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Towards single Natural Gas Market – Case of Latvia

Rota Šņuka, Board Member

ERRA-NARUC Natural Gas Workshop December 7-8, 2017

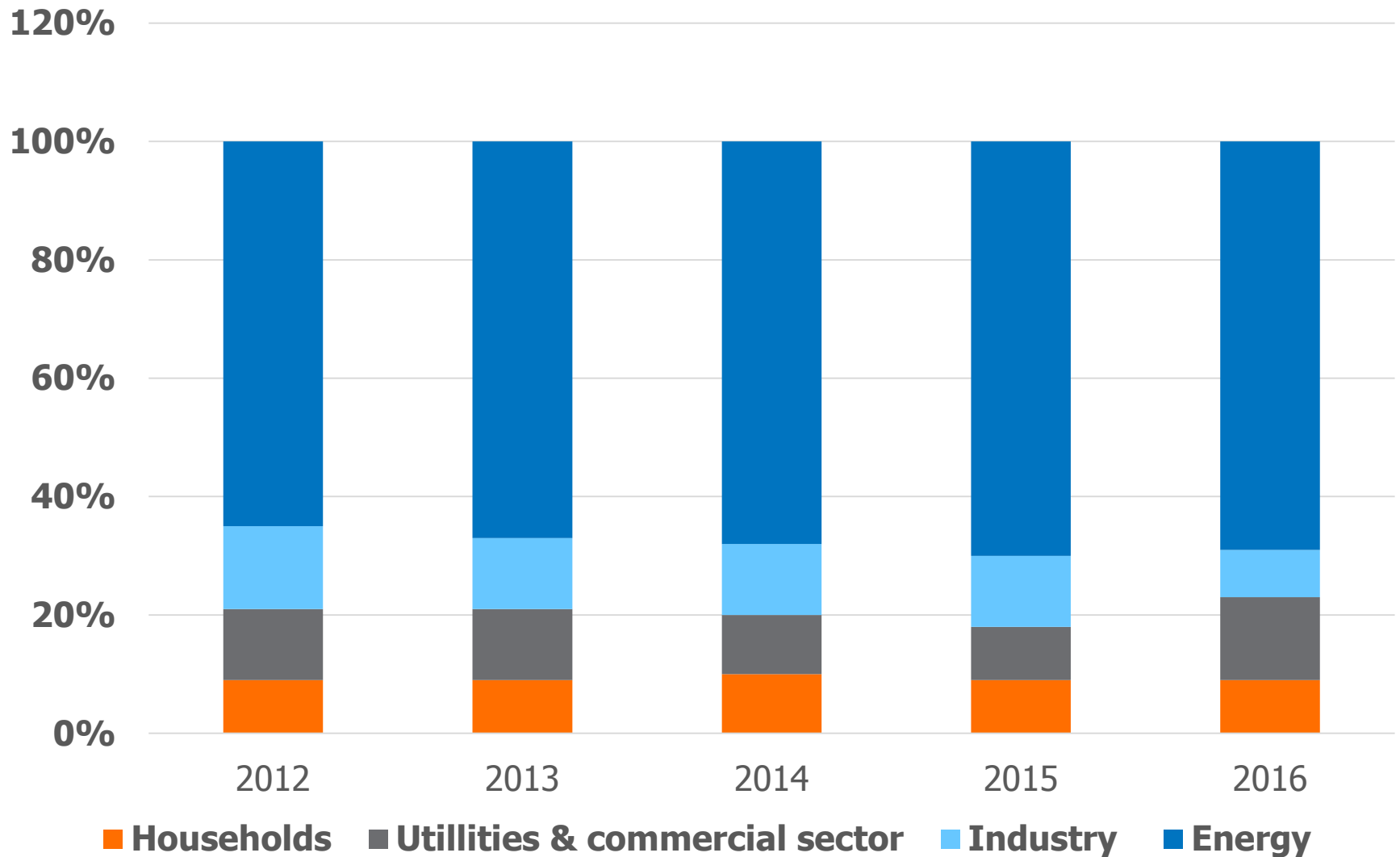


- 1. Description of Latvian gas market**
- 2. Baltic regional gas market**
- 3. Towards Single Baltic-Finnish gas market**

