

# Central European Gas Hub



## 18<sup>th</sup> CEGH Feedback Workshop

Vienna, 22 May 2019



# 18<sup>th</sup> CEGH Feedback Workshop



## Agenda

- **Welcome, Opening Words**
- Update CEGH VTP
- PEGAS Markets - overview
- PEGAS CEGH Gas Markets AT, CZ
- Features of the new CEGH Website
- Feedback Session / Q&A
- Lunch

# CEGH Volume Development 2018

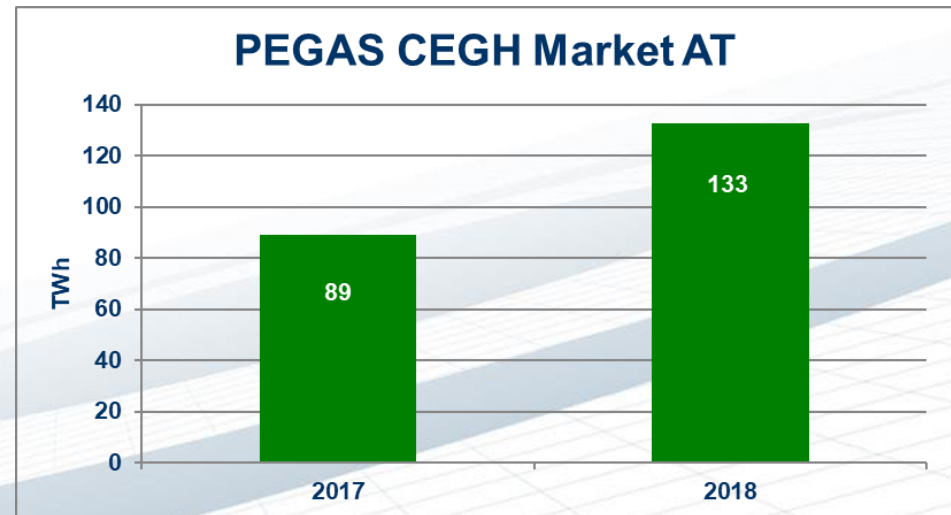
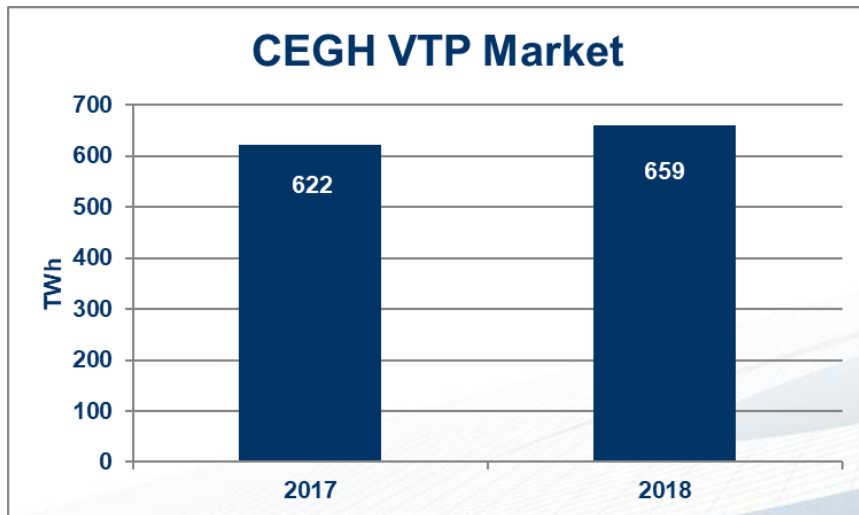


## CEGH VTP:

2018: 658.91 TWh  
(y-t-y: **+5.9%**)

## PEGAS CEGH Gas Market:

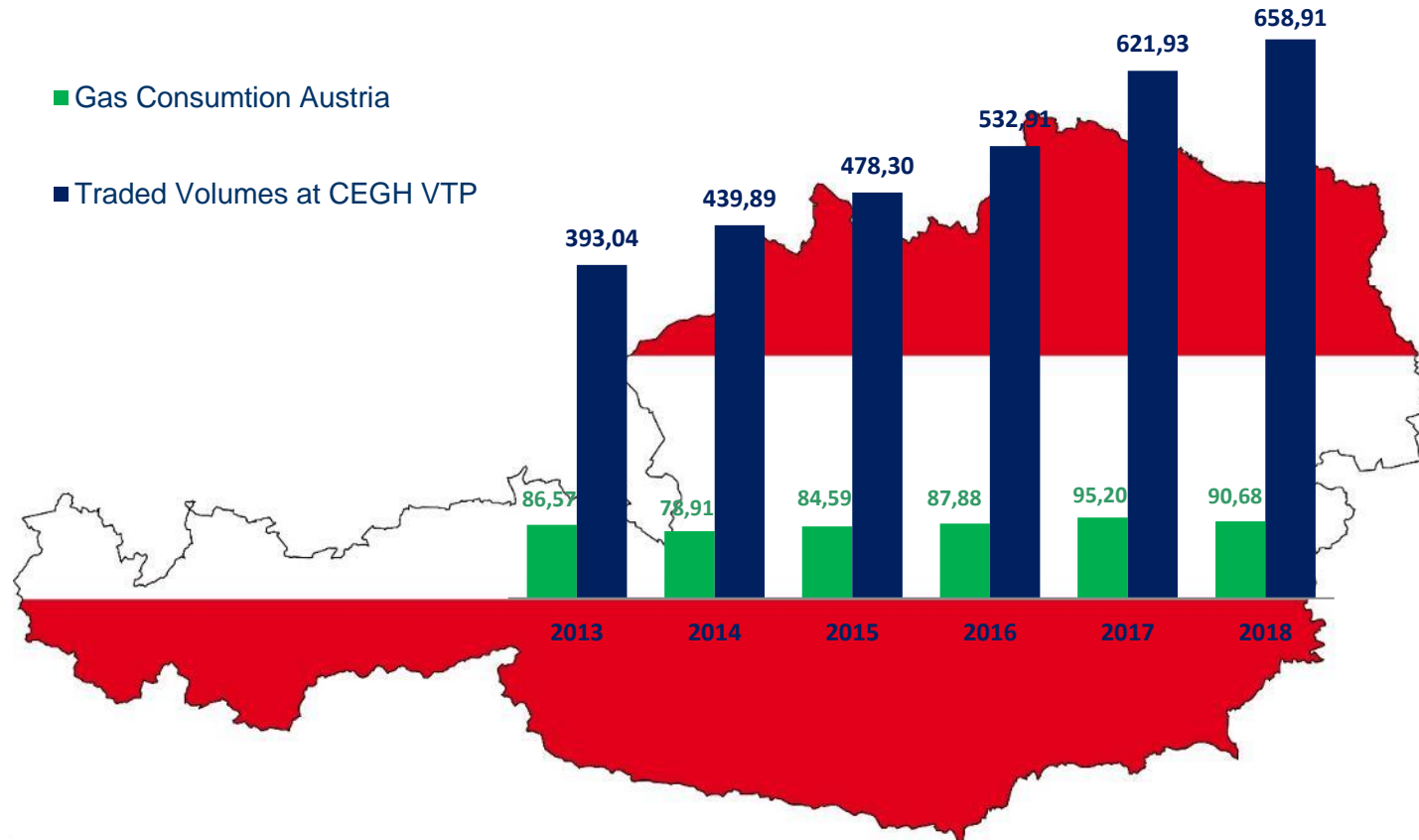
2018: 132.65 TWh  
(y-t-y: **+49.2%**)



# CEGH VTP Volume development and Austrian gas consumption (in TWh)



## Volume Development at CEGH VTP



Source: CEGH, E-control Austria

Graph: d-maps.com

# CEGH Volume Development 2019



## CEGH VTP:

Jan- April 2019: 249.53 TWh

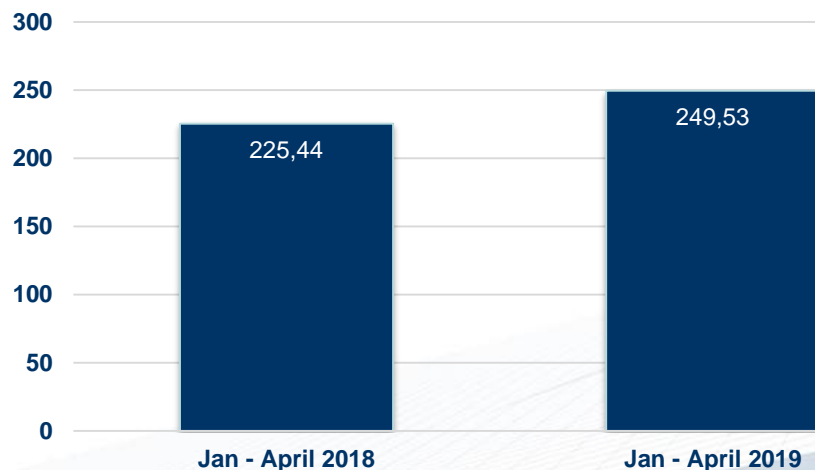
(y-t-y: **+10.68%**)

## PEGAS CEGH Gas Market:

Jan- April 2019: 50.58 TWh

(y-t-y: **+23.4%**)

### CEGH VTP MARKET



### PEGAS CEGH MARKET AT



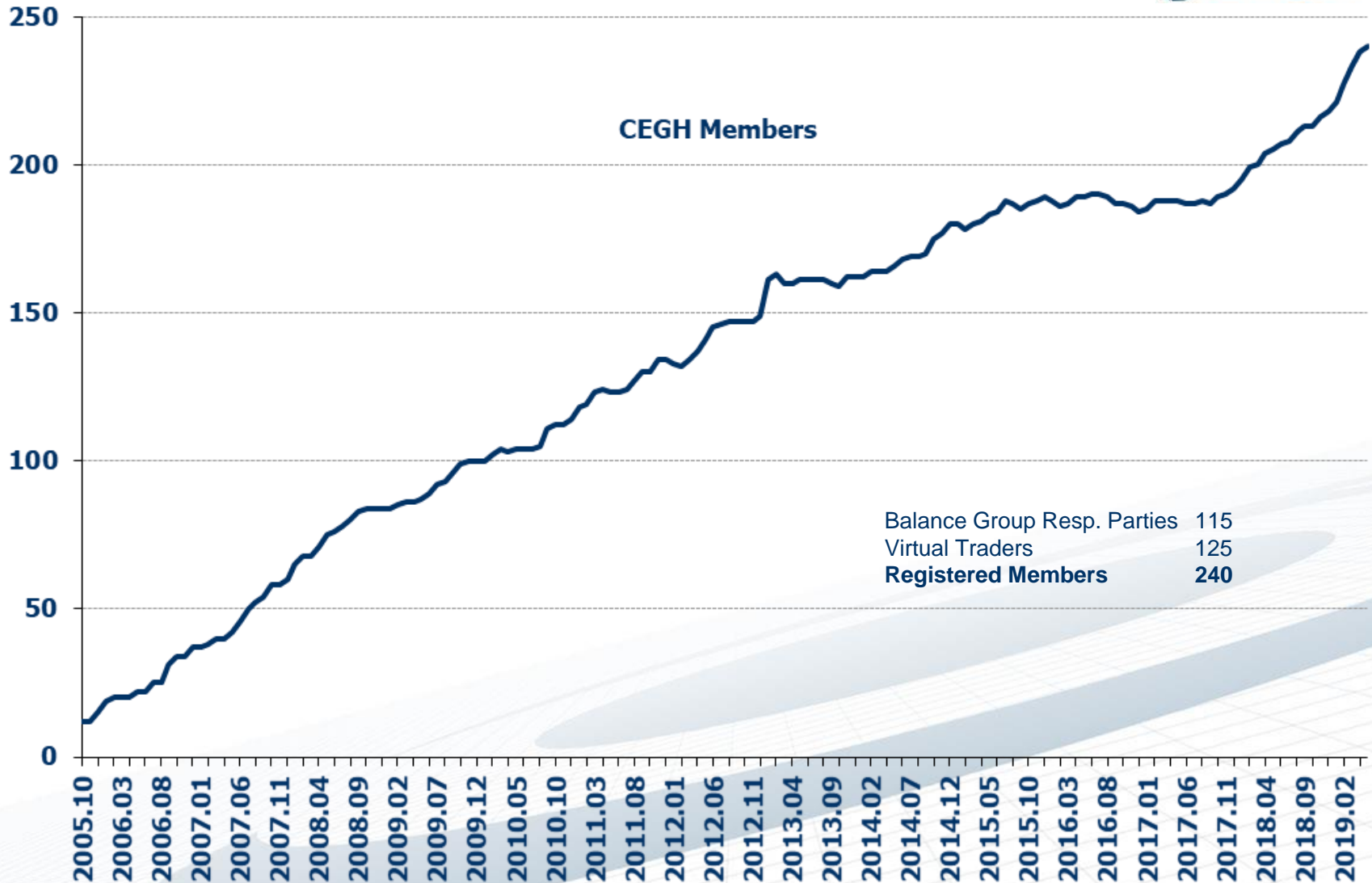
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# CEGH - Development of VTP Registered Members

