



St. Petersburg International Gas Forum 2018

- Uniper Round Table -

*Gas-to-power in the Baltic region and Latvia -
Reawakening or business as usual?*



Sebastian Gröblichhoff
Vice-Chairman of the Board
JSC Latvijas Gāze

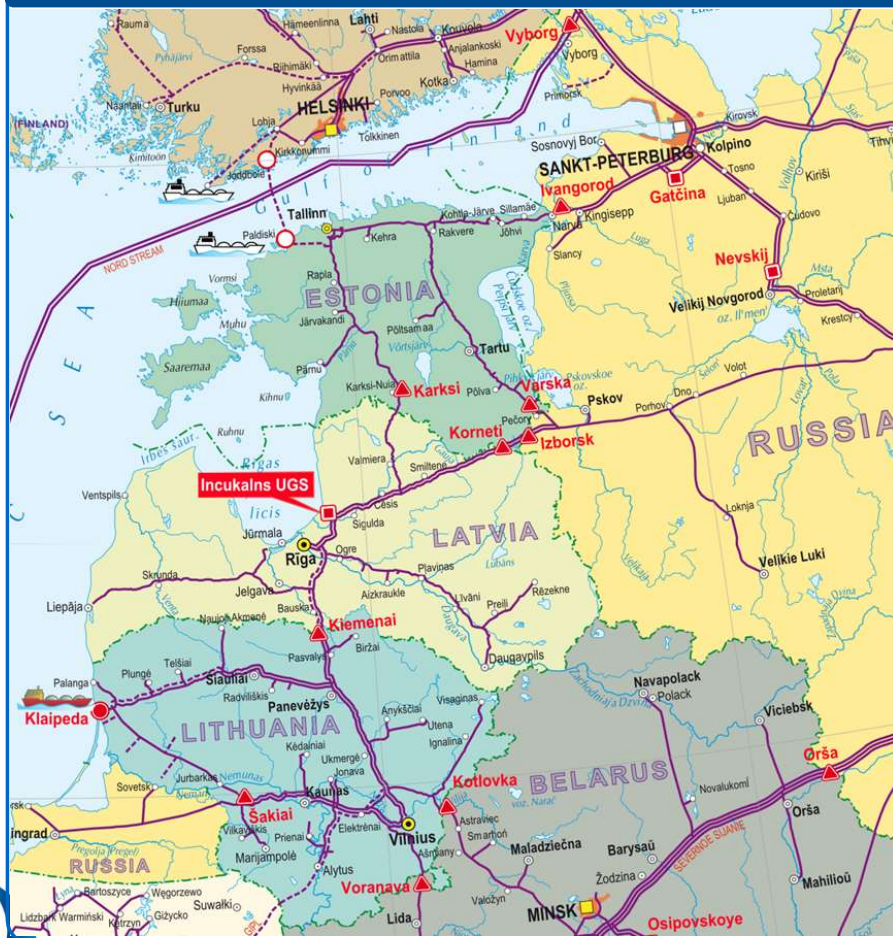
St. Petersburg, 3 October 2018



For decades natural gas in the Baltic states was exclusively supplied via pipelines from Russia



