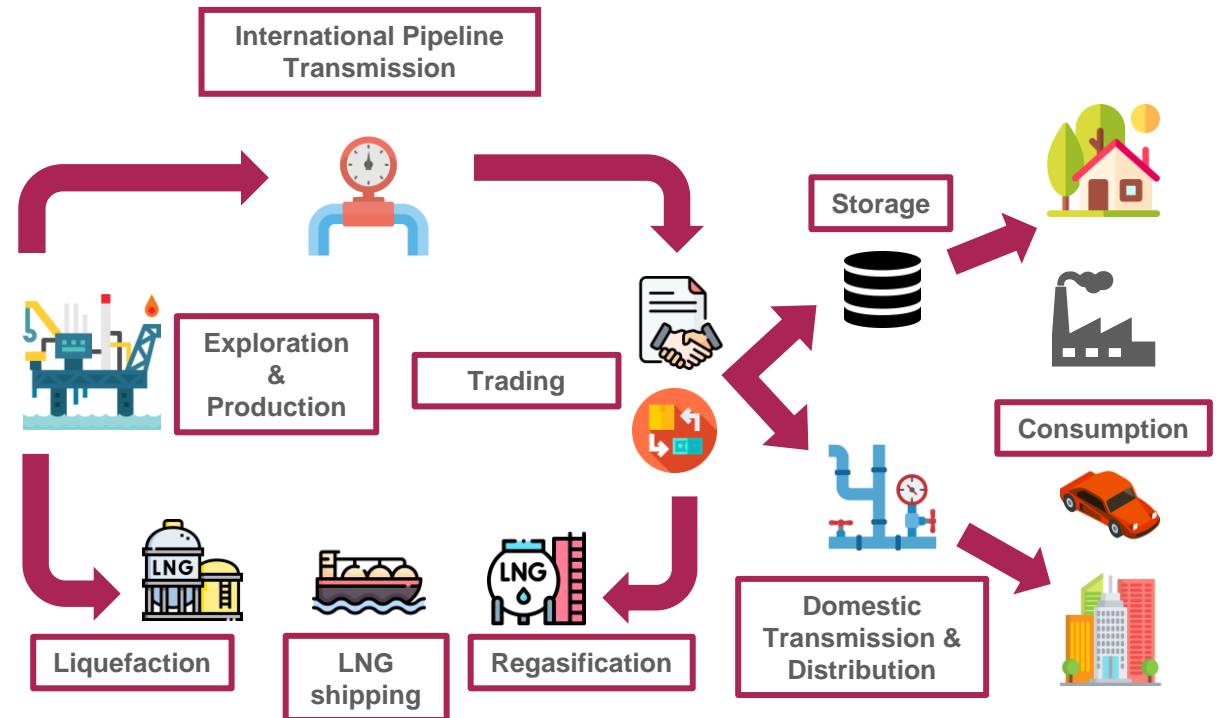
10/08/2023

WHAT IS NATURAL GAS AND WHERE DOES IT COME FROM?

- » Fossil fuel in gaseous, colorless, odorless, flammable form
- » Hydrocarbon, **mostly consisting of methane** (CH₄)
- » Formed over millions of years from organic matter
- » Natural gas reservoirs are **often found alongside oil deposits**
- » It can also be found in the form of shale gas, coal bed methane, less often methane hydrate and biogas
- » Possible to blend with biomethane of renewable origin

SUPPLY CHAIN FOR NATURAL GAS

- » **Exploration** (geological and seismic surveys) and **production** (onshore and offshore drilling)
- » **Processing** (removing impurities, in case of LNG liquefaction and regasification)
- » **Transportation** (via high-pressure pipelines or via special tanker ships as LNG)
- » **Trading** on exchanges or bilaterally (OTC), occasionally international long-term contracts
- » **Storage** (underground depleted gas reservoirs, salt caverns)
- » **Distribution and utilization** (heating, cooking, power generation, industrial processes, LPG)



