

ENERGY BUSINESS MOTION



Foreword



dr. Mátyás Vajta, CEO, HUPX
Chairman of Supervisory Board, CEEGEX

Dear Reader,

I am delighted to present HUPX Group, the Hungarian Power Exchange (HUPX), the Central Eastern European Gas Exchange (CEEGEX) and the Hungarian Derivative Energy Exchange (HUDEX).

At HUPX Group we provide high quality exchange services for the power and gas markets in a transparent and non-discriminatory manner. We are dedicated to grant our members with secure trading platforms and excellent customer services to make trading easy and safe on a constantly moving market.

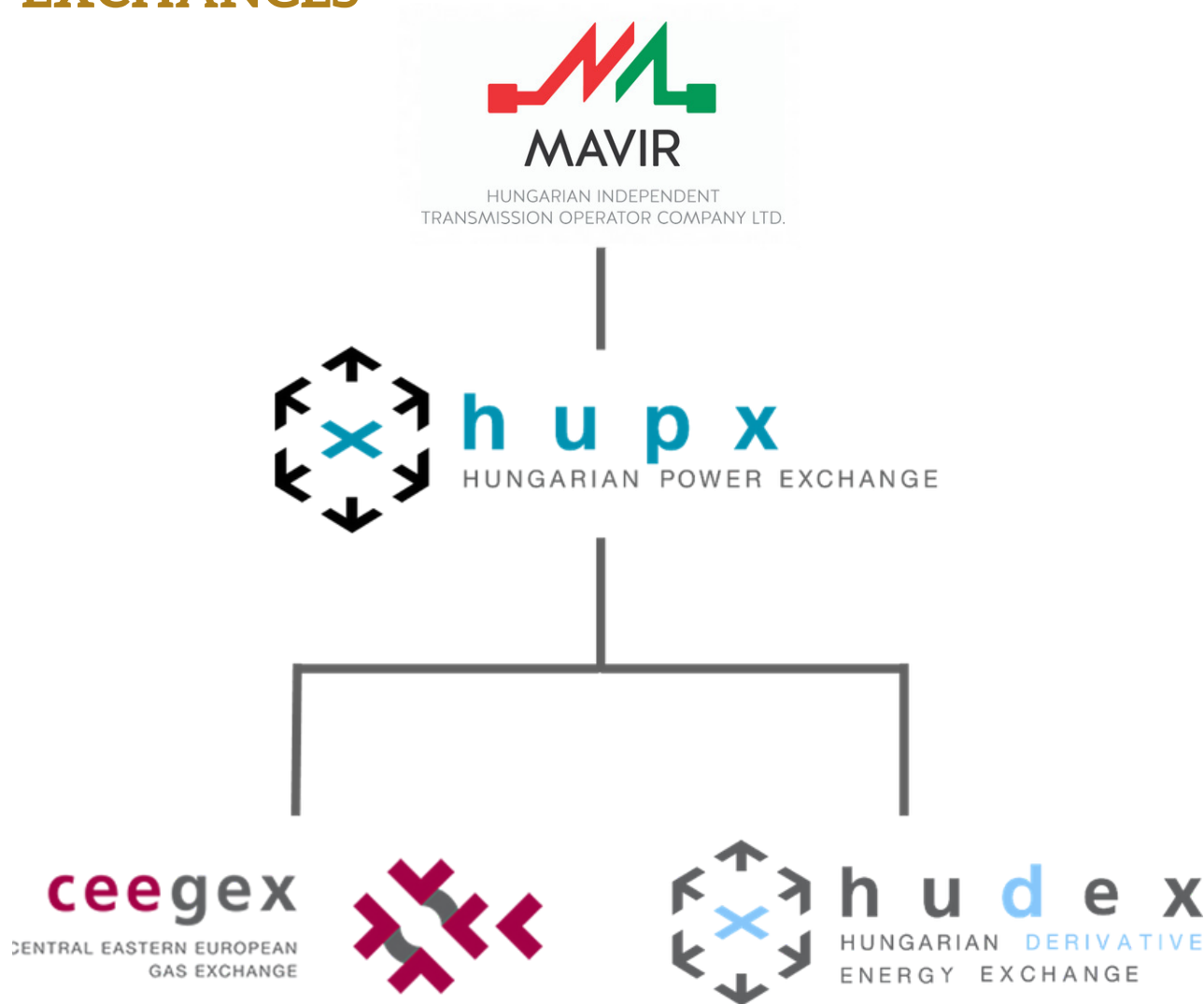
As the CEO of HUPX it is my main goal to support the company group in fulfilling this mission, thus it can continue to successfully contribute to the development of the Hungarian, regional and European energy market, and act as a progressive player of the energy industry.

Nevertheless, HUPX Group does not only represent trading platforms, it's a great community where we truly care for our traders' needs and aim to maintain friendly relationships with them.

I strongly believe in cooperation and teamwork. I think that the key factor of success is to find and agree on our common goals and create the atmosphere of trust. This is how I intend to cooperate with our partners and stakeholders as well.

I sincerely hope that our achievements and services showcased in this brochure will convince you and I will have the opportunity to welcome you on our markets.

HUPX GROUP: POWER, GAS AND DERIVATIVE EXCHANGES



MILESTONES

2010 Jul

HUPX Day-Ahead Market

2011 Jul

HUPX Physical Futures

2012 Sep

CZ-SK-HU Market Coupling

2013 Jan - CEEGEX

2014 Nov - 4M Market Coupling

2016 March

HUPX Intraday Market

2016 Oct - CEEGEX Within-Day

2018 Jan - HUDEX

2019 Nov

XBID: European Single Intraday
Coupling (SIDC)

HUPX GROUP

Intraday, Day-Ahead, Futures Power&Gas products are tradable within one company group, discounts available for being a member on all markets

Non-discriminative trading - equal treatment, equal accessibility to information, anonymous trading

Indicative reference price - market transparency

Settlement services - managed counterparty risks, prompt completion

Utilization of market resources



ADVANTAGES OF HUPX GROUP

Simple administration
(scheduling, invoicing)

High liquidity

Market coupling - optimal utilization of cross border links

Well-known IT solution - compatibility with other exchanges

Central counterparty ensures financial security for all transactions

REMIT reporting

HUPX POWER DAY-AHEAD MARKET

Market coupling, and the continuous development of the HUPX Day-ahead Market have increased the interest towards organized electricity trading in Hungary. This is visible in the continuously growing trading volumes.



WHAT DO WE OFFER?

