GAME CHANGER

Klaipėda LNG terminal

October 27, 2014

Factsheet

This Factsheet provides information summary and key communication messages on Klaipėda LNG terminal.

All materials included are public.

Appropriate for sharing on social media and other communication channels.



#KlaipedaLNG #energysecurity #LNG



- First large scale LNG import terminal in the Baltic region.
- Guarantees alternative gas supply and market prices.
- Demonstrates Lithuania's responsibility for the entire region's energy security.
- Breaks down gas supply monopoly in the region.
- LNG hub for the Baltic Sea, fully open for third-party access.
- Implementation of the Third EU Energy Package in the gas sector.
- Demonstrates maturity potential of the Lithuanian economy.

Politically and economically, the Baltic States are an integral part of the EU, yet unfortunately, this does not apply to the energy sector.

Lithuania and other Baltic States are still being compared to the "energy islands" in the EU internal energy market, due to the lack of gas and electricity interconnections with other EU Member States and extremely high dependency on energy resources supply from Russia.

Lithuanian energy sector is highly dependent on natural gas – 70% of district heating and 90% of electricity is being produced in Lithuania by burning natural gas, which was until now 100% supplied from the single supplier – Gazprom – through single pipeline.

This creates energy security threats making Lithuanian energy consumers and national economy vulnerable to electricity or gas supply interruptions and large-scale fluctuations of fossil fuel prices compared to the countries with more diversified or self-sufficient energy systems.

Naturally, in the absence of choice, there were no conditions to free the natural gas market.

Situation is about to change irreversibly

The most important Lithuanian energy security project – liquefied natural gas (LNG) terminal in Klaipėda – will ensure security of supply and alternative sources, enabling access to markets and allowing the purchase of gas at market prices.

Ready to share

The LNG terminal in Klaipėda is the first gas infrastructure object to be completed in order to increase the energy security in Lithuania.

Although the primary goal of Klaipėda LNG terminal is to satisfy national needs, the terminal will operate under so-called *third party access* regime, which means that neighbours and partners will also have the possibility to use terminal's capacity for their own needs on the regulated and non-discriminatory basis. Lithuania is ready to share its energy infrastructure for the benefits of the whole region.

Fair pricing

On August 21, 2014, state-owned natural gas supplier and trader LITGAS has signed LNG supply contract with Statoil ASA, which will supply 0,54 billion cubic meters per annum (~20% demand of Lithuania) though the LNG terminal for 5 years.

The contract is based on National Balancing Point, which is one of the main benchmarks in European gas markets.

The contract also covers possibilities of LNG reloading – a new commercial activity in the Baltic Sea region.

This contract will establish a natural gas pricing policy linked to the natural gas price movements on the international markets.

This guarantees that Lithuania will not have to pay politically reasoned prices for gas supply anymore.

Maturity and potential of the Lithuanian economy

According to the European energy security strategy as well as already performed stress tests of the natural gas supply and infrastructure, Klaipėda LNG terminal will be one of the major energy security infrastructures in the East-Baltic region.

Lithuania is capable and ready to implement vast and complex energy infrastructure projects.



"This vessel carrying a nice symbolic name "Independence" is a real step towards our energy independence and security, which means that we have an alternative and no one ever will blackmail us over gas prices or influence, through energy, our political or economic life.

It means not only fair prices for our people, but also an economically stronger and more competitive Lithuania.

[...] We will have the most sophisticated vessel that will serve not only Lithuania, but also the entire Baltic region. Lithuania is becoming a stable energy nation."

> Lithuanian President Dalia Grybauskaitė at the naming ceremony of the vessel for the Klaipėda LNG terminal. 19 February 2014

The decision-making process is fast and effective. It took only 4 years from project initiation to the launch of the terminal.

Thanks to the best management practices, the project was delivered on time and within budget limits.

Klaipėda LNG terminal – a crucial input to regional and EU energy security

The regional cooperation in the field of energy security is of vital importance.

For the first time Lithuania will have a second source of natural gas. During the first year of operation, this commodity will supply more than one third of the nation's energy needs.

In the future, its capacity can grow to meet the country's annual gas needs or 75% of the combined natural gas demand in Lithuania, Latvia, and Estonia.

Klaipėda LNG terminal is a GAME CHANGER

A monopolistic supplier uses energy, especially gas, as a means of political pressure.

The Ukraine crisis clearly demonstrates how vulnerable Europe is to such pressure.

Lithuania was aware of the consequences of such dependency long before. Now, it is ready to provide regional solutions for the Baltic States (Estonia and Latvia).

Having the regasification capacity of 4 bcma, the terminal could serve as base load capacity provider for the

most vulnerable users thus increasing the energy security of the region.

In addition, the LNG terminal will strengthen the position of Baltic States in negotiations with gas suppliers to get market-based prices instead of monopolistic ones.

Environment-friendly energy resource

The International Maritime Organization classifies the Baltic and the North Seas as the Sulphur Emission Control Area. Thus, from January 1, 2015, ships sailing in these seas will have to use low-sulphur fuel.

This will make LNG one of the preferred alternatives.

Input to meeting growing global LNG demand

Global demand for LNG in road transport is growing from almost none in 2010 to an estimated 45 million metric tons a year in 2025, and 96 million tons in 2035.

Demand for LNG as a marine bunker fuel is expected to reach 35.7 million tons in 2025 and 77 million in 2035.

