

A decorative network diagram on the left side of the slide, consisting of a web of thin grey lines connecting small dots in blue, green, and yellow.

CEGH FEEDBACK WORKSHOP

27 June 2023

- **About CEGH**
- CEGH VTP Operations
- EEX CEGH Gas Exchange
- CEGHs New Corporate Design
- CEGH GreenGas Platform
- CEGH GreenHydrogen Index

CEGH Volume Development 01-05/2023

CEGH VTP Market:

01-05/2023

227.2 TWh

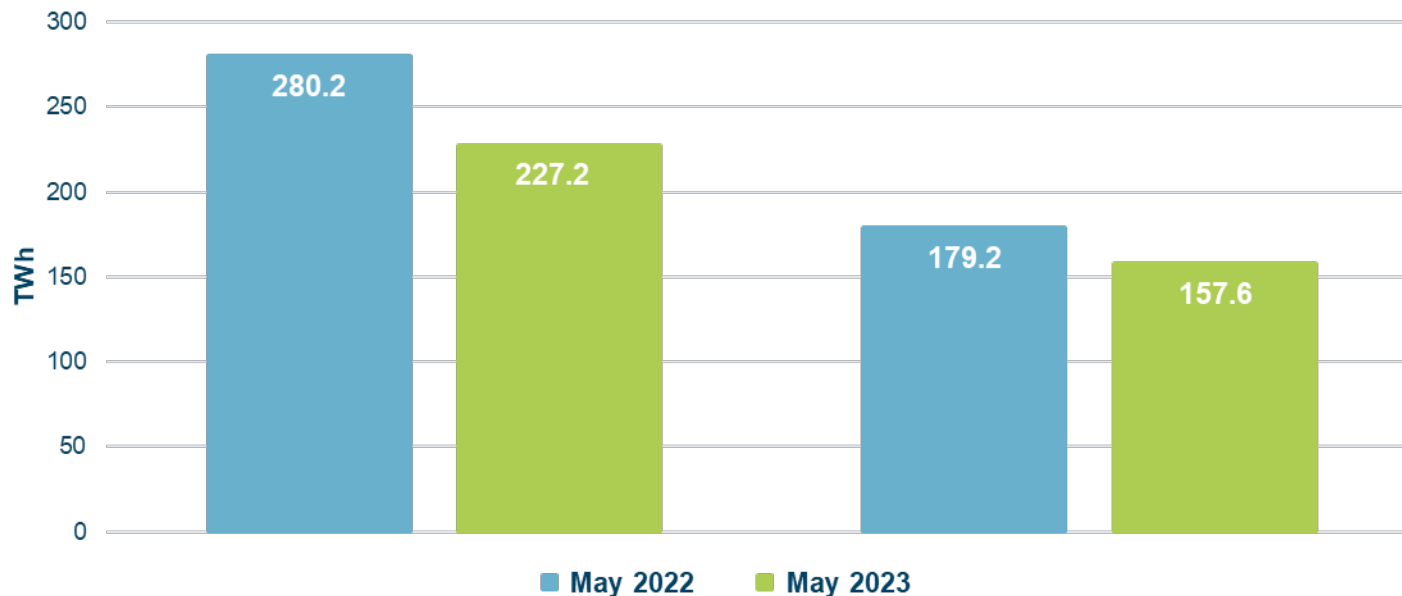
y-t-y: -18.9%

EEX CEGH Market AT:

