# LITHUANIA



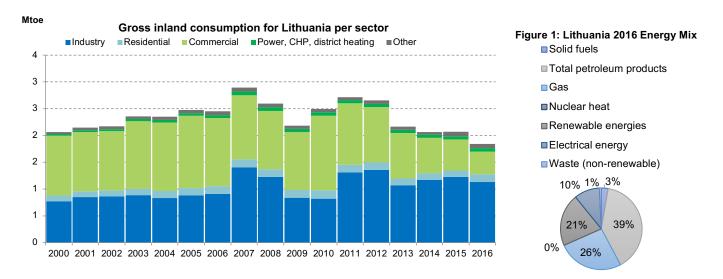
### **KEY FACTS:**

- Gas is no longer the first source of energy for Lithuania. This is the result of decreasing demand since 2011.
- The Lithuanian LNG terminal is clearly underused with an average use of only 23% between 2012 and 2017
- The structure of gas import has drastically evolved with Norway now being the main supplier compared to solely Russian import previously.
- More PCI gas projects are to be built, in connection to an LNG Terminal. They present a strong risk of new fossil fuel lock-in and stranded assets.

## 1. GAS DEMAND

According to EU data:1

- Gas represented 26% of Lithuania's energy mix in 2016.
- Lithuania consumed around 2.19bcm of gas in 2016.
- Gas demand dropped by 29% between 2011 and 2017.



### 2. GAS SUPPLY

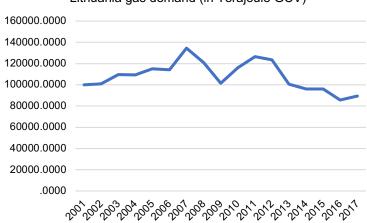
The share of gas in Lithuania's energy mix has been decreasing for the last few years and has in 2016 decreased to only 26% of Lithuania's total

energy sources.<sup>2</sup>

Lithuania gas demand (in Terajoule GCV)

Lithuania does not have fossil gas resources of its own.<sup>3</sup> Until 2014, Lithuania, just like its neighbours, relied on Gazprom as its single source of gas supplies. However, Lithuania's gas market has radically changed since its commissioning, in October 2014, of the liquefied natural gas (LNG) regasification terminal in Klaipeda.<sup>4</sup>

The first impact was economic: Shortly before the commissioning of the terminal, Lithuania successfully put pressure on Gazprom over its contract (then 15% more expensive than



European average prices for gas).5 In May 2014, Lithuanian Prime Minister announced that a new deal

<sup>&</sup>lt;sup>1</sup> E3G compilation of data extracted from Eurostat

<sup>&</sup>lt;sup>2</sup> http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=nrg 110a&lang=en

<sup>&</sup>lt;sup>3</sup> https://ec.europa.eu/energy/sites/ener/files/documents/2014 countryreports lithuania.pdf

<sup>&</sup>lt;sup>4</sup> http://www.lngworldnews.com/fsru-independence-arrives-off-lithuania/

<sup>&</sup>lt;sup>5</sup> http://www.wsj.com/articles/gas-terminal-plans-helped-lithuania-negotiate-lower-price-from-gazprom-1401188154

signed between the country's leading utility Lietuvos Dujos and Gazprom led to a price fall of "at least by 20 per cent".6

In August 2014 Lithuania signed with Norway's Statoil to solidify a five-year LNG supply deal preliminary valued at 2.5 billion to 3 billion litas (€725-870 million). It commits Statoil to deliver 540mcm of gas each year to the Klaipeda LNG terminal.<sup>7</sup> This new deal had its first significant impacts in 2016: Lithuania cut its imports from Russia by 63.2% in the first quarter, and again year on year. A year after the contract was signed the structure of gas imports for Lithuania drastically changed with now more than 60% of gas demand being supplemented by Norway (see figure 2).

