



Agenda

- 1) Opening – 12:30
- 2) Competition law guidelines *informative*
- 3) Greetings from transmission business unit *informative*
- 4) Market Development *discussion*
- 5) Creditworthiness requirements *discussion*

Coffee break (roughly in the middle of the Forum)

- 6) Service Development *discussion*
 - Demo – automatic approval of capacities and collateral monitoring in the Portal from the customer's point of view
 - Service development activities: implemented, in preparation and planned.
- 7) Overview concerning future gases *informative*
- 8) Mentimeter and final words *informative*

Closure of the Forum – 15:00



Reminder of Competition law guidelines for Gasgrid Finland and its market forums

Guidelines for the market forum meetings

1. The meeting materials sent in advance must clearly indicate both the matters for which discussion and the participation of the participants are expected, as well as matters that are for information only.
2. Meeting agenda is adopted by the participants as the rules of procedure of the meeting and is maintained throughout the meeting.
3. Meeting materials are published on Gasgrid Finland's [website](#) simultaneously for members of market forums and all stakeholders.
4. Meetings and meeting materials are to be carefully planned so that they do not deal with non-public or sensitive information.
5. Competition guidelines for meetings are reviewed at regular intervals in market forums, in particular when new members and / or representatives join.
6. No sensitive information is discussed at meetings, nor the accuracy of information provided to the market by others speculated about.
7. No more detailed information on Gasgrid Finland's financials than what is publicly available is provided (interim reports and financial statements).
8. Statistical summaries and market reviews do not contain any comments, analyzes or observations that may be used to infer company specific information on future prices or market developments.
9. The meeting will be adjourned, if the conversation moves to a prohibited subject/area.
10. Names of the participants and the topics discussed in the meeting will be recorded in the meeting minutes in a factual and clear manner.

Prohibited restrictions of competition

- Generally speaking, all **agreements, decisions** and **other arrangements** which have as their **object** or **effect** the **prevention, restriction** or **distortion** of competition are prohibited.
- In particular, those which:
 1. directly or indirectly fix purchase or selling prices or any other trading conditions;
 2. limit or control production, markets, technical development, or investment;
 3. share markets or sources of supply;
 4. apply dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage
- This so-called the cartel prohibition requires, inter alia, that **competitors**:
 - do not exchange, directly or indirectly, **confidential** or **sensitive information** which may **have an effect** on the future competitive and market behavior of the companies.
- However, general cooperation and lobbying to enhance the functioning of the market (e.g. joint market research, joint preparation of general rules of the game affecting the functioning of the market) may be allowed under certain conditions.

Competitively sensitive information

- Generally, information that **is not available** from public sources is considered sensitive, such as:
 - purchasing areas, sales areas;
 - market share information;
 - sales volumes;
 - cost structures;
 - information about customers and their purchases;
 - information relating to tenders; and
 - customer-specific discounts or discount policies.
 - The more **detailed, company-specific**, and **up-to-date** the information, the more likely the information is to be **considered sensitive**.
- In the **context** of Gasgrid Finland's market forums:
 - Unpublished information, such as:
 - gas sales and purchase prices or information from which prices can be deduced;
 - gas production volumes, production plans, maintenance, etc. decommissioning plans, investment plans, plant decommissioning plans;
 - gas consumption plans, expansion / reduction plans affecting consumption;
 - Gas import / export plans;
 - Gas transmission disruptions, planned outages not announced to the market, network construction plans.

Ensuring compliance with the guidelines



Guidelines are reviewed in the market forums



New members must always familiarize themselves with the guidelines



Compliance is supervised, in particular, by the chairmen of the market forums and the Gasgrid Finland staff participating in the meetings



Greetings from transmission business unit

Gasgrid greetings

- **General**

- Gas consumption Q1 app. 10,5 TWh mainly due to cold winter, 43 % higher than last year
- Gas consumption and other interesting market data to be published on regular basis on Gasgrid website:
<https://gasgrid.fi/en/our-services/other-services%e2%80%8b/>

- **Ongoing consultations**

- Update of connection agreements and the related compensation model for consumables of gas delivery stations (only in Finnish), consultation period until 30.4.

- **Upcoming events**

- Guarantees of origin, informative webinar 11.5. (in Finnish)
- Future of Gases Part III webinar (early June, date to be published later)
- Regional Market Council with Baltic TSO's focusing on maintenance and PCI projects (in planning, date to be published later)

- **Other**

- Quarterly Gas Market News Published: <https://gasgrid.fi/en/2021/03/15/gas-market-news-4/>
- Gasgrid Financial Statements and Annual Report for Published: <https://gasgrid.fi/en/our-company/publications/>

A close-up photograph of a person's hand, wearing a blue sleeve, operating a red industrial valve. The hand is turning a red handle on the valve. A silver metal pipe is connected to the valve. The background is a blurred industrial setting with gravel and other pipes.

Market Development

Upcoming Market Development actions

- Balticconnector capacity allocation principle for 2022
 - Energy Authority has required Gasgrid to submit the survey concerning the proposal of BC capacity allocation for 2022.
 - The survey is under preparation and discussion with Elering ongoing → market participants will be informed transparently concerning the survey once it is completed.
- Commercial services (capacity and nomination principles) offered by Gasgrid Finland concerning LNG entry
 - Introduction of LNG virtual entry point: capacity bookings and nominations submitted to LNG virtual entry point
 - Shippers may inject LNG quantities to transmission and/or distribution network by booking virtual entry capacity. Allocated capacity is compared to the nominations.
 - Submitted nominations shall not exceed the allocated capacity for the specific gas day. If nomination is greater than allocated capacity, nomination is declined.
 - LNG entry point principles are included to the Rules for Transmission Services 2.0