01-05/2023

157.6 TWh

y-t-y: -12%



EEX CEGH DA/WE

Open-Low-High-Close Prices



Historical EEX CEGH Prices

Spot and Futures Contract Prices

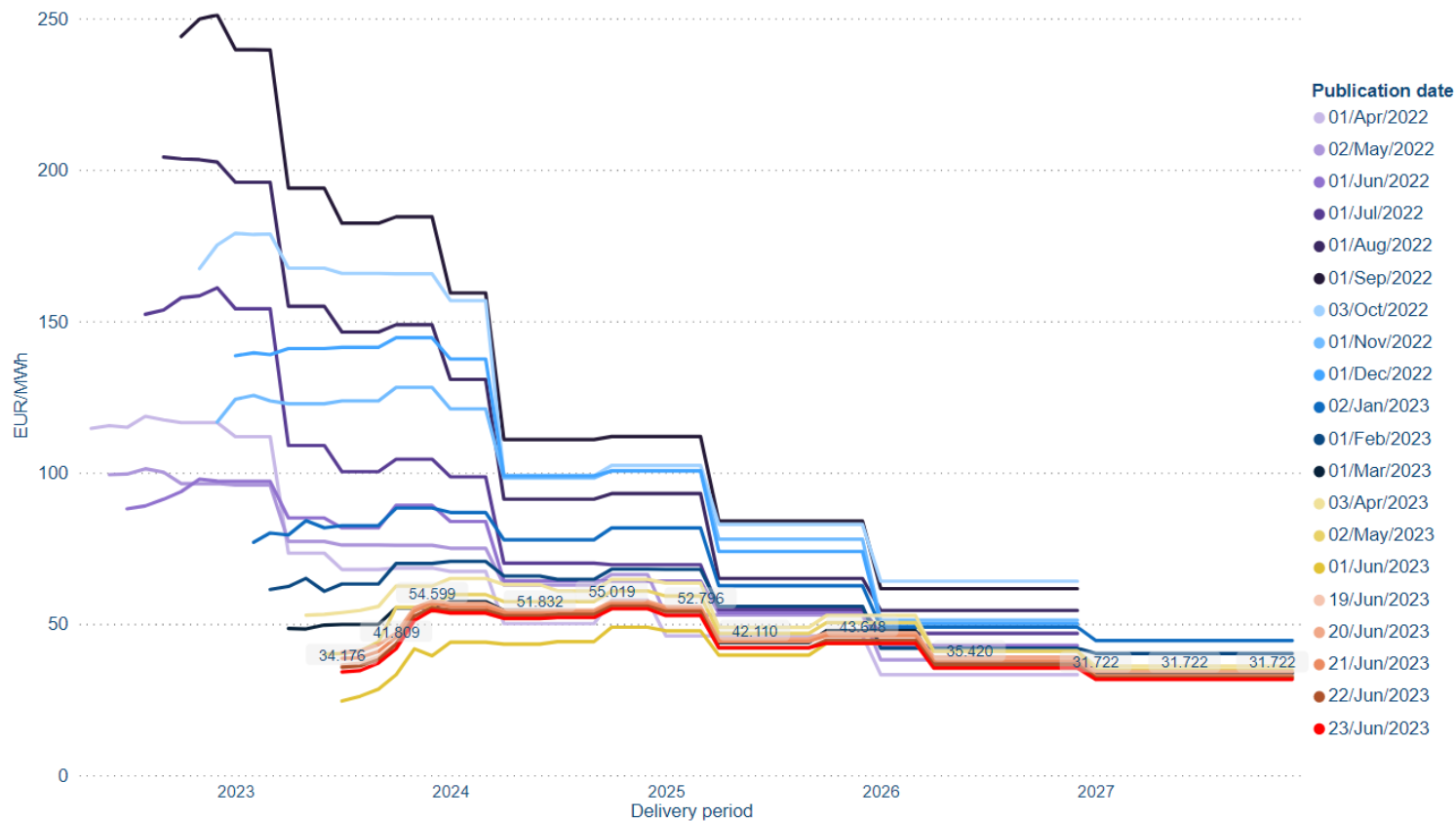


Maturity ● Day-ahead / Weekend ● Month +1 ● Quarter +1 ● Season +1 ● Calendar +1

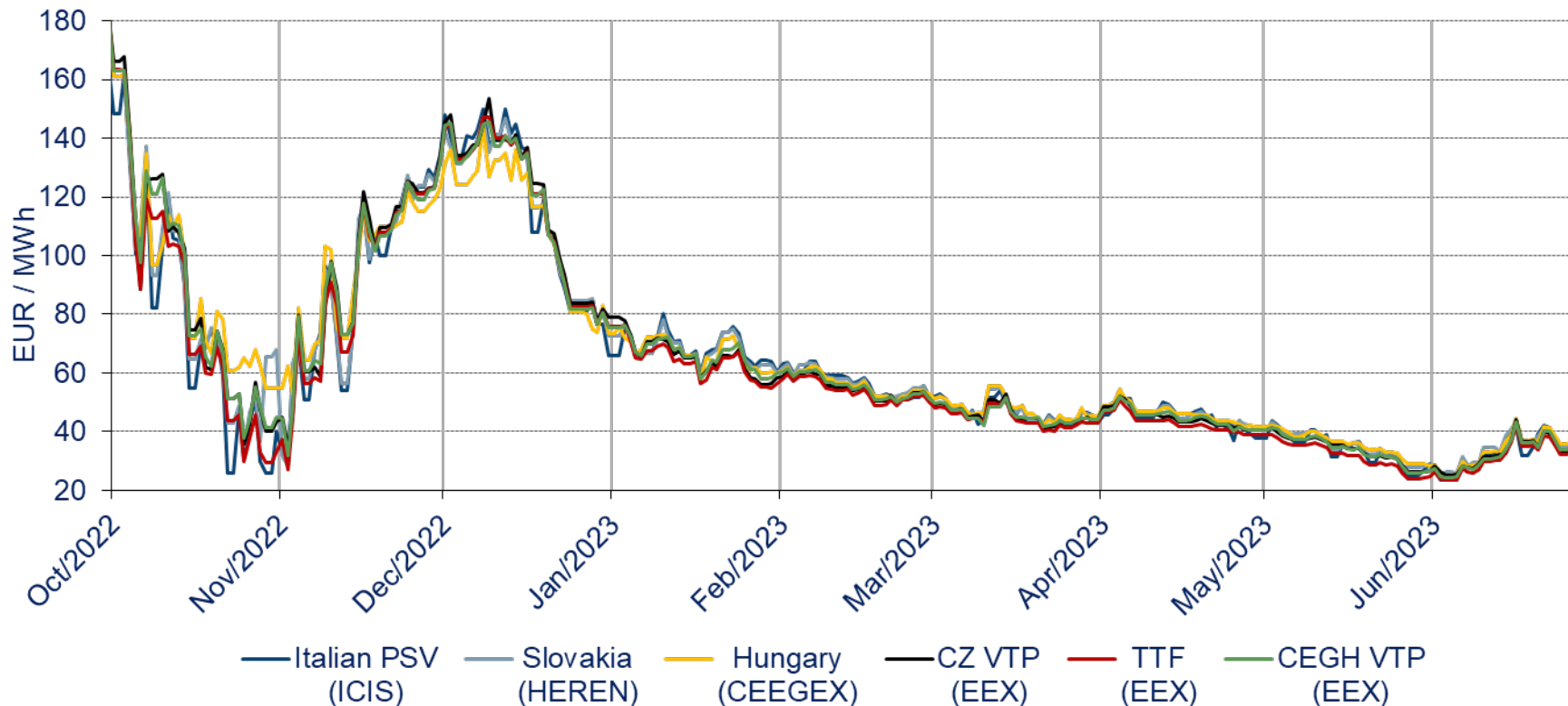


EEX CEGH Futures Price Curve

On the 1st trading day of the month and last 5 trading days

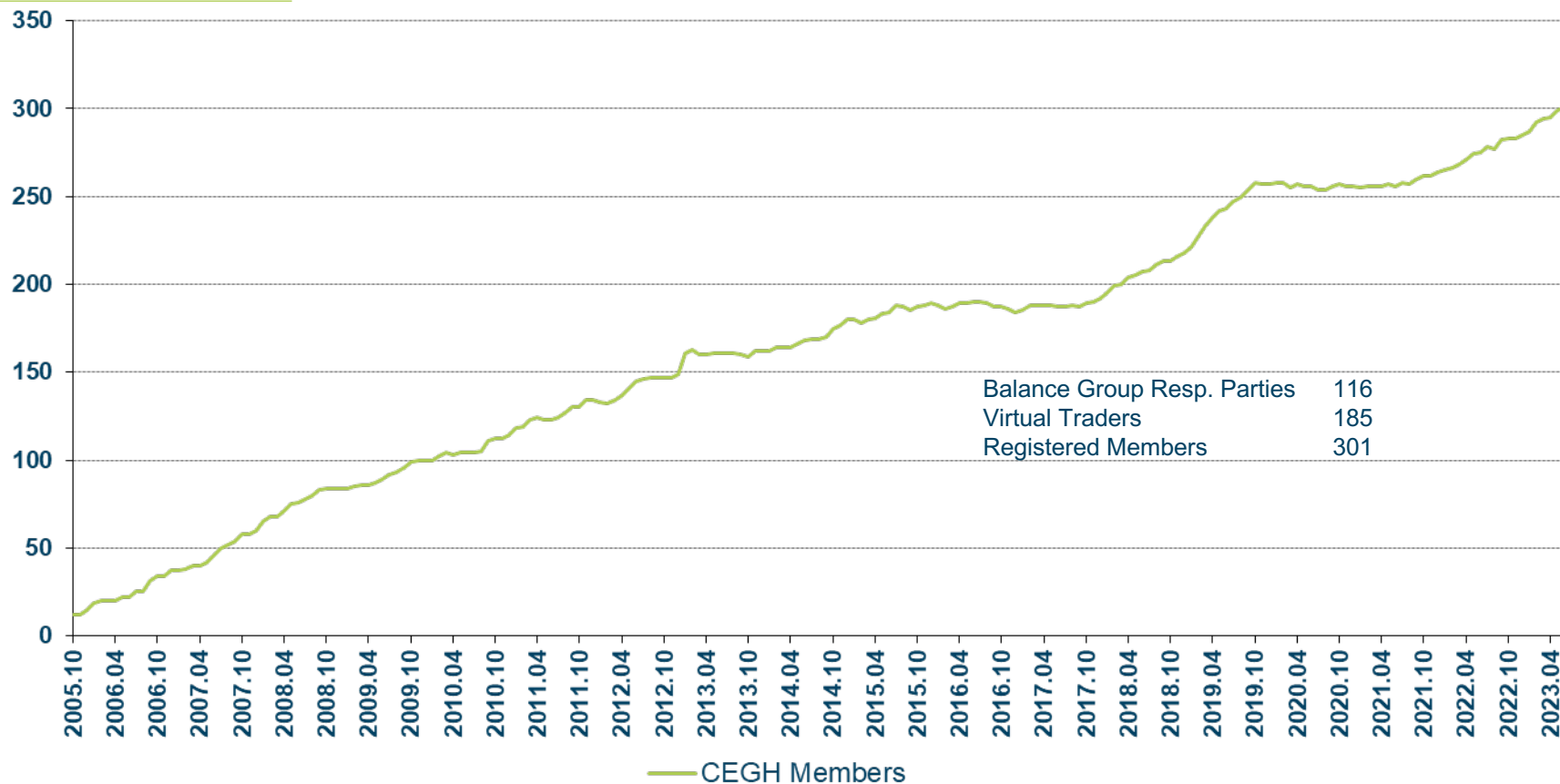


European Spot (DA/WE) Settlement Prices



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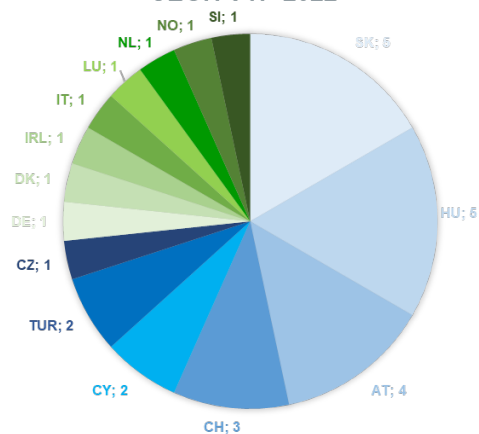