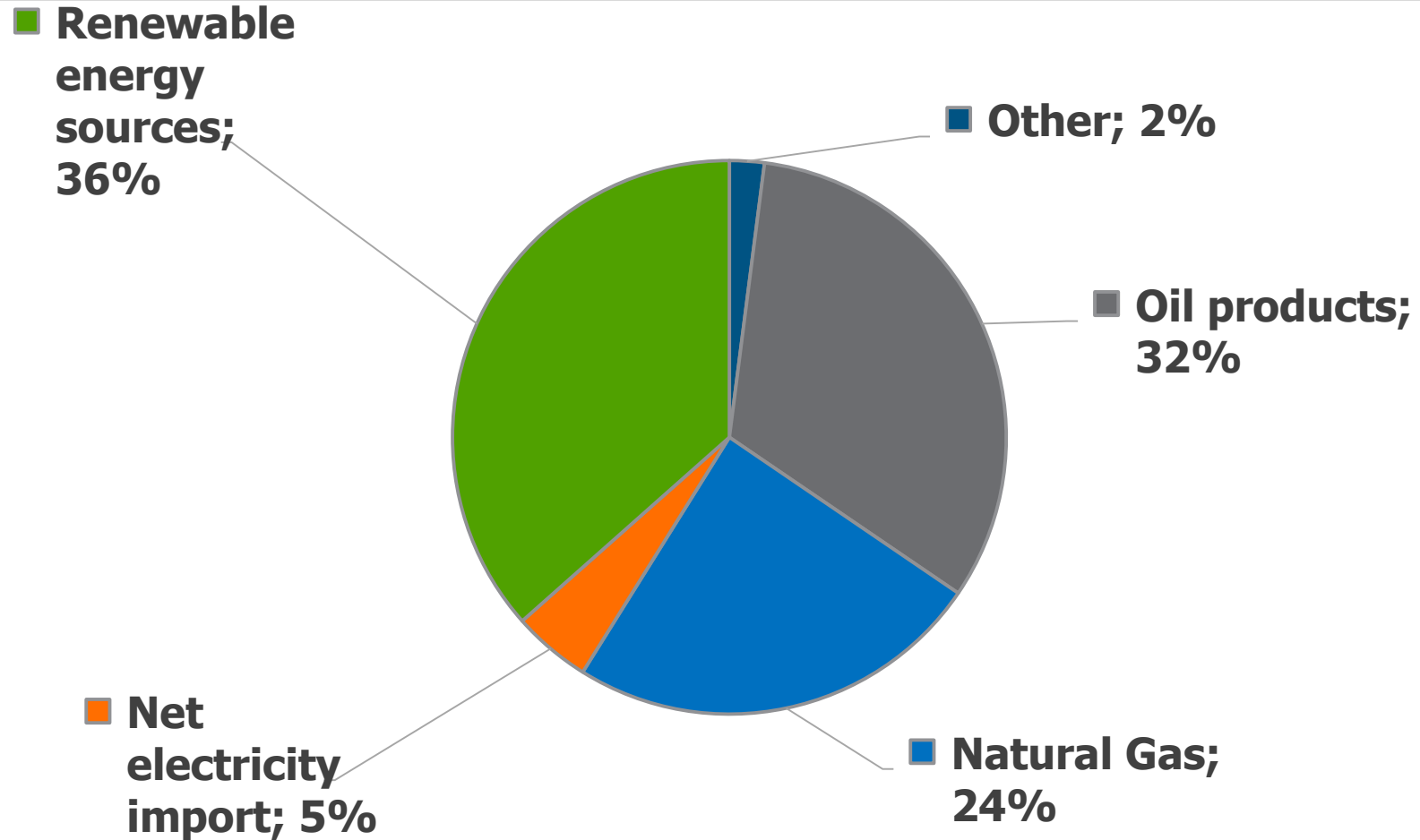


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Natural Gas Consumption by Sector , 2012-2016



