

ESTONIA

KEY FACTS:

- Steep gas demand decline of 28% between 2010 and 2017
- Estonia is entirely dependent on Russian gas (partly stored in Latvia)
- Questionable intentions to build a new Baltic LNG terminal despite the underused Lithuanian Klaipeda LNG Terminal already providing sufficient capacity to meet the Baltics' gas demand.

1. GAS DEMAND

According to EU data:¹

- Gas represented 6% of Estonia's energy mix in 2016.
- Estonia consumed around 0.52bcm of gas in 2016².
- Estonian gas demand dropped by 28% from 2010 to 2017.³

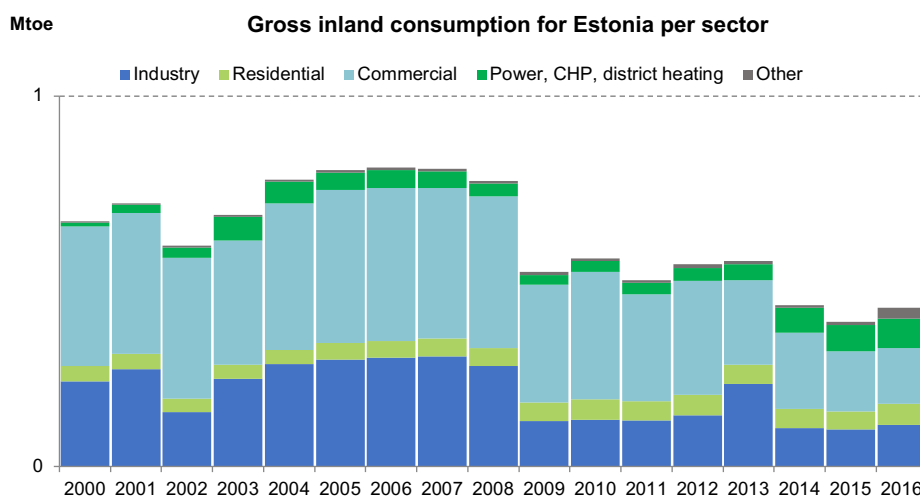
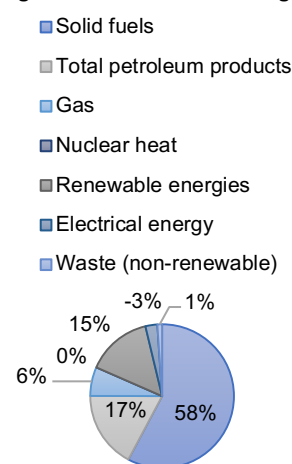


Figure 1: Estonia 2016 Energy Mix



2. GAS SUPPLY

Estonia is not a gas producer and therefore entirely relies on imports to meet its demand. 100% of the gas consumed in Estonia originates from Russia.⁴

During May to October, Estonia is supplied with gas directly from Russia and from November to April, gas is supplied from the Inčukalns underground storage facility in Latvia.⁵

Considering that Latvia also entirely relies on Russian gas to meet its national demand, Estonia is essentially fully dependent on Russian gas and is therefore strongly encouraged, under current political EU discussions, to develop new infrastructures and improve the resilience of its gas market, especially in case of a gas disruption from its only supplier. Important but controversial discussions have been going on about the different solutions.

3. GAS INFRASTRUCTURE

Estonia has operational interconnections with the Russian gas network and with Latvia with a maximum capacity of 4bcm/y. Despite its declining demand, Estonia therefore remains a net importer of gas from a single source. One reasonable option to improve this dependence on Russian gas would be to connect the Estonian grid to the recently built regasification LNG terminal in Lithuania, the **Klaipeda LNG Terminal**,⁶ which has yearly import capacities of around 4bcm, and which is big enough to provide for nearly the entire gas demand of Latvia, Estonia and Lithuania.