CEGH VTP: Number of Registered Members



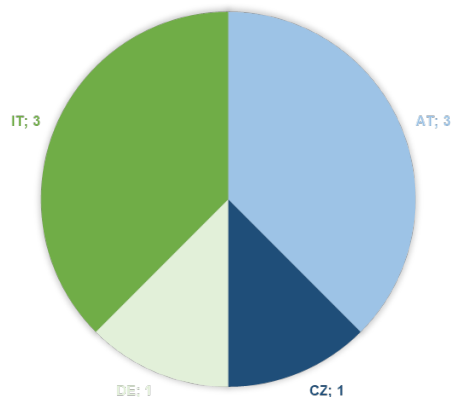
CEGH Customer Development

- **New members joining CEGH in 2022:**
30 new members and 8 member terminations
resulting in **285 members** in total at the end of the year.

**NEW CUSTOMERS
CEGH VTP 2022**

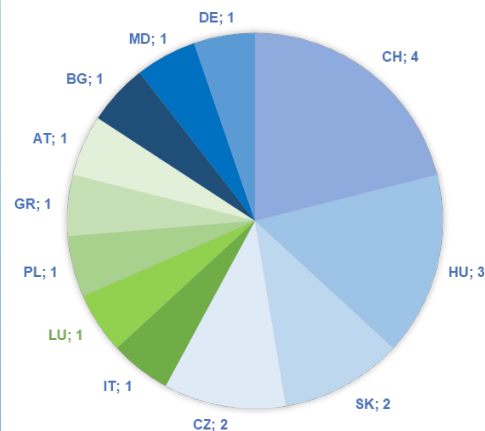


**CUSTOMER TERMINATIONS
CEGH VTP 2022**

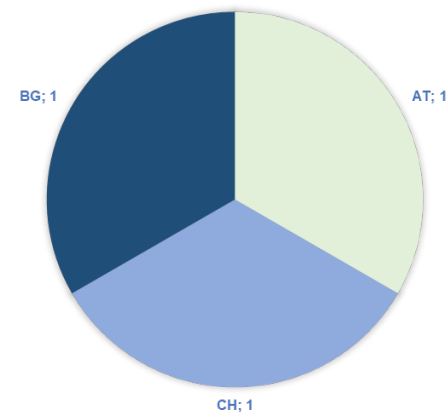


- **New members joining CEGH in 2023:**
19 new members and 3 member terminations
resulting in **301 members** in total by June 2023.