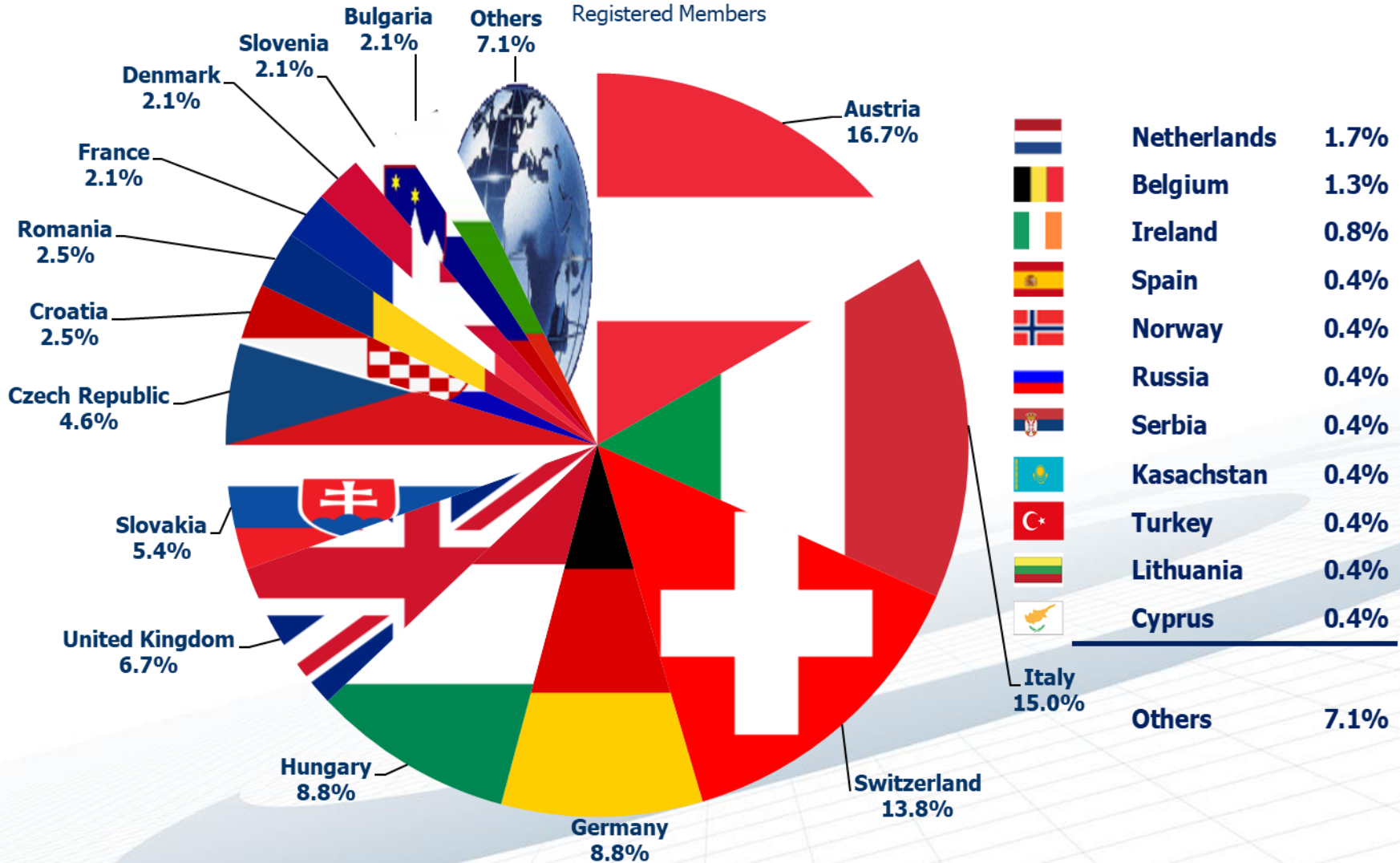


# CEGH - Development of VTP

## Diversity of Registered Members

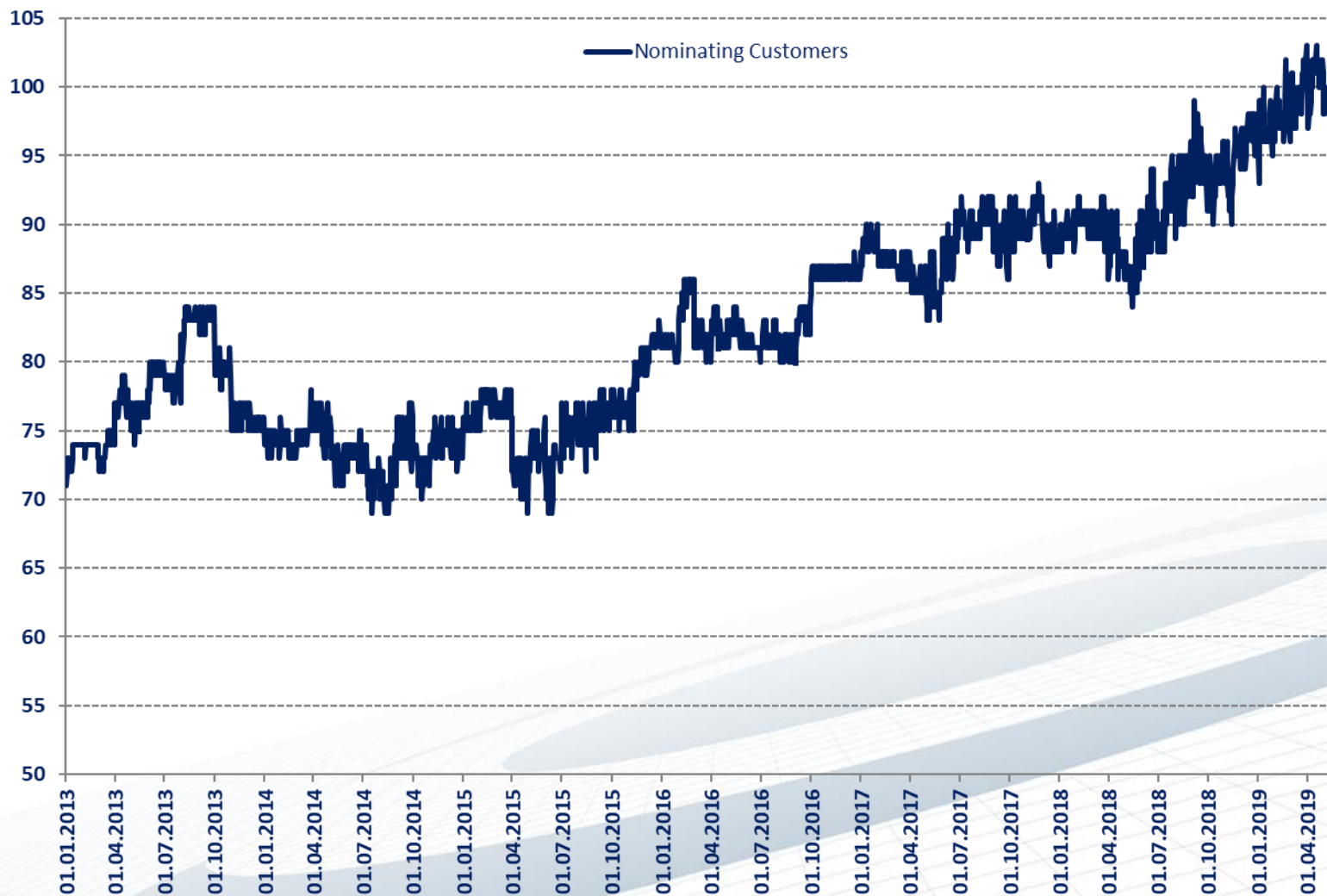


**CEGH**  
Registered Members





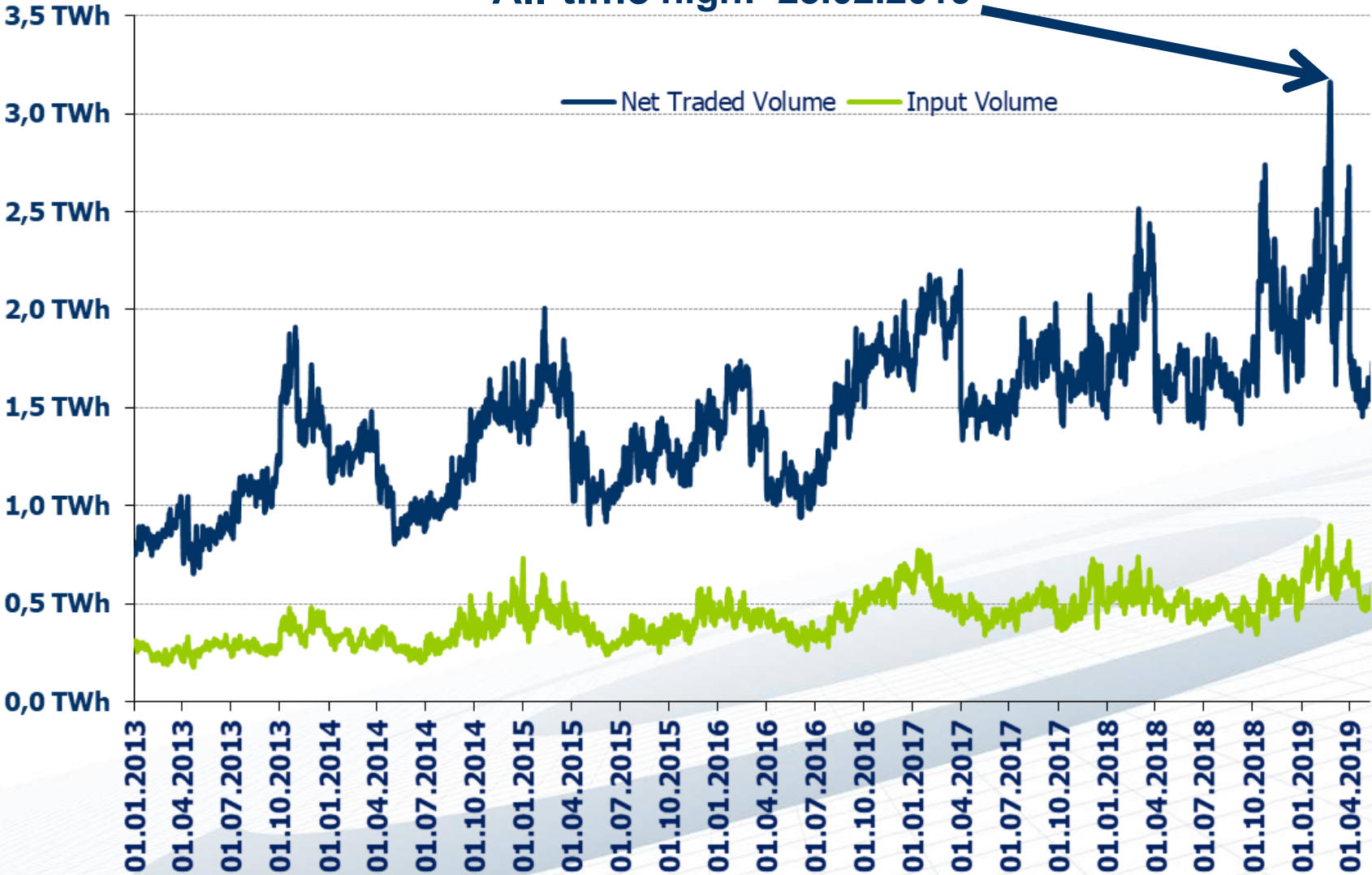
# CEGH VTP: Nominating Customers on daily basis since 2013



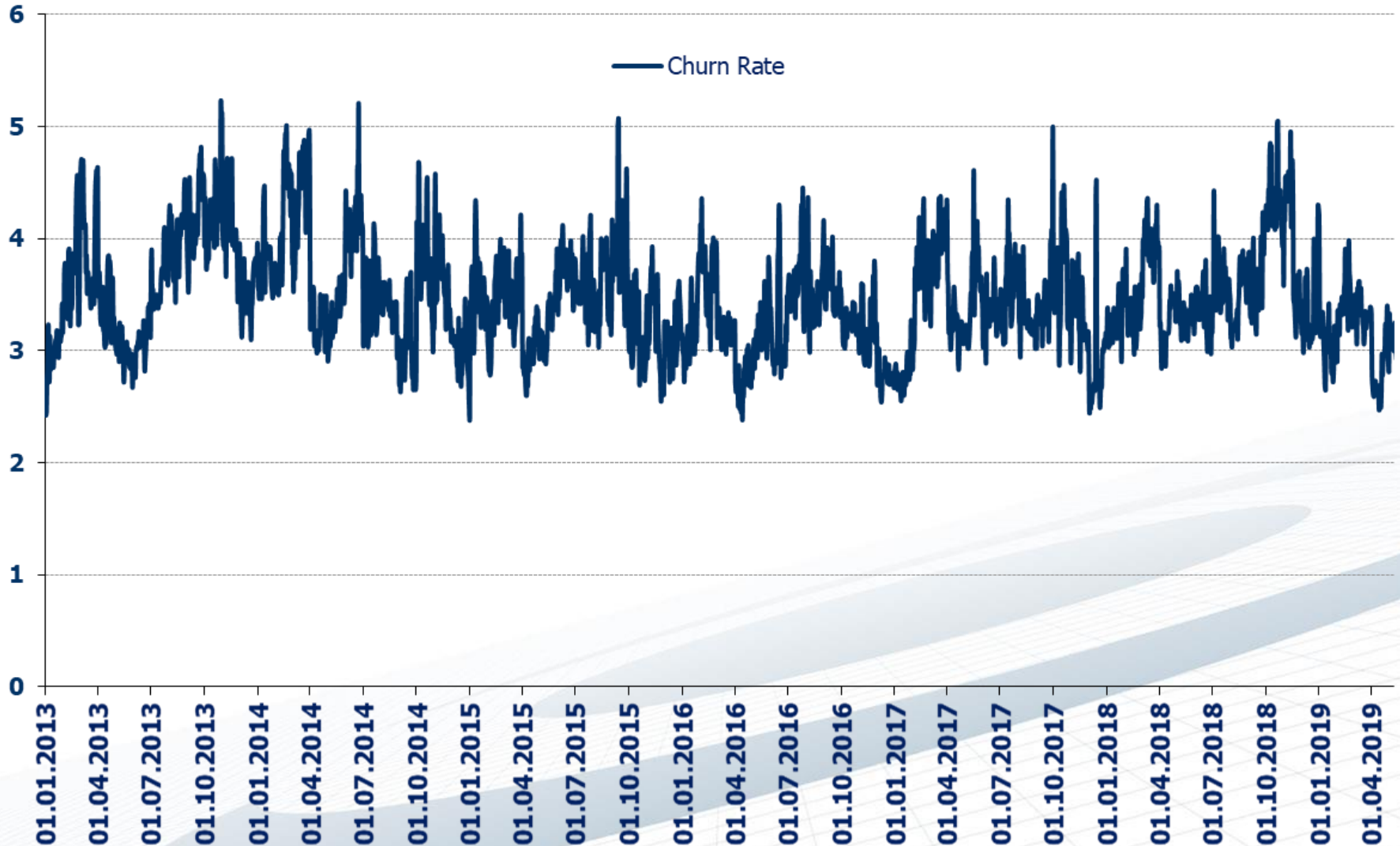
# CEGH VTP: Daily Net Traded Volume since Jan 2013