Upcoming Market Development actions

- Minor amendments will be made to the role-specific Framework agreements during Q2 (inclusion of LNG and amendments to the section terms and conditions). The amendments will be informed separately.
- No changes to the *Rules for gas transmission* foreseen before summer.
- Further development of market data publication
 - Starting from the beginning of 2021, Gasgrid publishes market data reviews: <https://gasgrid.fi/en/our-services/other-services%E2%80%8b/> (section reporting and data publication).
 - Near real-time data can be found here: <https://transparency.entsog.eu/#/map>
 - UMMs will be published in GET Baltic UMM platform: <https://umm.getbaltic.com/public-umm>
 - Gasgrid publishes exceptionally Balticconnector initial monthly technical capacities via GET Baltic's UMM Platform due to the uncertainty at the time of commissioning of the compressor stations, because compressor stations have significant impact on the amount of technical capacity.
 - Increase of harmonisation: Starting from the beginning of 2021, Finnish-Baltics TSOs are using GET Baltic UMM-platform

A photograph of an industrial facility, likely a power plant or refinery, featuring large red pipes and a black horizontal tank. The facility is situated in a landscape with a dense forest in the background and a rocky, grassy slope in the foreground. The text "The process for amendments of market rules" is overlaid in white on a semi-transparent dark band across the middle of the image.

The process for amendments of market rules

The process for market rule amendments

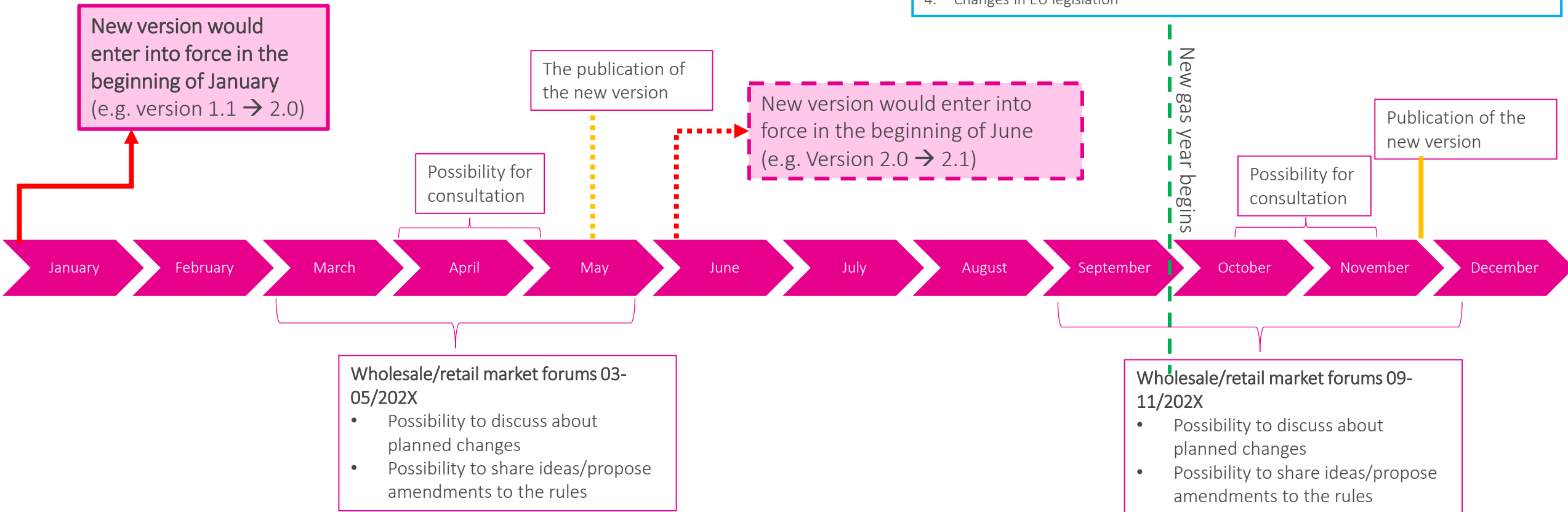
- Market rules, such as 'Rules for gas transmission' are documents which need to be amended in constantly developing market and changing environment.
- The amendments to the market rules may affect customers' systems and policies, so it is important to communicate changes well in advance.
- It is not appropriate to publish new version of the rules after each need for an amendment. Thus, the process for the amendments is developed. Urgent needs for amendments (such as requirement from NRA, updated legislation) are determined separately.
- You can submit your development ideas to commercial@gasgrid.fi. You may also contact me ([mika.myotyri\[at\]gasgrid.fi](mailto:mika.myotyri[at]gasgrid.fi)).



Gasgrid encourages to send your development ideas/possible stumbling blocks of the rules!
→ commercial@gasgrid.com

Drivers for rule changes:

1. Methodological changes approved by the NRA (tariffs, balance management, capacity, etc.)
2. Ideas / suggestions from market participants
3. Internal ideas / suggestions / needs for change
4. Changes in EU legislation



Urgent updates for market rules will be amended asap. Urgent needs are i.e. requirements from legislation or rules clearly hindering competition.



Neutrality charges – ensuring cost-neutrality of Gasgrid balancing services

Neutrality charges for balancing

- Gasgrid Finland shall not gain or lose by the payment and receipt of imbalance charges, balancing actions charges and other charges related to its balancing activities.
- Gasgrid passes any costs or revenues related to balancing for Balance Responsible Parties. This is done by neutrality charges.
- The neutrality charge unit price is defined on a monthly basis.
- Exceptionally 2020 neutrality charges were invoiced at once the neutrality charging principles were set up in autumn 2020. In order to ensure cost-neutrality of balancing services of Gasgrid, the neutrality charge was invoiced retroactively.
- From the beginning of 2021, neutrality charge invoicing is performed once per quarter → Q1/2021 will be invoiced by the end of April.

