Transmitting energy.

IMPORTANT PROJECT FOR THE WHOLE OF FINLAND

Commissioned by the Finnish government, Gasgrid Finland Oy has completed the LNG floating terminal vessel project to secure the supply of gas to industry, energy production and households as well as to safeguard Finland's security of supply from winter 2023 onwards. The LNG floating terminal vessel turned out to be the fastest solution to ensure the continuity of gas supplies in Finland in all different scenarios far into the future. The LNG floating terminal vessel also allows Finland to completely break away from dependency on Russian pipeline gas.

Finland does not have its own natural gas production or reserves and so is dependent on imports. Gas is mainly needed for industrial processes, heavy-duty transport and combined heat and power generation. In process use, gas is, among other things, a secure and cost-effective form of energy. The LNG floating terminal project is an important project for the whole of Finland.

The LNG floating terminal will ensure security of supply in any unforeseen and unpredictable situations. Port structures have been built for the LNG floating terminal vessel also on the Estonian coast to ensure security of supply in the event of long-term disruptions of gas supplies in both countries.

GAS FAR INTO THE FUTURE

Gasgrid has leased the LNG floating terminal vessel Exemplar for 10 years from Exelelerate Energy. Anchored in the Port of Inkoo, Exemplar can supply gas to the Baltic states and even to Poland through the Balticconnector interconnector pipeline, which came on stream in 2020. Cargos of LNG shipped by smaller tankers can be injected straight into the Finnish gas network through the LNG terminal in Hamina, which was completed in 2022.

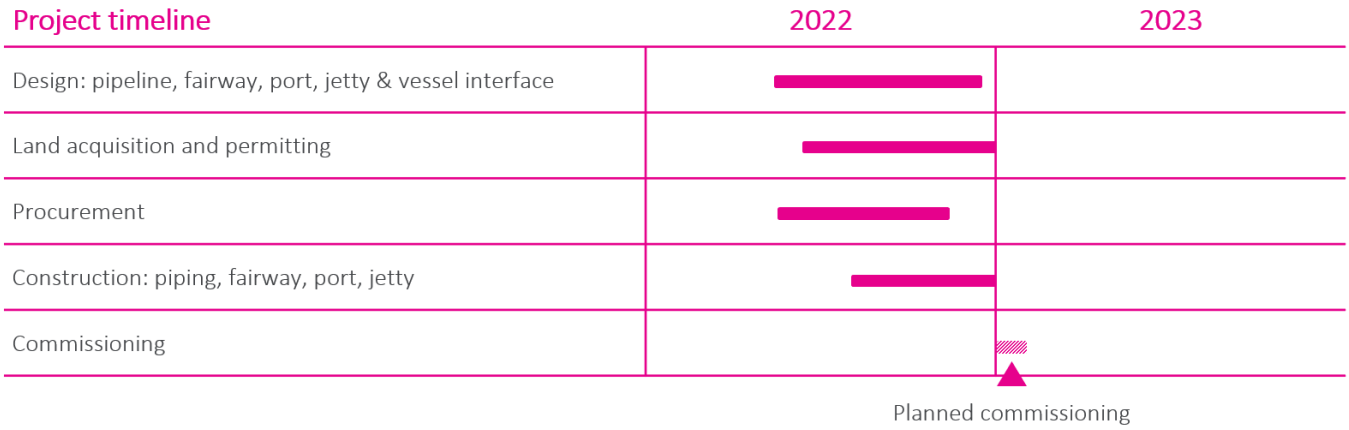
The LNG floating terminal vessel or Floating Storage and Regasification Unit (FSRU) is a terminal anchored in a port, where liquefied natural gas is re-vaporised into gas and injected into the gas transmission network. The FSRU is anchored to the port structure through which a pipe passes to Gasgrid's gas transmission network. The LNG for the terminal vessel is delivered by smaller tankers from the global market.

GASGRID

LNG FLOATING TERMINAL PROJECT

12/2022

PROJECT TIMELINE



WORKING TOGETHER

The project has been completed to an exceptionally tight timeline and under Gasgrid's leadership progressed to plan and in good cooperation with many different actors. A start was made on the harbour construction work for the LNG floating terminal in August 2022. The contract work included the pier and mooring structures and systems required by the LNG terminal vessel and the construction of a 2.2-km gas pipeline for integration into Gasgrid's gas transmission network.

The structural strength and tensile strength of Exemplar's pier and mooring structures are many times those used for normal shipping operations.

Gasgrid has actively communicated the progress of the LNG floating terminal project and has worked closely with the municipality of Inkoo. Under decision 11023/03.02.00/2022 by the Finnish Safety and Chemicals Agency (Tukes), the LNG floating terminal vessel Exemplar has been located in the Port of Inkoo and operations can begin in accordance with the licence terms and conditions.

FACTS - LNG FLOATING TERMINAL VESSEL EXEMPLAR IN INKOO

- The LNG floating terminal vessel is 291 metres long and 43 metres wide. It has a volume of approximately 151,000 cubic metres, corresponding to approximately 68,000 tonnes of LNG, liquefied natural gas, when fully loaded. This means approximately 1,050 GWh of energy content.
- The vessel's regasification capacity is 140 GWh/day and up to more than 40 TWh per year.
- The vessel's regasification capacity exceeds Finland's annual natural gas demand, which has historically been approximately 25 TWh per year.
- The terminal serves the entire Baltic Sea region gas market through the Balticconnector interconnector pipeline.
- The liquefied natural gas is regasified aboard the vessel before being injected into the existing gas network via a connecting pipeline in the port.
- The LNG is supplied to Exemplar by separate tankers. One unloading takes approximately 24 hours.
- Natural gas is mostly used in industry and energy production, as it is more environmentally friendly than, for example, coal or fuel oil.
- Compared to coal, natural gas emits 40% less CO_2 emissions.
- Natural gas currently accounts for 5% of Finland's total energy consumption. In addition, LNG is already used in shipping and heavy-duty transport.
- The total cost of the LNG floating terminal project is estimated at EUR 460 million under a 10-year lease. In addition, there will be costs related to the volume of use.

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More information and pictures about the project can be found on the Gasgrid website under projects.

www.gasgrid.fi

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