Structure of Primary Energy Supply, 2014

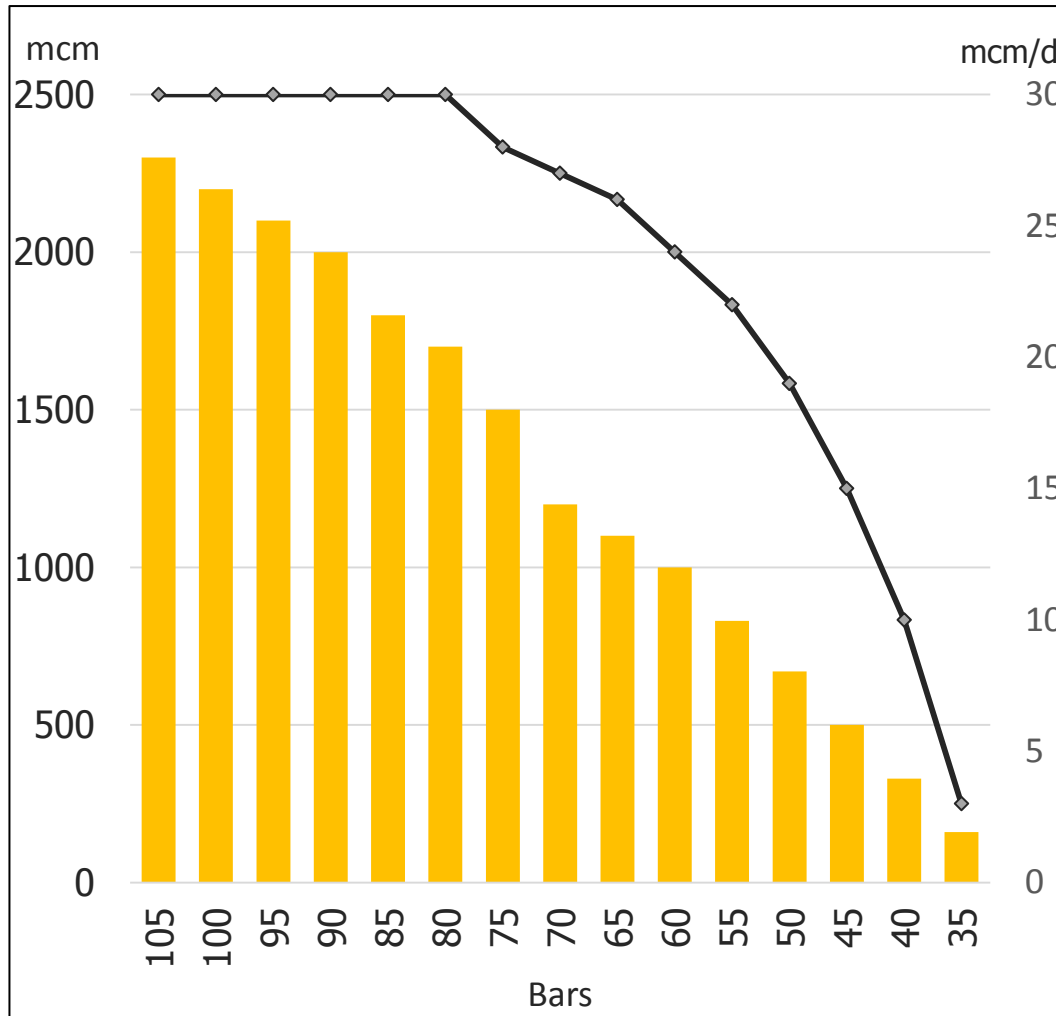


Natural Gas Supply System in Latvia



- ❖ 443 thousand consumers
- ❖ Transmission network – 1198 km, distribution network – 5055 km
- ❖ Two interconnections with Estonia and one with Lithuania
- ❖ No congestions (40% backup capacity)
- ❖ Inčukalns Underground Gas Storage

Gas Extraction from Incukalns Underground Gas Storage



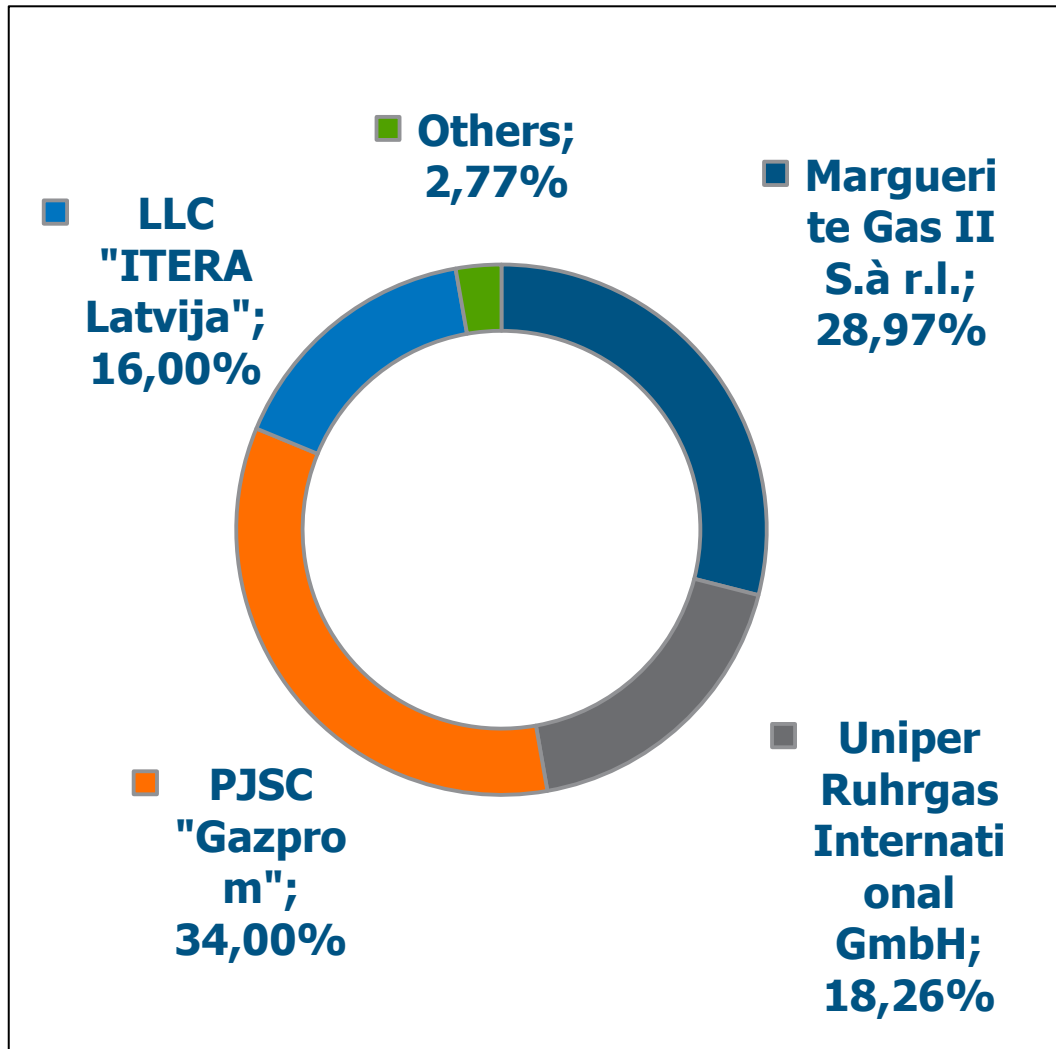
- ❖ Single storage site in the Baltics, aquifer type storage
- ❖ Capacity 4.47 billion m³, of which 2.32 billion m³ active (24219 GWh)
 - ✓ injection 190 GWh/d (max)
 - ✓ withdrawal 295 GWh/d (max)
- ❖ Extraction capacity is dependent on volume of working gas
- ❖ With possible cross border effects.
- ❖ Storage capacity can be increased
- ❖ Long term security

