

24th November 2022

24th CEGH Feedback Workshop



Virtual Meeting Guidelines

- We will have a Q&A session at the end of the CEGH presentation via the "Chat function".
- For questions during the presentation, please use the "Chat function", we will answer them at the Q&A session.
- The link to the download of the presentation will be sent in a Newsletter within the next days.

24th CEGH Feedback Workshop



AGENDA CEGH

Welcome and Opening Words

- Update on CEGH VTP Operations
- Latest Developments at EEX CEGH Gas Exchange
- CEGH GreenGas Platform Developments
- Preparation for the Supply Situation for the Winter Period 22/23
- Q&A Session

CEGH Volume Development 1-11/2022*



CEGH VTP Market: 1-11/2022: 581 TWh

(y-t-y: **-15.6%**)

EEX CEGH Gas Market: 1-11/2022: 395.6 TWh (y-t-y: +101.5%)



Central European Gas Hub AG

High Volatility & High Price Environment



New Gas Supply Situation leads to changed Price Spread Picture between European Markets

> eex

Daily Spot (DA/WE) Settlement Prices (EUR/MWh)



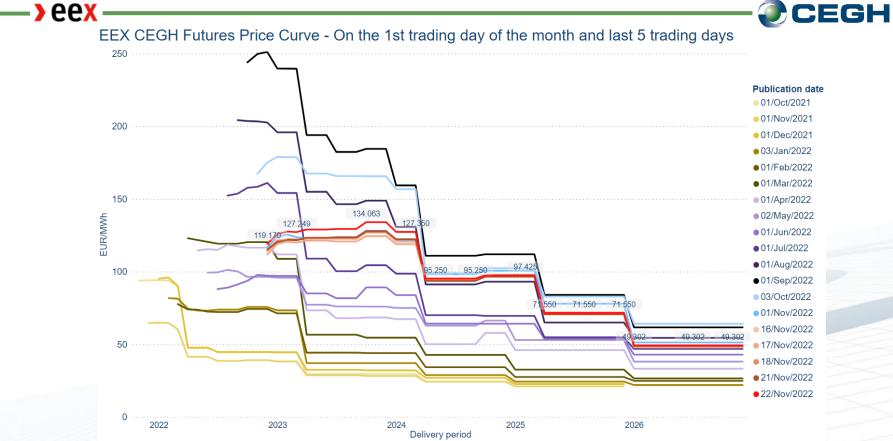
Downwards Trend in Futures Contracts: Day-Ahead and Futures Contracts at the Same Level Again —>eex





