GAS MARKET FORUM 28.10.2025

Helsinki

Agenda

9:00 Coffee and registration

Opening of the Forum

Topicals of Gas Market

Inkoo LNG terminal update

Clean Gas Market development

10:45 Break 10 min

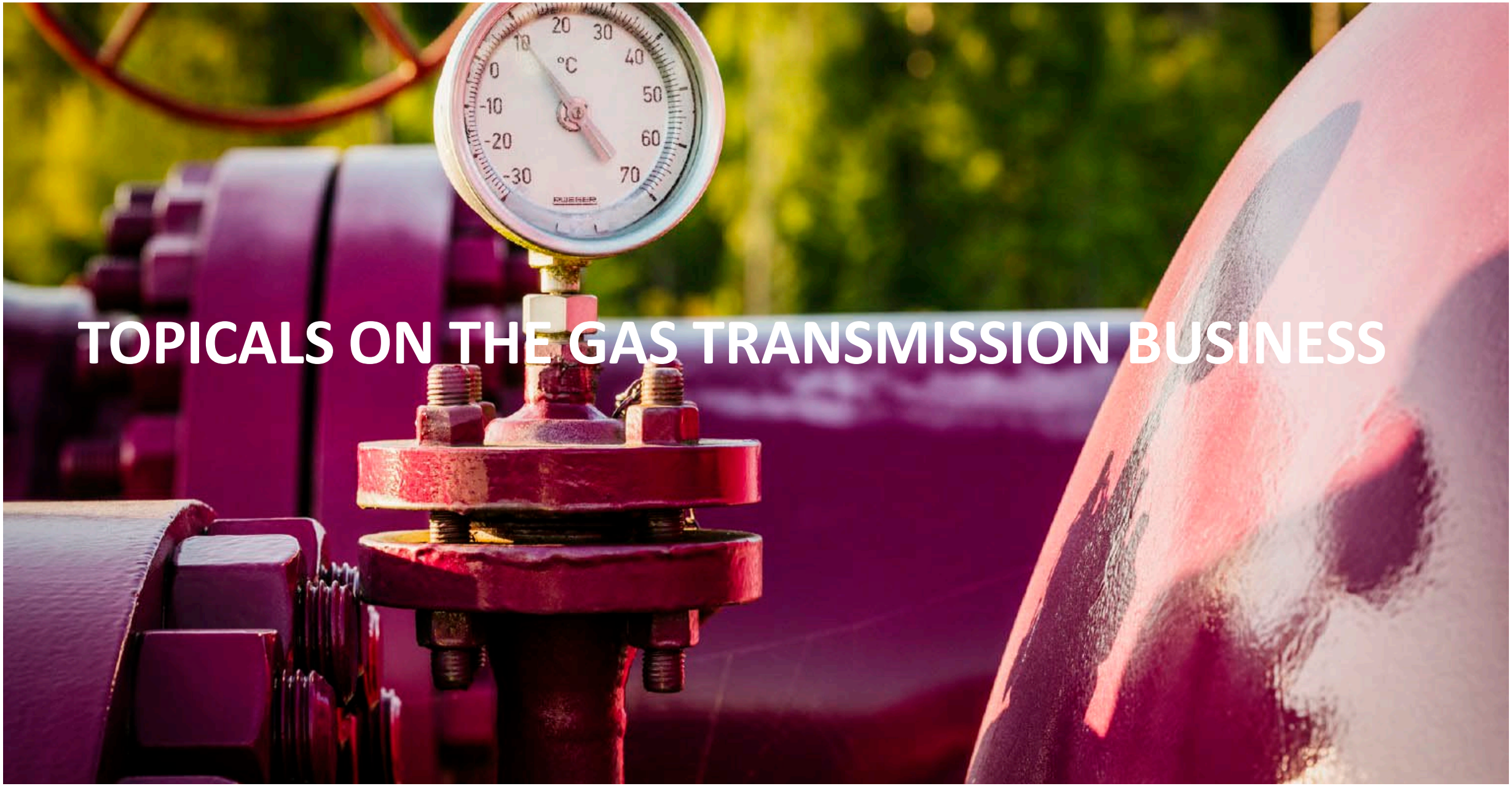
Market Update

Market Survey results 2025

Pricing 2026

Closing of the Forum

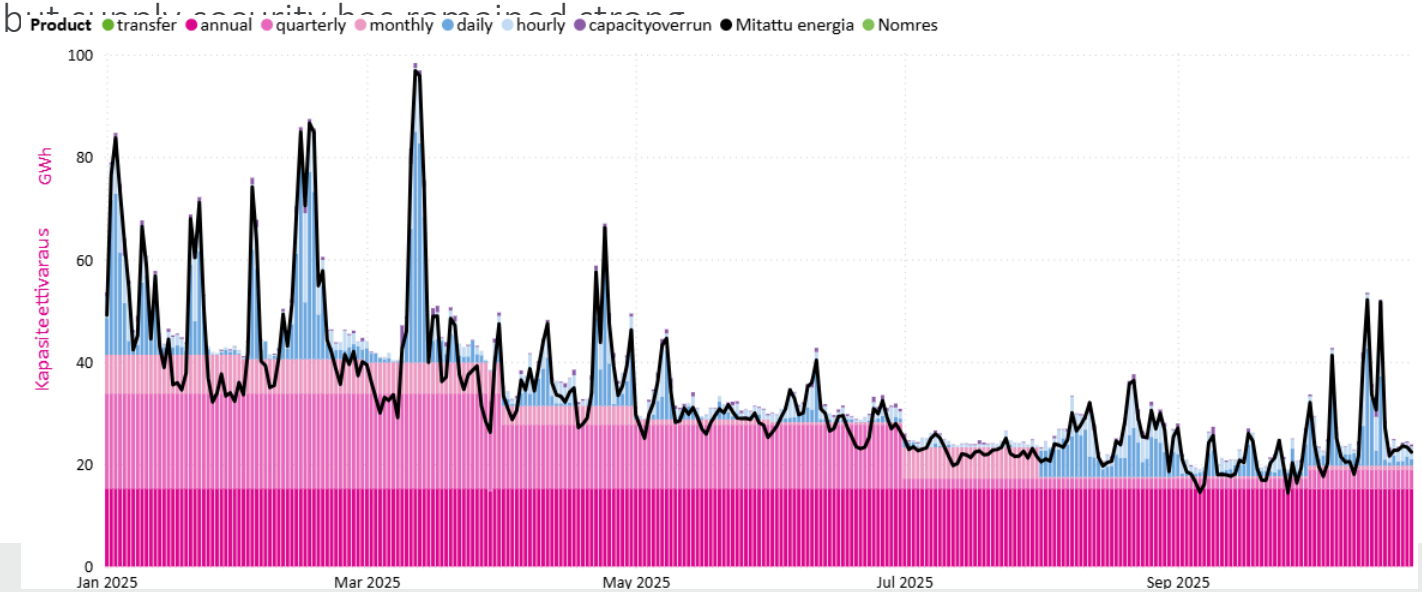
12:00 Lunch


TOPICALS ON THE GAS TRANSMISSION BUSINESS

TOPICALS ON THE GAS TRANSMISSION BUSINESS

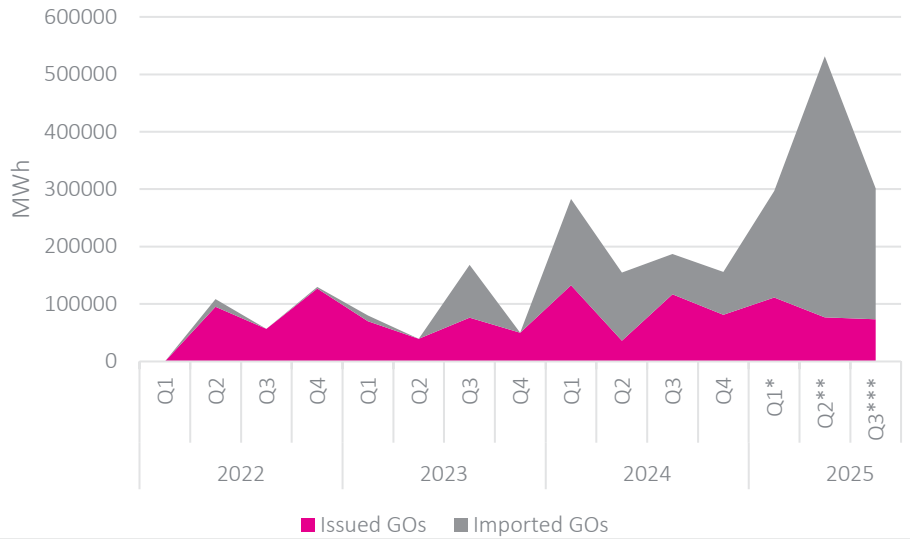
The year 2025 has been a period of stabilization in the gas business. Following the repairs to the Balticconnector pipeline, the market situation has stabilized. However, there have been changes in market dynamics:

- The role of gas in the energy production segment has shifted to become more dependent on electricity market conditions. The role of gases and gas infrastructure as providers of peak power has become more prominent.
- The base load mainly consisting of industrial consumption has set to the level of 20 GWh/day.
- The use of renewable gases in Finland has increased significantly, especially the import of renewable gases has grown substantially.
- Gas consumption levels have declined during the second half of the year. The estimated gas consumption for 2025 is approximately 12 TWh (compared to 14 TWh in 2024). During the winter season, fluctuations in weather conditions caused variations in demand, but supply security has remained strong.



TOPICALS ON THE GAS TRANSMISSION BUSINESS

- Gasgrid has conducted a comprehensive consultation process on th reference price methodology for transmission tariffs.
  - In our pricing strategy, we have considered the principles of fairness, cos and value reflectivity, predictability, and the promotion of renewable gases. The following changes have been proposed for the year 2026:
    - Introduction of a new pricing component, the capacity subscription charge, a part of the overall transmission service pricing structure.
    - Tariff discounts for renewable and low-carbon gases starting from the beginning of 2026.
- Imports of biomethane from Europe to Finland have increased significantly.
- The first guarantees of origin for hydrogen have been issued, and Gasgrid is actively involved in the preparation of hydrogen market legislation.