All-time high: 23.02.2019



# CEGH VTP: Daily churn rate since 2013

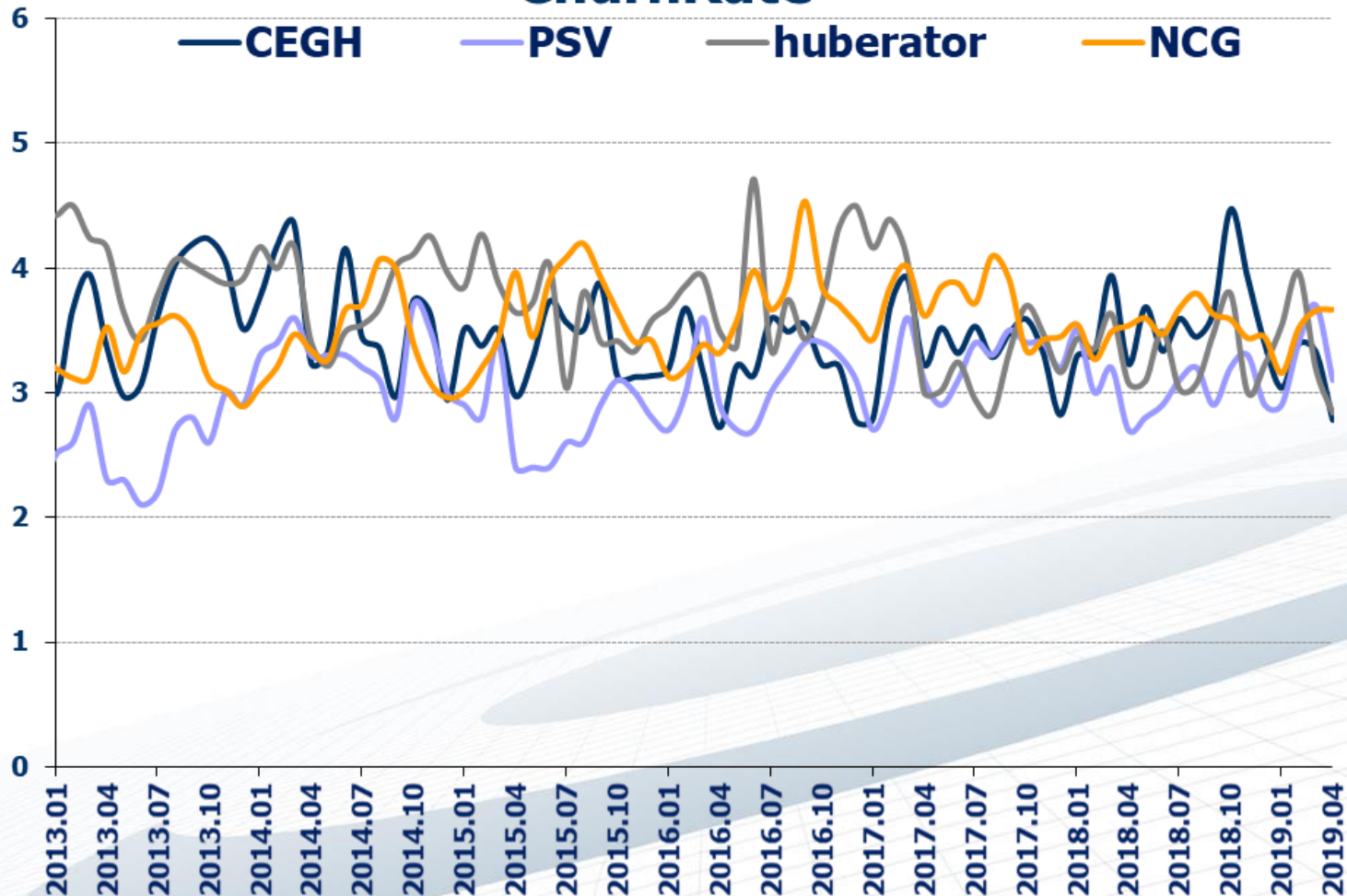


# CEGH Development of VTP

## Continental European Gas Hubs - Churn Rate



### Continental European Gas Hubs - ChurnRate



# CEGH Gas Storage Marketing Platform



OVERVIEW REGISTRATION

## Filter your results

Company

Storage

Status  
 open  
 closed  
 published  
 cancelled

Offer ID

Publication date  
 to

Bidding period  
 to

CLOSED ON 18.04.2019 15:00			
<b>OMV Gas Storage GmbH</b> OMV Storage-Pool VTP # Offer ID: 367 Bidding period: 18.04.2019 10:00 - 18.04.2019 15:00 Publication date: 04.04.2019 14:00 Quantity: 20 Bundles Pricing: € / Bundle / month Service period: 01.04.2020 06:00 - 01.04.2021 06:00		<b>WORKING GAS VOLUME</b> FIRM 17.000 MWh 01.04.20 06:00 - 01.04.21 06:00	<b>INJECTION RATE</b> FIRM 8 MWh/h 01.04.20 06:00 - 01.04.21 06:00
		<b>WITHDRAWAL RATE</b> FIRM 8 MWh/h 01.04.20 06:00 - 01.04.21 06:00	>
CLOSED ON 20.02.2019 15:00			
<b>OMV Gas Storage GmbH</b> OMV Storage-Pool VTP # Offer ID: 348 Bidding period: 20.02.2019 13:00 - 20.02.2019 15:00 Publication date: 15.02.2019 12:30 Quantity: 1 Bundles Pricing: € / Bundle / runtime Service period: 01.03.2019 06:00 - 01.11.2019 06:00		<b>WORKING GAS VOLUME</b> FIRM 200.000 MWh 01.03.19 06:00 - 01.11.19 06:00	<b>INJECTION RATE</b> FIRM 200 MWh/h 01.03.19 06:00 - 01.04.19 06:00
		<b>WITHDRAWAL RATE</b> FIRM 137 MWh/h 01.03.19 06:00 - 01.11.19 06:00	>
CLOSED ON 14.02.2019 15:00			
<b>OMV Gas Storage GmbH</b> OMV Storage-Pool VTP # Offer ID: 347 Bidding period: 14.02.2019 13:00 - 14.02.2019 15:00 Publication date: 13.02.2019 13:00 Quantity: 1 Bundles Pricing: € / Bundle / runtime Service period: 01.03.2019 06:00 - 01.11.2019 06:00		<b>WORKING GAS VOLUME</b> FIRM 200.000 MWh 01.03.19 06:00 - 01.11.19 06:00	<b>INJECTION RATE</b> FIRM 200 MWh/h 01.03.19 06:00 - 01.04.19 06:00
		<b>WITHDRAWAL RATE</b> FIRM 137 MWh/h 01.03.19 06:00 - 01.11.19 06:00	>
CLOSED ON 30.01.2019 15:00			
<b>OMV Gas Storage GmbH</b> OMV Storage-Pool VTP # Offer ID: 327 Bidding period: 30.01.2019 10:00 - 30.01.2019 15:00 Publication date: 16.01.2019 11:30 Quantity: 30 Bundles Pricing: € / Bundle / month Service period: 01.04.2019 06:00 - 01.04.2020 06:00		<b>WORKING GAS VOLUME</b> FIRM 17.000 MWh 01.04.19 06:00 - 01.04.20 06:00	<b>INJECTION RATE</b> FIRM 8 MWh/h 01.04.19 06:00 - 01.04.20 06:00
		<b>WITHDRAWAL RATE</b> FIRM 12 MWh/h 01.04.19 06:00 - 01.04.20 06:00	>
CLOSED ON 29.11.2018 15:00			
<b>OMV Gas Storage GmbH</b> OMV Storage-Pool VTP # Offer ID: 307 Bidding period: 29.11.2018 10:00 - 29.11.2018 15:00 Publication date: 06.11.2018 14:00 Quantity: 100 Bundles Pricing: € / Bundle / month Service period: 01.04.2019 06:00 - 01.04.2020 06:00		<b>WORKING GAS VOLUME</b> FIRM 17.000 MWh 01.04.19 06:00 - 01.04.20 06:00	<b>INJECTION RATE</b> FIRM 8 MWh/h 01.04.19 06:00 - 01.04.20 06:00
		<b>WITHDRAWAL RATE</b> FIRM 12 MWh/h 01.04.19 06:00 - 01.04.20 06:00	>

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- **PEGAS Markets - overview**
- PEGAS CEGH Gas Markets AT, CZ
- Features of the new CEGH Website
- Feedback Session / Q&A
- Lunch

A satellite night view of Europe, showing city lights and urban areas glowing against the dark background of the continent and surrounding seas.

# PEGAS Overview CEGH Feedback Workshop

22<sup>nd</sup> Mai 2019

# Agenda

**General presentation PEGAS**

The PEGAS Development : Volume and updates

Clearing Services



# PEGAS: EEX Group's Gas brand

## › eex group

- › eex
- › ecc
- › epexspot
- › powernext
- › pegas
- › pxe
- › cltx
- › nodal
- › nodalclear
- › gaspoint nordic

## Powernext is part of EEX Group

EEX Group provides the central market platform for energy and commodity products in 35 countries worldwide. The offering of the group comprises contracts for Energy, Environmentals, Freight, Metals and Agriculturals.

With high specialization and local presence in their core markets the companies of EEX Group answer to the needs of their customers for tailor-made solutions and easy market access. The synergetic, integrated group portfolio is completed by two clearing houses which ensure a proper clearing and settlement of trading transactions.

EEX Group is part of Deutsche Börse Group and located in 16 locations worldwide.

The EEX Group consists of the specialists European Energy Exchange, EPEX SPOT, Powernext, Cleartrade Exchange, Power Exchange Central Europe (PXE), Gaspoint Nordic, Nodal Exchange and the clearing companies European Commodity Clearing (ECC) and Nodal Clear.

**2017:** launch of cooperation CZ VTP between Powernext, CEGH and PXE.

**2016:** integration of spot and futures products of CEGH and Gaspoint Nordic into PEGAS platform.

**EEX** is Europe's leading energy exchange. It offers contracts on energy, environmental products, freight, metals and agricultural products for trading.

**ECC** provides clearing as well as physical and financial settlement of the transactions concluded on its partner exchanges.

**EPEX SPOT** operates the power spot markets of the Group, offering day-ahead and intraday trading, capacity auctions, market coupling and market operation services.

**Powernext** offers spot and derivatives trading for the European natural gas markets and operates the register for French guarantees of origin.

**PEGAS** is the central gas trading platform of EEX Group, operated by Powernext.

**PXE** is the center of competence for the Central and Eastern European markets.

**Nodal Exchange** is a derivatives exchange for the North American energy markets, offering contracts on power and natural gas.

**Nodal Clear** is a CFTC registered derivatives clearing organization and provides clearing for all contracts on Nodal Exchange.

**EEX Asia** is a Singaporean regulated futures exchange which operates the Group's Global Commodities portfolio in Asia.