**NEW CUSTOMERS
CEGH VTP 2023**

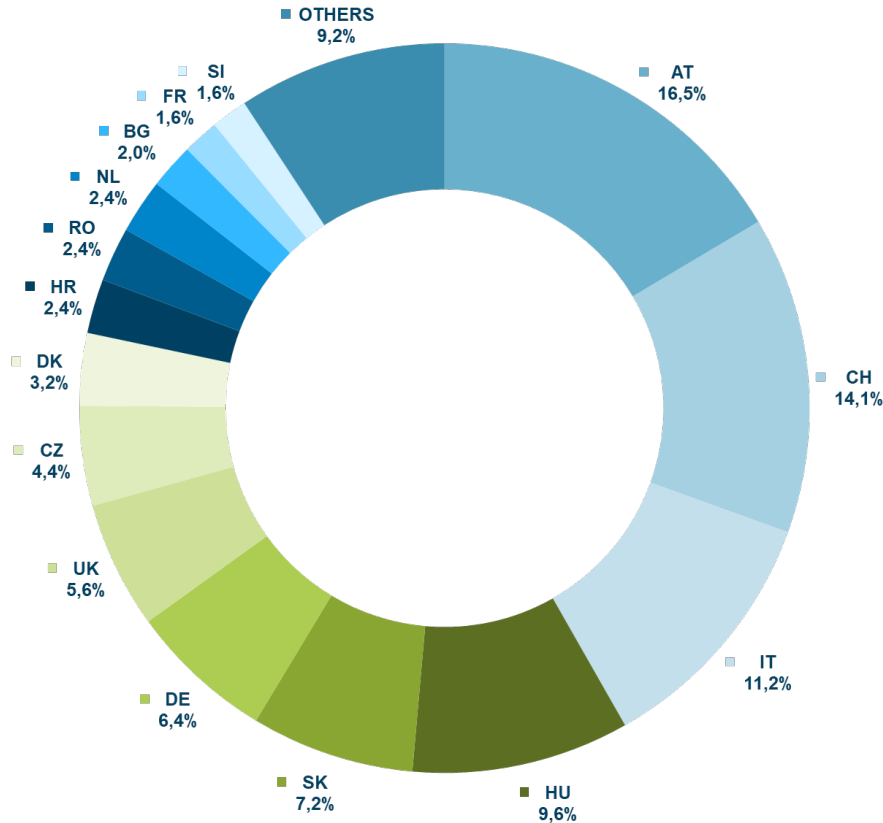


**CUSTOMER TERMINATIONS
CEGH VTP 2023**



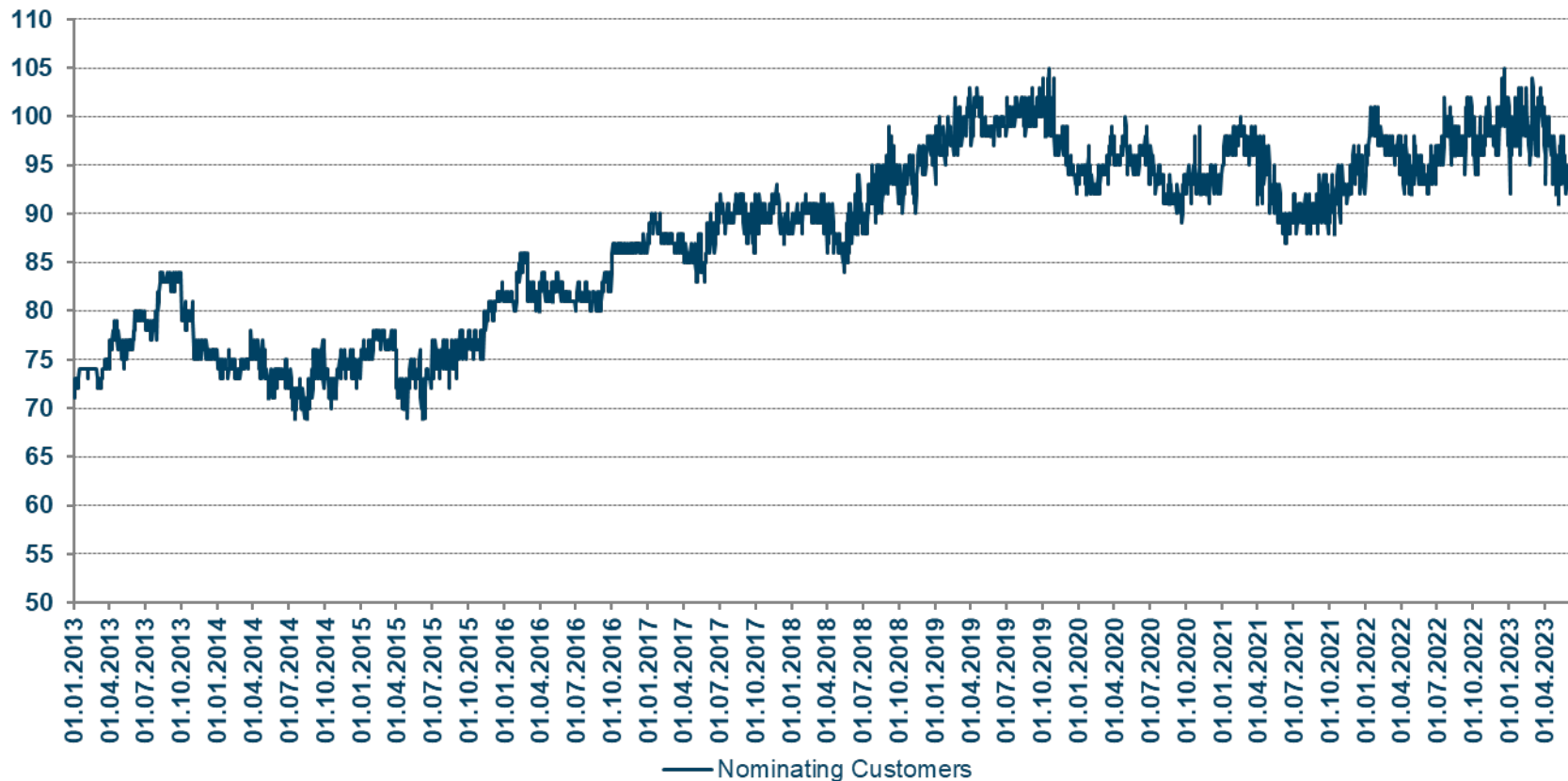
CEGH VTP: Diversity of Registered Members

301 Members
June 2023



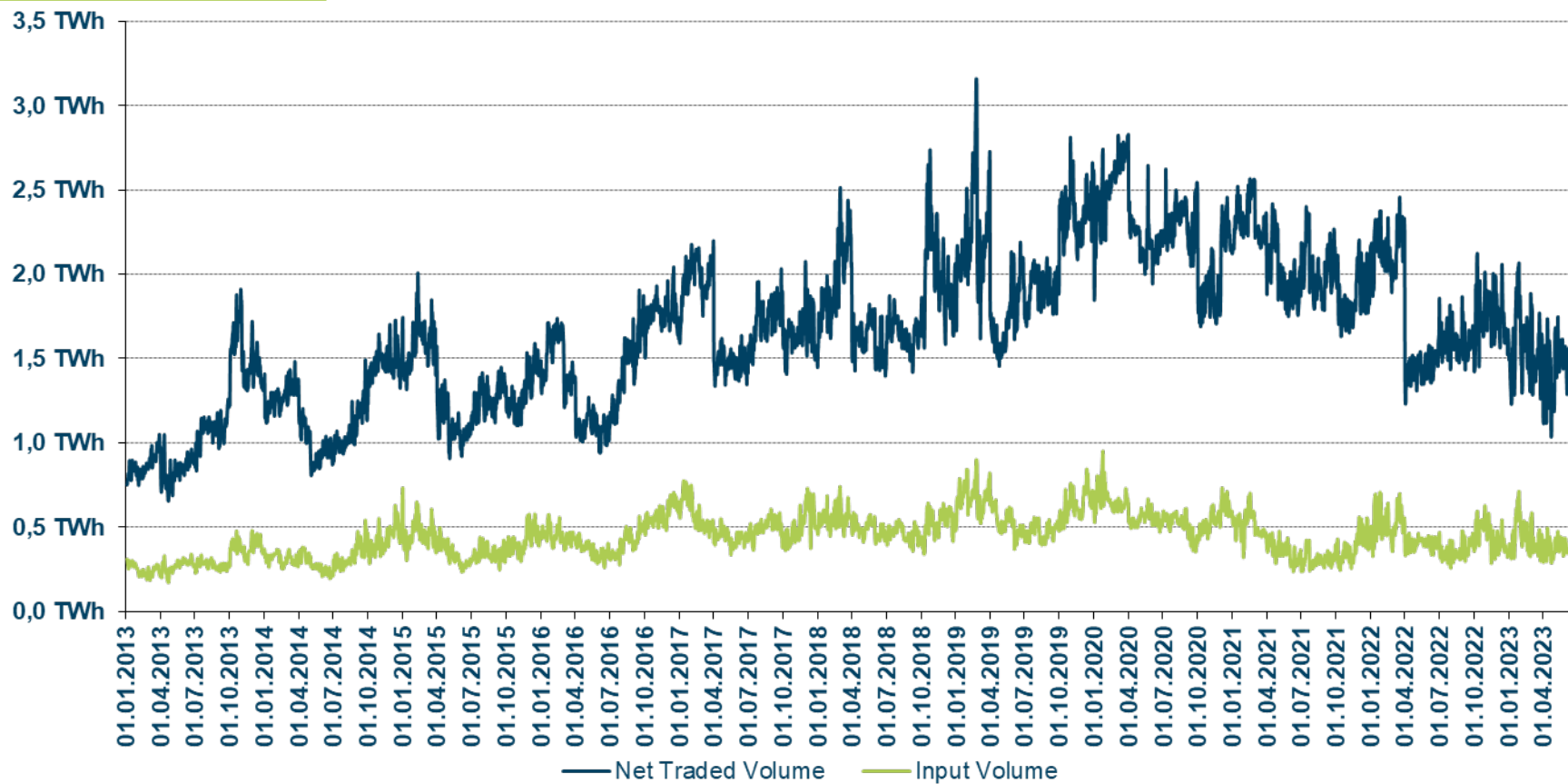
CEGH VTP: Nominating Customers on Daily Basis