Overview of physical supply infrastructure in the Baltic region

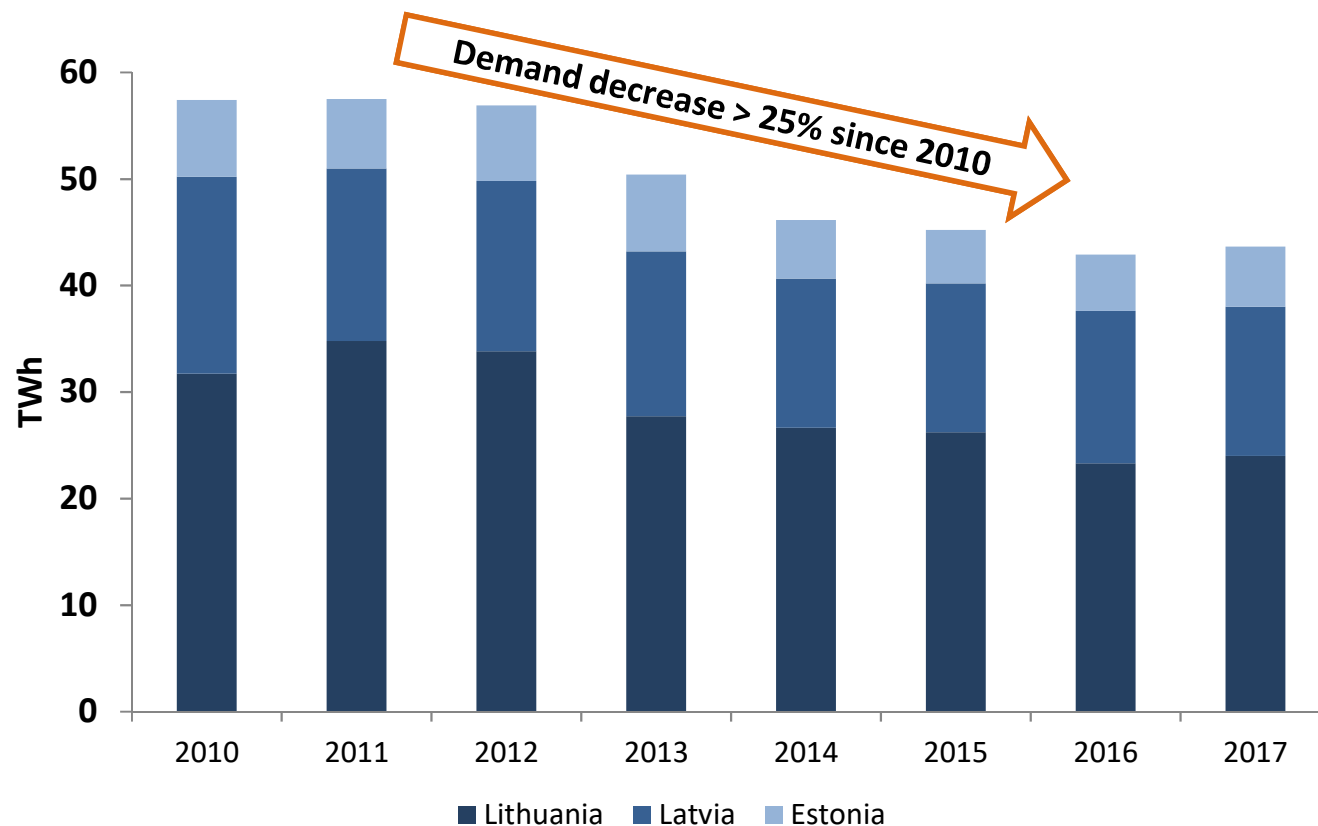


Key features of the Baltic gas market

- Pipelines from Russia and the Incukalna Underground Gas Storage (“UGS”) form backbone of regional supply infrastructure
- Construction of LNG terminal in Klaipeda has opened up a new supply opportunity
- However, until now no pipeline connection to western European gas infrastructure/ markets
- Development of a true regional gas market only started after opening of Latvian gas market in April 2017
- Trading activity is picking up but no fully liquid regional trading hub developed yet



Natural gas demand in the Baltic region dropped significantly since 2010



- Latvian gas market comprises approx. 35 % of Baltic gas market
- Demand decline is in line with developments in major EU gas markets
- Promotion of renewables & energy efficiency are the main drivers behind the demand drop

Source: Central Statistical Bureau of Latvia; ENTSOG; Amber Grid



Can gas-to-power reinvigorate natural gas demand in the Baltic region as CO₂ prices are finally increasing?



ICE EUA DEC-18



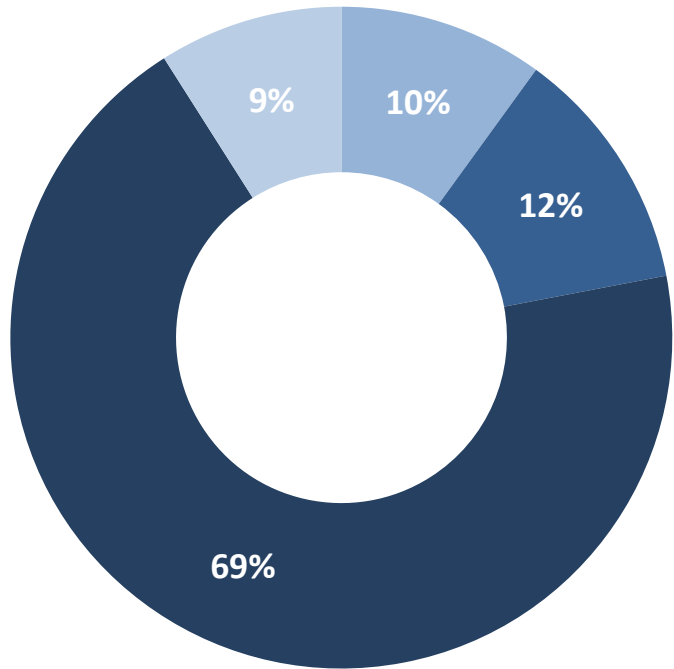
Source: Reuters



Latvian natural gas demand already today strongly depends on heat and power production