GAS IMPORT VIA PIPELINE

- 1 Austria:** connection to Western Europe, formerly a significant Russian route via Ukraine, Slovakia and Austria.
- 2 Croatia – LNG:** closest liquefied natural gas terminal to Hungary, which can receive tankers from anywhere on the globe, even from America, Africa and Asia.
- 3 Serbia – TurkStream:** for a few years now, gas has arrived in Europe from Russia via Turkey, and it has reached Hungary via the border with Serbia. In the future, gas originating from Azerbaijan or Turkey may also arrive via Bulgaria and Serbia.
- 4 Romania:** significant production, partly exported towards Hungary and even larger quantities may arrive in the future.
- 5 Ukraine:** in the past most of the Hungarian import volumes from Russia arrived via this route according to the long-term contracts between the two countries (partially replaced by TurkStream).
- 6 Slovakia:** occasional usage, its value may increase with recent infrastructure constructions, and Hungary may be supplied for example with Polish LNG in the future.




*The list of gas trading companies supplying consumers is available at: <https://www.mekh.hu/engedelyesek-listaja>

WHAT ARE GAS EXCHANGES AND GAS HUBS?





- » Natural gas is typically bought and sold on exchanges by trading companies, **the exchange itself only provides the platform for it.**
- » A **gas hub** means a physically well-connected country or region that serves as the delivery location of products, such as **the Dutch Title Transfer Facility for natural gas (TTF) or the Hungarian Virtual Point (MGP).**

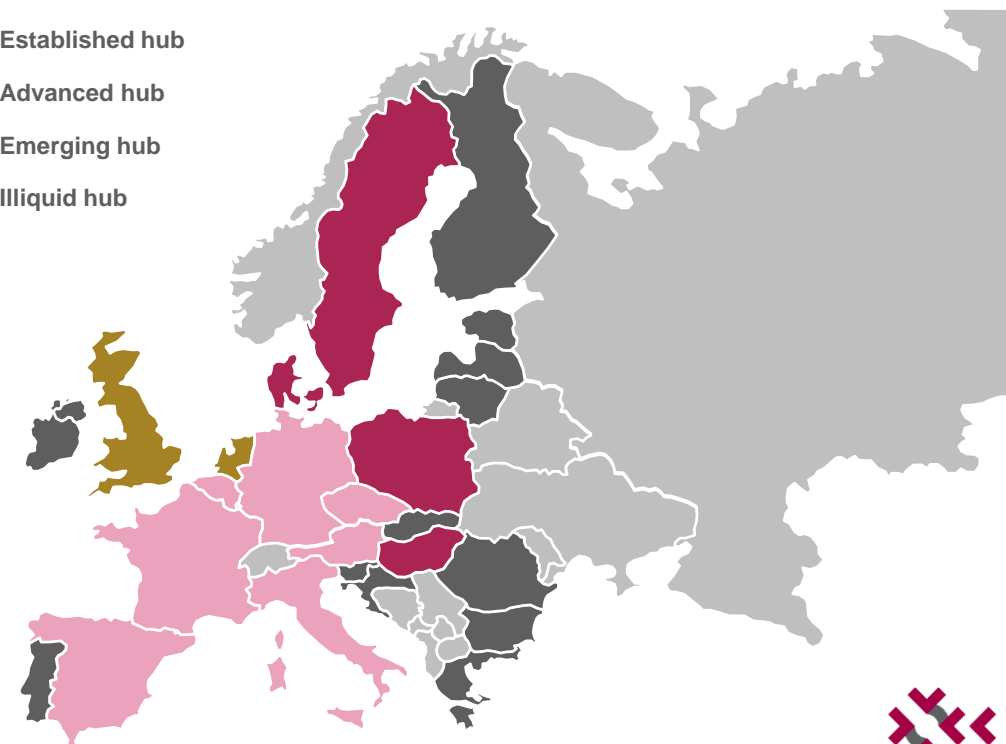
WHY ARE GAS EXCHANGES IMPORTANT?

