

Central European Gas Hub



ETCSEE 2016

Gas trading in CEE

15 June 2016

Roland Wolk



Important Gas Hubs & Gas Exchanges in Continental Europe

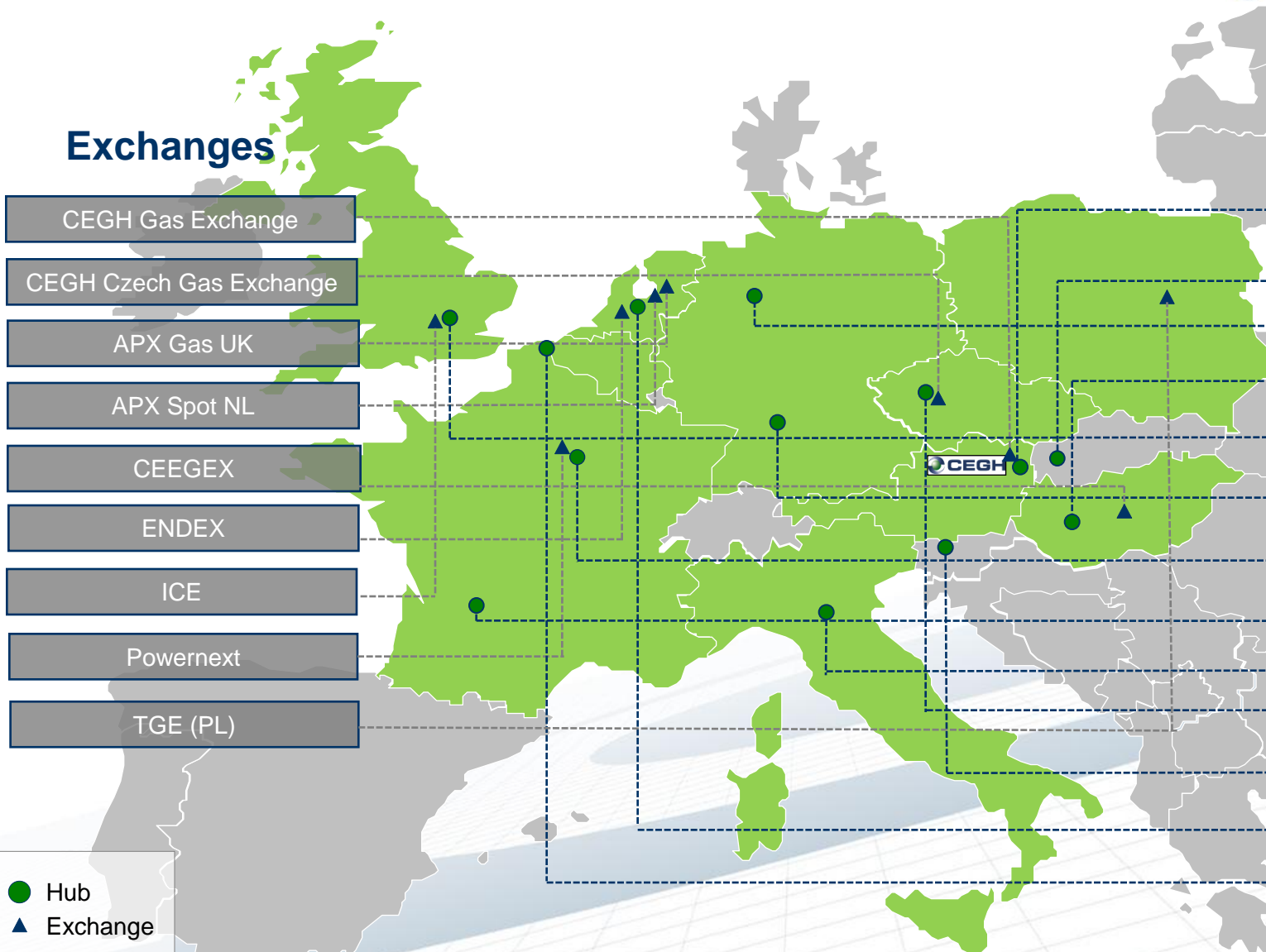


Exchanges

- CEGH Gas Exchange
- CEGH Czech Gas Exchange
- APX Gas UK
- APX Spot NL
- CEEGEX
- ENDEX
- ICE
- Powernext
- TGE (PL)