Shares of natural gas by customer groups in Latvia, 2015



- Municipal and commercial companies
- Industry
- Power and heat production
- Residential customers

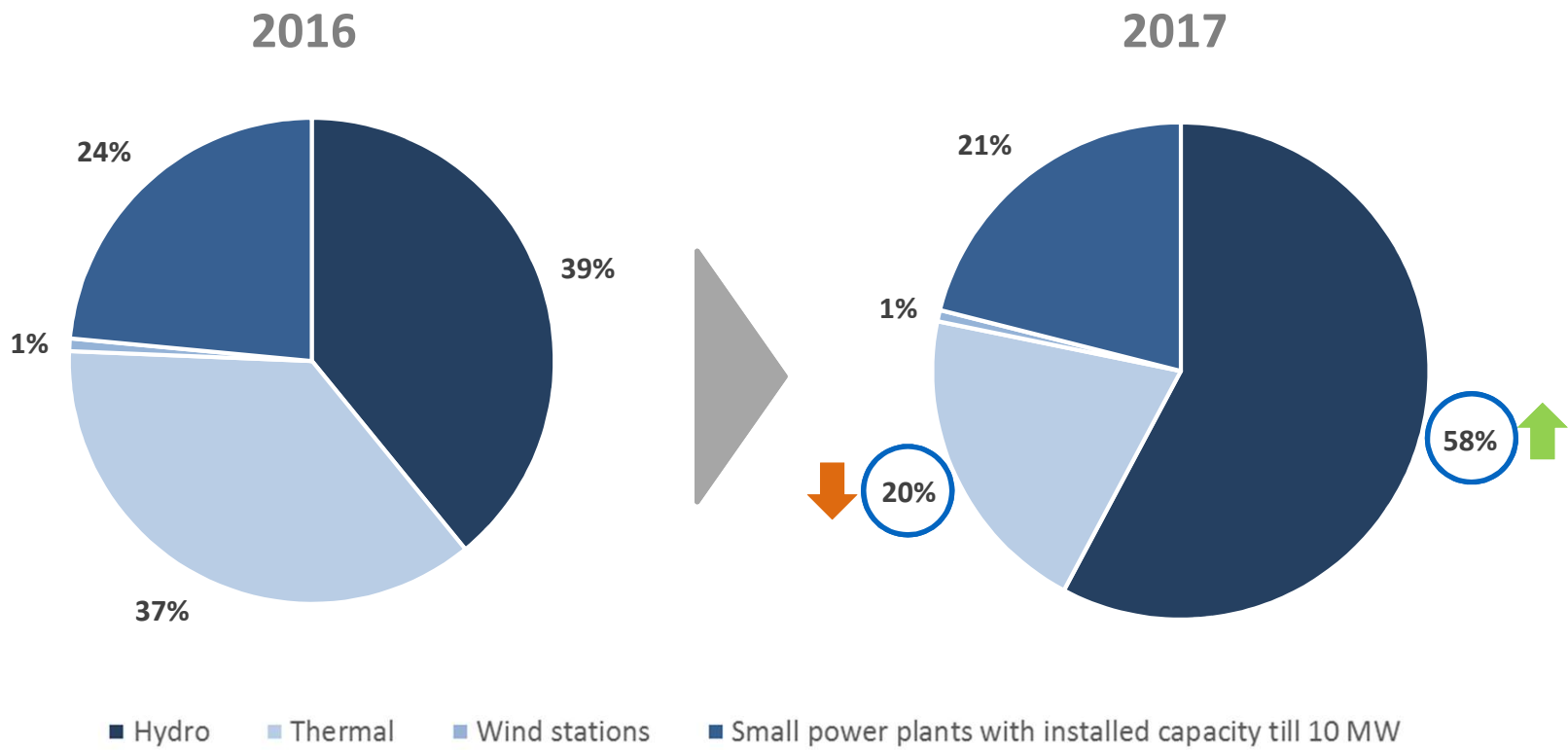
Source: ENTSOG, "Gas Regional Investment Plan 2017"



