ENERGY AUTHORITY

NATIONAL REPORT ON THE STATE OF ELECTRICITY AND GAS MARKETS IN FINLAND

YEAR 2025

CONTENT

FOREWORD

During the last few years Finland has rapidly decreased the use of fossil fuels in energy generation. In 2025, about 94 per cent of domestic power generation was covered by non-fossil fuels - nuclear and renewables. Wind power has passed hydro and was the second largest form in power production behind nuclear.

Increased wind power generation capacity and the Olkiluoto 3 nuclear power plant commissioned in April 2023 have improved electricity self-sufficiency in Finland on annual basis. However, due to market situation net import of electricity from other Nordic countries increased in 2025. At the same time Finland has also been a net electricity exporter to Estonia.

Average wholesale electricity prices were in 2025 lower than before the energy crisis and COVID. Despite of lowered average prices, volatility in wholesale electricity prices has increased during the last few years. The background of which has not been only the increased share weather dependant intermittent power production but also breakdowns in power plants or transmission interconnectors and colder periods of time which have led to short-term price peaks.

In 2025, the number of negative-price hours decreased compared with the previous year. This shows that the market players have proven their ability to adapt to price fluctuations in wholesale markets. In Finland, production subsidies are not paid for electricity generated during periods of negative wholesale electricity prices. Producers have also become more adept at bidding their generation into the market. At the same time, new sources of flexible demand have entered the market, such as electric boilers and energy storage systems, which help smooth wholesale price fluctuations.

On the other hand, the decline in dispatchable and reliable generation capacity is increasing concerns about the adequacy of electricity supply during peak demand periods and in the event of major generation plant and transmission interconnector outages. The market currently does not provide sufficient incentives for the construction and maintenance of such capacity. According to current estimates, this situation is expected to deteriorate in Finland as the country enters the 2030s.

Another growing challenge in the electricity market is ensuring that grid transmission capacity is sufficient to meet the needs of new connections. In particular, grid connection requests and capacity reservations submitted to network operators by energy storage projects and data centers have increased sharply. A key challenge is that necessary grid investments bringing additional transmission capacity cannot be implemented quickly enough to keep pace with demand. At the same time, new customers may reserve grid capacity at the expense of other users' needs.

A new large-scale LNG terminal commissioned in January 2023 in Inkoo showed its vital role in ensuring gas supplies to Finland.

For the Energy Authority, year 2025 was characterized especially by the ongoing implementation and enforcement of European network codes and guidelines, several court processes related to the methodologies for economic regulation of electricity and gas system operators.

The Energy Authority has prepared this national report on the state of the Finnish electricity and natural gas markets to the European Union Agency for the Cooperation of Energy Regulators and to the European Commission pursuant to the Article 59(1)(i) of the Directive for the Internal Market in Electricity (2019/944/EC) and Article 41(1)(e) of the Directive for the Internal Market in Natural Gas (2009/73/EC).

The report covers the main steps the Energy Authority has taken, and the results obtained as regards the tasks listed in Article 59 of the Electricity Market Directive and Article 41 of Natural Gas Market Directive. It contains a description of the powers and tasks of the Energy Authority as a national regulatory authority, an overview of the regulation and performance of electricity and natural gas sectors in Finland in 2025.

The focus in the report has been in the period from January to December in 2025 and data presented reflects this period as far as possible. In some points also the recent developments in 2026 are mentioned.

Simo Nurmi
Director General
Energy Authority

MAIN DEVELOPMENTS IN ELECTRICITY AND GAS MARKETS

2.1 Electricity market development

Electricity consumption

Gross electricity consumption in Finland increased in 2025 by 1.7 per cent and was 84.5 TWh. Compared to year 2024 consumption increased every month except in January and February. Especially in January-February 2024 gross consumption of electricity increased due to cold weather by more than 15 percent compared to the same period previous year.

Electricity consumption in industry sector increased by 0.9 per cent. Industry sector covered 58 per cent of gross electricity consumption in Finland in 2025. The other sectors increased their annual electricity consumption by 2.8 percent. In 2025, household and agriculture covered 28 per cent of total electricity consumption. The rest were used by services and construction (25 per cent) and grid losses (4 per cent).

Import and export

Net import of electricity increased from 2024. The share of net import covered 6.6 per cent of gross electricity consumption (in 2024 the share was 3.8 per cent). The increase in net import was mainly due to increased electricity import from Sweden which increased by 51.9 per cent. Also, net export to Estonia increased. In 2024, net export to Estonia was decreased due to failures in Estlink 2 subsea cables in February-September and damage at same cable from late December 2024. The net export to Estonia increased by 28.6 per cent.

Power generation

Domestic power generation decreased by 1.2 per cent in 2025 and was 78.9 TWh (79.8 TWh in 2024).

Nuclear power production increased by 0.6 per cent in 2025 and its share was 39.7 per cent of power production in Finland.

About 56.7 percent of electricity (56.4 percent in 2024) was produced from renewable energy sources in Finland. Wind power generation increased by 4.2 per cent and covered about 28.1 per cent of power generation being the second biggest form in Finnish power production. Hydro power decreased by 12.8 per cent compared to 2024. In 2024 share of hydro was 15.6 per cent. Share of biomass was 11.3 per cent. Share of solar power in Finnish power generation was 1.2 per cent.

Share of fossil fuels in power generation has been decreasing. Share of gas in power production in 2025 was about 1.0 per cent and share of coal was only 0.3 per cent.

Adequacy

During the peak load situations, the available domestic generation capacity is not enough to cover the demand in Finland. The Energy Authority has estimated in the Security of Supply Outlook in November 2024 the total domestic power generation capacity available in the market during the peak load situation in winter period 2024 - 2025 as about 11,700 MW excluding disturbance reserves and Meri-Pori condensed coal power plant (560 MW) which has been reserved until of December 2026 by the National Emergency Supply Agency for emergency supply purposes.

The highest peak load in 2025 was 15,6 MWh/h. The interconnector capacity between Finland and neighbouring countries has been high enough to cover the deficit in own generation capacity during the peak load situations.

Based on the Capacity Reserve Act the Energy Authority has responsibility to estimate amount of and procure strategic capacity reserves needed to ensure the balance between supply and demand. The Finnish Government adopted in March 2022 based on the proposal from the Energy Authority the national reliability standard which is 2.1 hour per year as a lost-of-load-estimation (LOLE). The Energy Authority decided based on national resource adequacy assessment (NRAA) in April 2025 that there is, however, no need acquire strategic reserve capacity to meet the national reliability standard during period of November 2025 – October 2026.

Wholesale prices

Available electricity transmission capacity between Finland and neighbouring countries has not always been enough for to cover market needs which has lead price differences between the bidding zones.

Uniformity of day ahead market prices between Finnish and neighbouring bidding zones decreased significantly in 2025. Finnish bidding zone (FI) and all Swedish bidding zones (SE1-SE4) had the same day-ahead price only in 3 per cent of hours (45 per cent in 2024). With the Swedish bidding zones SE1 and SE3 Finland had the same day-ahead price in 35 per cent (with SE1) and 15 per cent of hours (with SE3). Finland and Estonia had same price in day ahead market in 20 per cent of hours (32 per cent in 2023).

At the Nordic Capacity Calculation Region (CCR) flow-based capacity calculation methodology in day ahead market timeframe has been in use since later October 2024.

The first step towards the 15-minute market time unit (MTU) was taken in May 2023 when the balance settlement and a large part of energy measurements in Finland were changed to 15 minutes resolution. Intraday trading between Finnish and Estonian bidding zones moved to 15-minute MTU on 23 January 2025 and on the Nordic internal and external borders on 18 March 2025. The final stage of the 15 minutes MTU transition took place in October 2025, when 15-minute trading on entire European electricity day-ahead market went go-live. For all energy measurements, the transition period to a 15-minute measurement resolution will last until the end of 2028.

Volatility in wholesale electricity prices has been increasing during past few years due to increased share of intermittent weather dependant energy sources in power production. In 2025, number of negative wholesale prices decreased. During total of 433 hours (725 hours in 2025) wholesale day-ahead market price in Finnish bidding zone were negative. On the other hand, on 203 days in 2025 (on 181 days in 2024) price difference between the highest and the lowest hourly price was more than EUR 50/MWh which shows the extent of intra-day price volatility and can indicate challenges in balancing supply and demand, as well as the value of flexible

assets like demand-side response. Markets have shown their ability to adapt to new market situation and fluctuations in whole-sale electricity prices and new sources of flexible demand have entered the market, such as electric boilers and energy storage systems, which help smooth wholesale price fluctuations. Average daily difference between the maximum and minimum hourly wholesale electricity prices over all days in the year 2025 was EUR 89.57/MWh (80.62/MWh in 2024).

Retail markets

In 2025, the supplier switching rate was lower than in 2024. About 12.5 per cent of electricity customers in Finland switched their electricity supplier in 2025 (14.8 per cent in 2024). However, these numbers include also switches which were caused by merging of supply companies.

Share of dynamic priced electricity supply contracts has steadily increased. At the end of 2025, about 34 per cent all supply contracts were dynamic priced. Still, fixed-term contracts are the most common supply contracts among Finnish end users. Its share was about 42 per cent.

Due to merger of existing retailers, concentration in electricity retail market has increased. As the end of 2025, eight electricity retailers (six at the end of 2024) had a larger than five per cent share of retail market based on energy volume. The five retailers hold more than five per cent share of metering points. The Energy Authority has estimated that the Herfindahl-Hirschman index (HHI) in retail market is between 1050-1100 which indicate still a competitive market.

2.2 Gas market development

Gas consumption

In 2025 net gas consumption decreased by 14.1 per cent and was 12.0 TWh (14.0 TWh in 2024)[1]. Gas consumption in Finland has slightly recovered from the deep decrease in 2022 caused by high gas prices and suspended gas import from Russia. However, gas consumption in Finland is still lower than in 2022.

The decrease in gas consumption was mainly due to decreased use of gas in heat and power generation which was decreased in 2025 by 18.9 per cent. Among industrial customers connected to the transmission grid consumption decreased by 2.8 per cent. Also, gas deliveries from the transmission grid to distribution grids decreased by 27.8 per cent. Gas deliveries to distribution grids covered 17.6 per cent of all gas deliveries from transmission grid.

Gas import and export

Total entry of gas into Finnish gas transmission system was 15.6 TWh in 2024 (20.8 TWh in 2024). About 38.6 per cent of all imported gas was imported from the Baltic states via Balticconnector pipeline (in 2024 about 6.0 per cent). LNG terminals and especially terminal in Inkoo have played a vital role to ensure gas deliveries in Finland during Balticconnector's failure in 2024.

LNG import covered 61.4 per cent of gas import in 2025 and of which import through Inkoo LNG terminal was 97.5 per cent. Gas was exported to Baltic states through Balticconnector after it was repaired in April 2024. Amount of exported gas was 3.6 TWh (6.8 TWh in 2024). These numbers do not include import to off-grid LNG terminals in Pori and Tornio.

[1] Excluding offgrid use of gas eg offgrid biogas or gas delivered through offgrid LNG terminals to end users..

Finland is no longer importing natural gas nor LNG from Russia. Pipeline gas import from Russia through Imatra interconnection point has been suspended since May 2022. Terms and conditions for Inkoo LNG terminal prohibits importing LNG originating in Russia.

Since the came into force on 26 July 2024 of the 14th sanctions package against Russia approved by the Council of the European Union on 24 June 2024 prohibiting purchase or import liquified natural gas originating from Russia through European Union terminals that are not connected to the EU gas network, also import and purchases of Russian LNG to Finnish off-grid LNG terminals have been ceased.

Regional gas market

Finland together with Baltic states has several years been developing a regional gas market. In 2019 a separate inter-TSO compensation agreement was signed between the Finnish, Estonian and Latvian TSOs and a common tariff area has been established since the beginning of 2020 between Finland, Estonia and Latvia. In the common tariff area entry tariffs are unified and the tariffs at interconnection points between Finland, Estonia and Latvia have been removed since the beginning of 2020.

In April 2020, energy ministries, regulators and transmission system operators from Estonia, Finland, Latvia and Lithuania gave their agreement to a roadmap[2] establishing a process for the future regional gas market integration of their respective countries. The objective is to establish a merged, regional gas market in Estonia, Finland, Latvia and Lithuania, encompassing all four Member States, with the objective to improve market liquidity, integration and competition, ensuring affordable gas prices and high quality of service - thus being attractive for existing and new market participants. However, because of the geopolitical situation since 2022 which has caused significant changes in the fundamentals of the region's gas market, merging of regional gas markets and the development of updated ITC mechanism between TSOs have been postponed until market will be more stabilised.

2.3 National electricity and gas market regulation development

Government proposal to amend the Electricity Market Act and the Act on the Comparison Tool for Electricity Supply Contracts

In November 2024, the Government submitted to Finnish Parliament a government proposal to amend the Electricity Market Act and the Act on the Comparison Tool for Electricity Supply Contracts. The Parliament approved the proposed amendments in May 2025 and these amendments have come into force on 1 July 2025, except the provisions on market-based end-user load control which will enter into force on 1 September 2026. However, while approving the government proposal, the Parliament rejected proposed new provisions related to combined billing for electricity supply and distribution charges.

The main objective of these amendments is to implement measures whereby a smart electricity system provides customers opportunities to actively participate in the electricity market and to promote the maintenance of security of supply. The amendments will harmonise the structures of transmission charges, which would improve the understandability of electricity transmission pricing. In addition, the amendments will promote power-based pricing of electricity distribution. It would increase the customer's ability to influence the amount of their charges and incentivise

[2] https://ec.europa.eu/info/news/baltic-regional-gas-market-roadmap-will-mark-first-cross-border-gas-market-merger-between-4-eu-countries-2020-apr-20_en

customers to avoid consumption peaks. The customer's position will also be strengthened by limiting the effective date of a new electricity sales contract concluded through distance selling, and by implementing the provision of the Electricity Market Directive that regulates termination fees for fixed-term fixed-price electricity supply contracts.

Regarding connecting consumption and generation facilities to the grid, the requirement for a reasonable connection time under the Electricity Market Act is clarified, whereby the upper limit of a reasonable connection time for consumer customers would generally be six months from the conclusion of the connection agreement. In addition, the obligations imposed on the distribution system operator required by the Electricity Market Directive to regularly publish information on available capacity and the status of requests for connection to the grid would be implemented.

By clarifying the definition of a connection line, energy storage systems located in connection with power plants could utilize the connection line of a power plant or a common connection line of several power plants. This will enable the feasibility of energy storage systems located in connection with power plants and promote investments in energy storage systems built in connection with wind and solar power plants.

In addition, the amendments implement the provisions of the RED II Directive on compensation for electricity produced from renewable energy sources fed into the grid.

The amendments include also new rules for end-user market-based load control which would improve power shortage management and give customers the opportunity to choose a demand response service that suits their needs, allowing the loads connected to their smart meters to be controlled based on the price of electricity. The change would bring customers within reach of demand response in a cost-effective manner and would give customers the tools to reduce their electricity bills through automation. At the same time, increasing demand response would improve the security of electricity supply. The change would also increase opportunities to develop new demand response services.

Amendments regarding high voltage electricity grids

In December 2024, the High Voltage Grid Working Group appointed by the Ministry of Employment and the Economy published in its report[3] proposed ways to integrate growing electricity production and consumption into high-voltage grids. The main objective of the proposal was to reform the Electricity Market Act in order to integrate increasing electricity production and growing consumption loads into the main grid and the high voltage distribution network more smoothly and cost-effectively.

The background for these proposals is the estimated strong growth in electricity production and demand by 2040 due to clean transition projects, increasing hydrogen production and, for example, green steel production. At the same time, electricity consumption and production are becoming increasingly differentiated across Finland. Electricity production capacity is increasing with the growth of onshore and offshore wind power, especially in the Ostrobothnian provinces. At the same time, electricity consumption is increasing further as urban areas electrify their heat production, transport becomes electrified, and consumption is increasingly concentrated in Southern Finland.

[3] Press release and the report (in Finnish): https://tem.fi/-/tyoryhmalta-ehdotukset-kasvavan-sahkontuotannon-ja-kulutuksen-integroimiseksi-suurjanniteverkkoihin

According to the Working Group's report, the responsibility for developing a national unified electricity grid would continue to lie with the transmission system operator, Fingrid. Transmission system operator's responsibility to develop electricity grid would in future be limited to the development of a national unified electricity transmission grid and cross-border interconnection lines. Fingrid's area of responsibility would include the entire country, excluding the Åland Islands, and the Finnish exclusive economic zone. Åland Islands has its own electricity market legislation and the electricity supply in the region is organised differently than in mainland Finland.

Local and regional distribution system operators would be more clearly responsible than before for the development of high-voltage networks in their own area of operation. According to the proposal, network lines above 110 kilovolts would no longer automatically be considered a transmission system based on their voltage level, but such a line could also be a high-voltage distribution network if it is a local or regional network in nature. Distribution system operators will be enabled to build and operate a robust regional or local 400 kV network as a high-voltage distribution system operator.

Based on these proposals the Government submitted to the Parliament in May 2025 the Government proposal to amend the Electricity and Natural Gas Market Acts.

The Parliament approved the proposal in October 2025, and the amendments came into force 1 January 2026.

Fossil-Free Flexibility

The Ministry of Employment and the Economy set up in August 2024 the Fossil-Free Flexibility Working Group to assess flexible demand and supply of electricity and various energy storage systems are needed to meet the challenges of rapidly fluctuating electricity production resulting from increasing renewable energy production.

The Working Group published its final report[4] in May 2025.

The Government has not submitted any legal proposal based on the report to the Parliament yet as there has been difficulties in negotiations with the European Commission. In May 2026, the Government announced in that it will continue the preparation of a support scheme based on the General Block Exemption Regulation.

Temporary restriction of imports of natural gas and liquefied natural gas from Russia and Belarus

The Ministry of Employment and the Economy has prepared in 2024 the draft government proposal for a law on the temporary restriction of imports of natural gas and liquefied natural gas from Russia and Belarus.

The proposed temporary law would restrict the supply of natural gas and liquefied natural gas to the Finnish natural gas network through connecting pipelines or liquefied natural gas processing facilities if the natural gas or liquefied natural gas comes from Russia or Belarus.

[4] Report and the press release (in Finnish): https://tem.fi/-/fossiilittoman-jouston-tyoryhma-pohti-mallia-sahkomarkkinoiden-toimitusvarmuuden-ja-jouston-edistamiseksi

At the same time, the Natural Gas Market Act would be amended so that the connecting pipeline between Finland and a third country connected to the Finnish natural gas network could be closed for a fixed period of time to prevent a threat to the gas network.

The proposed temporary law aims to protect Finland's core security interests by limiting the tax revenues Russia and Belarus receive from the trade in natural gas and liquefied natural gas for the Finnish market and thus their ability to finance the maintenance and expansion of their military capabilities and warfare. In addition, the government proposal would seek to protect Finland from Russian hybrid influence and to achieve greater security of energy supply.

The Ministry of Employment and the Economy organised a public hearing on the draft proposal early 2025. However, the final government proposal has not yet been submitted to the Parliament for approval.

Implementation of EU directive on common rules for the internal markets for renewable gas, natural gas and hydrogen

In February 2025, the Ministry of Economic Affairs and Employment established a working group to prepare the implementation of the EU’s new gas market legislation.

The task of the working group was to prepare a legislative proposal for the implementation of the EU Gas Market Package. In its work, the group was required to pay particular attention to the emerging hydrogen market and to regulation taking into account its specific characteristics, based on the objectives set out in the Government Programme and the Government Resolution on Hydrogen. The working group also had to take into account the broader development of the European hydrogen market, with a particular emphasis on Finland’s national economic interests and the development of Finland’s hydrogen economy.

The working group submitted their proposal in May 2026 in the form of a government proposal.

The proposal includes the enactment of a new Hydrogen Market Act. In addition, amendments are proposed to the Natural Gas Market Act. The proposal also includes a new Act on the Unbundling of Gas Transmission System Operators, which would repeal the current Act on the Unbundling of Natural Gas Transmission System Operators; a new Act on Energy Supply Contract Comparison Tools, which would repeal the current Act on Electricity Supply Contract Comparison Tools; a new Act on the Supervision of Energy Markets, which would repeal the current Act on the Supervision of Electricity and Natural Gas Markets; and a new Energy Network Charges Act, which would repeal the current Act on Electricity and Natural Gas Network Charges. Furthermore, the proposal includes individual amendments to ten other acts.

The main objective of the proposal is to make the changes to national legislation required by the EU Gas Market Directive and Regulation adopted in 2024. The Gas Market Directive and Regulation introduced, for the first time, EU-level regulation concerning hydrogen markets and also amended the regulatory framework governing natural gas markets.

In addition, the proposal contains legislative measures required for the implementation of the amendments made in 2024 to the Regulation on Wholesale Energy Market Integrity and Transparency (REMIT).

The acts included in the proposal are intended to enter into force as soon as possible. However, the provisions concerning the full implementation of the regulatory framework for hydrogen networks would not apply until 1 January 2033.

ELECTRICITY MARKETS

Some key indicators for illustrating the development electricity network in Finland are shown in the following table (Table 1).