¹ E3G compilation of data extracted from Eurostat

² <https://www.stat.ee/34179>

³ http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=nrg_cb_gas&lang=en

⁴ <https://ec.europa.eu/eurostat/cache/infographs/energy/bloc-2c.html>

⁵ https://www.iea.org/media/freepublications/security/EnergySupplySecurity2014_Estonia.pdf

⁶ <http://www.portofklaipeda.lt/klaipeda-lng-terminal>

However, the country seems to be looking at the problem from a very different perspective, working closely with other governments in the region on the following PCI projects.⁷

A new Baltic LNG Terminal

Estonia is putting efforts into trying to have its own LNG terminal by pushing for two projects at the same time:

- The **Muuga LNG terminal** (near Tallinn) with 4bcm annual regasification capacity and a storage capacity between 50 000 m³ to 320 000 m³.⁸
- The **Paldiski LNG Terminal** with a 2.5bcm regasification capacity and a 160,000m³ storage capacity.⁹

These two projects have not been accepted in the third PCI list but both applied as candidates for the 4th list. The Commission seems to only support one project in the region leaving it up to the Baltic states to decide on which will be their priority project. It is clear that a new LNG terminal such as this would need financial support from the EU. This support would potentially have to be really significant, as conceived by the Paldiski LNG terminal project operator who warned that the infrastructure could only be built if the European Commission was covering 43% (around €150 million) of the €344 million needed.¹⁰ However, an application by the Paldiski LNG project promoter for EU funds under the CEF was denied in 2017.¹¹

Other developments make plans to add new LNG capacities seem even less reasonable: the Lithuanian LNG terminal which is already able to supply Estonia and Latvia with gas, was planned to be leased until 2024. The Lithuanian government approved the terminal's acquisition after 2024 in 2018¹², which makes it clear that these import capacities would be available beyond 2024 if necessary.

Giving priority to even one of these projects seems very questionable for other reasons too: Estonia is really not a "gas country". It only consumes over 0.5bcm of gas per year (which represents a marginal share of Estonia's total primary energy supply: only 6.2% of its energy supply was met with gas in 2015).¹³ It has the lowest dependency on energy imports (because of its oil production). Some signals raise other questions about the viability and interest of the Muuga project: this project was initially supposed to be a 2.5bcm project jointly run with Finland, but Finland eventually opted out after realizing that it was not commercially viable and that there was not sufficient demand in the Finnish market.¹⁴ In 2019, the Finnish government even stated that it does not support the building of any new LNG terminals in Latvia or Estonia.¹⁵

With the Klaipeda LNG Terminal in Lithuania, currently underused, the construction of a new terminal in the region doesn't seem to be economically and environmentally justifiable: this would **only be a tool for Estonia to negotiate its gas contracts with Gazprom downward**, to copy what Lithuania did a couple of years ago after the construction of the Klaipeda LNG terminal, but certainly not to reasonably diversify energy supplies and prepare a decarbonised future. One detail that strongly underlines the fact that Klaipeda is more of a boost to the gas industry than a project to meet Lithuanian energy consumers needs¹⁶ is that: the biggest share of capacities at the terminals have been booked by Achema, a fertilizer company using fossil gas as a feedstock.¹⁷

The Balticconnector pipeline between Estonia and Finland

Figure 2: Gas infrastructure in Estonia



⁷ <https://ec.europa.eu/energy/en/topics/infrastructure/projects-common-interest>

⁸ http://www.gie.eu/download/maps/2015/GIE_LNG_2015_A0_1189x841_FULL_wINFOGRAPHICS_FINAL.pdf

⁹ <http://www.gie.eu/index.php/maps-data/lng-map>

¹⁰ <http://www.naturalgas.europa.com/estonias-alexela-awaits-eus-decision-on-paldiski-lng-terminal-financing-28078>

¹¹ <http://www.lngworldnews.com/alexela-paldiski-lng-terminal-denied-eu-funds/>

¹² <https://www.lngworldnews.com/lithuanian-parliament-approves-fsr-u-acquisition/>