Daily auction through the year

Products: hourly and block

Gate closure: 11:00 am CET

Market coupling with Czech Republic, Slovakia and Romania

Liquid market with a high number of active trading participants

HUPX DAY-AHEAD MARKET MEMBERS

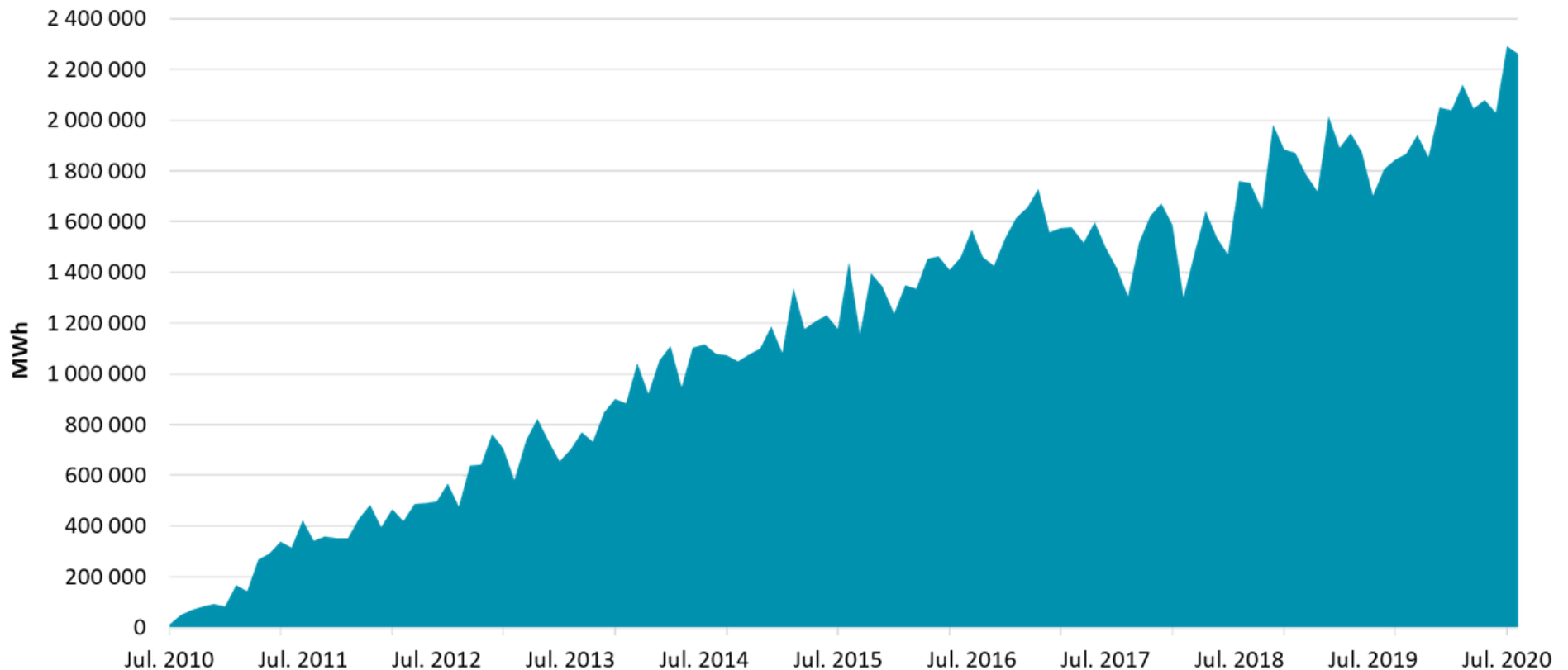


60 MEMBERS

Number of members admitted by 30.09.2020

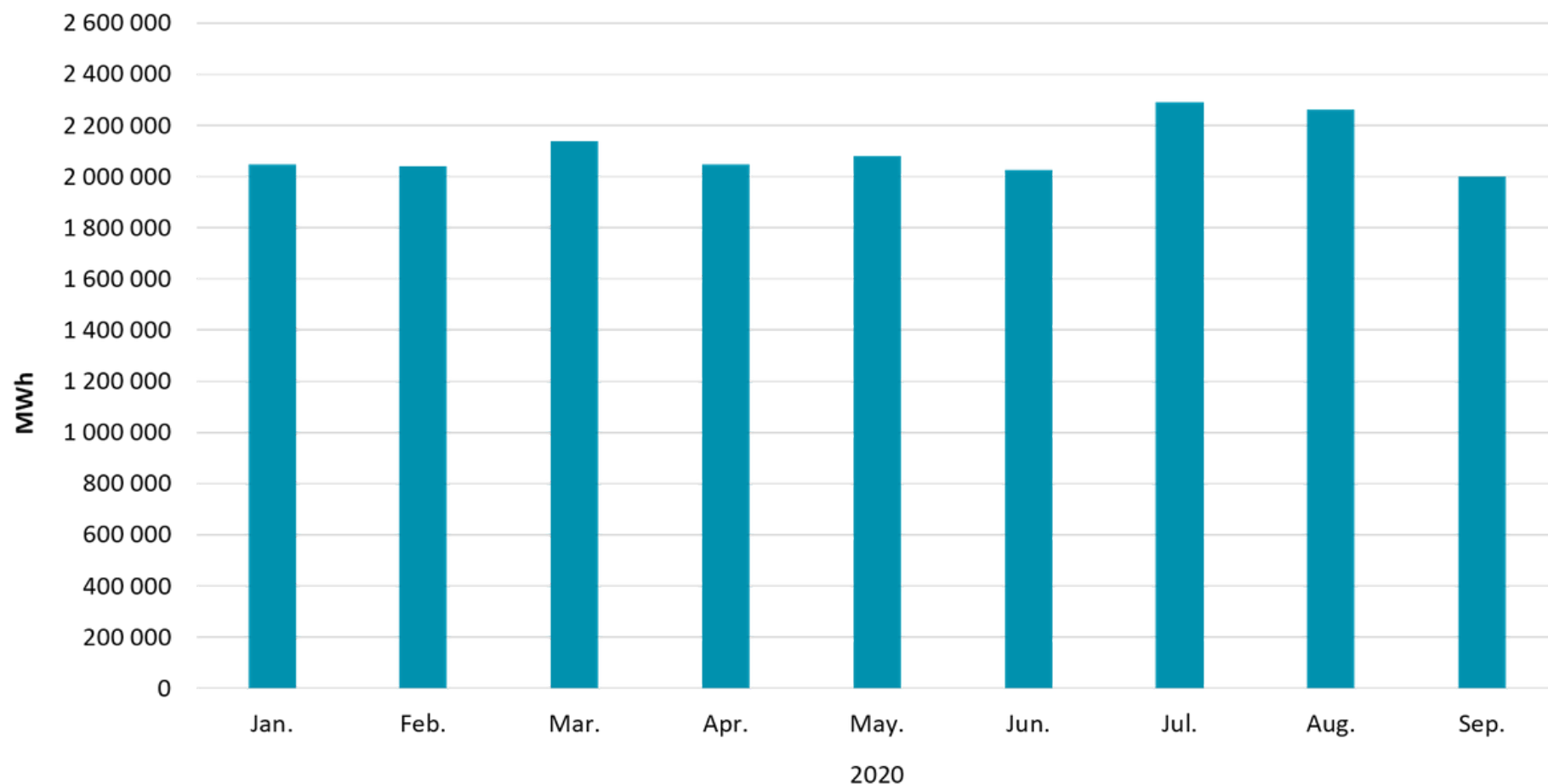
HUPX DAY-AHEAD MARKET MONTHLY VOLUMES SINCE LAUNCH

The most successful month in the Day-ahead Market's operation was July 2020 when it reached record heights in trading with a total volume of 2 291 840 MWh.

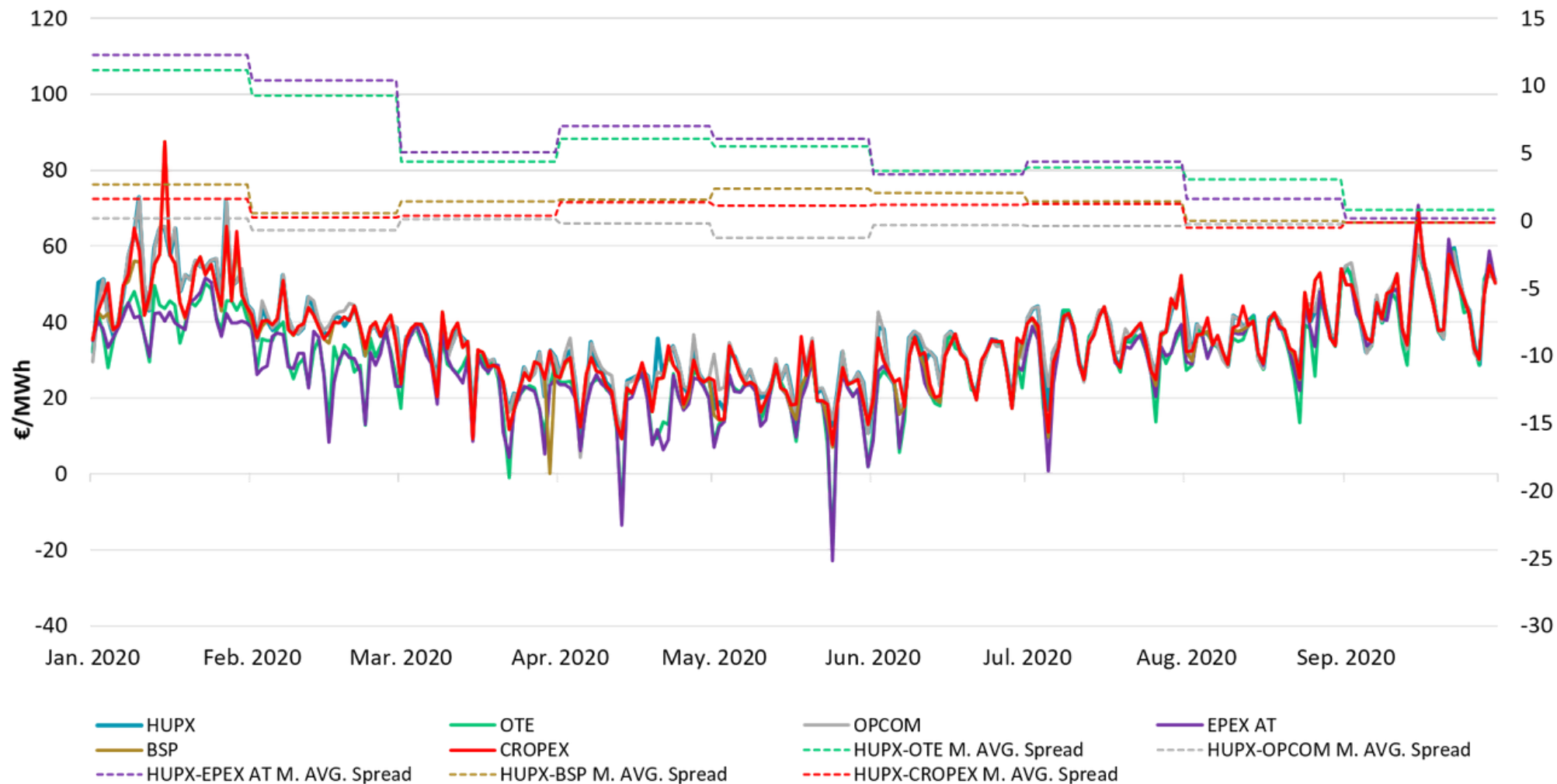


HUPX DAY-AHEAD MARKET TRADED VOLUMES

The highest ever daily traded volume in HUPX's history was accomplished on delivery day of 4th July 2020 with 90 324 MWh.