Table 1. Key indicators for electricity network in Finland (2025 figures preliminary)

Electricity network indicators	**2022**	**2023**	**2024**	**2025***
Number of TSOs	1	1	1	1
Number of high-voltage DSOs[5]	9	9	9	9
Number of DSOs	77	77	77	77
Length of electricity grid (km)				
• *400 kV (km)*	5,700	5,500	6,000	6,100
• *220 kV (km)*	1,000	1,000	1,000	1,000
• *110 kV (km)*	16,300	16,300	17,600	17,600
• *1-70 kV (km)*	154,900	155,200	156,200	156,300
• *0.4 kV (km)*	258,500	260,100	261,400	263,400

3.1 Network regulation

3.1.1 Unbundling

TSO unbundling and certification of TSO

Finland has chosen ownership unbundling model for unbundling of electricity transmission system operators (TSO). Before an undertaking is approved and designated as a transmission system operator, it shall be certified to have complied with the ownership unbundling requirements set in the Article 43 of the Electricity Directive. According to the national legislation, transmission system operator shall own transmission network it operates.

In 2025, there were no changes in the ownership of Finnish TSO, Fingrid Oyj. At the end of 2025 majority (53.14 percent) of shares of Fingrid were owned by the State of Finland and the National Emergency Supply Agency, while the rest is owned by Finnish financing and insurance institutions.

[5] Distribution system operators having only 110 kV or above grid

In 2026, one of the institutional owners sold its shares to the State of Finland and to another Finnish institutional owner. After this arrangement, the State of Finland owns 59.50 percent of the shares of Fingrid and holds 81.49 per cent of the votes.

Duties related to the state-ownership steering of Fingrid are within the Ministry of Finance to fulfil ownership unbundling requirements of Fingrid.

The Energy Authority has made the decision on the certification of Fingrid on March 14, 2014. The latest ownership arrangement has not required any reassessment procedure of Fingrid's certification.

DSO unbundling

The number of electricity distribution system operators has remained unchanged some years. Total number of distribution system operators (DSOs) having lower than 110 kV voltage level network was 77 at the end of 2025. Further, there are 9 high-voltage distribution system operators having only high-voltage 110 kV network.

The Electricity Market Act requires, that electricity network operations must be legally unbundled from electricity trade operations and electricity generation if the annual quantity of electricity transmitted to the customers through the network operator's 0.4 kV distribution network has been 200 GWh or more during three consecutive calendar years.

In total, 36 DSOs were over the threshold value in 2025. In addition, some other DSOs have voluntarily legally unbundled network activities. At the end of 2025, a total of 54 DSOs were legally unbundled.

The requirement for separate management for the electricity network company and requirements for professional interests and compliance programmes is applied in Finland only to legally unbundled system operators having 50,000 customers or more. At the end of 2025 these requirements were applied to 20 DSOs in Finland.

Since June 2023 the Electricity Market Act has required DSOs to apply permit from the Energy Authority for an exemption to operate other businesses than electricity network operations. Electricity trade operations or electricity generation, for which the requirements to unbundle still apply, do not require said permission. The change in Electricity Market Act also prohibits DSOs to engage in electric vehicle charging service business.

3.1.2 Network extension and optimization

Investments plans

In 2025, Fingrid continued to develop the internal transmission system significantly to increase the transmission capacity from northern and western Finland to southern Finland to accommodate rapidly increasing renewable energy but also to satisfy strong growth in electricity demand due to electrification of industry, heating and transport. Increasing market integration and intermittent generation demands flexibility not only from generation but also from the transmission system. As a result, Fingrid has also improved system stability and transmission capacity with compensation solutions

In 2025, Fingrid invested by EUR 485.1 million of which investments to the grid were EUR 449.5 million. Investments to the grid were decreased by EUR 42.3 million from year 2024.[6]

Fingrid estimates that the gross capital expenditure in 2026–2029 will amount to roughly EUR 2 billion.[7]

In late 2025 the 3rd AC connection between Finland and Sweden, Aurora Line, was taken into operation. However, Fingrid is already planning on expanding cross-border capacity in 2030s with AC-line Aurora Line 2 between Finland and Sweden, and with DC-lines Fenno-Skan 3 and EstLink3 between Finland and Sweden, and Finland and Estonia respectively.

According to the Finnish Electricity Market Act, all DSOs shall submit updated network development plans (NDP) to the Energy Authority bi-annually. The NDPs should include actions which demonstrate that each DSO will improve and maintain security of supply requirements set in the legislation. In summer 2021 amendments to the Finnish Electricity Market Act were made and in addition to the earlier security of supply requirements, legislation now includes requirements for DSOs to do investments in cost-effective ways and to consider possibilities of using flexibility services instead of grid investments. The next NDPs are delivered to the Energy Authority by 30th of June 2026.

The Energy Authority has powers to request DSOs to make amendments to their NDPs if deemed necessary. According to the submitted NDPs, DSOs have planned to make replacement investments to the electricity distribution grids during period of 2014 - 2036 worth about EUR 13.4 billion.

Smart grid development

In September 2016, the Ministry of Economic Affairs and Employment established the Smart Grid Working Group to explore smart grids´ potential for the electricity market. Its goal was to explore and propose concrete measures through which smart grids can facilitate the ability of customers to actively participate in the electricity market and generally promote the maintenance of security of supply. The final report with recommendations was published in October 2018[8].

The amendments to the Electricity Market Act, which came into force on June 1, 2023, include provisions to implement some of these recommendations - among other things, the provisions related to market-based demand side flexibility, the operation of independent flexibility service providers in the electricity market and the use of energy storages as a competitive activity in the market.

In December 2024, Energy Authority gave an updated order regarding electricity system operators data collection. Updates included requirements for new indicators on monitoring smart grid status, although some of the indicators chosen are already included in the earlier order. Data for these new indicators are submitted to the Energy Authority first time in 2026.

[6] Fingrid's annual report 2025: https://www.fingrid.fi/globalassets/dokumentit/en/annual-report/2025/fingrid_oyj_annual_review_2025.pdf

[7] https://www.fingrid.fi/en/news/news/2026/fingrid-oyjs-financial-statements-bulletin-januarydecember-2025/

[8] Final report is available from https://tem.fi/en/working-group-to-explore-smart-grids-potential-for-the-electricity-market

In Finland, following smart grid indicators were selected to be collected from distribution system operators: Total number and theoretical maximum power of demand response agreements made for the network needs and how many of these were activated during the year and maximum activated power. Energy storages connected to a network are divided to eight sub (8) categories, ranging from solid battery storages to hydrogen storages, from each category number of storages, total capacity and total power are asked to be submitted. Energy storages are also divided between storages for network needs and other's needs. Number of energy communities and customers of energy communities are to be collected as well. Total energy losses are also chosen to be monitored for smart grid development purposes. Small scale production (less than 1 MW nominal power unit) has already been collected.

For transmission system operator, following new TSO specific indicators are chosen: Dynamic line rating, including length of lines that use dynamic line rating, total average static thermal load capacity with DLR and total average dynamic thermal load capacity with DLR. Installed capacitive and inductive compensation capacity divided between series and shunt compensation.

In 2025, legislative amendments entered into force that, among other things, introduced flexible connection agreements, facilitated the connection of power plants to the grid and the utilisation of energy storage as part of power plants, and enabled, to a greater extent than before, the direct connection of electricity generation to a consumption site via a direct line.

3.1.3 Network tariffs

Regulation of network tariffs and charges

Transmission and distribution system operators set the actual network tariffs and charges by themselves. There is no ex-ante approval nor fixing of tariffs or prices of electricity network services by the Energy Authority nor any other authorities.

However, according to the electricity market legislation the allowed maximum price increase of distribution and transmission network charges within a rolling twelve-month period is limited to 8 per cent. In individual cases, Energy Authority may allow by its decision transmission or distribution system operator a higher increase if the increase is deemed necessary to fulfil requirements set in the system operation license or to fulfil the legal obligations set for the system operator.

Transmission and distribution system operators shall notice their customers about the changes in network charges at least one month prior to entering force.

Instead of approving or fixing tariffs or prices for grid services, the Energy Authority confirms ex-ante the methodology to be used in setting both transmission and distribution network tariffs and connection charges. The Energy Authority shall also approve ex-ante the terms and conditions of transmission and connection services before the network operators apply them.

The methodology of setting transmission and distribution network tariffs is confirmed by the Energy Authority prior to each regulatory period. The length of regulatory periods is four years, though the methodology is set for two consecutive regulatory periods.

In December 2023, the Energy Authority confirmed with its decisions the methods concerning the rate of return in electricity network operation to be followed during the sixth and seventh regulatory periods in 2024 – 2027 and 2028 - 2031.

After the end of each four-year regulatory period, the Energy Authority confirms by its supervision decisions the earnings of each network operator for the whole regulatory period and the amount that exceeds or falls short of the reasonable earnings level for the whole regulatory period. Where necessary, the supervision decisions include obligations to return any surplus profit from the completed regulatory period to customers through lower network charges during the new regulatory period. Conversely, the supervision decisions also confirm the cases where the network operator may increase earnings via higher network charges during the new regulatory period, equal to the amount by which the actual earnings from the previous regulatory period fell below the reasonable earnings level.

In the regulation model, all investments in the network are updated into the regulated asset base annually, which is then used to determine the reasonable rate of return. Thus, the confirmed methodology allows necessary network investments to be carried out to in a manner which ensures the viability of the networks as required by the Article 59(7)(a).

The network is valued with unit prices in net present value instead of book value in the regulated asset base to adjust for the long technical lifetimes of the assets. Ever since the first regulatory period in 2005-2007, the Energy Authority has incentivised system operators to make investments in the electricity network at economically sensible pace, taking into account the technical lifetime of the assets. Unit prices are used in the calculation of the adjustments of electricity network assets to ensure that the objectives laid down in the legislation on the regulation of reasonable pricing and the cost-effectiveness of investments can be achieved as well as possible. The objectives set in legislation require a principle that promotes cost-efficiency, which can be used to take a stand on the extent to which a system operator could have achieved a reasonable level of cost in the investments on average. This objective can be achieved with an adjustment made through unit prices.

A reasonable rate of return is determined as a nominal value, i.e. the impact of inflation is not removed from it. To avoid taking inflation into account twice in the calculation of reasonable return, the value of network assets may not be revalued. This refers to an adjustment that resembles a historical valuation in accordance with accounting in principle, in which separate frozen unit prices reflecting the average acquisition value must be determined for each investment year and used only for the adjustment of investments in that year.

The unit prices will be determined at the end of the regulatory period and applied to investments made in that period. During the period, unit prices are always adjusted and frozen for each year of investment using the consumer price index. However, for the valuation of the investments made before 2024, the unit prices are not indexed, and they are based mainly on the 2021-2022 cost level that describes the valid cost level during the previous regulatory period. This is used to ensure cost-reflective and equitable network valuation.

Approved rate of return on capital is determined using a WACC-model (Weighted Average Cost of Capital). The WACC parameters are updated annually, biennially or for each 4-year regulatory period depending on the parameter.

The network operators are encouraged to increase the efficiency of their operations and to maintain a high security of electricity supply. The Energy Authority has set both the general efficiency target and the company-specific efficiency target for the DSOs. The company-specific efficiency targets are estimated on the benchmarking of DSOs by using semi - nonparametric StoNED-method (*Stochastic Nonsmooth Envelopment of Data*).

The new regulation methods also incentivize innovation and the use of flexibility options.

The electricity TSO and most of the electricity DSOs appealed to the Market Court about the new regulation methods. In November 2025, the Market Court rejected all the appeals lodged by the network companies. The network companies have appealed against the Market Court decision to the Supreme Administrative Court and the appeal process is therefore still ongoing.

The Electricity Market Act has detailed provisions related to network charges collected from electricity generation. The connection fees for small-scale electricity generation (maximum 2 MVA) may not include the costs caused by strengthening the existing electricity network but only include the direct costs of connection.

The Finnish regulation also sets the maximum level of the network charges for the electricity generation connected to the distribution network. The annual network charges collected from an electricity generator may not exceed 0.07 cent/kWh.

According to the Electricity Market Act, at the request of the customer (either generator or load), the transmission and distribution system operators shall provide a comprehensive and sufficiently detailed estimate on the costs of a new connection.

Evolution of network tariffs and levies

The average distribution network charges rose slightly in 2025. In January 2026, the average distribution network charges (including taxes) for a typical household customer (consumption 5,000 kWh per year) were 1.8 percent higher than in January 2025.

Figure 1 below illustrates development of average electricity distribution network charges for two typical end users from beginning of 2020 to beginning of 2026.

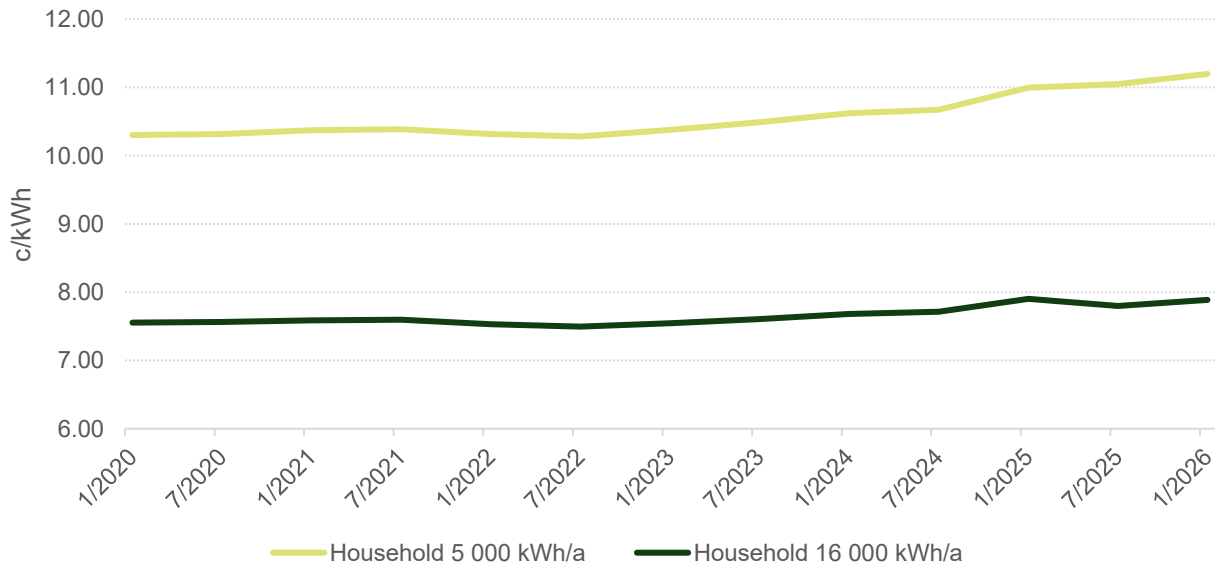

Figure 1. Development of distribution network charges (c/kWh). Prices include VAT and other taxes.

Electricity distribution network charges and electricity taxes are subject to the common value-added tax (VAT) rate of 25.5%. In addition, electricity distribution system operators collect electricity tax and the emergency stockpile fee based on the electricity final consumption.

In 2025, the emergency stockpile fee amounted to 0.013 cents/kWh (excl. VAT). The emergency stockpile fee was increased to 0,085 cents/kWh on 1 April 2026.

The electricity tax is divided into two tax categories (excl. VAT):

- Tax Category I: 2.24 cents/kWh. This category applies to households, the public sector, agriculture and forestry, and service industries.
- Tax Category II: 0.05 cents/kWh. This category is intended for energy-intensive industrial activities, greenhouse cultivation, and certain heat pump applications.

In October 2025, the Government made a legal proposal to move data centres from the Tax Category II to the Tax Category I. The change came into force on 1 July 2026.

3.1.4 Security and reliability regulation

Network security and reliability rules

Since September 2013, the national legislation has included obligations for DSOs to plan and develop their network that weather related (like storms or snow) interruptions shall not be longer than 6 hours in zoned areas and 36 hours outside zoned areas.

These demands are coming into force gradually by the end of 2028 and by the end of 2019 half of all customers electricity supply should have met the demands. According to the amendments made in 2021 to the Electricity Market Act, all DSOs operating mainly outside of zoned areas and doing significant investments in the network in the 2020's to fulfil the obligations, are automatically granted time to fulfil the requirements until end of 2036.

DSOs that shall meet the demands by the end of 2028 should have met the demands for 75 per cent of all customers by the end of 2023. Based on network development plans submitted to the Energy Authority in 2024, all these companies have met the 75 per cent target by the end of 2023.

Each DSO shall prepare a network development plan to meet these requirements and send an updated plan to the Energy Authority for a review bi-annually. Energy Authority has been monitoring DSO’s progress in this task bi-annually since 2014 through DSO’s network development plans.

3.1.5 Monitoring balance of electricity supply and demand

Balance of supply and demand

As a national energy regulatory authority, Energy Authority has task to monitor investments made to power generation capacity and its impact on security of supply in Finland.

The next table (Table 2) shows installed power generation capacity at the end of 2022-2025

Table 2. Installed power generation capacity

Installed power generation capacity, GW	**2022**	**2023**	**2024**	**2025**
Generation capacity by fuel mix (GW)				
• *Coal*	1.4	1.1	1.0	0.8
• *Gas*	1.8	1.7	1.7	1.7
• *Petroleum*	1.3	1.3	1.3	1.3
• *Nuclear*	2.8	4.4	4.4	4.4
• *Peat*	1.3	1.2	1.2	1.2
• *Biofuels*	2.6	2.8	2.7	2.6
• *Waste*	0.2	0.2	0.2	0.2
• *Hydro*	3.2	3.2	3.2	3.2
• *Wind*	4.8	6.7	8.0	9.4
• *Solar*	0.6	1.0	1.2	1.6
Total installed generation capacity (GW)	**20.0**	**23.6**	**25.0**	**26.4**

Based on information submitted by power plant operators to the Energy Authority, total installed power generation capacity in Finland was about 26.4 GW at the end of 2025. However, the entire installed capacity is not available during the peak load periods. The Energy Authority estimated before the winter 2025–2026, that about 11.7 GW of installed Finnish electricity generation capacity would be available at the market in low wind conditions during the winter period of 2025–2026.

Domestic electricity production capacity is not sufficient to cover the consumption during peak load periods and electricity imports from neighbouring countries are needed.

The actual peak load in the winter period of 2025–2026 was 15,6 GW, and it was reached in January 2026. The domestic power generation during the peak load was 14,3 GW, as wind conditions were better than in the Energy Authority's anticipated low wind scenario. Net import was 1,2 GW. Total maximum import capacity was 4,2 GW during the winter.

The electricity adequacy in Finland would face challenges during cold and windless periods if there were simultaneous disruptions in significant production facilities and transmission connections.

When looking only at the year 2025, there were no major challenges in electricity adequacy. The peak load was only 13,6 GW during 2025, reached in late December.

The transmission line Estlink 2 between Finland and Estonia was out of use during the first half of the year 2025 due a failure. That, however, didn't cause any major concerns in electricity adequacy, because there were no significant simultaneous faults in other transmission lines or power production units.

The electricity adequacy has traditionally been assessed focusing especially on peak load situations. The Energy Authority considers that as the electricity system has changed significantly,

the peak loads themselves don't automatically indicate tight situations and challenges could occur outside those hours. For example, the electricity price was relatively low (EUR 92,38/MWh) during the peak load in winter 2025–2026 and 933 MW of electricity consumption came from electric boilers. The peak load was thus consequence of high wind production and low electricity price, not a sign of adequacy risk.

As the traditional electricity generation capacity decreases and weather-dependent capacity increases, the role of system flexibility becomes more important.

Investments in power generation capacity

In 2020s domestic power generation capacity has increased mainly in nuclear, wind and solar. At the same time generation capacity based on fossil fuels has been decreased.

Figure 2 below shows the development of installed power generation capacity, maximum peak load and domestic generation during peak load in 2019-2025.

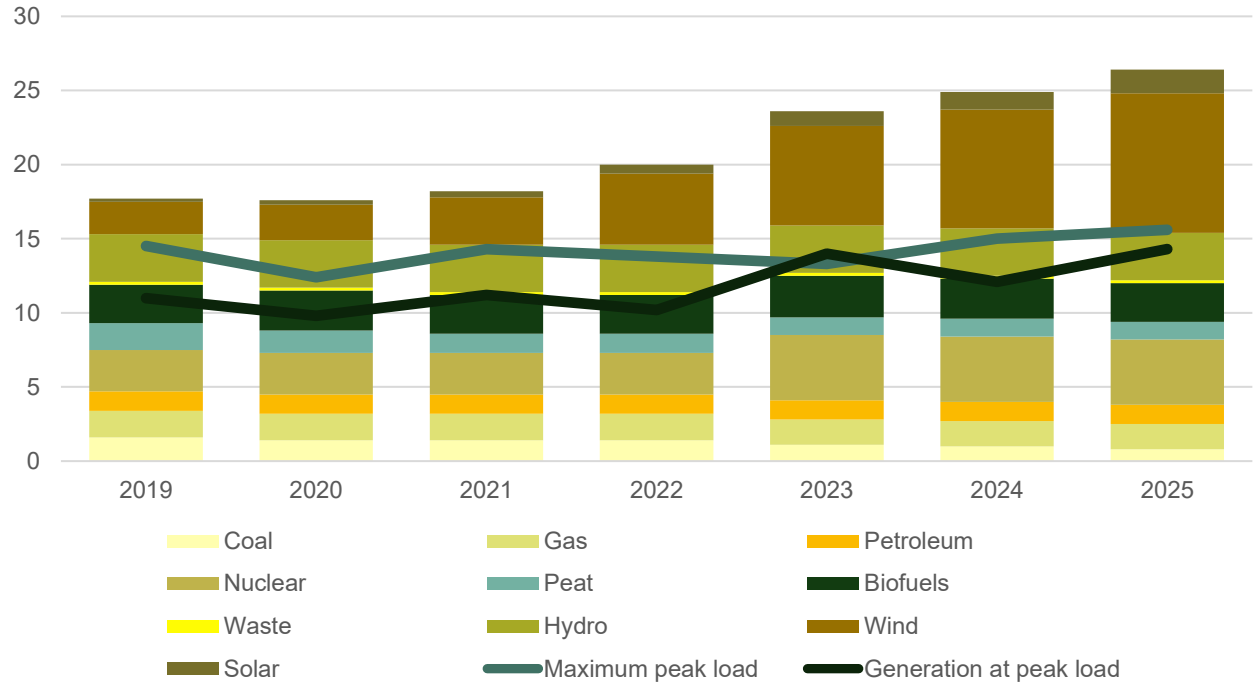

Figure 2. Installed power generation capacity, maximum peak load and power generation at peak load (GW).