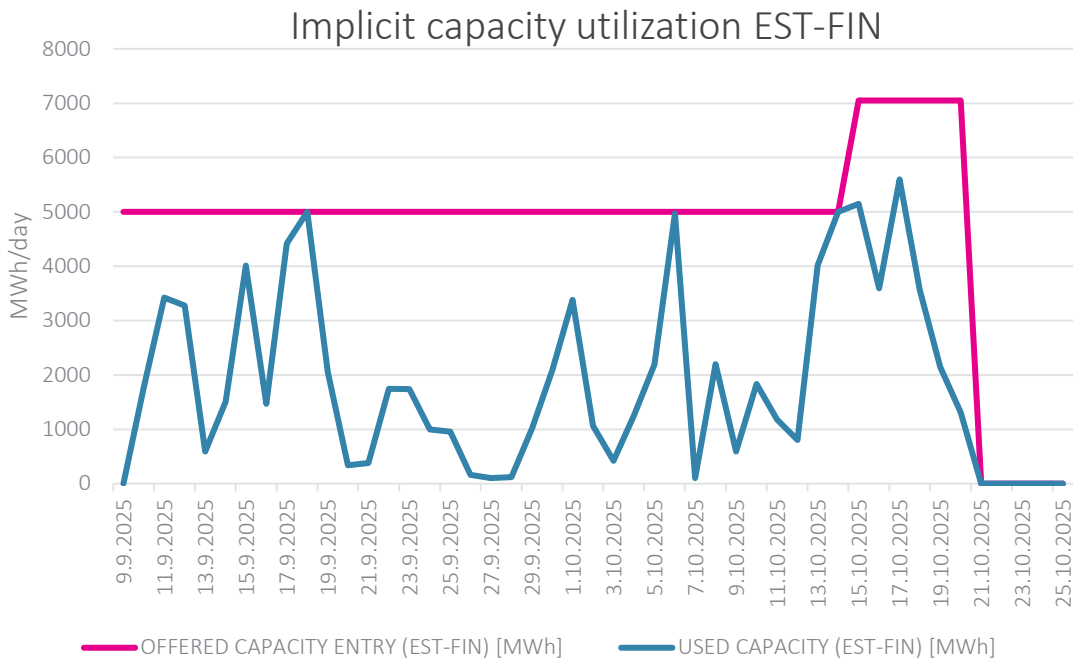


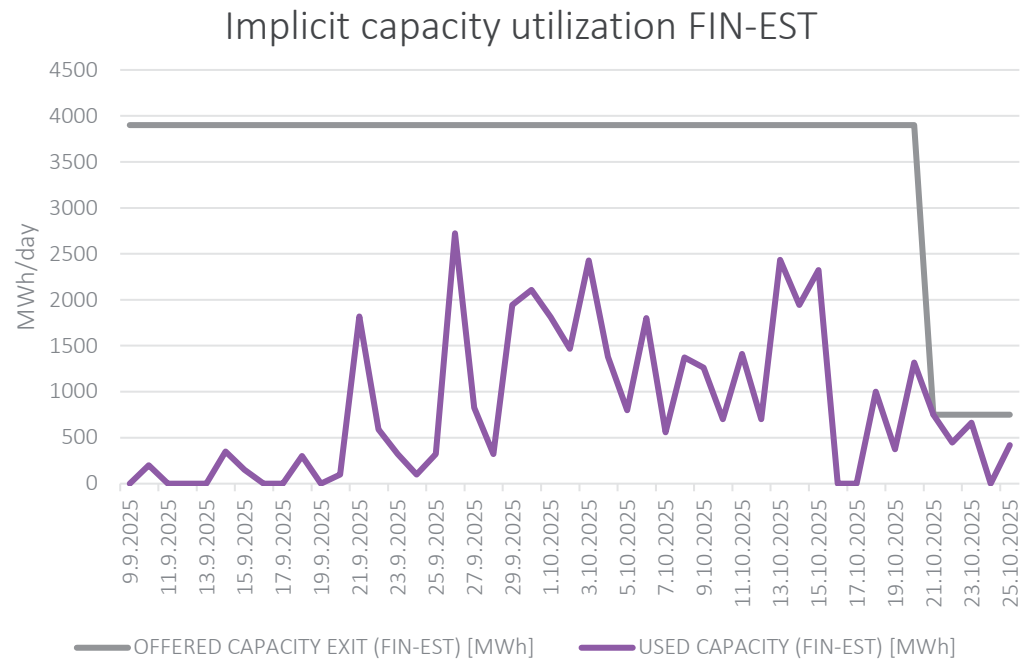
TOPICALS ON THE GAS TRANSMISSION BUSINESS

- Customer orientation, the development of a purpose-driven gas market model that responds to changes in the operating environment, cost-effective, but steering balancing management, and high security of supply will remain central themes in the coming year.
- Gasgrid has initiated and prepared new investments:
  - Pirkanmaa transmission pipeline project: A 14 km pipeline to connect the Taraste industrial area to the gas transmission network. Implementation is planned for 2027.
- Gasgrid aims to utilize the full potential of the methane network and LNG terminals to enable market participants to operate in the market efficiently and meet the flexibility and storage needs of a carbon-neutral energy system:
  - Customer-oriented and rational development of the gas market model considering the trends and changing market operating environment. In 2026, market model development to support the growth of clean gas solutions one of the focus areas.
  - Promoting technical implementations of renewable gas and balancing power projects with a customer-oriented approach.
- Longer-term gas market outlook to be initiated.

EEX has launched its operations on September 9

- EEX successfully launched its operations on September 9.
  - Around 65 market participants admitted by EEX to operate in Fin-Balt area out of which 35 market participants are active in Finland.