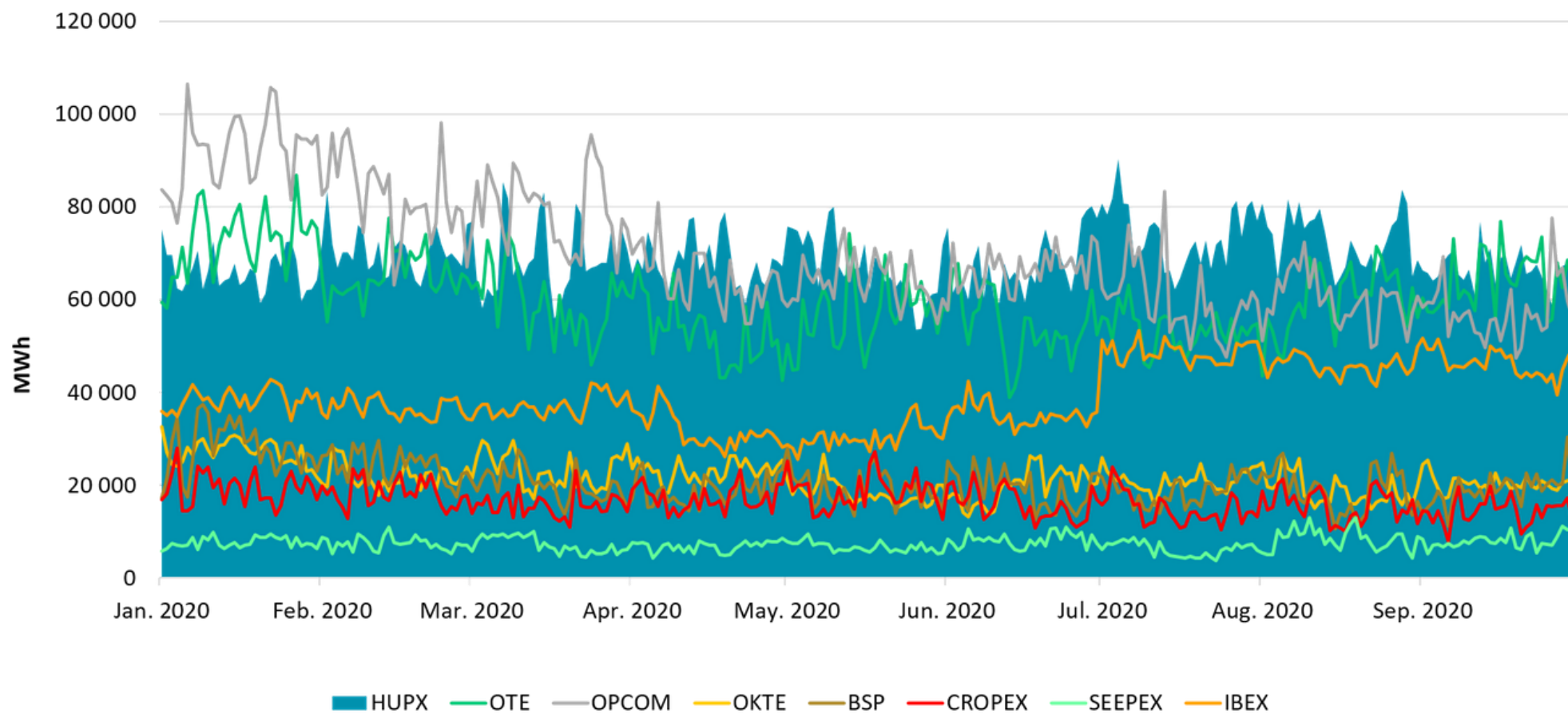


REGIONAL DAY-AHEAD MARKET AVERAGE HOURLY PRICES



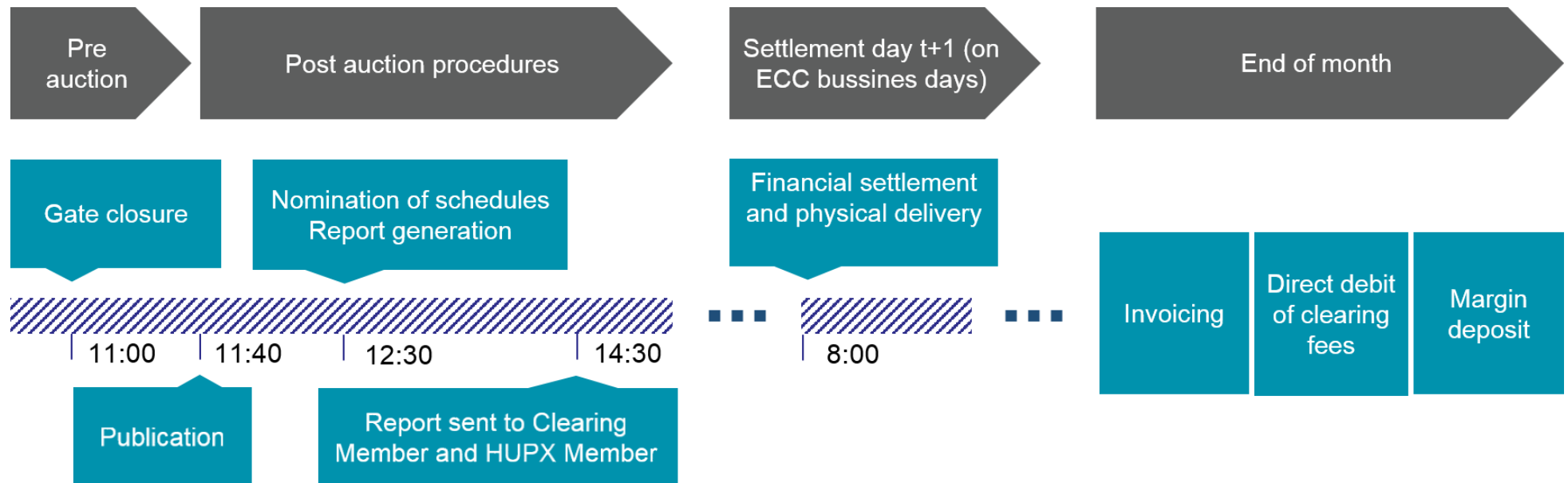
Source: www.hupx.hu and Balkan Energy

REGIONAL DAY-AHEAD MARKET VOLUMES



Source: www.hupx.hu and Balkan Energy

HUPX DAY-AHEAD MARKET OPERATION



HUPX POWER INTRADAY MARKET

HUPX Intraday Market provides more opportunities for its Members to reduce their need for imbalance energy, to optimize power generation closer in time to delivery and to manage forecast errors or unforeseen power plant outages.

Trading System: Deutsche Börse
M7 trading platform

Cross border trading for hourly
contracts and blocks

OTC (Over-the-counter) clearing
registration for local products

Trading is possible through
trading platform and API



ACHIEVEMENTS

XBID project - European Single Intraday Coupling (SIDC) project: Hungary joined in the 2nd wave in November of 2019, resulting in increasing number of members, record breaking volumes and significant liquidity

Total ID traded volume of 2018: 55.09 GWh

Total ID traded volume of 2019: 155.79 GWh

Reaching 772.89 GWh traded volume in 2020 until the end of September.

AutoTRADER solutions available for intraday trading:

- Trayport VisoTech GmbH with Periotheus;
- PowerBot GmbH with PowerBot;
- Likron GmbH with Likron Automatic Execution Service

HUPX INTRADAY MARKET MEMBERS

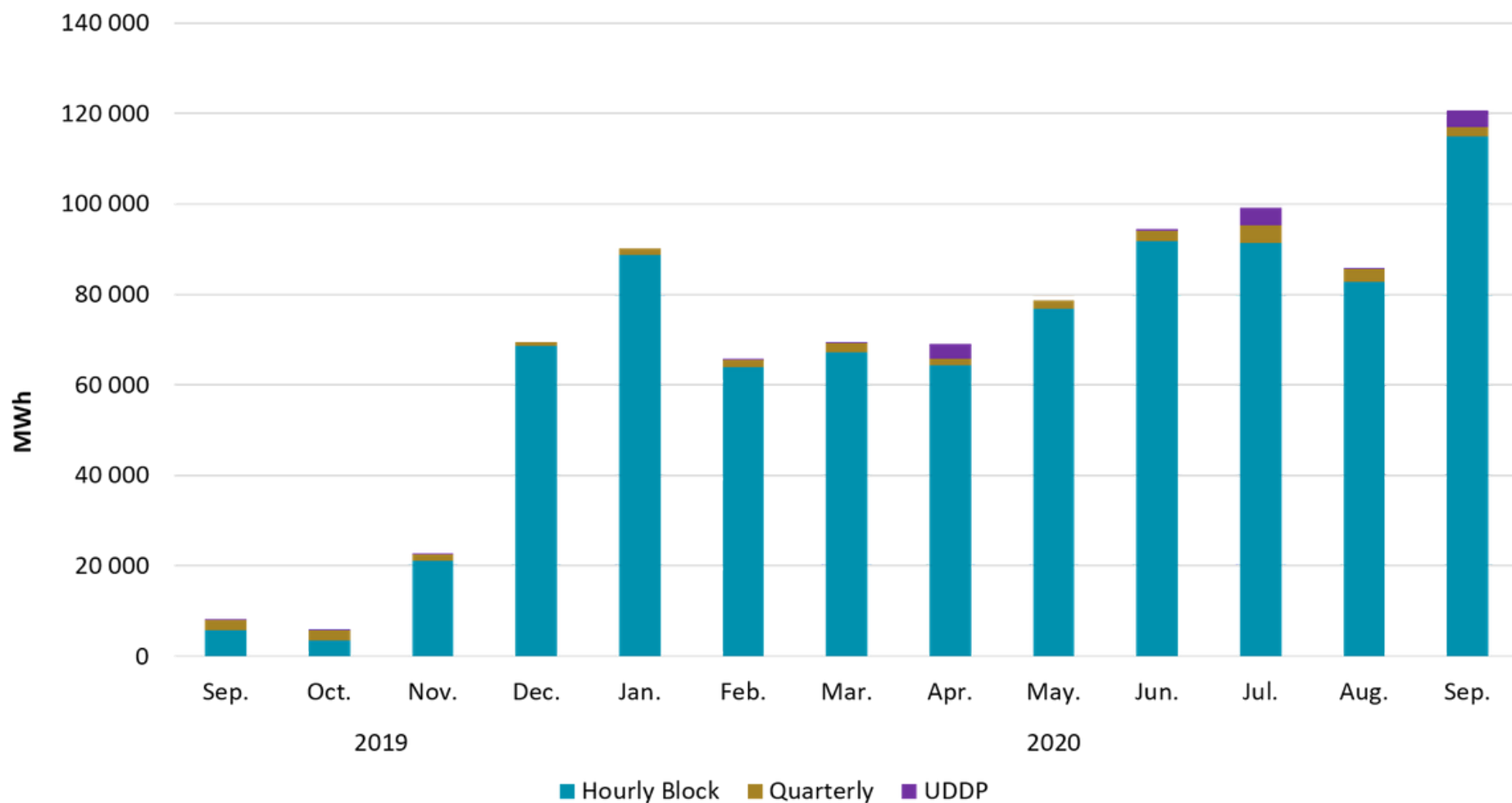


40 MEMBERS

Number of members admitted by 30.09.2020

HUPX INTRADAY MARKET TRADED VOLUMES

HUPX experienced great growth in the intraday volumes from the end of 2019 thanks to going live with XBID on November 19. HUPX Intraday Market reached a new monthly record with 120 569 MWh in September. The highest ever daily traded volume since the launch of HUPX IDM was experienced on the delivery day of August 13, 2020 with 12 479 MWh.



HUPX INTRADAY MARKET OPERATION

Non-stop trading

- 24/7, all year round
- With IT and operational support

Order book opening

- Trading session opens D-1 at 15:00
- 96 quarterly contracts,
- 24 hourly contracts and blocks
- Cross-border ATCs available from D-1 22:00 (for hourly contracts)

Pre-trade financial limit

- Limit set by the Clearing Members of the traders through ECC (European Commodity Clearing)
- Possibility of changing the available limit on a daily basis
- Daily limit reset at 16:00 CET on ECC business days
- Open positions accumulate on Weekends and Holidays until booking cut with financial settlement (next business day)