While Lithuania's national gas supply company continues to buy gas from Gazprom, most of Lithuania's major gas importers purchased gas supplies from Statoil for 2016.8 In 2017, Lithuania signed the first deal to import fracked U.S. gas.9

However, despite these apparent economic successes, the new LNG terminal hasn't (yet) led to any significant change in the amount of gas consumed in the country. With an average use of only 23% in the Klaipeda terminal, it has not fulfilled the promises made by its promoters. Running at only 80% capacity, the terminal could cover the gas use of the entire Baltic region. The situation in Lithuania changed in 2017: Gazprom experimented with supplying gas to the country (and other Baltic states) by short-term tender, as an alternative or supplement to its long-term contracts, following a successful auction. In autumn 2018, Gazprom launched a permanent Electronic Sales Platform (ESP) to sell gas to European clients on a short-term basis in various delivery points. While the auctions were one-off events, the ESP is intended as a framework for the ongoing monthly sale and delivery of Gazprom-produced gas and the Oxford Institutes for Energy Studies now deems the ESP as a viable source of spot gas purchases.

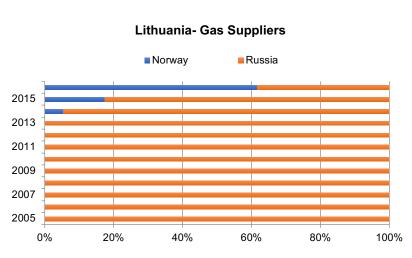


Figure 2: Lithuania Gas Suppliers (2016)



Figure 3: Lithuania Gas Infrastructure

## 3. GAS INFRASTRUCTURE

Until 2014, all the gas consumed in Lithuania was imported from Russia via a single pipeline from Belarus. Following the Security of Gas Supply EU Regulation,<sup>14</sup> Lithuania stores its security reserves (37mcm) in the Inčukalns underground gas storage facility in Latvia.<sup>15</sup>

The Lithuanian gas network is connected to the Belarusian, Latvian and Russian Federation (Kaliningrad) gas systems (see figure 3). In 2013, the Latvian-Lithuanian interconnection enhancement was successfully finalised by increasing the cross-border bi-directional capacity to more than 2.2bcm/y.<sup>16</sup>

<sup>&</sup>lt;sup>6</sup> https://www.ft.com/content/2b6f3ef0-dab2-11e3-9a27-00144feabdc0

 $<sup>^{7} \</sup>underline{\text{http://www.euractiv.com/section/energy/news/lithuania-breaks-gazprom-s-monopoly-by-signing-first-lng-deal/2} \\$ 

<sup>8</sup> http://www.naturalgasworld.com/lithuania-estonia-cut-russian-imports-29680

<sup>9</sup> http://www.reuters.com/article/us-lithuania-Ing-idUSKBN19H14M

<sup>10</sup> Food&Water Europe calculation based on data from ALSI: https://alsi.gie.eu/ - /

https://financialobserver.eu/baltics/lithuania-gets-its-own-Ing-terminal-and-new-rules-for-energy-market/

http://www.naturalgaseurope.com/gazprom-launches-baltic-gas-tender-28437

http://www.naturalgaseurope.com/lithuanian-bidders-eye-gazprom-gas-auction-experts-take-differs-28601

http://www.naturalgaseurope.com/lithuanian-intelligence-gazprom-continues-shady-games-in-lithuanian-gas-market-28959
https://www.oxfordenergy.org/wpcms/wp-content/uploads/2019/07/Gazproms-Gas-Sales-via-its-Electronic-Sales-Platform-ESP-52.pdf?v=7516fd43adaa

<sup>&</sup>lt;sup>14</sup> EU Regulation No. 994/2010

<sup>15</sup> https://ec.europa.eu/energy/sites/ener/files/documents/2014 countryreports lithuania.pdf

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It is however the construction of the import LNG terminal Klaipeda which radically changed the landscape of the country's energy market, even if its impact on the BEMIP region, regularly touted by its promoters, is not as big as one might expect since the utilisation rate of the terminal is guite low and a big share of the capacity is booked not by an energy company but a fertilizer producer, Achema. 17 It is also Achema which uses the largest share of gas in Lithuania and pays the biggest part of the LNG terminal's maintenance fees. 18 With its ability to import 4bcm/y of gas, Lithuania benefits from an infrastructure which can supply almost twice the amount of gas it consumes each year. The EU Commission approved State Aid for the terminal in 2018, a decision Achema wanted to challenge<sup>19</sup>, but without success.<sup>20</sup> While the terminal is currently being leased from Hoeg LNG, in 2018 the Lithuanian government approved of the terminals acquisition after 2024.21

Despite the already very important gas import capacity brought by the Klaipeda there have been on-going plans to extend the Klaipeda terminal with the acquisition by the Klaipeda promoter of an FSRU terminal that would add 4bcm/ year of regasification for Lithuania, the Baltic region and Finland. However, during a number of meetings with the Commission, the Finnish Ministry stated repeatedly that it does not see the need for any further LNG project in the Baltics.