Since January 2013



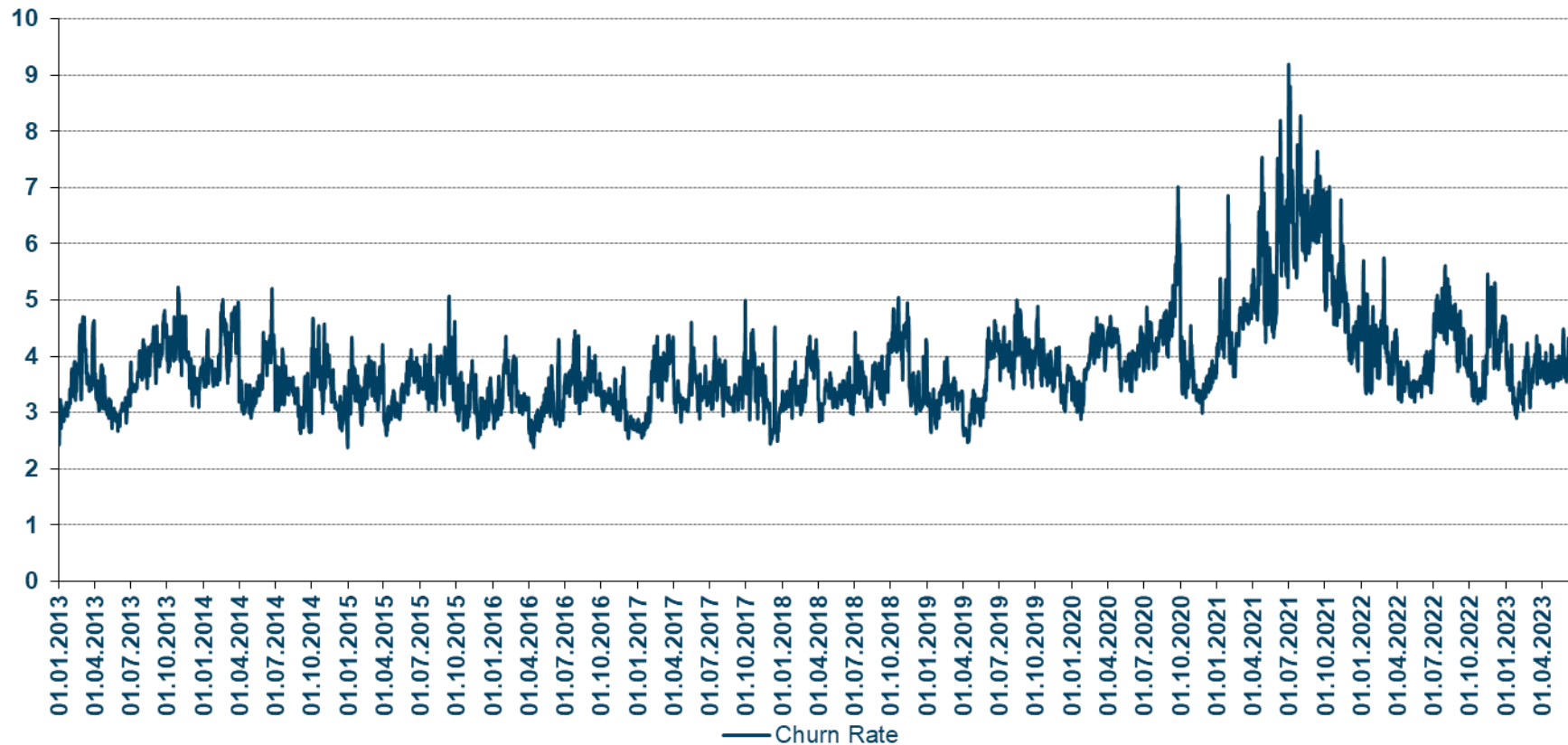
CEGH VTP: Daily Net Traded Volume

Since January 2013

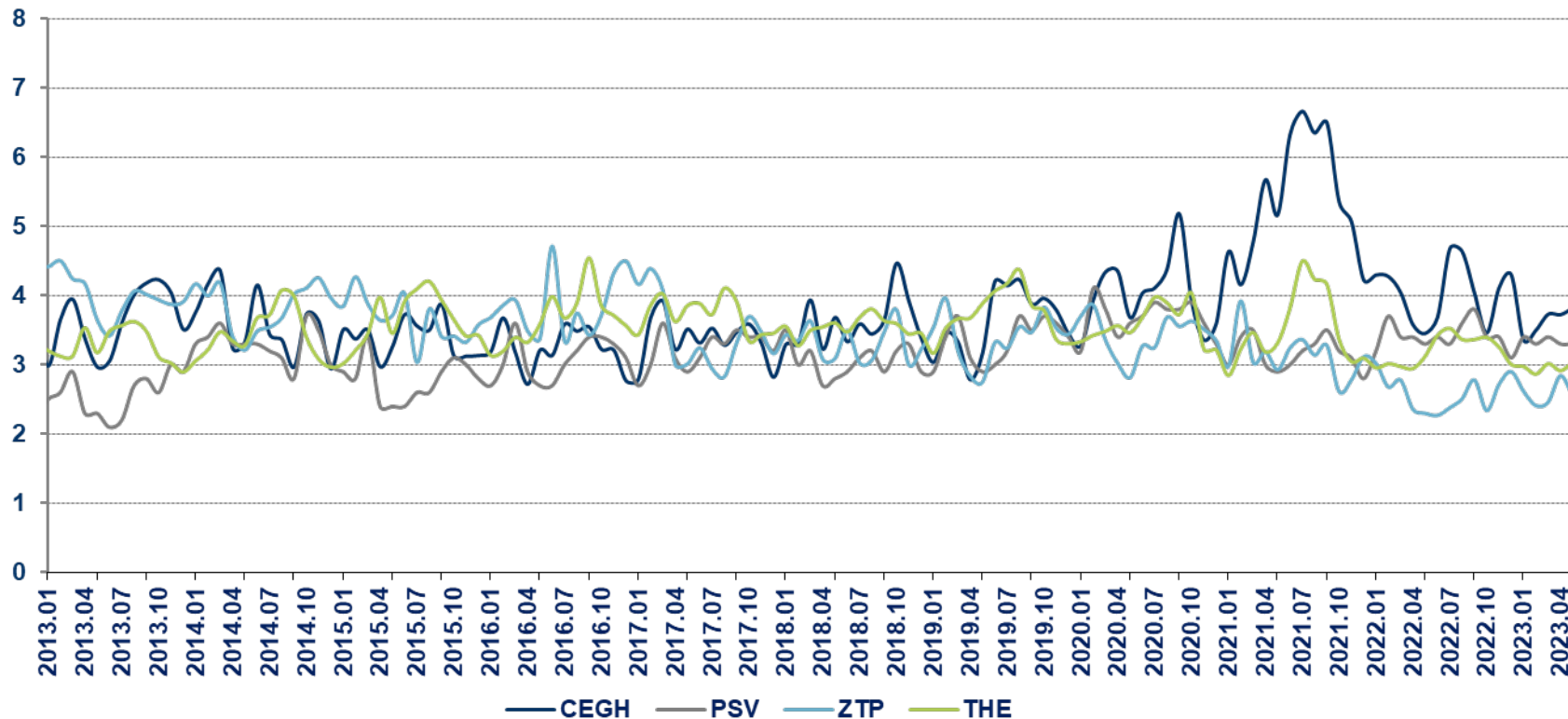


CEGH VTP: Daily Churn Rate

Since January 2013

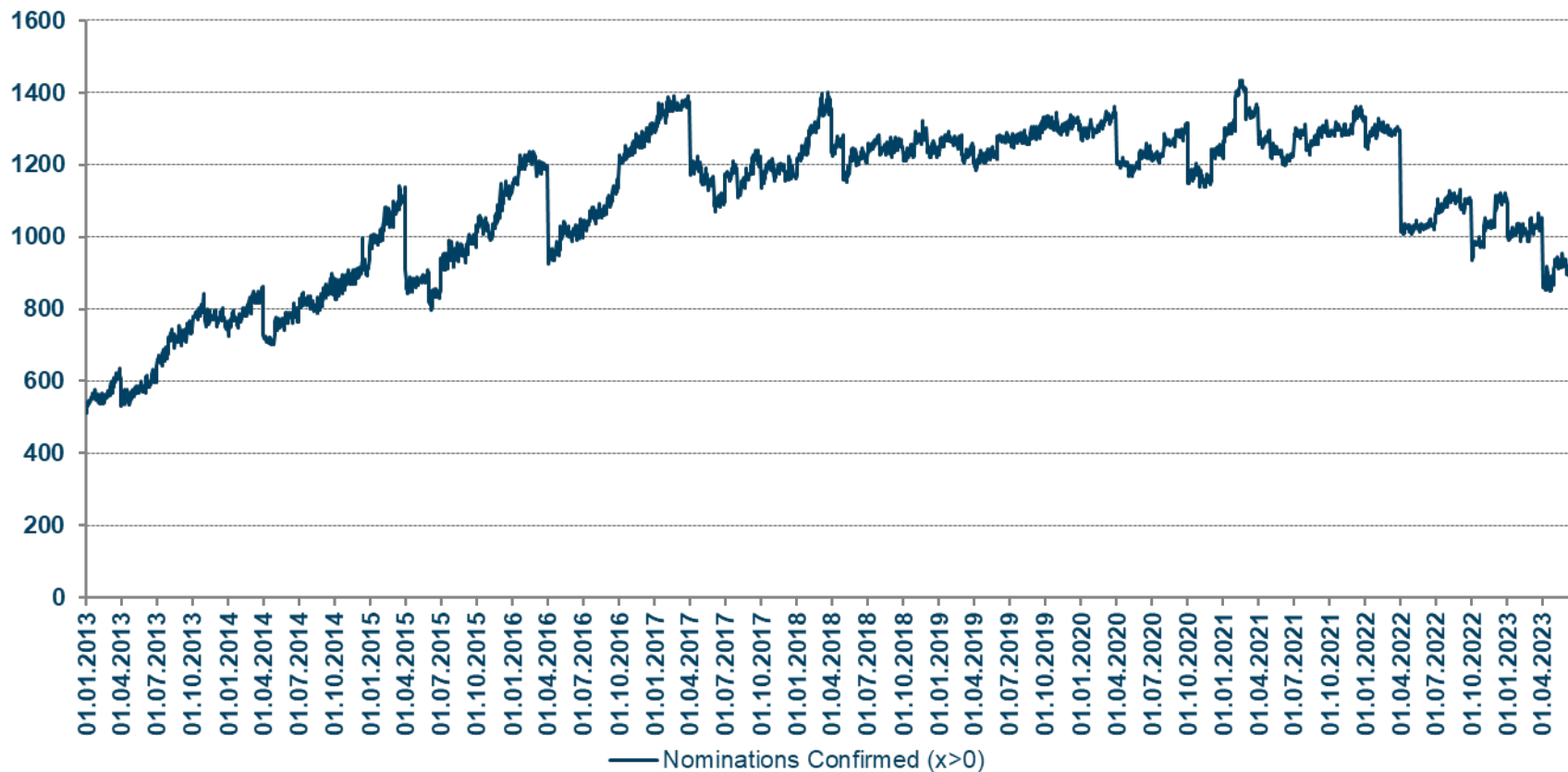


Churn Rate of Continental European Gas Hubs



CEGH VTP: Daily Hub Nominations

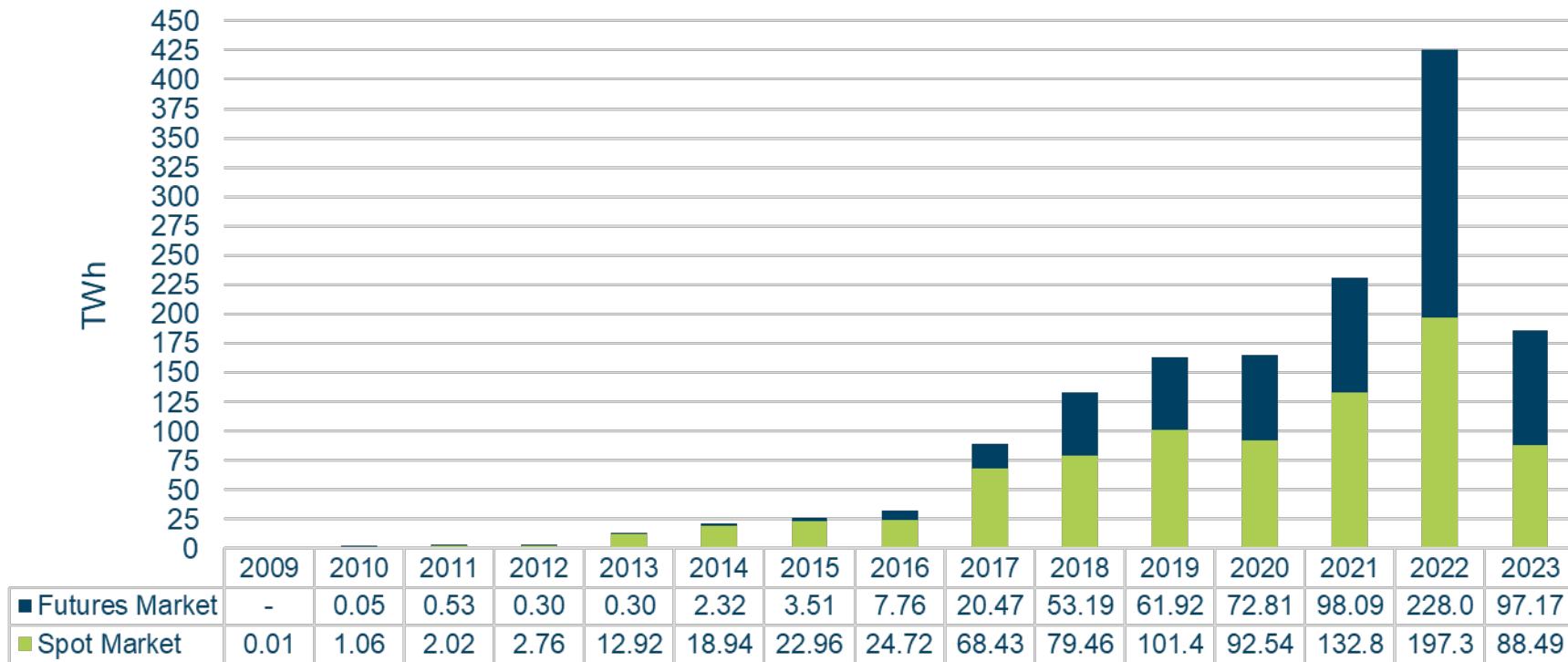
Since January 2013



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EEX CEGH Austrian Gas Market