However, due to a high share of renewables gas demand for power generation in Latvia is highly volatile



Composition of Latvian power production by source



Source: <http://www.ast.lv/en/electricity-market-review>



Gas-to-power potential in Lithuania and Estonia currently is rather limited



- **Lithuania** imports approx. 2/3 of its electricity (Latvia, Estonia, Finland, Sweden and Poland)
- Share of electricity generated from renewables resources in Lithuania in 2017 > 50%
- Lithuanian government recently published a new energy strategy with the goal to phase out fossil fuels



-
- **Estonia** still produces more than 80% of its electricity from shale oil (Narwa power plants)
 - However, share of renewables has continuously increased during recent years due to respective state incentive and support schemes



Several factors influence the burning of natural gas in the Baltic power generation segment



Ambient temperatures

Water levels

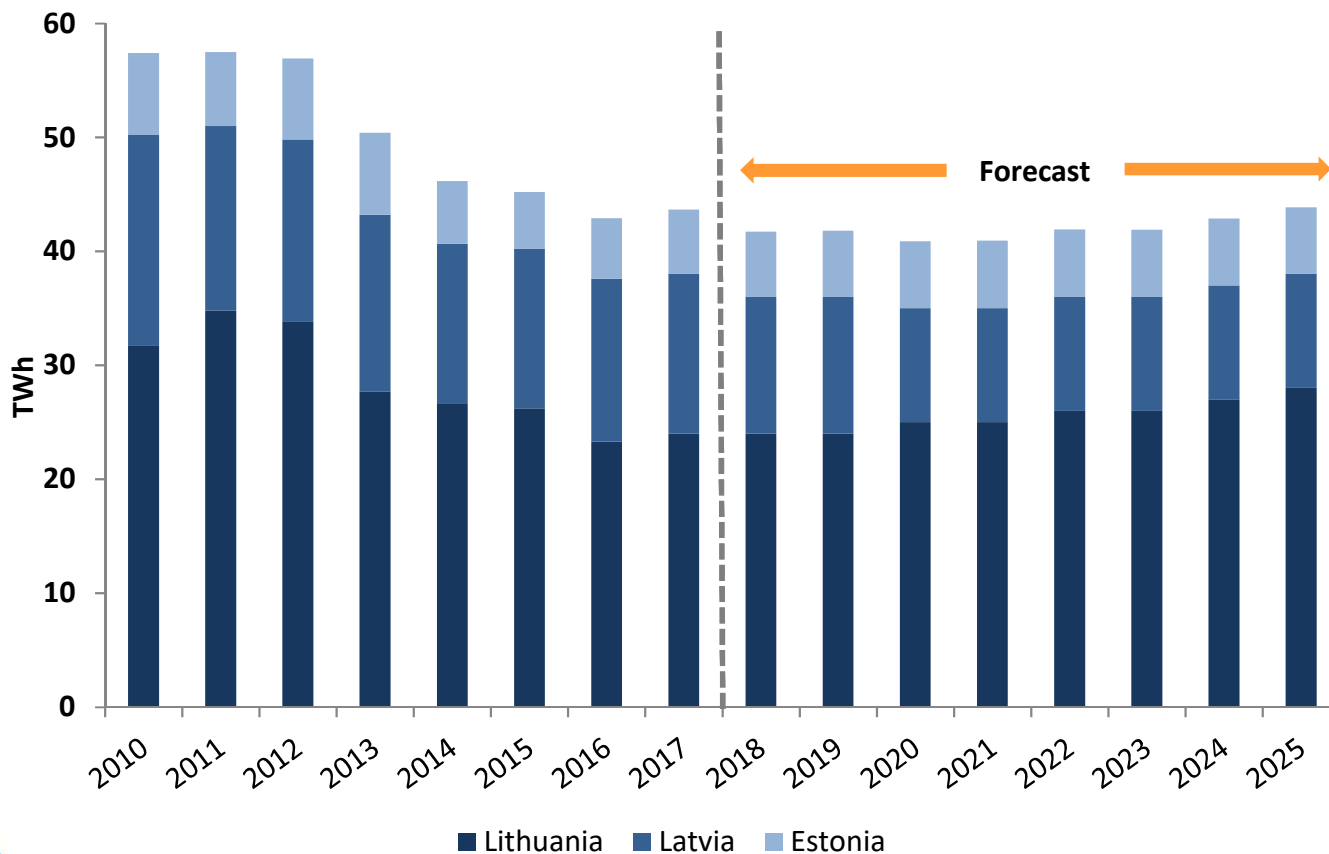
Availability of NordBalt cable

Commodity and CO₂ prices

Infrastructure tariffs (e.g. storage tariffs)