Neutrality charges for balancing

- The unit price is calculated as follows:

$$\text{Neutrality charge unit price} = \frac{\Sigma \text{balancing related revenues} - \Sigma \text{balancing related costs}}{\Sigma \text{offtakes of all Balancing Responsible Parties for that gas month}}$$

- **Offtakes** include the offtakes in the balancing portfolios of the Balance Responsible Parties in the Exit Zone, Virtual Trading Point and Balticconnector.
- **Balancing related revenues and costs:**
 - paid and credited imbalance charges
 - costs and revenues relating to balancing actions undertaken (such as balancing action performed by TSO in GET Baltic);
 - costs relating to balancing service agreements in force at that time (further information on the balancing service agreements can be found here: <https://gasgrid.fi/en/gas-market/agreements/> (section “Terms and conditions for balancing service provision”))
 - development, investment and maintenance costs relating to balancing actions;
 - personnel costs relating to balancing actions; and
 - finance costs relating balancing actions.

Neutrality charges for balancing

- Neutrality charges unit prices are published on Gasgrid website:

Month/Year	€/MWh
2021	
January 2021	-0,01346
February 2021	0,04395

- If the neutrality charge is positive, Gasgrid charges the balance responsible party.
 - If the neutrality charge is negative, Gasgrid compensates the balance responsible party.
- The Balance Responsible Party's monthly neutrality charge [€/gas month]:

$$\text{Neutrality charge} = \text{Σ offtakes of BRP's balancing portfolio} \times \text{neutrality charge unit price}$$

	Aggregated offtakes per BRP (incl. VTP, Balticconnector and exit zone) [MWh]	Neutrality charge unit price [€/MWh]	Invoice [€]
Neutrality charge 01/2021			
Neutrality charge 02/2021			

- The invoice which will be sent by the end of April will contain the neutrality charges of January-March 2021.

Based on the 1st invoicing performed in the end of January 2021, how do you the functioning of neutrality charging principles?



Creditworthiness requirements

Creditworthiness requirements

Two (and a half) key Topics

1. Current guarantee model – framework agreement approach
2. Current model in practice (and development)

Creditworthiness requirements 1/3

1. Creditworthiness requirements - shipper

The Shipper shall meet the creditworthiness requirements set by the Transmission System Operator with System Responsibility in order to be able to order Capacity and obtain Capacity rights.

3. Value of security

The Transmission System Operator with System Responsibility shall be provided with security the value of which at any given time shall be the amount of the largest monthly Capacity invoice actually sent for the past 12 months times three.

2. Creditworthiness requirements - Balance Responsible

A Balance Responsible Shipper and Trader shall also meet the creditworthiness requirements of the Transmission System Operator with System Responsibility in order to be able to act as a Balance Responsible Party.

4. Checking the sufficiency of the security

The Transmission System Operator with System Responsibility shall check the sufficiency of the security provided in conjunction with each Capacity Order so that the value of security must cover the amount of the largest monthly invoice for the upcoming months estimated on the basis of Capacity Agreements already concluded and the Capacity Agreement in accordance with the Capacity Order times three before the Transmission System Operator with System Responsibility can accept the Capacity Order.

Creditworthiness requirements 2/3

5. Imbalance charges

A further requirement for a **Balance Responsible Shipper or Trader** shall be that the value of security shall cover the Balance Responsible **Party's outstanding invoices at any given time for imbalance charges** and estimated imbalance charges that have not yet been invoiced to the Balance Responsible Party, **including a 10% security margin** for monthly fluctuation in imbalance charges.

6. Right to use the security

The **Transmission System Operator** with System Responsibility shall have the **right to use the security** for the payment of any invoice payable by the Shipper or Trader remaining **unpaid when seven days have elapsed** from the due date of the invoice.

7. Estimation of the security

The **Transmission System Operator** with System Responsibility shall **estimate the sufficiency** of the Shipper's or Trader's **security** when the Shipper's or Trader's business operations commence as well as on a continual basis.

8. Right to require further security

The **Transmission System Operator** with System Responsibility shall always have the **right to require further security** if a Shipper or Trader does not meet the necessary security requirements.

Creditworthiness requirements 3/3

9. Security on-demand guarantee

The **Transmission System Operator** with System Responsibility shall **accept** as **security on-demand guarantees** of an A-rated (Moody's or Standard & Poors) financial institution registered in an EU Member State and the Shipper's or Trader's **cash deposits into a bank account** designated by the Transmission System Operator with System Responsibility.

10. Expiration of the agreement

Security shall be **released within 7 days** of the completion by the Shipper or Trader of all of its **payments** to the Transmission System Operator with System Responsibility and the **expiry of the period of notice** for the termination of this Framework Agreement.

Creditworthiness in practice and development

Strengths

1. No credit losses nor significant delays with the payments
2. Only singular cases of delayed capacity bookings
3. Highly standardized bank guarantees

Weaknesses

1. Administrative requirements and workload
2. Costs of bank guarantees for the customers
3. Level of guarantees with respect to risks?