Biogas & e-methane production potentials – Southwest region

Bundled injection potential 6,7 TWh/a

Early stage plans

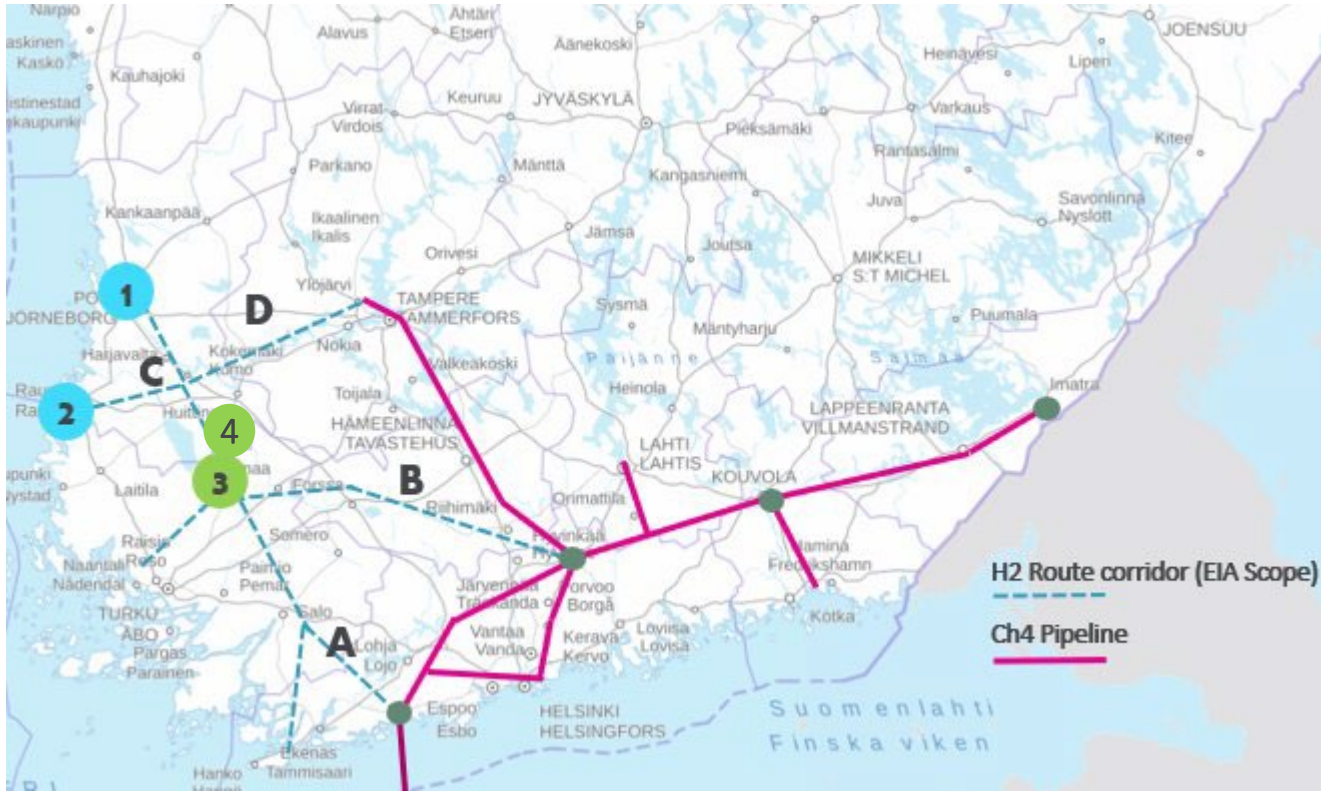
Injection potential

1) **Pori 2,0 TWh/a e-methane production + LNG terminal**

2) **Rauma 4,2 TWh/a e-methane production**

3) **Oripää 0,4 TWh/a biogas + e-methane**

4) Säkylä 0,13 TWh/a biogas

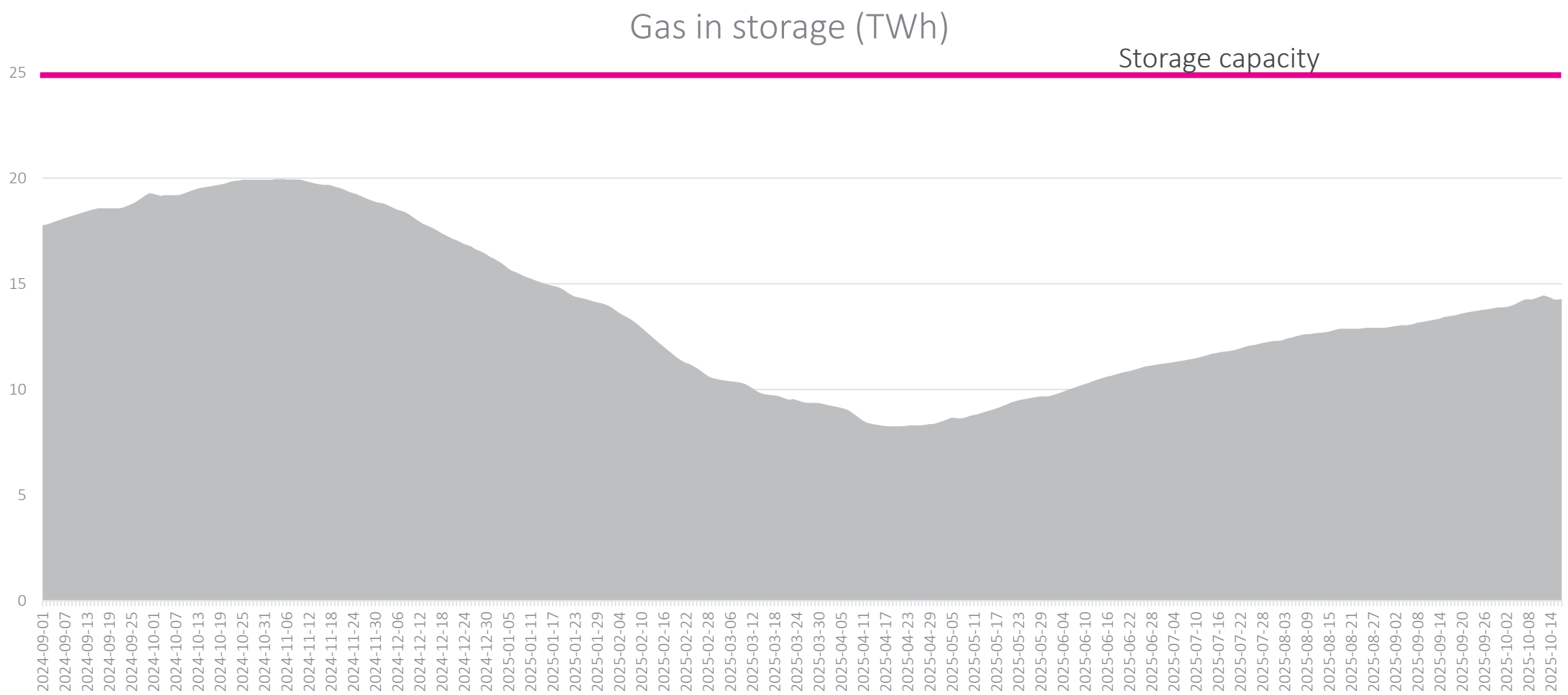


Route corridor segments

A - Inkoo - Loimaa 145km
B - Mäntsälä - Loimaa 151km
C - Loimaa - Pori + Rauma 125,5km
D - Nokia – Loimaa + Pori + Rauma 235 km

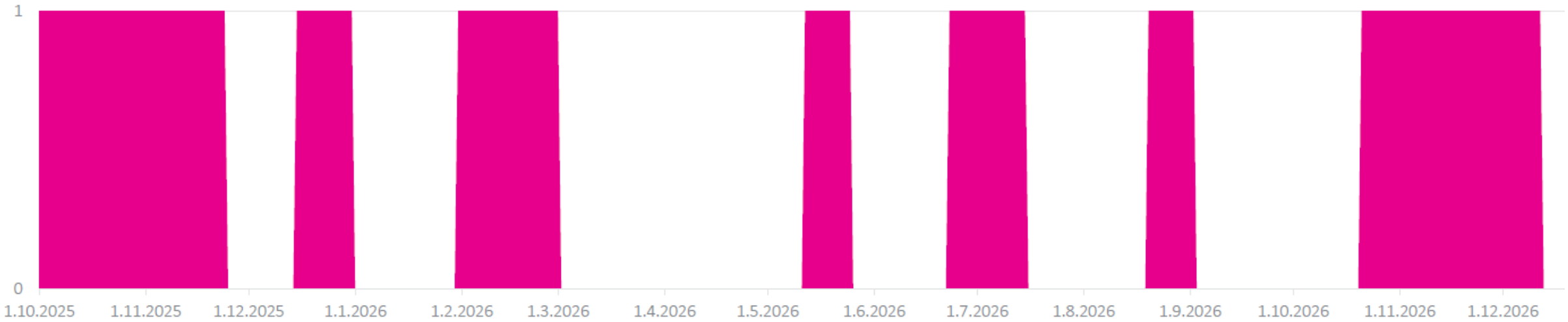
In network expansion planning shall be assessed if network development could take place without financing from the current market.

Incukalns gas storage



Inkoo LNG capacity reservations Q4/2025 and 2026

- 7 slots out of 20 was reserved in annual capacity allocation procedure for the calendar year 2026.
- After the conclusion of the annual Capacity Allocation Procedure and the definition of the Annual Service Schedule, the Scheduled Slots remaining unallocated are referred to as Spot Capacity.



New Terminal rules and commercial activity

End of 2025 situation

- One slot available starting end November

New terminal rules and changes to provide more flexible operations

- Long term capacity introduced
- Possibility to change a reserved slot to another free slot within the quarter
- Possibility to transfer quantities between users under the joint use concept

Reserved yearly capacity 2026:

- The schedule for 2026 published mid October
- 7 slots were reserved
- Terminal has 13 spot slots open for reservations
- 2 long term capacity slots reserved during autumn for 2027

Inkoo Terminal developments

- Exemplar was at drydock during August-September
- Terminal has started a project to check possibilities for ISCC certification in Inkoo
- Smaller vessel concept in the process to conclude the technical solution and costs for the needed technical changes
- Wind restrictions and other restrictions in Inkoo unchanged
- Terminal has now ISO certificates 9001, 45001, 14001

Clean Gas Market Development

Gas Market Forum 28/10/2025

Heli Haapea

GASGRID

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Common gas network in the EU area.

Procedures and requirements in Finland are similar regardless of how/where biogas is produced or in what form the gas is transferred.

Procedures and requirements in EU countries differ from each other.

Guarantees of Origin

Other Issuing Bodies in Finland:
Finnish Energy Authority – Heating and Cooling
Finextra – Electricity

The Issuing Body of the **gas and hydrogen GOs is Gasgrid**.

The only way to ensure the *renewable* origin of gas/hydrogen (both injected into the network and off-grid) for the end user.

Gasgrid is authorized to issue **both national and *EECS GOs.**

The verification obligation has been in place since July 1, 2022.

Utilization of biogas in emission trading and excise taxation (GO and PoS).

*EECS® European Energy Certificate System operated by Association of Issuing Bodies (AIB)

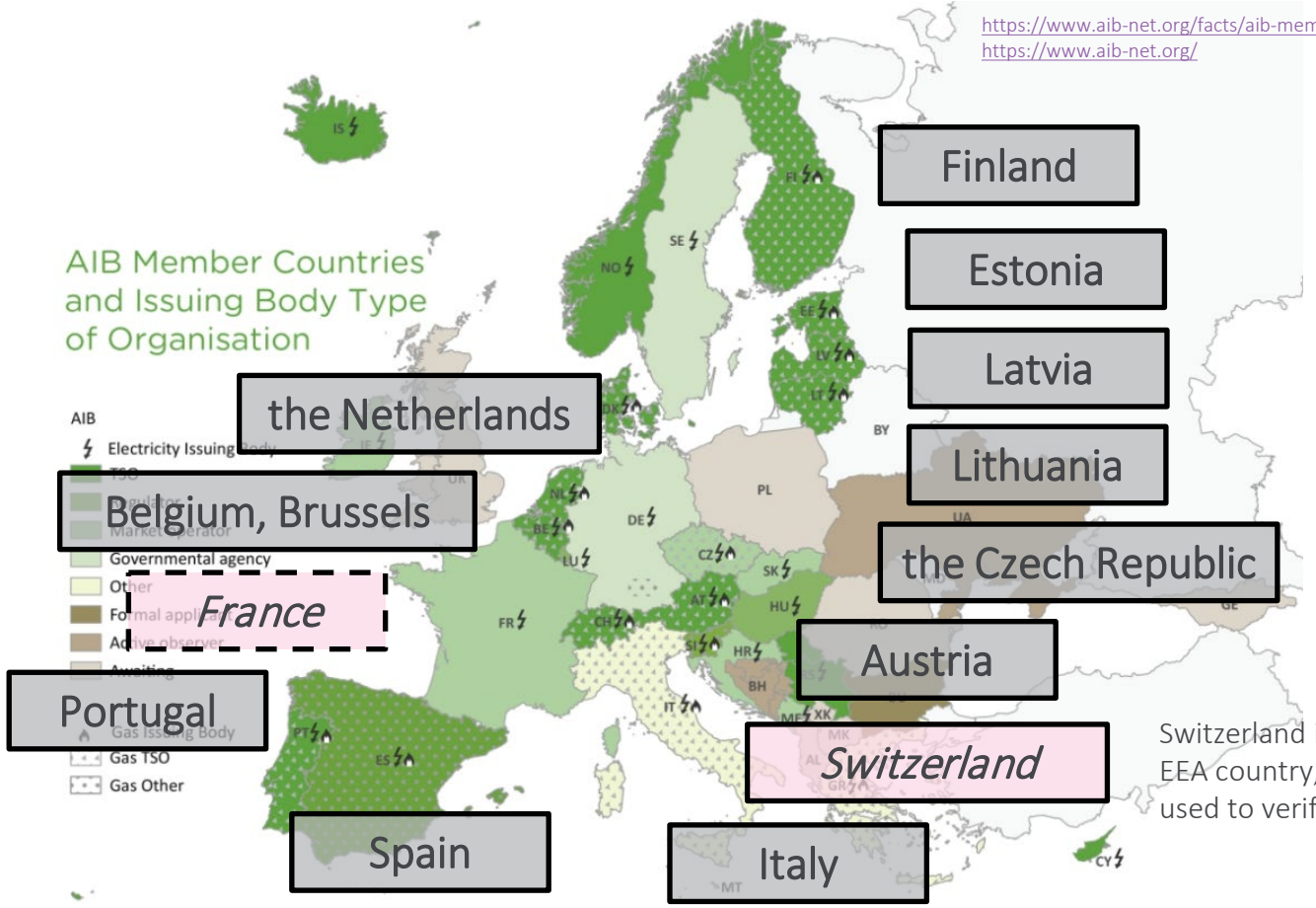
EECS® GOs, AIB's GSG Members

Ex-Domain cancellations:
- Denmark → Finland
- France → Finland
- Finland → France

Finland/Gasgrid does not generally prevent cancellations abroad, but the receiving country may not accept cancellations for verification of origin. When canceling abroad, the destination country must always be informed.

