



elering

GENERATING OPPORTUNITIES

21.05.2015

Viron kaasuverkko ja Balticconnector Viron näkökulmasta

1. Estonian Natural Gas Transmission Network

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- » Gas consumption in Estonia
- » Frequently Asked Questions

2. Balticconnector

1. Estonian Natural Gas Transmission Network, Elering Gaas AS

- On November 1, 1990 the first Estonian state-owned enterprise was born - Eesti Gaas, a vertically integrated company.
- By 2002 the company was no longer owned by the state, the stockholders were: OAO Gazprom 37 %, Ruhrgas AG 32%, Fortum OY 18%, Iitera Latvija 9 % and private persons 4%.
- During the year 2005, AS Eesti Gaas was reorganised into a consolidated group comprising subsidiaries AS EG Ehitus and AS EG Võrguteenus which started its activities on January 1, 2006.
- From January 4, 2015 Elering AS purchased 51,38% of AS EG Võrguteenus.
- Starting from April 10, 2015 the name of the company was changed from AS EG Võrguteenus to Elering Gaas AS.
- Elering AS intends to purchase all shares from other stockholders to combine Elering Gaas AS and Elering AS to one company.

1. Estonian Natural Gas Transmission Network, Elering Gaas AS

- Electricity Transmission System Operator Elering manages the Estonian electricity system in real time. Elering is responsible for the system's operation and ensures the supply of high-quality electricity to consumers at all times. Elering creates the conditions needed for the electricity market to function and build cross-border electricity interconnections so that electricity can move freely between neighbouring systems and markets. Homepage: <http://elering.ee/en/>
- Elering Gaas the Gas Transmission System Operator is responsible for the system's operation and ensures the supply of high-quality electricity to consumers at all times. Elering creates the conditions needed for the electricity market to function and build cross-border electricity interconnections so that electricity can move freely between neighbouring systems and markets. Homepage: <http://www.egvorguteenus.ee/>

1. Estonian Natural Gas Transmission Network, Market Development

Domestic Market

- Gas market liberalization Action plan 2015
- Balance Management
- Gas data hub
- Biomethane connection rules

Regional Market

- Cross-Border trade management
- Regional Gas Market Coordination Group

1. Estonian Natural Gas Transmission Network

- The first gas-producing plant in Tallinn was completed in the year 1865, producing artificial gas from English black coal.
- On August 9, 1948 the first gas transportation company in the territory of Estonia was established, bearing a long and cumbersome name of “Kohtla-Järve - Leningrad Gas Pipeline Operation Department”
- In the same year, Kohtla-Järve Shale Processing Plant was completed and started producing shale gas for Leningrad. In the year 1949, the construction of Kohtla-Järve - Leningrad gas transmission pipeline was completed and it started supplying gas to Leningrad.

More about history: <http://www.gaas.ee/en/group/history/>

1. Estonian Natural Gas Transmission Network

- In 1957, Leningrad lost interest in the artificial gas from Kohtla-Järve, as it had begun using natural gas from Stavropol.
- In 1969, the Leningrad - Kohtla-Järve transmission pipeline started supplying natural gas to Estonia
- In the year 1976 the gas pipeline of Tartu-Irboska was completed; it was followed by the Tartu-Rakvere gas pipeline in 1978.
- March 29 1988, the construction works of the Vireši-Tallinn gas pipeline started.