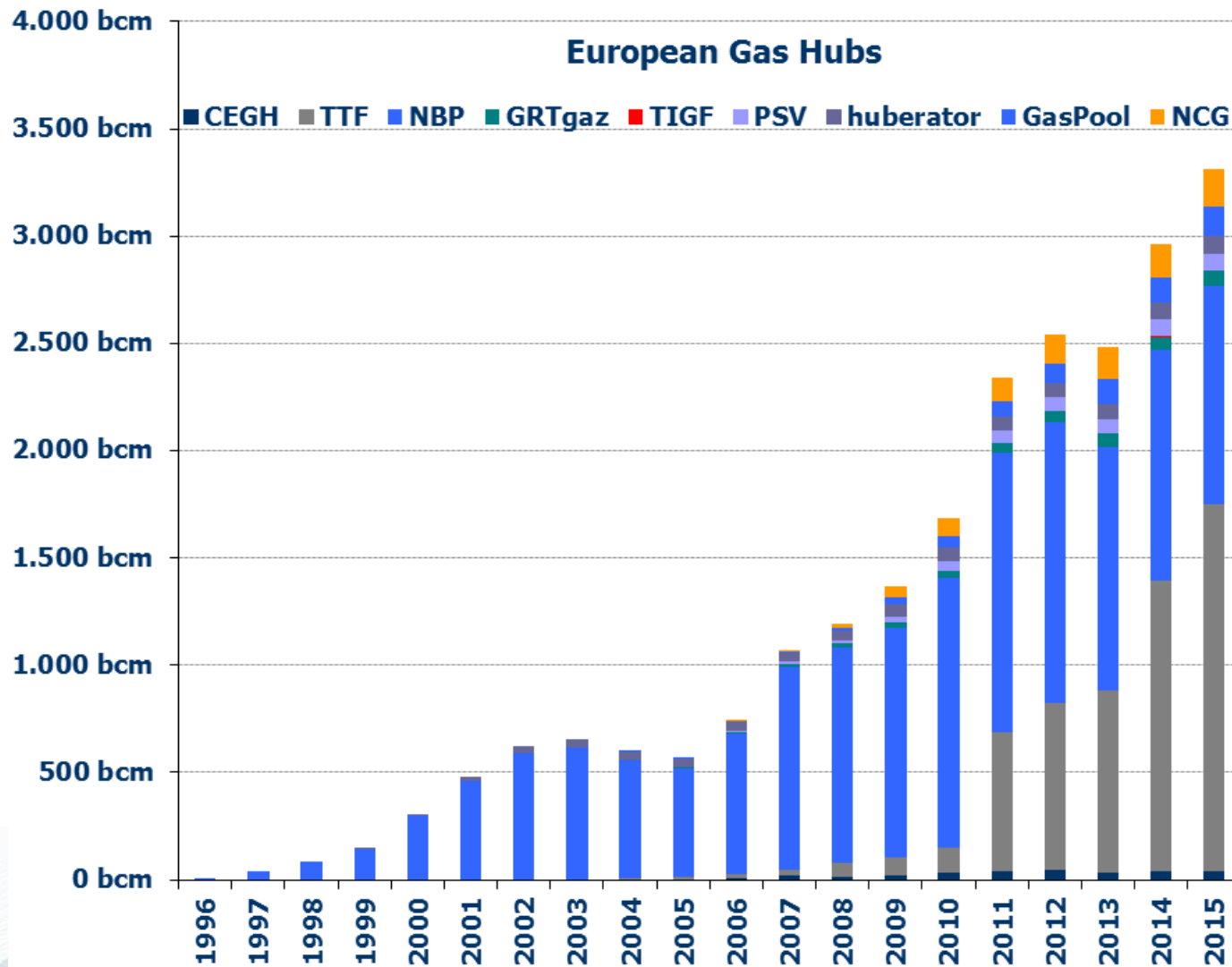
Hubs

- VTP AUT
- EU VTP
- GASPOOL
- MGP 2
- NBP
- NCG
- PEG Nord
- PEG Süd
- PSV
- CZ VTP
- SLO VTP
- TTF
- Zeebrugge



● Hub
▲ Exchange

Traded volumes at Continental European Hubs



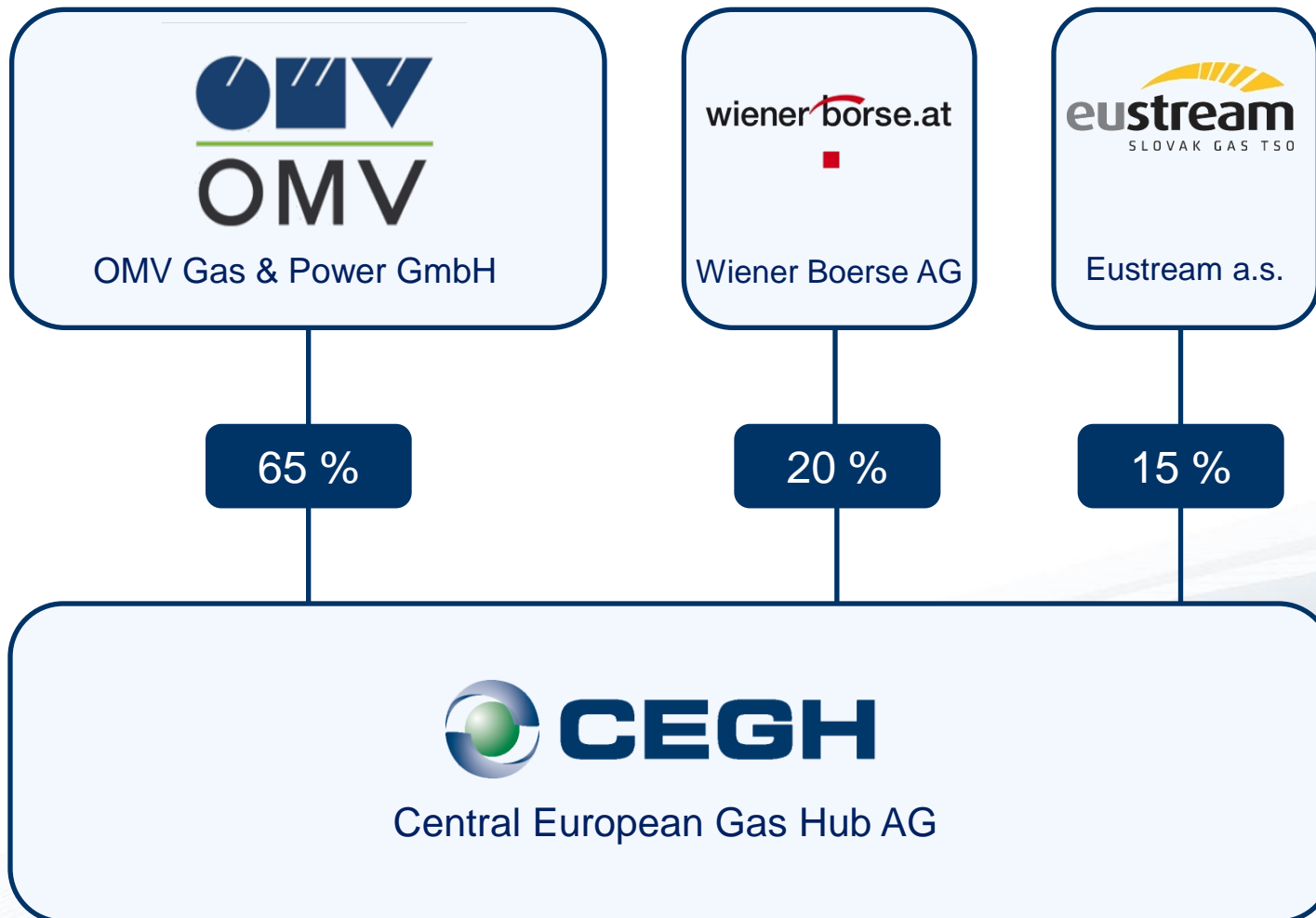
CEGH - The gateway from East to West within Europe's hub landscape



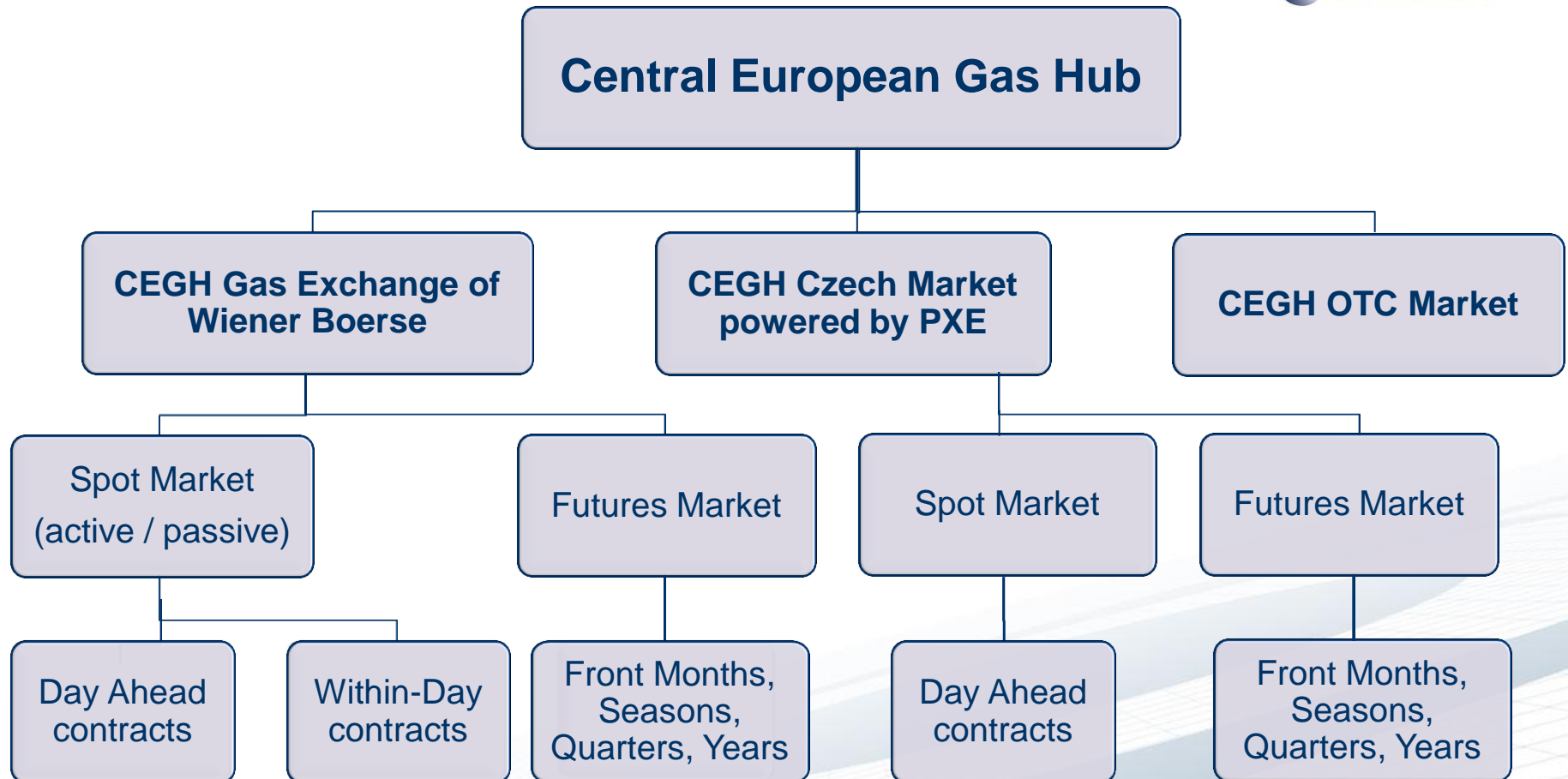
CEGH:

- Strategic location
- Gas transit routes
- Storage facilities

CEGH – Shareholder Structure



CEGH Markets: OTC and Exchange under one umbrella



- Standardized Products
- Clearing (no counterparty risk)
- Anonymous

- Trayport GV Trading System
- 3 hours lead time
- Market Maker

- Flexible volume (kWh)
- Bilateral contracts
- 2 hours lead time

CEGH Volume Development 2015: Overview



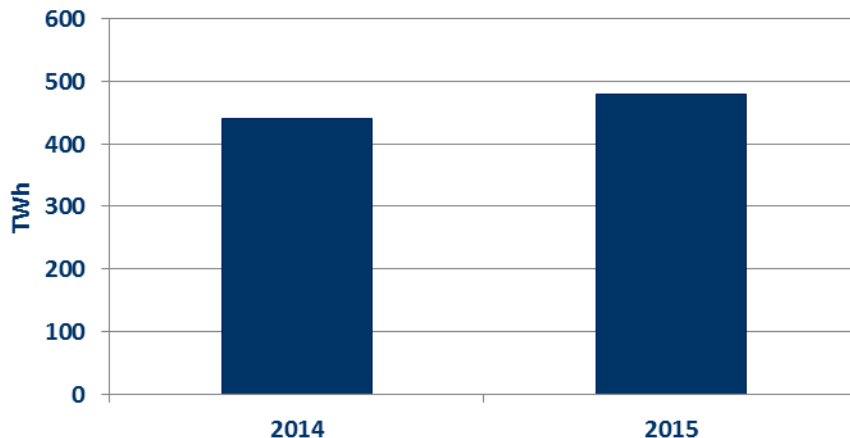
OTC Market:

1 - 12 / 2015: 478.30 TWh
(y-t-y: +9%)

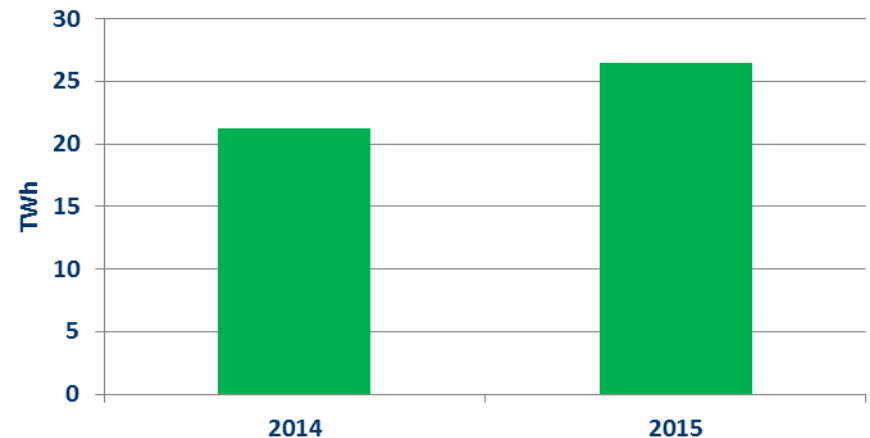
Gas Exchange:

1 - 12 / 2015: 26.48 TWh
(y-t-y: +25%)

CEGH OTC Market

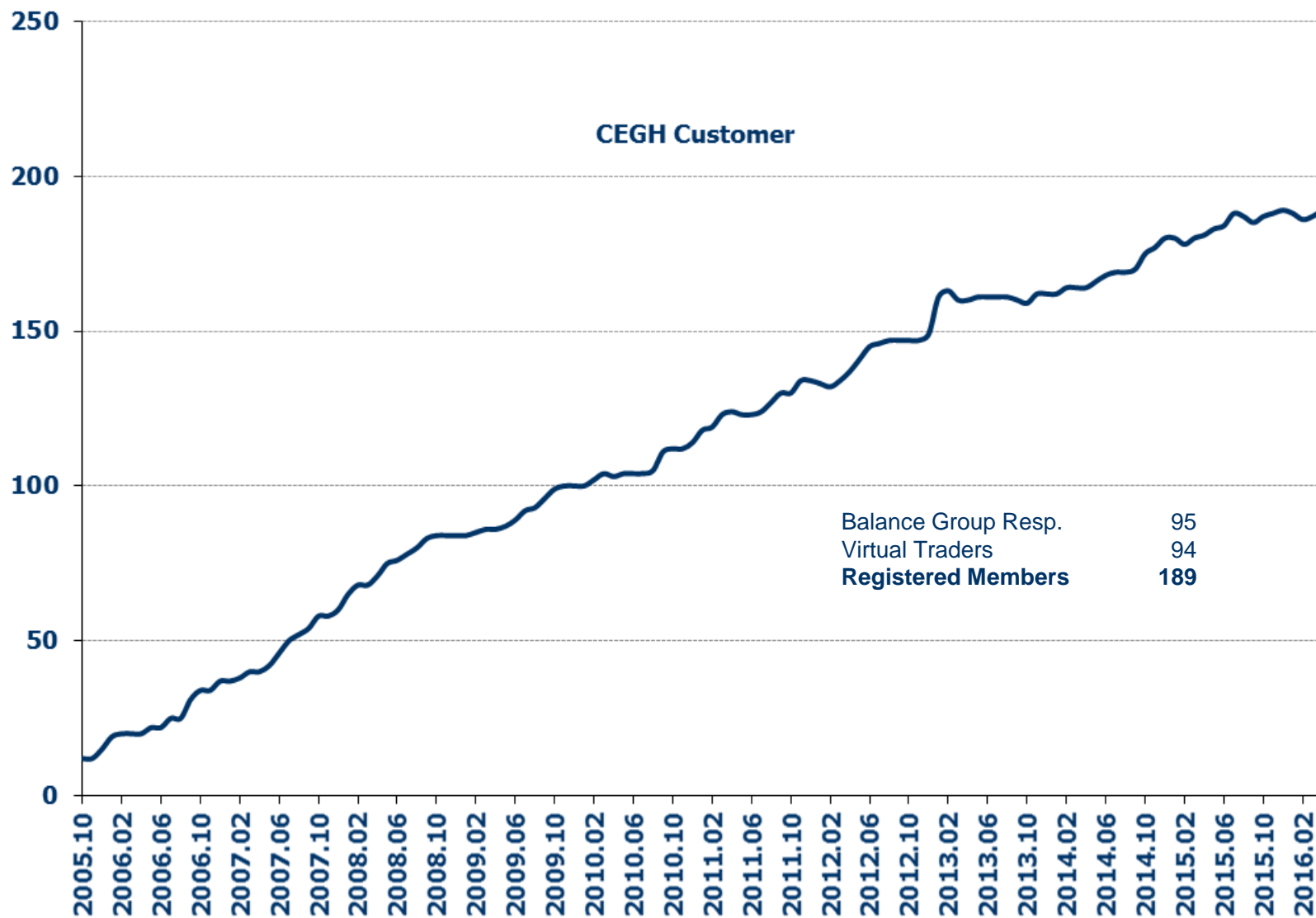


CEGH Gas Exchange



CEGH OTC Market Virtual Trading Point (VTP)