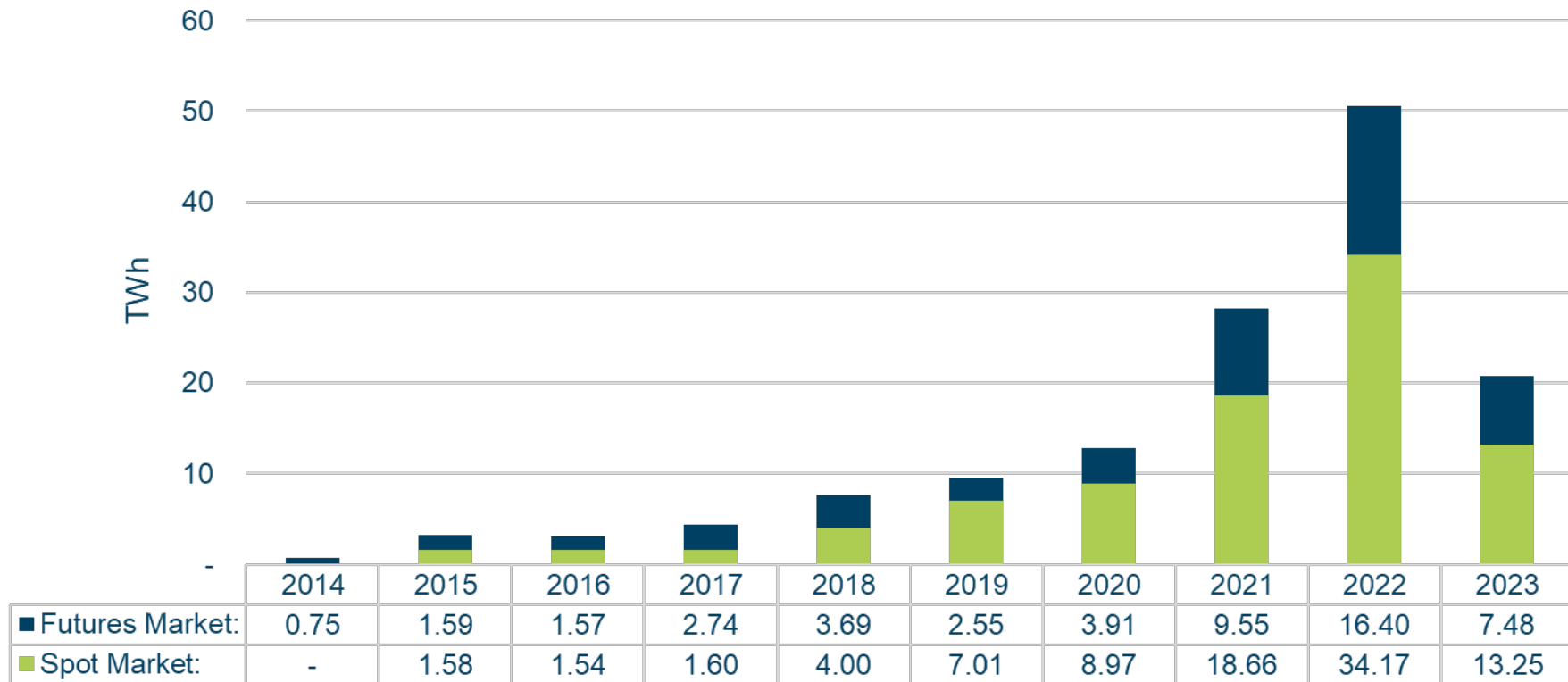
Yearly Trading Volume since 2009 - 2023 Y-t-D (incl. June 2023)*



*June 2023 is forecasted at 26th June 2023

EEX CEGH Czech VTP Gas Market

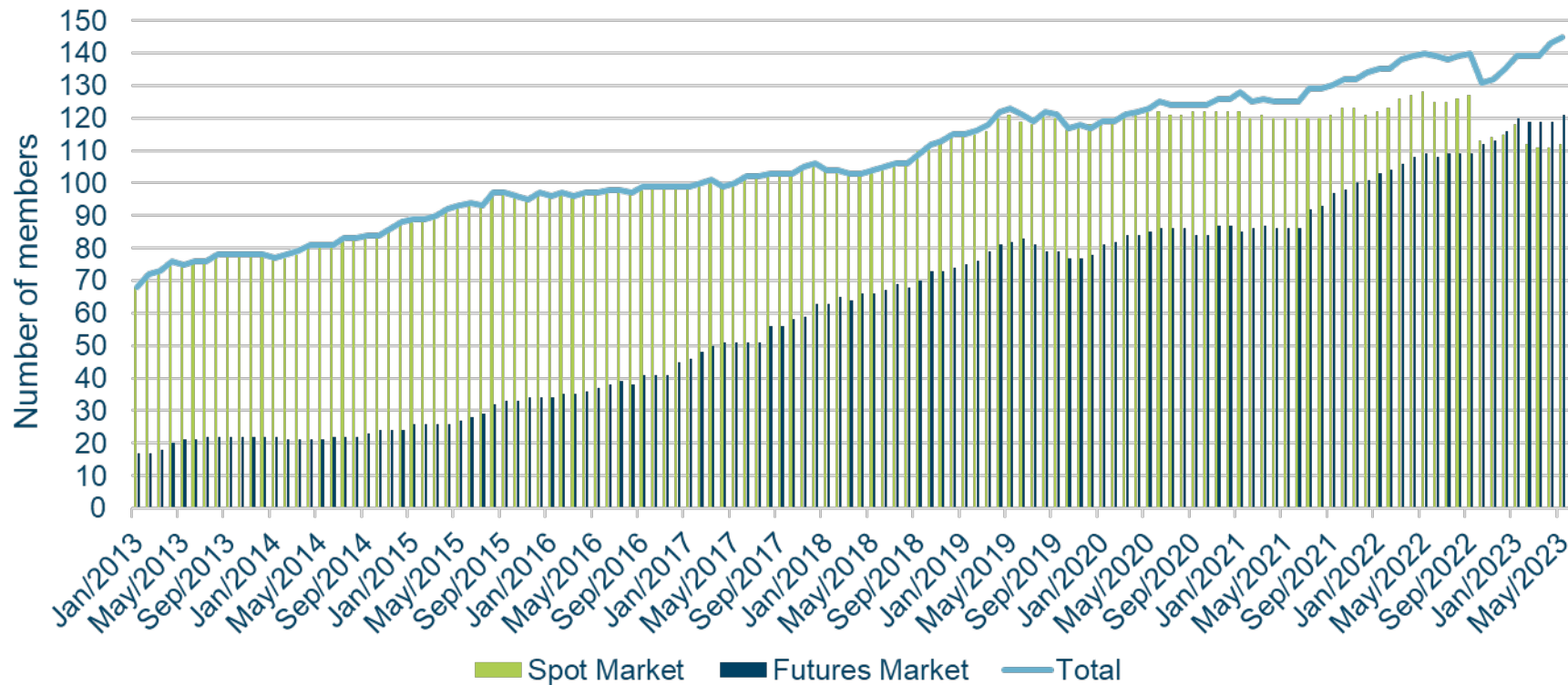
Yearly Volume since Feb. 2014 - 2023 Y-t-D (incl. June 2023)*