More about history: <http://www.gaas.ee/en/group/history/>

1. Estonian Natural Gas Transmission Network

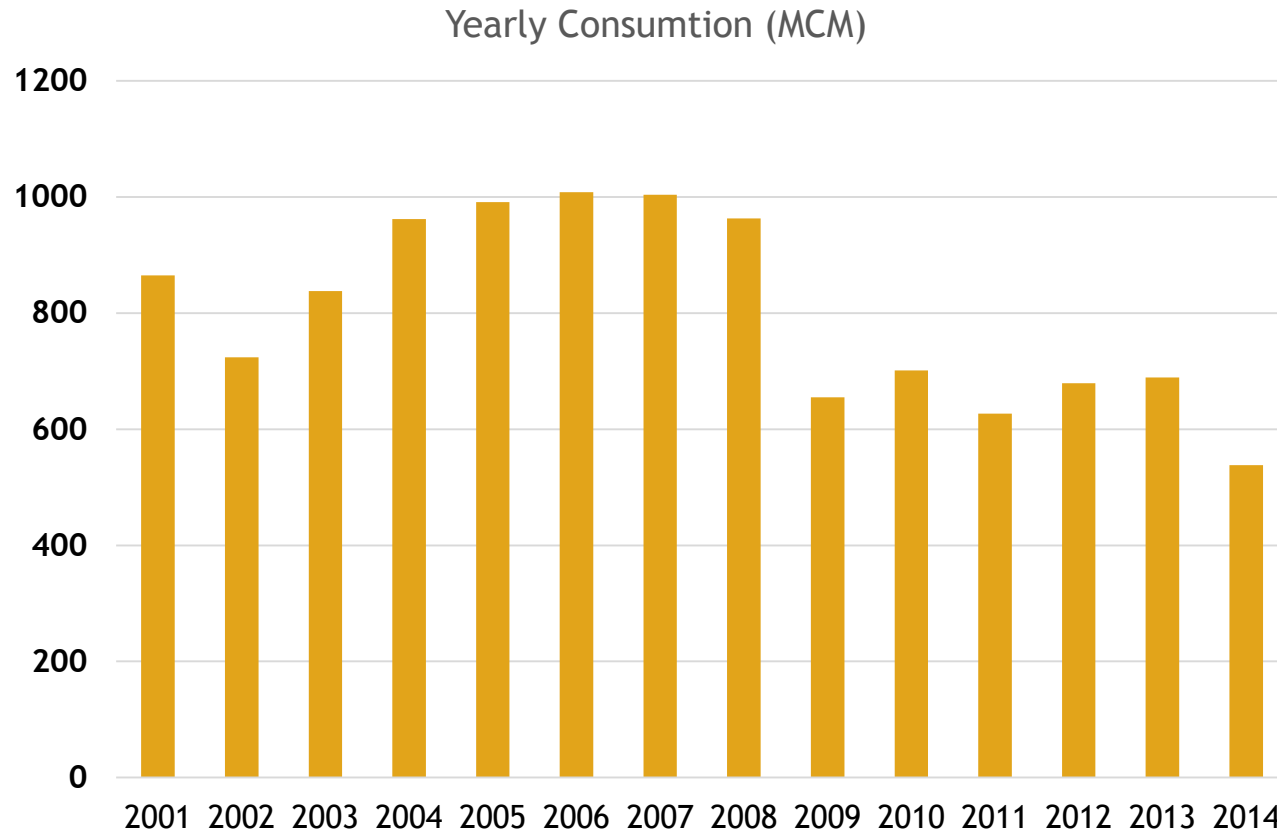


1. Estonian Natural Gas Transmission Network

No	Name	Dimention DN	Lenght (km)	MOP (bar)	Construction year	Years in use
1	Jõhvi - Narva D38	350/400	45,1	38	1955	60
2	Tallinn - Jõhvi D38 I liin	200	97,5	38	1953	62
3	Tallinn - Jõhvi D38 II liin	500	149,1	38	1963/1968	52
4	Irboska - Tartu D55	500	85,7	55	1975	40
5	Tartu-Rakvere D55	500	133,2	55	1979	36
6	Vireši - Tallinn D55	700	202,4	55	1991	24
7	Vändra-Pärnu D55	250	50,2	55	2006	9
8	Pihkva - Riia I D56	700	21,3	55	1972	43
9	Pihkva - Riia II D57	700	21,3	55	1984	31
Average age						39,7

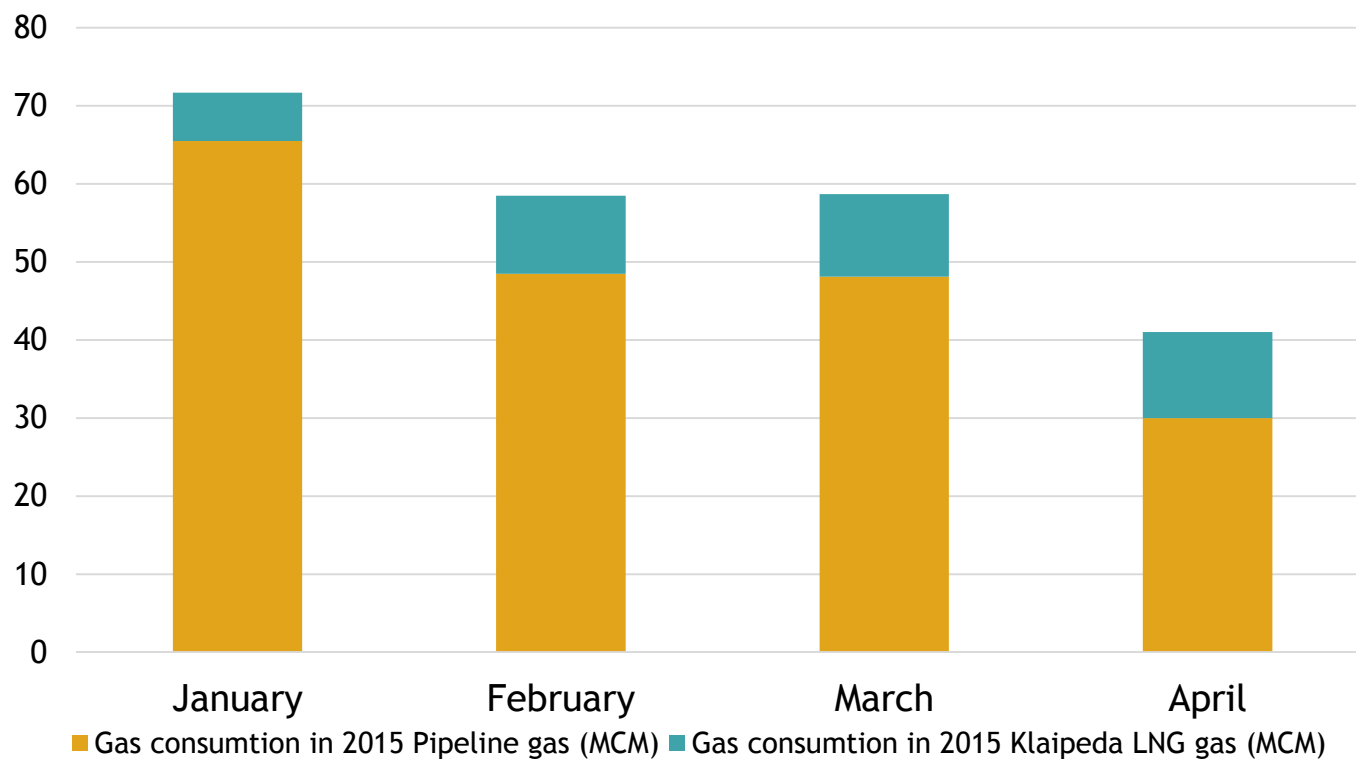
MAIN PIPELINES	805,8
BRANCH PIPELINES	79,2
TRANSMISSION PIPELINES	885
VALVE STATIONS	70
CATHODIC PROTECTION STATIONS	70
GAS MEASURING STATIONS	2 (3)
GAS PRESSURE REDUCTION STATIONS	36