CEGH - Development of OTC Trading Registered Members

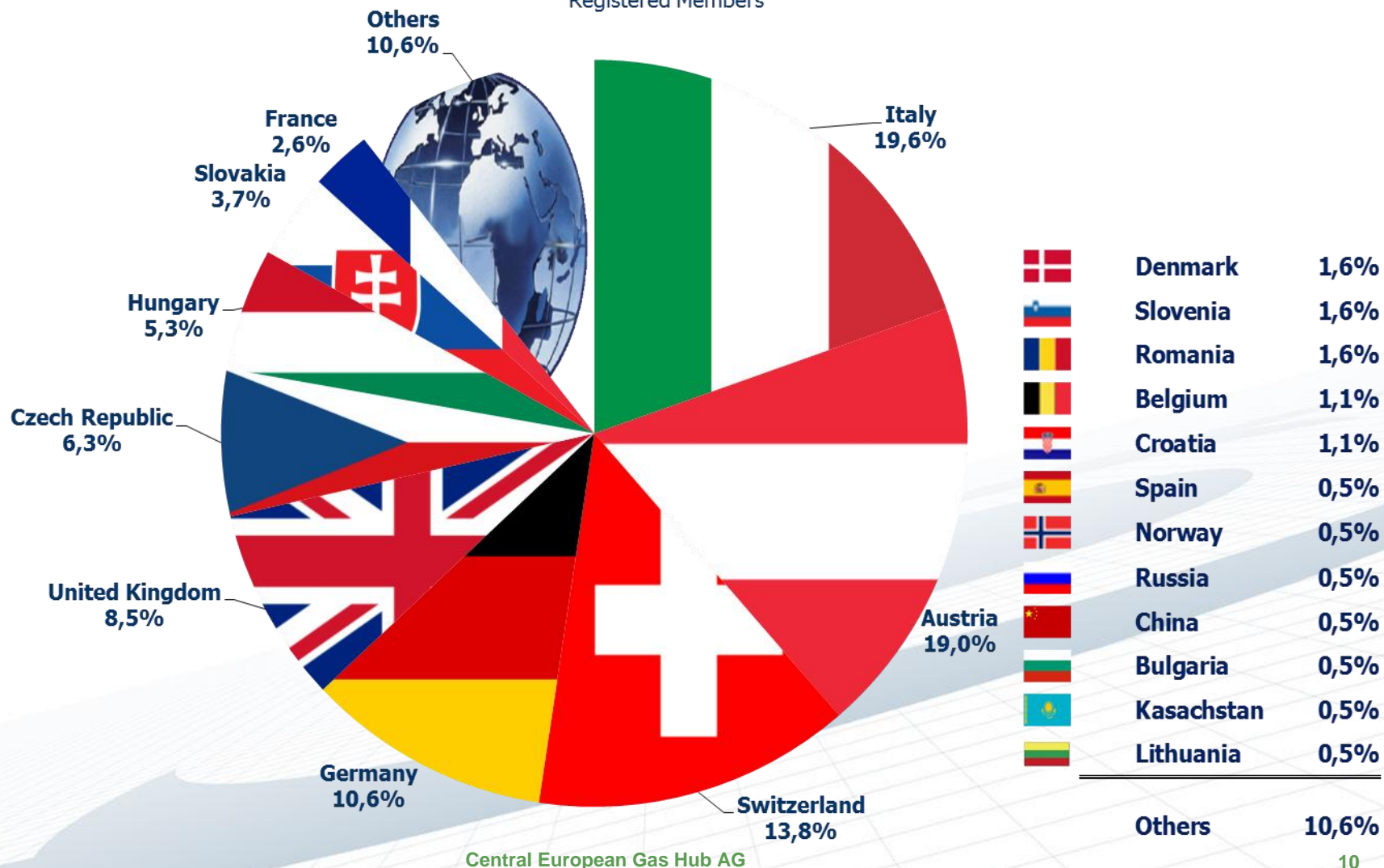


CEGH - Development of OTC Trading

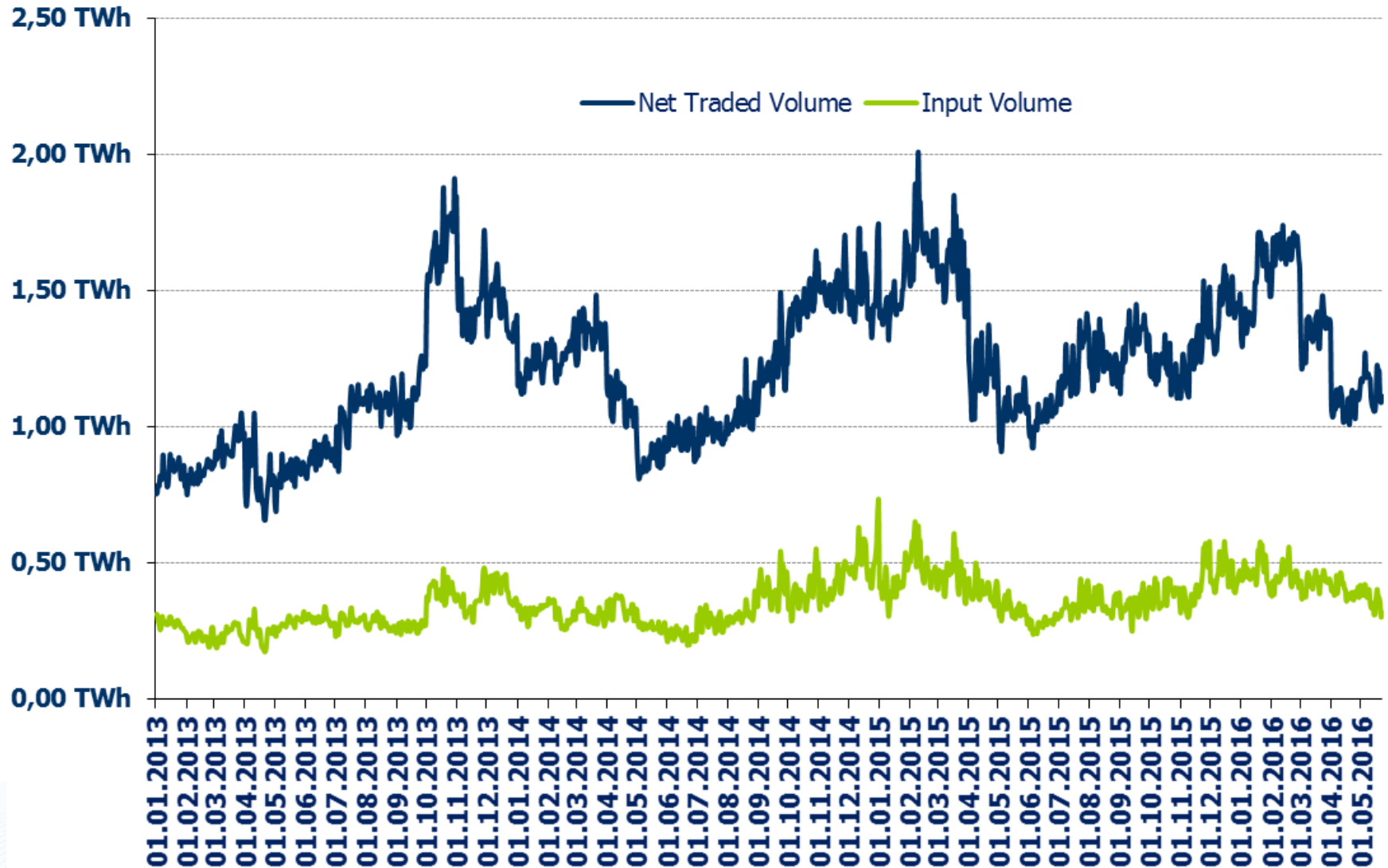
Diversity of Registered Members



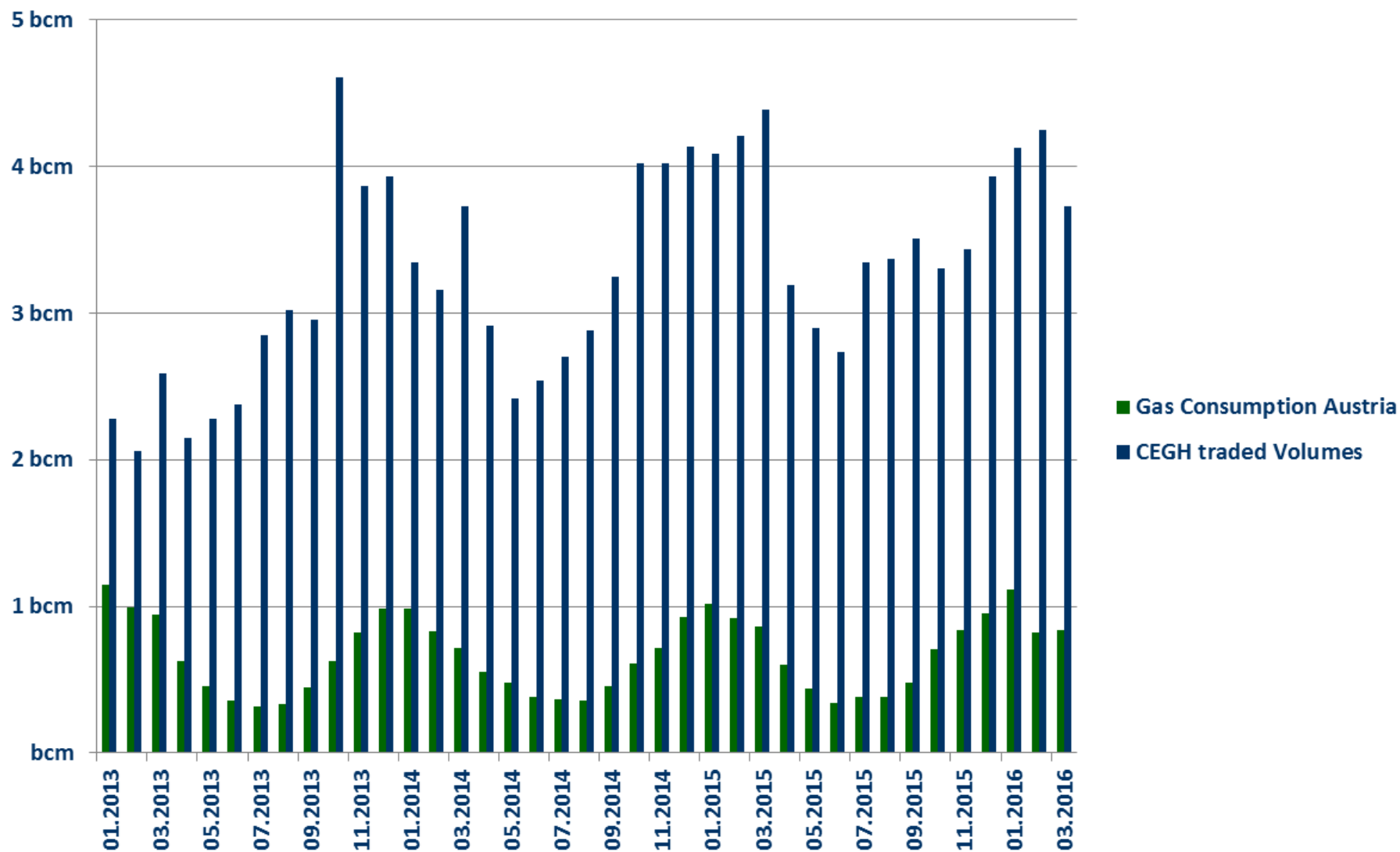