7

Future Gas Price Expectations increased significantly due to Supply Crunch Fears



EEX CEGH Gas Market

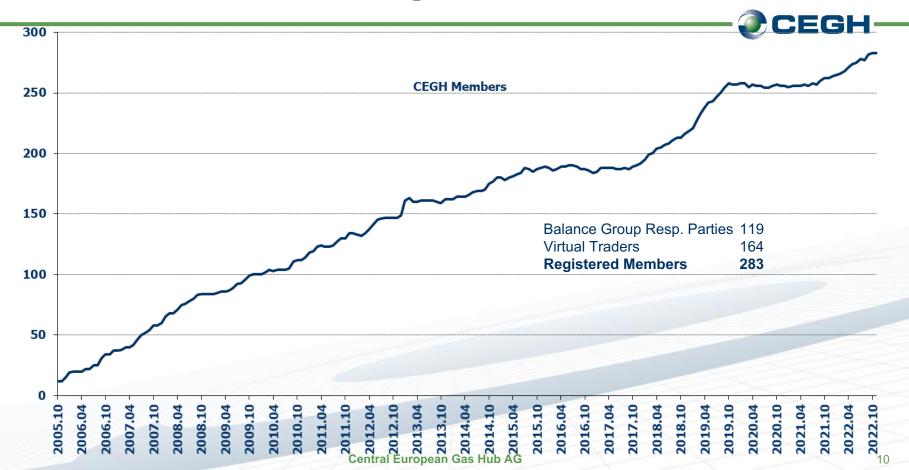
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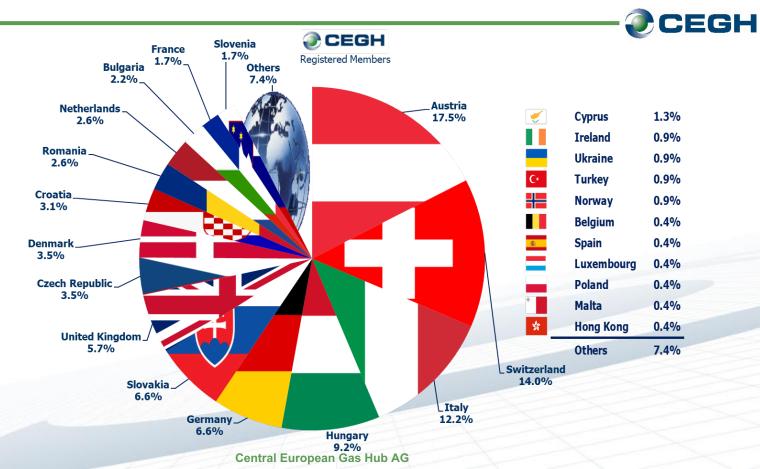
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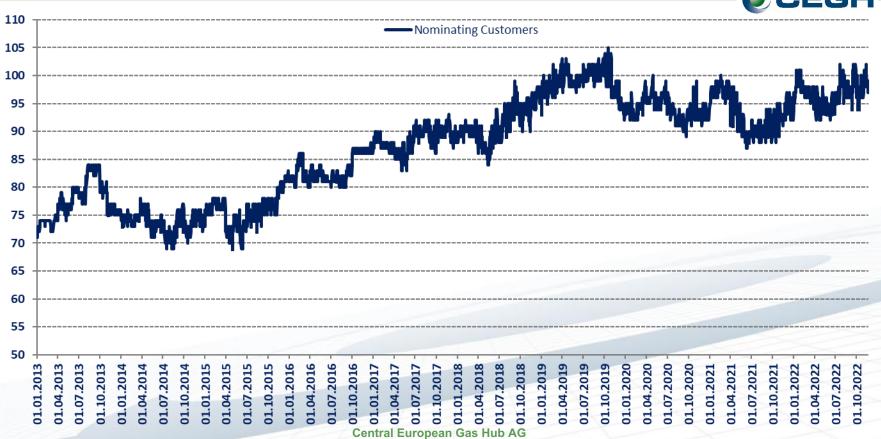
CEGH VTP: Registered Members



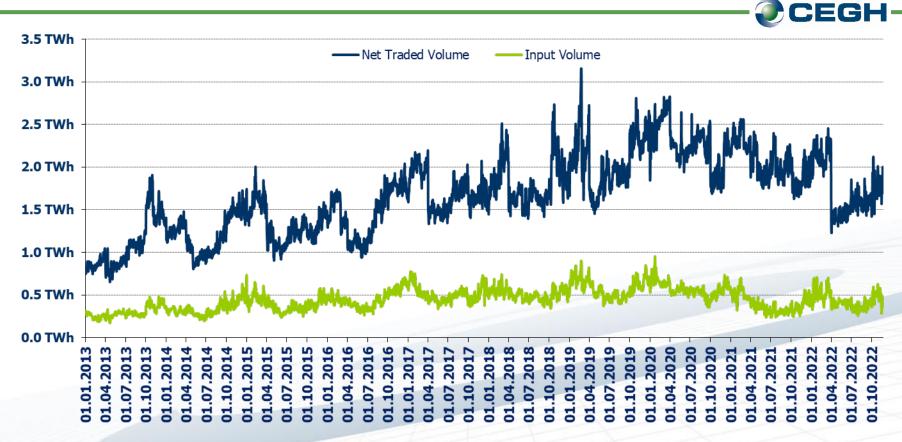
CEGH VTP: Diversity of Registered Members