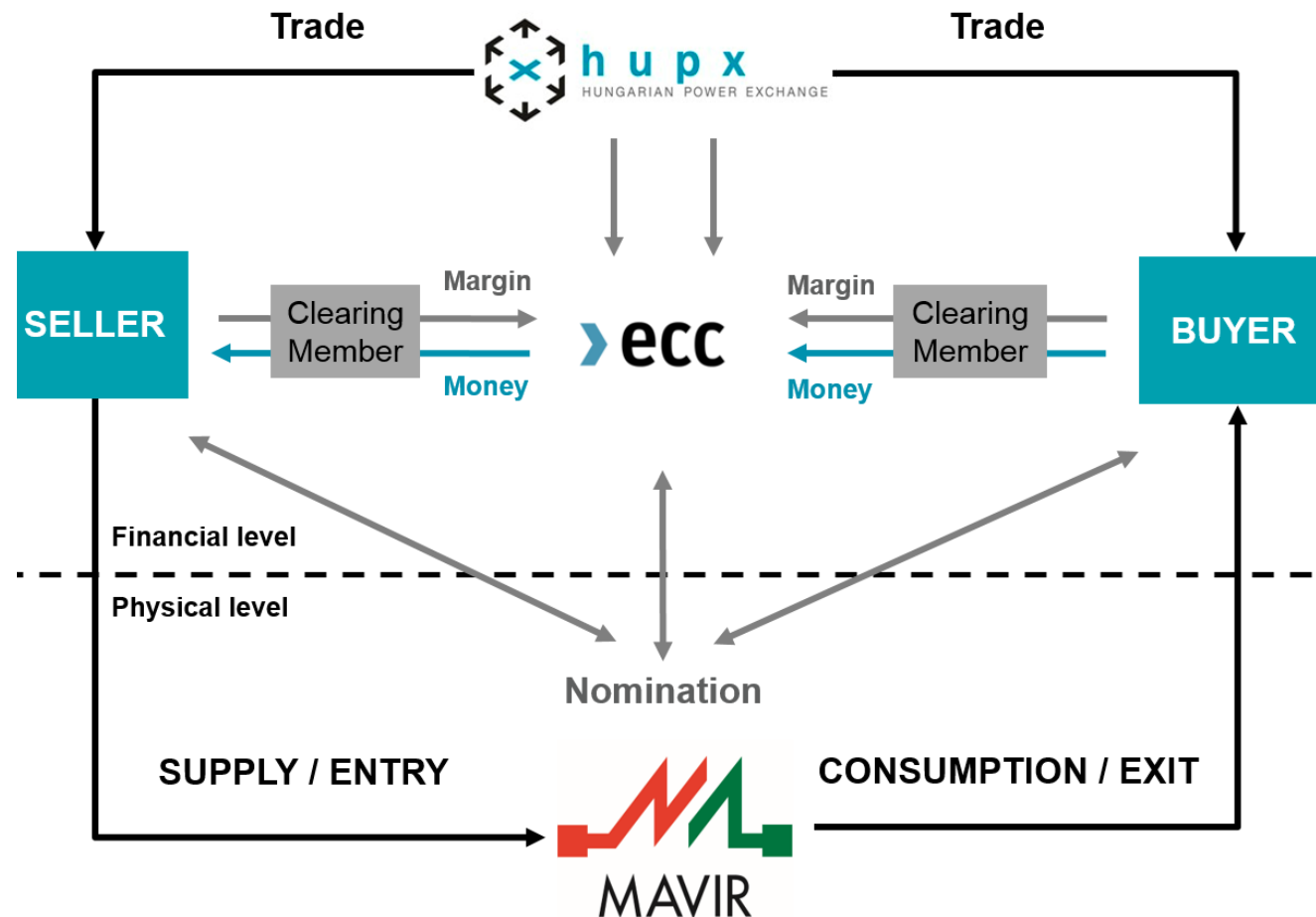


HUPX DAY-AHEAD MARKET AND HUPX INTRADAY MARKET CLEARING AND SETTLEMENT

ECC ensures financial security for all transactions by acting as a central counterparty between buyers and sellers and by setting up guarantee mechanisms such as security requirements. This way counterparty risk is eliminated.

Energy trading companies become Non-clearing members of ECC and the Clearing Members, which are banks being responsible for account maintenance and settlements. Clearing rules are described in ECC Clearing Conditions.

ECC nominates all transactions to MAVIR, who is then responsible for the physical settlement.



NEMOs are implementing Market Coupling Operator function in accordance with CACM GL and CEP.

Dec 2020 - 15 min cross-border product will be launched on AT-HU border on ID timeframe.

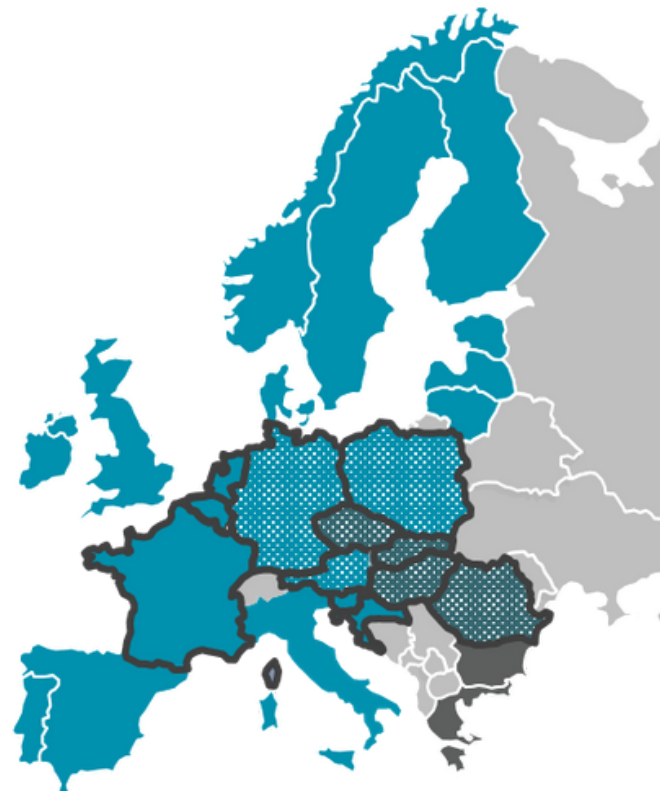
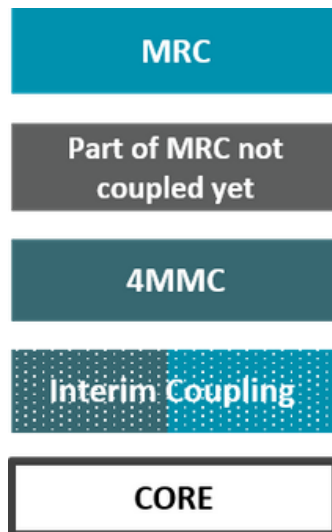
Q2 2021 - 4M-DE-AT-PL NTC Coupling Project (Interim Coupling): A temporary but well-established solution for coupling 4MMC and MRC.

Feb 2022 - Core Project: Implementation of flow based model in Core region with new borders included.

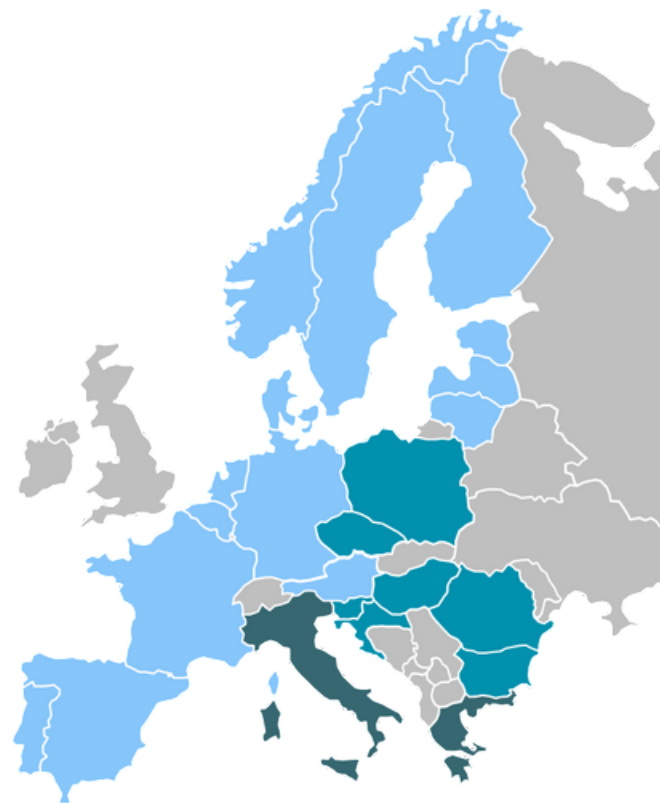
European Single Intraday Coupling (SIDC) project: Hungary joined in the 2nd wave in November of 2019, the 3rd wave is in progress.

HUPX PROJECTS

DAY-AHEAD



INTRADAY





Dániel Garai
CEO of CEEGEX

CEE GEX

CEE GEX Central Eastern European Gas Exchange Ltd. was established by HUPX Hungarian Power Exchange Ltd. with the aim of developing a new and efficient gas trading platform in Hungary.

CEE GEX as the organized market place for the Hungarian MGP, operates a liquid regional gas market that is in line with the leading international practices, offers safe, trustworthy and long-term solutions for its partners while utilizing the available infrastructure and providing cooperation opportunities in the Central and Eastern European region.

“We are proud to provide our members with a reliable and liquid gas trading platform. In 2019 ACER also reclassified the Hungarian MGP from illiquid market to emerging gas hub.* Looking ahead, our aim is to further improve our market and exploit our unique geographical capabilities to become the reference hub for our region. In order to achieve this we are dedicated to provide the highest level of services to our partners, while we continue contributing to the development and liquidity of the Hungarian and regional gas markets.”

Dániel Garai, CEO of CEE GEX

[*ACER Market Monitoring Report 2019 - Gas Wholesale Markets Volume 23/9/2020](#)

WHAT DO WE OFFER

Physical Within-day and Day-ahead Market

Trading on Hungarian Virtual Point (MGP) and on locational points

Trayport GlobalVision system

Continuous trading session 24/7

Continuous bid-ask prices provided by market makers



ACHIEVEMENTS

Increasing spot traded volumes:

Total spot volume of 2017:

2 014 GWh

Total spot volume of 2018:

8 405 GWh

Total spot volume of 2019:

34 338 GWh

Reaching 17 839 GWh spot traded volume in 2020 until the end of September.