Development

1. IT- and service development
2. Process development
3. Contract development

Alternative models

1. cash deposits into a bank account of TSO

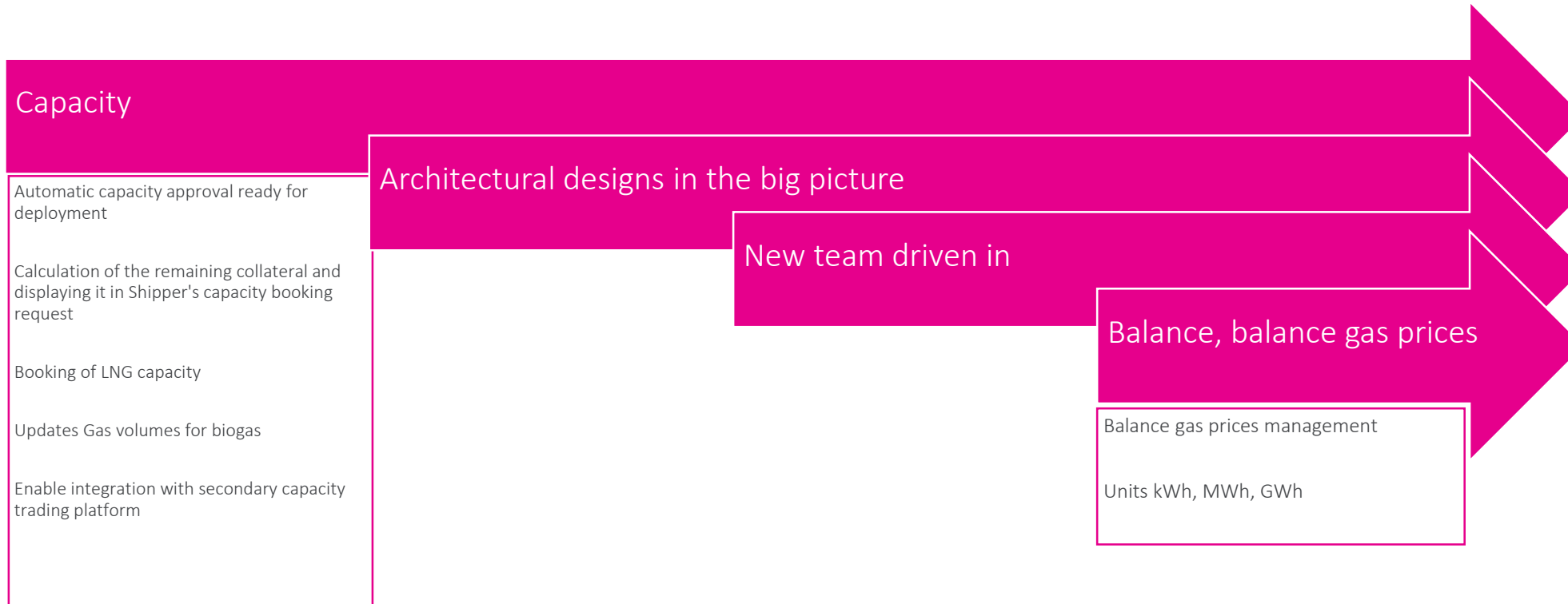
A photograph of an industrial facility, likely a water treatment plant, featuring large red pipes and tanks. The facility is situated in a natural setting with a dense forest in the background and a rocky, grassy slope in the foreground. The text "Service Development" is overlaid in the center.

Service Development

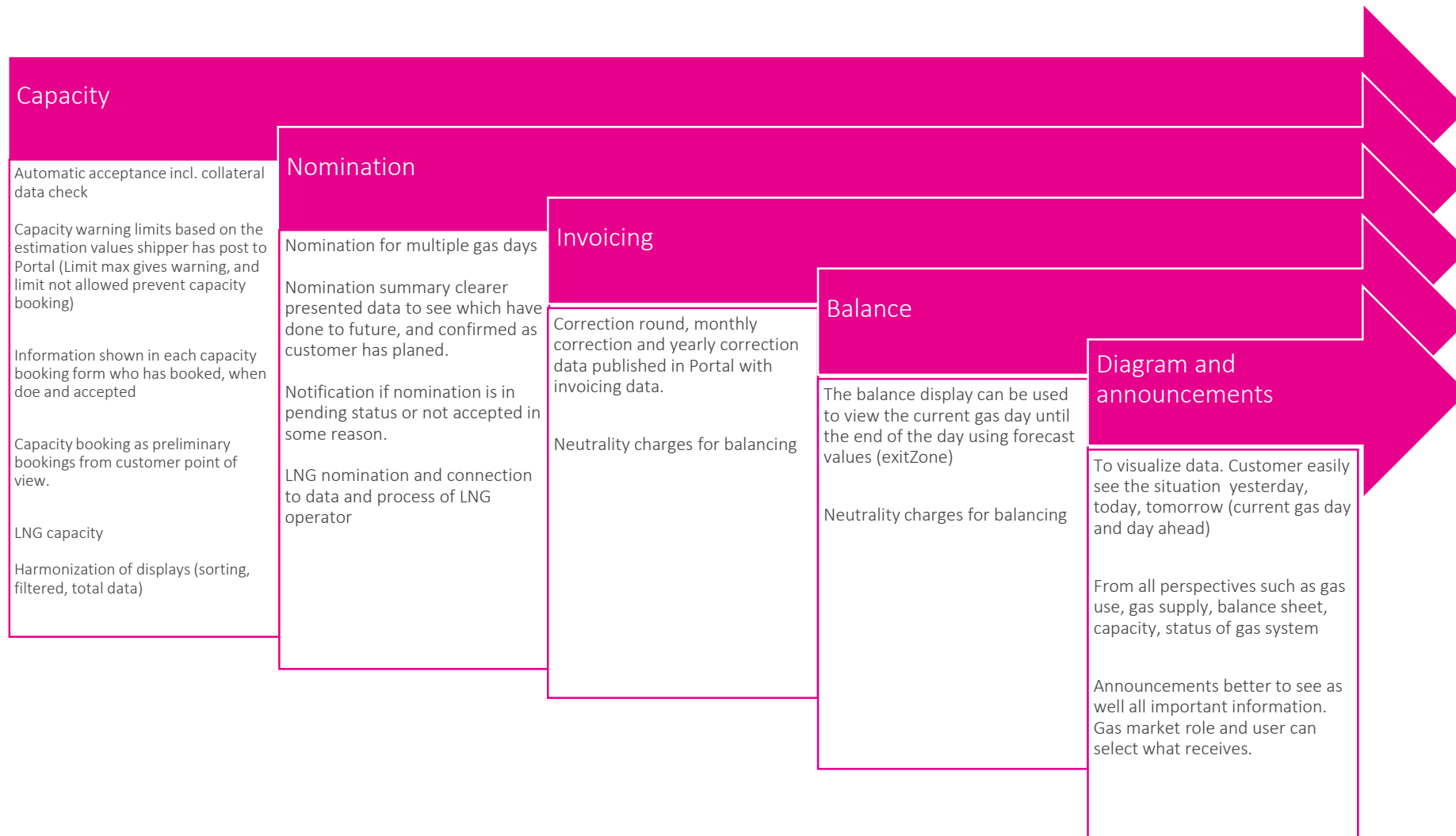
Gasgrid portal and service development

- Automatic approval of capacities and collateral monitoring in the Portal from the customer's point of view
- Service development activities: implemented, in preparation and planned