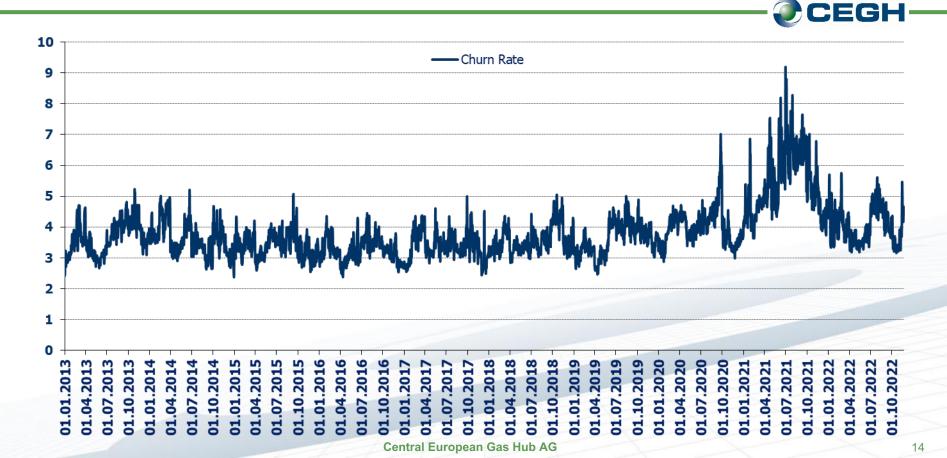
CEGH VTP: Nominating Customers on Daily Basis since January 2013



CEGH VTP: Daily Net Traded Volume since Jan 2013



CEGH VTP: Daily Churn Rate since 2013



CEGH VTP: Daily Hub Nominations since January 2013



CEGH REMIT Platform: www.cegh.at/remit

- Available 24/7
- Contents open to the public r publication of inside information
- Supports "templates" and "wildcards" in Regulation (EUNO*1227/2011) via the CEGH REMIT Platform in an effective manner
- AGGM, GCA and CEGH publish on CEGH REMIT platform their Urgent Market Messages (UMMs): Main source of information in the Austrian Market Area
- Posting only for registered users
- Postings fulfil legal obligation to publish insider information acc. to REMIT Art. 4
- Meeting all ACER requirements and recommended by E-Control
- Free of charge plus publication alert / RSS feed subscription
- Registered users and publication alert users can manage received notifications either via country selection or via information type

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	Unavailablilities of electricity facilities Production unavailability (planned)											
T Filter												
	Central European Gas Hub AG											

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CEGH Gas Storage Marketing Platform

OVERVIEW OVERVIEW

Key Facts

- Launched: November 2018
- + 70 companies registered and a function of the second seco
- Offered working gas volume: more than 20 TWh
- Primary & secondary capacity marketing
- 3 Categories: 1. Storage Capacity, 2. Gas in Storage, 3. Balance Group Service
- Publication of storage offers (SELL) only for companies with a CEGH contract
- Publication of storage requests (BUY) free of charge for companies until end of Q1 2023

Framework

- Free to use and easy to register for all interested parties for bidding no bidding checks and restrictions – everyone can place a bid for every publication on the platform
- 2-ways to use the Storage Platform: auction mode or publication until revoked
- Allocation according to the rules of the initiator who is selling / buying