Association of Issuing Bodies (AIB)

https://www.aib-net.org/facts/aib-member-countries-regions
https://www.aib-net.org/



Switzerland is neither an EU nor an EEA country, so Swiss GOs cannot be used to verify the origin in Finland

Note1: Regarding *the Standard CEN EN 16325* (published 15 July 2025), **it is only possible to transfer GOs *from Issuing Body registry to Issuing Body registry***

Note2, Germany: There is an Issuing Body (UBA Umweltbundesamt, Environment Agency), but **no gas GO registry** yet (expected around 2027-28)

Utilization of Biogas in Emission Trading and Excise Taxation

	PoS	GO	Physical connection	Purchase accounting	Notification to the tax liable
Emission trading (Finnish Energy Authority)	Required	• Canceled GOs must be issued for the same sustainable biogas quantity and batch. • GO is required to fulfill the verification obligation.	• Biogas is injected into the common gas network in the EU area. • Can demonstrate the allocation requirements of GOs.	• Supplied biogas (MWh) • Information of natural gas network • Biogas entry point • Final consumption point • **GO and sustainability documents must be clearly linked** via ID numbers. • **Criteria must be shown per facility**.	-
Excise taxation (Finnish Tax Administration)	Required	• Can be utilized in accounting. • GO is required to fulfill the verification obligation.	• Biogas is injected into the common gas network in the EU area. • **A physical pipeline connection** between the production site and the gas usage site. • **Biogas must be produced before it can be used** (product taxation).	• The same purchase accounting required in emission trading can also be utilized.	Required monthly

Biogas monitoring and reporting in the gas grid under ETS (ver4, in Finnish)

Clean Gas Development – Draft Terms

Term 1	Term 1.x	Term 1.1.x	Definition	Documents
1 *Clean gases*	1.1. Renewable gas	1.1.1.Biomethane, e-methane and hydrogen (RFNBO and non-RFNBO)	Gas produced from renewable energy sources. RFNBO: Fuel of non-biological origin whose energy content comes from renewable sources (e.g., renewable electricity). Used when it is important to emphasize the RFNBO attribute (temporal and geographical link to renewable electricity production).	GO and PoS – national or EU voluntary sustainability scheme, such as ISCC and REDcert RFNBO attribute itself does not add value from gas market perspective.
	1.2 Low carbon gas	1.2.1 CCUS hydrogen (Carbon Capture, Utilisation and Storage), recycled CO2 + e-methane	Not renewable. Must demonstrate at least a 70 % emission reduction compared to fossil fuels.	PoS – EU voluntary sustainability scheme, such as ISCC and REDcert

Clean Gas Development – Draft Key Roles

Term	Definition
Virtual injection point for clean (domestically produced) gases	A commercial injection point (market mechanism) where the physical injection points of renewable or low-carbon gases are combined into a single commercial or virtual point.
Injection point for clean gases (direct-to-grid)	An injection point where renewable or low-carbon gas can be injected directly from the production plant into the grid.
Container injection point for clean gases	A physical point where renewable or low-carbon gas is delivered by containers and injected into the grid. Requires metering, pressure boosting, and agreements.
Clean gas injection party	Responsible for both the technical and commercial operations of injecting clean gases into the grid: • Production and processing • Management and validation of metering equipment • Fulfilling quality requirements • Managing contractual relationships and shipper data allocation • Demonstrating origin and sustainability (GO + PoS) – or is this the shipper's responsibility? • Registration and maintenance of the injection point

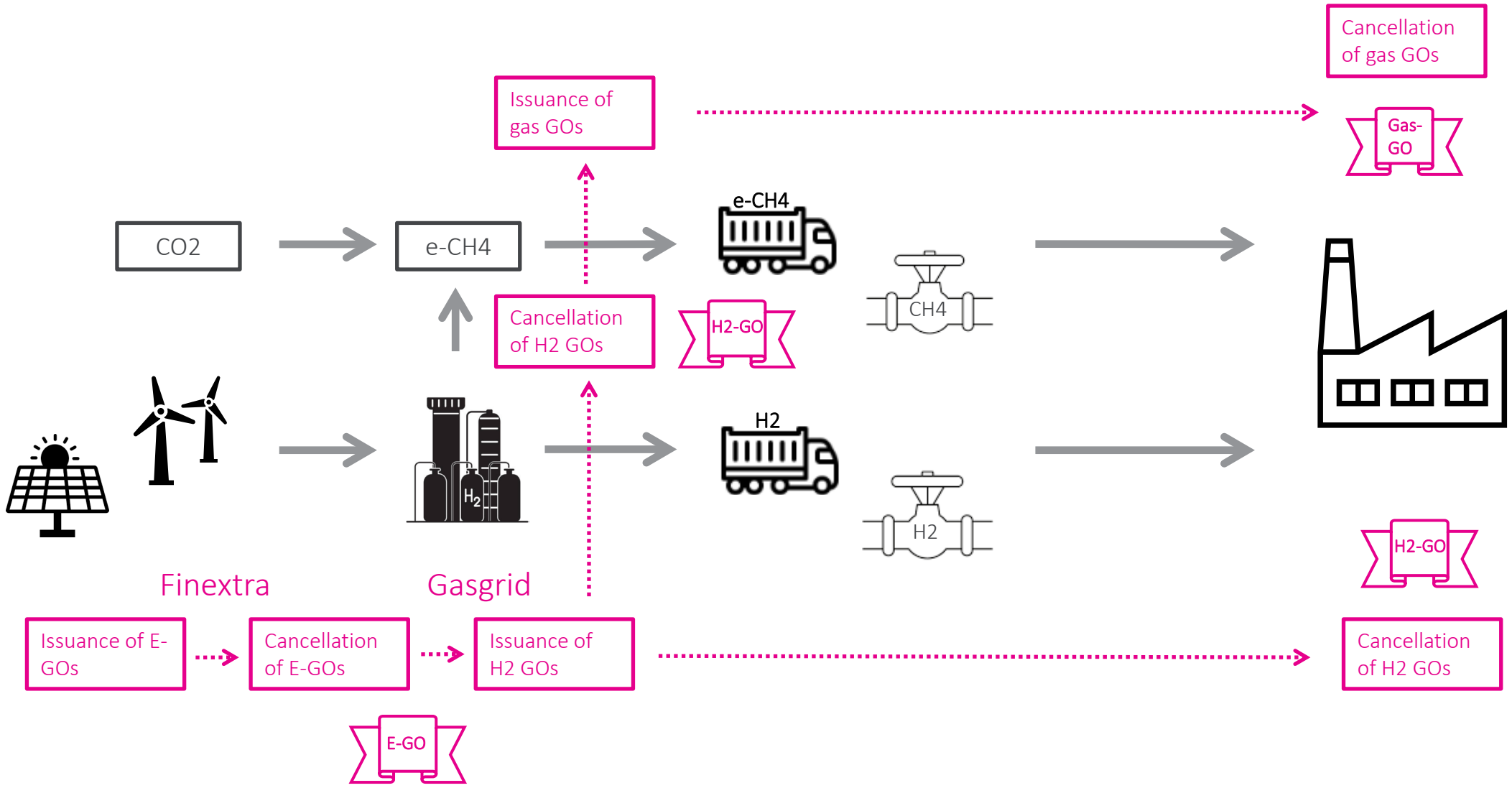
Clean Gas Development – Draft Operational Processes and Responsibilities

Function	Description
Volume Allocation	• Based on validated metering data, allocated to the shipper per injection point • Hourly data, serves as the basis for balancing
Multiple Shippers	Multiple shippers can inject gas at the same point (at different times or at the same time, nominations required?), if: • Each has a contractual relationship with the clean gas injection party • Metering enables volume allocation • Injection point, shipper, and hourly injection can be allocated
Shipper Data Change	• Clean gas injection party announces a new shipper in the Portal • The shipper confirms the contractual relationship in the Portal
Balancing	• The result of volume allocation serves as the basis/input for balancing. • Each shipper is responsible for their own balance.
Responsibilities	• Notification of contractual relationship – Clean gas injection party • Confirmation of contractual relationship – Shipper • Balancing responsibility – Shipper
IT Notes	In the Portal: • Functionality for changing contractual relationships • Confirmation mechanism for the shipper • Volume allocation table (injection point, shipper, hourly injection)

Clean Gas Development – Draft Tariff Reductions / Documentation (100% or 75%)

Element	Definition
Cycle	• Quarterly or a half-year basis, applied retroactively
Documentation	• **Renewable gases**: GO and PoS – either national or EU voluntary scheme (e.g., ISCC) • **Low-carbon gases**: only EU voluntary PoS • GO and PoS must refer to the same batch, matching the injection point and gas route
Requirements	• Produced in Finland • Measured volume injected into the grid
Cases	1. Injection point for clean gases (direct-to-the- grid) 2. Container-based injection point for clean gases

Renewable Hydrogen and E-methane GOs



Let’s Improve the Clean Gas Market – Together with Your Feedback

We welcome your thoughts:

- What works well in the current renewable gases framework?
- What challenges or uncertainties do you see?
- Do we need to update or rethink any concrete use cases?