Two other important projects were associated to the Klaipeda terminal, in order to connect the terminal to the other Baltic countries (see orange lines on figure 4):

The Klaipeda-Kursenai Gas Transmission Pipeline: a 111km pipeline, with a 3.7bcm/y transport capacity, meant to connect the LNG terminal to the Baltic gas market.<sup>22</sup> The construction was completed in October 2015 (€60 million, with €27.6 million coming from EU funds).<sup>23,24</sup>

The further enhancement of Latvia-Lithuania interconnection (construction of pipelines Riga-Jelgava and Jelgava-Lithuanian border) to double the current capacity to reach 4.4bcm/y is

planned and has been granted PCI status.25

A third important project which involves Lithuania also received PCI status and would connect this time the Lithuanian gas market to Poland: The GIPL (Gas Interconnector Poland – Lithuania). It would consist in a 534km bidirectional pipeline with capacity of 2.4bcm/y in the direction PL→ LT, and up to 1.7bcm/y in direction LT → PL.<sup>26</sup> Project aimed promoters to complete construction December 2019,27 in however they started in March 2018 and finalisation was postponed to summer 2021 which was originally when the pipeline should have commissioned. All in all, the project received over €10 million of EU financial support and might receive even more.<sup>28</sup>



These projects however raise important Figure 4: Proposed Gas Infrastructure in Lithuania questions and problems: The

competitiveness of imported LNG remains to be proven, especially compared to cheap gas coming

<sup>17</sup> https://www.lngworldnews.com/lithuania-achema-books-additional-lng-terminal-capacity/?utm\_source=emark&utm\_medium=email&utm\_campaign=daily-update-Ing-world-news-2019-06-07&uid=52896

https://www.baltictimes.com/lithuania s achema turns to cjeu over lng terminal s maintenance costs/

<sup>19</sup> https://www.baltictimes.com/lithuania s\_achema\_turns\_to\_cjeu\_over\_lng\_terminal\_s\_maintenance\_costs/

https://en.delfi.lt/business/achema-loses-eu-court-case-over-state-aid-for-klaipeda-lng-terminal.d?id=82233661

<sup>21</sup> https://www.lngworldnews.com/lithuanian-parliament-approves-fsru-acquisition/

https://ec.europa.eu/inea/sites/inea/files/fiche\_8.2.3-0001-lt-p-m-14\_final.pdf

http://www.baltic-course.com/eng/energy/?doc=111255

<sup>24</sup> https://ec.europa.eu/inea/en/connecting-europe-facility/cef-energy/projects-by-country/lithuania/8.2.3%E2%80%930001-lt-p-m-14

https://circabc.europa.eu/ui/group/3ba59f7e-2e01-46d0-9683-a72b39b6decf/library/cc16bb46-608d-4edc-8d5c-7ed90cfa4926/details

https://www.epsog.lt/en/projects/gipl-gas-interconnection-between-poland-and-lithuania

<sup>&</sup>lt;sup>27</sup> https://ec.europa.eu/inea/en/news-events/newsroom/first-gas-interconnector-poland-%E

<sup>&</sup>lt;sup>28</sup> https://ec.europa.eu/inea/en/connecting-europe-facility/cef-energy/8.5-0045-ltpl-s-m-14

from Russia. At a time when gas demand decreases and when climate emergency forces us to accelerate the energy transition, the need to build (with heavy public financial support) new gas infrastructures is deeply questionable. The risk of building a new fossil fuel lock-in is high and it is likely that many of these infrastructures will become quickly stranded.



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