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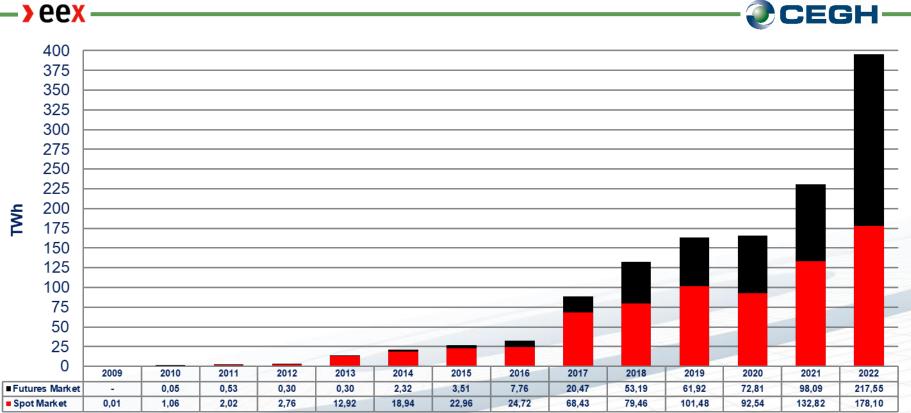
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EEX CEGH Austrian Gas Market Yearly Trading Volume: 2009 – November 2022*



Record Volumes on EEX CEGH Austrian Gas Market in Extreme Price Situations



EEX CEGH Monthly Traded Volumes *incl. lin. forecast 11.2022

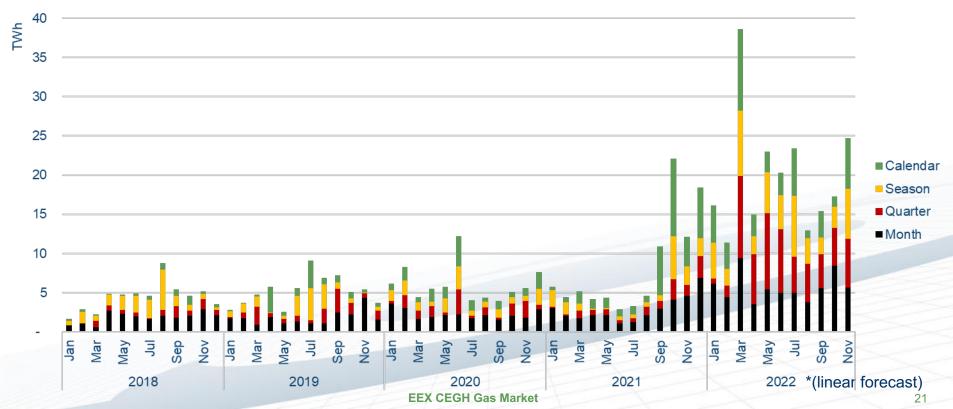
56 54	■ Day-ahead & Weekend		
58 56 52 50 48 46	■ Within day	All-time high Spot All-t high 10.2	
14 12	■ Futures Market		
38			
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44	Launch PEGAS		
22 20	CEGH Markets		
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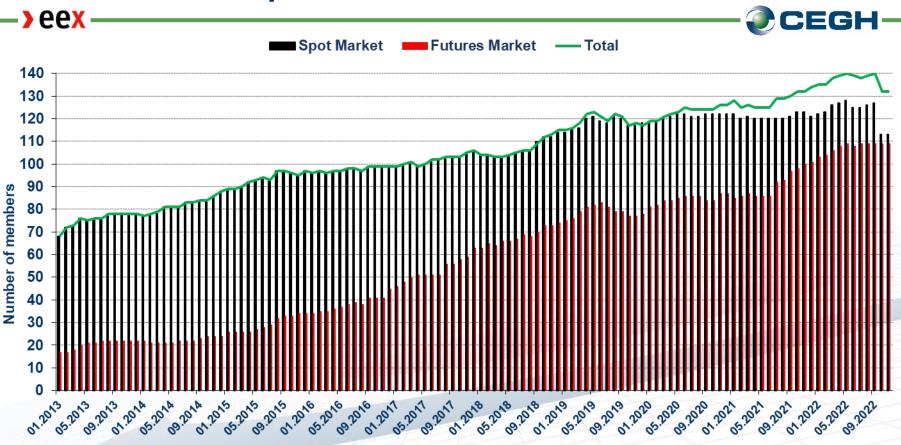
EEX CEGH Austrian Gas Market: Monthly Futures Volume: Jan 2018 – Nov 2022*