*June 2023 is forecasted at 26th June 2023

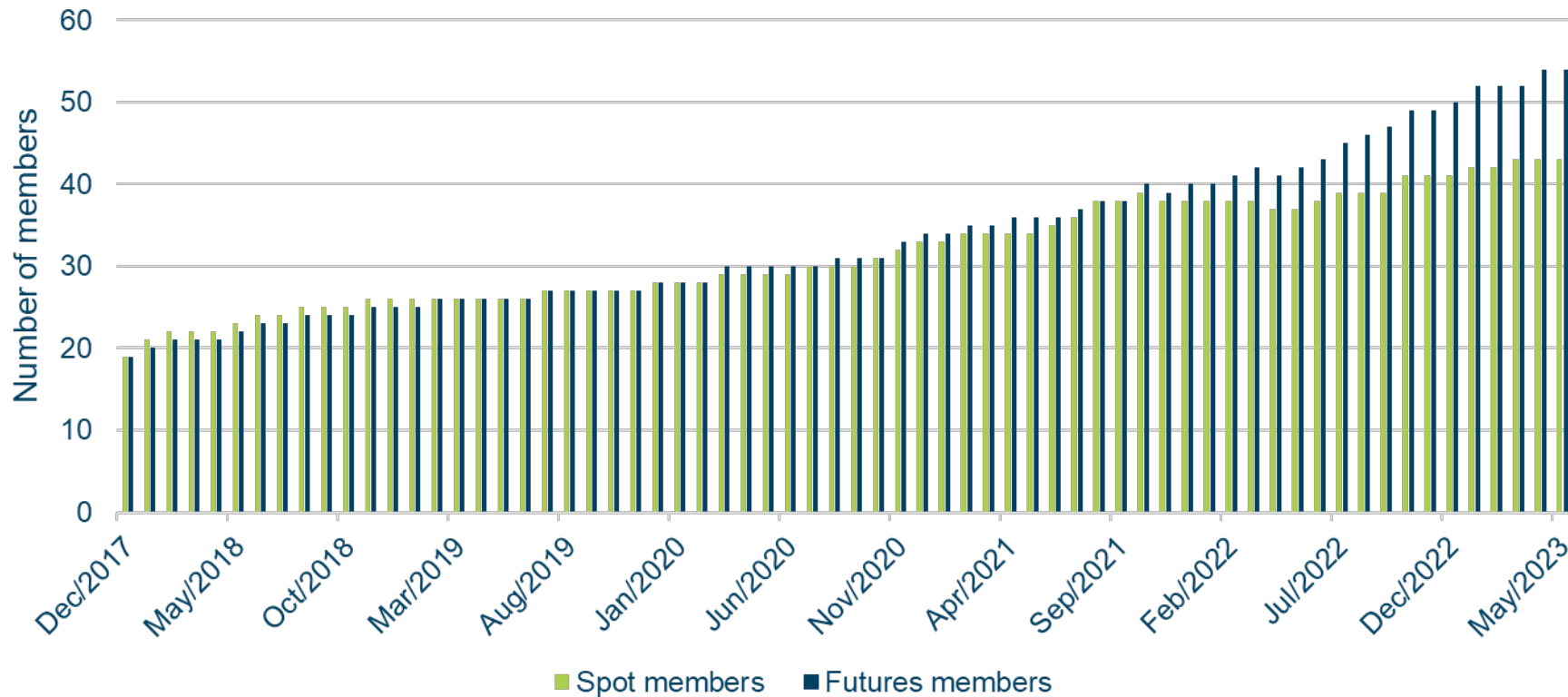
EEX CEGH Austrian Gas Market

Development of Members since January 2013

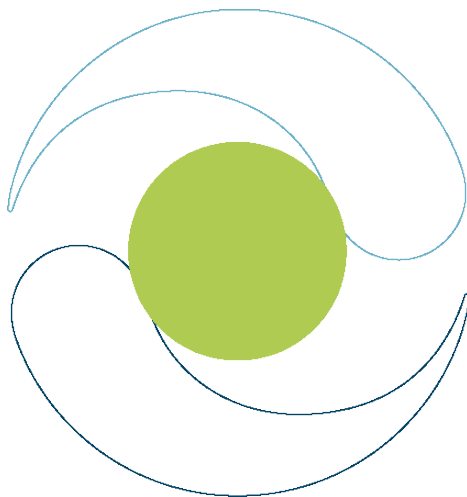


EEX CEGH Czech VTP Gas Market

Development of Members since December 2017



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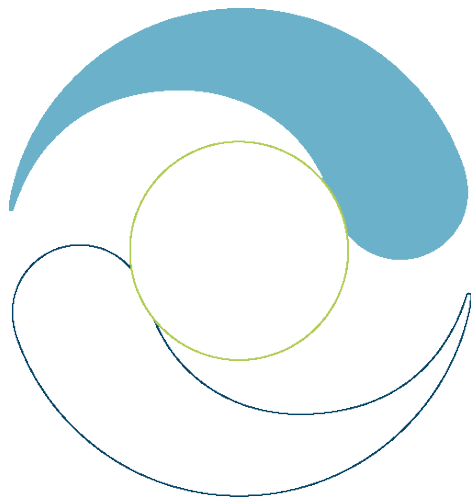


GREEN

represents our commitment to the **green gas business**. The color stands for our focus on **environmental responsibility** and determination to help build a more **sustainable future**.

We are supporting the **development of biomethane markets** and its role in the **future energy mix** with

- **CEGH GreenGas Platform**
- **EFET CEGH Standard Contract** for Biomethane Certificates



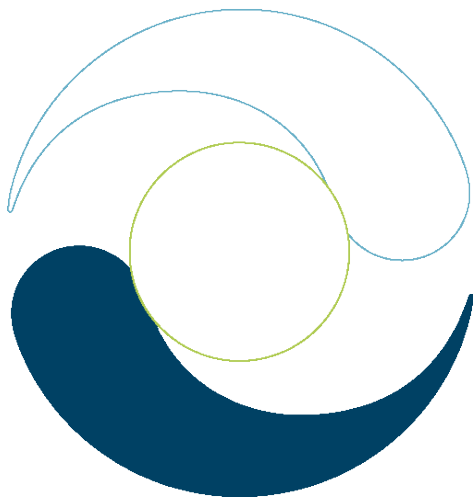
LIGHT BLUE

is symbolic of our growing interest in the **green hydrogen business**.

The color represents our **focus on innovation, technology, and sustainability**.

How we support the development of hydrogen markets:

- **CEGH GreenHydrogen Index**
- Build-up of **future hydrogen markets**



BLUE

stands for **Natural Gas** and our **long-standing expertise** in traditional gas trading & being a **reliable partner** for the gas industry.

The color signifies our commitment to providing **excellent service** to our customers.

Our gas trading places in Austria and in CEE:

- **CEGH-VTP**: benchmark hub for CEE region
- **EEX CEGH Gas Exchange Markets**: in Austria and in the Czech Republic

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- CEGH VTP Operations
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- **CEGH GreenGas Platform**
- CEGH GreenHydrogen Index

CEGH Green Gas Platform

Easy access to trading in biomethane / GOs



- Platform was developed closely with market participants.
- According to market feedback Start as "bulletin board" and as "auction“.
- Easy registration and newsletter function
- CEGH GreenGas Platform allows buying and selling of (GOs) or bundled GOs together with biomethane or only biomethane without GOs.
- Connected Registers: E-Control and Biomethane Register Austria AGCS, DENA Germany.
- Next Steps

Filter

Zurücksetzen

Status

☒ offen
 ☒ beendet
 ☒ veröffentlicht
 ☐ zurückgezogen

Unternehmen

Angebots ID

Seite

Kauf

Verkauf

Register

Nachweis

Land

Veröffentlichungsdatum

to

Gebotszeitraum

to

Filter

GEROT SAUGABE BIS AUF WIDERRUF MÖGLICH

Landwärme CE Trading Kft.

Veröffentlichungsdatum: 22.03.2023 11:00

Angebots ID: 945

Produkt

Biomethan mit Herkunftsnachweis/Zertifikat

Register / Nachweis / Herkunftsländ

DENA / DENA Biogaszertifikat / Deutschland

Gebotszeitraum

bis auf Widerruf

Gefördert

Nein

Vorverkauf

Minimum Preis

172,90 € / MWh

Menge	Lieferzeitraum	Produkt
0,342 MWh	01.01.23 06.00 - 01.01.24 06.00	
Menge	Biomasse (1) BiomasseV (1), Ausschließlichkeit (2), Mengengerüst plausibel (4), Einsatzstoffgehalt (5), Einspeisemenge in Erdgasnetz (6), Massenbilanzierung bis zur Einspeisung in das Erdgasnetz (27)	
3.004 MWh		
Produkte (keine Gewähr) - Stand: 09.06.2021		
EEG 2004 - Grundvergütung Biogas	EEG 2009 - Grundvergütung Biogas	
EEG 2009 - Grundvergütung Biogas (auch Biomasse außerhalb BiomasseV)	EEG 2014 - Biomasse	
EEG 2017 - Biomasse (gesetzlich)	EEG 2021 - Biomasse (Ausschreibung)	EEG 2021 - Biomasse (gesetzlich)
EEG 2021 - Bioabfall (Ausschreibung)	EEG 2021 - Einspeisevergütung ausgetriggerte Anlagen Biogas (Biomasse)	
E-WärmeG 2008 - Wärmenutzung Bafög	EnergieStG - Stromsteuerbefreiung (Biomasse)	
TEHG - Befreiung von Abgabepflicht (Biomasse außerhalb MWV)	KWK 2017 - innovative Wärmespeichern	
KWK 2017 - innovative Wärmespeichern (Anteil Biomethan in KWVG)	KWK 2017 - Wärmenetze u. -speicher	

GEROT SAUGABE BIS AUF WIDERRUF MÖGLICH

Wien Energie Vertriebs GmbH & Co KG

Veröffentlichungsdatum: 31.05.2022 13:00

Angebots ID: 927

Produkt

Herkunftsnachweis/Zertifikat

Register / Nachweis / Herkunftsländ

AGCS Biomethan Register Österreich / Biomethannachweis / Österreich

Gebotszeitraum

bis auf Widerruf

Vorverkauf

Minimum Preis

40,00 € / MWh

Menge	Produktionszeitraum	Produkt
876 MWh	01.12.21 - 01.12.22	
		Biomethan auf Basis von Biogas (B110000)

GEROT SAUGABE BIS AUF WIDERRUF MÖGLICH

Wien Energie Vertriebs GmbH & Co KG

Veröffentlichungsdatum: 31.05.2022 13:00

Angebots ID: 928

Produkt

Herkunftsnachweis/Zertifikat

Register / Nachweis / Herkunftsländ

AGCS Biomethan Register Österreich / Biomethannachweis / Österreich

Gebotszeitraum

bis auf Widerruf

Vorverkauf

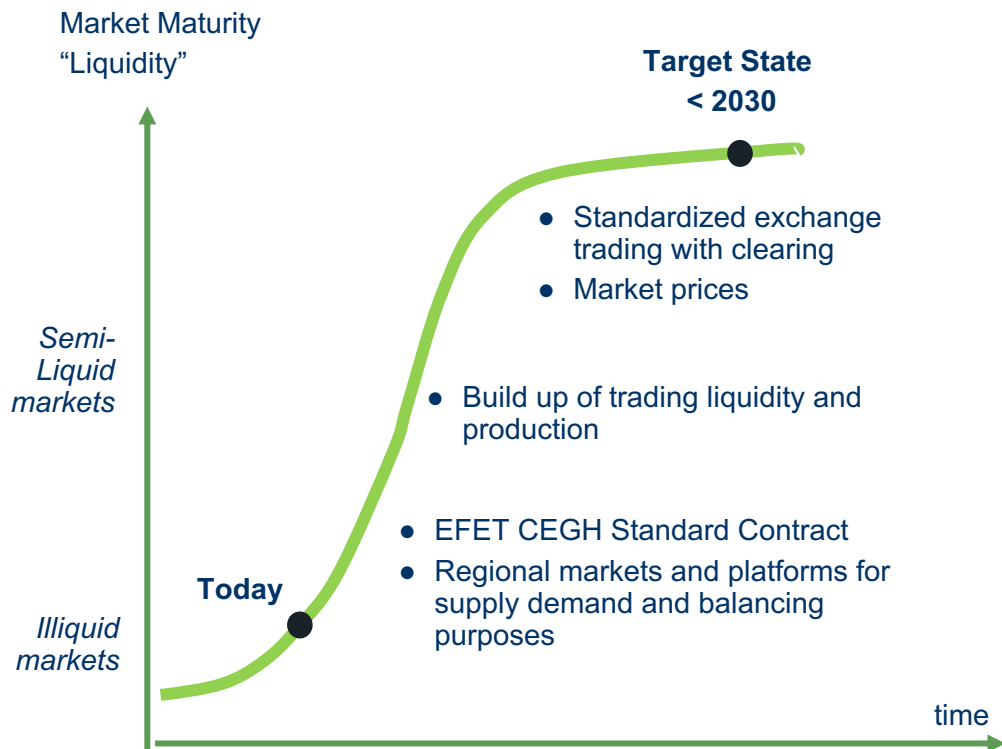
Minimum Preis

40,00 € / MWh

Menge	Produktionszeitraum	Produkt
848 MWh	01.11.21 - 01.12.21	
		Biomethan auf Basis von Biogas (B110000)