-  ✓ **Anonym and non-discriminative** trading via exchanges
-  ✓ Deals are concluded at **the best available prices** based on supply and demand dynamics
-  ✓ **Transparent** matching mechanisms increase market efficiency and competition
-  ✓ Exchange price serves as an **important reference** to market participants
-  ✓ **Partner risk is eliminated** by involving a clearing house
-  ✓ Exchanges provide a regulated framework, where **energy policies can be integrated**
-  ✓ Consumers benefit from **diversification** (access to diverse sources), which enhances the **security of supply**
-  ✓ Enables cross-border trading, which facilitates **liquidity and market integration**

CEEGEX, THE HUNGARIAN GAS EXCHANGE

- » 10 years of operation
- » 48 members from 15 countries
- » Traded volume is the quarter of the Hungarian gas consumption
- » MGP was reclassified to emerging hub in 2021 by ACER

-  Established hub
-  Advanced hub
-  Emerging hub
-  Illiquid hub



MAIN CHARACTERS

- » Gas exchange – the platform
- » Members – companies admitted for trading
- » Clearing house – financial security
- » Transmission System Operator (TSO) – physical security



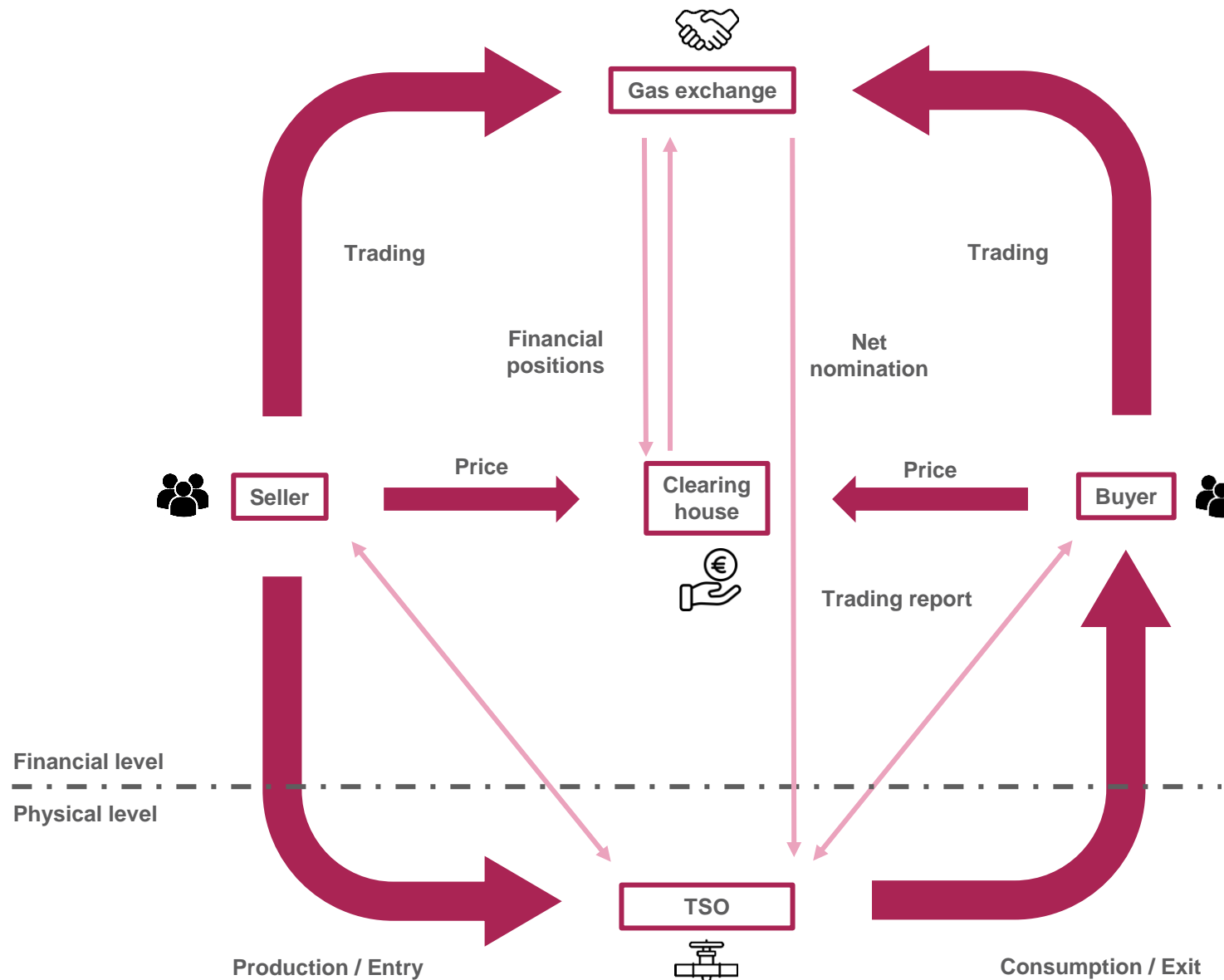
Each well-functioning gas exchange has a **clearing house** that manages the trading accounts and trading limits of the members as the EUR amounts are deposited via the clearing house.