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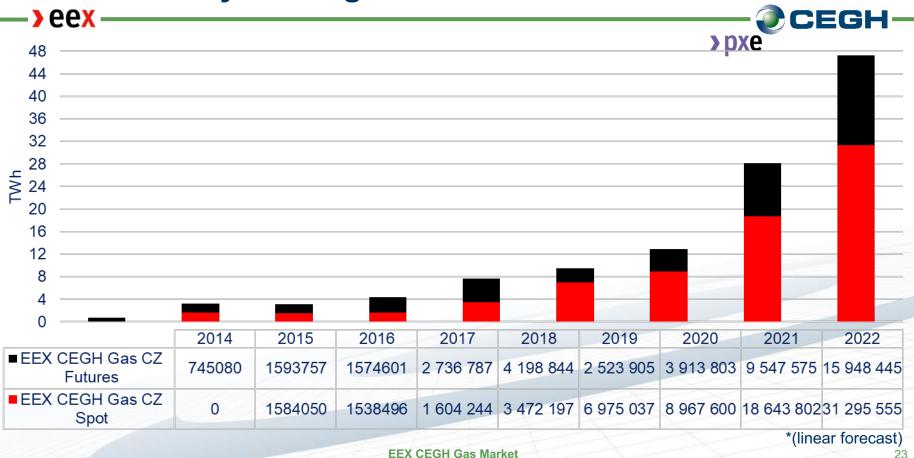
EEX CEGH Futures Traded Volumes



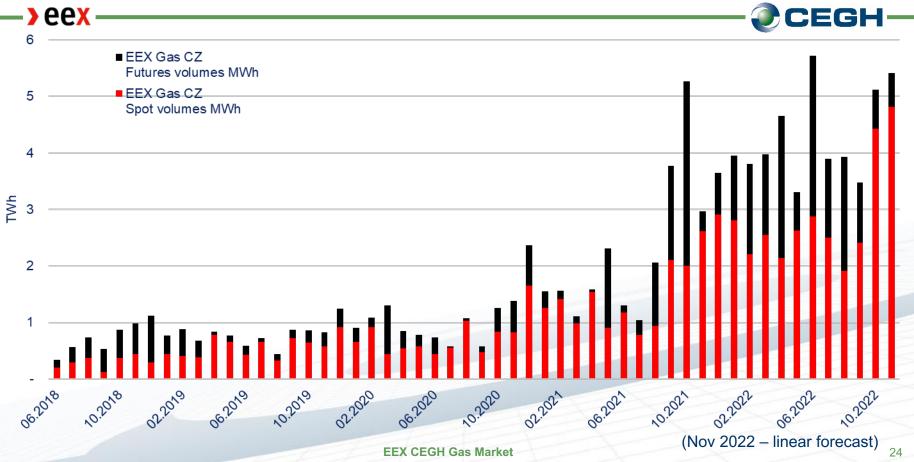
EEX CEGH Austrian Gas Market: Development of Members since 2013



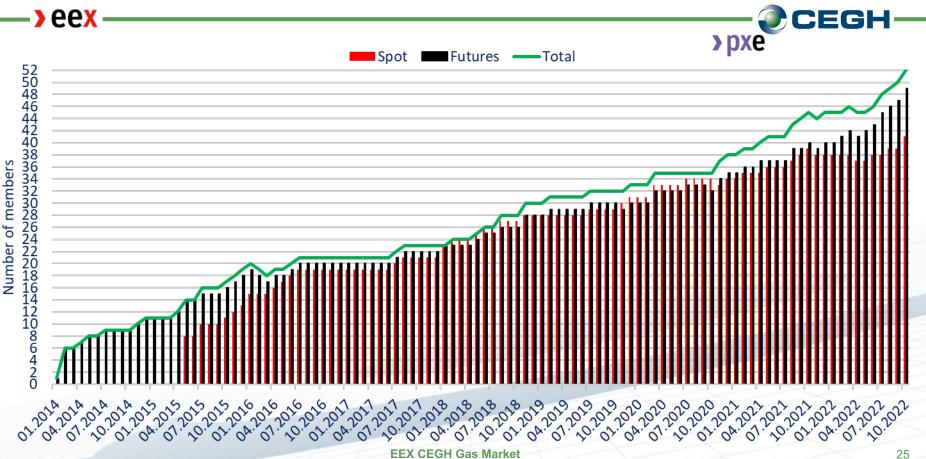
EEX CEGH Czech Gas Market: Yearly Trading Volume: 2014 – Nov 2022*