CEGH Green Gas Platform

Different instruments are needed in different market maturity phases



Biomethane - Guarantees of Origin

- Standardized products & exchange trading

Platform based trading

- Standardized Contracts (EFET CEGH)
- Transparency on prices and liquidity
- From long term - to short term trading

Institution building (Registries, Standardization)

- Harmonized Regulatory Framework (e.g. AIB Hub)
- Cross-border trading & recognition

EFET – CEGH Contractual Standardization of Biogas GO & Certificate Trading

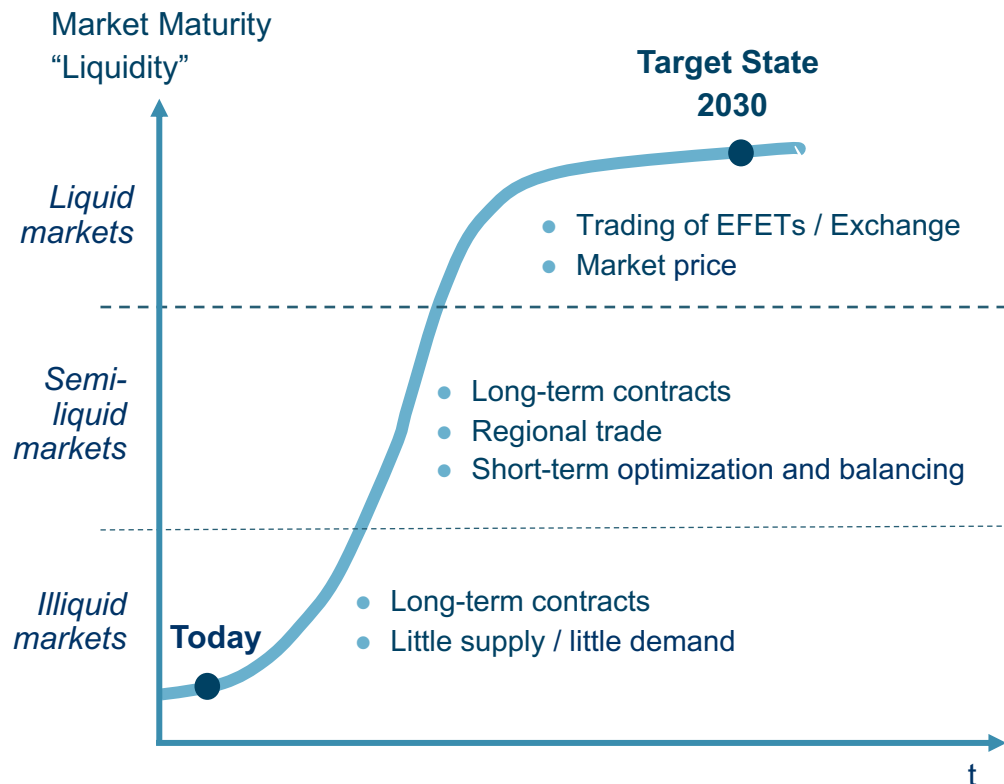


- The Biogas Market is a **non-liquid market with no / little contractual standardization**. As Guarantees of Origin and Certificates are of **key importance for the trading of renewable gases** (incl. biomethane), the development of contractual standards helps to enhance trading.
- Based on a 2022 “**CEGH Legal Discussion Paper**” that was addressing various potential use cases for trading of GOs and Certificates, **EFET and CEGH have partnered to develop a Biogas Certificate Standard Agreement**.
 - A first draft was circulated for consultation in Q1 2023, to EFET Committees / Members.
 - Based on feedback from EFET Members, the draft was amended and an Guidance Note was added that provides background information.
- The **final version of the EFET CEGH Biogas Certificate Standard Agreement is expected to be published**, (subject to required EFET approvals) **in July 2023**. Following its publication, CEGH plans to organize a session to familiarize market participants with the usage of the agreement.

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Green Hydrogen - Development of Liquidity

Different Instruments in Different Market Maturity Stages



Green hydrogen / GOs of green hydrogen

Useful trading instruments to be offered:

Exchange (financial Clearing / Clearinghouse)

Platform based trading (Broker)

Balancing instruments

Standardized contracts (EFET)

Build-up of institutional & regulatory requirements

Price Information & Transparency

Auction- / Bulletin-Board / "Physical" Services
(Work in Progress)

Supporting Development of Hydrogen Markets

Provision of CEGH Hydrogen Indices

- Publication of **CEGH Hydrogen Indices facilitates** monitoring the „cost gap“ between hydrogen and alternative sources of energy supply and enables market participants to evaluate business cases for investing in hydrogen projects.
- **Further enhancements of price assessments** planned once the hydrogen market becomes more liquid leading to new requirements by index users (e.g. benchmarking costs of supply, “net-back pricing”).

Set Up of a Marketing Platform

- Launch of the CEGH GreenGas Trading Platform to facilitate trading of Biomethane Guarantees of Origin (GoOs) with or without biogas for the first time in Austria.
- Gradual expansion into other markets in Central - and Eastern Europe planned.
- Upgrade of functionalities according to market feedback.
- Addition of **trading of Green Hydrogen once Green Hydrogen becomes available.**




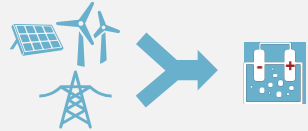







Continuous Stakeholder Dialogue

- CEGH engages with key stakeholders within the emerging hydrogen ecosystem including politicians, regulators, producers and offtakers.
- Key areas for alignment include regulatory frameworks (e.g. third-party access to hydrogen infrastructure), market model (entry-/exit system vs. physical hub), balancing code, design of framework agreements etc.

CEGH GreenHydrogen Indices

Regulations are the main Driving Force for Different “Hydrogen Colors”



	“Grey” H ₂	Green H ₂	H ₂ Blend	Renewable H ₂ ¹
 Illustration				
 Electricity procurement	Electricity is procured from the grid, therefore the hydrogen produced does not meet any requirements for labelling	Electricity is procured from the grid and, additionally, GoOs are purchased from marketplaces	Green electricity is either procured via direct line or PPA as well as regular (“grey”) electricity from the grid	Green electricity is either procured via direct line or PPA
 (Regulatory) requirements	No additional requirements concerning the operation of the electrolyzer	No additional requirements concerning the operation of the electrolyzer	Balancing of renewable electricity and hydrogen production for min. 40% of the production volume	Hourly balancing of renewable electricity and hydrogen production for 100% of the production volume
 CEGH Index	-	 CEGH Green Hydrogen Spot & Forward Index	 CEGH Green Hydrogen PPA 40 Index	 CEGH Green Hydrogen PPA 100 Index

¹In line with requirements REDII Delegated Act

CEGH GreenHydrogen Indices on CEGH's Website

Publication date: 07.06.2023

 [download.CSV](#)

CEGH GreenHydrogen PPA 100 Index

Delivery Period	EUR/MWh
10-Year Baseload	156.448

CEGH GreenHydrogen PPA 40 Index

Delivery Period	EUR/MWh
10-Year Baseload	162.241

CEGH GreenHydrogen Spot Index

Delivery Period	EUR/MWh
6-Jun-2023	161.084

CEGH GreenHydrogen Forward Index

Delivery Period	Maturity	EUR/MWh
July 2023	Month +1	163.192
August 2023	Month +2	168.999
Q3 2023	Quarter +1	170.423
Winter 2023	Season +1	217.705
Summer 2024	Season +2	195.509
Calendar 2024	Calendar +1	213.613
Calendar 2025	Calendar +2	194.564
Calendar 2026	Calendar +3	175.936

[Go to CEGH GreenHydrogen Index](#)

[Go to CEGH GreenHydrogen Index Specifications](#)

A decorative graphic on the left side of the slide, consisting of a network of thin grey lines connecting various dots. Some dots are dark blue, some are lime green, and some are light blue, creating a complex, web-like structure.

Q&A SESSION



**THANK
YOU FOR
YOUR
ATTENTION**