More than 540 employees in 16 different locations

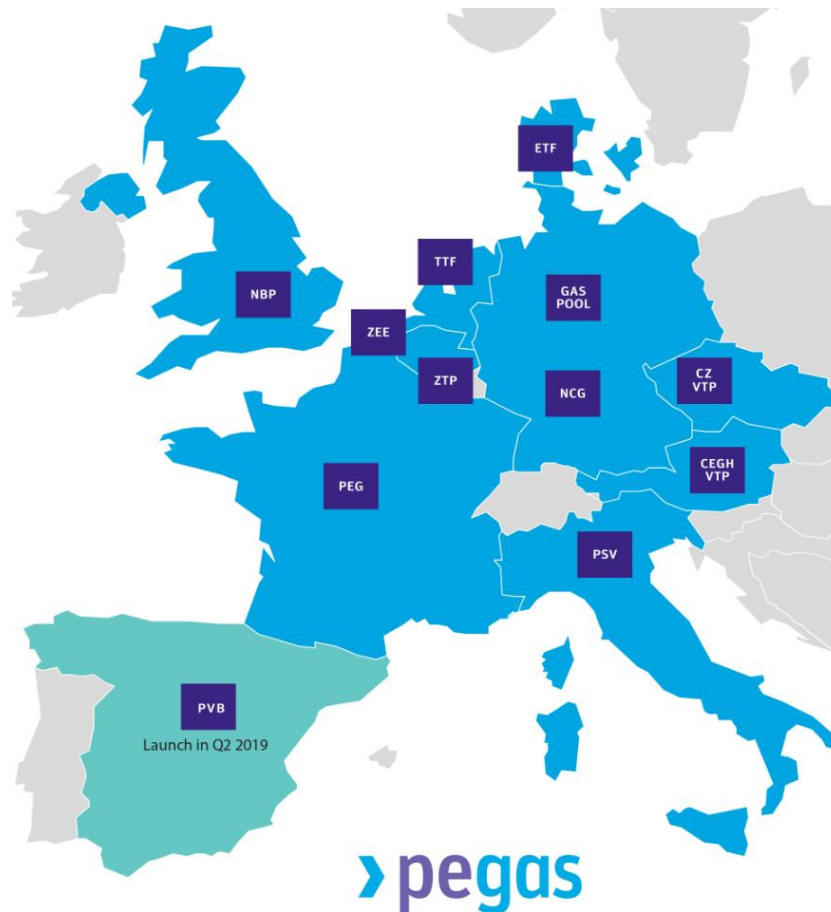
- |                  |                     |
|------------------|---------------------|
| 01_ Leipzig - HQ | 09_ Milan           |
| 02_ Amsterdam    | 10_ Oslo            |
| 03_ Berlin       | 11_ Paris           |
| 04_ Bern         | 12_ Prague          |
| 05_ Brussels     | 13_ Singapore       |
| 06_ Copenhagen   | 14_ Vienna          |
| 07_ London       | 15_ Madrid          |
| 08_ Luxembourg   | 16_ Washington D.C. |



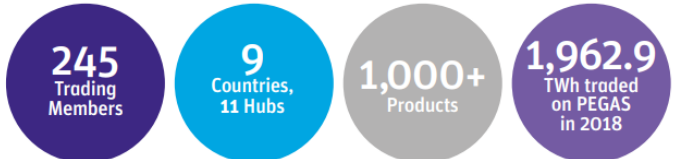
# PEGAS detailed products and services

## History

- 2007** Launch of EEX gas products for the German market.
- 2008** Launch of Powernext gas spot and Powernext gas futures for the French market.
- 2011** Launch of EEX gas spot products on TTF.
- 2013** In February, launch of monthly, quarterly, seasonal and yearly contracts on the Dutch TTF, as well as a PEG Nord/TTF Spread product.
- 2013** EEX and Powernext launch the PEGAS platform as a cooperation for natural gas trading in Europe, transfer of natural gas spot contracts traded on the EEX to PEGAS.
- 2014** Launch of Belgian ZTP spot and futures contracts.
- 2015** PEGAS launches the Belgian ZEE gas spot and futures markets as well as UK NBP spot and futures and PSV futures markets.
- 2015** EEX becomes Powernext's majority shareholder, successful migration of all active EEX gas market members to Powernext.
- 2016** Integration of spot and futures products of CEGH and Gaspoint Nordic into the PEGAS platform.
- 2017** Launch of time spread products on Pegas Futures. Integration of CZ VTP market.



### Key figures



## Spot markets 24/7

- Within-Day
- Day-Ahead
- Weekend (+ Saturday & Sunday)
- Individual Days

## Futures Markets

- Month +6
- Quarters +7 (11 for TTF)
- Seasons +6 (+3 for PVB)
- Calendars +6 (+2 for PVB)

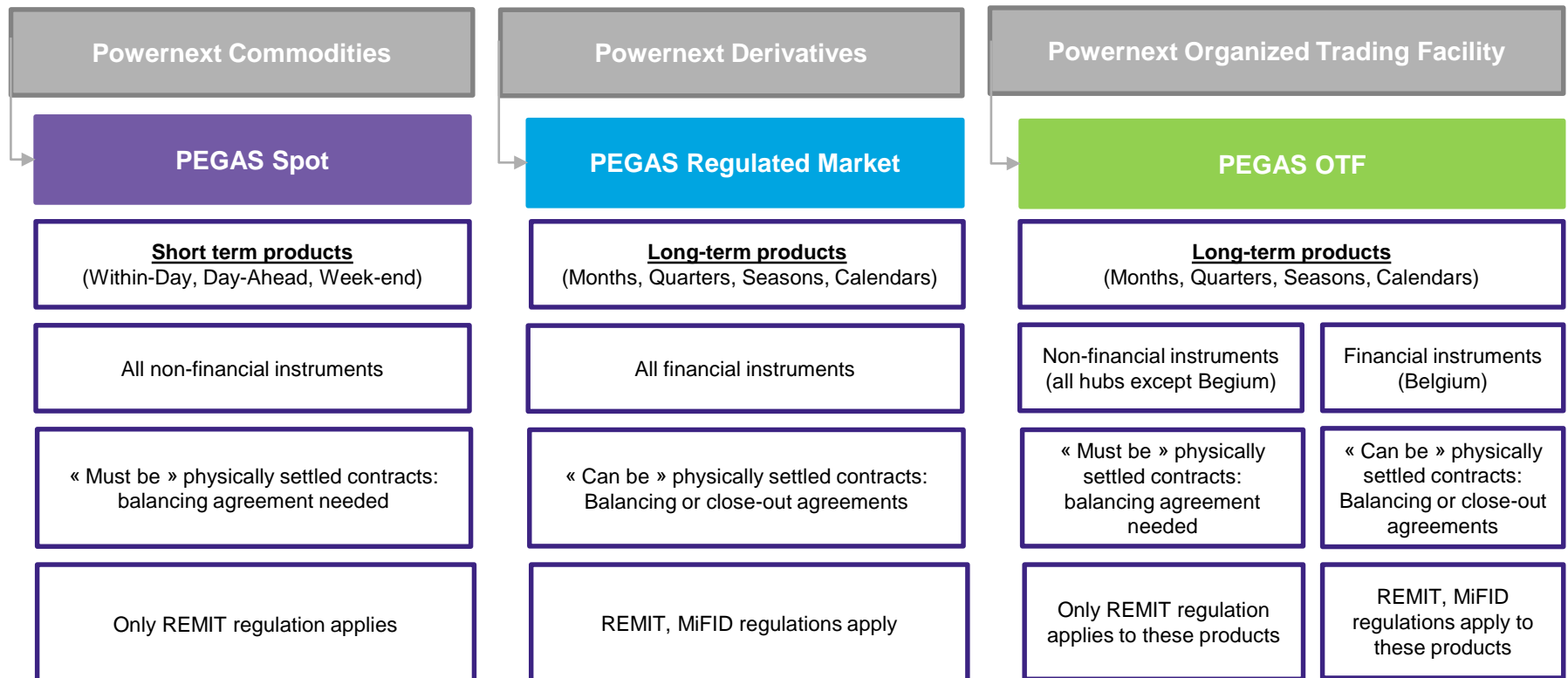
## Other products and services

- Locational Spreads trading
- Time Spreads
- OTC trade registration (STP)
- TTF Options
- Third party trading
- Third party shipping
- Combined cash limits
- Data and indices
- Reporting

# PEGAS Markets offering – legal framework

Powernext manages legally three different trading platforms for gas products under three sets of rules

Technically, all platforms can be accessed through one single screen



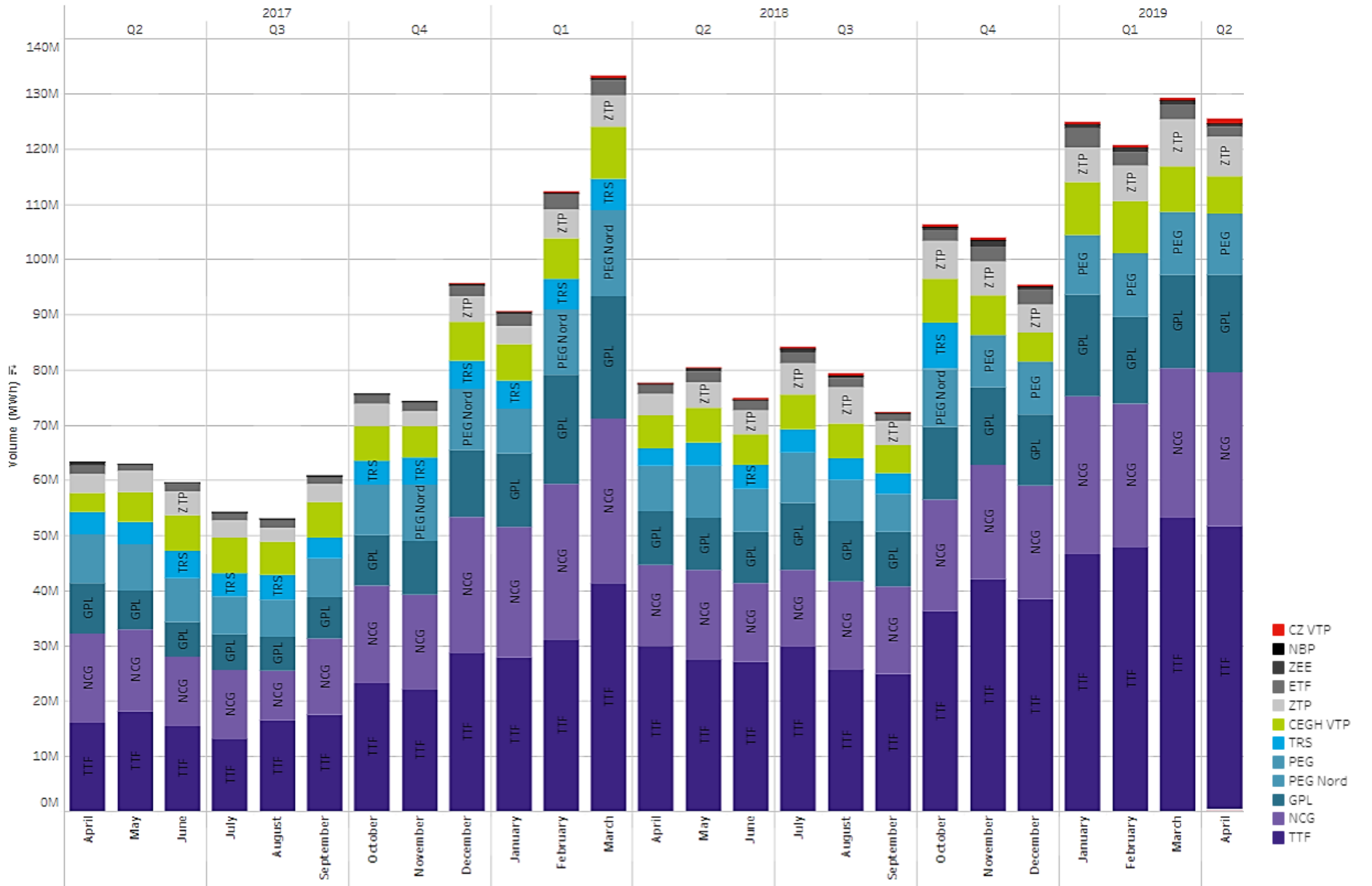
# Agenda

General presentation PEGAS

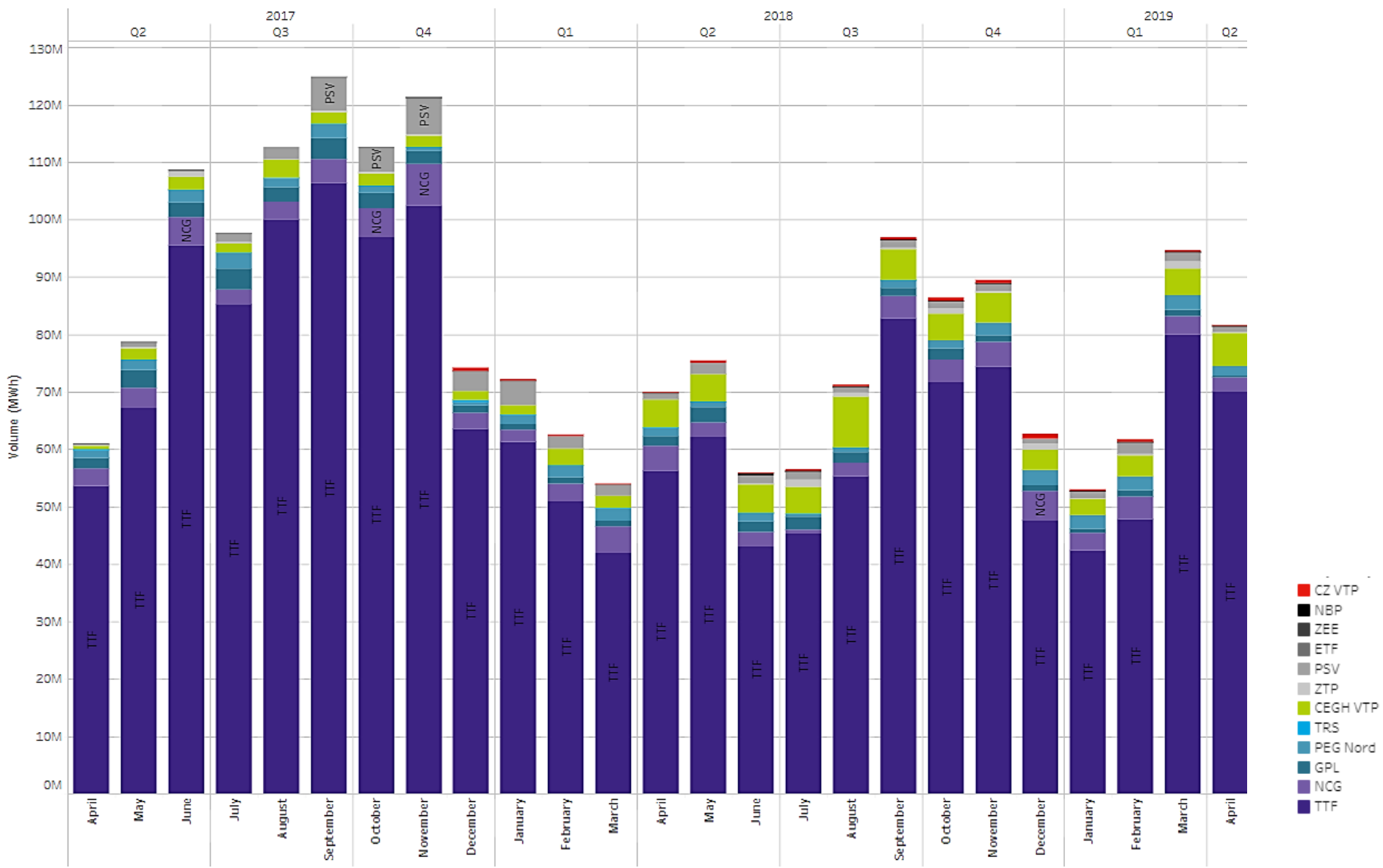
**The PEGAS Development : Volume and updates**