In 2025, wind power capacity increased more than 1,300 MW, reaching almost 9,400 MW by the end of the year. All new wind power projects are being developed commercially without any public support.

At the end of 2025, over 1,600 MW of solar power capacity was connected to the grid. This consisted of mainly small-scale solar panels (capacity less than 1 MW) - only total capacity of

almost 330 MW was from solar power plants with capacity above 1 MW. Annual increase of solar power capacity was more than 360 MW.

There were also negative changes in power production capacity during the year 2025. Two coal-fired CHP units and one gas-fired CHP unit were decommissioned. These three units had a combined capacity of 330 MW

During the past few years, it has been typical that old CHP plants have been replaced by heat-only production facilities. Heat production is also increasingly based on electric boilers and heat pumps. This trend has led to decrease in traditional electricity production capacity and increase in electricity consumption. However, so far electric boilers and heat pumps have been flexible and supported the traditional heat production and during high electricity prices heat production is still based on fuels.

On 1 April 2019 came into force a new Act which forbids the use of coal in electricity and heat production from 1 May 2029. However, use of coal will be allowed after 1 May 2029 to ensure security of supply in heat production subject to the Energy Authority's approval. Furthermore, the Government may allow use of coal for an interim period under crisis. However, use of coal in energy production has already been decreasing also because of economic reasons.

In April 2024, the last coal-fired condensed power plant in Meri-Pori (capacity 560 MW) was transferred into emergency reserve organised by the National Emergency Supply Agency until end of 2026. Since then, the power plant has not been available for the market, and it would be activated only when emergency situations are declared in Finland. In late June 2026, the power plant operator announced that after expiration of the emergency reserve agreement in December 2026, the power plant will be available for the market in January-February 2027 and the power plant will be finally closed on 1 March 2027.

Interconnector capacity

Total installed interconnection capacity between Finland and Sweden is 3,500 MW. In normal situation, commercial interconnection capacity between Finland ja Northern Sweden (bidding zone SE1) is 2,000 for export and 2,300 MW for import. However, when Olkiluoto 3 nuclear power plant is operating with capacity of above 1,000 MW, Fingrid reduces available import capacity from the Northern Sweden (SE1) to Finland by 300 MW. Installed capacity between Finland and Central Sweden (SE3) is 1,200 MW for both export and import.

In normal situation interconnection capacity between Finland and Estonia is 1,016 MW for both directions.

Finland has also an interconnector to Norway (bidding zone NO4) with import capacity of 120 MW and export capacity of 100 MW.

In addition, there is a cable with capacity of 100 MW between Åland island and mainland of Finland, which serves as a backup connection for Åland's needs. Åland island has also connection to SE3 and commercially Åland island belongs to the bidding zone SE3.

Third AC connection between Finland and Sweden, Aurora Line, was taken into operation in late 2025. It increased interconnection capacity from Finland to Sweden (SE1) by 900 MW and from Sweden to Finland by 800 MW. European Union granted EUR 127 million in support for the Aurora line.

Import from Russia through AC links in Vyborg (import capacity 1,400 MW) has been suspended since May 2022.

Strategic reserves

To ensure the balance between supply and demand during scarcity hours, Finland has a capacity mechanism – strategic reserves. The Energy Authority is responsible for evaluating and deciding the required size of the strategic reserve capacity and arranging the tendering process to procure the capacity.

During the winter period, from December to end of February, units participating in the strategic reserve system are in 12 hours' readiness to start operating, to produce power or to provide demand flexibility. At other times, the units are in one-month readiness. The units shall be able to increase power output with 1 MW within 1 minutes after request and be ready for 200 hours continuous power production with full capacity during the winter period.

Since July 2022, there hasn't been any capacity in strategic reserve system. Since the commissioning of Olkiluoto 3 -nuclear power plant National Resource Adequacy Assessments haven't shown any resource adequacy concerns which would prevent reaching the national reliability standard (LOLE=2.1 hours/year) adopted by the Government in March 2022.

The system has been in place since 2007, and the activation of strategic reserve capacity has been very rare. The last time strategic reserves were activated in Finland was in January 2010.

Risk-preparedness for crisis in electricity sector

Being designated as the competent national authority defined in the Risk-preparedness Regulation (2019/941) in September 2020, the Energy Authority together with relevant stakeholders updated national crisis scenarios in electricity sector and the national Risk Preparedness Plan in 2024 and 2025.

The updated Risk Preparedness Plan was submitted to the Commission and to the Electricity Coordination Group in January 2026.

3.1.6 Cross-border issues

Capacity allocation and congestion management

Congestions in interconnectors between Finland and Sweden, Finland and Norway and Finland and Estonia are managed through implicit capacity allocation in the day-ahead and intraday market timeframes. In the day-ahead market, cross-border flows and bidding zone prices are determined simultaneously within the available transmission capacity limits, and capacity left unused in the day-ahead market is offered to the intraday market.

Capacity of the submarine cable between Åland Islands and mainland Finland, ÅL-Link, is not provided to the market. The cable is built primarily to ensure security of supply in the Åland Islands, which also have an AC submarine cable connection to Sweden. ÅL-Link is a 100 MW HVDC connection between Ytterby and Naantali and functions as a reserve connection for the Åland electricity network.

Until the go-live of the flow-based capacity calculation methodology in the Nordic capacity calculation region (Nordic CCR) in October 2024, the transfer capacity provided to the Nordic day-ahead market was calculated using the Net Transfer Capacity (NTC) approach. Under the NTC approach, the available capacity at a bidding zone border was determined as Total Transfer Capacity (TTC) reduced by the Transmission Reliability Margin (TRM). The Finland-Estonia border is part of the Baltic capacity calculation region, where cross-zonal capacity continues to be calculated using the coordinated NTC approach.

In July 2018, all regulatory authorities of the Nordic CCR approved the Nordic TSOs' proposal for a capacity calculation methodology in accordance with Article 20(2) of the CACM Guideline. According to the methodology, the flow-based method is to be used as the capacity calculation method for the day-ahead and intraday markets. In October 2020, all regulatory authorities of the Nordic CCR approved an amended day-ahead and intraday capacity calculation methodology.

The flow-based capacity calculation methodology was taken into use in the Nordic CCR on 29 October 2024, with first delivery day on 30 October 2024. After the go-live, day-ahead capacity in the Nordic market is no longer represented only as bilateral transmission capacity at bidding zone borders. Instead, available capacity is represented through the flow-based domain, where the capacity of critical network elements and the impact of bidding zone exchanges on those elements are taken into account. Market participants continue to submit bids at bidding zone level.

The implementation of flow-based capacity calculation has been stepwise. Flow-based calculation is currently used in the Nordic day-ahead market, while intraday capacity is provided through ATC extraction (ATCE), which translates the remaining day-ahead flow-based capacity into ATC values for the intraday timeframe. This is because the intraday allocation mechanism is not yet able to use flow-based constraints directly.

During 2025, the Nordic regulatory authorities followed the effects of the new methodology, especially the development of intraday capacities. The Nordic TSOs submitted a follow-up report to the Nordic regulatory authorities on 27 June 2025, covering approximately six months of data after the day-ahead flow-based go-live. According to the TSOs, intraday capacities after the day-ahead flow-based go-live were significantly lower than before the go-live, creating challenges for market participants in the intraday market and also for the balancing timeframe.

On 26 September 2025, the Nordic energy regulators sent a joint response to the Nordic TSOs concerning the follow-up report. At the letter, the Nordic energy regulators emphasised that the situation with significantly reduced intraday capacity and the critical situation in the balancing market required further attention from the TSOs. The Nordic regulatory authorities continued to monitor the functioning of the methodology and the TSOs' work to improve the ATCE solution and reduce the risk of situations where no intraday capacity is made available for cross-border trade.

In 2025, capacity allocation on the Finland-Estonia border was also affected by the outage of EstLink 2. The interconnector was out of service from December 2024 until June 2025, temporarily reducing the transmission capacity between Finland and Estonia by 650 MW. The link returned to commercial use on 20 June 2025.

Availability of interconnection capacities

In 2024, between 1.1.–29.10 (before flow-based capacity calculation), the average interconnection capacity between bidding zone Finland (FI) and Northern Sweden (SE1) available for day ahead market was 800 MW for export and 1,079 MW for import. Between 30.10.-31.12.2024

the average interconnection capacity available for day ahead market was 1,039 MW for export and 1,076 MW for import. Data from year 2025 is not available.

At the interconnector between Finland and Central Sweden (SE3), between 1.1.–29.10.2024, the average capacity available for day ahead market was 308 MW for export and 995 MW for import. Between 30.10.-31.12.2024 the average interconnection capacity available for day ahead market was 1,073 MW for export and 1,164 MW for import. Export capacity at the interconnector FI-SE3 was reduced remarkably since 2021 until flow-based capacity calculation by the Swedish TSO due to challenges in the transmission management at the Swedish internal transmission grid.

Between Finland and Estonia (EE) the average interconnector capacity available for day ahead market in 2024 was 723 MW for export and 724 MW for import. Available interconnector capacity between Finland and Estonia was reduced large part of year 2024 due to failures in Estlink 2 subsea cable (658 MW) on January 26 – September 4, 2024 and from December 25. 2024 to June 2025.

In other interconnectors available capacity has been limited shorter period of time due to failures and maintenance in transmission system.

Table 3 below shows the average availability of interconnection capacities for the market compared to maximum capacities in 2022 - 2025.

Table 3. Availability of interconnection capacities, %[9] (Source: Fingrid).

	2022	2023	2024	2025
Interconnector FI-SE1				
• *Import SE1 -> FI*	95.1 %	90.7 %	80.2 %	na
• *Export FI -> SE1*	93.5 %	88.0 %	85.4 %	na
Interconnector FI-SE3				
• *Import SE3 -> FI*	98.5 %	93.4 %	85.4 %	na
• *Export FI -> SE3*	15.2 %	23.5 %	36.7 %	na
Interconnector FI-EE				
• *Import EE -> FI*	92.7 %	96.0 %	58.8	na
• *Export FI -> EE*	97.2 %	96.2 %	58.6	na

Costs of countertrade and congestion management income

Finland is a single bidding zone and congestions within Finland and after day-ahead market closure are managed by countertrade.

Countertrade is used to relieve both national and inter-regional congestions during the daily network operation. Costs of countertrade are paid by the TSO.

[9] Availability of interconnection capacity is calculated by comparing transmission capacity available for the market during the year to the maximum transmission capacity of the interconnector. Data from 2025 is not yet available.

Congestion management income arises when the transmission capacity between bidding zones is too low to even out the difference between supply and demand in the market areas. The congestion management income is obtained by multiplying the amount of electricity to be transmitted between the bidding zones by the price difference:

*Congestion management income [€/hr] = Transmission between bidding zones in the day-ahead market [MW] * Price difference between bidding zones [€/MWh]*

The congestion management income is divided evenly between the transmission system operators whose cross-border lines caused the income to accrue.

Table 4 shows the costs of the countertrade paid by Fingrid and congestion management income to Fingrid during the years 2022 - 2025.

Table 4. Net costs of countertrade and congestion income (Source: Fingrid).

Net costs of countertrade and congestion income, MEUR	**2022**	**2023**	**2024**	**2025**
Net costs of countertrade	**7.3**	**0.9**	**7.1**	**0.3**
• *Countertrade between Finland and Sweden*	3.8	0.1	0.9	0.0
• *Countertrade between Finland and Estonia*	1.7	0.7	5.2	0.0
• *Countertrade inside Finland*	1.8	0.1	1.0	0.3
Congestion management income to Fingrid[10]	**943.0**	**260.1**	**265.2**	**284.3**
• *From interconnectors between Finland and Sweden*	775,6	115.0	164.5	176.3
• *From interconnectors between Finland and Estonia*	167.4	145.1	100.7	106.4
Income to Fingrid from issuing long-term transmission rights	**-**	**57.0**	**62.3**	**65.0**
• *On interconnectors between Finland and Estonia[11]*	-	57.0	62.3	65.0
Congestion income credited to the holders of corresponding transmission rights	**-**	**96.2**	**85.5**	**91.4**
• *On interconnectors between Finland and Estonia*	-	96.2	85.5	91.4

In 2025 congestion management income for the Fingrid totalled EUR 284.3 million (EUR 265.3 million in 2024). In addition, Fingrid earned income EUR 65.0 million (EUR 62.3 million in 2024) from issuing the financial long-term transmission rights (FTR) issued on the Finland–Estonia border.

Fingrid used EUR 393.6 million of congestion management incomes in 2025. A total of EUR 81.9 (301.0 in 2024) million in congestion income was recognised in turnover to cover operating expenses, and EUR 141.2 (130.1 in 2024) million in other operating income to cover financial transmission rights and cross-border capacity costs and EUR 170.4 (EUR 30.4 in 2024) million in investments to improve cross-border transmission capacity.

[10] Congestion management income in 2023, 2024 and 2025 does not include incomes from issued long-term transmission rights at FI-EE border

[11] Fingrid and Elering started issuing financial long-term transmission rights on Finnish-Estonian border in December 2022.

At the end of 2025, the accrued congestion income on Fingrid's balance sheet amounted to EUR 797.5 million (EUR 841.8 million at the end of 2024). The accrued congestion income could be used for financing investments to improve the market functioning.

Technical cooperation between Union and third country transmission system operators

The electricity trading with Russia has been suspended since May 2022.

3.1.7 Implementation of Network Codes and Guidelines

System Operation Guideline (SO GL)

In 2025, the Energy Authority has continued co-operation with other national energy regulatory authorities to ensure that methodologies pursuant to System Operation Guideline (2017/1485) are implemented.

On Nordic level, Energy Authority has continued co-operation with Nordic TSOs and national regulatory authorities to meet in Nordic region the requirements set in the System Operation Guideline (2017/1485). Before submission for approval of amendments to existing methodologies, there have been preparatory discussions on FRR exchange and sharing limits between SAs.

Already in 2023, the Energy Authority and other Nordic national energy regulatory authorities received for approval the amended methodology on limits on the amount of exchange of FRR between synchronous areas defined in accordance with Article 176(1) and limits on the amount of sharing of FRR between synchronous areas defined in accordance with Article 177(1) However, the Nordic TSOs withdrew the amendment proposal before the 6 months deadline for the regulatory authorities' decision. In 2025, the discussions with Nordic TSOs on possible resubmission of a further developed proposal have continued.

Forward Capacity Allocation Guideline (FCA GL)

Finnish-Estonian border

The assessment of cross-border hedging opportunities concerning the FI-EE bidding zone border was completed by the Finnish and Estonian NRAs in 2021. The assessment concluded that the hedging opportunities in the Estonian bidding zone were insufficient. This was largely due to the fact that Estonian market participants had previously used the Helsinki EPAD as their main hedging tool, while the decreasing price correlation between the Finnish and Estonian bidding zones had weakened the effectiveness of this hedge. Finnish and Estonian NRAs therefore requested the Finnish and Estonian TSOs to issue long-term transmission rights on the FI-EE border. Fingrid and Elering have issued long-term financial transmission rights (FTR options) on the FI-EE border since 1 December 2022.

In 2025, the application of the firmness framework for FI-EE FTR options was addressed at European level following the EstLink 2 outage. ACER issued Opinion No 02/2025 concerning the curtailment of FI-EE FTRs and the interpretation of force majeure. ACER clarified that FTR options on the FI-EE bidding zone border are financial instruments and should not be curtailed

for operational security reasons under Article 53(1) of the FCA Regulation. ACER also clarified that all conditions in the force majeure definition must be fulfilled when force majeure is invoked.

Finnish.Swedish borders

Concerning the Finnish-Swedish bidding zone borders, the earlier Article 30 process led to ACER Decision 12/2022 on the FI-SE1 and FI-SE3 borders. Fingrid appealed against ACER's decision to the ACER Board of Appeal, which upheld ACER's decision on 24 October 2023.

Fingrid submitted its proposal under Article 30(6) of the FCA Guideline to the Energy Authority in December 2023, and the proposal was approved by the Energy Authority in June 2024.

Due to the requirement to reassess cross-border hedging opportunities at least every four years under Article 30 of the FCA Guideline, the Energy Authority and the Swedish national energy regulatory authority, Energimarknadsinspektionen carried out a new assessment concerning the FI-SE1 and FI-SE3 bidding zone borders in 2025.

On 1 December 2025, the Energy Authority decided that there were not sufficient hedging opportunities on the Finnish-Swedish bidding zone borders. The Energy Authority obliged Fingrid under Article 30(5)(b) to ensure that other long-term cross-zonal hedging instruments than transmission rights are made available to support the functioning of the wholesale electricity market. Fingrid was also required under Article 30(6) to submit the necessary arrangements for approval within six months of the decision. Fingrid has made an appeal to the Market Court on this decision and the court process is still ongoing. However, the Market Court rejected in its interim decision Fingrid's requirement to suspend the enforcement of the Energy Authority's decision until the Market Court will issue its decision.

In addition, Nordic long-term capacity calculation was further developed in 2025. On 31 October 2025, the Nordic TSOs and Nordic RCC took into use flow-based calculation for year-ahead long-term capacities. In connection with the go-live, flow-based capacities for 2026 and the related ATCE values were published for market participants.

Capacity Allocation & Congestion Management Guideline (CACM GL)

The capacity calculation methodology (CCM) in the Nordic Capacity Calculation Region (Nordic CCR) in line with Article 20 of the CACM Guideline was approved in July 2018. The methodology was subsequently amended in 2019 and 2020. The 2020 approval included requirements concerning the implementation process, including parallel runs and a checkpoint for the Nordic NRAs before the go-live of the flow-based capacity calculation methodology.

Following several delays in the operational implementation and during the parallel run phase, the flow-based capacity calculation methodology for the day-ahead market and the ATC extraction methodology (ATCE) for the intraday market were taken into use in the Nordic CCR on 29 October 2024, with first delivery day on 30 October 2024. The implementation was the result of cooperation between NEMOs, TSOs, Nordic RCC and regulatory authorities.

During 2025, the Nordic NRAs continued to follow the functioning of the new methodology. The Nordic NRAs requested the Nordic TSOs to deliver a follow-up report covering approximately six months of data after the go-live of flow-based capacity calculation in the day-ahead market and ATCE in the intraday market. The Nordic TSOs submitted the report to the Nordic NRAs on 27 June 2025. In the report, the TSOs noted that intraday capacities after the day-ahead

flow-based go-live were significantly lower than in the corresponding period before the go-live, which created challenges for market participants and for the balancing timeframe.

On 26 September 2025, Nordic energy regulators sent a joint response to the Nordic TSOs concerning the follow-up report. At the letter, Nordic energy regulators emphasised that the situation with significantly reduced intraday capacity and the critical situation in the balancing market required further attention from the TSOs.

Preparations for the next implementation step, namely the application of flow-based capacity calculation in the intraday timeframe have also continued. In May–June 2025, the Nordic TSOs consulted stakeholders on the six-month testing period required under Article 20(8) of the CACM Guideline before implementing a change in the capacity calculation approach. The consultation material linked the testing period to the planned introduction of flow-based parameters in intraday auctions.

A further major development under the European market coupling framework was the transition of the Single Day-Ahead Coupling to a 15-minute market time unit. The 15-minute market time unit was implemented across European bidding zones and bidding zone borders on trading day 30 September 2025, for delivery day 1 October 2025. In Finland, this marked an important step in the broader transition towards quarter-hour electricity markets.

Electricity Balancing Guideline (EB GL)

In 2025, the Energy Authority continued to participate, together with other European national regulatory authorities and ACER, in the common European decision-making and coordination processes related to methodologies and other requirements pursuant to Commission Regulation (EU) 2017/2195 establishing a guideline on electricity balancing (EB GL). The Energy Authority also continued to follow the Nordic TSOs' Nordic Balancing Model (NBM) programme, which remains closely linked to the implementation of the EB GL and the integration of Nordic balancing markets with European balancing platforms.

The NBM initiative is based on the Nordic TSOs' cooperation agreement signed in March 2018. Its purpose is to update and adapt the Nordic balancing market design, develop common methods and operational processes and implement the related IT systems needed for an efficient, secure and European network code compliant balancing scheme. A key element of the NBM is the transition to modernised Area Control Error (mACE) based balancing in the Nordic LFC Block, where instantaneous power imbalances are handled for each sub-region or bidding zone separately instead of only for the Nordic synchronous area as a whole.

The NBM programme covers a broad set of Nordic balancing market developments. The most important developments in 2025 concerned the implementation of automated 15-minute balancing in the mFRR energy activation market, Fingrid's connection to the European aFRR platform PICASSO, preparations for future connection to the European mFRR platform MARI and the continued development of Nordic balancing capacity markets.

On 4 March 2025, the automated Nordic mFRR energy activation market went live with 15-minute activation resolution. The implementation changed the Nordic balancing process from manual hourly balancing towards automated balancing in 15-minute periods. The Energy Authority monitored Fingrid's implementation and the functioning of the new market design in coordination with other Nordic regulatory authorities, including the implications for imbalance pricing, market participant readiness and the subsequent steps towards connection to the European MARI platform.