Latvian Gas Market Opening



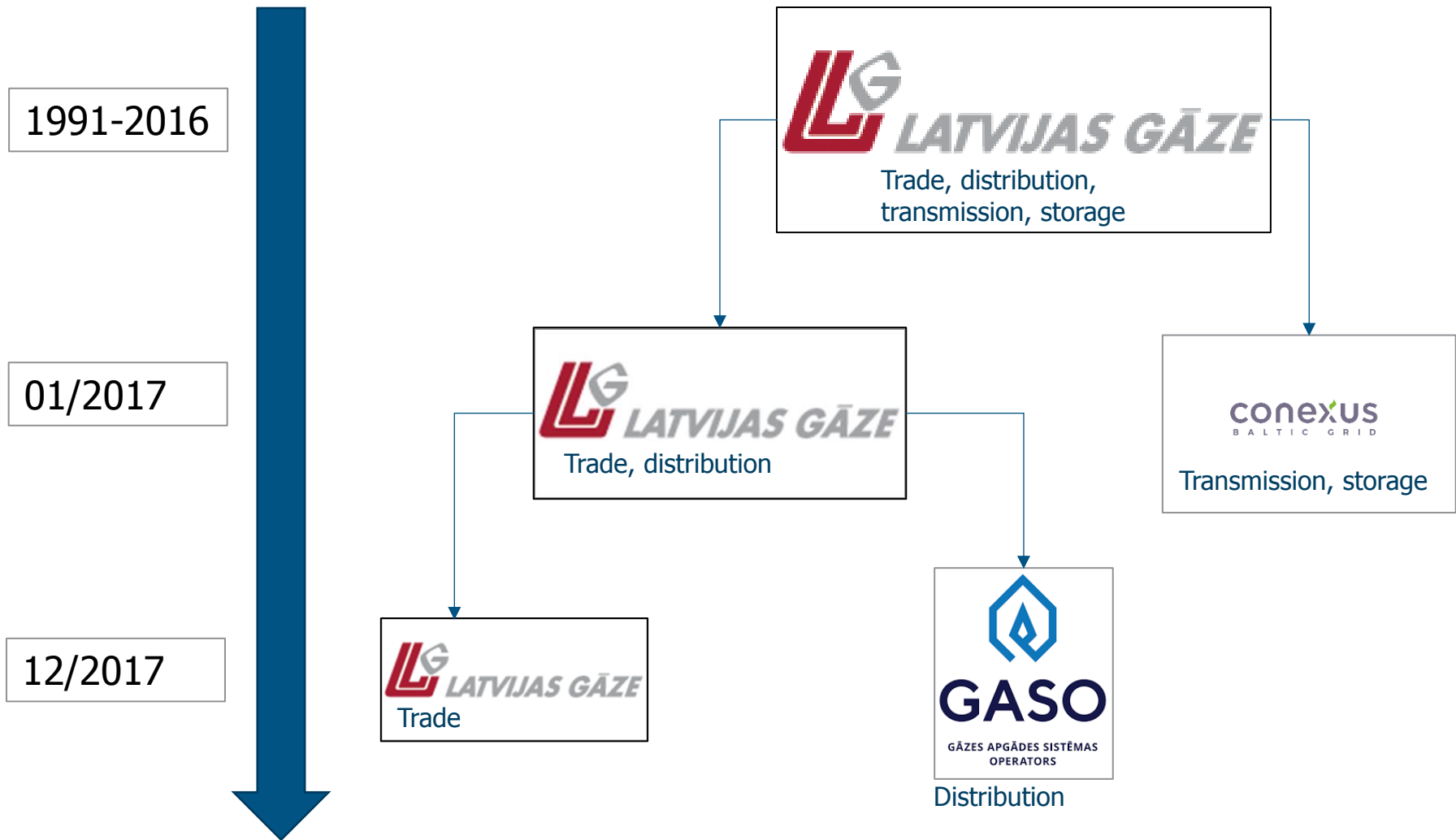
- ❖ Two different derogations from Third Energy Package:
 - ❖ as emergent market until 2014
 - ❖ as isolated market until April 3, 2017
- ❖ April, 2014 - third party access to the Latvia's natural gas transmission and distribution infrastructure
- ❖ April, 2017 - JSC «Latvijas Gaze» is split up into two independent «sister» companies with the same ownership structure (transmission & storage and trade & distribution).
- ❖ April, 2017 - all natural gas users have the right to freely choose a natural gas trader. Regulated prices for households.
- ❖ December, 2017 - 35 registered gas traders.
- ❖ December, 2017 - ownership unbundling of transmission system and storage system operator has to be completed.
- ❖ January, 2018 - unbundling of distribution system operator has to be completed.