To comply with the amendments of MARPOL Convention, all vessels operating in the Baltic Sea and North Sea, including the English Channel, will have to reduce the sulphur content of marine fuels to 0.1%, starting from January 1, 2015.

Thus, there is a huge demand and potential for LNG regasification capacity in Central and Eastern European countries.

All currently operational LNG import terminals are located in Western and Southern Europe.

Klaipėda LNG terminal will be the first in the Baltic and Nordic region.

It is an opportunity to use Klaipėda terminal for regional purposes and satisfy growing global demand for LNG in transport sector.

NUMBERS AND FACTS

During the first year, Klaipėda LNG terminal is about to produce around 1 billion cubic meters of gas. In the future, its capacity can grow to up to 3 billion cubic meters, which makes the approximate amount of gas Lithuania has consumed in 2012. Thus, this terminal should meet the country's annual gas needs. (http://bit.ly/1uXiEHN)

Statoil will be supplying **540 million** cubic meters of natural gas annually from 2015 until 2020.

LNG distribution station near the Klaipėda LNG terminal will allow providing services to customers in all Baltic States and Poland. The estimated initial storage capacity of the LNG distribution station is up to 10,000 cubic meters. 2 tanker trucks can be filled simultaneously.

FSRU "INDEPENDENCE"

TECHNOLOGY LNG terminal is a floating storage with a regasification unit (**FSRU**).

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170 thousand cubic meters (tcm) of LNG storage capacity or ≈100 mcm (3.5 billion cubic feet, Bcf) of natural gas.

4 billion cubic meters / yr (141 Bcf/yr) of regasification capacity (11 mcm per day).

Klaipėda LNG terminal will also provide possibilities for cooperation in LNG reloading which is a new type of activity in the Baltic Sea region. Gas in liquid form would be pumped to smaller tonnage vessels at the all year round ice-free Klaipeda port and shipped to small terminals.

The LNG storage vessel was built for Lithuania in South Korea by Norwegian company **Höegh LNG** in association with the local company **Hyundai Heavy Industries.**

BENEFIT OF THE TECHNOLOGY FOR ENERGY SECURITY:

Movable – FSRU can serve as LNG carrier.

Effective – FSRU will be able to supply gas to the gas transmission system and to provide LNG reloading services at the same time.

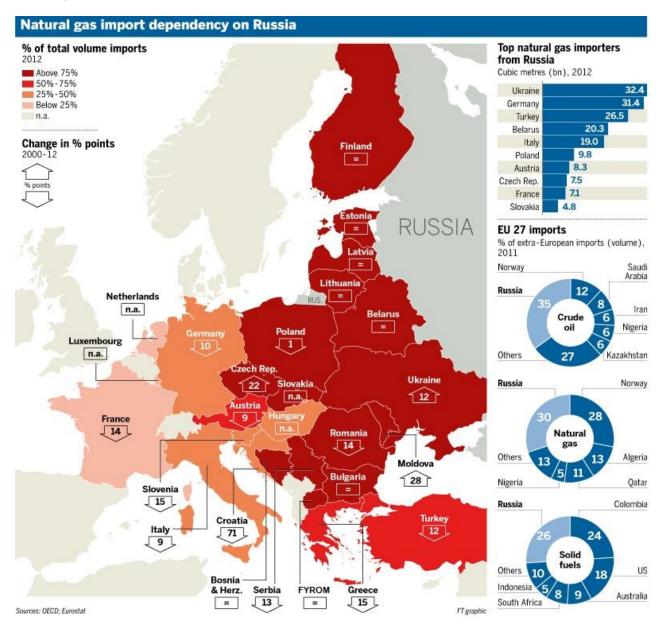
Safe – FSRU will comply with safety standard applicable in gas and oil business.

Secure – FSRU equipment designed to comply with N-1 requirements. Member States have to ensure that the gas network is robust enough to withstand the disruption of the largest infrastructure at national or regional levels.



Visual material on Energy Security

"Energy islands" and dependency in Europe



EU Energy Consumption of Russian Natural Gas (%)

Prin	nary Energy	Natural Gas
Austria	12.8%	52.2%
Belgium	10.9%	43.2%
Bulgaria	13.6%	100.0%
Croatia	9.4%	37.1%
Cyprus	0.0%	0.0%
Czech Republic	14.2%	80.5%
Denmark	0.0%	0.0%
Estonia	10.0%	100.0%
Finland	10.6%	100.0%
France	2.7%	17.2%
Germany	8.7%	39.9%
Greece	7.2%	54.8%
Hungary	19.7%	49.5%
Ireland	0.0%	0.0%
Italy	7.5%	19.8%
Latvia	31.0%	100.0%
Lithuania	50.0%	100.0%
Luxembourg	6.1%	27.9%
Malta	0.0%	0.0%
Netherlands	2.1%	5.8%
Poland	8.3%	54.2%
Portugal	0.0%	0.0%
Romania	8.8%	24.2%
Slovakia	20.3%	63.3%
Slovenia	6.3%	57.4%
Spain	0.0%	0.0%
Sweden	1.9%	100.0%
United Kingdom	0.0%	0.0%

Source: Gas data from Eurogas, BP Statistical Review of World Energy 2013, and U.S. Energy Information Administration; boundary data from ESRI, 2005. Graphic created by CRS.

Borders are not necessarily authoritative.