Clearing Services

# PEGAS Volume – Global Gas Spot



# PEGAS Volume - Global Gas Futures



# Agenda

General presentation of the EEX Group, Powernext and PEGAS

The PEGAS Development : Volume and updates

**Clearing Services**

# Network of Clearing Members

# 23

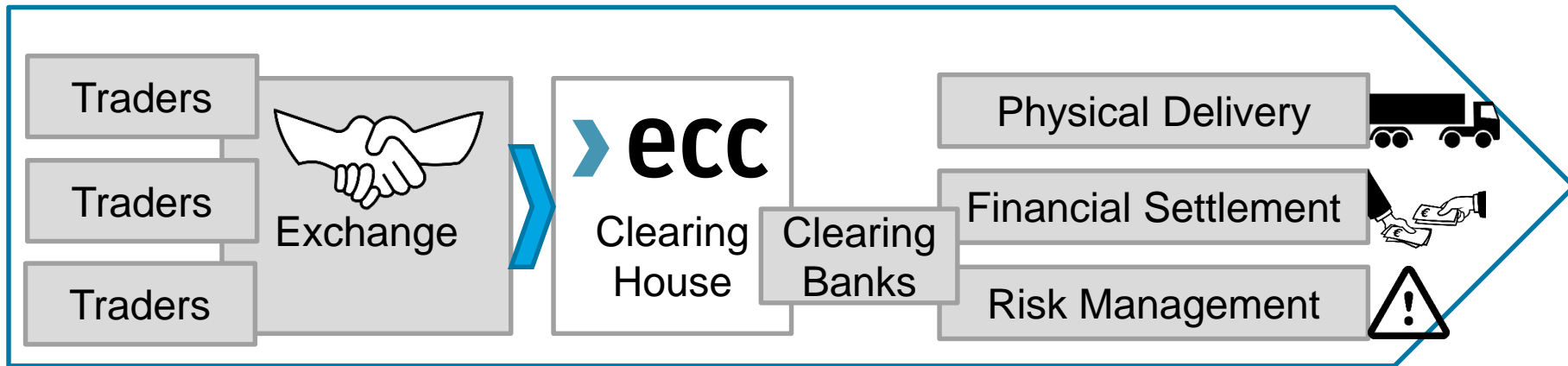
## Clearing Member

- ABN AMRO Clearing Bank N.V.
- Banca Akros SpA
- Banca Popolare di Sondrio SCPA
- Banco Santander, S.A.
- Bayerische Landesbank
- BNP Paribas Commodity Futures Ltd.
- Citigroup Global Markets
- Commerzbank
- ED&F Man Capital Markets Limited
- Goldman Sachs International
- INTL FCStone LTD
- J.P. Morgan Securities plc.
- KELER CCP Ltd.
- Macquarie Bank International
- Marex Financial Limited
- Merrill Lynch International
- Morgan Stanley & Co. International plc
- Oesterreichische Kontrollbank AG
- Raiffeisenbank a.s.
- Renta 4 Banco
- Societe Generale Newedge UK Limited
- UBS AG
- UniCredit Bank Czech Republic and Slovakia, a.s.





# Clearing: Crucial Step after each Exchange Trade

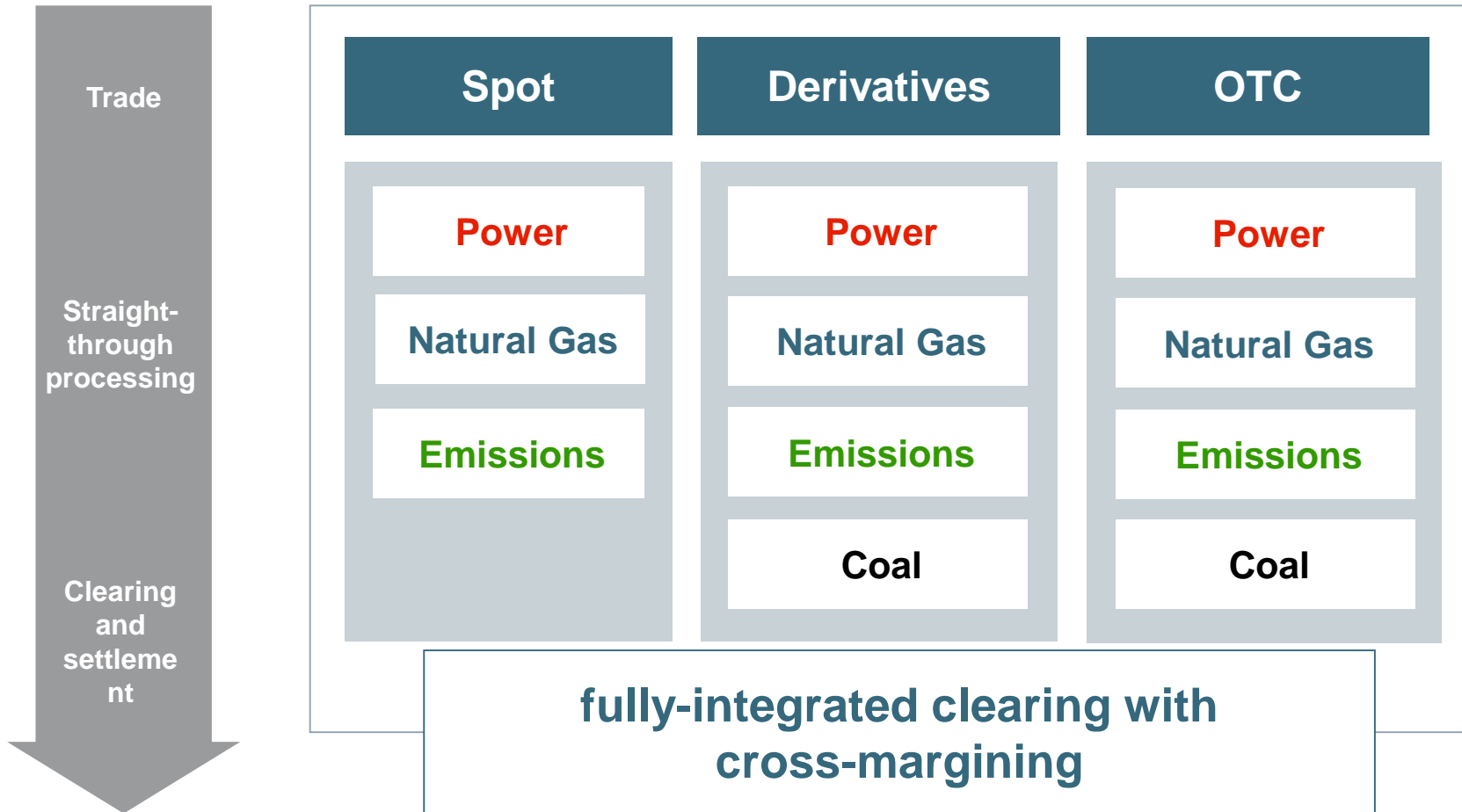


- All trades and payments will be reported on a daily base to clients, if subscribed.

## Clearing House ECC:

- ✓ Central counterparty
- ✓ Guarantees proper fulfillment
- ✓ Connects exchanges and OTC markets using an **integrated clearing platform**

# Clearing : Cost-effective margining through ECC



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- **PEGAS CEGH Gas Markets AT, CZ**
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## PEGAS CEGH Gas Markets

# Detailed Products and Services Offering



## Spot markets

- Hourly
- Within-Day
- Day-Ahead
- Weekend
- Saturday
- Sunday
- Individual Days

## Futures regulated markets

- Next 6 Months
- Next 7 Quarters
- Next 6 Seasons
- Next 6 Calendar years

## OTF markets

- Next 6 Months
- Next 7 Quarters
- Next 6 Seasons
- Next 6 Calendar years

**Locational Spreads trading facility with TTF, GPL, NCG, PSV and CZ VTP**

## Time Spreads

### Trade registration for futures contracts

Bilateral trade clearing at ECC through STP or OTC Web platform

### Data and indices

All customers have free access to EEX ftp and PEGAS tools

CEGHIX, CEGHEDI, 1<sup>st</sup> FM, 1<sup>st</sup> FQ and 1<sup>st</sup> FM Reference Index are published on the CEGH website