JSC Latvijas Gaze Ownership Structure



- ❖ Till the end of 2016 the market in Latvia was dominated by a single vertically integrated incumbent operator: JSC «Latvijas Gaze».

Spin-off of JSC «Latvijas Gāze»



New Transmission System Tariff Methodology

(adopted on November 28, 2016)



Main features:

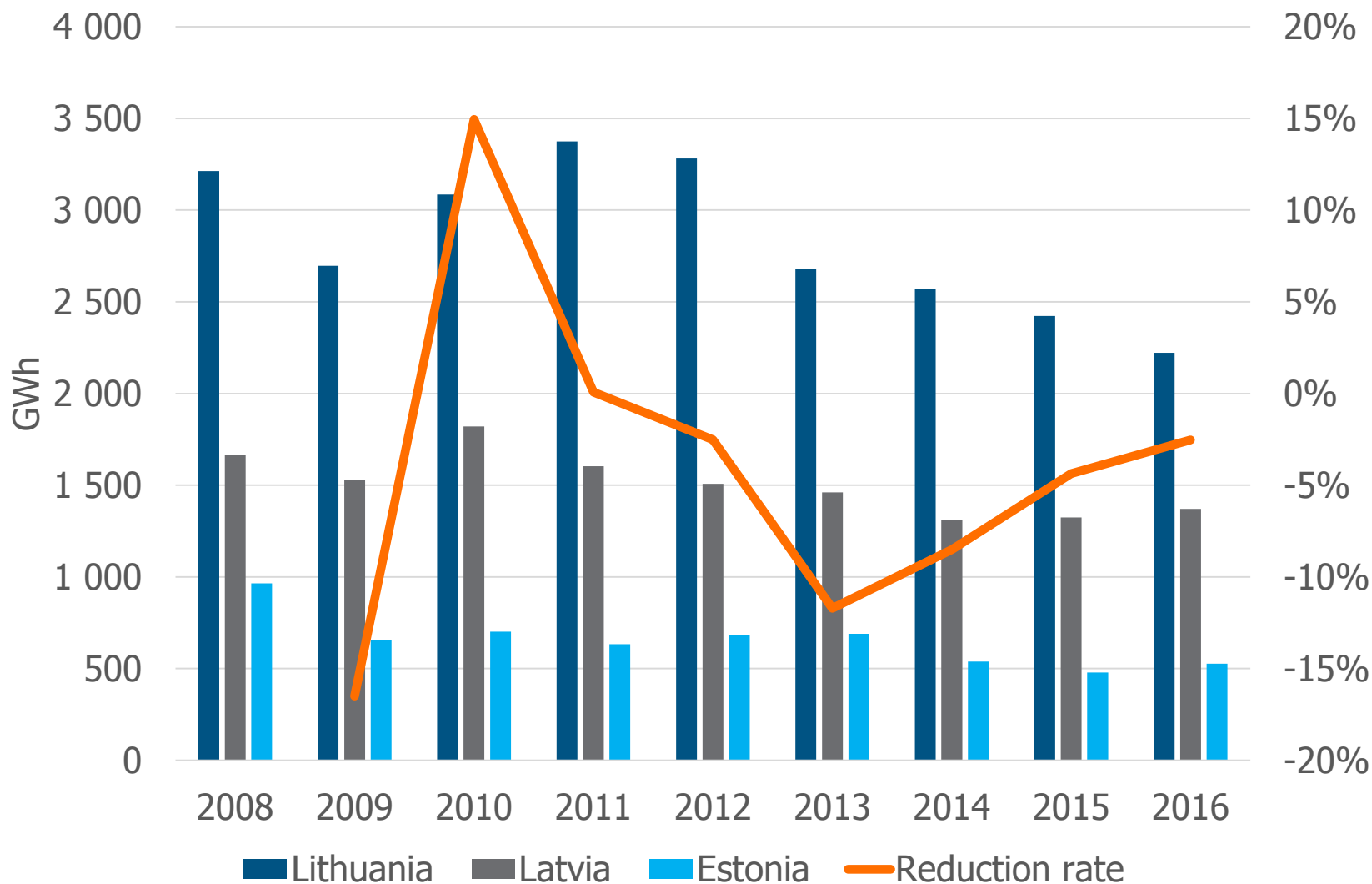
- ❖ Based on TAR NC (Network Code on Harmonized Transmission Tariff Structures on Gas)
- ❖ Shift from m³ to kWh
- ❖ Postage stamp methodology
- ❖ Discounts for storage facility at entry/exit points - 50%
- ❖ Tariff review cycle – one year, first review cycle till April 1, 2019

