

# Amber Grid – Gas Transmission System Operator of Lithuania

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 **Amber Grid**

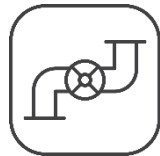


# Who are we?

- Amber Grid is the state-owned Lithuanian gas transmission system operator
- We ensure that all consumers are supplied with an important energy resource – gas
- We implement strategic state projects to increase country's energy independence
- We work in the field of green gas and contribute to the creation of clean, environmentally friendly energy
- We belong to ENTSO-G, the European Network of Transmission System Operators for Gas
- We are part of the energy exchange group EPSO-G
- 96 % of Amber Grid shares are state-owned
- The company listed on the Nasdaq Baltic OMX stock exchange



Our team –  
324 people



We transport approx  
58 TWh/year of gas



The Company revenue  
– around EUR 68 million  
per year



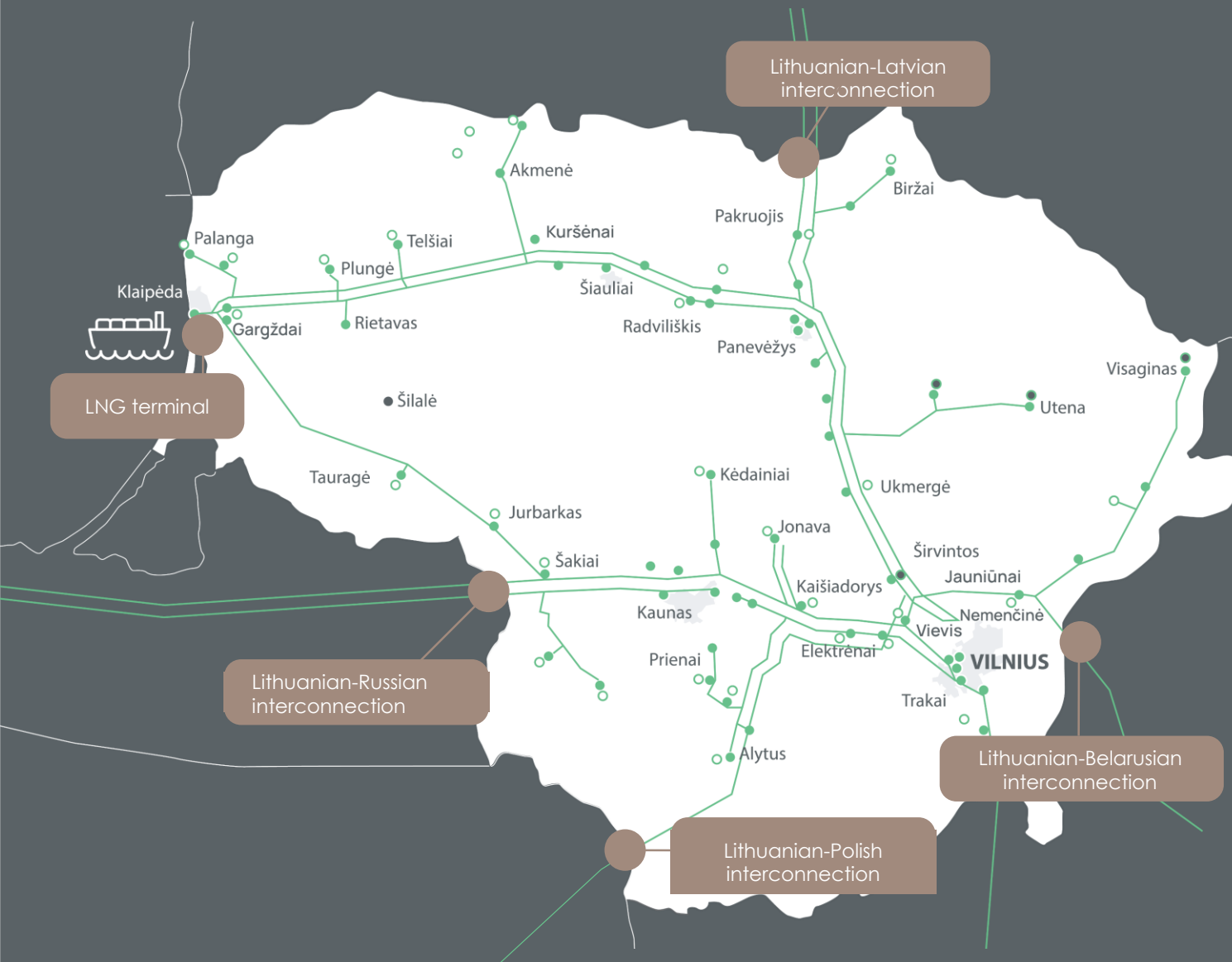


# Gas transportation ways

- We transmit natural gas to consumers in Lithuania, Baltic countries and Finland and provide gas transit services to Kaliningrad Region
- Gas is transported to Lithuania by ships via the LNG terminal in Klaipėda port (Baltic sea) and starting from May – by new pipeline GIPL between Poland and Lithuania
- For the past few years, two-thirds of Lithuania's gas needs have been sourced through Klaipėda LNG terminal
- As of April 2022 Lithuania doesn't import Russian gas. Klaipėda LNG terminal ensures all the gas demand of Lithuania



# Lithuanian gas transmission grid



— Main gas pipelines (2285 km)

- - - Pipeline under construction

**M** Gas metering stations (4)

**C** Gas compression stations (2)

● Gas distribution stations (64)