40 members in 2020

Introduction of pre-trade limit check

Extended tradability of spot gas products

CEEGEX MEMBERS

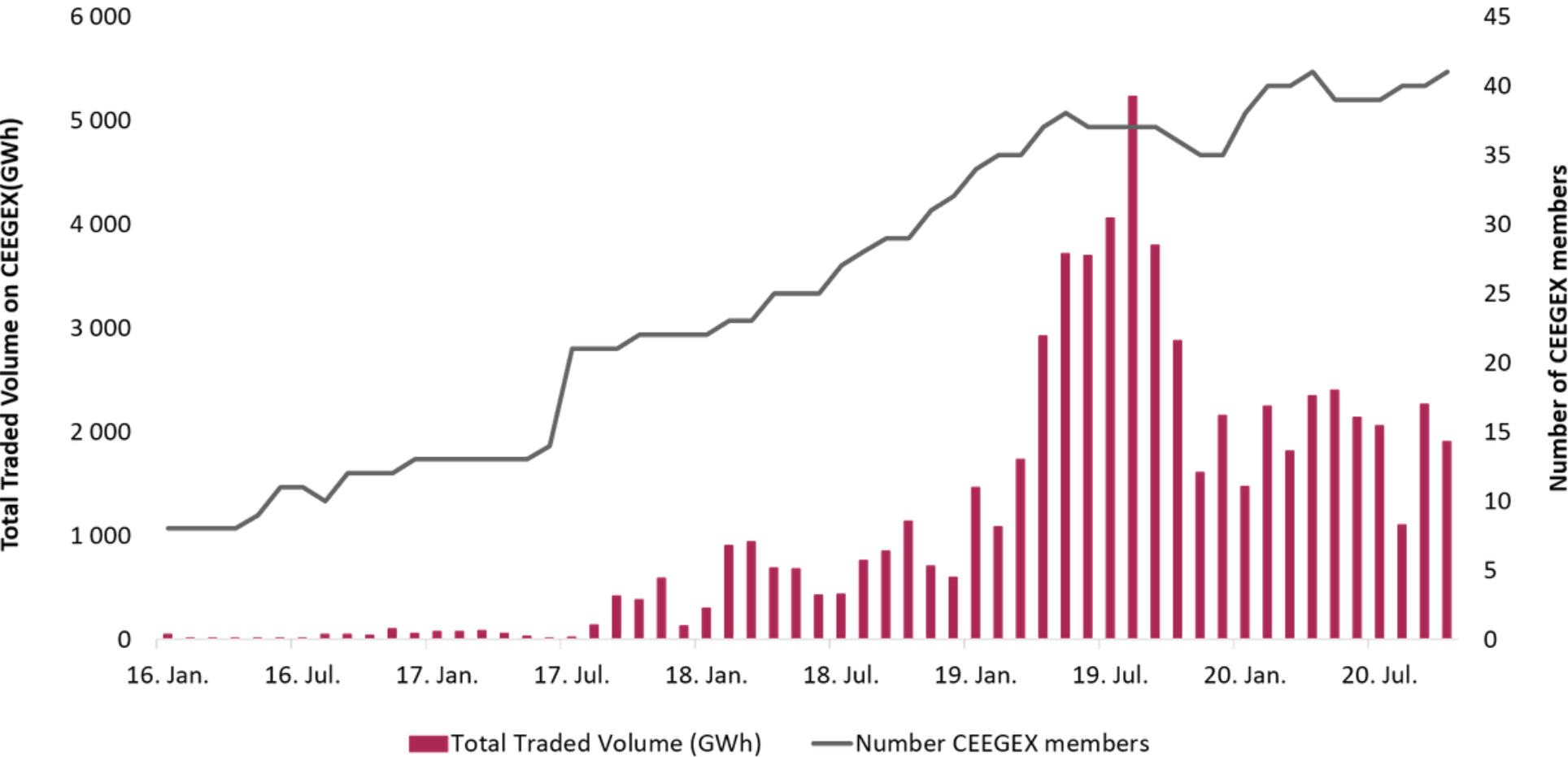


40 MEMBERS

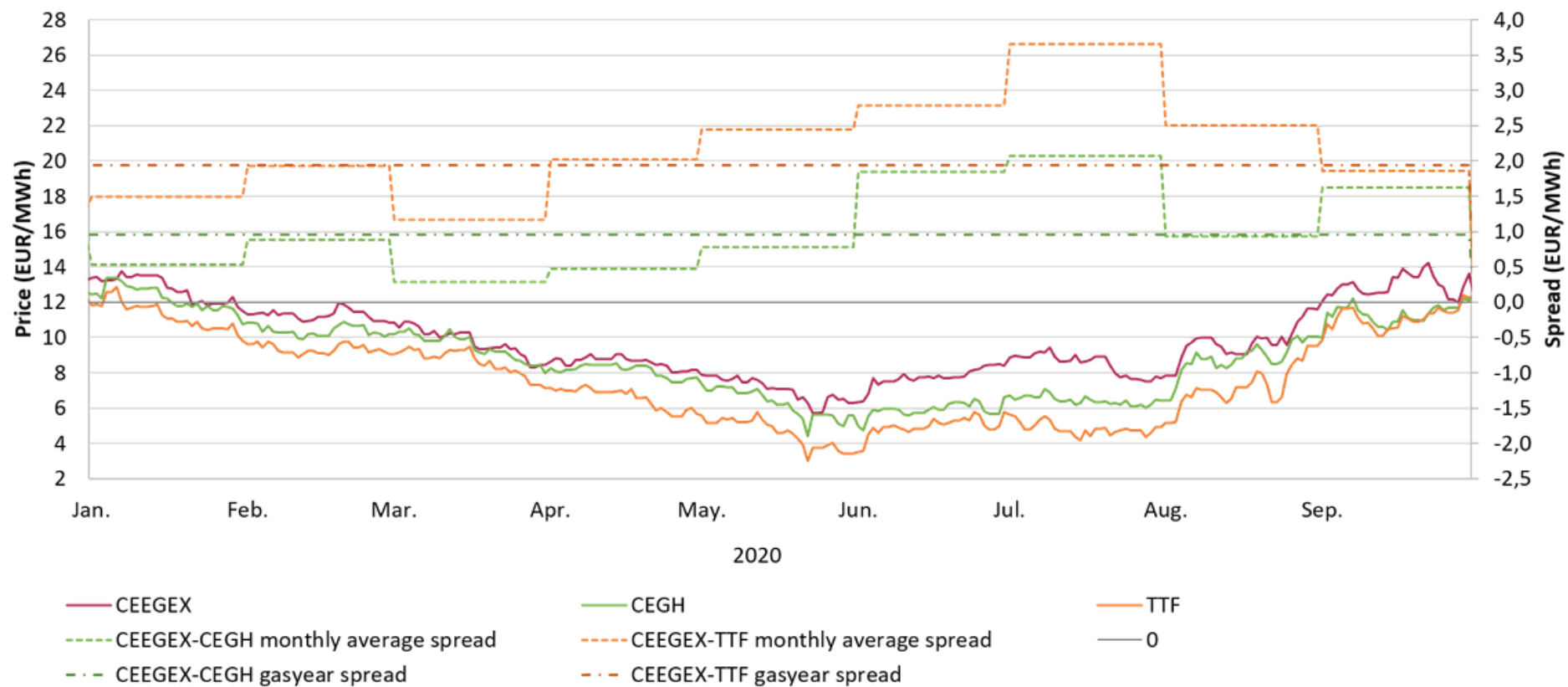
2 MARKET MAKERS

Number of members admitted by 30.09.2020

CEEGEX TRADED VOLUMES

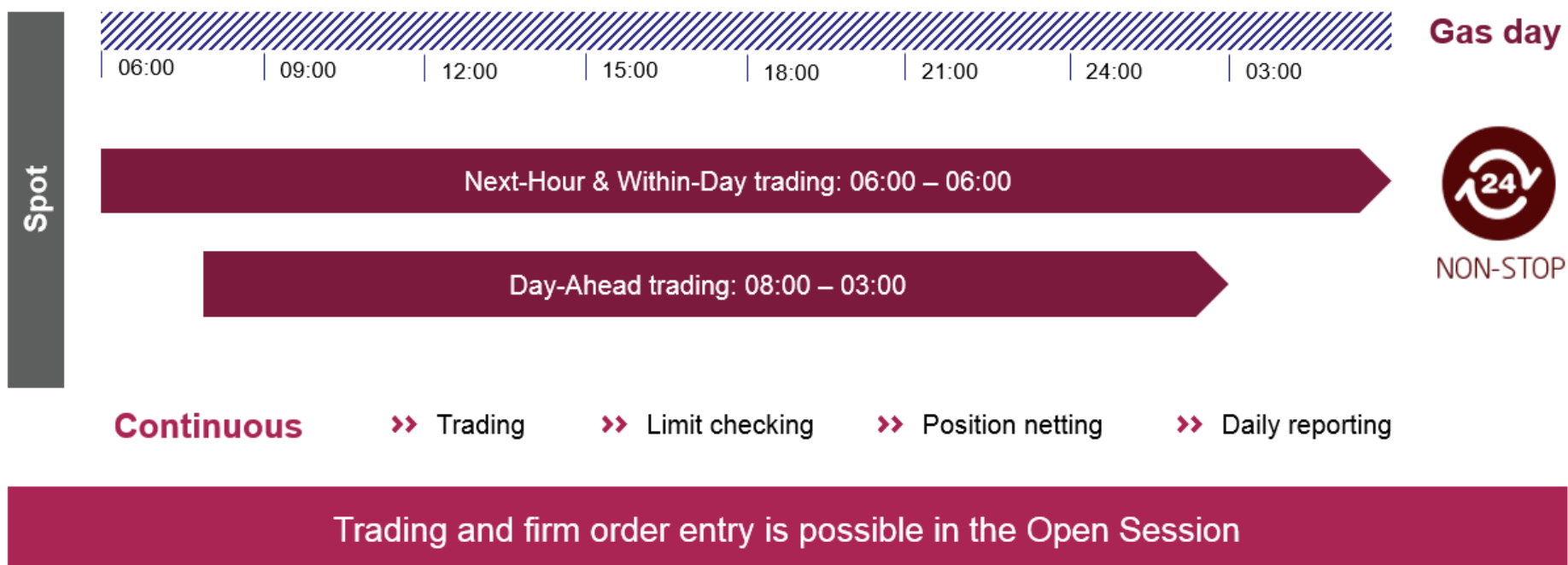


CEGH - TTF - CEEGEX DAY-AHEAD MARKET PRICES



Source: www.ceegex.hu and Thomson Reuters Eikon

DAILY OPERATION OF CEEGEX MARKETS

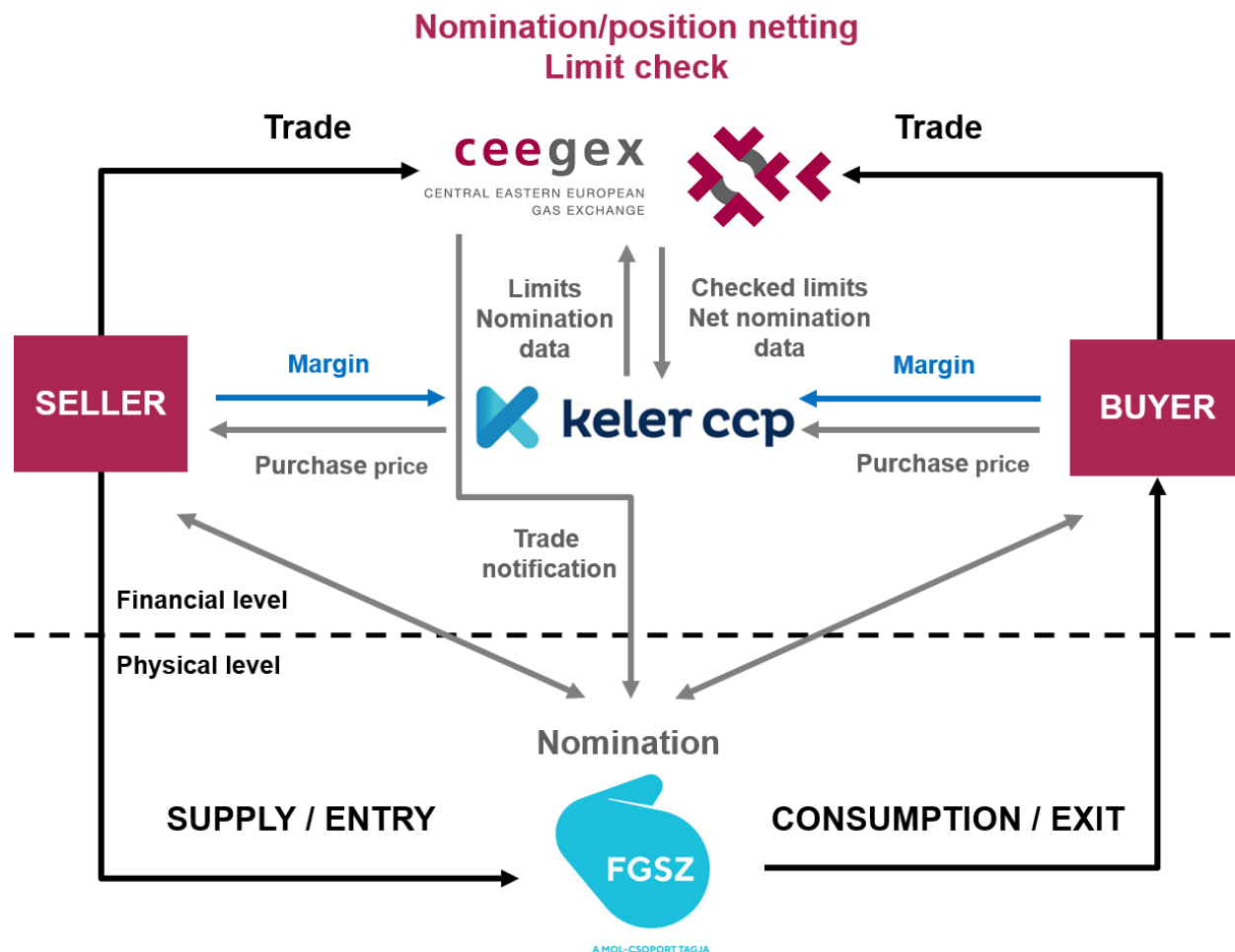


CLEARING AND SETTLEMENT ON CEEGEX MARKETS

KELER CCP ensures financial security for all transactions by acting as a central counterparty between buyers and sellers and by setting up guarantee mechanisms such as security requirements. This way counterparty risk is eliminated.

Energy trading companies become Clearing members of KELER CCP and they open their bank account at KELER to conduct the daily financial transactions. Clearing rules are described in KELER CCP General Business Rules.

CEEGEX nominates all transactions to FGSZ, who is then responsible for the physical settlement.





Attila Vass
CEO of HUDEX

HUDEX

The foundation of HUDEX was the result of a change in the legal environment, according to which Physical Futures products traded on the markets of HUPX and CEEGEX are subject to the MiFID II regulation.

HUDEX started its operation on January 03, 2018. as a MiFID II regulated market (financial exchange) with a power and natural gas market segment, where Hungarian power and natural gas future products are traded at one place, with one membership, with optional physical delivery for power products and mandatory physical delivery for natural gas products.

"HUDEX supports HUPX Group's key objective that the Hungarian futures energy market, as before, will continue to serve as reference price in the so-called HUPX region, which includes Hungary and South Eastern Europe. By constantly developing both our power and gas segments, we aim to provide a reliable and liquid trading platform with unique discounts to our members."

Attila Vass, CEO of HUDEX

WHY JOIN HUDEX

Both Hungarian Power and Gas Futures contracts are available with one HUDEX membership

Membership available for Power Futures contracts for non-EU companies as well

Financial trading with possibility of optional physical delivery on HUPX DAM for Power Products

No transaction fee as an initiator on HUDEX power trading

Growing liquidity and market makers

Elimination of Counterparty Risk

Anonym Market



ACHIEVEMENTS

Two Market Makers on HUDEX Gas Segment

Two Market Makers on HUDEX Power Segment

New financial products on HUDEX power segment:
baseload day product,
baseload weekend product

New financial products on HUDEX gas segment:
BoM, Seasonal, Yearly products

STP (Straight Through Processing) for the clearing registration of OTC trades on Power Segment