The **transmission system operator (TSO)** ensures the physical delivery of natural gas, checks the quantities traded on the gas exchange and the correctness of the quantities fed into and withdrawn from the network.



Members can be wholesale traders, natural gas producers, network operators and even consumers. Every member has the right to buy and sell.



WHY ARE PRICE INDICES IMPORTANT?

- ✓ **Transparent:** widely available to the market participants
- ✓ **Compact:** one price summarizes an entire trading day
- ✓ **Reliable:** simple and objective calculation logic helps decision-making



WHAT IS CEEREP AND HOW IS IT CALCULATED?



- » A price index reflecting **market conditions in Hungary** at the end of the day
- » The calculation is based on **the orders and contracts** on CEEGEX
- » Follows **European best practices** (same parameters and algorithm)

WHAT CAN CEEREP BE USED FOR?



It can be used directly in **wholesale contracts**.



It can also be included directly in **consumer contracts**

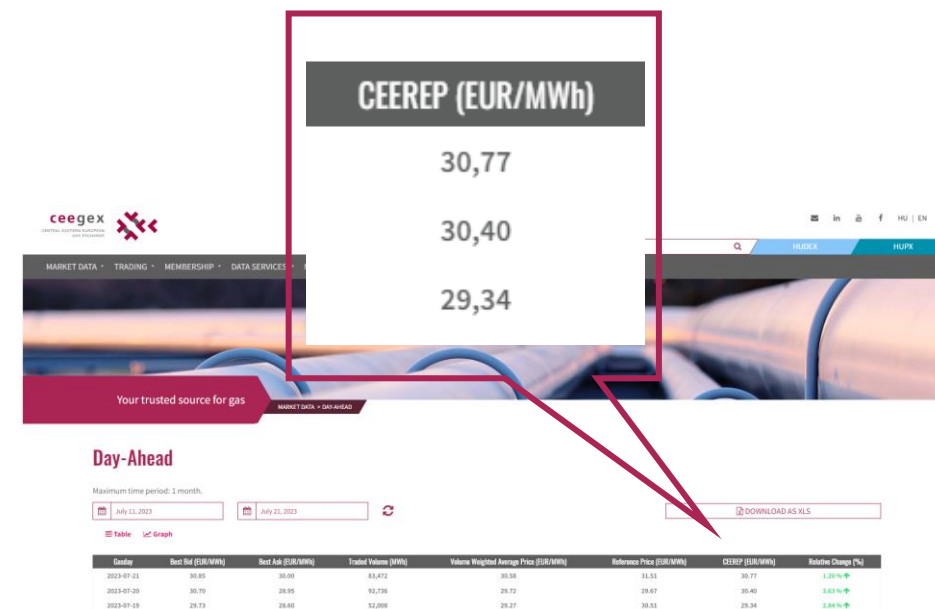
WHERE IS CEEREP AVAILABLE?