● Gasified cities

○ Gasified towns

● Non - gasified cities

 LNG terminal in Klaipėda

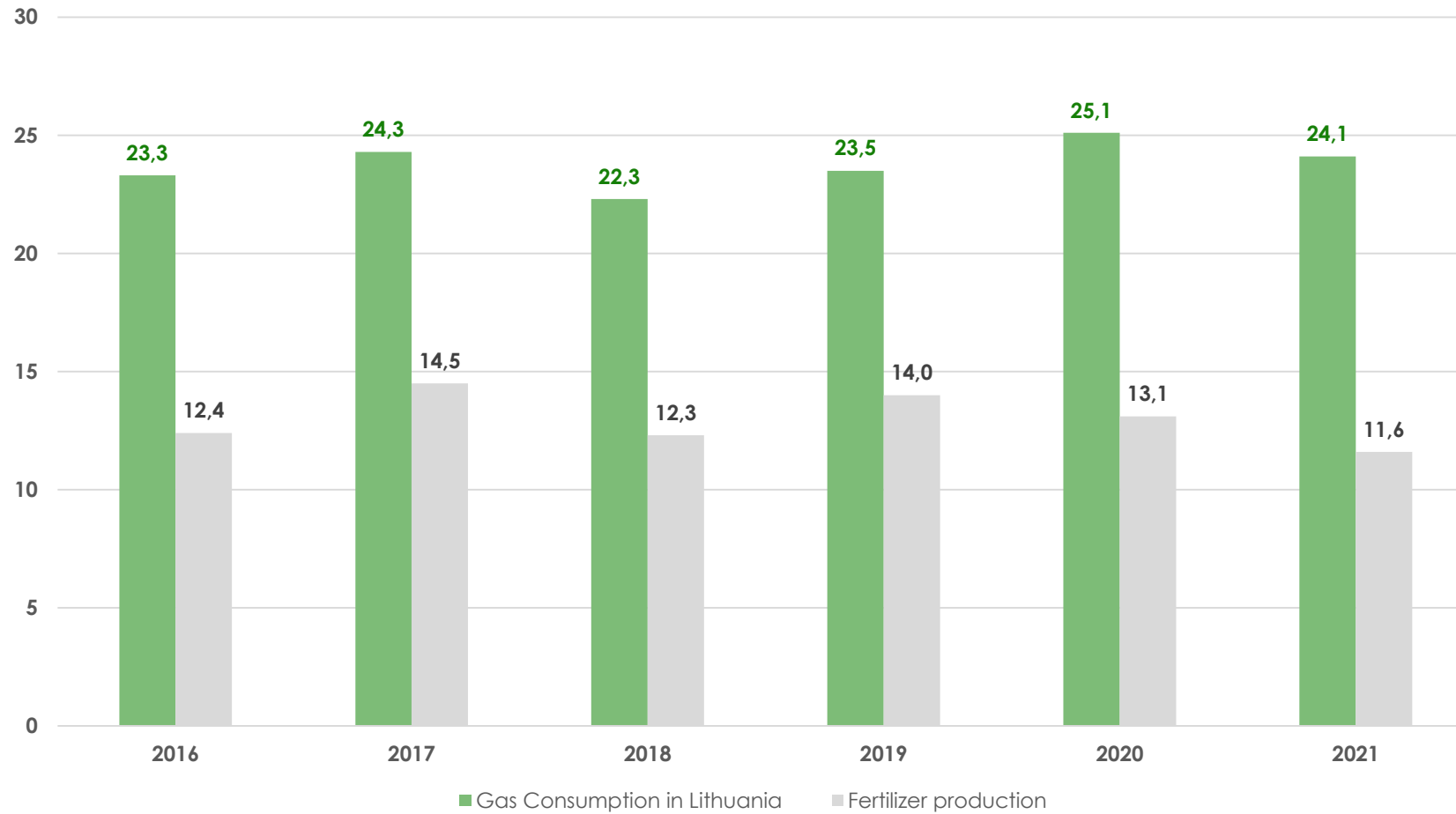


# Who uses natural gas in Lithuania?

- The main consumer of natural gas in Lithuania is the nitrogen fertilizer producer Achema. This company consumes about half of the gas supplied to Lithuania.
- Gas as energy resource is also used to generate electricity and heat energy for cities of Lithuania.
- About 25 terawatt-hours (TWh) of gas are consumed annually in Lithuania, about 200 TWh – in Poland, about 1,000 TWh – in Germany and about 4,500 TWh – in Europe.