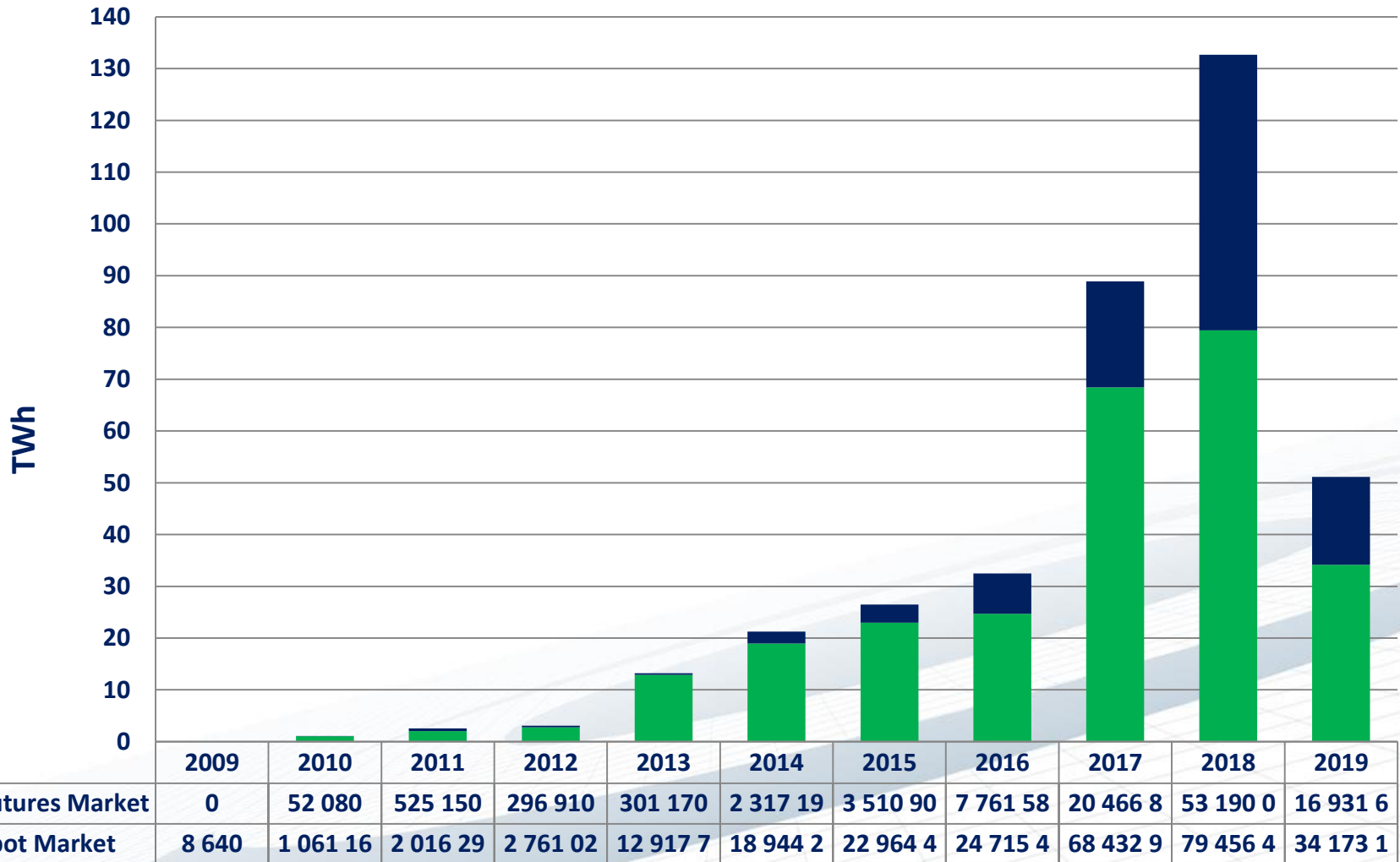
# PEGAS CEGH Spread Products



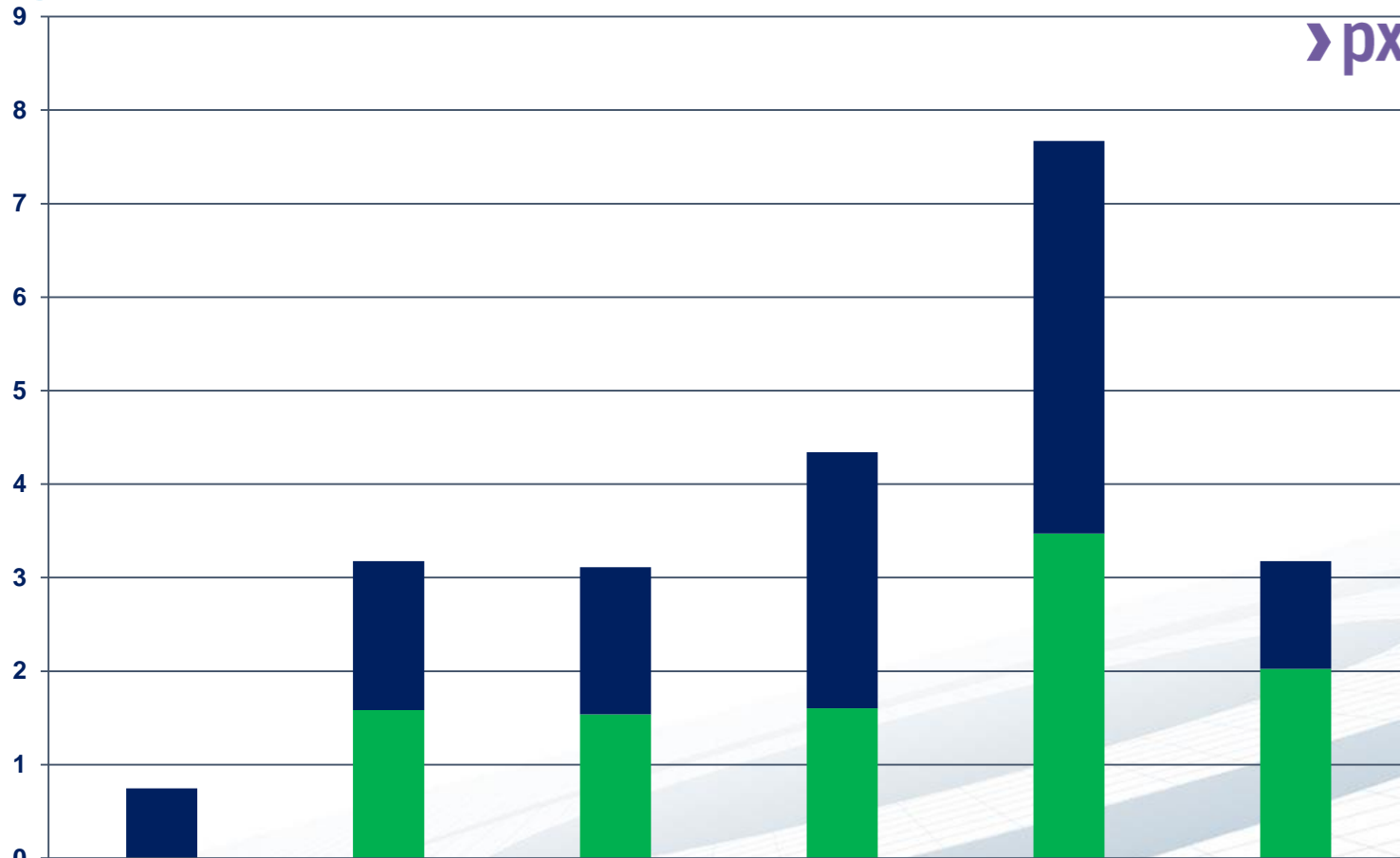
- **Locational Spreads:**
  - Used for change of ownership between different hubs without having shipping capacity rights
  - At Spot and Derivatives Market
  - Difference (Spread) between Hubs is traded
  - e.g. CEGH/TTF Spread
    - Bid Order: Buy CEGH; Sell TTF
    - Ask Order: Sell CEGH; Buy TTF
- **Time Spreads:**
  - Used to change ownership within different futures products
  - For Storage Optimization
  - e.g. May 18 / June 18 Spread
    - Bid Order: Buy May; Sell June
    - Ask Order: Sell May; Buy June



# CEGH Gas Exchange: Yearly Trading Volume since 2009



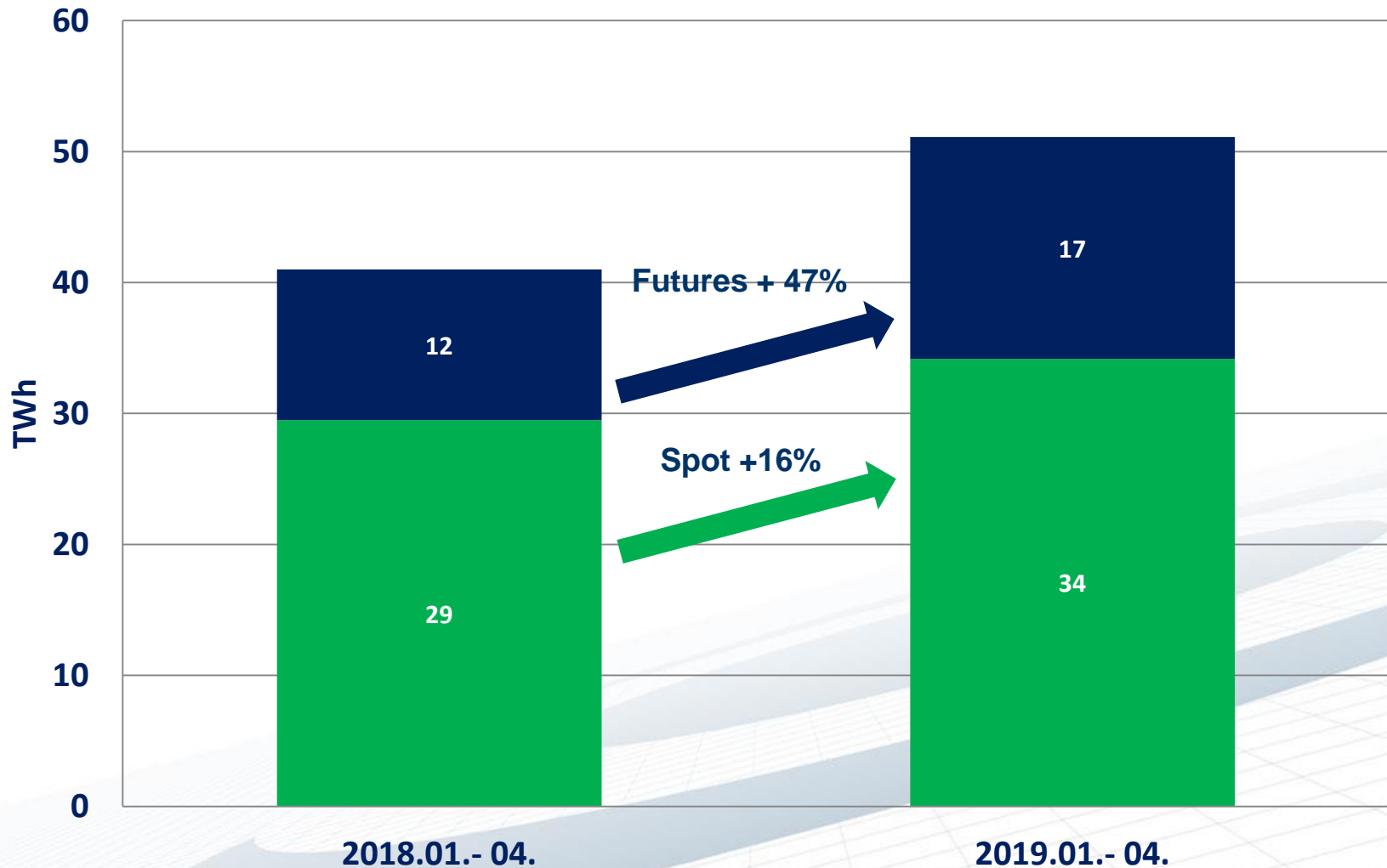
# PEGAS CEGH Czech Gas Market: Yearly Trading Volume since 2014



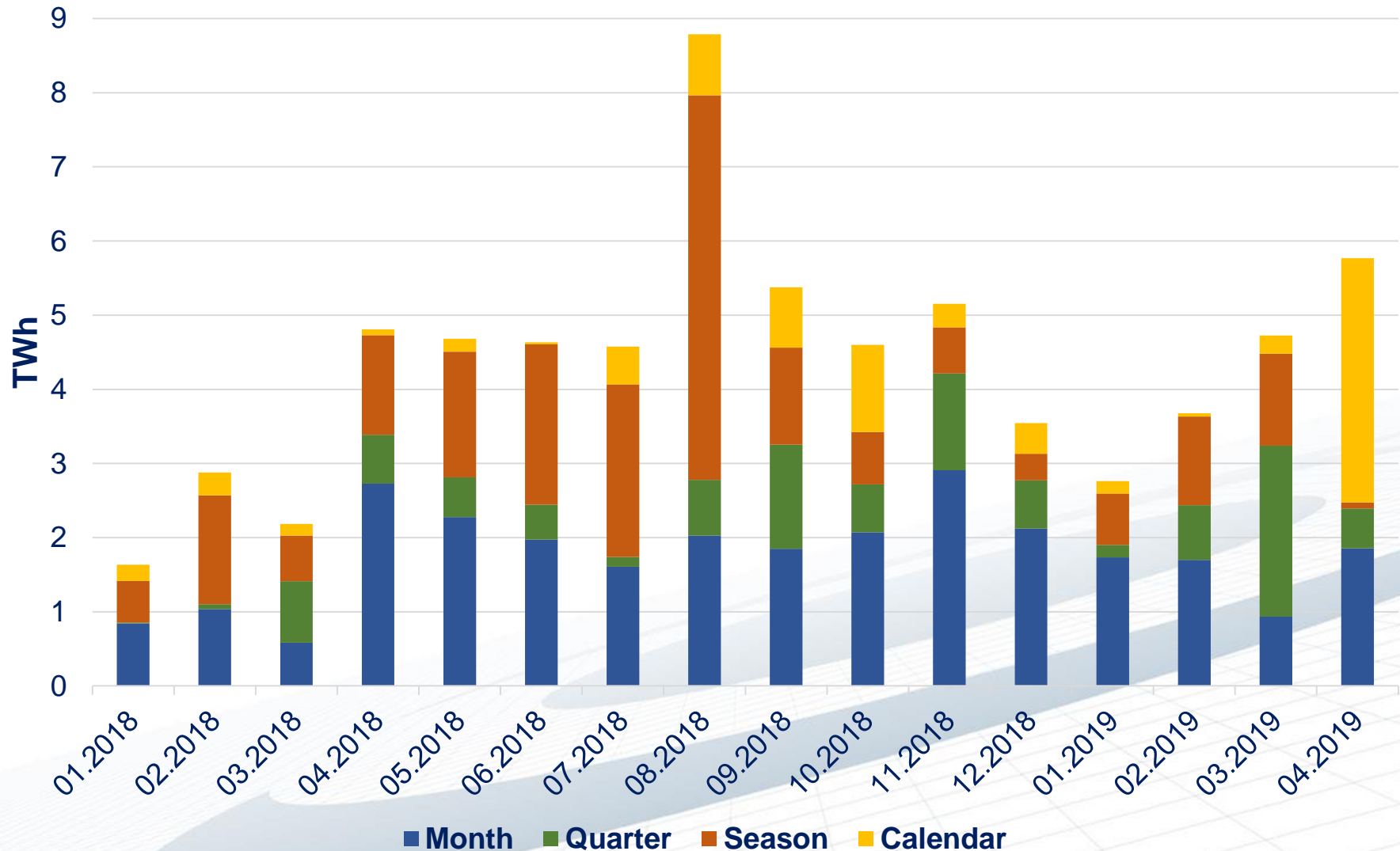
	2014	2015	2016	2017	2018	01. - 04.2019
■ PEGAS CZ Futures	745080	1593757	1574601	2 736 787	4 198 844	1 149 097
■ PEGAS CZ Spot	0	1584050	1538496	1 604 244	3 472 197	2 026 118