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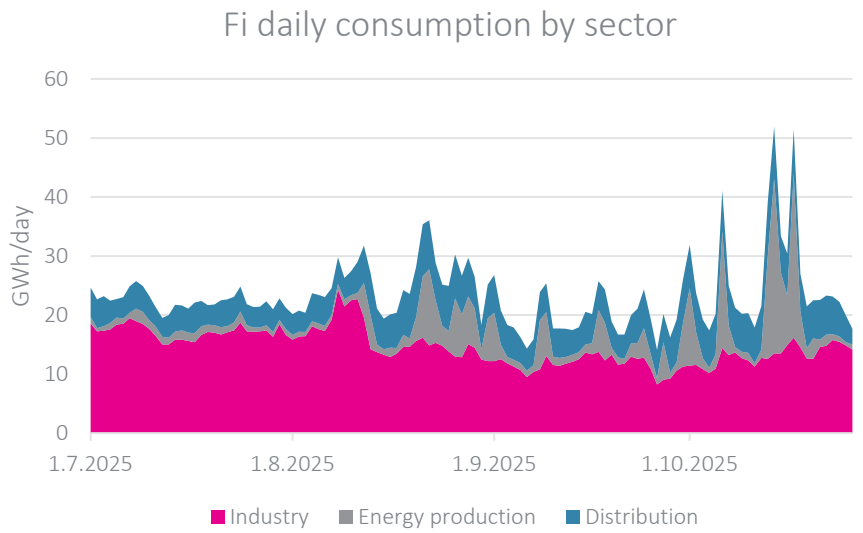
GASGRID

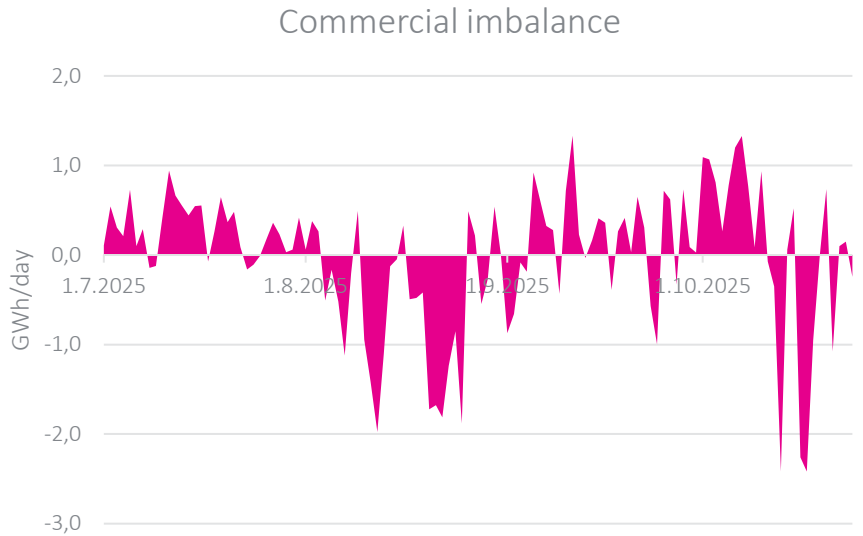

Break 15 min

Market overview

- Finnish gas consumption H2/25 so far:
  - min ≈ 14 GWh/d, max ≈ 52 GWh/d, avg ≈ 24 GWh/d
- Consumption 1.1. – 26.10.2025 ≈ 10 TWh (same period 2024 ≈ 11,5 TWh)
- Commercial balancing has remained overall on a good level during H2/25
  - Gasgrid has done some balancing actions in the gas exchange during H2/25, but no heavier price steering actions significantly impacting balance gas prices have been needed
- Gasgrid has improved its internal balancing model, monitoring and procedures improving the cost efficiency of balancing.
  - Neutrality charge unit prices have been low, close to zero or even negative (if negative, TSO compensates BRP) during 2025

Daily consumption (non-validated data)