HUDEX MEMBERS

POWER



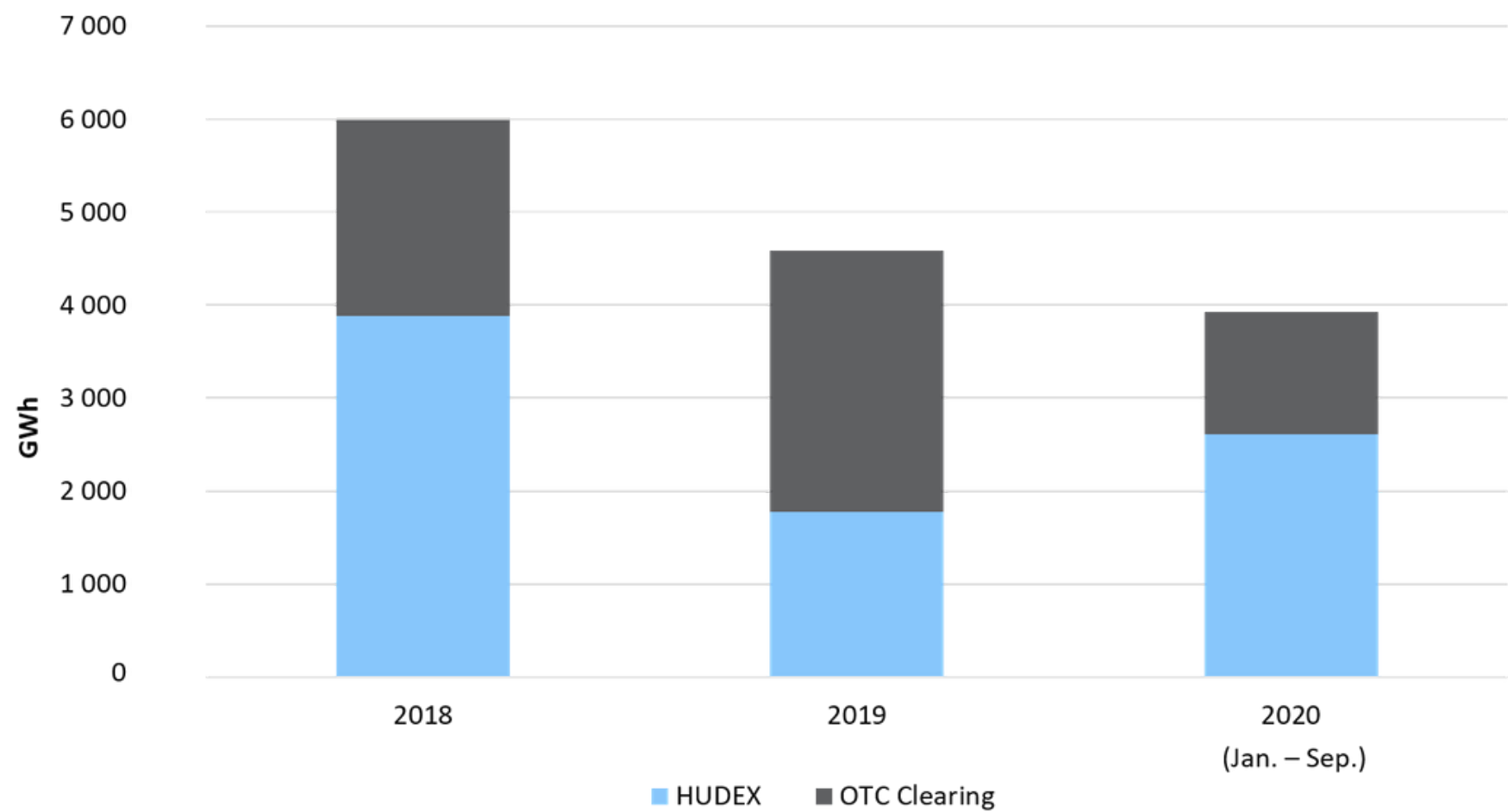
GAS



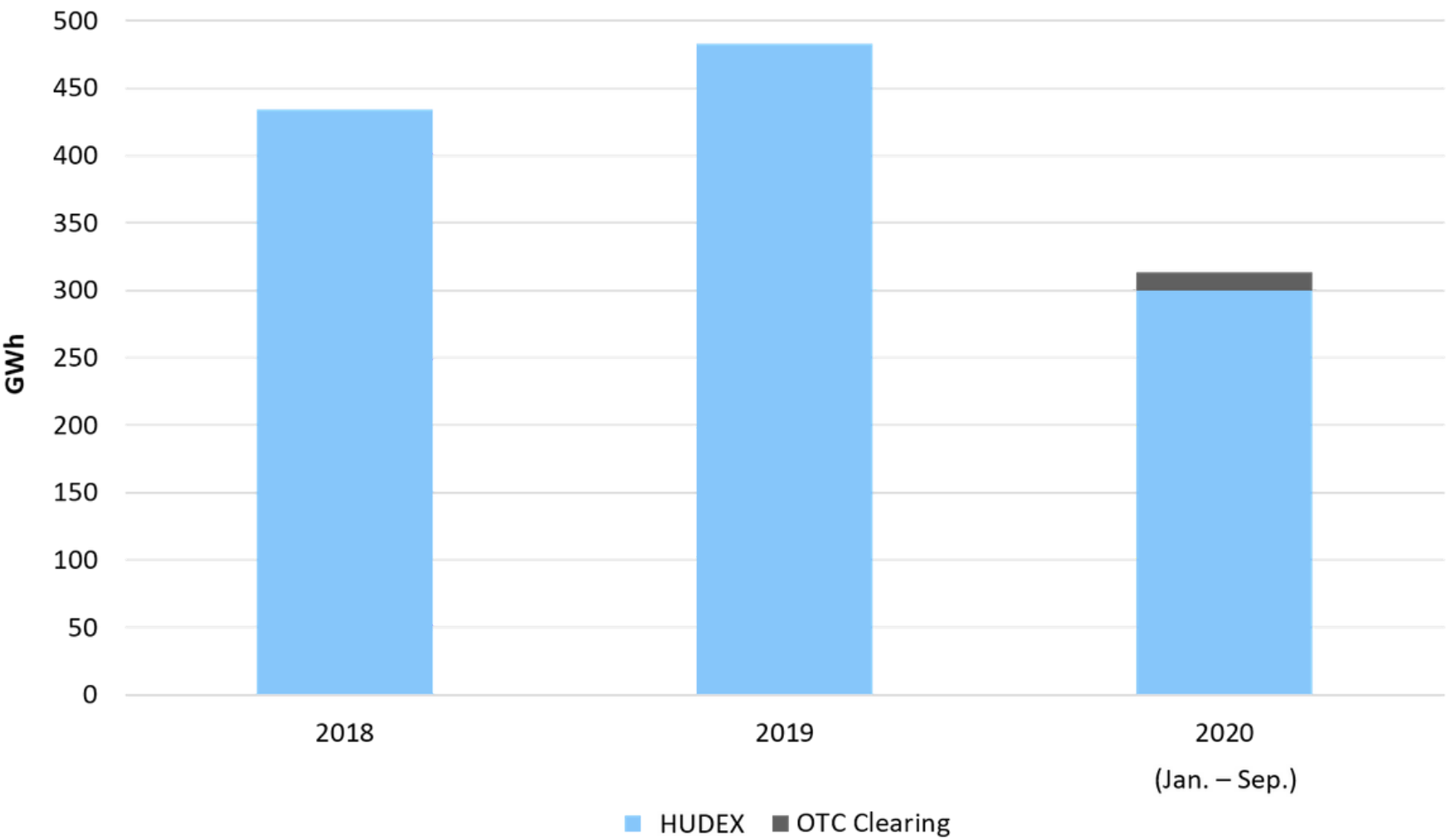
35 MEMBERS

4 MARKET MAKERS

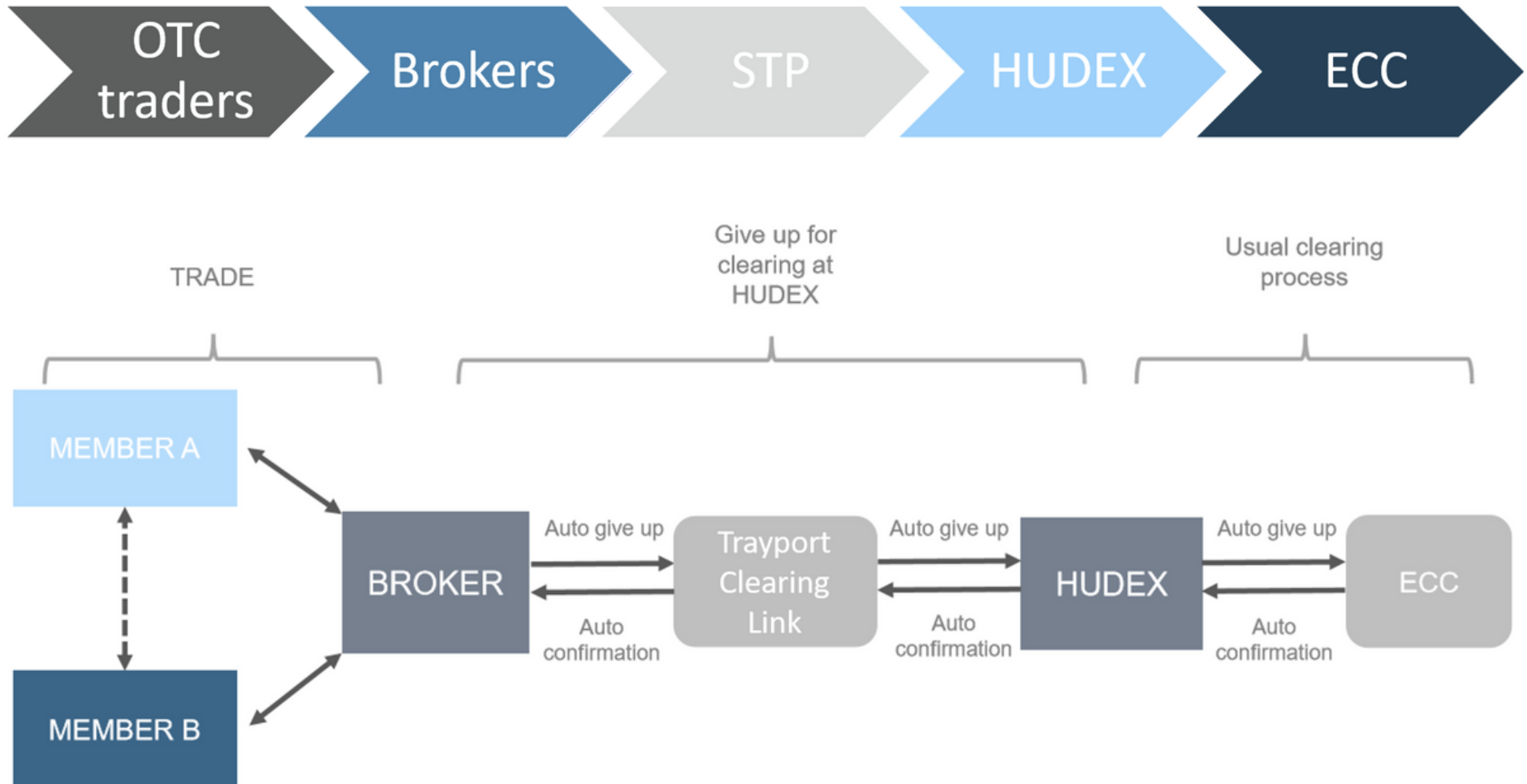
HUDEX TRADED VOLUMES - POWER SEGMENT



HUDEX TRADED VOLUMES - GAS SEGMENT



HUDEX OTC BENEFITS



HUDEX OTC BENEFITS

HIGH QUALITY SERVICE



STP in place

Straigh Trough Processing
Quick, Efficient
No mails & calls

Reliable broker partners:

- TFS
- 42FS
- ARRACO
- Griffin

LOWEST FEES



HUDEX OTC Transaction fees from 0,005€/MWh

Up to 66% CHEAPER

>500 GWh → 0,005

200-500GWh → 0,007

<200 GWh → 0,010

**OTC-only trader:
Free of charge**