Fingrid joined the European aFRR balancing energy platform PICASSO on 26 March 2025. The Finnish aFRR energy market became capable of cross-border optimisation through PICASSO, and aFRR energy trading between Finland and Estonia started in May 2025 using available capacity on the Estlink 1 HVDC connection. The Energy Authority followed the implementation and the related national terms and conditions, including the effects on aFRR pricing and settlement.

The Energy Authority issued a decision to enforce Fingrid's connection to mFRR balancing energy platform MARI on 27 June 2025 as Fingrid was found in breach of deadlines set the EB GL. The Energy Authority coordinated with other Nordic national energy regulatory authorities on issuing the national injunction decisions.

The Energy Authority and the other Nordic regulatory authorities had approved several methodologies related to the Nordic mFRR and aFRR balancing capacity markets in October 2024. In 2025, the Energy Authority continued to follow the practical application of these methodologies and the operation of the Nordic balancing capacity arrangements. The common mFRR capacity market between Finland, Sweden and Denmark, which expanded from national markets in November 2024, formed part of this monitoring. The Energy Authority also followed the further development of the common Nordic aFRR capacity market and the use of market-based allocation of cross-zonal capacity for the exchange of balancing capacity.

In 2025, the Energy Authority approved several changes to Fingrid's national terms and conditions under the EB GL. This included terms and conditions for balance responsible parties and balancing service providers, as well as changes required by the 15-minute imbalance settlement and balancing energy market reforms.

Connection Codes (DCC NC. RfG NC and HVDC NC)

In 2025, Energy Authority did not issue any decision related to the implementation of connection codes in Finland.

3.1.8 Monitoring and assessing the development of a smart grid

According to the legislation, Energy Authority shall monitor and assess the development of smart grid and how the actions improve energy efficiency and the integration of energy from renewable sources. Also, Energy Authority shall assess the network development, investments to the network and are the DSOs using demand response, energy efficiency, energy storage facilities or other resources as an alternative to system expansion.

Since August 2021, the national legislation has included obligations for DSOs to include in the distribution network development plans a plan for using demand response, energy efficiency, energy storage facilities or other resources as an alternative to system expansion. Distribution network development plans including the new obligation were delivered to the Energy Authority first time in June 2022.

Based on distribution network development plans the DSOs have invested over EUR 4.6 billion in 2014-2021 because of the security of supply obligations set in the national legislation. The network development and investments to distribution networks caused these obligations will continue to the end of 2036. Demand response and other resources as an alternative to system expansion are still quite new solutions for the DSOs based on the NDPs.

Based on the 2024 distribution network development plans, most of the DSOs have done research or pilot projects to develop these alternative solutions, but there have not been other major developments than pilot projects. The Energy Authority has also encouraged the DSOs to research and pilot new potential alternatives to system expansion. Based on this, the Energy Authority has included a separate incentive for flexibility as a part of the regulatory methodology applied during new regulatory period started in January 2024.

In addition to the obligation of monitoring and assessing the development of smart grid, Energy Authority also strongly incentives DSOs and TSO to innovate self-imposed. As a part of Energy Authority's regulatory methodology DSOs and TSO may include a cost equalling maximum one per cent of their yearly network business related turnover to a specific innovation incentive. Since DSOs and TSO are required to publish the results of their finished innovative projects, Energy Authority has possibility to consider number of published Smart Grid projects as an output suitable for also Smart Grid Indicators[12].

Energy Authority has defined that the project must address at least one of the following categories to be considered as a Smart Grid project:

- smart metering
- demand flexibility
- flexibility solutions
- batteries, storages, EVs

Therefore, Energy Authority reported the number of published Smart Grid projects as a part of National Report 2023. In 2023 DSOs and TSO had reported total of 17 innovative projects which Energy Authority had classified as Smart Grid projects. Two of the total 17 projects were carried out by the TSO and the rest were projects by DSOs. A few projects were collaborative projects between several DSOs, but Energy Authority has calculated projects if they were individual projects since every DSO must bear their own project costs. For years 2024 about a same number of innovative projects were reported to Energy Authority.

As stated above, January 2024 marked the beginning for the new regulatory period and sine then a separate incentive for flexibility has been included in the methodology. Up to beginning of the new regulatory period network operators were able to report different flexibility solutions as a part of innovative incentive. Energy Authority expects the amount of flexibility solutions to increase due to the new incentive for flexibility.

3.2 Competition and market functioning

3.2.1 Wholesale markets

Some key indicators for illustrating the development wholesale market are shown in the following table (Table 5).

[12] The Expert Workshop on Defining Common Smart Grid Indicators (i.e. Smart Grid KPIs) has concluded that Smart Grid Indicators should include a limited sets of output indicators, supported by inputs indicators. The workshop was co-organised by DG ENER, CEER and ACER, Organised virtually on 25th May, 2022, including national regulators, network operators (ENTSO-E and EU.DSO, and energy stakeholders (T&D Europe, SmartEn).

Table 5. Indicators for electricity wholesale market

Electricity wholesale market indicators	**2022**	**2023**	**2024**	**2025**
Electricity Production (TWh)	**69.1**	**78.0**	**79.5**	**79.2**
• *Hydro*	13.3	15.0	14.1	12.3
• *Wind*	11.6	14.5	19.9	22.2
• *Solar*	0.4	0.6	1.2	1.0
• *Nuclear*	24.2	32.7	31.1	31.3
• *CHP district heating*	8.9	6.3	5.3	4.4
• *CHP industry*	7.8	7.1	6.5	6.5
• *Conventional thermal power*	2.9	1.7	1.4	1.5
Total annual electricity demand (TWh)	**81.7**	**79.7**	**82.7**	**84.8**
• *Peak load (GW)*[13]	13.8	13.2	15.0	13.6
Net import (TWh)	**12.5**	**1.8**	**3.2**	**5.6**
• *Imports*	19.4	9.6	8.7	11.1
• *Exports*	6.9	7.8	5.5	5.5
Traded volumes in the spot electricity market (TWh)				
• *Day-ahead buy volume (FI)*	59.6	56.5	56.7	59.0
• *Day-ahead sell volume (FI)*	48.3	53.6	52.5	52.8
• *Intraday buy volume (FI)*	1.3	2.1	3.3	5.0
• *Intraday sell volume (FI)*	1.4	2.0	3.2	4.7

Figure 3 below shows domestic power generation by different sources and net import of electricity in 2019-2025.

[13] Until 2024 maximum hourly demand (GWh/h).

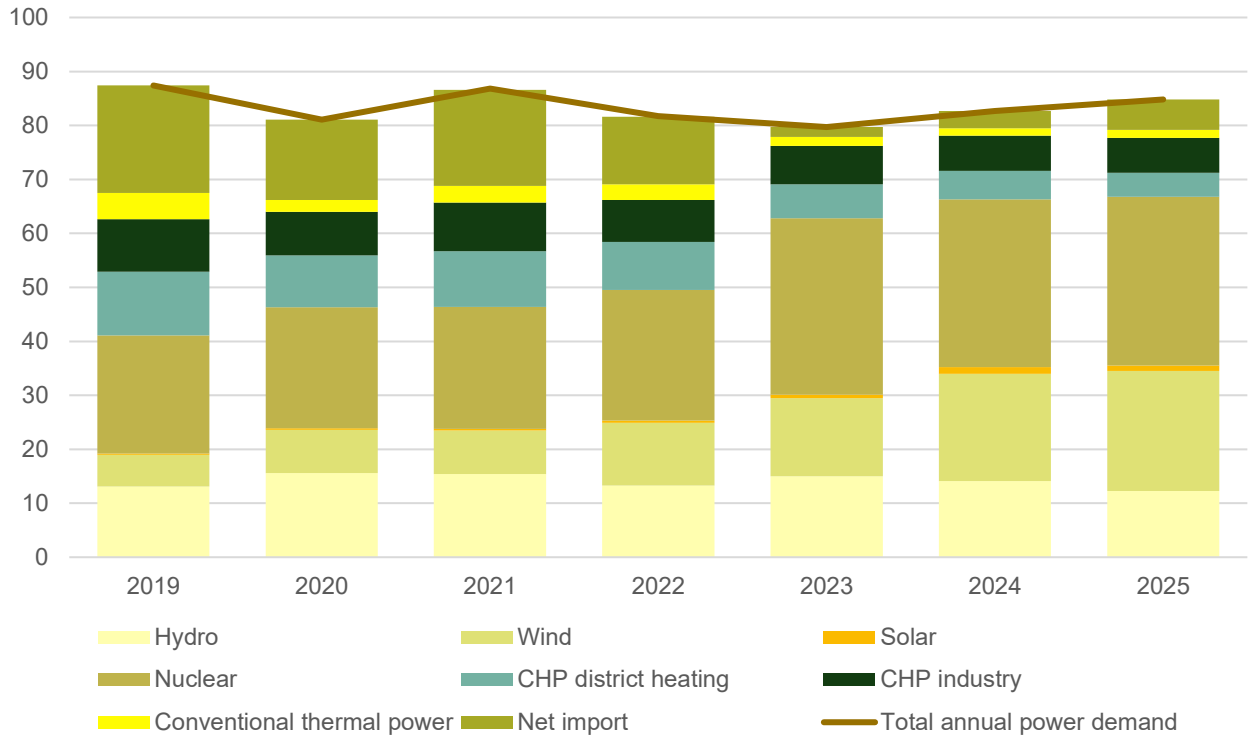

Figure 3. Power generation by different sources and net import (TWh)

Market opening

In December 2025, the Energy Authority has designated for four years period Nord Pool AS to perform day-ahead and intraday coupling in Finland as a nominated electricity market operator (NEMO). European Market Coupling Operator ASA (EMCO/former Nord Pool) applied in 2019 for re-designation of their nominated market coupling operator status in accordance with article 4 of CACM. In December 2029, the Energy Authority re-designated EMCO for indefinite period with obligations to inform relevant changes to the Energy Authority.

In January 2016, EPEX SPOT SE announced to the Energy Authority its willingness to offer day-ahead and intraday trading services with delivery in Finland by using so-called passport method. The Energy Authority decided in February 2016 that EPEX SPOT SE has right to offer day-ahead and intraday trading services with delivery in Finland. EPEX SPOT SE announced in November 2023 to the Energy Authority that the French NRA has granted EPEX SPOT SE the renewal of the French NEMO license until the 9 November 2027. In February 2024, Energy Authority confirmed that EPEX SPOT SE may continue to offer day-ahead and intraday trading services with delivery in Finland as a passporting NEMO based on the renewed NEMO designation decision from the French NRA.

In April 2017, the Energy Authority approved in cooperation with other Nordic regulatory authorities a plan for multi-NEMO arrangements (MNA) proposed by Fingrid. This enables multiple NEMOs to offer day-ahead and intraday trading services in Finland.

EPEX SPOT SE launched their intraday continuous trading and clearing services in Finland on 25 May 2020 and started offering day-ahead trading services on 3 June 2020.

Finland has been part of the European Cross-Border Intraday (XBID) solution since the 1st wave of XBID go-live in June 2018. XBID allows for orders entered by market participants for continuous matching in one bidding zone to be matched by orders similarly submitted by market participants in any other bidding zone within the XBID solution's reach, as long as transmission capacity is available.

The share of electricity bought from the power exchange in relation to the Finnish electricity consumption has increased considerably since Finland joined the Nordic power market area in June 1998. The share of electricity procured from Nord Pool and EPEX SPOT power exchanges covered 73 per cent of the Finnish physical consumption in 2025 (73 per cent in 2024). Especially buy and sell volumes in intraday market have been increasing during the last few years.

Nasdaq OMX has been providing services for trading with financial products in Nordic region. In addition, European Energy Exchange (EEX) started in March 2024 offering trading with own financial products in Nordic power futures market.

In August 2024, Euronext and Nord Pool announced their plan to launch a Nordic and Baltic power futures market. In January 2025, Euronext and Nasdaq announced the signing of a binding agreement under which Euronext will acquire Nasdaq's Nordic power futures business, subject to receipt of applicable regulatory approvals.

Prices

The basis of the price formation in the wholesale power market is the day-ahead spot market. Trading day ahead market is organised as an implicit auction. Finland is part of pan-European single day-ahead market coupling (SDAC). In SDAC buyers and sellers shall submit bids to the power exchanges for the following day before 12.00 CET every day indicating the amounts one market actor wishes to buy or sell in each bidding zone at the relevant hour at different price levels. The prices for individual bidding zones are calculated by using a common Euphemia algorithm. In the calculation all buy and sell bids from each power exchange are summarised into buy and sale curves and the price and traded volume are set where the buy and sell curves are crossing. The calculation takes also into account transmission capacity available between bidding zones and bids set in other bidding zones When the price has been determined for each operating hour, volumes of sales and buys of individual market actors are also determined. In case there are no grid restrictions between the bidding zones, the spot price is the same price for these bidding zones.

For Nordic region (Finland, Sweden, Demark and Norway) Nord Pool calculates also so-called system price which is an unconstrained market clearing reference price for the Nordic region. It is calculated without any congestion restrictions by setting capacities to infinity. The system price is calculated locally by Nord Pool after area prices are calculated for all bidding areas. Flows between the Nordics and the Netherlands, Germany, Poland and the Baltics from the area price calculation are taken into account in system price calculation. These flows are used when calculating the System price either as import/sales or as export/purchase orders. In system price calculation area bidding areas in Norway, Denmark, Sweden and Finland constitute one common bidding area (capacities between these are set to infinity).[14]

[14] https://www.nordpoolgroup.com/trading/Day-ahead-trading/Price-calculation/

In 2025, the average system price was only one per cent higher than in 2024. The average system price in 2025 was EUR 39.70/MWh (EUR 36.06/MWh in 2024).

The average day ahead market price in Finnish bidding zone in 2025 was EUR 40.48/MWh, showing a decrease of 11 per cent year-on-year (EUR 45.57/MWh in 2024). The highest day-ahead price (15 min) EUR 572,16/MWh in Finnish bidding zone was reached on Tuesday October 14, 2025. The lowest day-ahead price (hourly) EUR -21.39 /MWh at the Finnish bidding zone was reached on Sunday June 29, 2025. From 1 October 2025 onwards the market time unit in day ahead market has been 15 minutes. Before that it was one hour.

Figure 4 presents daily average day-ahead market prices at the Finnish bidding zone in 2022-2025.

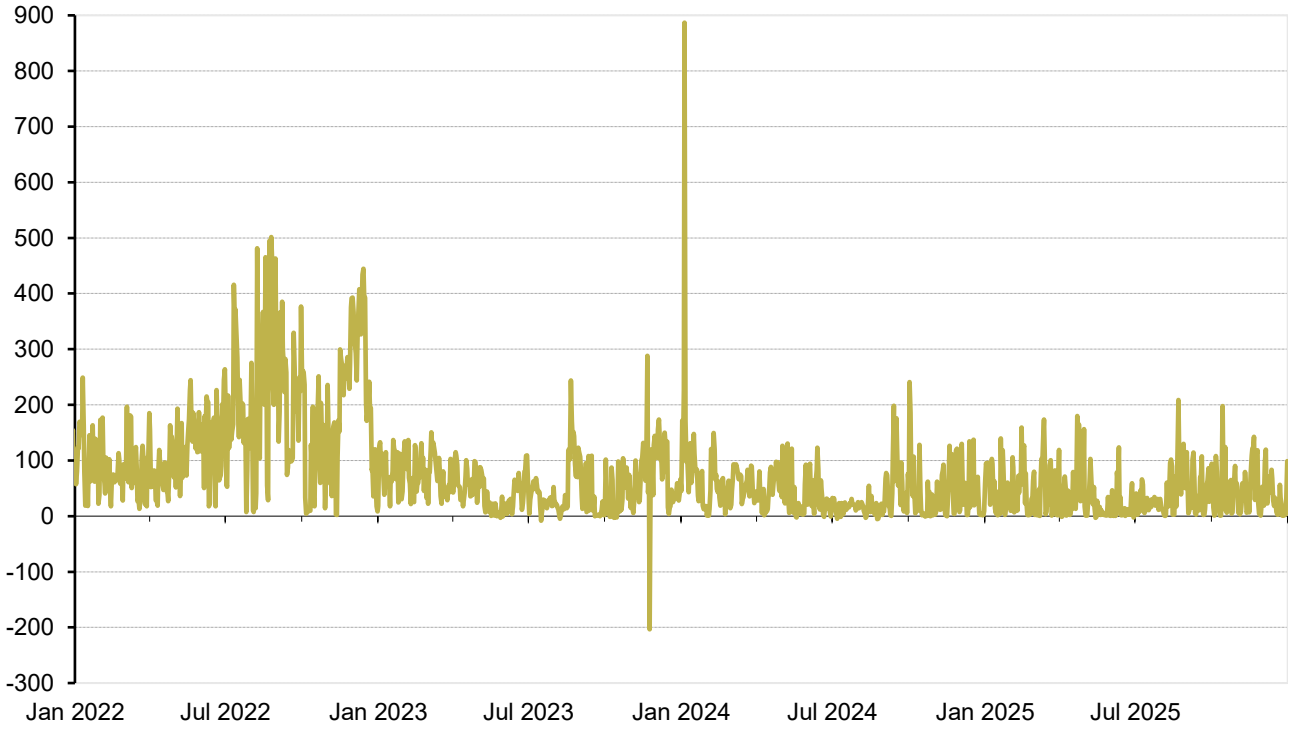

Figure 4. Daily average day-ahead market prices at the Finnish bidding zone in 2022-2025 (EUR/MWh). (Source NordPool)

Increasing share of intermittent power generation from wind and solar has increased volatility in wholesale electricity prices in 2020s.

On the other hand, markets have shown their ability to adapt to new market situation and fluctuations in wholesale electricity prices. Producers have improved their processes in bidding their generation into the market. Power producers will not receive any financial support while producing electricity during negative day ahead prices. At the same time, new sources of flexible demand have entered the market, such as electric boilers and energy storage systems, which help smooth wholesale price fluctuations.

Number of negative hourly prices in the Finnish bidding zone decreased and was 433 (725 in 2024). Wholesale price volatility[15] was 131 per cent in 2025 (163 per cent in 2024) but it is still remarkable.

Number of days when price swing between the highest and lowest prices is higher than EUR 50/MWh was 203 in 2025 (181 in 2024).

Table 6 below shows average wholesale electricity prices and price volatility at the Finnish bidding zone in 2022 - 2025.

Table 6. Wholesale electricity prices and price volatility at the Finnish bidding zone (Source: calculations from NordPool data).

	2022	2023	2024	2025
Average day ahead market electricity price (FI, EUR/MWh)	154.04	56.47	45.57	40.48
• *Highest day ahead market price (EUR/MWh)*	861.14	777.18	1,896.00	572.20
• *Lowest day ahead market price (EUR/MWh)*	-2.08	-500,00	-20.01	-21.39
Average day ahead market Nordic system price (EUR/MWh)	135.86	56.44	36.06	39.70
Number of negative hourly prices at day ahead market (FI)[16]	27	467	725	433
Volatility of day ahead market hourly prices, % (FI)[19]	86 %	100 %	163 %	131 %
Number of days with price swing >50 EUR/MWh at day ahead market (FI)[17]	334	204	181	203
Average daily swing at day ahead market (EUR/MWh) (FI)[18]	201.18	75.29	80.62	89.57

Uniformity of day ahead market prices between Finnish and neighbouring bidding zones decreased significantly in 2025.

In 2025, Finland had radically less time than in 2024 same wholesale electricity day ahead prices as in Swedish bidding zones. During 3 per cent (in 2024: 45 per cent) of time Finland and Northern- and Central Sweden (SE1-SE3 bidding zones) had the equal day-ahead price.

Uniformity of day prices between bidding zones Finnish (FI) and Central Sweden (SE3) reduced significantly. In 2025, prices were same 15 per cent of time (51 per cent in 2024). In 2025, day ahead price was in Finnish bidding zone same as in the Northern Sweden (SE1) 35 per cent of time (51 per cent in 2024).

Finland had with Estonia equal day-ahead price in 20 per cent (in 2024 32 per cent) of time in 2024. Reduction was mainly caused by the failure in Estlink 2 subsea cable which reduced the interconnector capacity between Finland and Estonia from late December 2024 until June 2025.

[15] Price volatility at the day ahead market is measured here as: (standard deviation of hourly prices) / (average of hourly prices) over all hours during the year.
[16] 15min day ahead prices since October 2025 have been changed to average hourly prices
[17] Refers to the number of days in a year during which the difference between the highest and lowest hourly electricity prices exceeded €50/MWh.
[18] Refers to the average difference between the maximum and minimum wholesale electricity prices over all days in the year.

Figure 5 below presents the percentage of hours in 2025 when an equal day-ahead price existed. In this picture the bidding zones of each country are grouped for clarity.