EEX CEGH Czech Gas Market: Monthly Trading Volume



Development of EEX CEGH CZ Gas Market Members since 2014



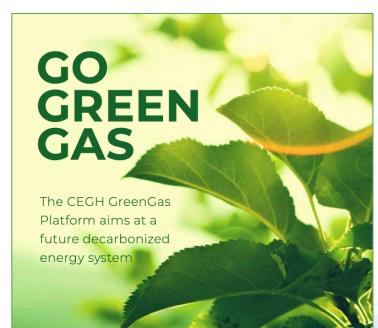
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Liquid Markets are an Important Building Block for EU Biogas Targets

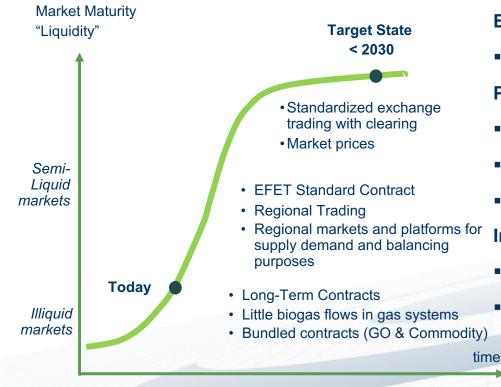


- Ambitious European targets for Green Gases incl.
 biogas, but regulatory and institutional framework
 conditions are still missing, e.g. national registries for
 Guarantees of Origin (GOs), rules for cross-border
 trade, standardization, etc.
- Functioning markets are an important pre-condition for biogas expansion: Transparent, robust price signals for efficient resource allocation and long-term investments.
- So far, there is no institutionalized or well-functioning trading in Austria or EU - neither with GOs nor with bundled biomethane.

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Different Instruments are Needed in Different Market Maturity Phases





Biomethane - Guarantees of Origin

Standardized products & exchange trading

Platform based trading

- Standardized Contracts (EFET)
- 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

CEGH GreenGas Platform for Marketing of Green Gases



- Scope: CEGH GreenGas Platform for marketing of green gases, such as biogas and hydrogen.
- Development: CEGH GreenGas Platform is based on market feedback to meet current needs and wishes of stakeholders.
- Location: Service offering for Austria; gradual expansion to Central- and Eastern Europe is planned.
- Functions: Basic functions available from the start; new features will be added in line with the needs of the evolving green gas market.
- Costs: CEGH GreenGas Platform is free of charge!

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CEGH GreenGas Platform



Next Steps for Platform Development

- CEGH is in exchange with existing & potential platform users to by way of a Stakeholder Committee regarding further developments of the platform and related topics.
- CEGH marketing activity to attract liquidity on the platform is ongoing.
- Dena-Registry on CEGH GreenGas Platform

Registry Connection / Cross border activity

- Austria: CEGH GreenGas Platform Users can mandate CEGH to directly notify ownership transfers in the registry of the Austrian Issuing Body (E-Control Austria) and AGCS Biomethanregister.
- Additional Countries: Other national registries will be added to the platform as soon as possible and relevant.