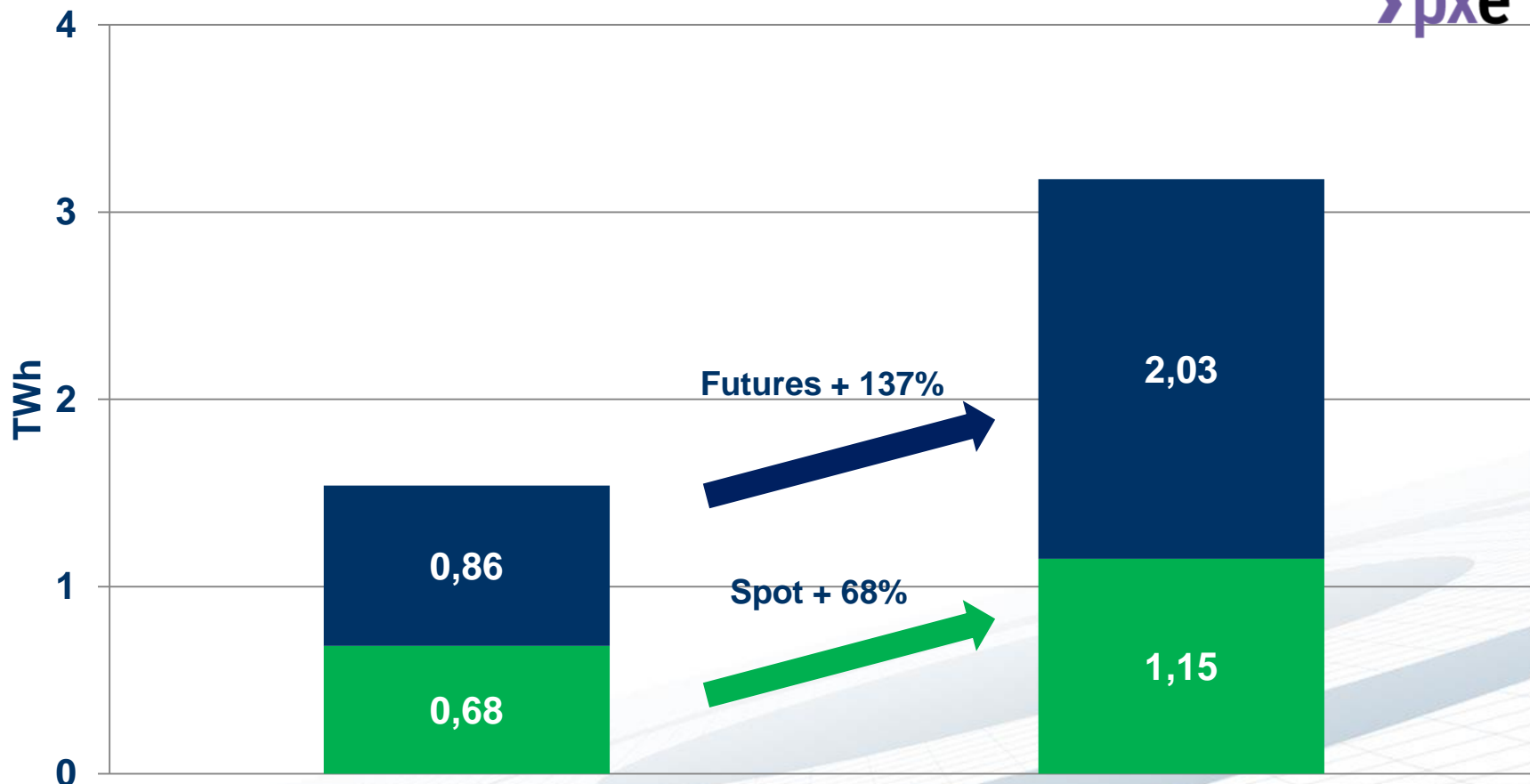
# PEGAS CEGH Austrian Gas Market: Spot and Future Growth 01.- 04.2018 vs 2019



# PEGAS CEGH Austrian Gas Market: Monthly Futures Volume since 2018



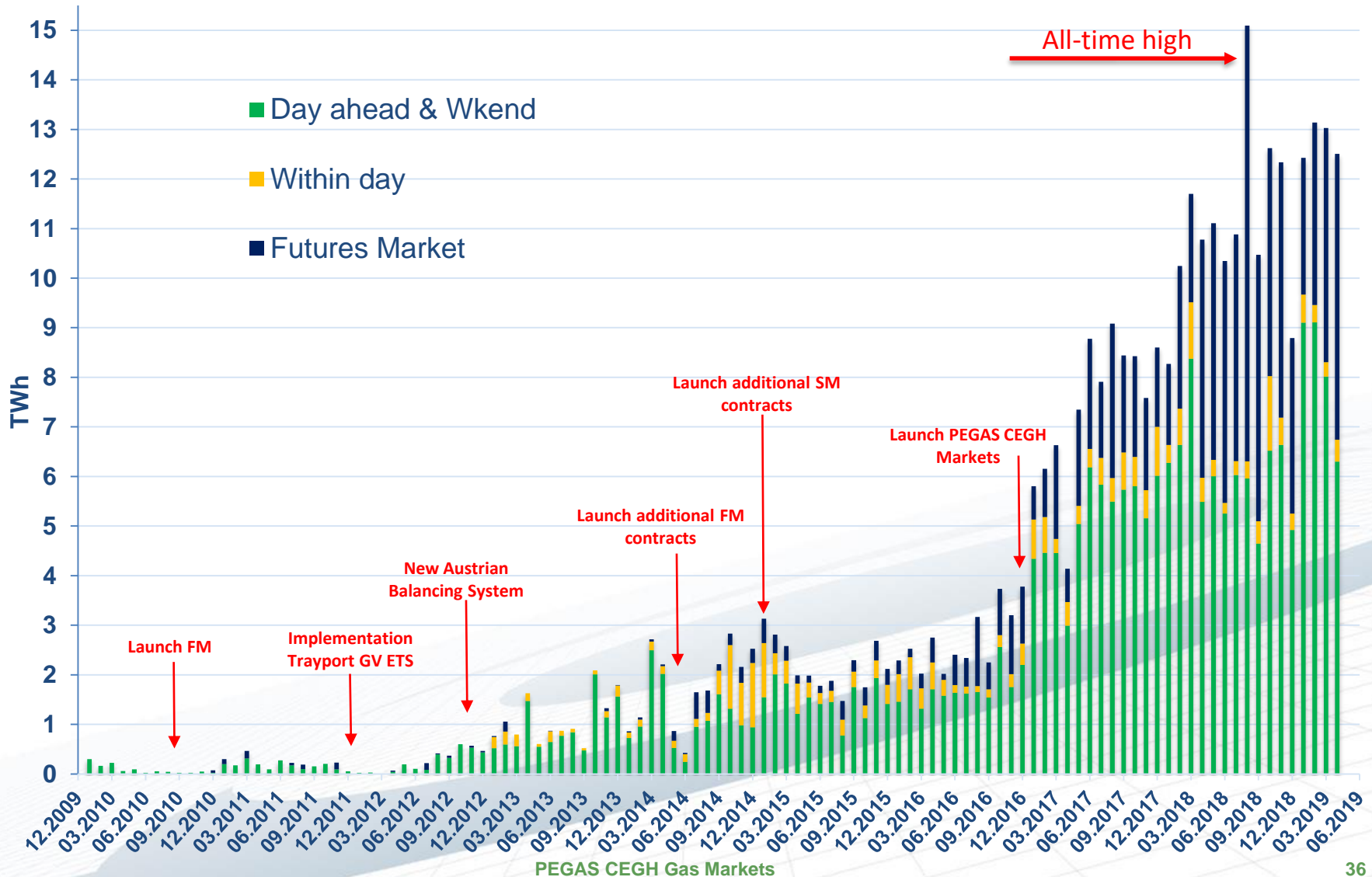
# PEGAS CEGH Czech Gas Market : Spot and Futures Growth 01. – 04.2018 vs 2019



	01.04.2018	01.04.2019
■ Spot	855 856	2 026 118
■ Futures	683 624	1 149 097

# PEGAS CEGH Gas Market

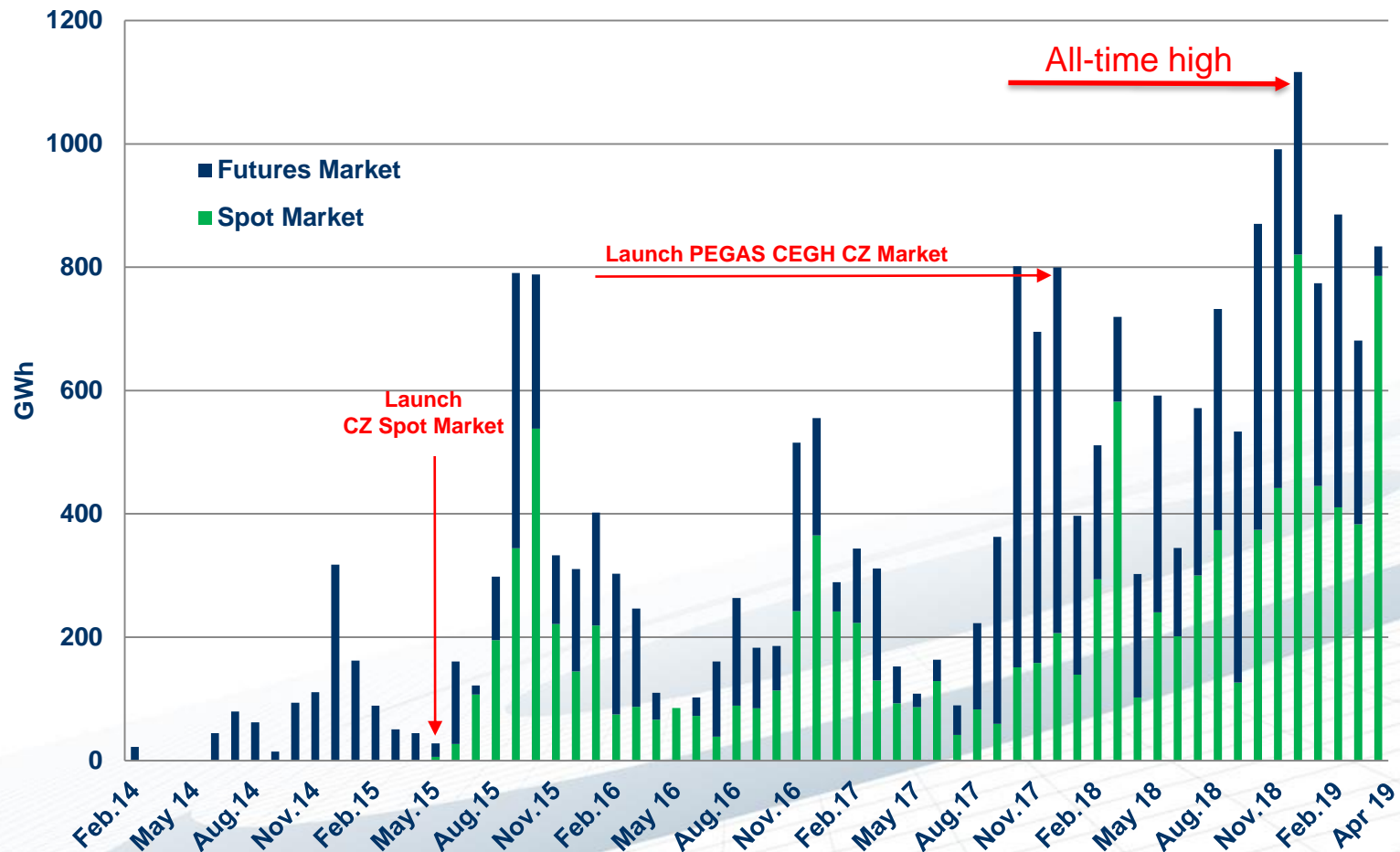
## Monthly Trading Volume since Dec 2009



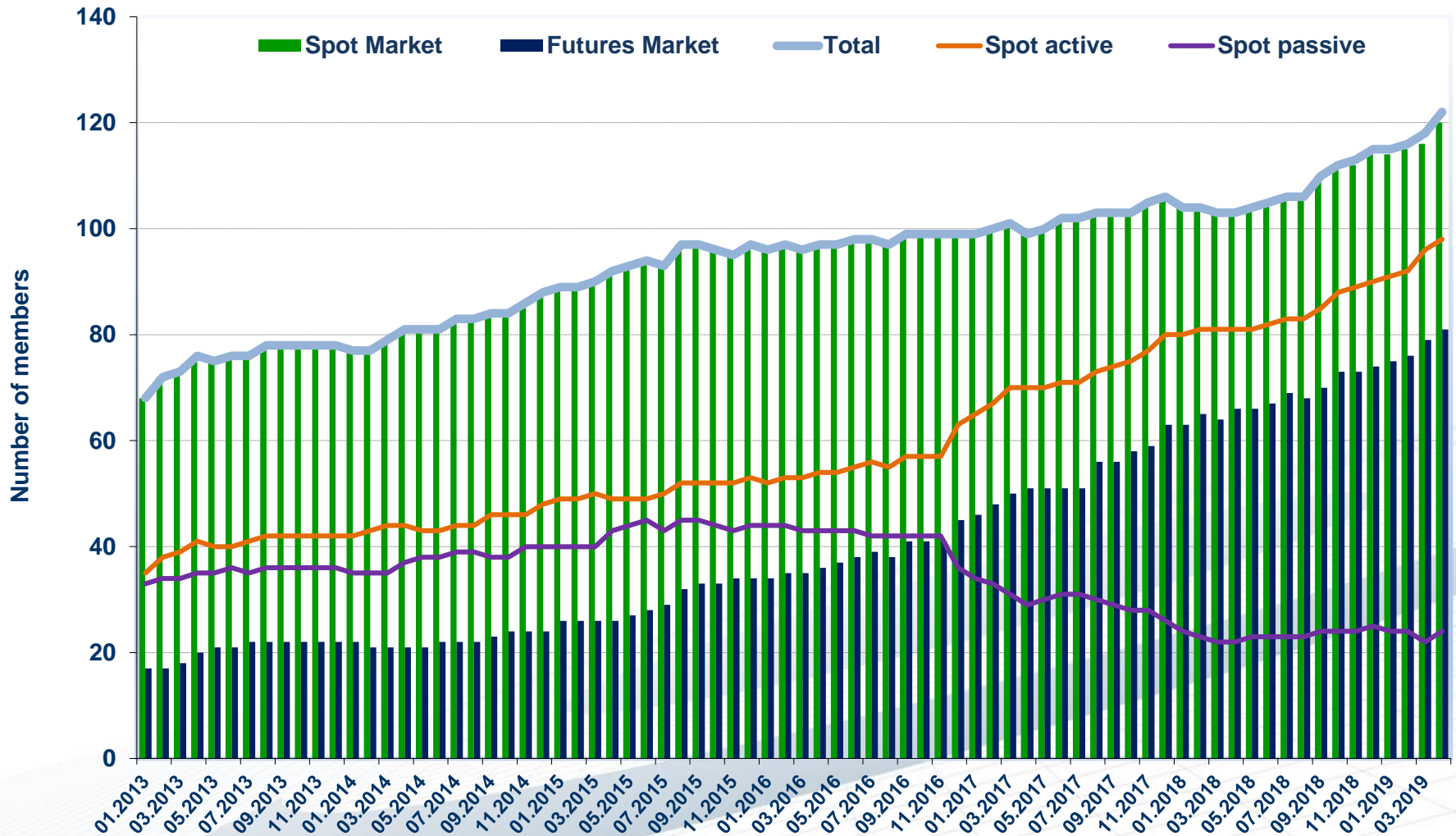
# PEGAS CEGH Czech Market: Monthly Trading Volume