Result – improved cross border trade between Baltic States



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Natural Gas Consumption in Latvia, Lithuania, Estonia (2008-2016)



Characteristics of Baltic Gas Market



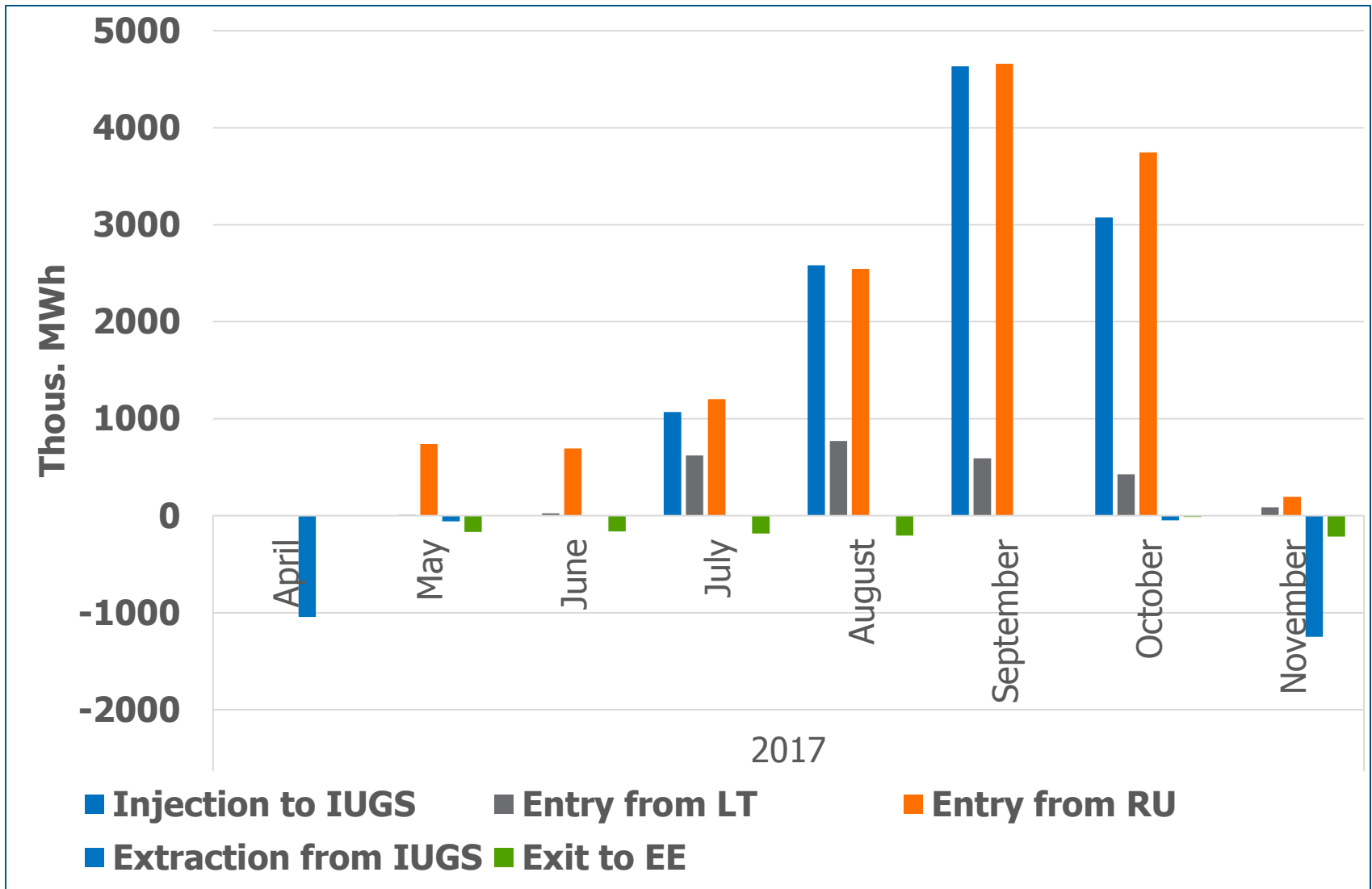
- ❖ Weak growth perspective for natural gas consumption
- ❖ No domestic production (except biogas facilities)
- ❖ Large interconnection capacities with Russia, but newly build LNG entry point in Klaipeda
- ❖ Two new interconnections will be available in the system – Balticconnector (FI-EE) and GIPL (PL-LT).
- ❖ Different existing tariff regimes – Lithuania – Matrix method, Estonia – commodity method, Latvia – Postage stamp method.
- ❖ Unused potential for IUGS and Klaipeda LNG