PHYSICAL DELIVERY



Optional physical delivery on HUPX DAM

Y, Q, M, W contracts

Monthly or weekly basis

Request: Webtool

Confirmation: ETS

Lowest delivery fees

RELIABLE CLEARING



ECC clearing in place

No counter party risk

Collaterals in place

Cross margining with
other markets

All in one

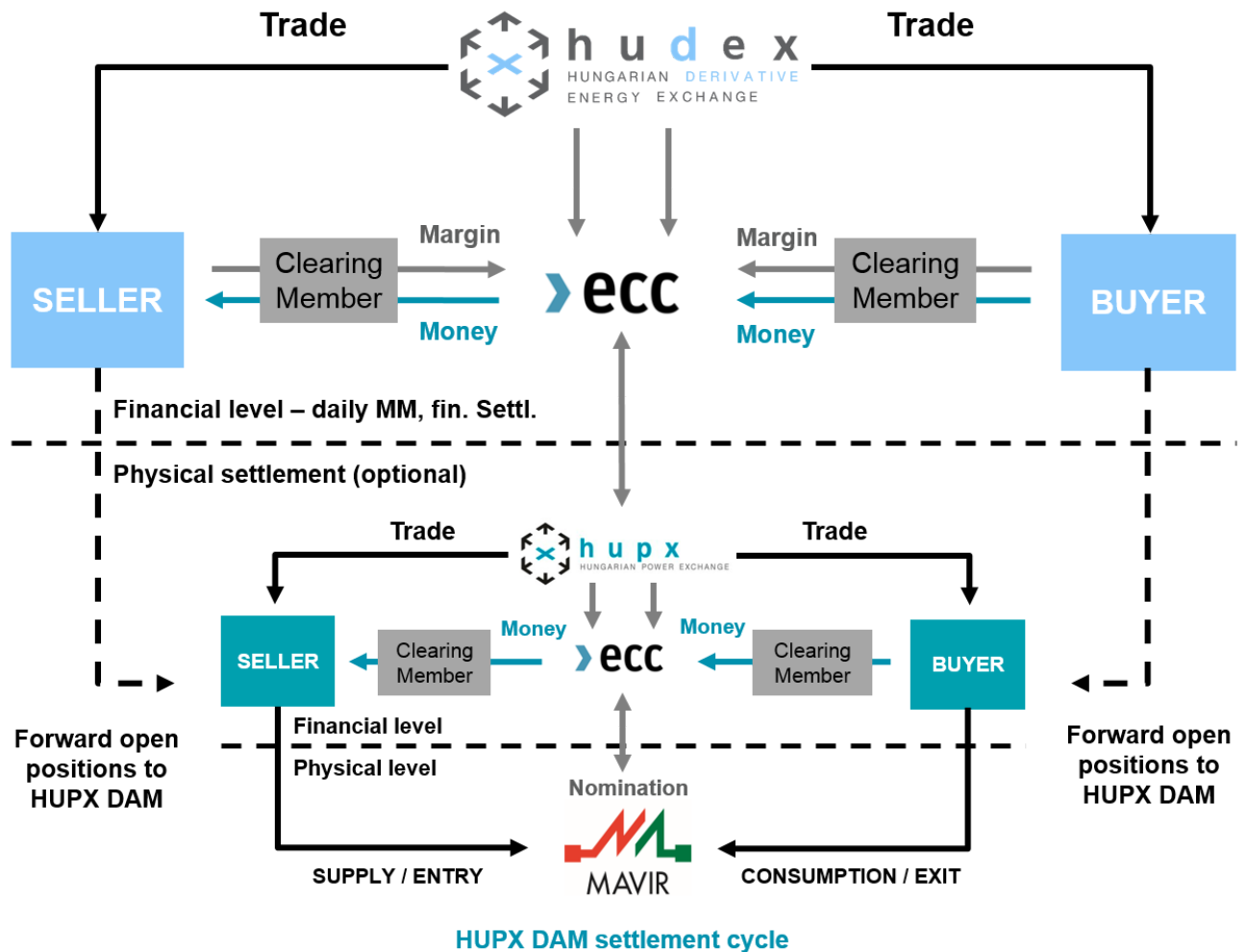
CLEARING SYSTEM- POWER SEGMENT

On HUDEX Power segment all transactions are centrally cleared by the European Commodity Clearing AG.

Financial settlement referenced to HUPX Day-Ahead Market index. HUDEX offers optional physical delivery (weekly and monthly contracts) through the HUPX Day-Ahead Market.