# Gas consumption in Lithuania, TWh



# Baltic States and Finland region



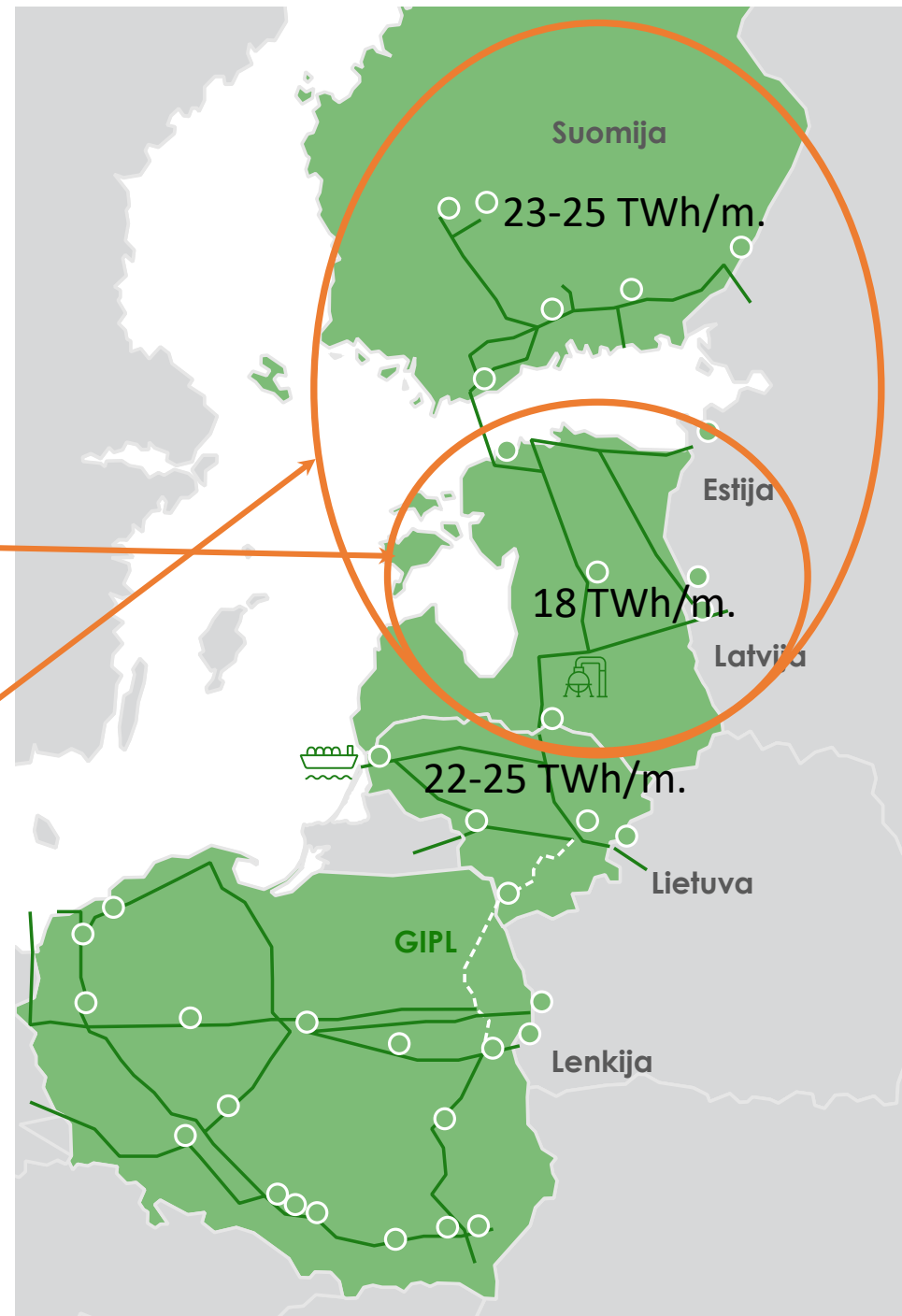
- We are connected to Latvia and Belarus by gas interconnectors and provide gas transit to Kaliningrad Region
- In 2022, we will also be connected to Poland via new gas interconnection GIPL
- Klaipėda LNG terminal plays an important role. it has the capacity to transport as much gas as Lithuania needs
- Latvia has the Inčukalnis underground gas storage facility, which can store as much gas as Lithuania needs per year