Service development activities: done 1.1. – 31.3.2021



Service development activities: in preparation and planned



Collateral data

Customer name

Transmission network state   Tiina Niinimäki

Front page

Capacity

Gas energy

Balance

Invoices

Deposits

Delivery relationships

Market parties

Monitoring

Users

DEPOSITS

Set deposit	End day of deposit	Used deposit	Remaining	Warning limit Set by the customer	Preliminary charges to be invoiced	
200 000 €	12.4.2022	120 000 €	80 000 €	10%	48 000 €	Edit

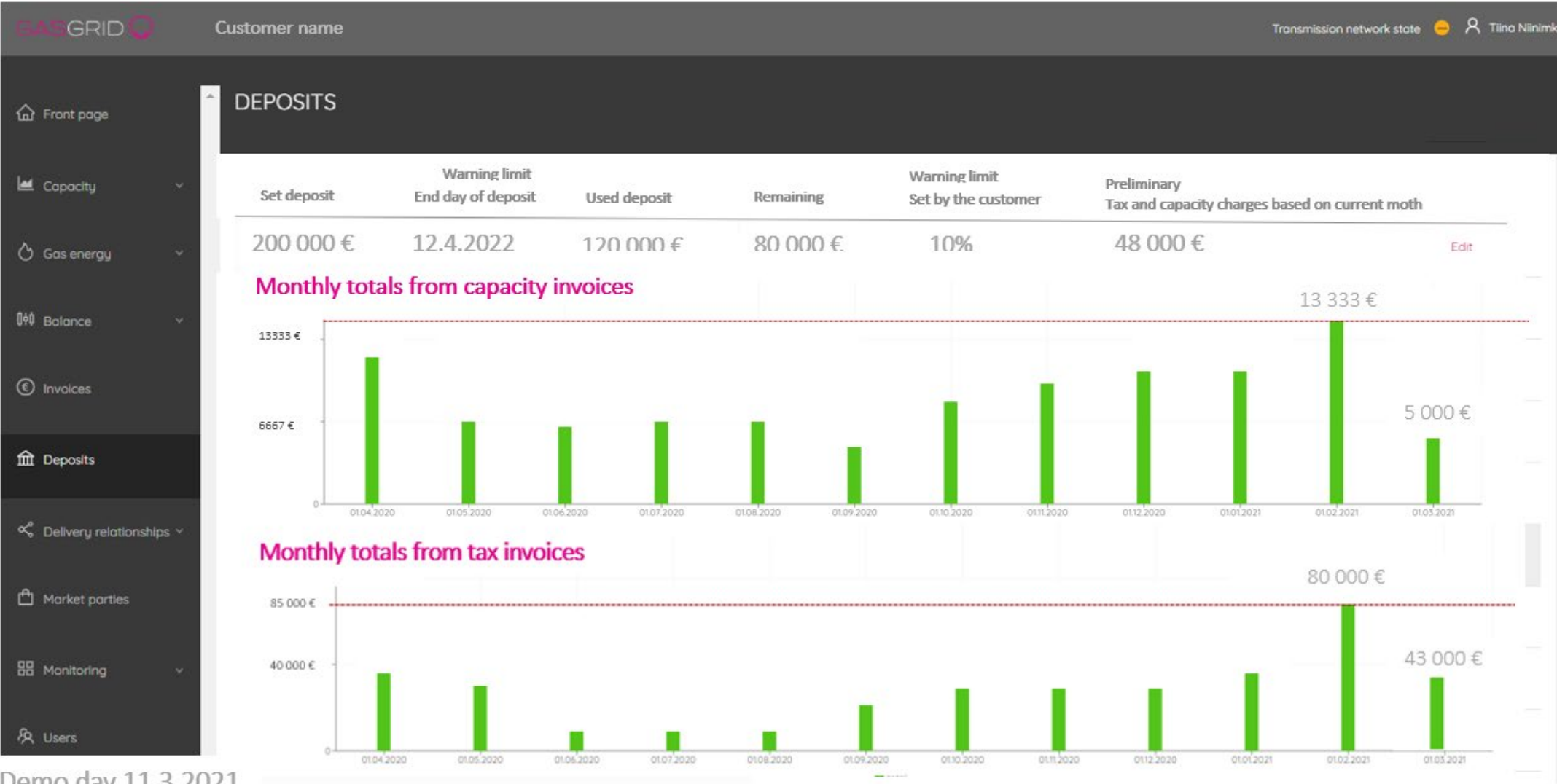
The system warns when the remaining amount of collateral is below the limit value. The limit value is a percentage of the set deposit. Default is 10 % and customer can adjust the value.

When warning limit is reached system sends notification by email to all user who belongs to the Invoicing group. Title Deposits will be highlighted by symbol.


Charge of short term capacity products (day, hourly) and preliminary tax values for **current month** 1.3-11.3. Example if customer roles are shipper transmission system end user.


Demo day 11.3.2021

Collateral data values for calculating the used deposit



Collateral data values for calculating the used deposit

Customer name

Transmission network state  Tiina Niinimäki

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DEPOSITS

Set deposit	End day of deposit	Used deposit	Remaining	Warning limit Set by the customer	Preliminary used deposit based on current moth	
200 000 €	12.4.2022	120 000 €	80 000 €	10%	48 000 €	Edit

Estimated imbalance charges for 01.03.2021-08.03.2021: 0 €

Examples:
On 4th of March system calculates period 1st of February – 1st of March
On 6th of March system calculates period 1st of February – until invoice of February is assumed to be paid

For each day, the balance sheet deviation per gas day shall be considered multiplied by the balancing gas price of that day. The direction of the deviation affects whether the purchase or sale price of balancing gas is used. The negative balance sheet deviation is multiplied by the purchase price of the balancing gas and the positive balance sheet deviation by the sales price of the balancing gas. If the deferred balance sheet deviation fee for this period is positive, a safety margin of 10% is added to the estimated amount. If the balance sheet goes to the credit side, the margin shall not be increased