CEGH GreenGas Platform – New Development

Select Dena-Registry	OVERVEW CRATE OFFR MEMBER ADMINISTRATION>	
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CEGH GreenGas Platform – New Development

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Extract from Dena - Criteria Matrix

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As of: 06/09/2021	Products (no warranty)	-	1	7	4	9 Q	1	o	8	1	a	11	74 X	1	17a	8 2	8	21	2	2	24	2 2	12	R 1	R 8	8	8	高 約	2	8	R #	8 8	398	8 :	4 is 4	9	9	÷ \$	¥ 4	*	4 8	} 🗣	ន	3
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EEG 2009	Grundvergütung Biogas Grundvergütung Biogas (auch Biomasse außerhalb BiomasseV) Technologie Bonus 1 4 bzw. 2 4 ⁺ Nawaro-Bonus (ausschließlich Nawaro) Nawaro-Bonus (mit Teilmengen pflanzl. Nebenprodukte) Landscape conservation bonus Storage gas reconversion	x		X		X X X X X X X X X X	x	X	X	(X)	(X)		x x x	X	(X)	x						x									x	:							x	x			(X)	
EEG 2012	Grundvergütung Bioabfall Grundvergütung Biopoiegas Grundvergütung Biogas Grundvergütung Biogas Grundvergütung und Einsatzstoff-Vergütungsklassen 1, 2a, 2b ³ Processing Boums 1 + bzw. 2 ¢ bzw. 3 ¢ ⁴ Storage gas reconversion	x	K K	x	x	x x x x x x x x x x x	x	X	x							x	x					X X X X X X	(X)	(X) (() (X)	(X)	(X)	x ¹ x ¹ (X)		x 1 1	x ¹ x ¹	X 		x					xx	x	x	f	f f f	

CEGH GreenGas Platform – New Development

Select Dena-Registry Select Criterias => Renewable Energy Law

2. Product Details	2. Product Details
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(1) Borrass within the meaning of the Biorrass Ordinance (1b) Broad biorrass term: EEG 2017 (2) Exclusivity (4) Quantity structure is plausible (5) Record of the substances used (6) Feed in quantity into the ratural gas metwork (7) Natural gas quality for the entire quantity	Volume Unit Observation period kWh/h 08.00 06.00 Products (no warrantly) - As of 06.09.0021 08.00 06.00 EEG 2004 - Basic tariff Biogas EEG 2009 - Grundvergibung Biogas EWarreeG 2003 - Heat utilisation Baden Wuertlemberg Energie SIG - Electricity tax exemption (biomass) TEHG - Exemption from duty (biomass outside MVO) KWKG 2017 - Innovative heating technologies KWKG 2017 - Innovative heating technologies (thare of biomethane in IKWK) KWKG 2017 - heat networks and storages EVERTMENT (Storage 2017 - Innovative heating technologies (thare of biomethane in IKWK)

CEGH Biogas Contract Standardization

Supporting the development of the Biogasmarket by standardized contract terms

- **Current situation** shows non-liquid and fragmented traded market
- Cross border transfers are not possible due to missing local regulation / interfaces
- Trading could be facilitated by a "Standardized Agreement" e.g. EFET Contract.

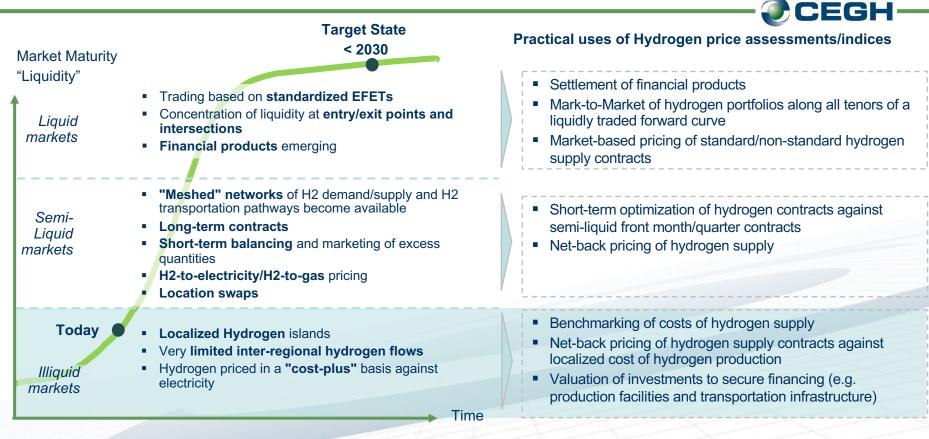
CEGH effort for development of a Standard Contract