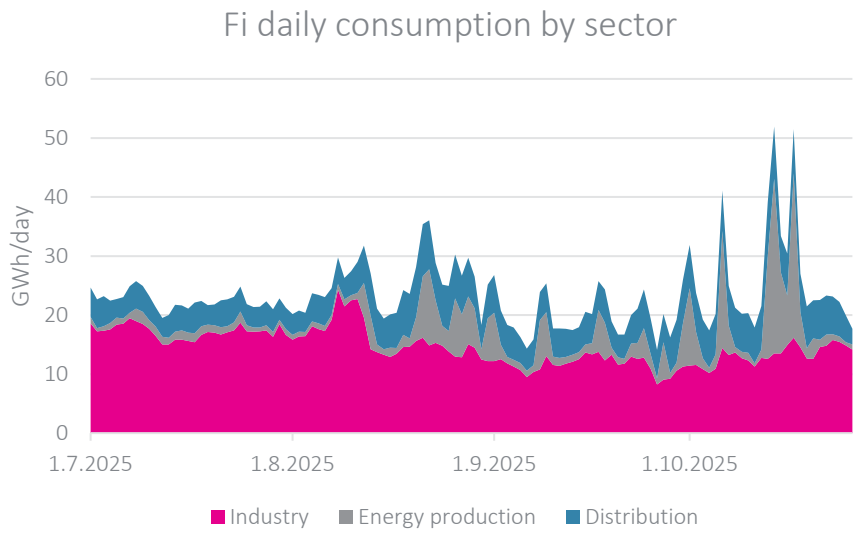


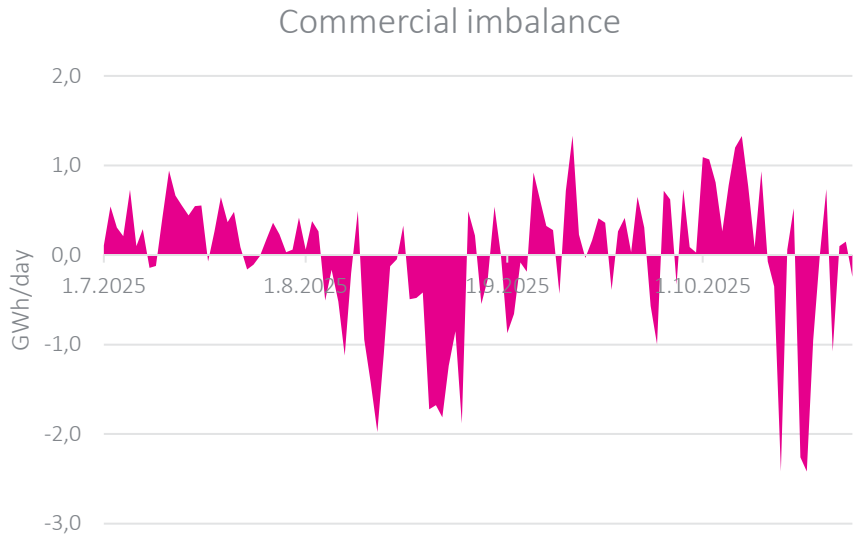


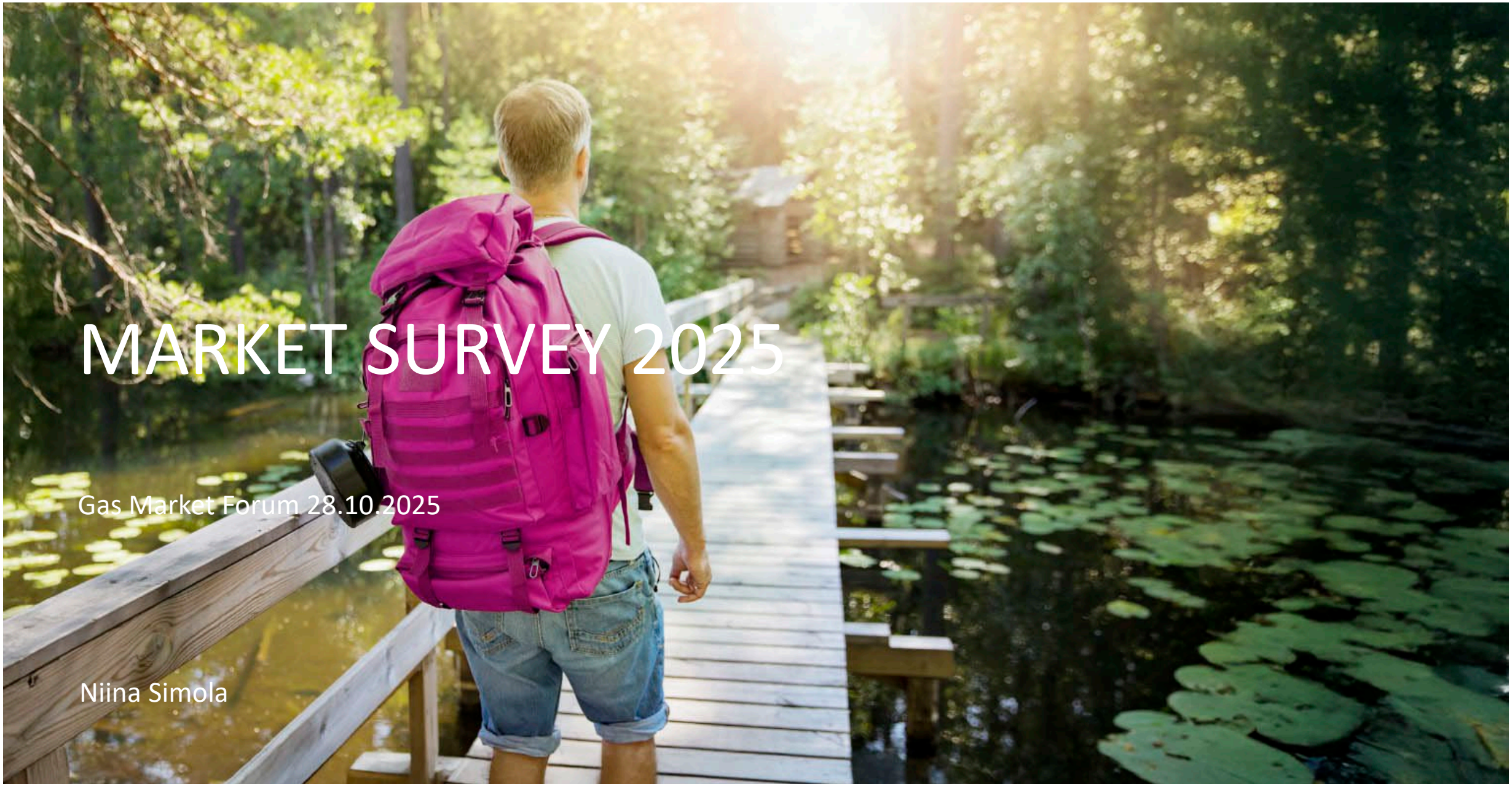
Market overview

- Consultation regarding updated Balancing Service Agreement Terms open **until 16th Nov**.
  - Main updates regarding commodity price setting possibilities and penalty component
  - Possibility to offer commodity charge based on the daily FI NGP (EEX avg/d) with a pre-defined fixed price adjustment component [€/MWh] in addition to the current fixed commodity charge option.
  - Gasgrid requests feedback from Shippers who are interested in participating in balancing service tenders in the future
  - Updated version of the terms will be published by 1.12.2025
  - Updated terms will enter into force on 1.1.2026
- Balticconnector capacity
  - Maintenance works on Estonian system side 21.-30.10. (10 gas days) limiting BC capacity
  - Capacity restrictions will be lifted from the beginning of gas day 31.10.
  - Technical capacity will return to normal level (78 GWh/d Exit and 70,5 GWh/d Entry)

Daily consumption (non-validated data)







MARKET SURVEY 2025

Gas Market Forum 28.10.2025

Niina Simola

Market Survey 2025

- The survey was launched 4 months ago and Gasgrid uses the answers deepening customer understanding and continuing to develop the market model towards our customers needs

- 32 questions regarding customer experience and the Finnish Gas Market model and services

Thank you all for the answers!

Results 2025

	CUSTOMER EXPERIENCE	MARKET MODEL AND SERVICES	TOTAL
Average	4,02	3,53	**3,63**

Scale from 1 to 5 (5 is the best and 1 the worst)

Results of the Market Survey 2025

CUSTOMER EXPERIENCE

Communication and accessibility got the highest scores of 4,11 and 4,15

Events held by Gasgrid got score of 3,94

Publishing of Market Data (ENTSOG TP) got lowest scores 3,88

MARKET MODEL AND SERVICES

Functioning of the secondary capacity market got the lowest score 2,7

Balancing service model and monthly tendering process got 3,2

Documentation of the Market rules and procedures got the highest score 3,83

Gasgrid’s role of facilitating the development of Clean gases got second highest score 3,77

Market Survey: Main open feedbacks

CUSTOMER EXPERIENCE

Competence and accessibility of Gasgrid's specialists is seen good

Fast answers to problems

UMM's should be in one place (TSO's and market participants)

Email distribution list registration should be easier

MARKET MODEL AND SERVICES

Low neutrality costs are considered as an improvement

Pricing is a challenge and should be considered so that it is possible to maintain the current consumption level of natural gas

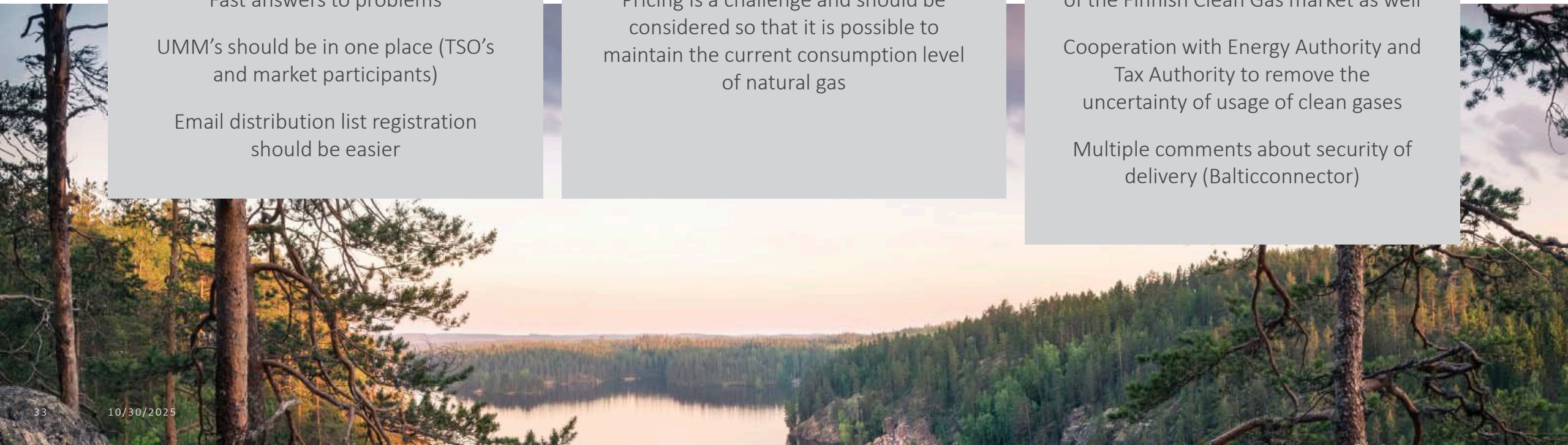
OVERALL DEVELOPMENT IDEAS

Gasgrid should facilitate competition

Gasgrid should improve the situation of the Finnish Clean Gas market as well

Cooperation with Energy Authority and Tax Authority to remove the uncertainty of usage of clean gases

Multiple comments about security of delivery (Balticconnector)



Mentimeter results of the Forum

Rate the topics of todays Forum (drag topics in order 1st most interesting, 2nd interesting etc)

How do you see the usability of EEX?

It works if there's liquidity and particiåants

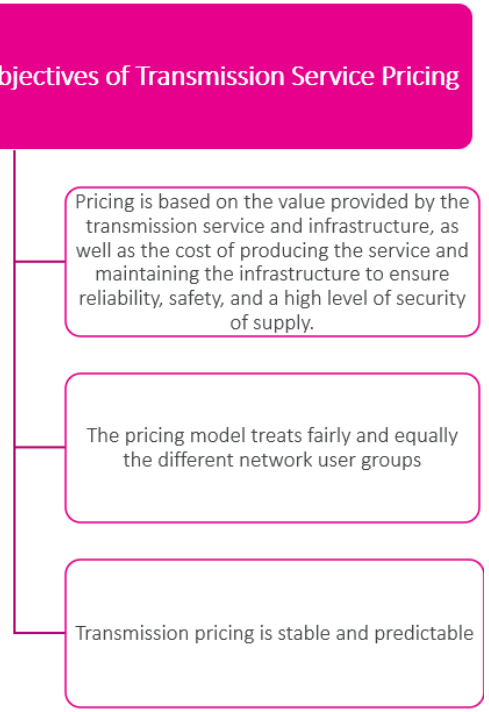
Joule direct has many deficiencies

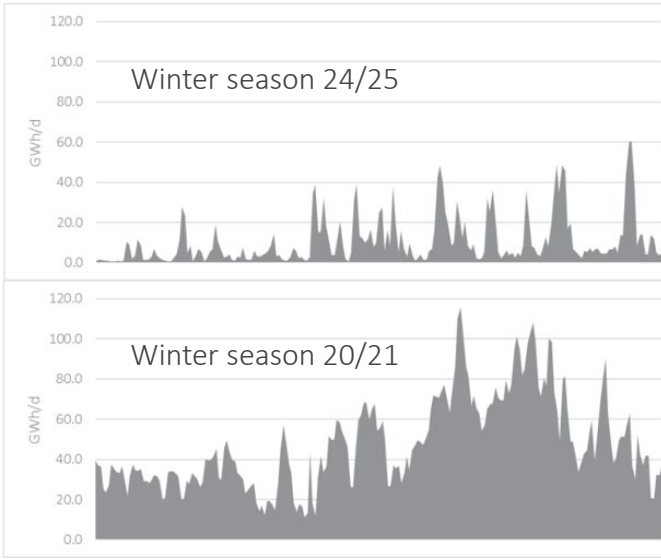

GASGRID

Transmission service pricing 2026

Transmission service pricing 2026

- Consultation was organized by the Energy Authority between 6.10. – 24.10.2025.
- Gasgrid proposed continuing applying postage stamp with ITC agreement hybrid tariff model.
- Proposed tariffs and capacity product multipliers for 2026 are presented in the table.
- Gasgrid has proposed introducing a new tariff component, Capacity Subscription Charge from the beginning of 2026.
  - Unit price for Capacity Subscription Charge = 1730,40 €/MW
  - The inclusion of the capacity subscription charge as part of tariff methodology would not affect the level of reasonable return on gas transmission, which is determined according to the Energy Authority's regulatory method.
- Gasgrid aims to publish the final tariffs as soon as possible after final confirmation from the Finnish Energy Authority.
  - Final tariffs will be published latest 30.11.2025.