It is published on CEEGEX website:

<https://ceegex.hu/en/market-data/daily-data>

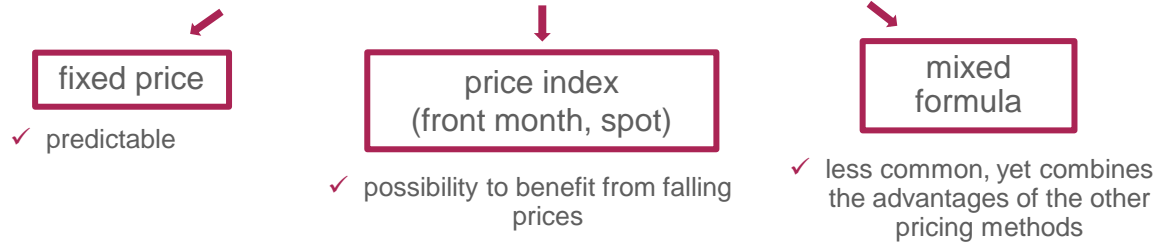


Every weekday after **5:30 p.m.**



HUNGARIAN INDEX IN HUNGARIAN CONTRACTS

Pricing methods offered by suppliers:



Price indices traditionally available in Hungary:



! Price differences between countries (local events also affect gas prices)

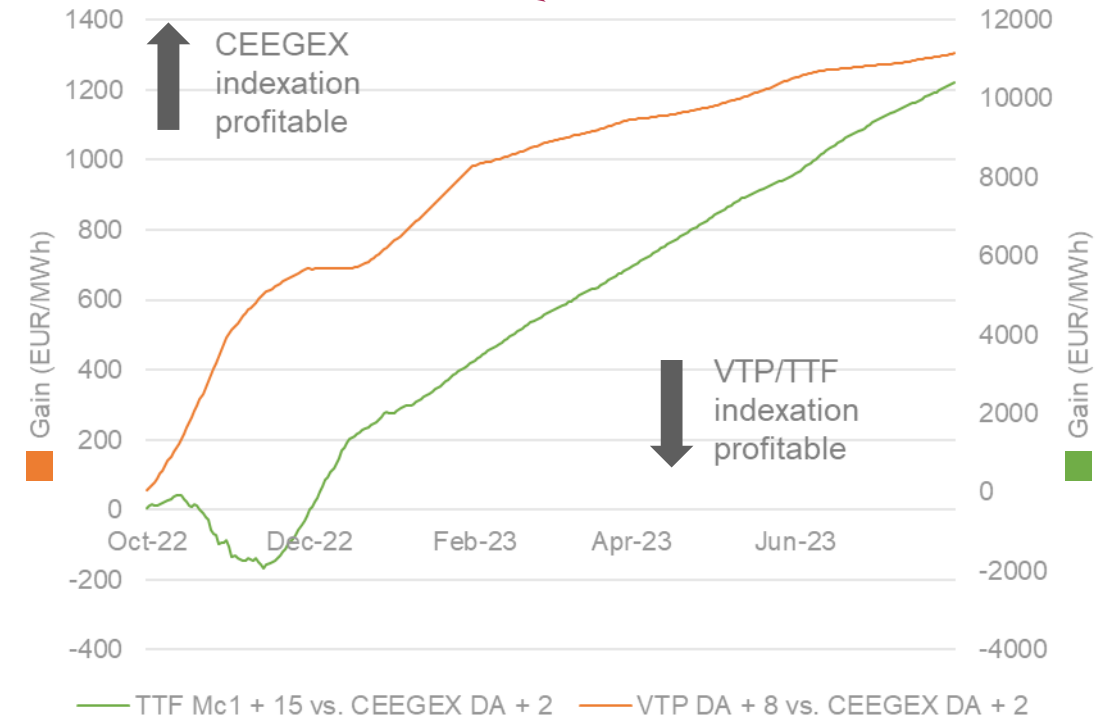
Recently price differences have become hectic and volatile, so indexing to **MGP (Hungarian Virtual Point)** has appeared.

- ✓ enables pricing that **reflects domestic supply and demand conditions**
- ✓ it is more beneficial for both the consumer and the trader
- ✓ the contract price can be separated from factors influencing foreign prices

If a gas contract includes a spot index, then CEEGEX prices are the best solution in Hungary instead of spot TTF or VTP.



Based on CEEGEX's internal analysis, in the first 10 months of '22/23 gas year the cost of a consumer was significantly more favorable with a contract linked to CEEGEX than with TTF or VTP indices.



CEEGEX encourages market participants to use the newly launched CEEREP index or the volume weighted average price (VWAP) in the bilateral contracts, especially towards consumers.