- **EFET CMA**, is used for Power and Biogas GoO transactions and is a business standard
- CEGH prepared a legal paper ("Discussion Paper") to facilitate the discussion on a technical level and to identify relevant topics for standardization.
- Target is to receive stakeholder feedback and then to develop together with EFET a standard contract.
- Feedback to the discussion paper is appreciated, the paper is available for download here: <u>CEGH Biogas Contract Standardization Discussion Paper</u>

EGH

CEGH GreenHydrogen Index

Hydrogen Price Indices for Different Purposes at Different Development Stages of the Hydrogen Market



CEGH supports the Development of Hydrogen Markets

Provision of CEGH Hydrogen Index	 Publication of CEGH Hydrogen Index 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 for Biogas	 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.

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CEGH GreenHydrogen Index



Save-the-Date!

If you are interested in our CEGH GreenHydrogen Index, we will host a

Webinar

on 20 December 2022, 14:00 – 15:00

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EEX & ECC Clearinghouse Procedures in Case of Supply Curtailments

- EEX considers it essential to have access to a central and transparent market that enables its participants to manage and transfer risk through trading and central clearing.
- However, major disruptions of gas delivery might trigger temporary measures
 - ▶ in the form of a **volatility interruption**, or
 - a temporary suspension of the EEX gas derivatives market to avoid irrational price movements.
- EEX aims to keep the Spot Market open for trading at any time.
- On CEGH VTP, nominations of ECC would only be curtailed as a last resort according to the CEGH GTCs to keep balancing available as long as possible.
- ECC nominations for trades already concluded would continue to be nominated to the CEGH VTP, even in case of EEX market suspension. ECC will exercise margin calls if required; indices would be published, if necessary with defined fallback procedure.
- Detailed information can be found here: <u>https://www.ecc.de/de/newsroom/circulars</u> and <u>https://www.eex.com/en/faq</u>

EGH

CEGH Procedures in Case of Supply Curtailments

Procedures on the CEGH Virtual Trading Point (VTP)

- In case of a supply disruption / curtailment of gas, CEGH will continue to provide its title transfer service and asks all members to monitor the situation closely and to keep nominations to the VTP balanced.
 - Please coordinate any re-nominations with your counterparties, as in case of mismatches the lesser rule will be applied.
 - Balancing via the gas exchange by the Market Area Manager (MADAM) might not be possible any longer to the full extent, due to a lack of gas / volatile prices. Please avoid imbalances!
- A supply disruption / curtailment of gas itself would not to be considered a "Force Majeure Event" under the CEGH General Terms and Conditions. The reason for this is that such event would not hamper the ability of CEGH to perform the VTP title transfer service.
- Curtailments of VTP positions would only be done by CEGH, in case of an order / request by the Market Area Manager / Authorities according to applicable market rules.

CEGH

Procedures in Case of CEGH Service Interruption

Procedures if CEGH is not able to offer its services for different reasons (e.g. Power Outage, Internet failure)

- CEGH will inform all customers via CEGH REMIT Platform and Newsletter about the interruption of its services (if possible).
- The message will contain all relevant / available information about the problem and affected services.
- Customers will be asked to keep their nominations unchanged during the interruption as the changes cannot be communicated to system operators and counterparties.
- If an emergency communication is possible, you will be informed, but please coordinate re-nominations with your counterparties, as in case of mismatches the lesser rule will be applied.
- Balancing via the gas exchange by the Market Area Manager (MADAM) might not be possible as the Within Day Market could be halted. Please avoid imbalances!

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Q&A Session



Thank you very much for your attention

