# Transmission tariffs and service prices of Gasgrid Finland in 2021

The price list of Gasgrid Finland contains transmission tariffs, the daily imbalance charging method, the capacity overrun charge and the centralised data exchange charges. Under the Finnish Natural Gas Market Act, the transmission system operator sets the transmission charges for Finland's internal entry and exit points. As regards international connections, the transmission charges for 2020 and 2021 are set by the Energy Authority.

## 1. Transmission tariffs

In Finland, the *postage stamp* reference price methodology is applied. In the postage stamp methodology, the distance between entry and exit points or the technical transmission capacity do not affect the unit price of entry or exit capacity, but the tariff for entry or exit capacity is the same for all entry or exit points.

### Firm capacity products

| The price of yearly capacity product (= *reference price*) | |
|---|---|
| **Entry capacity** | |
| Imatra | 0,14277 €/kWh/day/year |
| Balticconnector | – €/kWh/day/year |
| Biogas virtual entry point | 0,14277 €/kWh/day/year |
| LNG virtual entry point | 0,14277 €/kWh/day/year |
| **Exit capacity** | |
| Balticconnector | – €/kWh/day/year |
| Finnish exit zone | 1,04859 €/kWh/day/year |

| The price of short-term capacity products (applied both for entry and exit capacity products) | |
|---|---|
| Capacity product | Tariff multiplier |
| Year (= *reference price*) | 1,00 |
| Quarter | 1,10 |
| Month | 1,25 |
| Day | 1,50 |
| Within-day | 1,70 |

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The tariffs for short-capacity products are calculated by multiplying the reference price (the price of an annual capacity product) by the tariff multiplier of short-capacity products.

Example: The tariff of monthly capacity for the Finnish exit zone:

$$Tariff = (1{,}04859 \times 1{,}25)\ €/\text{kWh/päivä/kuukausi} = \mathbf{1{,}31074}\ €/\text{kWh/päivä/kuukausi}$$

At the end of this document, an illustrative calculation example of the entry and exit capacity tariff unit conversion from a capacity unit (€/kWh/day/year) to an energy unit (€/MWh) is described.

## Commodity charge

| Commodity charge (= *energy charge*) is payable at Finnish exit zone. | |
|---|---|
| **Based on the transported gas quantity** | 0,0001957 €/kWh |

## Interruptible capacity

| Interruptible capacity | |
|---|---|
| Discount of interruptible capacity as a percentage of the price of the corresponding firm capacity product. | |
| Entry capacity | Discount |
| Imatra | 5 % |

At Imatra point, interruptible capacity has not been offered during 2020, as firm capacity has been sufficient to fulfil the market needs. Gasgrid Finland estimates that firm capacity will cover the market needs also in 2021, and the probability for offering interruptible capacity is low. Gasgrid sets the discount for interruptible capacity at Imatra entry point compared to the corresponding price for the firm product is 5 %, which is the same than in 2020.

At exit zone, there is no discount for interruptible capacity, because Gasgrid Finland foresees to be able to transport gas quantities without limitation meaning that only firm capacity will be offered.

At LNG virtual entry point and biogas virtual entry point, there is no discount for interruptible capacity, because Gasgrid Finland foresees to be able to receive LNG fulfilling the quality requirements without limitation meaning that only firm capacity will be offered.

At Balticconnector, capacity is allocated according to the confirmed nominations. Thus, only firm capacity is offered.

## Capacity overrun charge

| Capacity overrun charge |
|---|

Capacity overrun charge pricing: One and a half (1,5) times the unit price based on within-day firm capacity will be charged for the quantity exceeding the booked capacity.

$$\boldsymbol{Capacity\ overrun\ charge = reference\ price \times 1,5 \times 1,7}$$

Capacity overrun charge is paid at the exit zone and at the biogas virtual entry point.

Finnish exit zone: If, based on the results of the final balance settlement, exit zone offtake exceeds the shipper's total exit zone capacity for each gas day, the shipper must pay capacity overrun charge for the gas quantities exceeding the allocated capacity.