Registered Members



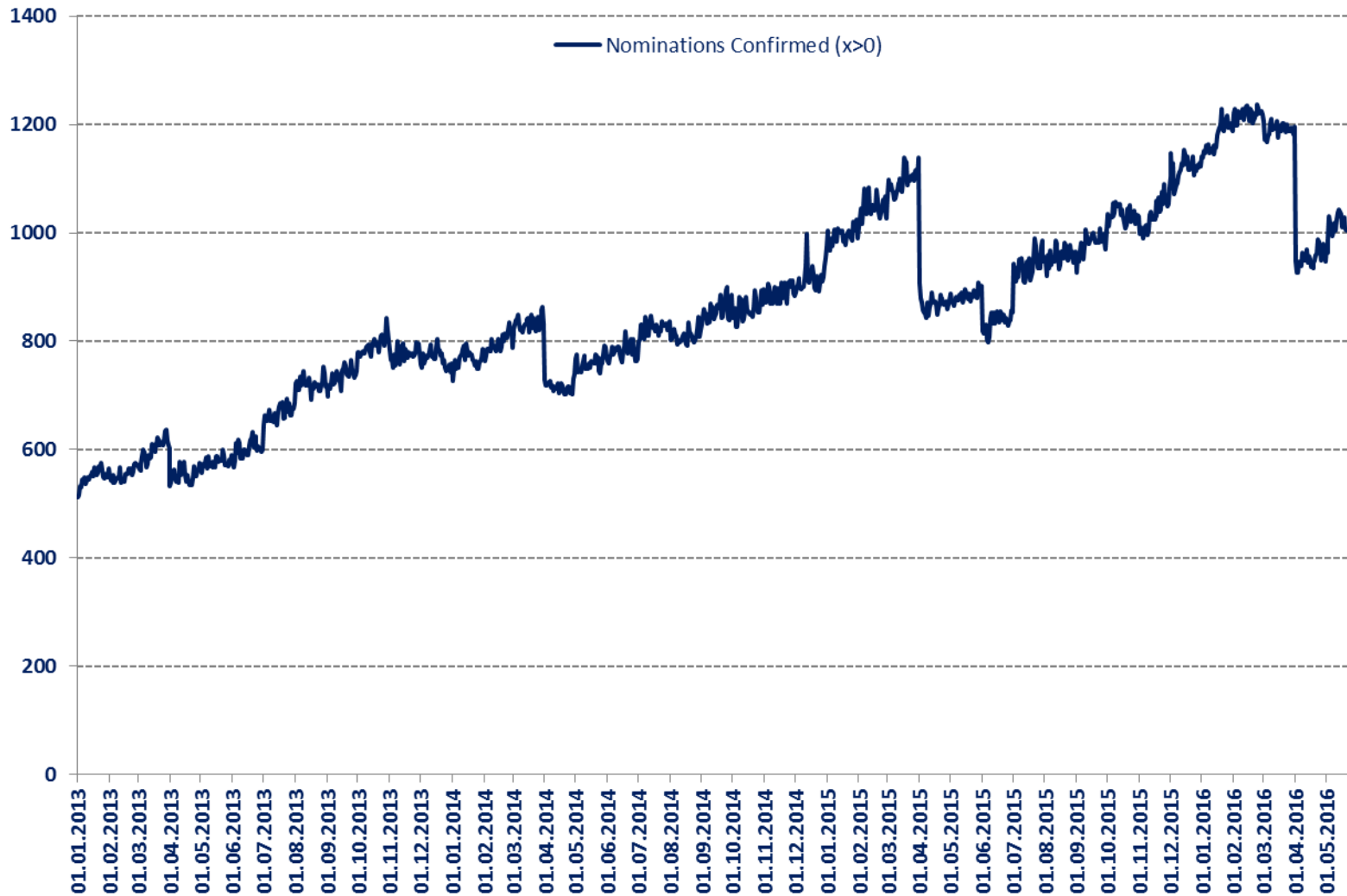
Daily trading volumes and physical input since 2013



Development of Total Trading Volume since 2013 at CEGH



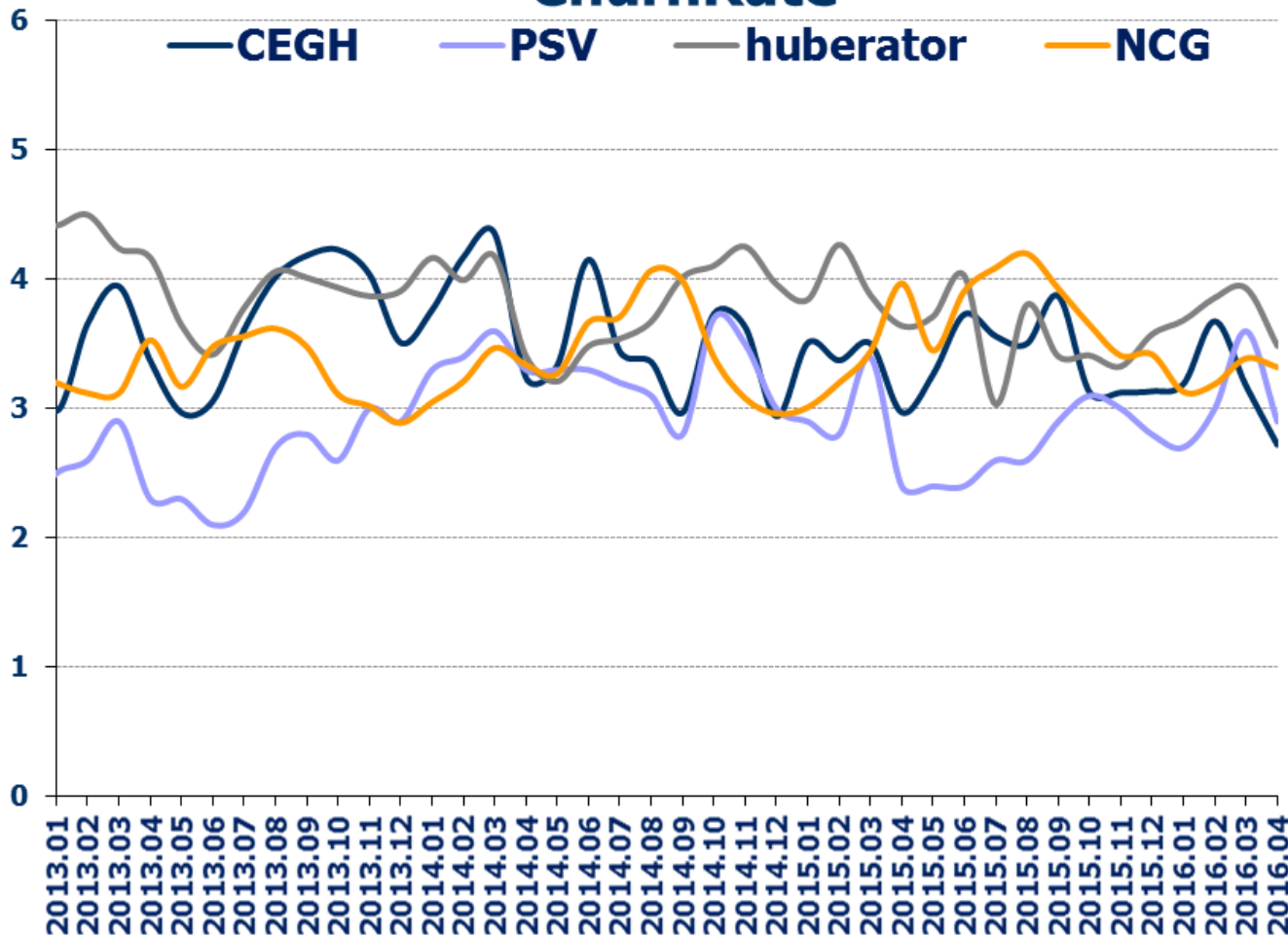
OTC Trading: Daily Nominations since Jan 2013