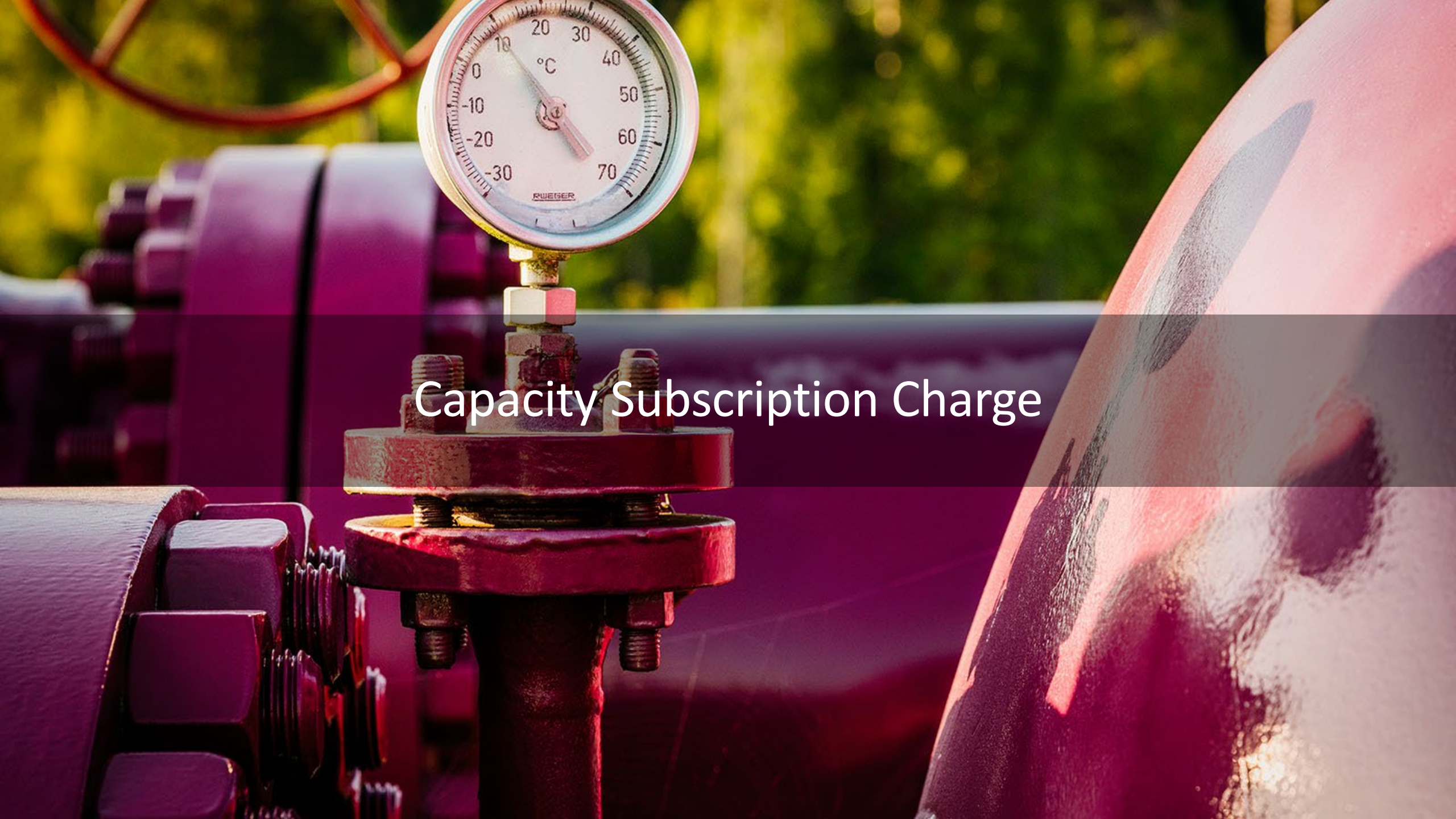


Firm capacity products

The price of yearly capacity product (= reference price)	
Entry capacity	
Balticconnector	– €/kWh/day/year
Biogas virtual entry point	0,14277 €/kWh/day/year (0,39115 €/MWh)
Hamina LNG entry point	0,14277 €/kWh/day/year
Imatra	0,14277 €/kWh/day/year
Inkoo LNG entry point	0,14277 €/kWh/day/year
Exit capacity	
Balticconnector	– €/kWh/day/year
Finnish exit zone	1,31283 €/kWh/day/year (3,59679 €/MWh)

The price of short-term entry capacity products	
Capacity product	Tariff multiplier
Year (= *reference price*)	1,00
Quarter	1,10
Month	1,25
Day	1,50
Within-day	1,70
Capacity overrun	1,50 x 1,70 = 2,55

The price of short-term exit capacity products	
Capacity product	Tariff multiplier
Year (= *reference price*)	1,00
Quarter	1,10
Month	1,25
Day	2,0
Within-day	2,50
Capacity overrun	1,5 x 2,5 = 3,75

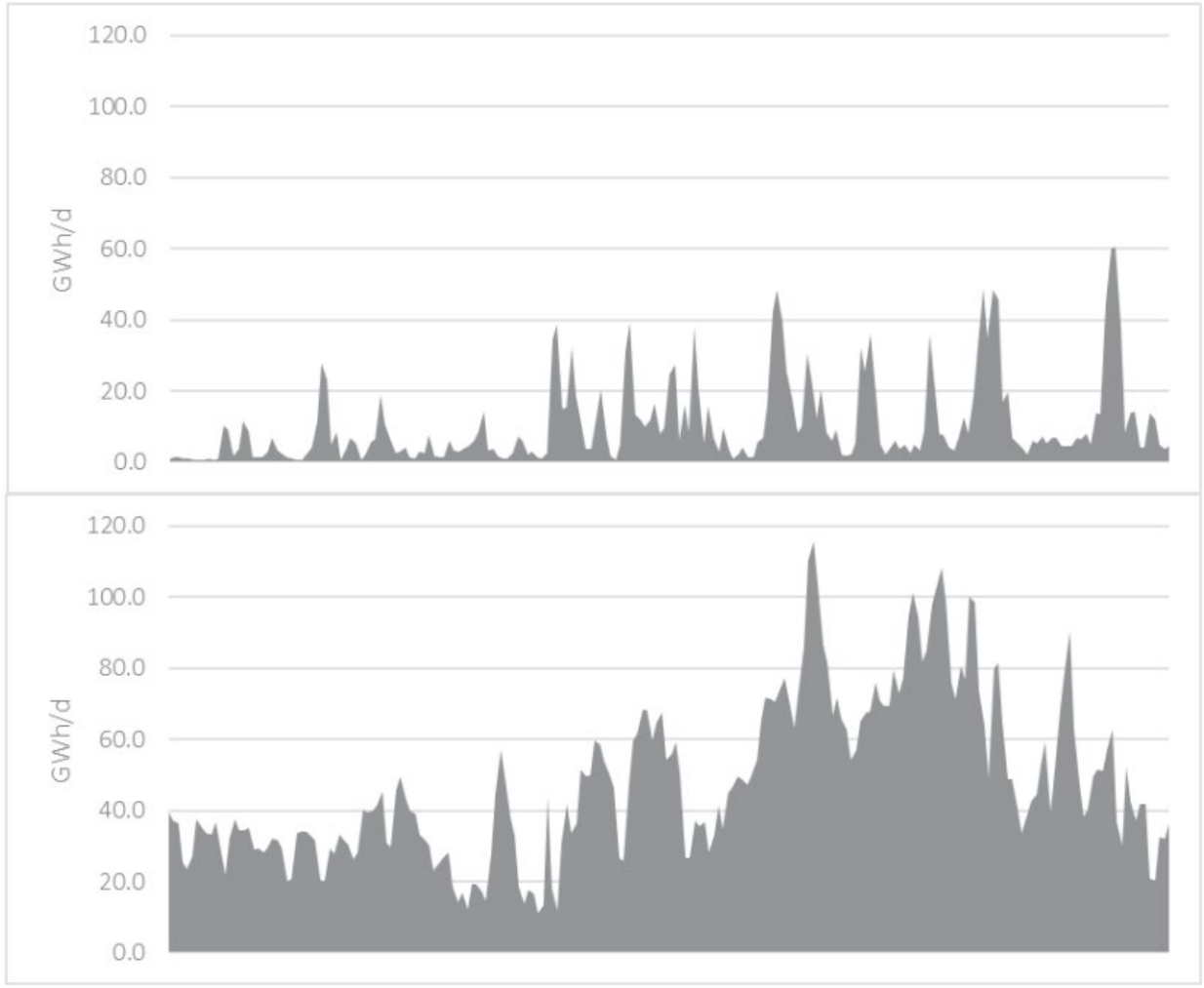

Capacity Subscription Charge

Estimated revenue collected from offtakes (exits)

- **Current model**: revenue collected from offtakes (exits) = exit zone capacity tariffs + commodity charge
- **As of 2026**: revenue collected from offtakes (exits) = exit zone capacity tariffs + commodity charge + capacity subscription charge revenue
  - → Total revenue estimated to be collected from offtakes will be allocated between the new proposed capacity subscription charge tariff component, exit zone capacity tariffs and commodity charge
  - → Capacity subscription charge tariff component therefore has reducing impact on the revenue estimated to be collected from the exit zone capacity tariffs as the total revenue collected from offtakes is divided between the three tariff components instead of being collected only from the exit zone capacity tariffs and commodity charge