No quick recovery of natural gas demand driven by gas-to-power expected in the Baltic region

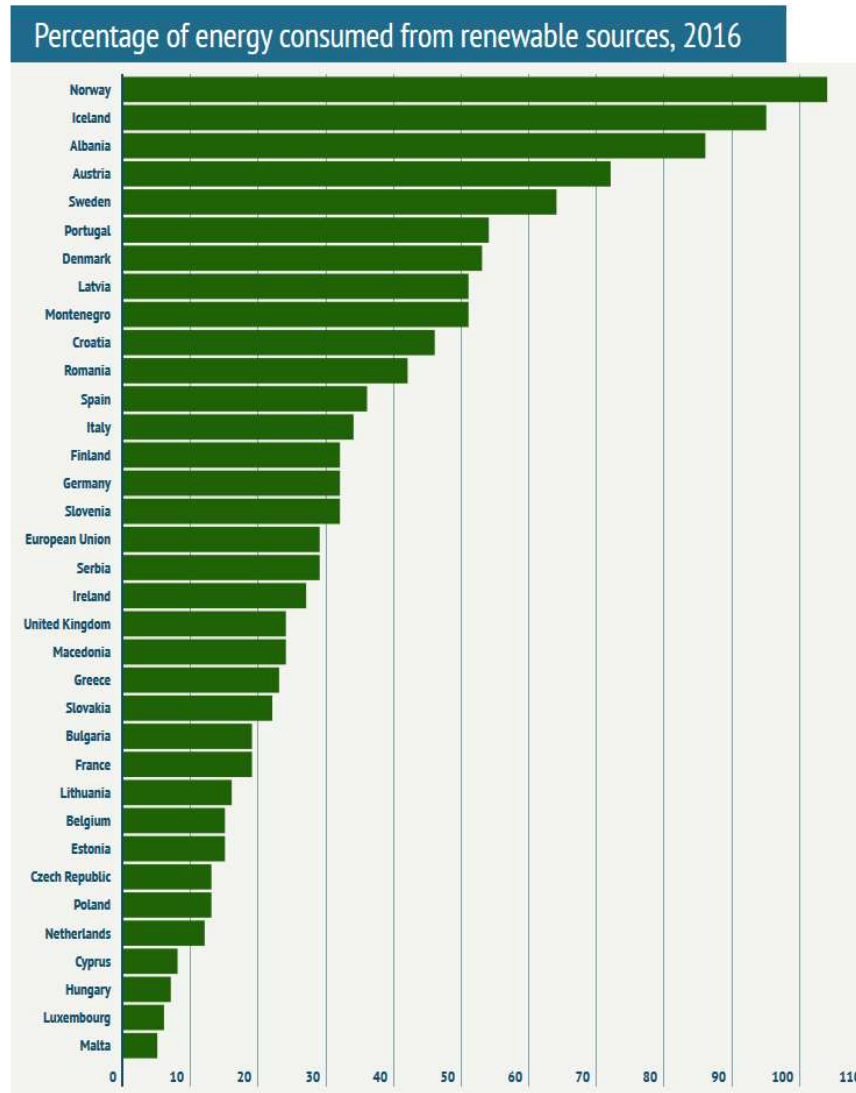


- Due to a high share of renewables and a strong position of natural gas in power generation already today the growth potential remains limited
- International and local climate policies aim at further increasing the share of renewables
- Stronger growth of gas-to-power in the Baltic region would require significant capital investments (e.g. switch from shale oil to natural gas in Estonia)

Source: Central Statistical Bureau of Latvia; ENTSOG; Amber Grid



However, potential for gas-to-power varies across Europe depending on share of renewable and generation mix



- Despite limited short-term growth potential for gas-to-power in the Baltics the region may serve as good example for the efficient combination of renewables and the high flexibility of natural gas in covering short-term demand changes.

Source: Data from Eurostat, 2016

Source: <https://www.euronews.com/2018/09/27/which-european-nations-lead-the-way-with-renewable-energy-euronews-answers>





Thank you!