Continental European Gas Hubs Churn Rate since 01.2013



Continental European Gas Hubs - ChurnRate

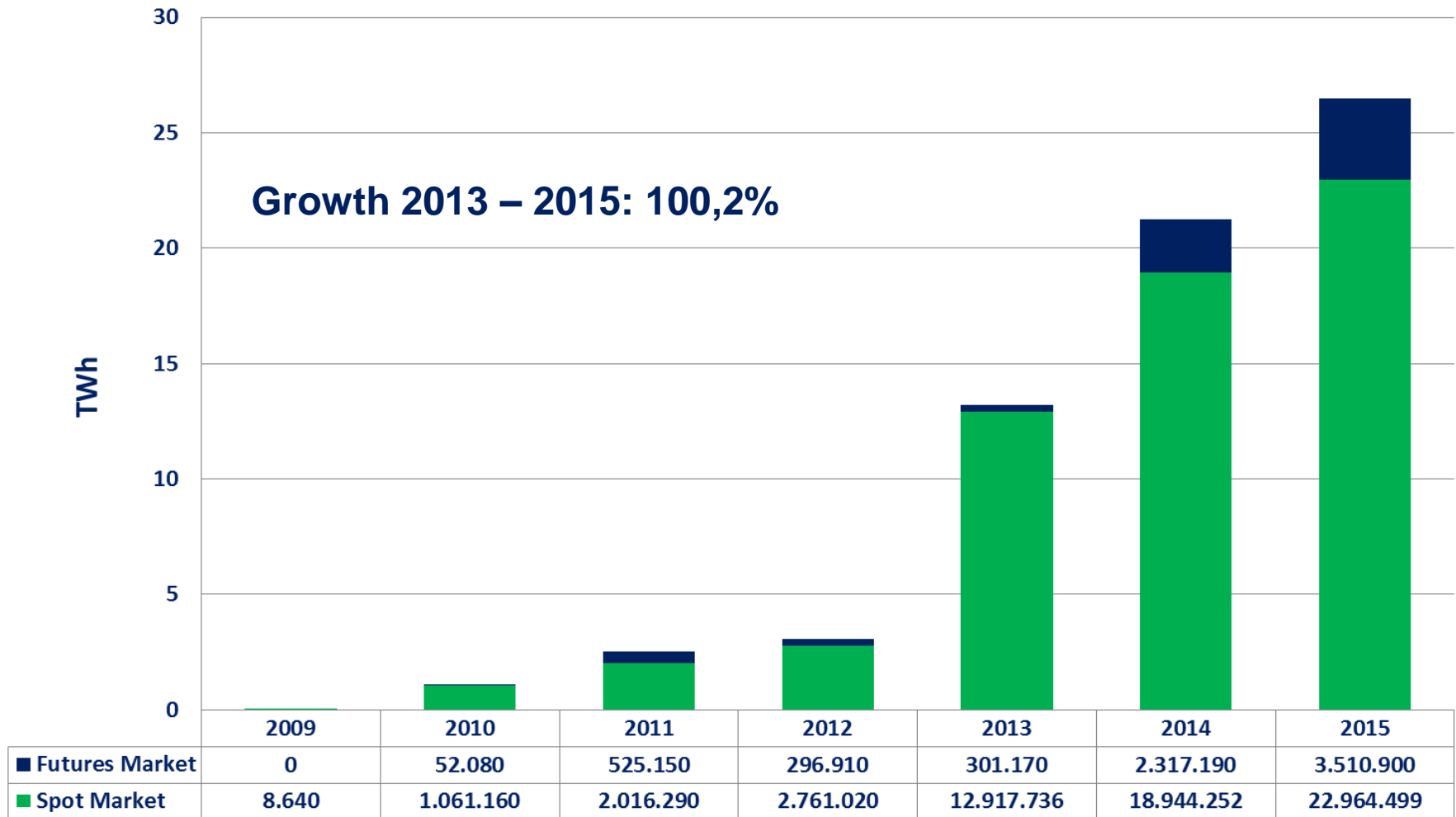


CEGH Gas Exchange (Austria)