Demo day 11.3.2021

Capacity booking – automatically accepted

Book capacity – system checks remaining deposit

NEW CAPACITY BOOKING
CHOOSE CAPACITY PRODUCTS

A Annual	0,002873 €/kWh
Q Quarterly	0,003160 €/kWh
M Monthly	0,003591 €/kWh
<div>Starting from: 01.05.2021 Ending in: 31.05.2021 Amount: 56300 kWh/h</div>	
150 419,5 0,003591 €/kWh	
D Daily	0,004309 €/kWh
H Hourly	0,004884 €/kWh
TOTAL PRICE 150 419,5	
REMAINING DEPOSIT 150 000,0	
<small>Please note: The tariff period is calendar year and therefore the duration of some capacity products may exceed past the current tariff period. In these cases the price given by the portal is only indicative. GASGRID will accept the capacity bookings after 30 min from receiving them. In case of capacity booking related mistakes, please contact the support team.</small>	
<div>Cancel Save and close</div>	

The alternative is to make a capacity reservation in advance and place them on order when the correct time is right.

Capacity approval begin

- The capacity booking request has accepted 30 minutes after its arrival.
 - Notification will be send by email to users about capacity booking
 - Capacity booking is shown as accepted and aggregated value are shown in summary view

Exception

- Shipper can cancel booking in 27 minutes.

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Thank you for your interest!

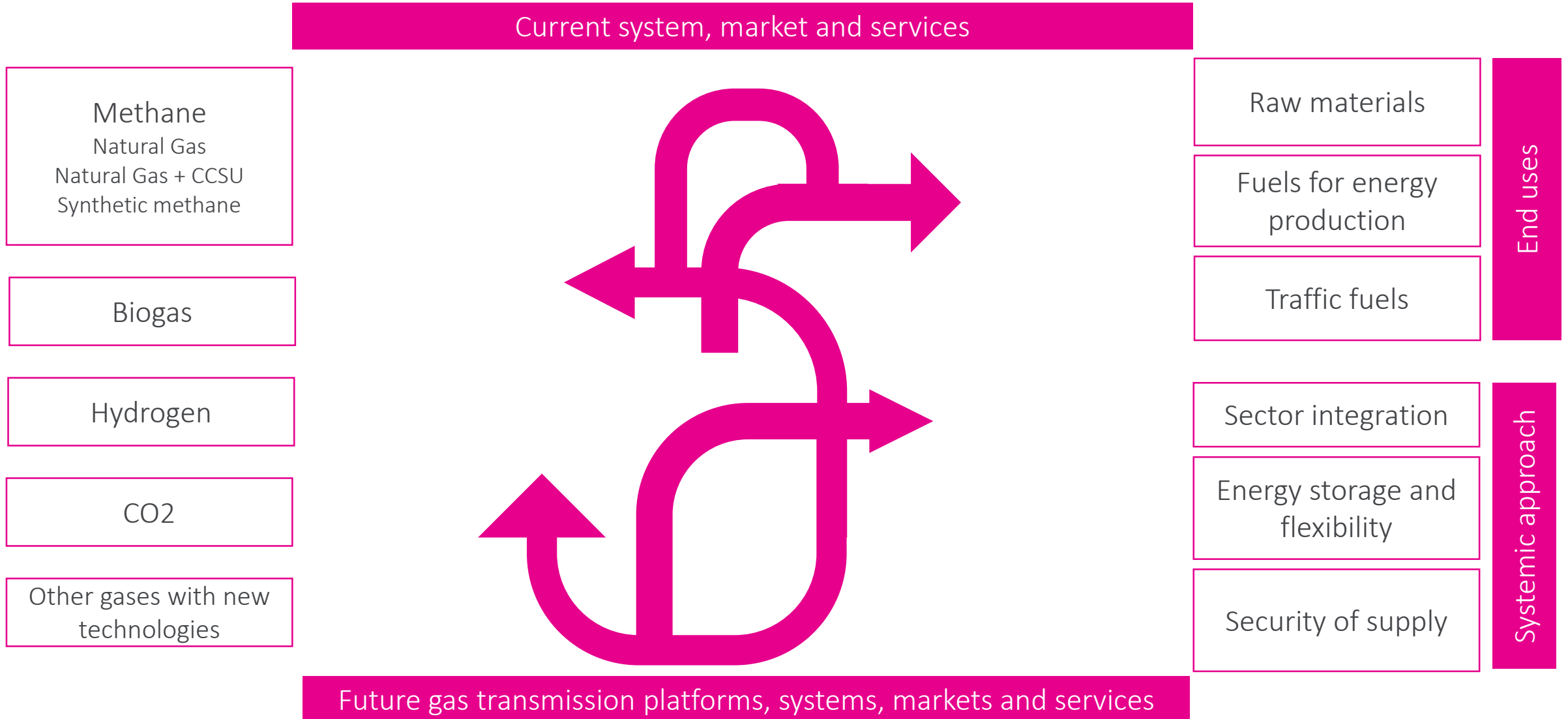


Gases as part of the energy system of the future

Gasgrid RDI activities in 2020 and 2021

Gases as part of the energy system of the future

Themes for development and investigation



Ramping up research, development and innovation

Key activities in 2020 and early 2021

Ramping up RDI

- Development of RDI principles, capabilities and ways of working
- Building up an RDI network
- *Feedback from customers, market and stakeholders extremely important*

Project preparations

- Co-innovation project: Hydrogen and Carbon Value chains
- Joint R&D project with Fingrid related to evaluation of possibilities of future sector-integrated energy system and role of hydrogen
- Collaboration with Baltic TSOs on a R&D project regarding injection of hydrogen in the existing gas transmission infrastructure

Initiatives and working groups

- Sector integration working group organized by Ministry of Economic Affairs and Employment of Finland
- European Hydrogen Backbone – initiative

European Hydrogen Backbone

Vision on development of a dedicated hydrogen network will be presented

Tuesday 13th of April 12:00 to 1.30pm, the European Hydrogen Backbone initiative will present an expanded version of its plan for a dedicated hydrogen transport infrastructure across Europe. The plan contains maps with proposed pipeline routes for 2030, 2035 and 2040 and an analysis of costs, providing a significant update of the report published in July 2020, reflecting an expanded group, now consisting of 23 European gas TSOs from 21 European countries. If you haven't registered yet for the webinar, please be invited to do so via the link below.