Specific Gas Facilities in the Region



- ❖ **Inčukalns Underground Gas Storage** - support to regional common gas market.
 - ✓ Gas storage auction was organized to secure gas winter needs for 2017/2018 period.
- ❖ **Klaipeda LNG** - has put an effective cap on Russian gas prices with effect.
 - ❖ Component of security of supply (SOS component) is added to the natural gas transmission tariff. From 1 July 2017 the SOS component is EUR 454.25 per MWh/day/year (excluding VAT).
- ❖ **Klaipeda LNG and IUGS should be seen as wider asset interplay as the markets matures.**

Gas Flows to/from Latvia, 2017



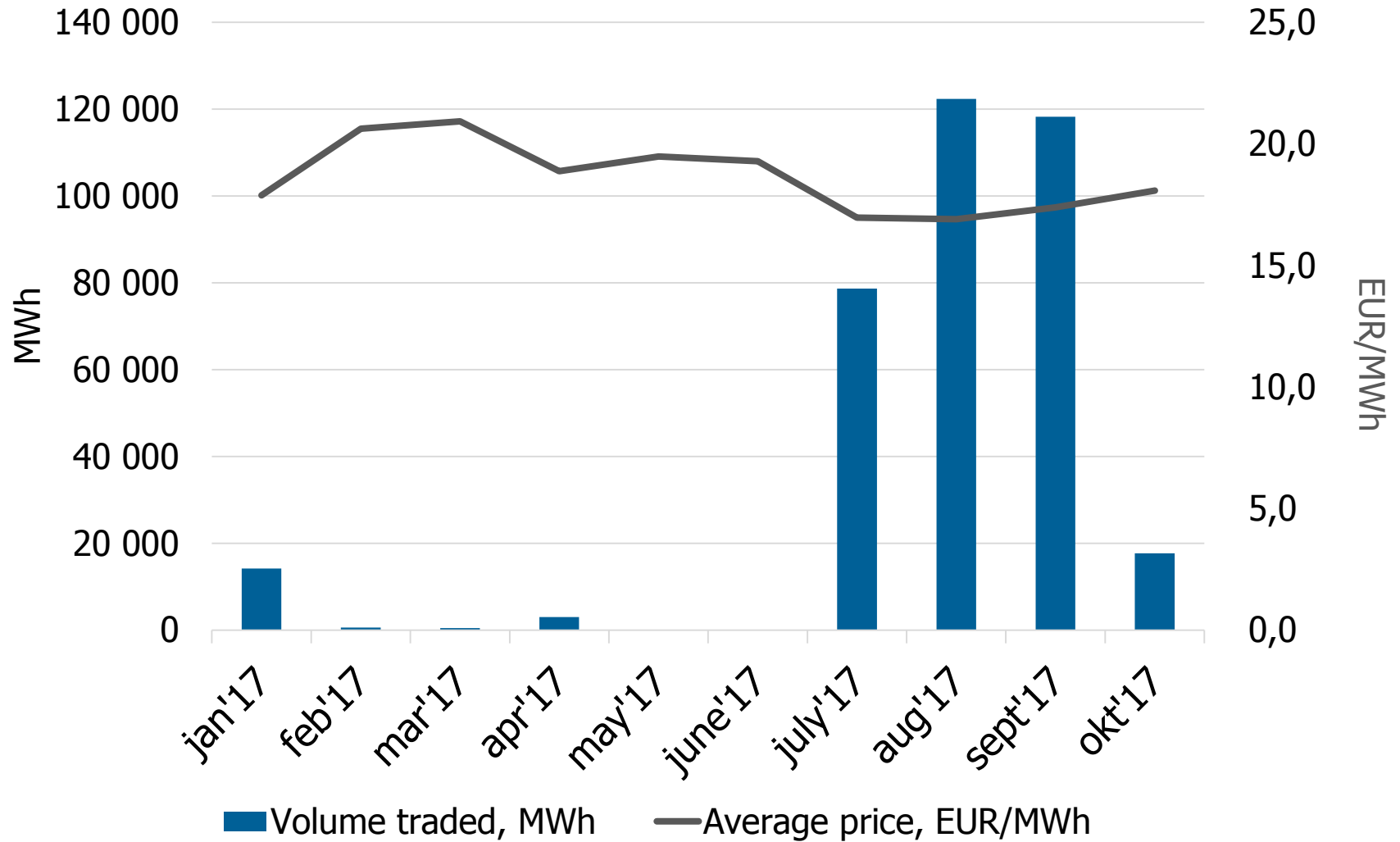


- ❖ Objective – to increase market liquidity, competitiveness, and transparency of the wholesale market of the Baltic States
- ❖ Conducting its operations since 2012, Regional trading platform - from 1 July 2017, the market areas established in Latvia and Estonia
- ❖ Electronic trading system for short-term trading of natural gas products
- ❖ 70 exchange participants, 10 active participants



- ❖ Available capacities at IPs between LT/LV and LV/EE are at a time allocated by GET Baltic to the natural gas volume (a day-ahead product).
- ❖ Every day 90 % of day ahead capacity is reserved for Implicit Capacity Allocation. Capacity is reserved at 10:00 o'clock and after delivery of implicit capacity allocation results, unbooked capacity is released at 14:15.
- ❖ Approved by the NRAs of Baltic States on January 6, 2017.