Traded Volume on Spot & Futures Market



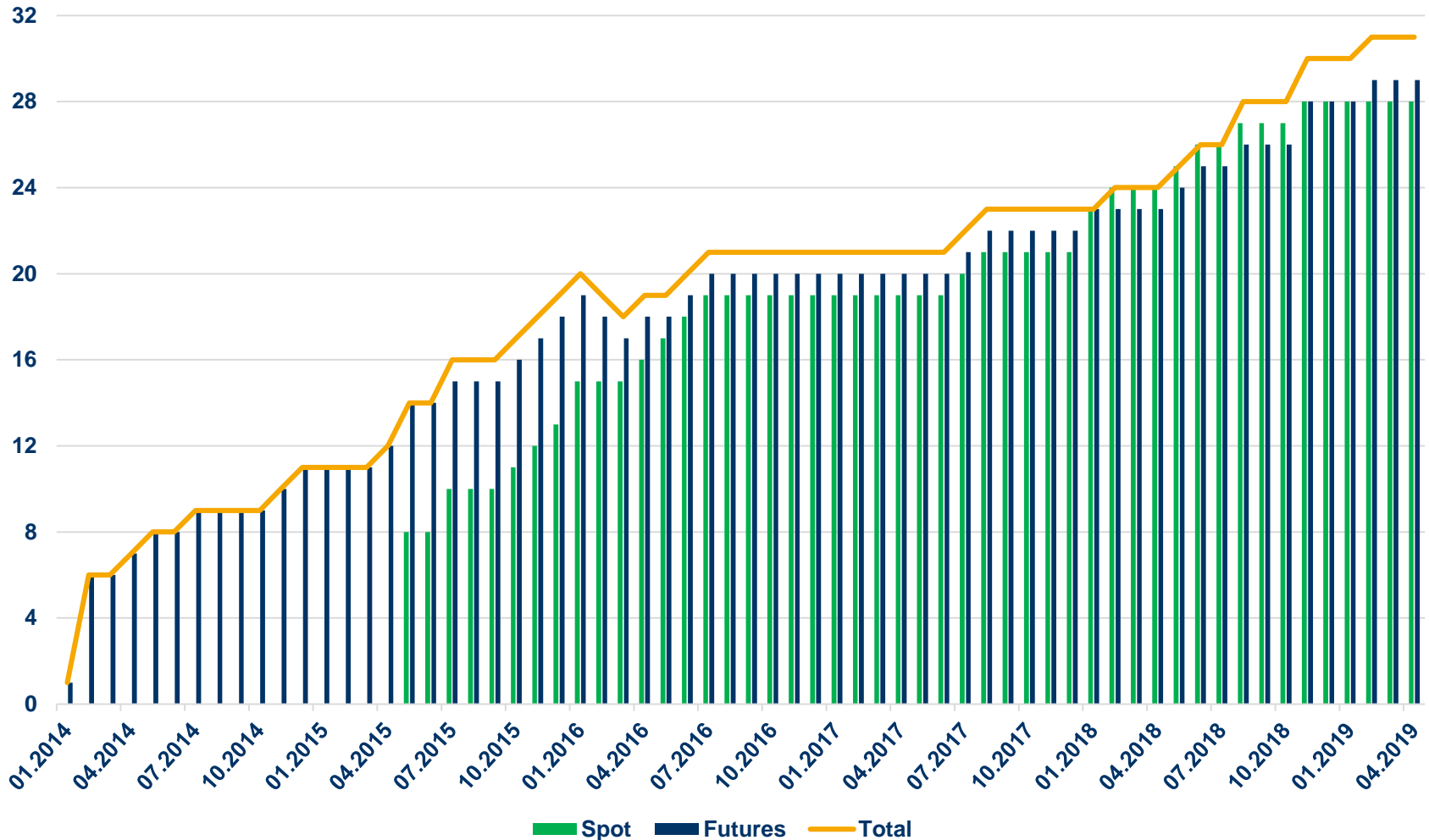
# Development of the Members since 2013



# PEGAS CEGH Czech Gas Market: Development of Members since 2014



Trading participants CZ



# Questions?



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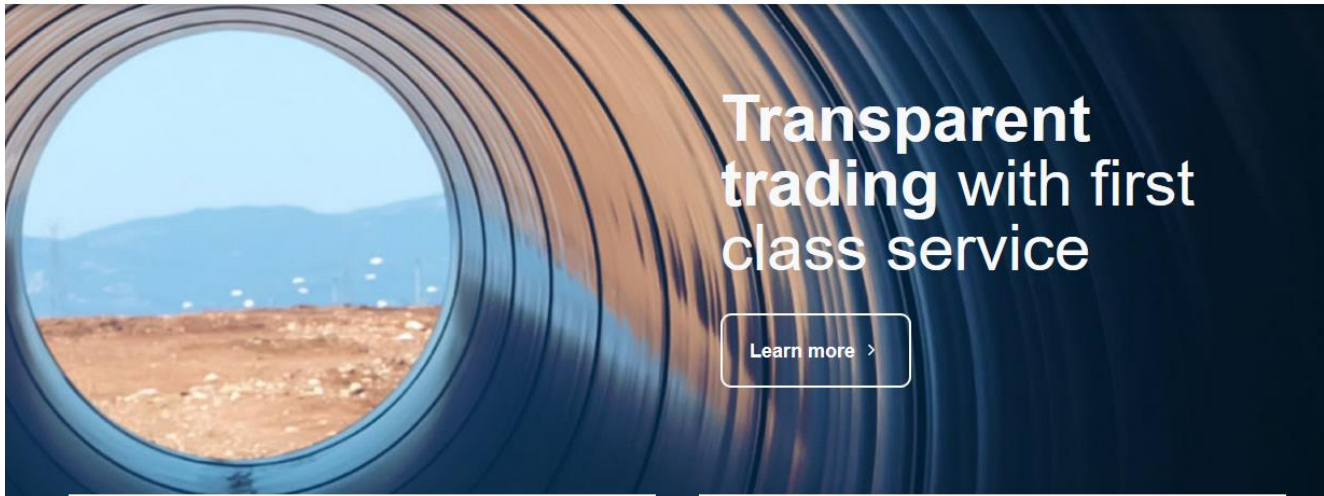
# Relaunch of CEGH Website



VWAP/CEGHIX 15.404 €/MWh ▾ EN ▾ Nomination Platform



VTP MARKET EXCHANGE MARKET BECOME A MEMBER SERVICES ABOUT US



## Transparent trading with first class service

[Learn more >](#)

### PEGAS CEGH AT Day Ahead Market >

Trading Day	Contract	VWAP / CEGHIX €/MWh
21 May	<b>Wednesday</b>	<b>15.421</b>
20 May	<b>Tuesday</b>	<b>15.679</b>
19 May	<b>Monday</b>	<b>15.746</b>

### PEGAS CEGH AT Futures Market >

Trading Day	Contract	Settlement Price €/MWh
20 May	<b>June 2019</b>	<b>15.619</b>
20 May	<b>Q3 2019</b>	<b>15.744</b>
20 May	<b>Winter 2019</b>	<b>20.696</b>

Saturday and Sunday Contracts show the VWAP (no official CEGHIX)

[All market data >](#)

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# Relaunch of CEGH Website



## Main Features of new CEGH Website:

- Detailed Market Data information on CEGH Website: incl. download of the last 3 months
- CEGHIX alert: online registration for daily notification
- Online registration tool for new CEGH members
- List of all registered CEGH members
- Measures of Liquidity according to EFET guidelines
- Registration for CEGH Newsletter
- Direct access to CEGH CMT Nomination Platform
- Links to CEGH REMIT Platform and CEGH Gas Storage Marketing Platform

# Relaunch of CEGH Website



## Market Data for CEGH VTP:

- Table with monthly nominated volume back to 2013
- Download of VTP nominated volumes on daily basis back to 2013
- List of all registered CEGH members

## CEGH VTP Volumes

[CEGH Statistics 2019](#)

[CEGH Statistics 2018](#)

[CEGH Statistics 2017](#)

[CEGH Statistics 2016](#)

[CEGH Statistics 2015](#)

[CEGH Statistics 2014](#)

[CEGH Statistics 2013](#)

With the launch of the new Austrian Gas Market Model by 1 January 2013 all CEGH Volumes are published in energy units.

Delivery Month	Net Traded Volume TWh	Physical Volume TWh	Churn Rate
2019-04	48.13	17.3	2.78
2019-03	68.14	20.46	3.33
2019-02	67.77	19.55	3.47
2019-01	65.49	21.56	3.04
2018-12	56.88	16.78	3.39
2018-11	61.65	15.72	3.92
2018-10	65.50	15.26	4.29
2018-09	48.54	13.31	3.65
2018-08	50.19	14.57	3.44
2018-07	52.95	14.74	3.59
2018-06	45.33	13.59	3.33
2018-05	52.43	15.83	3.31

# Relaunch of CEGH Website



## Market Data for PEGAS CEGH Gas Exchange Market:

- Overview of all trades per day  
(accumulated, DA with 15 minutes delay, Futures at the end of the day)
- Index for Austria:  
CEGHEDI, CEGHIX, 1st Front Month, 1st Front Quarter
- Index for CZ:  
CZ Spot Reference Price
- Single select function:  
search for any historic day to see the Market Data for this specific day
- Market Data download with data of the last 3 months  
(in csv format, per contract)
- Subscription for daily CEGHIX notification

# Relaunch of CEGH Website



VTP MARKET EXCHANGE MARKET BECOME A MEMBER SERVICES ABOUT US



Select market:  Select product:

## Day Ahead Market

[.CSV](#)

Select contract

Select country (AT or CZ)

csv download

Trading Day	Contract	Open €/MWh	High €/MWh	Low €/MWh	Close €/MWh	Volume acc.	Trades	CEGHEDI	VWAP / CEGHIX €/MWh	Trend	Best Bid	Best Ask
21.05.	Wednesday	15.000	15.000	15.000	-	480	1	-	15.000	▼	15.300	15.975
20.05.	Tuesday	15.700	16.050	15.375	16.050	243 432	193	15.565	15.679	→		
19.05.	Monday	15.600	16.650	15.000	15.000	217 176	184	15.666	15.746	→		
18.05.	Sunday	16.050	16.050	15.150	15.150	8 064	11	-	15.655	→		
17.05.	Saturday	16.025	16.250	15.925	16.250	2 424	3	-	15.655	→		
17.05.	Weekend	15.975	15.975	15.375	15.800	441 120	187	15.560	15.655	▼		
16.05.	Friday	16.400	16.550	15.600	16.475	231 312	205	15.817	16.282	▼		
15.05.	Thursday	16.700	16.750	16.425	16.450	238 104	217	16.675	16.536	→		
14.05.	Wednesday	16.400	16.800	16.350	16.575	196 440	172	16.621	16.517	▼		

VWAP ... Volume Weighted Average Price published from 08:00 am CET until 06:00 pm CET. Prices 15 minutes delayed;

CEGHIX ... CEGH Gas Index published at 07:50 pm

Please mind that the price for Saturday and Sunday is no official CEGHIX (Index), but shows the VWAP to give a price indication for these products. The price for weekend products is the official CEGHIX for this time period.

# Relaunch of CEGH Website



- Settlement prices are published daily at around 07:15 p.m.
- CEGHIX alert is sent at the same time

Daily CEGHIX alert by e-mail



Always  
Up to date

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# 18<sup>th</sup> CEGH Feedback Workshop



## Agenda

- Welcome, Opening Words
- Update CEGH VTP
- PEGAS Markets - overview
- PEGAS CEGH Gas Markets AT, CZ
- Features of the new CEGH Website
- **Feedback Session / Q&A**
- Lunch

# 18<sup>th</sup> CEGH Feedback Workshop



**Save the Date: 19th CEGH Feedback Workshop:**  
5 December 2019, Palais Coburg, Vienna



**Thank you very much  
for your attention**