¹³ https://ec.europa.eu/commission/sites/beta-political/files/energy-union-factsheet-estonia_en.pdf

¹⁴ <http://www.naturalgasworld.com/estonia-tallinn-lng-terminal-prospects-dampened-revised-lithuania-statoil-contract-28030>

¹⁵ Repeated statement given by the Finnish government representative attending the BEMIP PCI process meetings in the first half of 2019

¹⁶ http://www.skultelng.lv/en/baltijas_gazes_tirgus/

¹⁷ https://www.lngworldnews.com/lithuania-achema-books-additional-lng-terminal-capacity/?utm_source=emark&utm_medium=email&utm_campaign=daily-update-lng-world-news-2019-06-07&uid=52896

Work has just started to build a bidirectional offshore pipeline **connecting Inkoo in Finland to Paldiski in Estonia**.¹⁸ After years of discussions, the European Commission announced in August 2016 that it would allocate €187.5 million of public money for the construction of the pipeline (75% of total construction costs).



With a yearly import capacity of around 2.5bcm, the project officially aims at “ending the gas isolation of Finland and develop the Baltic regional gas market”.¹⁹ With constructions of the pipeline having started in 2018²⁰ and the Balticconnector is projected to start operating by the end of 2019.²¹

The project may create possibilities for gas storage in Latvia, as Finland’s geological structure makes domestic storage very expensive to build.²²

Figure 3: Proposed PCI Project Balticconnector

This project however raises a number of important concerns:

- The **project connects Finland to Estonia and Latvia, other countries fully dependent on Russian gas**. While the project gives the Finnish gas market access to the Latvian Inčukalns underground gas storage and the Klaipeda LNG terminal, it could be used by Estonia as a political justification to receive support to build a closer but economically unnecessary LNG terminal at Paldiski, deeply incompatible with the EU decarbonisation objective.
- The project (with a more than 50-year lifespan) will increase import and export capacities of two countries with a **steeply decreasing gas demand**. The risk for the project to soon become stranded seems therefore high. Equally high is the risk for the country to lock itself in a growing dependence on external energy which cannot be good for its energy independence.
- The pipeline is **heavily financed with EU tax payers’ money** at a time when the entirety of limited public budgets for the energy sector should be going to sustainable, long-term and low-carbon energy sources needed to fight climate change.
- The 3rd PCI list has seen the integration of an already advanced project, the "Enhancement of Estonia-Latvia interconnection" that has received funding from the CEF in 2016.²³ The improvement of the gas network between those two countries is directly linked to the Balticconnector project and is aimed at creating an integrated Baltic market and diversifying gas sources in the region.
 - However, the gas demands in Baltic countries as well as Finland, have been consistently dropping in recent years, seriously questioning the choice to place this project as a priority one and allowing it to be funded under public money.

Far from preparing the country for a needed energy transition towards non-nuclear low-carbon energy sources, Estonia strongly considers options which ridiculously exceed its gas needs, which may not solve its single gas supplier situation and which risk creating a new fossil fuel cycle not only internally, but also in the Baltic region more generally.



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¹⁸ <https://ec.europa.eu/eipp/desktop/fr/projects/project-98.html>
¹⁹ <https://ec.europa.eu/energy/en/news/energy-union-eu-invests-1875-million-euro-first-gas-pipeline-between-estonia-and-finland>
²⁰ <https://ec.europa.eu/inea/en/news-events/newsroom/construction-phase-balticconnector-pipeline-started>
²¹ <https://ec.europa.eu/inea/en/news-events/newsroom/pipeline-installation-offshore-section-balticconnector-track>
²² https://www.iea.org/media/freepublications/security/EnergySupplySecurity2014_finland.pdf
²³ <https://ec.europa.eu/inea/en/connecting-europe-facility/cef-energy/8.2.2-0005-ee-w-m-16>