CEGH Gas Exchange: Yearly Trading Volume since 2010



Yearly Traded Volumes



Registered Members CEGH Gas Exchange



97 Trading
Participants

Spot Market



14 Clearing
Participants



12 Clearing
Participants



Futures Market

35 Trading
Participants

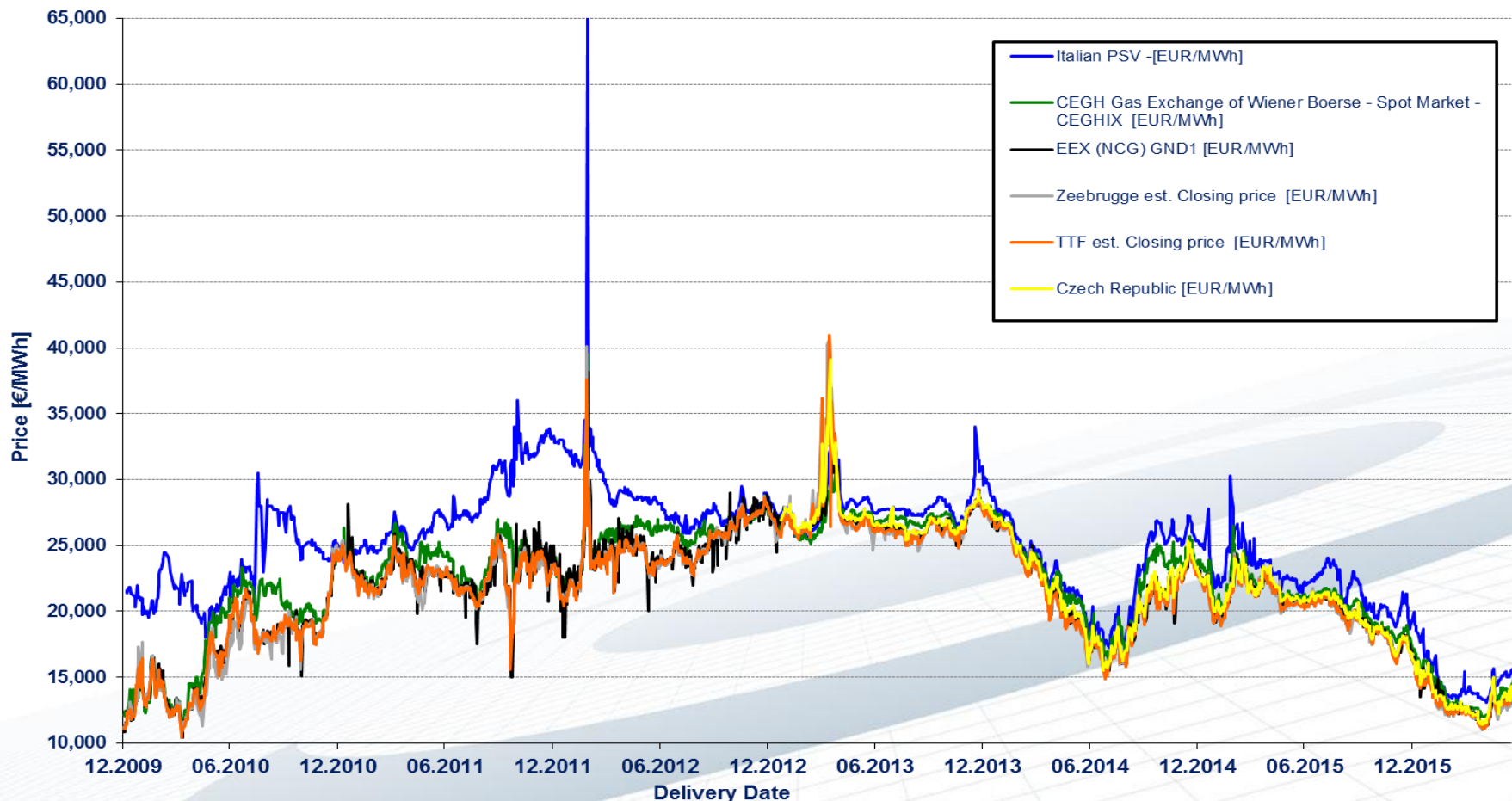


Relation between CEGH, Huberator, NCG, TTF, PSV and CZ

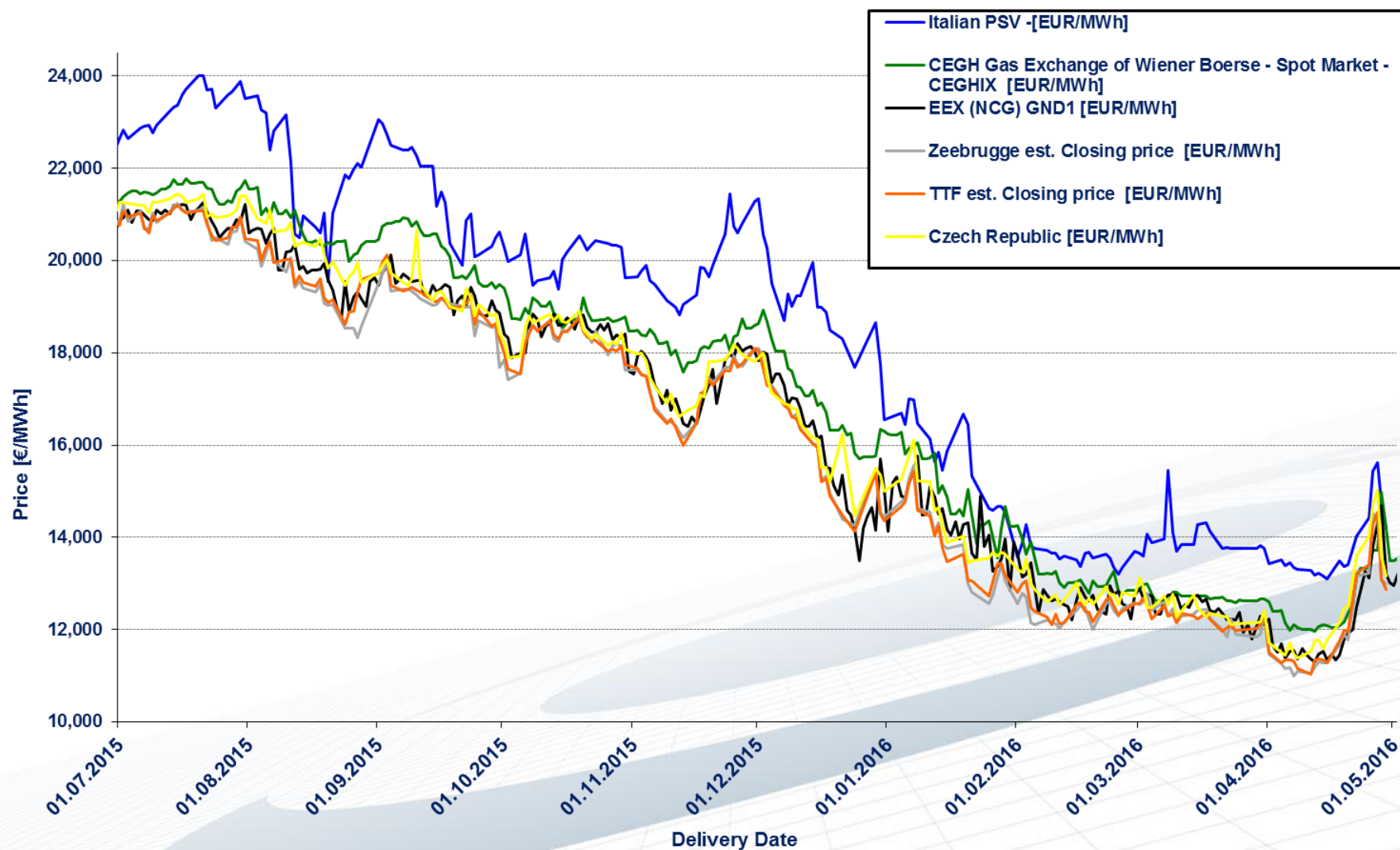


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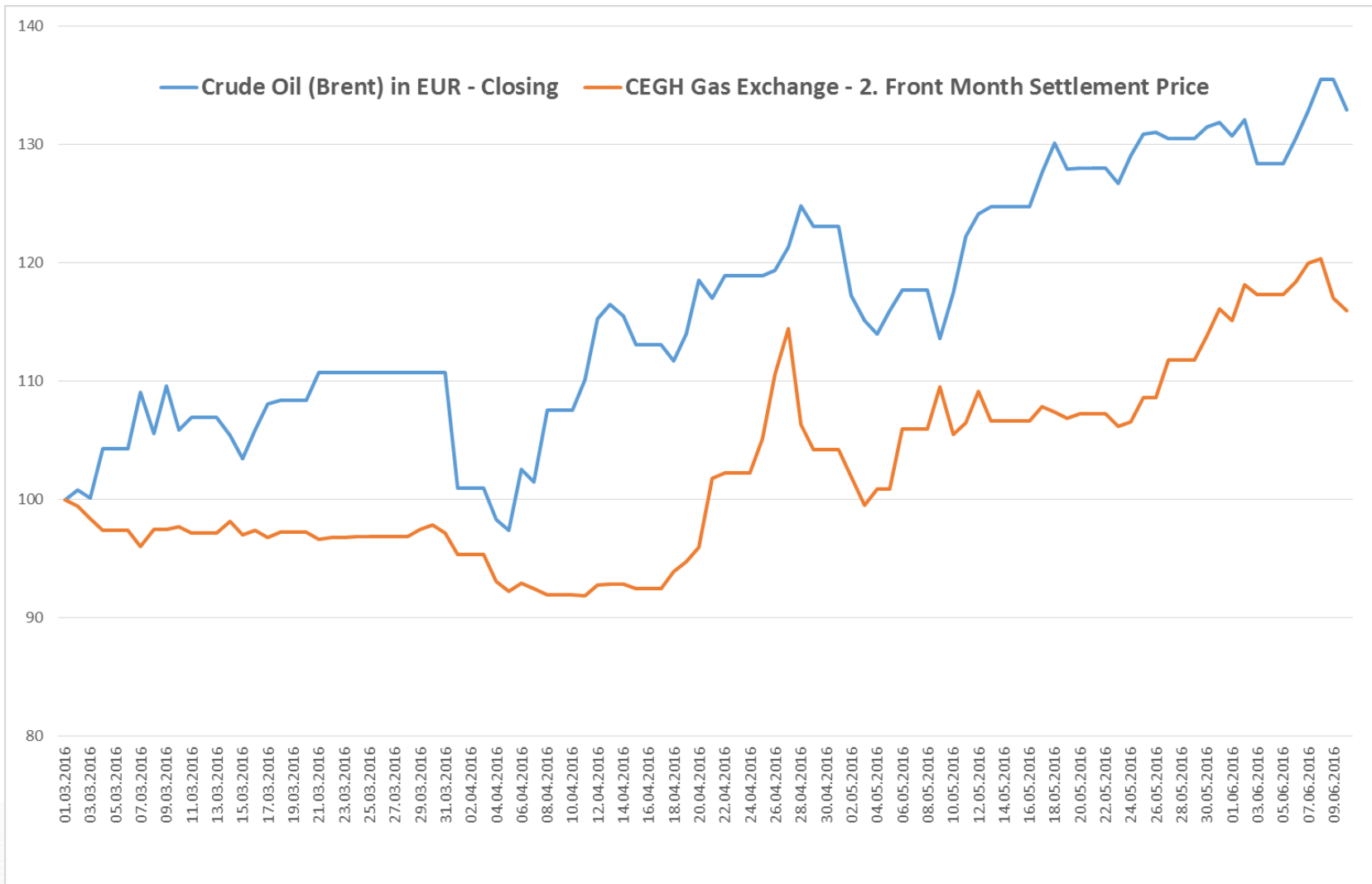
Benchmark (Day Ahead Spot Market)