Webinar

European Hydrogen Backbone 2021

How a dedicated hydrogen infrastructure can be created

Tuesday 13th of April – 12:00 to 1.30pm

[Register here](#)

After registering, you will receive a confirmation email containing information about joining the webinar.

An initiative by:

Enagás, Energinet, Fluxys, Gasunie, GRTgaz, NET4GAS, OGE, ONTRAS, Teréga, Snam, Nordion Energi, GNI, National Grid, Creos, Gasgrid, Elering, TAG, GCA, FGSZ, Plinovodi, Eustream, DESFA, GAZ-SYSTEM


Supported by:

Guidehouse

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Head of Strategic analysis & RDI
tel. +358 40 158 1722
sara.karki@gasgrid.fi

Thank you!



A photograph of an industrial facility, likely a refinery or chemical plant, during sunset. Large, horizontal, cylindrical storage tanks are visible, with a walkway and railings in the foreground. The scene is illuminated by the warm, golden light of the setting sun, which is visible as a bright glow in the background. The sky is a clear, pale blue. The overall atmosphere is industrial and serene.

Final words

Give us feedback, development ideas, comments

- You may contact us:
 - By e-mail or phone (also bilateral discussion via Teams can be arranged):
 - [commercial\[at\]gasgrid.fi](mailto:commercial@gasgrid.fi) (primary channel)
 - You may also contact us directly:
 - [mika.myotyri\[at\]gasgrid.fi](mailto:mika.myotyri@gasgrid.fi); +358 45 112 4515 (concerning market development)
 - [tiina.niinimaki\[at\]gasgrid.fi](mailto:tiina.niinimaki@gasgrid.fi); +358 40 592 7042 (concerning service development)

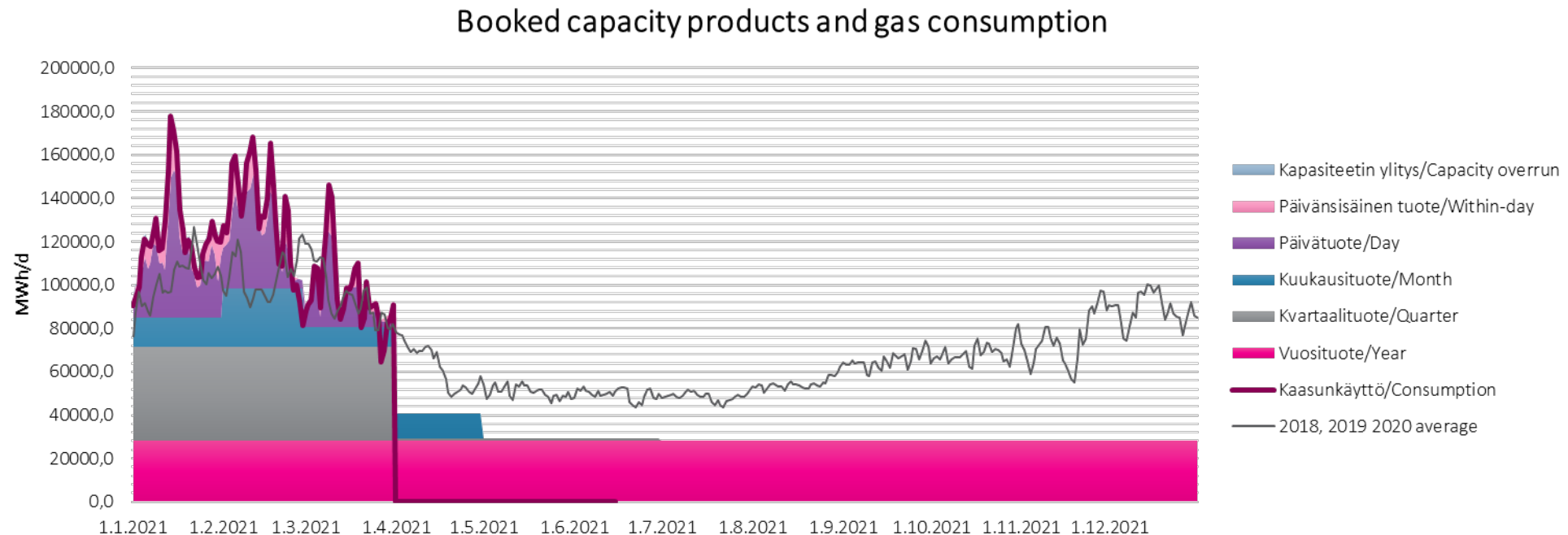
We are happy to answer your questions or discuss about the market and service development – do not hesitate to contact us!

A photograph of an industrial facility, likely a water treatment plant or a chemical processing site, situated in a rural, forested area. The facility features several large, red, curved pipes and tanks, some of which are elevated on concrete structures. The ground is covered in gravel. In the background, there is a dense forest of green trees under a clear sky. The foreground shows a rocky, grassy slope with some dry grass. A semi-transparent dark band across the middle of the image contains the text "Market data overview (not presented in the forum)".