Capacity Subscription Charge

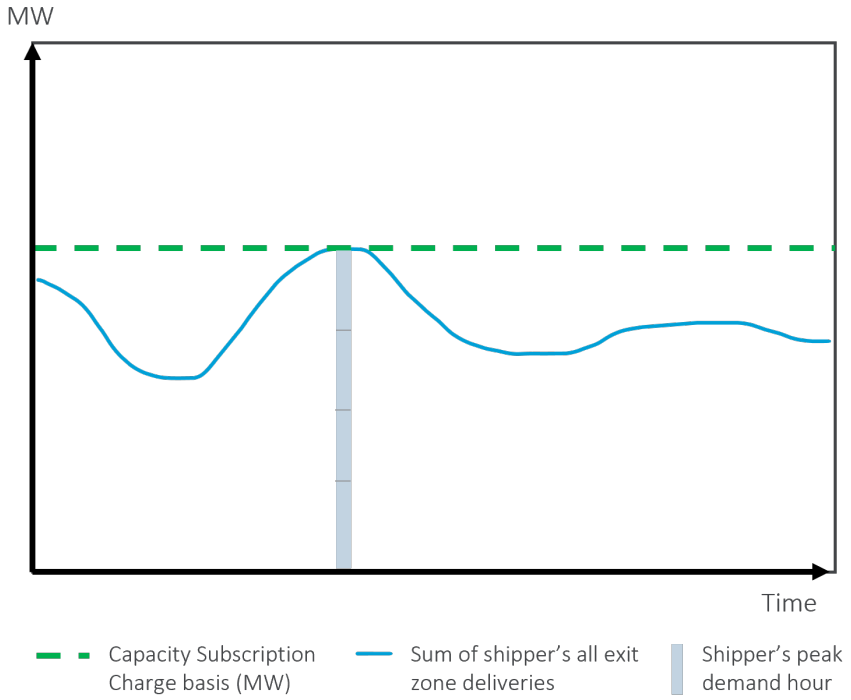
- Background: Need to ensure fair allocation of costs between different network user groups
- Change in the Finnish gas demand:
  - Energy production sector base load demand has practically disappeared
  - Consumption in this sector consists of occasional peaks when electricity market conditions are favorable for gas consumption
- Gasgrid maintains infrastructure and capacity is available 24/7/365
  - Maintaining readiness incurs costs regardless of actual usage
  - Fair and equal treatment must be ensured among network users
  - Current tariff model favors irregular users and causes imbalance in cost allocation
  - Growing share of costs falls on stable base load consumers
- Capacity subscription charge seen as the way to enhance fairer cost allocation, stabilize pricing and improve management of deficit and surplus revenue



Gas demand in energy production sector during winter seasons 24/25 (upper figure) and 20/21 (lower figure)

Determination of the Capacity Subscription Charge

- Charge is based on the **shipper's exit zone** delivery portfolios highest peak demand hour of the review year
  - Review year = 1.1.202X 07:00 - 1.1.202(X+1) 07:00 (EET)
- Highest peak demand hour will be determined from the **hourly sum** of all exit zone delivery points belonging to the shipper's delivery portfolio
  - Highest hourly demand (MW) will determine the final capacity subscription charge for the review year (if there are no changes to the delivery relationships during the review year)
- Gasgrid has considered the opinions and feedback received during the previous consultation and made changes to the proposed model
- For the sake of clarity, Gasgrid no longer proposes the charge to be based on the individual connection capacities from the connection agreements for each delivery point separately (as presented in the consultation document published April 16th, 2025



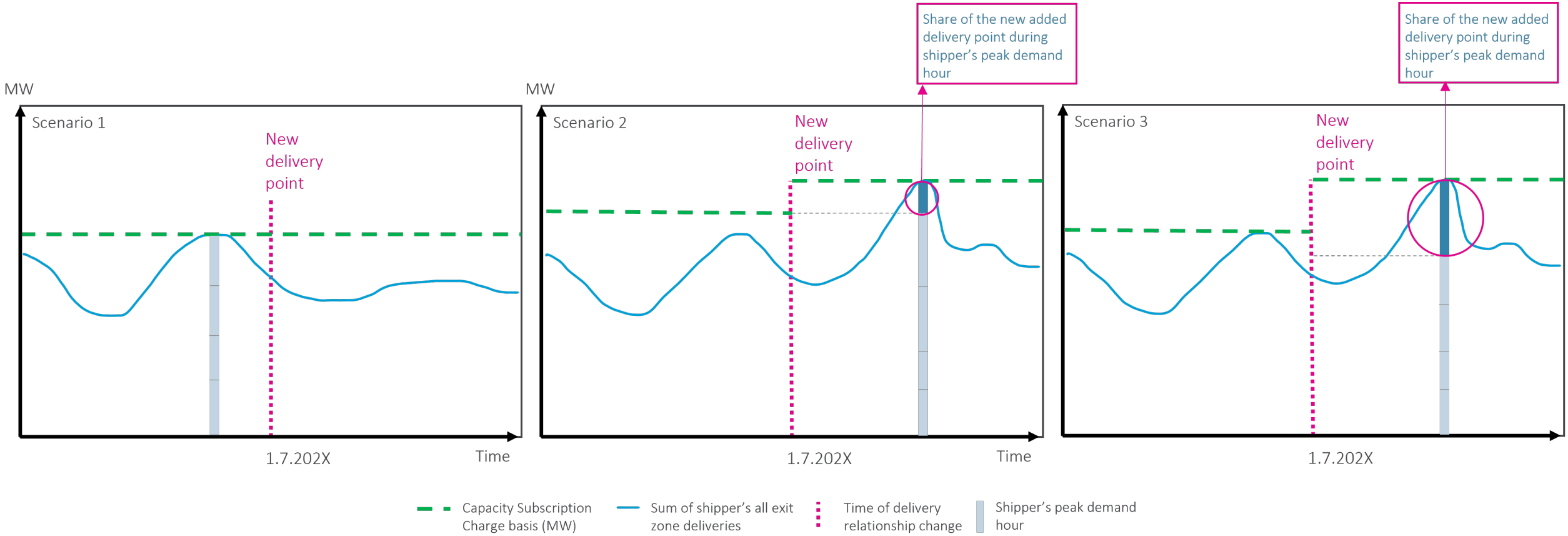
Notification of the estimated capacity subscription / Invoicing

- Shipper shall submit its capacity subscription estimate to Gasgrid no later than Dec 15th (or next business day if Dec 15th is on weekend)
  - Capacity Subscription form for providing this information will be available at Gasgrid's website
- Estimate acts as the basis for invoicing for the upcoming review year
- Invoicing is carried out monthly on the 1st day of the month or the next business day
- Example:
  - Shipper's capacity subscription estimate = 100 MW
  - Capacity subscription charge = 1730,40 €/MW
  - Annual invoice = 100 MW * 1730,40 €/MW = 173 040 €
  - Monthly invoice = 173 040 / 12 months = 14 420 €/month
- Final invoicing ("*reconciliation invoicing*") will be carried out after the review year has ended based on the actual highest peak delivery quantity
  - If actual peak > estimated capacity subscription, Gasgrid will invoice the difference (MW) multiplied by the unit price
  - If actual peak < estimated capacity subscription, Gasgrid will credit the difference (MW) multiplied by the unit price

GASGRID

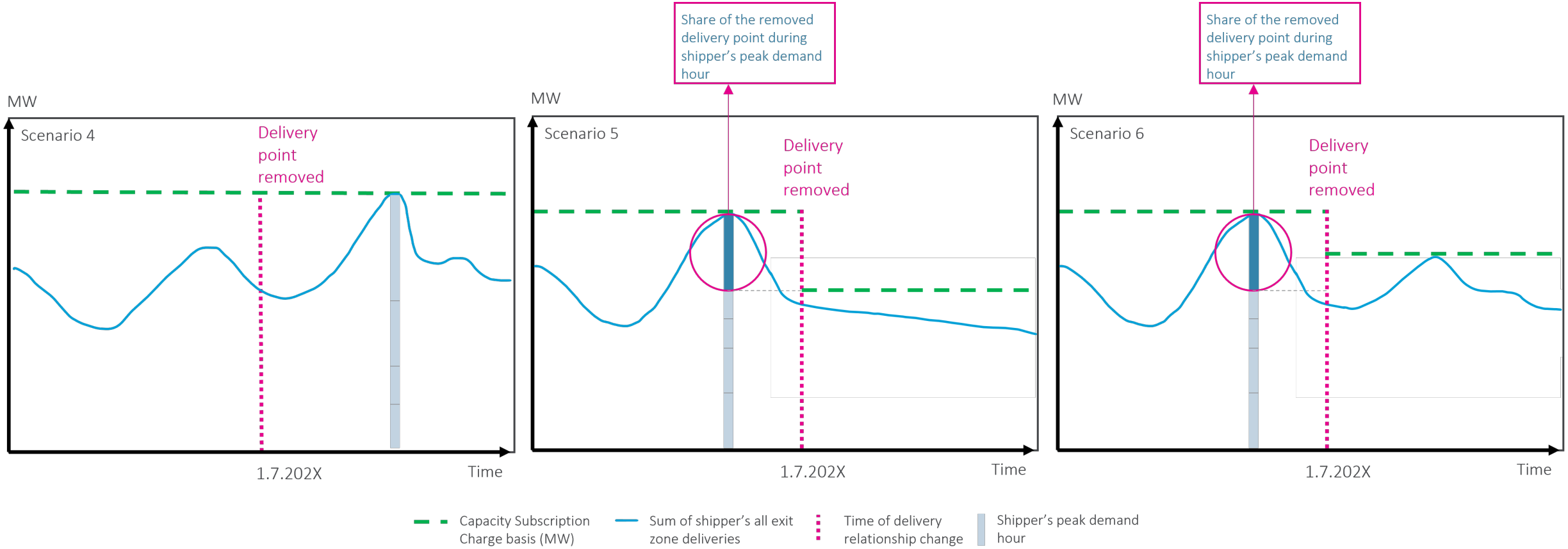
Changes in delivery relationships during review year (1/2)

- If new delivery point(s) are **added** to shipper's delivery portfolio during review year, the potential impact of these will be considered in the reconciliation invoicing
- Example: a new delivery point is **added** on 1.7.202X. Following figures illustrate how the capacity subscription charge level (MW) will be determined in the three different scenarios (after the review year).



Changes in delivery relationships during review year (2/2)

- If delivery point(s) are **removed** from shipper's delivery portfolio during review year, the potential impact of these will be considered in the reconciliation invoicing
- Example: delivery point is **removed** on 1.7.202X. Following figures illustrate how the capacity subscription charge level (MW) will be determined in the three different scenarios (after the review year).




Thank you!
Questions?