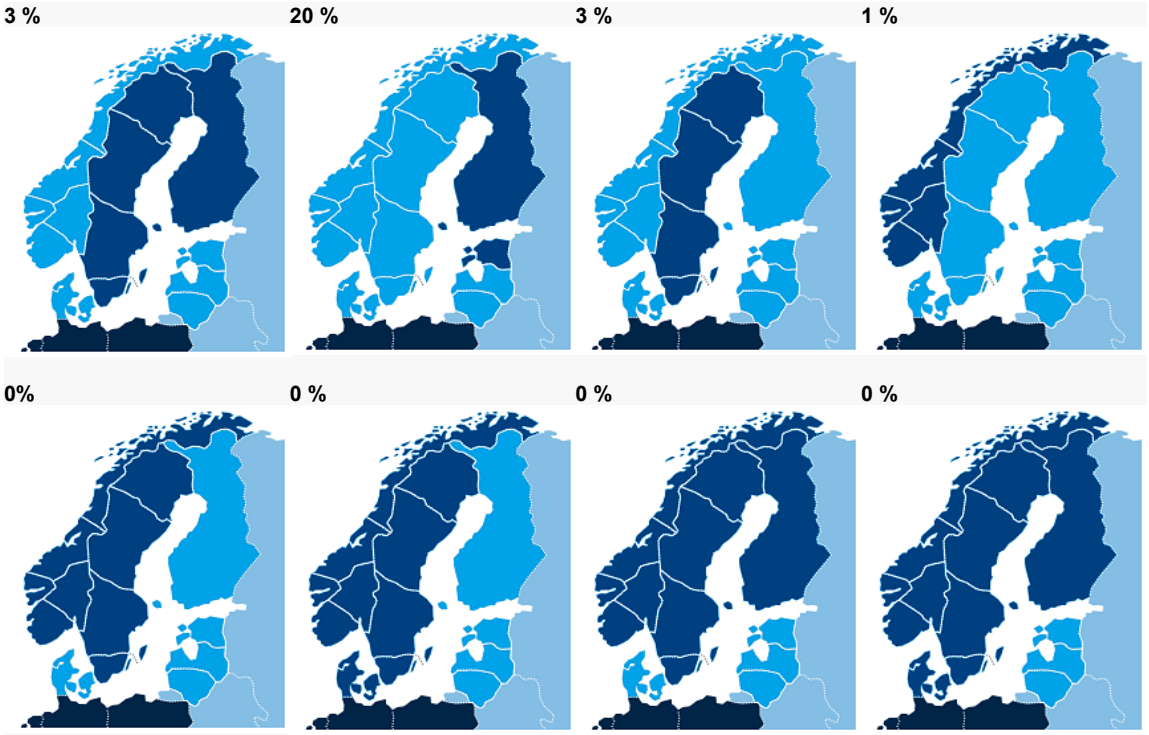

Figure 5. Percentage of time during which different bidding zones have had equal day-ahead market prices in 2025.

Table 7 below shows on how many hours there has been a price difference between the bidding zones in 2021 - 2024.

Table 7. Number of hours when there has been a price difference between bidding zones[19] (Source: Fingrid, ENTSO-E Transparency Platform).

Number of hours when there is a price difference between bidding zones	2022	2023	2024	2025
Between bidding zones FI and SE1	6,422	2,968	4,338	na
• *During hours with import SE1 -> FI*	6,422	2,773	3,547	na
• *During hours with export FI -> SE1*	0	195	791	na
Between bidding zones FI and SE3	3,750	2,136	4307	na
• *During hours with import SE3 -> FI*	2,926	1,434	2,565	na
• *During hours with export FI -> SE3*	824	702	1,742	na
Between bidding zones FI and EE	3,345	4,698	5,970	na
• *During hours with import EE -> FI*	0	2	239	na
• *During hours with export FI -> EE*	3,345	4,696	5,731	na

Transparency

In 2013 came into force transparency regulation (543/2013) which is directly applicable legislation also in Finland. In addition to this, also REMIT regulation (1227/2011) includes obligations for market participants to publish inside information, which if it were made public, would likely to significantly affect the prices of wholesale energy products. In addition to publication of inside information REMIT regulation also sets other obligations to improve energy market transparency.

According to REMIT regulation it is prohibited to trade on an inside information. This includes, inter alia, acquisition of a wholesale energy market product when market participant holds inside information related to that product, disclosure of inside information to a third party and recommending another person to acquire wholesale energy product based on such inside information. Energy Authority monitors markets and potentially investigates and sanctions market participants when they detect potential breach of REMIT obligations to publish inside information or prohibition of insider trading.

According to REMIT regulation market participants shall register with the national regulatory authority in the Member State in which they are established or resident of. Energy Authority maintains the national registry of market participants and approves/disapproves new participants, or any changes done to the existing one. Market participants are also obliged to report their wholesale energy market transactions and orders to trade to ACER which in turn discloses the received information on transactions and orders to trade made by Finnish market actors to Energy Authority. Energy Authority monitors markets in relation to the registry of market participants and reported transactions and orders to trade in order to detect whether all relevant parties are within the scope of REMIT.

According to the regulations, power producers, electricity users and transmission system operators have an obligation to disclosure information on events, which might have a relevant effect on price formation at the wholesale markets. They shall disclosure for example information on

[19] Hour is nominated as import hour if there has been import to the Finnish bidding zone based on the day ahead market results. Data from 2025 is not yet available

any plans or changes of plans for maintenances or limitations of their production units or interconnectors as well as unplanned outages and failures.

Furthermore, in Finland there are some national rules on disclosing information related to electricity power plants. According to the Electricity Market Act a power plant operator shall notify the Energy Authority of a plan for constructing a power plant, of commissioning of a power plant and of long-term or permanent decommissioning of a power plant. Further provisions on the contents of the notification obligation and notification procedure are given by Government degree.

Pursuant to the Electricity Market Act, the power plant operators are also obliged to notify the Energy Authority planned maintenance outages of their power plants practicing separate electricity generation, with an output of 100 MVA, which would take place between the 1st of December and the 28th of February. The notification shall be made at least six months before the planned starting date of the maintenance outage. The Energy Authority may order that the date of a maintenance outage of a power plant be rescheduled outside the period of the 1st of December and the 28th of February if deemed necessary to maintain the security of supply.

In 2025, Energy Authority did not receive any notification from the power plant operators on planned maintenance outages during winter period of 2025 - 2026.

3.2.2 Retail market

Some key indicators for illustrating the development electricity retail market are shown in the following table (Table 8).

Table 8. Indicators for electricity retail market (2025 numbers are preliminary).

Electricity retail market indicators	**2022**	**2023**	**2024**	**2025***
Number of electricity customers (1000)	**3,590**	**3,718**	**3,753**	**3,849**
• *Household customers (1000)*	3,170	3,291	3,328	3,403
• *Other customers (1000)*	417	427	425	446
Number of electricity suppliers	54	53	49	49
Market shares				
Market share of the three largest suppliers by metering points, %	48 %	48 %	46 %	44 %
Number of retailers with market shares >5%	6	6	6	8
Number of retailers with customer shares > 5%	6	6	6	5
External switching rate, %[20]	**16.3%**	**14.2%**	**14.8%**	**12.5%**
• *Households, %*	16.6%	15.1%	15.1%	12.8%
• *Other customers, %*	14.7%	11.6%	12.7%	11.9%

[20] Switching rates also include switches which are due to mergers of supply companies and treated as supplier switches in data exchange.

Electricity retail market indicators	**2022**	**2023**	**2024**	**2025***
Share of customers having a smart meter, %	>99%	>99%	>99%	>99%
Share of customers having different type of electricity supply contracts (as of 31 December)				
• *Fixed-term contract, %*	50%	45%	45%	42%
• *Open-ended contract, %*	36%	24%	22%	24%
• *Dynamic price contract, %*	14%	31%	33%	34%
Market concentration				
HHI in terms of sold energy	800-825	825-850	925-950	1050-1100
• *Households*	925-950	950-975	975-1000	1000-1050
• *Other customers*	750-775	750-775	925-950	1050-1100
HHI in terms of metering points	800-825	1000-1050	1000-1025	1050-1100
• *Households*	875-900	1050-1100	1025-1050	1100-1150
• *Other customers*	775-800	875-900	925-950	950-1000
Evolution of the price of electricity for a typical household consumer[21], cent/kWh	**19.97**	**26.57**	**20.75**	**20.23**
• *Network charges (excl. taxes)*	6.20	6.26	6,68	6,84
• *Energy costs and supply margin (excl. taxes)*	7.65	14.56	7,80	6,96
• *Taxes*	6.11	5.75	6,27	6,44
Prosumers and energy communities (as of 31 December)				
Number of customers with a network service contract for partial self-generation	69.400	101,900	113,700	121,900
• *of which households*	61,200	91,800	101,600	108,000
Number of energy communities in distribution grids (as of 31 December)	..	..	280	307
Number of consumption places in energy communities (as of 31 December)	..	..	3,300	6,200
Installed capacity of small-scale power generation[22], MW	**723.3**	**1018.2**	**1207.4**	**1377.1**
• *Photovoltaic, MW*	637.1	926.9	1097.2	1249.5
• *Wind, MW*	17.8	18.5	19.1	19.2
• *Bio, MW*	13.8	14.2	14.4	14.7
• *Hydro, MW*	30.2	31.0	30.5	31.1
• *Diesel, MW*	23.4	26.5	34.1	50.1
• *Other, MW*	1.0	1.2	9.3	12.6

[21] Household annual consumption 5000 kWh/year. For 2022 and 2023 the energy costs are estimate based on SCF data. Situation at the end of December

[22] Only generator units with nominal capacity max 1 MVA. Connected to the network at the end of December.

Market opening and competition

The Finnish regulation does not set include any remarkable entry barriers for new electricity retailers. Electricity retailers do not have to obtain any license from the Energy Authority before starting operation. However, all retailers shall make a contract with the TSO showing that they have balance responsibility arrangements in place

The number of retail suppliers has gradually decreased during the last few years. At the end of 2025, there were 49 retail suppliers supplying electricity for households and other small-scale end-users. Some companies have made exit from the retail market, all by selling and merging their retail supply business and transferring their ongoing supply contracts to another company. Energy Authority has not given any decisions related to these exits from the market. On the other hand, some new companies have entered the retail market.

Only a few of the electricity retailers in Finland are fully ownership unbundled from electricity network activities. Though legally unbundled, most of the electricity retailers still belong to same a group of companies as a local distribution system operator or they are owned by one or several distribution system operators.

Due to merger of existing retailers, concentration in electricity retail market has increased. As the end of 2025, eight electricity retailers (six at the end of 2024) had a larger than five per cent share of retail market based on energy volume. The five retailers hold more than five per cent share of metering points.

One the other hand, the market share of the three largest companies decreased slightly. At the end of 2025, their market share among in the retail market for small and medium-sized customers was 44 per cent (46 per cent in 2024).

The Energy Authority has estimated that the Herfindahl-Hirschman index (HHI) in terms of energy volumes to measure market concentration in retail market is between 1050-1100. HHI based on metering points is 1050-1100. Both numbers indicate still a competitive market.

Self-generation and small-scale power generation

Number of customers having electricity self-generation has been increasing. This increase is mainly due to decreased costs of solar panels and high electricity prices during the energy crisis which have attracted households and small and medium enterprises to install solar panels on their rooftops. However, increase in 2025 was a bit slower than few years ago.

In 2025, number of customers having an agreement with the DSO on partial self-generation increased by 7.2 per cent. At the end of 2025 almost 122,000 customers had a contract for partial self-generation of which 108,000 were households.

Small scale generation[23] capacity connected to the distribution grids increased by 14 per cent in 2025.

Increase was mainly due to increase of photovoltaic capacity which increased by 14 per cent and was almost 1,250 MW at the end of 2025.

[23] Generator units with nominal capacity max 1 MVA

According to the Energy Agency's estimate, new solar power systems were installed in more 6,000 small houses in Finland in 2025.

In addition, Energy Authority has estimated that there are about 24 MW of PV capacity without any grid connection. These installations are mainly in summer houses.

Figure 6 below illustrates development of small-scale power generation capacity connected into distribution grids.

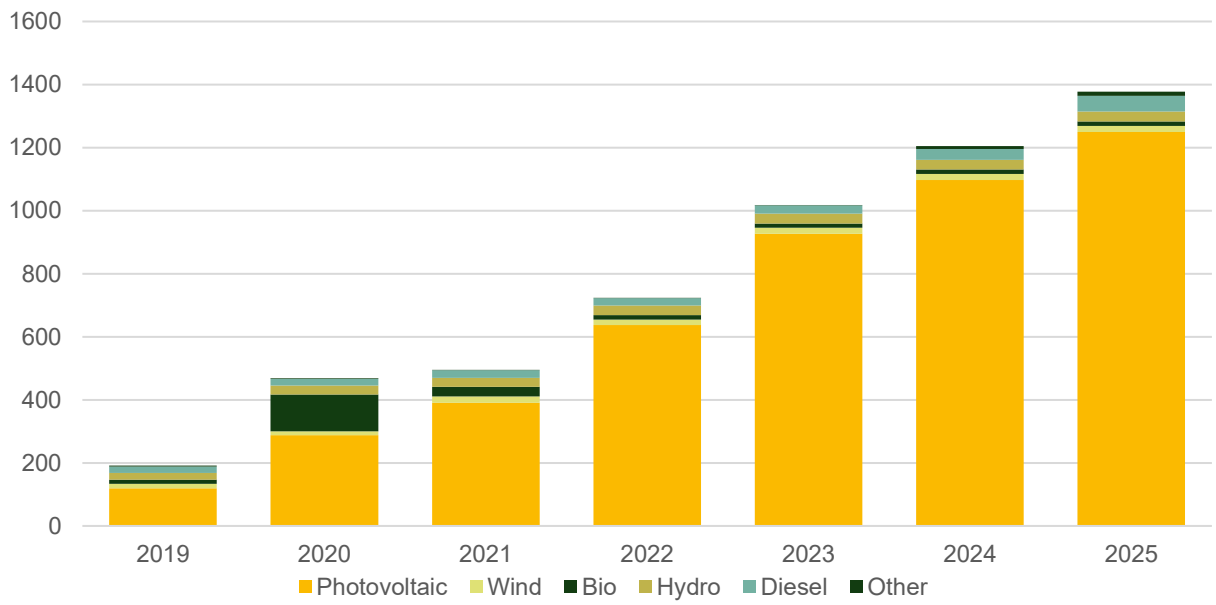

Figure 6. Installed small-scale power generation capacity with connection to the distribution grids (MW).

At the end of 2025 industrial size PV capacity (nominal capacity more than 1 MW) was about 326 MW (100 MW at the end of 2024). Industrial size PV capacity is estimated to increase remarkably also during next few years. Total PV capacity connected to the electricity grids was at the end of 2025 about 1,577 MW.

Price comparison tools

On 1 June 2023 came into force the Act on the Price Comparison Tool for Electricity Supply Contracts[24] which obliges the Energy Authority to maintain a price comparison tool which meets requirements set out in the Article 14 of the Electricity Market Directive (EU) 2019/944. Energy Authority has already voluntarily administrated such a tool[25] since 2006 to promote effective competition at the electricity retail market.

[24] Laki sähköntoimitussopimusten vertailuvälineestä (498/2023)
[25] www.sahkonhinta.fi

In 2024 new types of products started to become prevalent in the market, namely the so-called *consumption-effect* contracts. Consumption-effect contracts include a fixed price element and a variable price element dependant on when electricity is used. At the end of 2024 the price comparison tool was updated to create a new category for these products which allows users to compare these products against each other. At the same time new categories for fixed-term contracts were introduced, allowing for a larger variety of contract lengths to be reported.

In 2025 the Energy Authority has provided a lot of advice to end-users and suppliers about the procedures and functionalities of the comparison tool. It has also addressed issues concerning different forms of abuse of the price comparison website by suppliers aiming to appear as one of the suppliers with the cheapest products.

In addition to the legal-based price comparison tool administrated by the Energy Authority, there are some other privately run comparison tools in Finland. As Energy Authority provides a comparison tool that meets the requirements set out in Art 14(1) of the Directive, Finland has chosen not to provide for the issuance of trust marks to other comparison tools.

According to the legislation, electricity suppliers offering electricity to end users in Finland who wish to publish prices in the Energy Authority's price comparison tool, shall provide the Energy Authority information on prices which are applied when supplier is offering electricity in general to the consumers and other end users, whose annual consumption is below 100,000 kWh. In addition, the legislation requires that electricity retailer with SOLR (supplier of last resort) status shall provide information to the Energy Authority on prices, which are applied when supplier is offering electricity in general to the consumers and other end users, whose annual consumption is below 100,000 kWh.

Prices

In Finland, electricity suppliers can decide retail prices freely. For retail supply, there are no regulated tariffs which should be approved by the Energy Authority or any other authorities before taking into use.

The evolution of offered prices of new supply products and average price of existing contracts paid by customers during 2021-2025 is shown in the following figure (Figure 7).

Overall, the retail market prices have stabilized to a normal level after the energy crisis of 2022. Increased price volatility on the spot-market has however made especially open-ended fixed price contracts more expensive than before the energy crisis.

Increased share of dynamic priced contracts since the energy crises has influence on the average price of existing supply contracts paid by customers. In dynamic priced contracts the final price for customers change following the development of spot prices in day ahead wholesale market.

Figure 7. Price of offered new electricity supply contracts for a household customer (annual consumption 5,000 kWh) in different contract types (cent/kWh, incl. VAT, excl. grid charges and electricity taxes). Source Energy Authority and Statistics Finland.

Based on information from Statistics Finland, for a customer with 5,000 kWh annual consumption, the average price paid for electricity excluding taxes and network costs has fallen in 2024. The average price paid in December 2024 was 24 per cent lower than in December 2023. Price of electricity distribution grid services excluding taxes has not changed on average between 2023 and 2024.

Finland saw a general VAT increase in September 2024. The VAT rate was changed from 24 per cent to 25,5 per cent, and this applied also to electricity. The market-based price decreases have been larger than the VAT increase, resulting in an overall decrease in prices despite the increase in VAT.

Consumption of electricity is subject to the electricity excise tax, strategic stockpile fee and general VAT (25,5 per cent). Strategic stockpile fee (0.013 cent/kWh) is paid by all end users. Strategic stockpile fee and electricity excise tax are collected by the DSOs and TSO based on amount of electricity delivered to end-use. Electricity excise tax (ecl. VAT and strategic stockpile fee) has two categories:

- in category I tax is 2.25 cent/kWh and it is paid by households, public sector, agriculture and services;
- in category II tax is 0.05 cent/kWh and it is paid by industry, mining, greenhouses and data centres.

Figure 8 shows share of different supply contracts at the end year in 2020-2025.

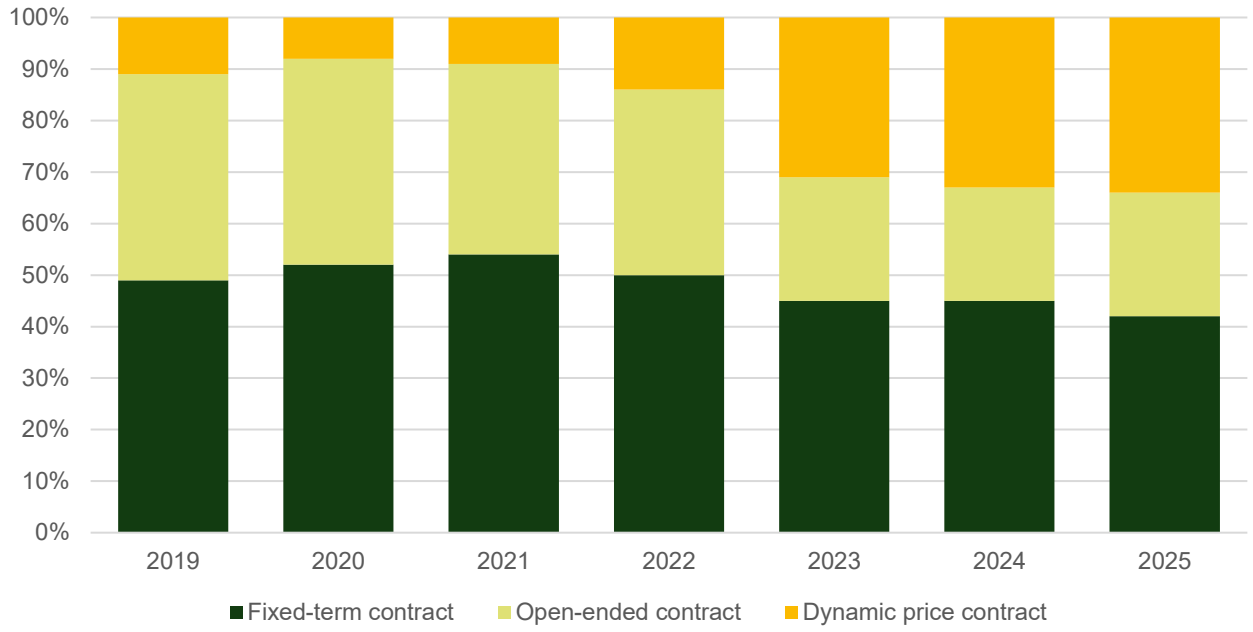

Figure 8. Share of different supply contracts (situation at the of December)

At the end of 2025, about 34 per cent of retail customers had a dynamic electricity price supply contract. Share of dynamic priced contracts increased by 1 percentage points from 2024. The most popular supply contract type among Finnish end users has been a fixed-term contract during last few years. At the end of 2025 about 42 per cent of retail customers in Finland had a fixed-term supply contract. Most commonly, fixed-term contracts are made for one or two years.

About 24 per cent of retail customers had an open-ended supply contract which customer may terminate with two weeks' notice. The share of such contracts increased by 2 percentage points compared to 2024.

Prepayment systems

In Finland, prepayment meters are not in use. Since almost all customers have a smart meter in Finland, suppliers and distribution system operators commonly offers their customers a choice for billing based on their actual electricity consumption. In these cases, billing usually takes place monthly or bi-monthly.

However, suppliers and distribution system operators are allowed to offer prepayment systems in order to invoice end users in advance based on the estimation. If they offer these kinds of systems to household customers, the system shall adequately reflect likely annual electricity consumption.