# Region gas market

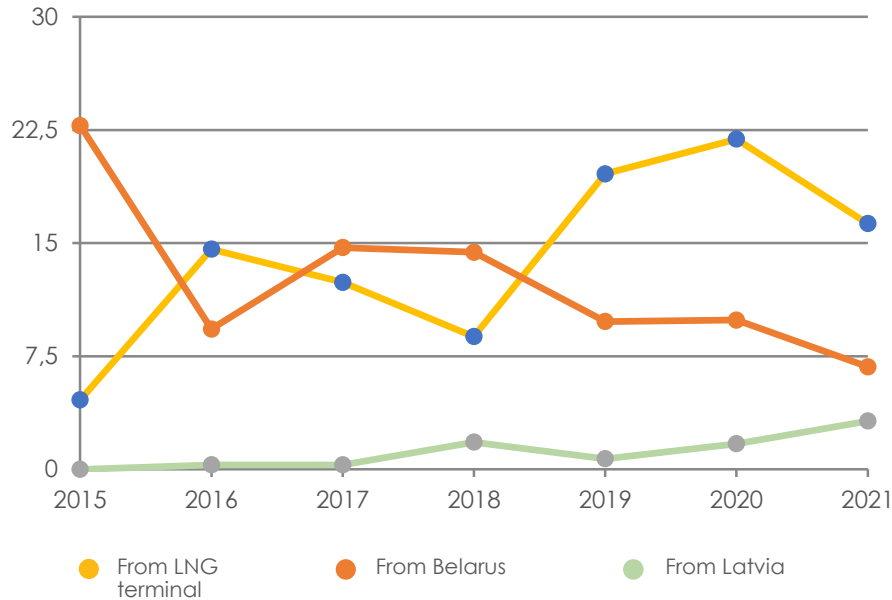
- Baltic countries + Finish gas market = 65-70 TWh per year
- From 2020 m. **Latvia-Estonia** have formed a common gas market. The single market means that it has (1) a single VTP, (2) common rules for the transmission and balancing, and (3) no commercial border for the transportation of gas between countries.
- From 2020 Latvia-Estonia together with Finland have formed the FINESTLAT tariff zone. The tariff zone means that (1) there are the same entry tariffs in all countries (2) and there are no tariffs to cross the border between the Latvian-Estonian common market and the Finnish gas market - i.e. the border exists commercially and capacity is allocated there, but gas is transmitted across the border free of charge.