1. Estonian Natural Gas Transmission Network, Gas Consumption



Estonian Natural Gas Transmission Network, Gas Consumption in 2015

Gas consumption in 2015



1. Estonian Natural Gas Transmission Network, Frequently Asked Questions

- What is the gas excise in Estonia? 0,02345 EUR/m²
- What is the transmission tariff in Estonia? 0,01678 EUR/m²
- How is the transmission tariff calculated in Estonia? The transmission tariff currently is related only to consumption, no capacity fee.

2. Balticconnector

- Balticconnector is a bi-directional offshore pipeline between Estonia and Finland developed by AS Eleing Gaas and Gasum OY.
- Together with a potential regional LNG terminal Balticconnector will enhance the security of supply and make way for gas price convergence.
- On 24.11.2014 the prime ministers of Finland and Estonia have agreed upon development of the project so that the Balticconnector will be commissioned in 2019.
- The offshore section of the Balticconnector is approx. 81 km long and the capacity of the pipeline is ca 7,2 million m³/day.
- For the implementation of the Balticconnector pipeline other grid enhancements are needed in Estonia, such as a compressor station in south of Estonia and bi-directional measuring station on the Estonian-Latvian border.



2. Balticconnector, business development

- Elering Gaas is preparing the investment request for the regulators of Estonia, Latvia and Finland for the Balticconnector project and for Est-Lat Enhancement project.
 - Market test for both projects ongoing
 - Composing of CBA and CBCA ongoing
 - Estimated time for Investment Request submission to regulators mid-June
- Elering Gaas is preparing documentation for submission of Grant for Works in 2015, as agreed by the prime ministers.

2. Balticconnector, permitting progress

Offshore progress in Estonia

- Superficies licence process ongoing
 - » EIA report public display ongoing
 - » Estimated time for EIA approval 10/2015
 - » Estimated time for licence 4/2016
- Water permit
 - » Application after EIA approval
 - » Processing time 3 months
 - » Estimated time for receiving the licence 1/2016
- Building permit
 - » Application for technical requirements after Superficies licence has been granted
 - » Estimated time for technical requirements 6/2016
 - » Building permit application 9/2016
 - » Building permit received 12/2016

All permits needed for offshore construction in Estonia will be available by the end of 2016.

2. Balticconnector, permitting progress

Onshore progress in Estonia

- Planning of pipeline
 - » All needed planning procedures completed for the pipeline and compressor and metering station in Kersalu
- Construction permits
 - » 3 of 6 building permits received for the onshore pipeline
 - » Estimated time for all needed construction permits 9/2015
- Procurements
 - » Detailed engineering of onshore pipeline will start in 8/2015
 - » Procurements for onshore section construction will take place in mid-2016.

The building of the onshore section can start in 2016

2. Balticconnector, permitting progress

Est-Lat enhancement

- Bi-directional measuring station on the Estonian-Latvian border.
 - » Preliminary design available 7/2015
 - » Procurement for Works 8/2015-10/2015
 - » Construction and commissioning by 12/2016
- Compressor station in south of Estonia
 - » FEED engineering 2/2016-10/2016
 - » Procurement for Works 11/2016-3/2018
 - » Construction and commissioning by 12/2019

Reverse flow on Estonian-Latvian border will be available end of 2016, compressor station will be operational during completion of the Balticconnector.

Thank you very much!

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Jõgeva avariikohal. Rebenenud toru.

1996.a. aprilli lõpp.