Dynamic price contracts

On 1 June 2023 came into force amendment to the Electricity Market Act which requires that all retailers supplying electricity to more than 200,000 customers have to offer dynamic priced

contracts provided that the customer is connected into distribution network and has a meter capable for metering with required accuracy. There is a similar requirement also for all retailers having the SOLR (supplier of last resort) status. However, retailers having the SOLR status may not offer dynamic priced contracts only.

Currently all electricity retail companies operating nationwide in Finland offer their customers a dynamic electricity price contract, where electricity price varies every hour and is bound to day-ahead spot prices added with the supplier's fixed margin.

At the end of 2025, about 34 per cent of retail customers had a dynamic electricity price supply contract. Share of dynamic priced contracts increased by 1 percentage points from 2024.

There was great price volatility in the day-ahead spot market during 2024, with January having much higher than usual prices whereas July and August saw very low prices. These fluctuations also have a direct impact on those consumers' bills who are on a dynamic price contract. Using average consumption data from the Finnish TSO for a consumer with a small house with electric heating and an annual consumption of 11,000 kWh, the average monthly cent/kWh price for a customer on a dynamic price contract varied in 2024 between 1–12 cents/kWh. The most expensive month was January, with the price reaching 12 cents/kWh. For all the other months of the year the price was below 6 cents/kWh, with the cheapest month, August, reaching 1,2 cent/kWh. The average price of a dynamic priced contract was lower than all other types of products for every month excluding January.

After the energy crises in 2021-2022 contract types that mix a fixed price element with a variable price element dependant on spot-prices became more common on the market. These products are aimed at providing customers a chance to benefit from switching their consumption to a cheaper time while providing security from the full variance of the day-ahead spot market. These types of contracts see much smaller price fluctuations than regular dynamically priced contracts.

Smart meter use

Almost 100 per cent of points of consumption in Finland have already a smart meter.

In August 2021, the Government adopted updated regulation for balance settlement and metering which also defines technical requirements for the 2nd generation of smart meters.

Since May 2023 consumption and production are metered either with granularity of one hour or 15 minutes and balance settlement is done in 15 minutes periods, including also households in Finland. All smart meters should be capable for metering with 15 minutes resolution by the end of 2028. Currently, more than half of the energy meters are already metering consumption with 15 minutes resolution. Metering with 15 minutes resolution is necessary for customers to gain full benefit since day-ahead market moved to 15 minutes market time unit in October 2025.

Regarding roll-out of 2nd generation of smart meters, the national regulation allowed until June 30, 2025 the network operators in individual cases install hourly metering equipment at the point of electricity consumption, if the point of electricity consumption's metering equipment was damaged and the network operator had not yet started replacing the electricity metering equipment with new 2nd generation remote metering equipment. Since July 2025 all installed energy meters must have fulfilled the technical requirements set for the new 2nd generation of smart meters. In addition, DSOs must replace the hourly metering smart meters used to measure the point of electricity use and small-scale electricity production with new remote metering equipment by July 4, 2031 at the latest.

Information exchange

Since 2022, all retailers and DSOs have been obliged to use a centralised exchange service, Datahub maintained by the Finnish TSO. Retailers and DSOs shall submit data on each metering point they service to the Datahub.

The reported customer and consumption data is available to all entitled parties, which has further simplified and improved efficiency in supplier switching and other retail market processes.

Switching rates

In 2025 the number of end users switching electricity supplier to another supplier slightly decreased compared to 2024. In 2024, the external switching rate was 12.5 per cent of all electricity end users (14.8 per cent in 2023). This corresponds to approximately 481,000 end users.

Among household customers the switching rate was 12.8 percent in 2025 (15.1 percent in 2024). Among other customers, the switching rate was 11.9 percent (12.7 percent in 2024).

Switching rates have decreased since the energy crisis in 2021-2022. Figure 9 shows external switching rates in 2019-2025. These figures include also supplier switches which are only due to mergers of existing suppliers.

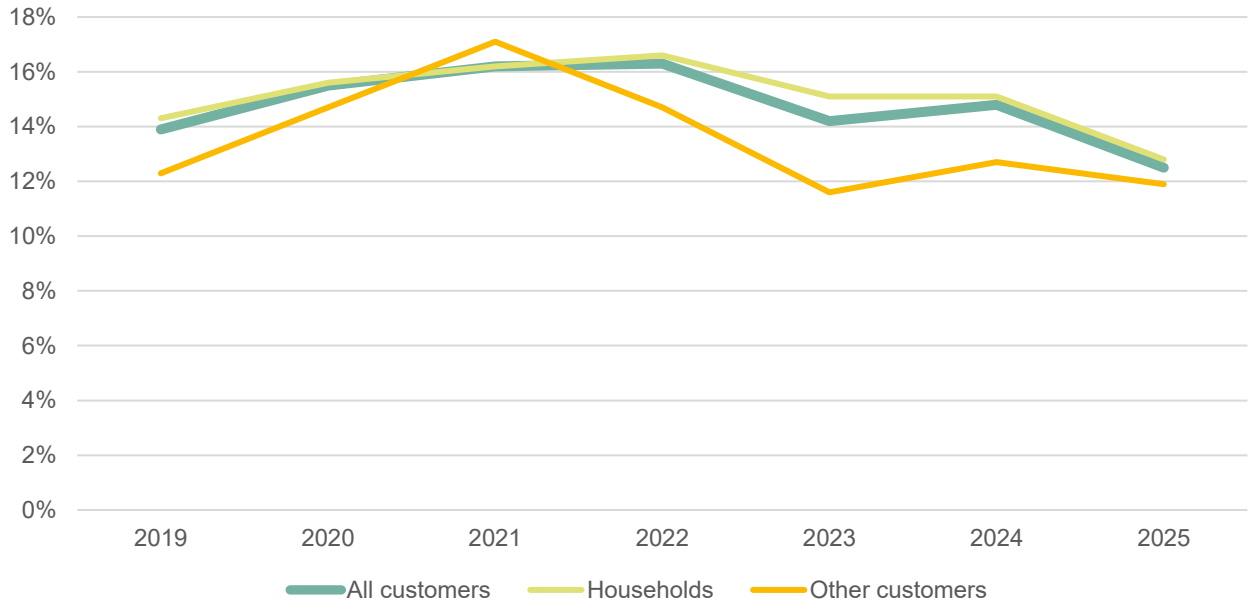

Figure 9. External switching rates in 2019-2025

Distortion or restriction of competition

The Finnish Competition and Consumer Authority has responsibility to protect sound and effective economic competition by intervening, where necessary, in restrictive practices, such as cartels and abuse of dominant position.

The Energy Authority may report relevant information to the Competition and Consumer Authority, but such cases have not occurred in 2025. The Energy Authority, on its own behalf, supervises the compliance with the Electricity Market Act containing also some prohibitions to use terms and conditions limiting competition within the electricity sales.

In 2019, Energy Authority established a Smart Grid Forum to support national implementation of smart grid provisions of the Clean Energy Package and proposals from Smart Grid Working Group which was set by the Ministry of Economic Affairs and Employment and submitted its final report in Autumn 2018. The Smart Grid Forum consisted of representatives from the Ministry, the Competition and Consumer Authority and relevant stakeholder organisations representing consumers and electricity companies.

Based on discussions at the Smart Grid Forum, the Energy Authority prepared and submitted in July 2021 to the Ministry a proposal[26] to amend national legislation to facilitate so-called combined billing of energy and grid charges to foster competition in retail market. The proposal includes suggestions for necessary practical processes and arrangements to enable voluntary combined billing in which supplier and customer may agree on that the customer will receive from the supplier only one electricity bill which includes both energy and grid payments. Amendments into provisions at the Electricity Market legislation to facilitate combined billing were included in the Government proposal which was submitted to the Parliament in November 2024. However, during the approval process the Parliament rejected these provisions.

3.2.3 Consumer protection and dispute settlement

The consumer authorities are in general responsible for consumer protection in Finland. The Finnish Competition and Consumer Authority ensures that the practices companies use in marketing and their customer relations are appropriate and the contract terms applied by them are reasonable. The Consumer Ombudsman supervises that the Consumer Protection Act and other laws passed to protect consumers are observed.

The Energy Authority monitors the transmission system operators', distribution system operators' and suppliers' overall compliance with the electricity and natural gas market legislation. In particular, the provisions in the legislation concerning electricity and natural gas contracts are aimed at ensuring the minimum protection for household consumers.

Monitoring the retail electricity market is an ongoing process and the Energy Authority follows the market closely in order to ensure that illegal practices are met with due investigations and sanctions. The scope of issues is under constant review and possible courses of action are explored continuously. The Energy Authority has powers to impose necessary and

[26] https://energiavirasto.fi/documents/11120570/120184679/Energiavirasto+esitys+s%C3%A4hk%C3%B6n+myynnin+ja+jakelun+maksujen+yhteislaskutus+1548-403-2021.pdf/4311167c-b361-d387-11a8-0851d8d30f01/Energiavirasto+esitys+s%C3%A4hk%C3%B6n+myynnin+ja+jakelun+maksujen+yhteislaskutus+1548-403-2021.pdf?t=1652265595978 (in finnish)

proportionate measures to promote effective competition and to ensure the proper functioning of the electricity market.

Complaints by household customers

In 2025, the Energy Authority received 18 complaints from household customers related to electricity distribution system operators and suppliers. The Energy Authority opened by own initiative two new investigations related to electricity distribution system operators in 2025.

In 2025, the Energy Authority made decision in 20 cases related to electricity distribution system operators and suppliers. Some of these cases were already received in previous years.

These statistics do not include the phone calls or other written inquiries from customers or other market participants received during the year. The requests for investigation and other inquiries fell into the following categories: connection charges, network tariffs, quality of supply, metering, contractual issues, invoicing, disconnections, reasonableness of electricity prices under the obligation of supply and compensation to the distribution system operator for the costs of supplying electricity.

Disconnection rates

The Energy Authority does not collect data on disconnections due to non-payment or for other customer-related reasons.

Restrictive contractual practices

In 2025, the Energy Authority gave several decisions regarding the reasonable price for a supplier that has the obligation to supply electricity to end users. In these decisions, the Energy Authority assessed whether the prices charged by the supplier were reasonable. The Energy Authority didn’t set any specific price or price range that would be considered reasonable but in all the cases the pricing was found to be reasonable. The Energy Authority also gave one decision regarding the use of sales terms which can be restrictive to competition within electricity market.

During 2025, the Energy Authority was also handling several advice requests from customers. The Energy Authority continued to receive a large number of consumer complaints and advice requests especially regarding prices of their electricity supply contracts and obligations for retailers to inform their customers on changes in contract prices.

As the Energy Authority does not have jurisdiction to investigate the basis for the contractual changes, some of these consumer complaints and requests for advice were redirected to the Finnish Competition and Consumer Authority instead, thus using the resources of both authorities.

Protection of energy poor and vulnerable household customers

Energy poverty or vulnerable customers are not defined in the national energy legislation. The definition of a vulnerable consumer is considered to be included in Article 19 of the Finnish Constitution, from which the right to social security is derived. The definition is complemented by the Social Assistance Act. In addition, the Electricity Market Act does contain some restrictions to disconnection due to non-payment to protect household customers in specific circumstances. If the non-payment is caused by the end user's financial difficulties due to serious illness, unemployment or some other special cause, principally through no fault of their own, the disconnection may take place at the earliest two months after the due date of the payment. Furthermore, the disconnection due to non-payment is not allowed between the beginning of October and the end of April in an electrically heated building or in a part of a building that is used as a permanent residence, until four months have elapsed since the due date of the outstanding payment.

According to the Electricity Market Act an electricity retailer with a significant market power or the highest market share within the area of responsibility of a distribution system operator has so-called obligation to supply. The obligation means that the retailer shall supply electricity at reasonable prices to consumers and other users of electricity whose place of use is equipped with main fuses of 3x63 amperes at maximum or whose site of electricity use receives annually no more than 100,000 kWh of electricity. Terms and conditions regarding this obligation shall not include any unreasonable provisions or limitations that would restrict competition within electricity trade. The Energy Authority may order the retailer referred to here to sell electricity to the customers within the obligation to supply.

The prices of electricity within the obligation to supply system do not have to be approved by the regulator before the supplier takes them into use. By virtue of the Electricity Market Act the Energy Authority may investigate either on the basis of a complaint or at its own initiative the pricing of electricity within the obligation to supply.

In 2022, the Energy Authority received several complaints regarding the pricing of electricity within the obligation to supply and opened investigations regarding 17 different companies. Several of these cases were resolved by the end of 2025.

In these decisions, the Energy Authority has assessed whether the pricing for contracts under obligation to deliver has been reasonable. The Energy Authority has not defined nor set any specific allowed maximum price or an exact price range that would be considered reasonable. Instead, Energy Authority has assessed the issue by comparing development of prices of offered retail price contracts in general to the development of wholesale day-ahead market prices and forward contract prices. In addition, Energy Authority has compared individual company's prices to the respective offered competitive contracts offered in the retail market. Energy Authority has considered in its decisions that, while retail supply under obligation to supply is competing with other supply offers, there is no reason to doubt unreasonable pricing as long as movements in retail prices in general reflect the development of wholesale prices and individual company's prices are below offered respective supply contracts under competition.

Safeguard measures against interruptions in electricity supplies

The Electricity Market Act includes specific provisions for situations when electricity supply to an end user would be to be interrupted due to reasons attributable to the retailer like in the case of a bankruptcy.

In such situations, before the DSO may interrupt the electricity supply, the DSO shall notify the affected end users of the interruption and the reasons behind it. In addition, the DSO has the responsibility to continue supplying electricity for those customers for at least three weeks since the DSO has notified them about the interruption and since the retailer has ended its supplies.

The amendment to the Electricity Market Act, which came into force on June 1, 2023, further requires that, if the end user is a household consumer, the DSO shall continue the supply until the Energy Authority transfers the end user to a retailer which has the obligation to supply within that area.

In 2025, there were no situations where supply of electricity to end users was going to be interrupted due to reasons attributable to retailers.

In such situations the end user shall compensate the DSO for the reasonable costs incurred for the supply of electricity. If the end user and the DSO do not agree on the compensation, the Energy Authority determines the amount of compensation.

In 2025 the Energy Authority made three decisions related to the amount of compensation to a DSO. These cases were related to situations where the DSO had the responsibility to continue electricity supply to end users due to a supplier's bankruptcy in 2022.

Obstacles to and restrictions of consumption of self-generated electricity and citizen energy communities

Electricity customers may install own small-scale power generation facilities like PV panels to the roof-top of their apartment by notifying the DSO and use this self-generated energy in the same facilities. In case they have surplus of generated energy, they may conclude a contract with party who is willing to buy the surplus. The regulation does not include provisions concerning pricing of this surplus energy and usually the price reflects current wholesale prices.

Increasing number of customers have installed PV panels to cover part of their electricity consumption with a self-generated energy. Also, some housing companies have been interested to invest own PV generation and to share surplus of self-generated energy between the members of the housing company.

In 2020, the Ministry of Economic Affairs and Employment prepared legislative amendments to improve local energy communities' possibilities to consume and share self-generated energy within a local energy community. These amendments into the Government Decree entered into force in January 2021. New provisions facilitate to distribute self-generated electricity among the community or the group of active customers on the same property or group of properties. The regulation also applies, under defined prerequisites, to individual end-users and thus improves their opportunities to utilize self-generated electricity as well. The decree stipulates the rules for netting of consumption and production in the balance settlement and calculating the compensation of jointly produced electricity for each consumption point. The transitional period of the decree ended on January 1, 2023, and since then the netting and calculation of compensation inside the imbalance settlement period has been done by the Datahub.

At end of 2025, there was 307 local energy communities at the distribution grids. These energy communities consisted of 6,200 consumption points.

Dispute settlement

The Energy Authority does not have powers for dispute settlements between energy users and energy companies in individual contractual disputes.

In Finland, the disputes between household consumers and energy companies in individual cases may be solved in the Consumer Disputes Board which is a neutral and independent expert body whose members represent consumers and business in a balanced way. The Boards gives solution recommendations for legal disputes between consumers and energy companies. A dispute handled by the Board can always be taken to a court of law. Furthermore, the Consumer Advisory Service is a national service that provides information on consumer rights, and mediation assistance in disputes between household consumers and energy companies.

The Consumer Ombudsman may assist a household consumer in an individual dispute in the court if the issue carries significant impact or the entrepreneur is not compliant with the decision of the Consumer Disputes Board. The Consumer Ombudsman may also bring group complaints to the Consumer Disputes Board or initiate class actions, for instance, against a network operator or supplier and act as the representative of the plaintiffs in a general court of law.

Individual disputes between non-household customers and energy companies are solved in a general court of law or in an arbitral tribunal if agreed so. The Parliament adopted in February 2023 a new law on dispute settlement between business customers and energy companies as required by the Directive (EU) 2019/944. Legislation regarding an independent Energy Market Disputes Board to specifically solve contractual disputes between energy companies and business customers entered into force on 1 September 2023.

GAS MARKETS

The Finnish natural gas market was opened for competition on January 1, 2020. In the initial phases of competitive market, the approval decisions on terms and conditions for capacity allocation and transmission services were given only for a term of one year to gain practical experience from open gas markets. The approval decisions made in 2021 on terms and conditions for capacity allocation and transmission services for 2022 onwards was made until further notice because gained experience of the open gas market has showed that the terms and conditions are sufficient to support efficient and transparent functioning of the open gas market.

Some key indicators on gas networks are presented in the following table (Table 9).

Table 9. Key gas indicators

Gas indicators	**2022**	**2023**	**2024**	**2025**
Maximum gas daily consumption TWh/d[27]	0.114	0.078	0.130	0.097
Transmission pipeline entry capacity TWh/y HCV[28]	82	51	79	79
Transmission pipeline exit capacity (exports) TWh/y HCV[29]	29	29	29	29
LNG Gas Storage Capacity nm3[30]	258,806	261,000	258,810	257,306
LNG Regasification Capacity GWh/day	6	146	146	146
Number of TSOs	1	1	1	1
Number of DSOs	17	16	16	17

4.1 Network regulation

4.1.1 Unbundling

Unbundling of TSO

Prior to 2020, there was neither legal nor operational requirements in place for unbundling of natural gas transmission network operation. The only wholesale supplier of natural gas –

[27] energy volumes are expressed by using higher calorific value.
[28] Technical capacity without limitations (caused for example by compressor station delays)
[29] Technical capacity without limitations
[30] Storage capacity in off-grid LNG terminals is 80 000 nm3. Numbers since 2022 include also storage capacity located in LNG terminals in Hamina and Inkoo. In Finland there are no other gas storages.

Gasum Oy – was also the sole importer and operator of the transmission system until end of 2019. TSO activities were unbundled only in accounts.

Due to the Natural Gas Market legislation, gas transmission system operations were ownership unbundled from electricity and gas generation and supply by the 1 January 2020. A new gas TSO Gasgrid Finland Oy was unbundled through a partial demerger from Gasum Oy that entered into force on 1 January 2020. Furthermore, duties related to the ownership steering of Gasgrid Finland Oy was transferred to the Ministry of Finance on 1 January 2020 to fulfil ownership unbundling requirements of Gasgrid Finland Oy as the duties related to the state ownership steering of Gasum Oy as well as other state-owned energy generation and supply companies remained within the Prime Minister's Office.

The Energy Authority has had a process with Gasum Oy first in the Market Court and continuing in the Supreme Administrative Court concerning accounting unbundling and cross subsidization in financial statements 2017 - 2020. In its decision on March 28, 2024, the Supreme Administrative Court has with minor exceptions ratified the cross-subsidy decisions issued by the Energy Authority to Gasum Oy.

In 2025, the Energy Authority continued the process in the Market Court regarding the penalty payment proposal for Gasum Oy. The ruling reinstated the Energy Authority's decisions and returned the penalty payment proposal to the Market Court for consideration.

On 13 May 2026, the Market Court issued its decision on the penalty payment proposal and imposed a penalty payment of EUR 17 million on Gasum Oyj for violating the unbundling provisions of the Natural Gas Market Act. The Market Court found that Gasum Oyj had seriously breached the provisions concerning the unbundling of operations and considered, in line with the Energy Authority's view, that the unlawful conduct had been deliberate. The Market Court also stated that the infringement was significant in terms of its financial scope and that the conduct may have caused harm in the natural gas market at the time when competition was being opened.

The Finnish gas TSO, Gasgrid Finland Oy submitted its application for the certification of the TSO to the Energy Authority in January 2020. Final certification decision was given on 19 August 2020. Gasgrid Finland Oy is fully owned by the State of Finland.

Unbundling of DSO

In Finland, there is 17 gas distribution system operators. Many of them are relatively small having only few dozens of customers. Only one distribution system operator had at the end of 2025 more than 1,000 customers.

Legal and operative unbundling requirements are not required from distribution network operators in Finland as Member States may decide that the unbundling provisions are not applied to network operators with less than 100,000 customers. All Finnish natural gas distribution system operators fall below the limit set by the Directive.

The accounting unbundling requirement applies to all distribution system operators. The accounting unbundling is also required in the companies, which have other activities besides natural gas network business if these activities are not relatively small. As a relatively small activity has been considered such business activities, whose annual revenue is less than 10 per cent of total revenue of the company's natural gas supply operations.

4.1.2 Network extension

According to Finnish national legislation, gas transmission system operator does not have obligation to prepare and submit to the Energy Authority national network development plans for review. Thus, Energy Authority does not have power to monitor national network investment plans and assess the consistency with Union-wide ten-year network development plans (TYNDP).