Biogas virtual entry point: If, based on the results of the final balance settlement, injection into the Finnish gas system through biogas virtual entry point exceed the shipper's total biogas virtual entry point capacity for each gas day, the shipper must pay capacity overrun charge for the gas quantity exceeding the allocated capacity.

## Underutilization fee of Balticconnector

Underutilization fee is applicable at the Balticconnector entry and exit point and it is applied only during days, when Balticconnector is congested. Shippers may renominate downward in the Balticconnector free of charge a maximum of 50 000 kWh/h (tolerance) compared to the Shipper's highest confirmed nomination for the gas day. For amounts exceeding the tolerance limit, the shipper shall pay an underutilization fee which is 0,002 €/kWh.

Tolerance: 50 000 kWh/h
Pricing: 0,002 €/kWh

# 2. Centralized data exchange charge (= gas datahub)

The centralized data exchange charge is charged from the Distribution System Operators. The DSO is charged with regard to the consumption sites in distribution networks owned or operated by the DSO for which information is maintained in the register of centralized data exchange system (= all daily or non-daily read metering sites in the distribution network except small-scale individual non-daily read sites using gas only for cooking purposes).

Pricing: 2,15 €/metering site/month

# 3. Charges levied from Balance management

## Daily imbalance charge

The daily Imbalance Charges of a Balance Group shall be calculated by multiplying the Balance Group's daily imbalance quantity by the applicable Imbalance Charge price. The daily imbalance quantity shall be based on the results of the final balance settlement.

The direction of the daily Imbalance Charge shall be determined as follows:

a) if the Balance Group's daily imbalance quantity for the Gas Day is positive then the Balance Responsible Party shall be deemed to have sold a quantity of gas to the Transmission System Operator with System Responsibility equivalent to the daily imbalance quantity and therefore shall be entitled to receive a credit for the daily imbalance quantity; and

b) if the Balance Group's daily imbalance quantity is negative, the Balance Responsible Party is deemed to have purchased a quantity of gas from the Transmission System Operator with System Responsibility equivalent to the imbalance quantity and shall therefore be obliged to pay a charge to the Transmission System Operator with System Responsibility.

## The buy and sell price of imbalance gas

The daily Imbalance Charge shall be cost reflective and shall take account of the prices associated with the Transmission System Operator's balancing actions, if any, and of the adjustment.

The applicable price for the daily Imbalance Charge shall be determined as follows:

a) Marginal Sell Price where the daily imbalance quantity is positive (i.e. the network user's inputs for that Gas Day exceed its offtakes for that Gas Day); or

b) Marginal Buy Price where the daily imbalance quantity is negative (i.e. the network user's offtakes for that gas day exceed its inputs for that gas day).

### Grounds for determining the price of the Imbalance Charge

The definition of neutral gas price: "The volume weighted average price of concluded trades on a gas exchange during the Gas Day."

If Gasgrid Finland has not traded on the gas exchange or made within-day orders under balancing service agreements during the Gas Day, the price of the daily Imbalance Charge shall be the adjusted Neutral Gas Price.

If Gasgrid Finland trades on the gas exchange or makes within-day orders under balancing agreements during the Gas Day, the price of the Balance Group's daily Imbalance Charge shall be determined either:

a) volume weighted average on the basis of the executed within-day product trade price (buy and/or sell) of Gasgrid Finland on the gas exchange,

b) the price (buy and/or sell) of the within-day order made by Gasgrid Finland under a balancing service agreement, or

c) the adjusted Neutral Gas Price.

Adjusted neutral gas price when the transmission system operator purchases an amount of gas corresponding the imbalance of the balance responsible party: Neutral gas price minus 10% of the neutral gas price.

Adjusted neutral gas price when the transmission system operator sells an amount of gas corresponding to the imbalance of the balance responsible party: Neutral gas price plus 10% of the neutral gas price.

The criteria for determining the imbalance charges are described in the Terms and Conditions of Balancing which can be found from Gasgrid webpage.