Market data overview (not presented in the forum)

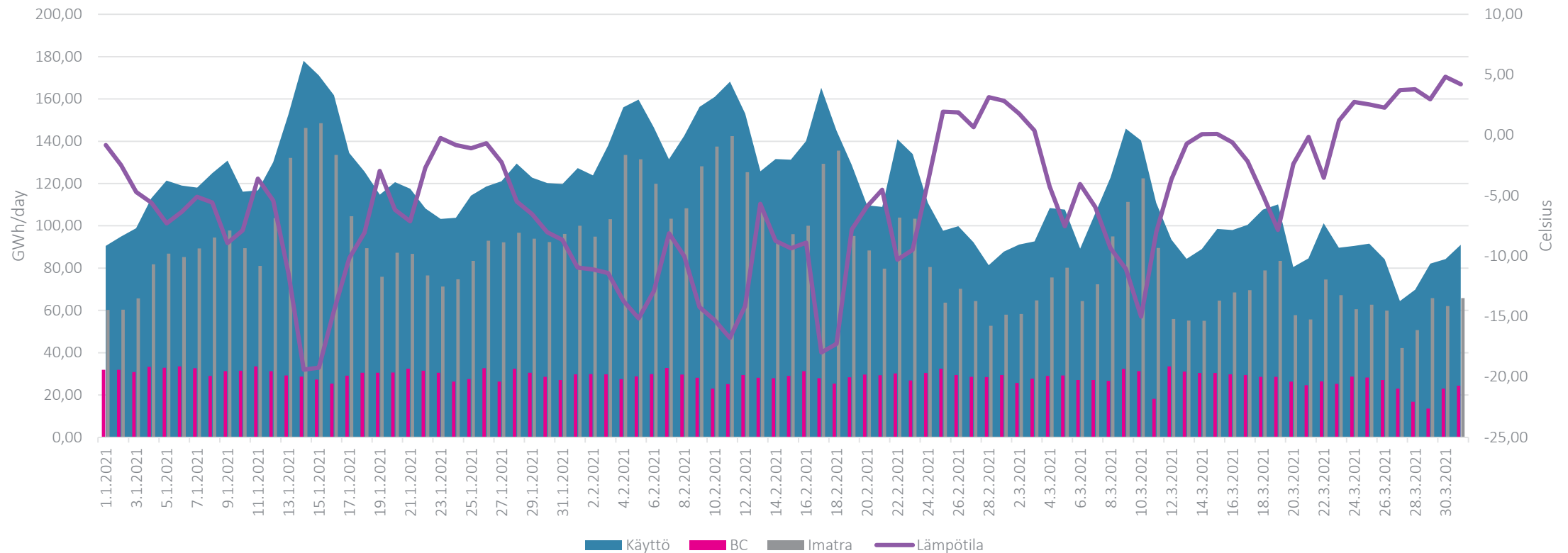
Overview Q1/2021

- 1) Gas consumption in March approx. 3.0 TWh (cf. March 2020 approx. 2.4 TWh). Mid march was very cold which can be seen as a spike in gas consumption.
- 2) For Q2, it is noteworthy that very little quarterly product was booked. For April, the “absence” of the quarterly product was offset by higher capacity reserves in March. The heating season is coming to an end.



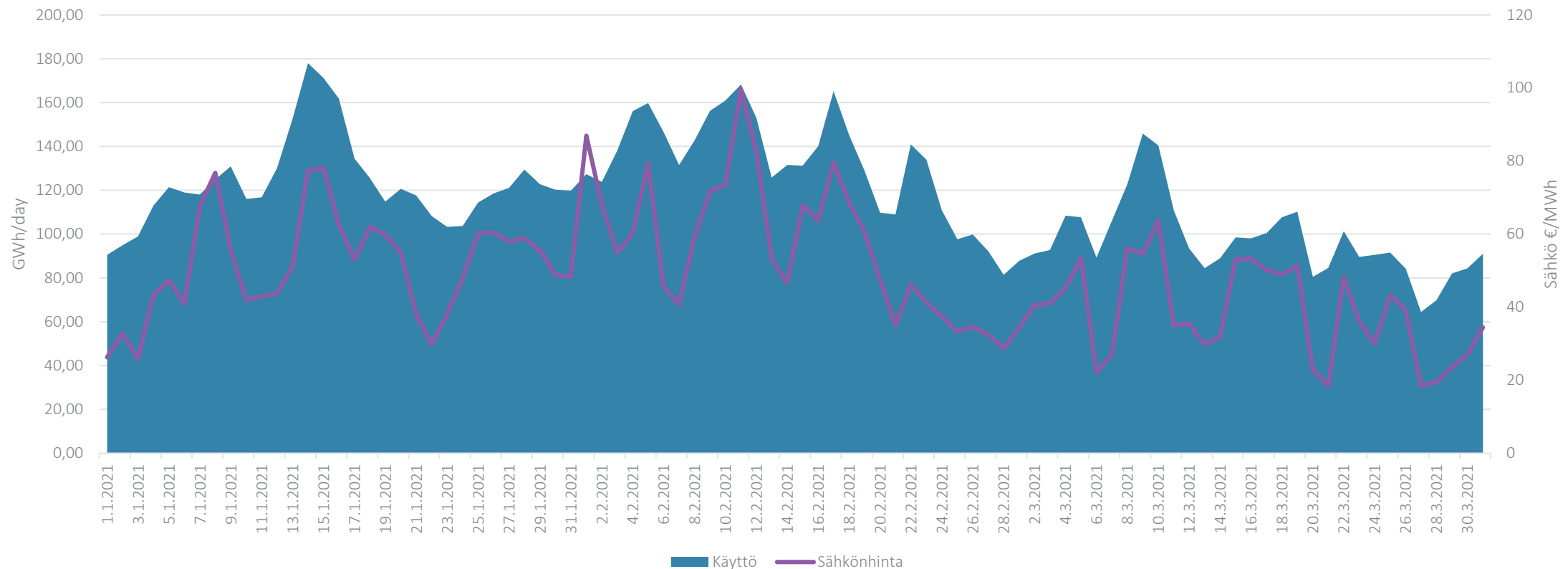
Gas consumption vs. temperature

A correlation between temperature and gas consumption can clearly be seen – during cold spells gas consumption increases.



Gas consumption vs. the price of electricity

There can be seen a correlation between Finnish gas consumption and the price of electricity - when consumption is higher, electricity is also more expensive. For example, March 10th was very cold (approx. -15 C) → gas consumption increased while the price of electricity increased significantly (from 25 € / MWh → 60 € / MWh).



Physical entry gas quantities to the FINESTLAT-common tariff zone