4.1.3 Network and LNG tariffs for connection and access

Regulation of gas network tariffs and charges

According to the Natural Gas Market Act, the gas transmission and distribution system operators (TSO and DSOs) may set the actual network tariffs and charges by themselves. There is no ex-ante approval of tariffs or prices of network services by authorities.

However, the Energy Authority confirms ex-ante the methodology to be used in revenue cap regulation applied in setting transmission and distribution network tariffs and methodology for connection charges. The Energy Authority shall approve ex-ante also the terms and conditions of network and connection services before the network operators are able to implement them.

The methodology for revenue cap regulation of gas transmission and distribution network tariffs is confirmed by the Energy Authority prior to each regulatory period. After end of the regulatory period, the Energy Authority will validate the earnings of each network operator in its supervision decisions for the whole regulatory period and will confirm the amount of any accrued earnings that exceed or fall short of reasonable earnings for the regulatory period. Where necessary, the supervision decisions will include an obligation to return to the customers any excess profit for the completed regulatory period through pricing for the new regulatory period. The supervision decisions will correspondingly confirm that the network operator may allow in its pricing for the new regulatory period, for the amount by which the earnings accruing to the network operator from the previous regulatory period fell below the reasonable earnings level.

The length of regulatory periods is four years. In November 2023, the Energy Authority confirmed with its decisions the methodology to be followed in natural gas system operation during the fifth and sixth regulatory periods in 2024 – 2027 and 2028 - 2031.

Based on Article 26 of Commission Regulation (EU) 2017/460 of 16 March 2017 establishing a network code on harmonised transmission tariff structures for gas (TAR NC), Gasgrid Finland Oy started the consultation on the tariff methodology in early 2020, following the end of the derogation at the beginning of 2020. In October 2020, the Energy Authority approved the reference price methodology in line with the TAR NC. Gasgrid Finland Oy was required to apply the reference price methodology in setting transmission tariffs from 1 January 2021.

The Energy Authority organised a new public consultation from the 6th of October 2025 to the 24th of October 2025 on the approval of the reference price methodology in accordance with Article 26 of the TAR NC concerning harmonised transmission tariff structures for gas and issued its decision on the 5th of November 2025. In accordance with Article 28 of TAR NC the Energy Authority also conducted a consultation with the national regulatory authorities of all directly connected Member States and the relevant stakeholders on the following:

- the level of multipliers;
- if applicable, the level of seasonal factors and the calculations set out in Article 15; and
- the levels of discounts set out in Article 9(3) and 16.

The latest consultation on the matter was open from 16h of April until 16th of June 2025. The Energy Authority gave in November 2023 a motivated decision on the level of multipliers, seasonal factors and discounts.

Gasgrid Finland proposed that the discounts under Article 9 of the TAR NC would not be applied in Finland during the 2025 tariff period. However, Gasgrid Finland proposed introducing the discounts under Article 18 of Regulation (EU) 2024/1789 as of the start of the 2026 tariff period, i.e. 1 January 2026 at 07:00 EE(S)T.

For entry points in the Finnish gas system where renewable gas is injected into the network from renewable gas production facilities, Gasgrid proposed a 100 percent discount on the entry capacity charge. For entry points where low-carbon gas is injected into the network from a production facility, Gasgrid proposed a 75 percent discount on the entry capacity charge.

Based on the statements received in the matter and the further justifications presented by Gasgrid in its response, the Energy Authority considers the discounts to be in accordance with Article 9 of the Tariff Network Code and Article 18 of Regulation 2024/1789, and therefore justified.

Regulation of LNG tariffs and access

In accordance with national legislation, in Finland approval decisions for terms, conditions and tariffs for LNG-terminal use are in force for a maximum time span of two years at once. The regulation concerning the 3rd party access and ex-ante approval of terminal tariffs concerns widely LNG-terminals with grid connection and off-grid terminals, in line with European Commission request regarding regulation for LNG-terminals in Finland which have received state-aid.

The Energy Authority has approved terms, conditions and tariffs for off-grid LNG-terminals in Pori (latest approval decision valid for the time period of 2026–2027), Tornio (latest approval decision valid for the time period of 2025–2026) and Kokkola (latest approval decision valid 5.9.2025–4.9.2027). These off-grid terminals are serving local industrial customers. Latest approval decisions for the grid-connected LNG-terminals in Hamina and Inkoo are both valid for the year 2026.

The Hamina LNG-terminal, with its storage capacity of 30,000 nm3 and injection capacity of 6,000 MWh/d, is connected to both low-pressure DSO network and high-pressure TSO network. With its maximum storage capacity of 148,806 nm3 and the injection capacity of 140 GWh/d, the Inkoo LNG-terminal (floating storage regasification unit, FSRU) is connected to high-pressure TSO network.

On November 30, 2022, the Energy Authority granted the Inkoo LNG-terminal operator, Floating LNG Terminal Finland Oy, the right to limit the use of the LNG-terminal ship for ten years. The decision makes it possible that liquefied natural gas of Russian origin will not be handled on the terminal.

4.1.4 Balancing

Energy Authority approves the terms and conditions for the gas market under the Act on the Regulation of the Electricity and Gas Markets (590/2013), including the main principles of the balancing in Finland. The rules were approved in 2020 are still applicable and no changes to the balancing rules have been made since then. These approved terms and conditions also include the methodology used to calculate the provision of balancing services.[31]

Finnish Transmission System Operator (TSO) with system responsibility, Gasgrid Finland, is responsible for balancing in the Finnish gas system. Gasgrid Finland is also responsible for the physical balance of the Finnish gas system and for organizing both balancing and balance settlement. Gasgrid takes care of the physical balancing by optimizing the level of pressure.

The balancing period is the gas day, which commences at 7:00 am and ends at 7:00 am on the following day. A shipper's or trader's injections and withdrawals of gas energy must be of equal quantity over the period in question, that is, participants are responsible for their own commercial balance in the market.

A shipper or trader may act as a balance responsible party by itself or outsource balance responsibility to another shipper or trader. The market model enables multiple ways of achieving balance as, in addition to forming and merging balance groups, participants may buy/sell gas over the counter between each other or on a gas exchange or, alternatively, export gas via the Balticconnector.

4.1.5 Cross-border issues

The Balticconnector pipeline, a link between the Finnish and Baltic gas networks, was commissioned in December 2019. The commercial operations of the link started on January 1, 2020.

Prior to that there were no other interconnections except for the Imatra entry point for gas importing from Russia. Gas flow from Russia to Finland has been suspended since May 2022.

According to national regulation, TSO has obligation to submit their capacity allocation and congestion management rules to NRA for confirmation. In November 2021, the Energy Authority approved capacity allocation methodology applicable in the Balticconnector interconnection point for an indefinite period. The decision was coordinated with the Estonian national regulatory authority. In the approved methodology auctioning at Balticconnector is not applied, but instead capacity is allocated implicitly (CAM NC 30 article). However, Energy Authority takes the changing market situations into account and, if reasonable, will re-assess the approved methodology.

Regarding the designing of provisional/final transmission and distribution tariffs or methodologies, see chapter 4.1.3.

The Energy Authority is appointed to resolve conflicts against TSO, DSO and LNG operators, in relation to that operator's obligations under the directive.

Since 2017, Finland and the Baltic states have been working actively towards the achievement of the gas market integration of the four countries. Established for this purpose, the Regional Gas Market Coordination Group (RGMCG) meets around four times a year. Participating in the

[31] Unofficial English translation of the Terms and Conditions of Balancing can be found here: https://gasgrid.fi/wp-content/uploads/Terms-and-conditions-of-balance-management-2.0-unofficial-english-translation.pdf .

work of RGMCG are the countries' ministries for energy, transmission system operators and authorities supervising the energy market.

During 2021-2022 the Finnish and Baltic transmission system operators have been working on the proposal for 4-country single entry tariff zone, without internal cross-border entry and exit fees. In November 2021, the national regulatory authorities of Finland, Estonia, Latvia, and Lithuania received an application from the TSOs for a coordinated opinion on gas transmission entry tariff and inter-transmission system operator compensation mechanism among Finnish, Estonian, Latvian and Lithuanian gas TSOs. The objective was that the 4-country single entry tariff zone should enter into force from the beginning of gas year 2023. However, on 12 October 2022 FinBalt NRAs chairs agreed to postpone FinEstLat and Lithuanian gas market merger determining that merger could happen no sooner than in October 2024. This decision was taken because the geopolitical situation in 2022 has caused significant changes in the fundamentals of the region's gas market. Consequently, the ITC mechanism, which was developed based on other assumptions about the functioning of the market, no longer corresponds to the current situation and may not provide benefits to all parties involved.

On January 20, 2023, TSOs proposed to postpone the submission of updated or new ITC application of four country ITC mechanism until the new region's gas supply model is stabilised and the role of the region's gas infrastructure in supply of gas beyond the borders of the region has become clear. Consequently, the market merger was postponed once more and did not materialise in 2024 either, and it did not materialise in 2025 either.

Energy Authority does not have the competence to monitor investment plans and assessment of consistency with Union-wide network development plan, PCIs and national development plans.

4.1.6 Implementation of Network Codes and guidelines

Finland decided to end the derogation from applying certain provisions from the European natural gas market regulation, e.g. network codes from January 1, 2020. Since then, the network codes have been applicable in Finland.

4.2 Competition and market functioning

4.2.1 Wholesale markets

Effectiveness of competition

From the perspective of competition, the Finnish gas wholesale market has developed significantly since the market opening in 2020. The commissioning of the Balticconnector pipeline connected Finland to the Baltic gas markets and enabled competition in a market that had previously been isolated and dependent on one wholesale supplier. Following the suspension of gas imports through the Imatra entry point in May 2022, alternative supply routes have become increasingly important. Gas can now be imported through Balticconnector and supplied to the Finnish gas system through the LNG terminals in Inkoo and Hamina, which has diversified the available sources of gas.

In 2025, the availability of Balticconnector after the repair works affected the demand for the Inkoo LNG terminal, indicating that different supply routes may complement or compete with each other depending on market conditions.

In addition, the launch of EEX gas exchange operations in the Finnish gas market in September 2025 further supported market integration. Gasgrid Finland Oy has reported that the transition from the GET Baltic platform to the European EEX platform has connected the Finnish and Baltic gas markets more closely to European gas trading, strengthened market liquidity, increased trading volumes and enabled more efficient trading between market areas.

Some indicators on gas wholesale market are presented in the following table (Table 10**Virhe. Viitteen lähdettä ei löytynyt.**).

Table 10. Natural gas wholesale market indicators

Natural gas wholesale market indicators	**2022**	**2023**	**2024**	**2025***
Total gas demand TWh[32]	**12.2**	**13.4**	**14.0**	**12.1**
• *Imports volume (by pipeline) TWh*	12.3	3.3	1.3	6.0
• *Imports LNG volume TWh*[33]	0.3	15.1	19.6	9.6
• *Exports volume (by pipeline) TWh*	0.6	5.1	6,8	3.6
• *Biogas injected into the transmission grid TWh*	0.2	0.1	0.2	0.1
Maximum daily gas consumption GWh/d	**114.2**	**78.1**	**130.5**	**96.9**
Number of active wholesale companies	**49**	**56**	**72**	**59**
Number of traders active in the gas wholesale market	**19**	**19**	**32**	**35**
Number gas customers connected to the transmission grid	**214**	**210**	**207**	**204**
Gas delivery from transmission grid to customers (mcm/y)	**1,069**	**1,159**	**1,182**	**1,037**
• *Heat and power plants*	170	258	286	232
• *Industrial customers*	648	647	634	616
• *DSO grids*	240	244	252	182
• *Other customers*	11	10	9	7

The Finnish natural gas wholesale market remained relatively small in 2025. Total gas demand decreased from 14.0 TWh in 2024 to 12.1 TWh in 2025. Pipeline imports increased compared with 2024, while LNG import volumes decreased. This reflects the availability of alternative supply routes and the changing role of LNG after the repair of Balticconnector. Figure 10 shows daily gas consumption in 2022-2025.

[32] Source: ENTSOG Transparency platform

[33] Injected gas from LNG terminals to the gas grid. Imports through off-grid LNG terminals excluded.

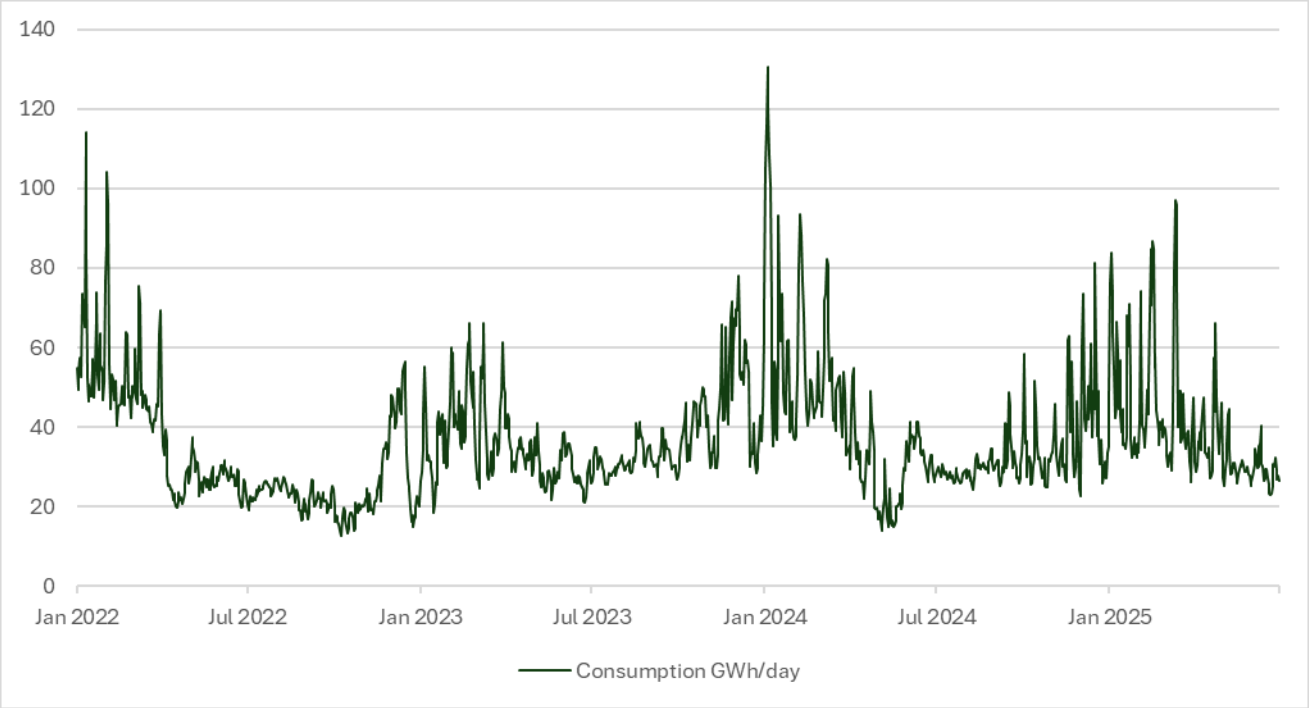

Figure 10. Daily gas consumption in Finland GWh/d (Source: Gasgrid Finland)

The number of active wholesale companies decreased from 72 in 2024 to 59 in 2025, while the number of traders active in the wholesale market increased slightly from 32 to 35. Although the market remains limited in size, the presence of several active wholesale companies and traders indicates that wholesale competition continued to function.

Gas consumption in Finland is characterised by a large share of direct industrial and energy-sector consumption. In 2025, industrial customers and heat and power plants continued to account for the majority of gas delivered from the transmission grid to customers. This structure means that developments in the wholesale market are strongly affected by the consumption decisions of a relatively limited number of large end-users.

Since the suspension of gas import from Russia in May 2022, gas consumption in Finland has decreased more than 50 per cent. Especially gas deliveries from transmission grid to heat and power plants and to DSO grids have been reduced. Figure 11 shows gas deliveries from the transmission grid to different customer groups in 2019-2025.

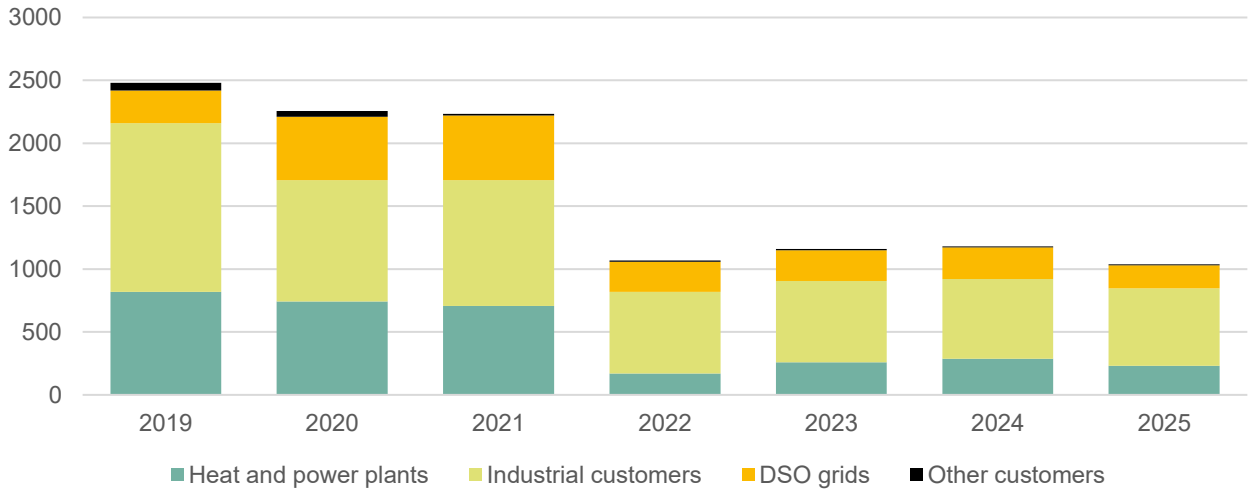

Figure 11. Gas deliveries from the transmission grid to different customer groups in 2019-2025 (mcm/year)

Overall, the Finnish gas wholesale market in 2025 was characterised by lower demand, continued reliance on alternative supply routes, and a market structure where competition exists but remains constrained by the small size of the market and concentrated demand.

Prices

Since the beginning of 2020 until 8 September 2025 gas trading services were provided by GetBaltic, the common Finnish-Baltic gas exchange.

On 9 September 2025 the Finnish-Baltic gas exchange was integrated into EEX trading and clearing infrastructure and since then EEX has been providing gas wholesale trading services in Finland.

The following figure (Figure 12) illustrates the daily prices of fulfilled trades for Finland in GetBaltic between 2022–2025. Prices were volatile when the Balticconnector -pipeline between Finland and Estonia was unavailable and gas supply in Finland was only based on importing LNG cargoes in October 2023 – April 2024. During the second half of 2024 prices were rising steadily towards the end of year reflecting gas price development in other parts of Europe. After a price peak in March 2025, prices decreased to below 50 EUR/MWh during the summer 2025.

Figure 12. Price of fulfilled trades for Finland on a daily market in GetBaltic until 8 September 2025 (EUR/MWh). (Source: Get-Baltic)

Figure 13 below presents development of natural gas prices for transmission network customers between different customer groups in 2022-2025.

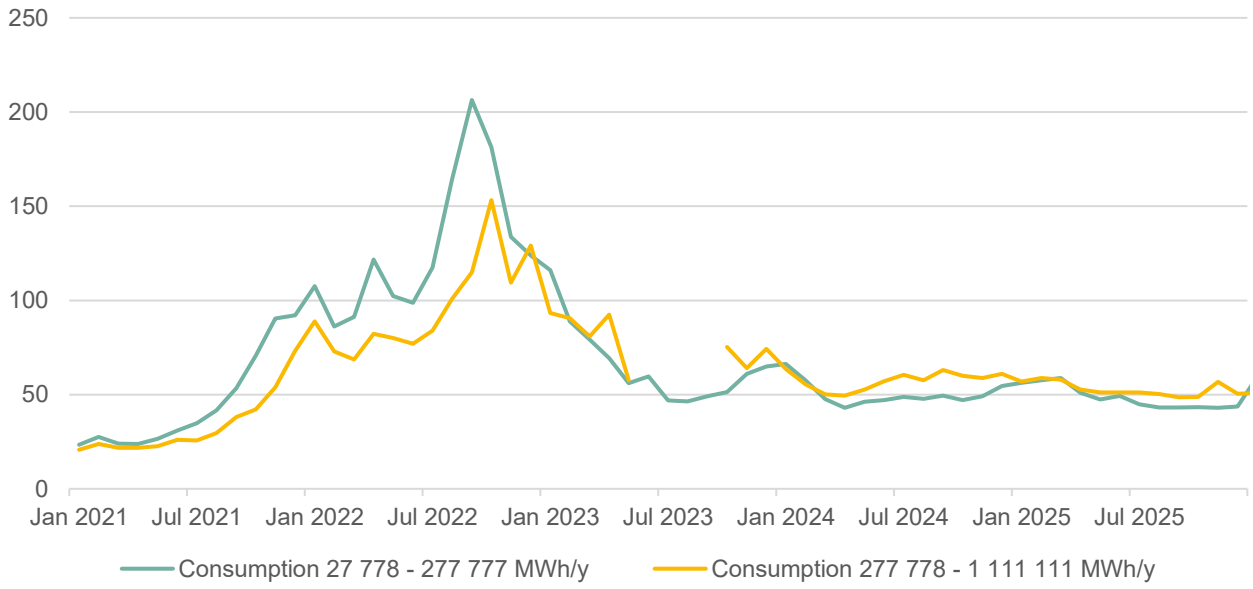

Figure 13. Price of natural gas to transmission network customers in 2022-2025(excl. taxes). (Source: Statistics Finland)

In Figure 14 can be seen that after peaking up to 61 EUR/MWh in March, the price of natural gas in power production decreased to around of 45 EUR/MWh for the second half of the year

2025. Price development reflects the development of the daily prices of fulfilled trades for Finland in GetBaltic gas exchange (see Figure 12).