After the Competent Authority has declared that the crisis level of a security of gas supply regulation is in force, the Transmission System Operator with System Responsibility may, under the authorisation of the Competent Authority, impose balancing gas pricing in another way.

## Neutrality charge

The Transmission System Operator shall not gain or lose by the payment and receipt of daily Imbalance Charges, Within-Day Charges, balancing actions charges and other charges related to its balancing activities. To ensure cost neutrality, the neutrality charge is used.

The price of the Gas Month-specific Neutrality Charge shall be determined after each Gas Month. The price of the Neutrality Charge [EUR/MWh] shall be determined on the basis of the above total sums of revenues minus total costs and by dividing the result by the total amount of offtakes of all of the Balance Responsible Parties for that Gas Month. Taken into account as offtakes shall be offtakes included in the balancing portfolios of the Balance Responsible Parties in the Exit Zone, Virtual Trading Point and Balticconnector.

If the Neutrality Charge is positive, the Balance Responsible Party shall pay the Neutrality Charge to the TSO. If the Neutrality Charge is negative, the TSO shall credit the Neutrality Charge to the Balance Responsible Party.

# 4. Other charges

## Pricing for connections

TSO has obligation to connect new infrastructure to its grid as long as connecting infrastructure fulfils technical requirements set by the TSO. Connecting infrastructure may consist of natural gas usage or storage facilities as well as LNG or biogas infrastructure. TSO is justified to collect all reasonable costs which have been generated because of the new connection.

Pricing: Price of the connection is evaluated by Gasgrid Finland case by case.

## Nomination imbalance charge

A nomination imbalance charge may be applied in Finnish exit zone.

Pricing: 0 €/kWh

## Compensation for non-conformity with gas quality and supply requirements

Compensation terms and conditions have been mentioned in the Shipper and Trader Framework Agreement which can be found from Gasgrid webpage.

## Charges in a prevailing emergency situation

Compensation is agreed separately case by case between the transmission system operator with system responsibility and the shipper.

## Capacity right transfer charge

Pricing: 0 €/transfer notification

## Transmission tariff calculation example

For illustrative purposes only, non-binding example calculations for use of the firm transmission capacity price list.

### Conversion of yearly capacity tariff from capacity unit into energy unit.

The shipper estimates that it requires transmission capacity at an average capacity of 100 MW (=total transmission requirement during a gas day is 100 MW x 24 h/gas day = 2 400 MWh/gas day) throughout the year. For this purpose, the shipper books the required entry capacity from Imatra and the exit capacity for Finnish exit zone.

The market participant may obtain the transmission capacity from Imatra 1 kWh/gas day for a year with the unit price of the entry capacity at Imatra. If the annual booking lasts 365 days, the unit price 0,14277 € equates to a transmission quantity of 365 kWh (0,365 MWh). The total transmission quantity required by the shipper is 2 400 MWh/day x 365 days = 876 000 MWh. In which case the shipper requires 876 000 MWh/0,365 MWh/unit = 2 400 000 units of entry capacity. The unit price is 0,14277 €/unit, in other words the total cost is 0,14277 €/unit x 2 400 000 units = 342 648 €. The average cost of entry capacity is 342 648 €/876 000 MWh = 0,3912 €/MWh.

The market participant may obtain in Finnish exit zone to get the transmission capacity to the exit point 1 kWh/gas day for a year with the unit price of the exit capacity. If the annual booking lasts 365 days, the unit price 1,04859 € equates to a transmission quantity of 365 kWh (0,365 MWh). The total transmission quantity required by the shipper is 2 400 MWh/day x 365 days = 876 000 MWh. In which case the shipper requires 876 000 MWh/0,365 MWh/unit = 2 400 000 units of exit capacity. The unit price is 1,04859 €, in other words the total cost is 1,04859 €/unit x 2 400 000 units = 2 516 616 €. The average cost of exit capacity is 2 516 616 €/876 000 MWh = 2,8728 €/MWh.

The average cost of the capacity booking is therefore 0,3912 €/MWh + 2,8728 €/MWh = 3,264 €/MWh.