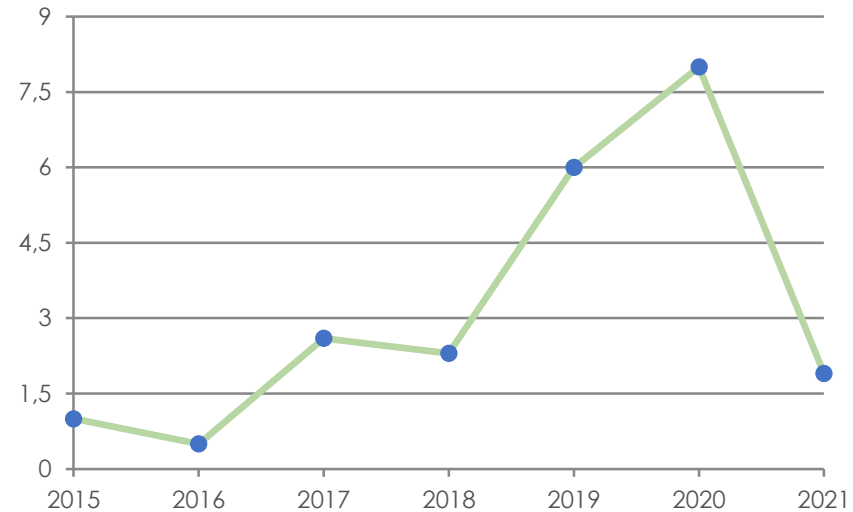
# Gas flows to Lithuania and cross-border flows

Gas flows into Lithuania, TWh



- In recent years, gas imports through the LNG terminal have dominated
- The use of the Inčiukalns gas storage facility in Latvia also increased

Gas flows into Latvia, TWh



- Transit to Latvia has been steadily increasing, mainly from the LNG terminal in the summer
- 2021 due to unattractive gas market prices, a significant reduction in gas flows

Transit to Kaliningrad region in 2017-2020 ranged from 25 to 28 TWh.



# Amber Grid rules

## AB Amber Grid **Rules for Access** to the Natural Gas Transmission System lays down

- the procedure, terms and conditions for the use of the Natural Gas Transmission System owned by the TSO
- the procedure, terms and conditions for the exchange of information between the TSO and the NUs
- the guidelines on cooperation between the TSO and operators of other gas systems
- the rights, obligations and liabilities of the TSO and the NUs

## AB Amber Grid Natural Gas Transmission System **Balancing Rules**

- to identify the principles of balancing
- to ensure the safe and efficient operation of the transmission system
- market participants shall balance their quantities of natural gas injected into the gas transmission system with the ones off-taken from the gas transmission system
- rules financially incentivise network users to balance their balancing portfolios



# Capacity allocation

All standard products are available for NUs – yearly, quarterly, monthly and daily

- GIPL capacity will be auctioned at the GSA Platform
- Other entry/exit points are allocated by Amber Grid using FCFS and Pro rata principles
- Implicit Capacity Allocation mechanism at interconnection point with Latvia is also applied



# Nominations

Nomination procedure at GIPL:

- Hourly quantities should be nominated
- day ahead nomination and within-day re-nomination

VTP nominations:

- For gas exchange trades – exchange operator sends to TSO
- For bilateral trades – both sides have to send it to TSO (there will be possibility to submit single-sided trade notifications if agreed by NUs)

LNG terminal entry point nominations:

- LNG terminal operator sends nominations to TSO, NUs do not have to submit nominations to TSO





# Balancing regime

- The daily imbalance quantity of each market participant during each balancing period shall be calculated in accordance with the following formula:

$$\text{daily imbalance quantity} = \text{all inputs} - \text{all off-takes}$$

- **Daily balancing regime is applied**
- Final imbalance is calculated after the end of the month, based on final allocations



# Gas market operator

## About GET Baltic

Conducting its operations since 2012, GET Baltic is a licensed natural gas market operator with a status of Registered Reporting Mechanism provided by the ACER. The Company administrates the electronic trading system for trading spot and forward natural gas products with physical delivery in the market areas located in **Lithuania, Latvia, Estonia and Finland.**

2012

Established in  
2012

98

Exchange  
Participants

65

Baltic-Finnish  
Gas Market Size,  
TWh



**ETS**

Electronic Trading  
System



**REMIT**

Remit data  
reporting service



**UMM**

UMM reporting  
service

<https://www.getbaltic.com/en/>



# Thank You!

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 **Amber Grid**