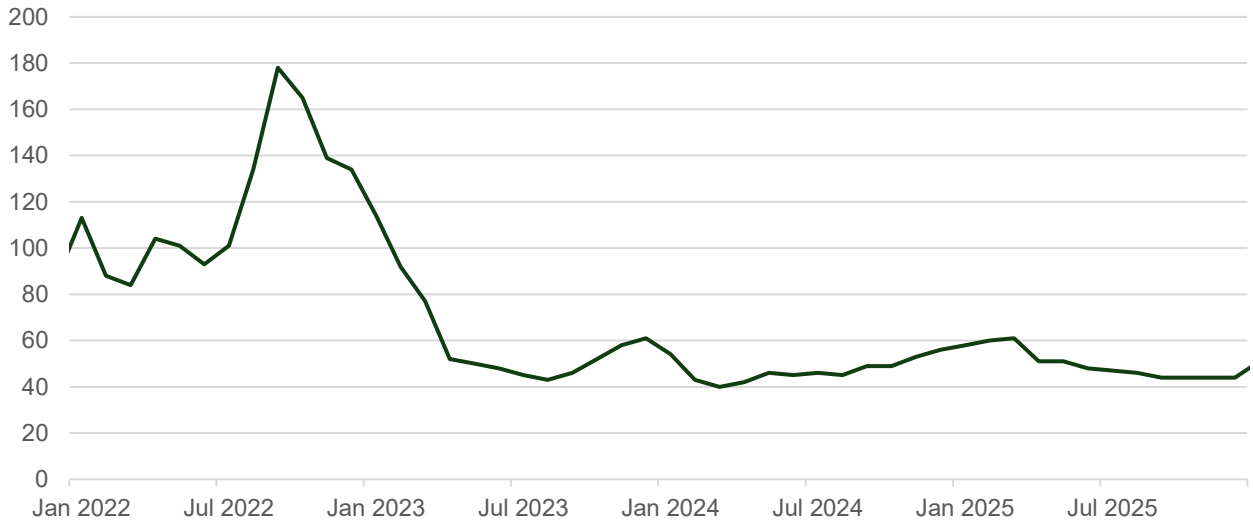

Figure 14. Price of natural gas in power production (EUR/MWh). (Source: Statistics Finland)

Transparency

The REMIT regulation also applies to gas markets. Market participants operating in wholesale gas markets are obliged to register to their national regulatory authority and to report their wholesale energy market transactions to ACER. They are also obliged to publish inside information and are prohibited to do insider trading or market manipulation.

Energy Authority performs similar monitoring and investigatory activities on gas markets as on electricity markets.

4.2.2 Retail market

Some indicators on gas retail market are presented in the following table (Table 11).

Table 11. Natural gas retail market indicators (2024 preliminary).

Natural gas retail market indicators	**2022**	**2023**	**2024**	**2025***
Number of DSO customers	**23,937**	**22,844**	**21,843**	**17,837**
• *Small houses and customers using only for cooking*	21,590	20,732	19,839	15,967
• *Housing buildings*	574	419	331	309
• *Commercial and public buildings*	983	923	928	896
• *Local district heating*	83	128	120	129
• *Greenhouses*	14	14	14	13
• *Industrial customers*	483	468	438	360
• *Power plants*	10	9	7	7
• *Gas filling stations*	139	137	138	138
• *Other users*	61	14	28	18
Amount of gas delivered to end users at the distribution grids, mcm	**401.28**	**523.55**	**538.12**	**442.12**
• *Small houses and customers using only for cooking*	5.67	3.37	3.16	2.60
• *Housing buildings*	12.03	6.60	4.03	2.85
• *Commercial and public buildings*	24.94	15.69	13.13	11.53
• *Local district heating*	25.40	52.02	46.23	29.33
• *Greenhouses*	0.52	0.42	0.44	0.29
• *Industrial customers*	255.09	362.78	371.67	350.66
• *Power plants*	59.99	77.28	94.15	40.32
• *Gas filling stations*	2.88	2.18	1.84	1.78
• *Other users*	14.74	3.20	3.46	2.76
Average retail gas prices of gas for reference customer categories connected into gas distribution grids[34], EUR/MWh				
• *Consumption <278 MWh/y*	176.92	94.90	67.98	67.98
• *Consumption 278 - 2 777 MWh/y*	149.40	75.13	63.90	63.90
• *Consumption 2 778 - 27 777 MWh/y*	134.00	83.44	61.37	61.37
• *Consumption 27 778 – 277 777 MWh/y*	113.58	74.43	60.43	60.43

[34] Excluding taxes. Data before 1 January 2021 is not available. Yearly average is calculated as an average of the monthly averages reported by Statistics Finland. Source Statistics Finland.

Market opening and competition

Most of the natural gas used in Finland is used by heat and power plants and industrial end users connected to the gas transmission grid.

The retail market for gas in Finland is thus relatively small. In 2025, 442.125 mcm of gas was delivered to end users through the distribution grids, compared with 538.12 mcm in 2024. The share of gas delivered through the distribution grids, calculated on the basis of gas delivered to end users through both the transmission and distribution grids, decreased from approximately 31 per cent in 2024 to approximately 30 per cent in 2025.

There were about 18,000 gas end-users in the natural gas retail market in 2025, compared with about 22,000 in 2024, and the number of gas end-users has continued to decrease steadily (see Figure 15).

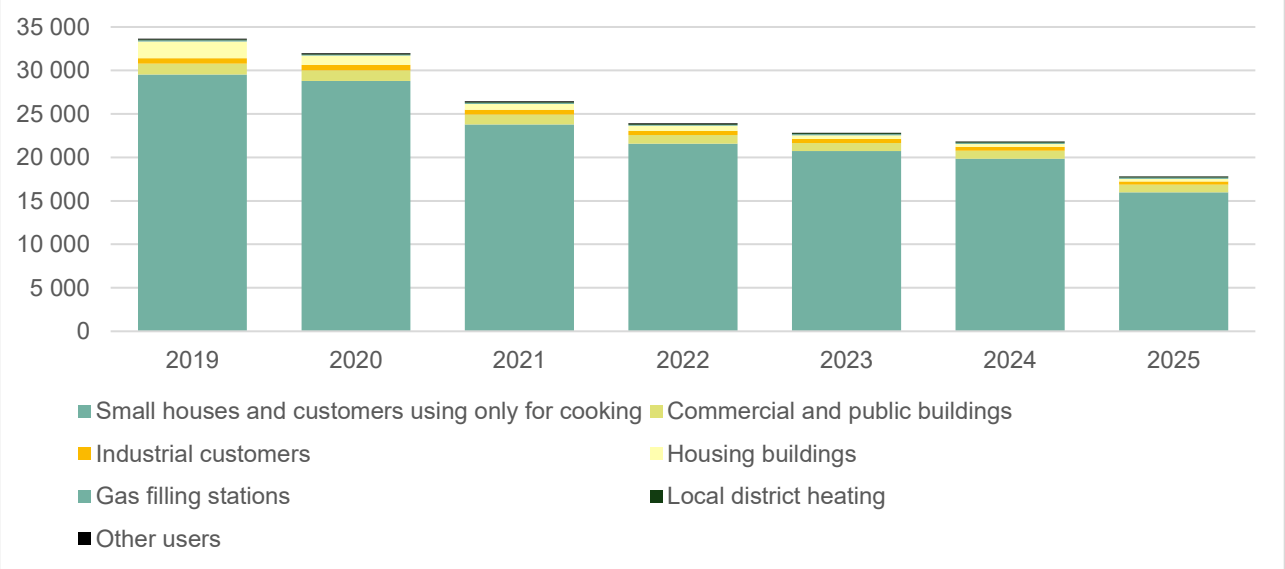

Figure 15. Number of gas customers connected to the distribution grids

The largest gas end user segment, with almost 16,000 customers and approximately 90 per cent of all gas end-users connected in distribution grids consists of households and customers who buy natural gas only for cooking at home. However, the total natural gas consumption of this segment amounts to only 2.60 mcm, which means less than 0.2 per cent of gas delivered to end users through transmission and distribution grids. Average annual gas consumption in this segment was approximately 163 m³ per customer. In Finland, only a few hundred customers use gas for heating their houses, and their number has continued to decrease.

In 2025, industrial customers accounted for the largest share of gas delivered through distribution grids. Gas delivered to industrial customers amounted to 350.66 mcm, corresponding to approximately 79 per cent of the total gas delivered through distribution grids. By contrast, gas delivered to local district heating and power plants accounted for a substantially smaller share than industrial consumption. Most of gas-based power and heat production plants gas are connected to the gras transmission grid.

There are 18 companies registered as retailers and 16 distribution network operators. The customer segments vary among suppliers, some of gas suppliers serve mostly households while others have only industrial customers.

Since 1 January 2020, gas retail market has been opened for competition, and all gas customers have been able to choose their supplier. However, to switch a gas supplier, the customer must have a remotely readable gas meter.

Monitoring the level of prices, the level of transparency, the level and effectiveness of market opening and competition

In retail level, many retailers have only a few customers which are also different in their gas consumption profile. According to the Natural Gas Market Act the retailer in a dominant market position in a natural gas distribution network shall supply natural gas at reasonable price upon the request of an end-user using gas mainly for heating apartment or other end-users whose connection capacity is maximum 250 kW (obligation to supply).

The retailer with obligation to supply shall have public terms, prices and criteria for determining them for the end-users in question. However, before publishing above mentioned information, the retailer with obligation to supply, shall provide the Energy Authority information on prices.

As regards the supervision of natural gas retail pricing under obligation to supply, the powers of the Energy Authority are ex post by their nature. As stated above, in retailers with obligation to supply shall inform Energy Authority regarding the prices before publishing them.

Figure 16 illustrates gas retail price development for certain reference customer categories connected to distribution grids in 2022-2025.

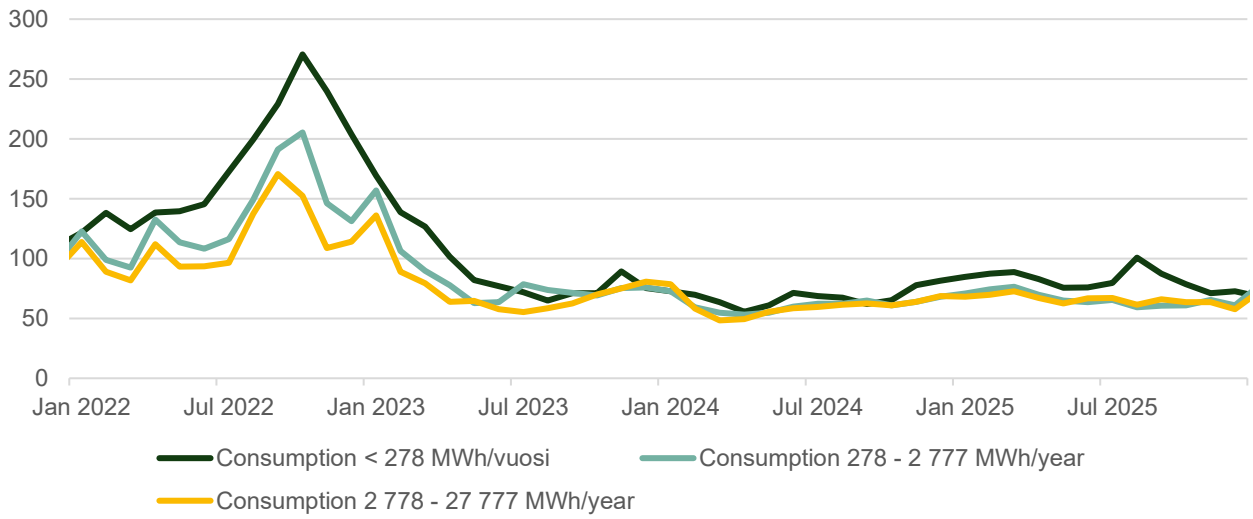

Figure 16. Monthly average price of natural gas to distribution network customers (EUR/MWh, excl. taxes). (Source: Statistics Finland)

Gas retail customers have been able to switch the gas supplier only from the beginning of 2020. The Energy Authority has not yet collected data on switching rates.

4.2.3 Consumer protection and dispute settlement

Ensuring access to consumption data

According to Natural Gas Market Act end users have a right to receive the metering data on their own consumption free of charge. Likewise, they have a right to give any other party access to that data. The metering data must be given in the format that corresponds to general procedures followed by the industry and the network system operator.

In 2025, the Energy Authority did not have any investigations regarding the access to consumption data.

Consumer protection

The consumer authorities are in general responsible for consumer protection in Finland. The Finnish Competition and Consumer Authority ensures that the practices companies use in marketing and their customer relations are appropriate and the contract terms applied by them are reasonable. The Consumer Ombudsman supervises that the Consumer Protection Act and other laws passed to protect consumers are observed.

The Energy Authority monitors the transmission system operators', distribution system operators' and suppliers' overall compliance with the electricity and natural gas market legislation. In particular, the provisions in the legislation concerning electricity and natural gas contracts are aimed at ensuring the minimum protection for household consumers. The requirements set out in the Directive 2009/73/EC and its Annex 1 have been implemented in the national legislation.

Complaints from customers

No new complaints were received from household customers in 2025.

Dispute settlement

The Energy Authority does not have powers for dispute settlements between consumers and energy companies in individual contractual disputes.

The disputes between household consumers and energy companies in individual cases may be solved in the Consumer Disputes Board which is a neutral and independent expert body whose members represent consumers and business in a balanced way. The Boards gives solution recommendations for legal disputes between consumers and energy companies. A dispute handled by the Board can always be taken to a court of law.

Furthermore, the Consumer Advisory Service is a national service that provides information on consumer rights, and mediation assistance in disputes between household consumers and energy companies.

The Consumer Ombudsman may assist a household consumer in an individual dispute in the court if the issue carries significant impact or the energy company is not compliant with the decision of the Consumer Disputes Board. The Consumer Ombudsman may also bring group complaints to the Consumer Disputes Board or initiate class actions, for instance, against a network operator or supplier and act as the representative of the plaintiffs in a general court of law.

Individual disputes between non-household customers and energy companies are solved in a general court of law or in an arbitral tribunal if agreed so.

Safeguard measures against interruptions in gas supplies

The Natural Gas Market Act include specific provision for situations when supply of gas to end users is going to interrupt due to reasons attributable for the gas supplier like due to bankrupt of a supplier.

In such a situation, before they may interrupt the supply the gas DSO shall notify affected end users. In addition, the DSO has responsibility to continue supplying gas at least three weeks since the DSO has notified the customers. Further, if the end user belongs to the obligation to supply scheme – end user is using gas mainly for heating houses or demand in the end user's connection point is max 250 kW – the DSOs shall continue supply until the Energy Authority has nominated a new supplier for the end user.

In 2024, there were no situations when supply of gas to end users was going to interrupt due to reasons attributable for the gas suppliers.

In such situation the end user shall compensate the DSO for the reasonable costs incurred for the supply of gas. If the end user and the DSO do not agree on the compensation, the Energy Authority determines with is decision the amount of the compensation.

4.3 Security of supply

4.3.1 Monitoring balance of supply and demand

The role of the Energy Authority in security of supply issues is to monitor the balance between supply and demand in natural gas, the quality and maintenance of networks and measures to cover the peak demand and avoid the supply shortages. The Energy Authority publishes annually a report on gas security of supply situation.

The Finnish gas system has faced since 2019 several fundamental changes. Until end of 2019 all gas was imported from Russia through the interconnection point in Imatra. Commissioning of Balticconnector pipeline between Finland and Estonia in December 2019 opened additional source for importing gas. Balticconnector has also enabled export of gas to Baltic states. Gas import from Russia to Finland suspended in May 2022. After that, the only source of pipeline gas was the Balticconnector between Estonia and Finland until commissioning of LNG terminals in Hamina in October 2022 and Inkoo in January 2023.

LNG terminals in Inkoo and Hamina together with the pipeline connection to Estonia has enabled for market participants using of Inčukalns underground gas storage (Inčukalns UGS) in Latvia as a seasonal storage of gas: during summer period market participants could import LNG and inject it to the gas storage for using it during winter period.

Figure 17 illustrates amount of gas entry and exit at the connection points of the Finnish gas transmission system and net consumption in Finland in 2020 – 2025 as monthly values.

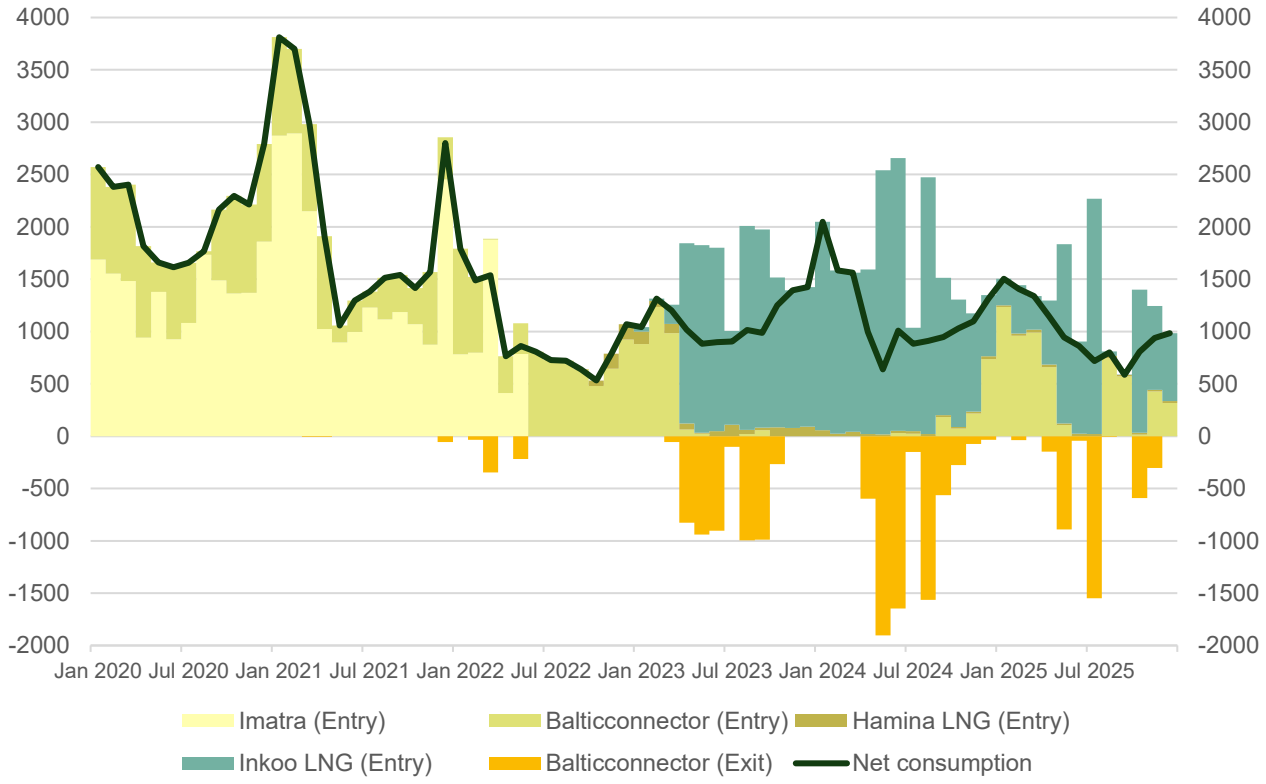

Figure 17. Amount of gas entry and exit at the connection points of the Finnish gas transmission system and net gas consumption in 2020 – 2025 (GWh/month). (Source: ENTSOG Transparency platform)

A technical import capacity from Estonia to Finland varied between 0 and 76 GWh/day during 2025.

To improve the security of supply situation, Finnish gas TSO has leased a floating LNG-terminal vessel which is located in Inkoo and has a vaporizing capacity of 140 GWh/d and maximum storage capacity 151,072 m3.

Smaller LNG terminal in Hamina has storage capacity of 30,000 m3 and maximum injection capacity of 6,000 MWh/d. It is connected to the Finnish national gas transmission grid as well as to the local gas distribution network.

There's no natural gas production in Finland. Small-scale biogas is produced and injected into the gas transmission and distribution network in six different locations. There are also two off-grid LNG-terminals in Pori and Tornio serving mainly local industry.

4.3.2 Measures to cover peak demand and shortfalls of suppliers

Natural gas users, excluding consumer customers, are primarily responsible for their own contingency planning, condition of possible backup fuel systems, backup fuel buffer stock and fuel transportation.

In case of a gas shortage situation LNG can be feed into gas network. Finnish system operator Gasgrid Finland uses mobile LNG-vaporizers and have prepared feed-in-points for LNG.

During system malfunction almost in all cases natural gas can be quickly switched to other fuels or natural gas driven generation capacity can be replaced by other generation capacity using other fuel than gas. Light and heavy fuel oil are the primary backup fuels for natural gas. In specific cases air-propane mixture and liquefied petroleum gas can be used as backup fuels too. Biogas can be used as a backup fuel as well.

If the natural gas supply is prevented over an extended period, the obligatory storages can be used too. The National Emergency Supply Agency controls for use of obligatory storages in Finland. Total volume of stockpile fuels and obligatory storages must be at least equal to cover normal consumption of imported fuels for five months.