The clearing house of HUPX DAM is ECC AG who nominates the net positions to the Hungarian transmission system operator (MAVIR Zrt.) on behalf of HUPX.

Default physical delivery can be requested during the admission process.

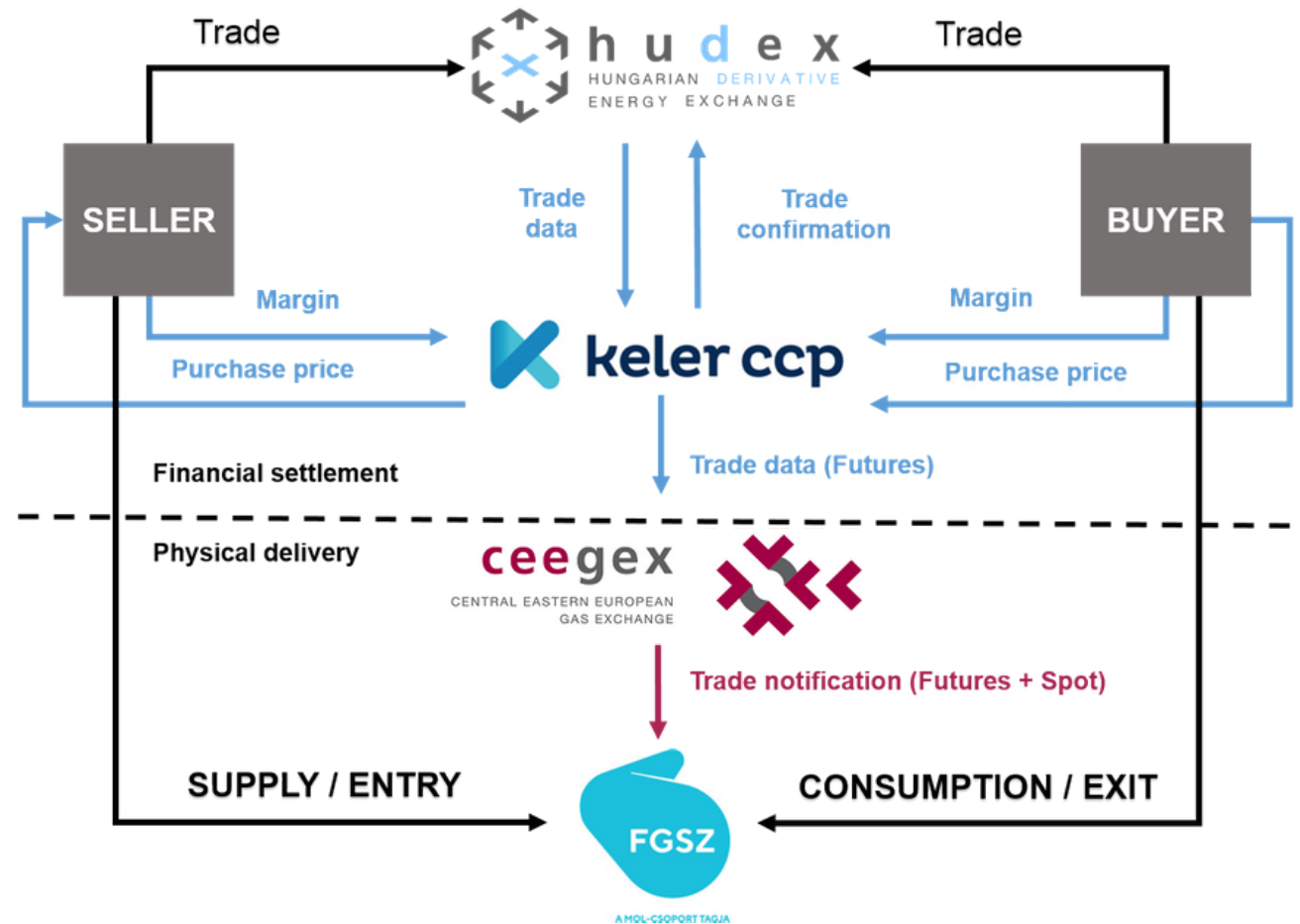


CLEARING SYSTEM - GAS SEGMENT

On HUDEX Gas all transactions are centrally cleared by KELER CCP Ltd.

KELER CCP ensures financial security for all transactions by acting as a central counterparty between buyers and sellers, by setting up and operating a guarantee system through collateral requirements. Clearing rules and conditions are described in KELER CCP's GBRs.

The trade notifications emerging from the positions of the trading participants are sent by CEEGEX to TSO, FGSZ.



DATA REPORTING SERVICE OF HUPX AND CEEGEX UNDER REMIT*

A1 Entrust HUPX/CEEGEX to report their trades and data concluded on HUPX/CEEGEX

A2 Choose another RRM and download the data from the HUPX/CEEGEX SFTP folder

A3 The A2 agreement extended with additional liability, incurring however an annual fee

B Entrust HUPX/CEEGEX to report trades concluded on other venues than HUPX/CEEGEX



* Data reporting under REMIT for HUPX, CEEGEX and HUDEX Members is included in the membership fee

** HUDEX does not own RRM status, HUPX as RRM will provide data reporting services to HUDEX

DATA REPORTING OF HUDEX**

EMIR: Our CCPs (ECC and KELER) can provide reporting service under EMIR.

MAR related issues: Any detection of market abuse has to be reported to MNB

MIFID II: ESMA: Reference data reporting, Non-working days report, weekly position reporting (if necessary)

MIFID II: MNB (NCA of HUDEX): Daily position reporting, Transaction reporting, daily trading information, list of deals and list of orders

DATA SERVICES OF HUPX GROUP: INFO USER, DATA VENDOR

Information package	Historical + End of day data (SFTP)	Live (read-only user)
Info User Package Fees		
IDM U1	600 EUR / year	-
IDM U2	600 EUR / year	3 000 EUR / year / user
DAM U	600 EUR / year	-
HUDEX U1	600 EUR / year	-
HUDEX U2	600 EUR / year	4 200 EUR / year / user
CEEGEX U1	600 EUR / year	-
CEEGEX U2	600 EUR / year	4 200 EUR / year / user
Data Vendor Package Fees		
IDM V1	6 000 EUR / year	-
IDM V2	6 000 EUR / year	3 000 EUR / year / user
DAM V	6 000 EUR / year	-
HUDEX V1	6 000 EUR / year	-
HUDEX V2	6 000 EUR / year	4 200 EUR / year / user
CEEGEX V1	6 000 EUR / year	-
CEEGEX V2	6 000 EUR / year	4 200 EUR / year / user
<p>The following discounts are available:</p> <p>15% discount is applied in case of subscribing to 2 Info User Packages or 2 Info Vendor Packages*</p> <p>20% discount is applied in case of subscribing to 3 Info User Packages or 3 Info Vendor Packages*</p> <p>30% discount is applied in case of subscribing to 4 Info User Packages or 4 Info Vendor Packages*</p>		

In line with HUPX's transparency policy customers can subscribe to **power and gas market data** packages available through the **SFTP server and read-only access to the trading system (API)**.

Detailed report specifications are available on our websites.

*discounts apply to each information package subscribed, but do not apply to read-only user fees

For more information contact: **data@hupx.hu**

FEES

	HUPX		CEEEX			HUDEX
	ID	DAM	Flexible	Classic	Basic	
Fixed Fees						
Entrance fee	0 €	15 000 €	7 000 €	15 000 €	0 €	0 €
Annual fee ¹	0 €	12 600 €	6 500 €	12 000 €	2 000 €	3 000 € ¹
System fee ³	8 000 €	6 600 €	10 000 €	10 000 €	10 000 €	9 000 € ²
Additional user	3 000 €	3 000 €	6 000 €	6 000 €	6 000 €	4 200 €
Additional portfolio	0 €	2 000 €	0 €	0 €	0 €	0 €
Read only user	3 000 €	3 000 €	6 000 €	6 000 €	6 000 €	4 200 €
Transaction fees						
Transaction fee power products (Initiator)	0,10 €	0,05 €	-	-	-	0 €
Transaction fee power products (Aggressor)	0,10 €	0,05 €	-	-	-	0,025 €
Transaction fee for Virtual Trading Point Gas (*CEEEX Next-Hour, Within Day, Day-ahead) (**HUDEX Monthly, Quarterly, Seasonal, Yearly; Balance of Moth)	-	-	0,09 €	0,01 €/0,01 €/0,005 €*	1,00 €	0,003 €/0,01 €**
Transaction fee for Locational Point Gas	-	-	0,12 €	0,04 €	1,00 €	-
OTC transaction fee power and gas	0,10 €	-	-	-	-	0,01 €
Delivery fee for power products	-	-	-	-	-	0,02 €

1 If the member is admitted to HUDEX, 3000 € discount is applied to HUPX and CEEEX annual fee

2 If the Member is admitted to CEEEX, the Trading System Fee for HUDEX is 0 €

3 For HUDEX Members Trading System Fee includes: One (1) user for Trayport GlobalVision and for the physical delivery two (2) HUPX DAM ETS Delivery Portfolio (for weekly and monthly products)

HOW TO BECOME A MEMBER

Preconditions

Electricity or gas trading
license* /

Investment Firm license
(HUDEX) /

- Certification of competence (KYC)
- Balancing group Agreement with MAVIR for Power
- Network usage Framework contract with FGSZ for Gas
- Clearing Membership Agreement (ECC / KELER) and pledge of collaterals required by them
- HUPX / CEEGEX / HUDEX Trader Certificate**
- Trading system test (HUDEX)

*Or other license stated in the relevant Market Rules.

**For HUPX Spot, EPEX Spot trader exams are accepted.

HUPX/CEEGEX/HUDEX MEMBERSHIP

PROCESS

1) Submission of the documents

- Forms
- Supporting documents

2) Check & Approval

- The documents are checked by HUPX / CEEGEX / HUDEX and ECC / KELER
- Approval as an Exchange Member of HUPX / CEEGEX / HUDEX

3) Admission

- Connections to the Trading System
- Go-live

Contact:

membership@hupx.hu



HUPX celebrates 10-year anniversary

MILESTONES OF 10 YEARS

2019: HUPX went live XBID

2018: E-learning platform was introduced

2017-2018: HUDEX was established and started its operation

2016: Launch of HUPX Intraday Market

2015: HUPX obtains NEMO status

2014: Go live of 4M Market Coupling

2013: CEEGEX started its operation

2012: Go live of CZ-SK-HU Market Coupling

2011: Launch of HUPX Physical Futures

2010: Go-Live of HUPX Day-ahead market on July 20th, 2010



**Learn more about our
history and watch our
10th Anniversary video
via the QR code**



CONTACT



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