Gas prices: Relation between CEGH, Huberator, NCG, TTF and PSV



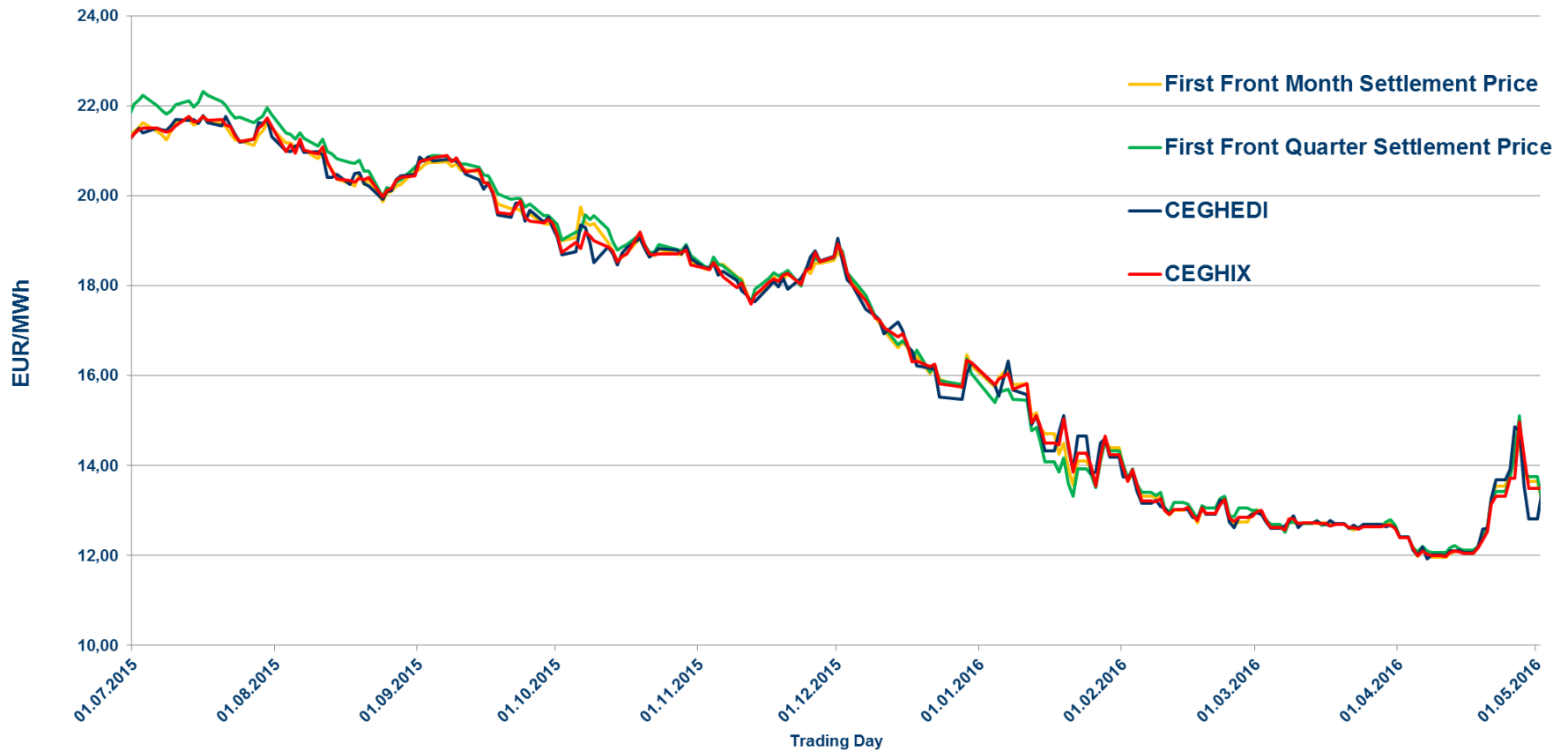
Relation Brent Oil to CEGHIX



CEGH Gas Exchange of Wiener Boerse: Austrian Indices

- Indices:
 - CEGHIX
 - CEGHEDI
 - 1st Front Month Index
 - 1st Front Quarter Index

CEGH Gas Exchange of Wiener Boerse: Austrian Indices



CEGH Czech Futures Market Powered by PXE

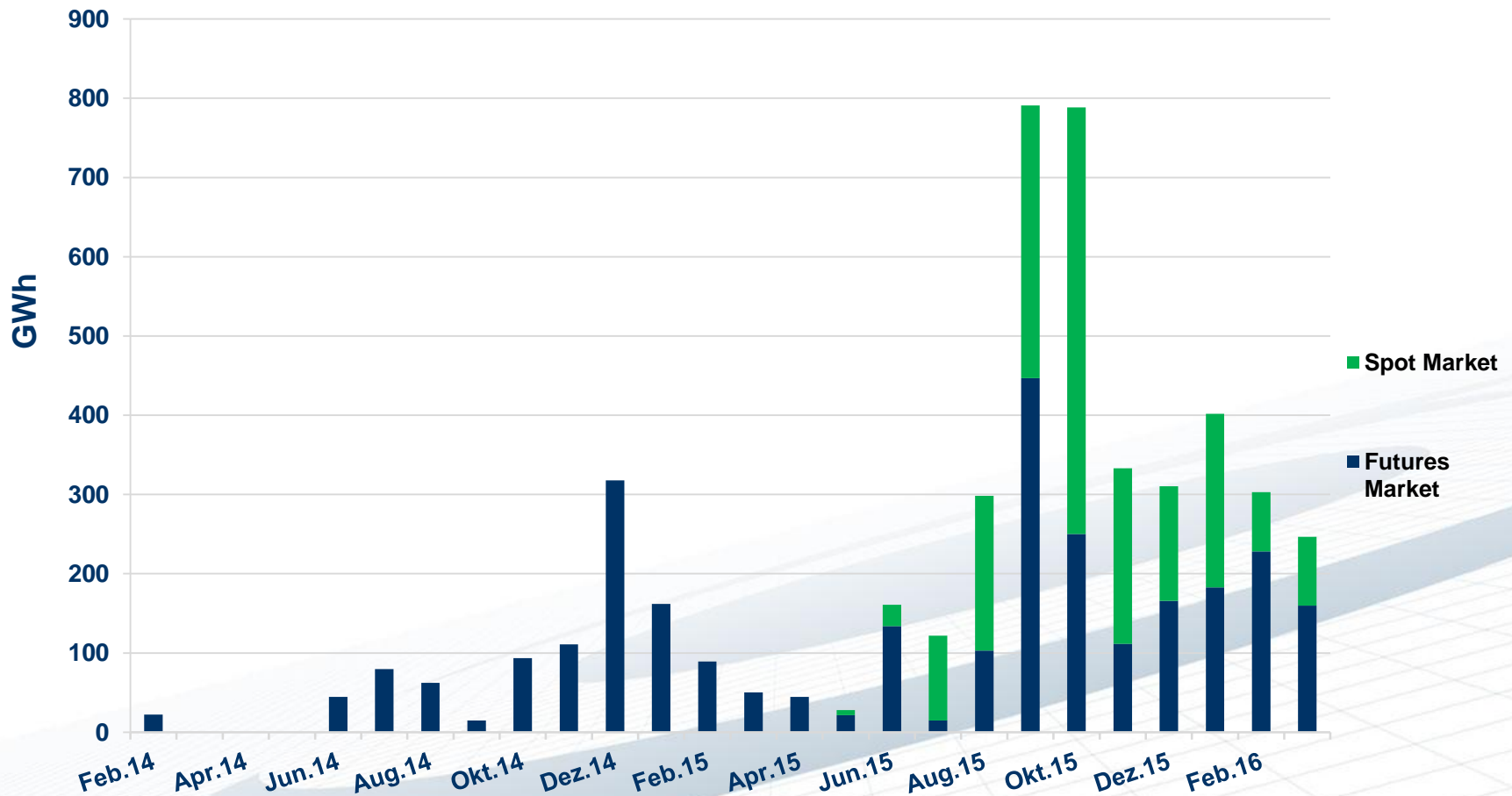
CEGH Czech Gas Exchange Market: Start 9 December 2013



- **Launch:** Futures Market: 9 December 2013
Spot Market: 4 May 2015
- **Members:** 18 members registered
- **Traded Volume:** 3,177 GWh (1 – 12 / 2015)

CEGH Czech Gas Exchange: Monthly Trading Volume

Traded Volume on Spot & Futures Market



Gas Target Model (GTM 2014) of ACER

Way Forward

Gas Target Model (GTM 2015) - way forward



- Self-evaluation process: NRAs shall assess, whether markets are able to meet revised GTM 2015 criteria by **2017**
- If not, the GTM suggests considering structural market reforms e.g.
 - **full market merger, or**
 - **trading region, or**
 - **satellite market (& market coupling)**

Any reform should be based on an appropriate cost-benefit analysis to ensure their economic viability

update Gas Target Model



➤ **Market Merger**

full merger of 2 or more adjacent markets by merging their virtual trading points and balancing zones

➤ **Trading Region**

partial merger of two or more adjacent markets at the wholesale level by merging their virtual trading points and establishing a cross-border trading balancing zone

➤ **Satellite Market**

substantial linking (via pipeline capacity) of a non-functioning gas market to a directly neighbouring, well functioning wholesale gas market

(New) GTM 2015 requirements



- Order book volume (new)
- Bid offer spread (new)
- Order book price sensitivity (new)
- Market concentration for bid / offers (new)
- Trading concentration (new)
- Number of trades (new)
- HHI (new method)
- Residual Supply Sources (new method)

Deleted criteria: market zone size, churn rate

**→ GTM launch documentation contains EU wide initial assessment
(based on 2013 broker data) done by ACER**

Outlook: The regional role of CEGH as liquidity provider under the GTM 2015



- CEGH is the most liquid international and cross-regional trading place in CEE and SEE.
- CEGH's existing liquidity can be used for developing surrounding gas markets further by:
 - Trading Region (e.g. CZ-SK-AT - and further?: combining the wholesale markets to form one virtual trading point for various countries.
 - Easy access from various countries to CEGH to utilize its liquidity for other gas markets (e.g. building a better balancing market model).



Austrian – Czech Market Integration Concept: TRU – Trading Region Upgrade



- Start with a smaller integration step:
TRU = Trading Region Upgrade
- Possibility to upgrade booked Entry Capacity in CZ and AT
 - Enables access to both VTPs
 - Enabling access to the other market area
- Consultation on CZ-AT Market Integration until 19 April 2016
organized by Czech and Austrian regulators on a proposal of the
TSOs (Net4Gas and GasConnect Austria) to connect gas market
areas tighter together

**Thank you very much
for your attention**



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