GET Baltic Traded Volumes





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Common Baltic-Finnish Gas Market Area

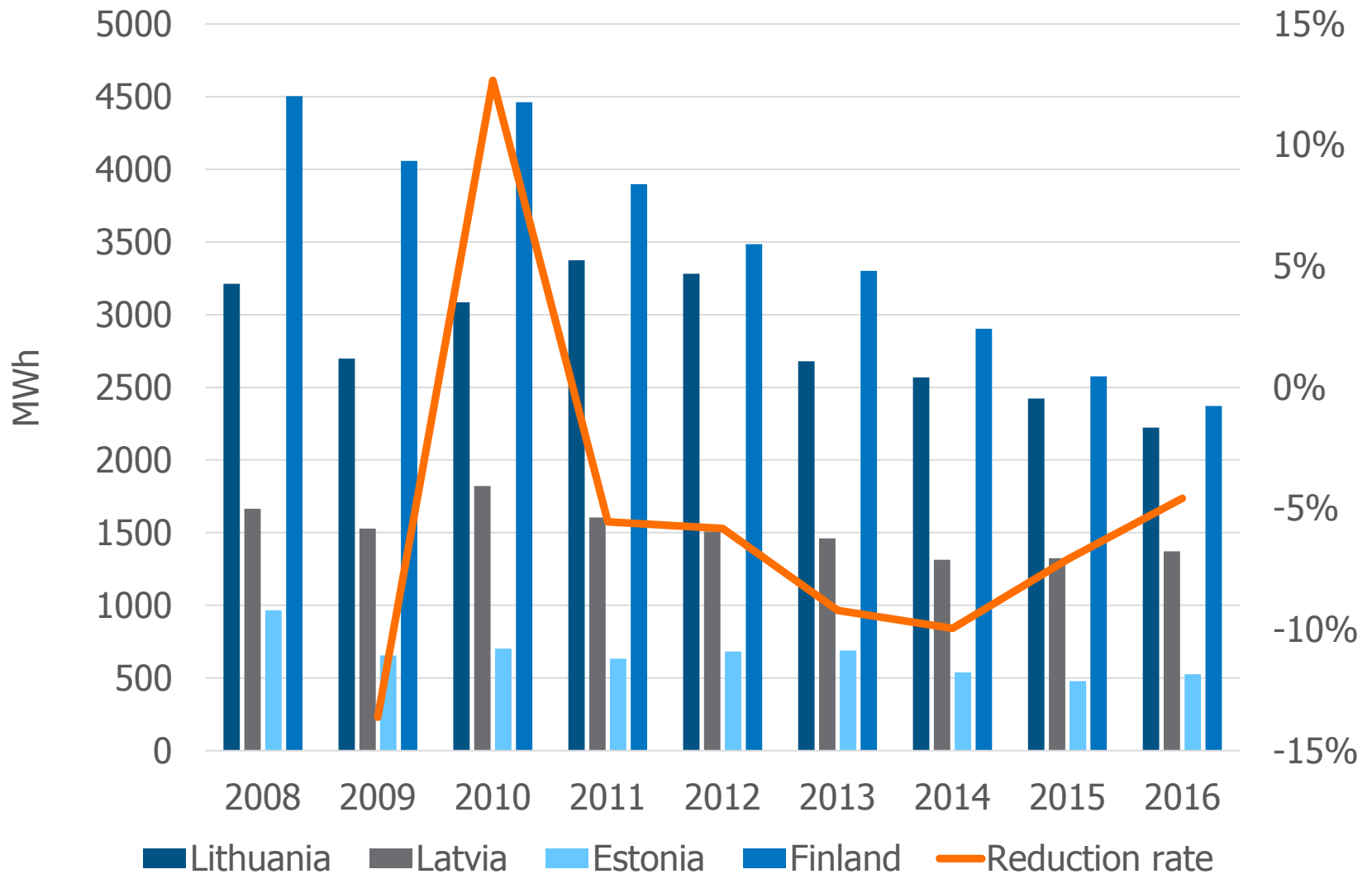


Strategic goals:

- ❖ Facilitation of energy independence
- ❖ Facilitation of diversity of supply sources
- ❖ Security of supply

Estonia, Latvia, Lithuania, Finland – North-Eastern gas supply risk group - shared responsibility for the security of gas supply

Natural gas consumption in Latvia, Lithuania, Estonia, Finland



Infrastructure Development



Interconnection Estonia – Finland, Balticconnector, 2019

Enhancement of EE-LV interconnection, 2019

Enhancement of Inčukalns Underground storage, 2019

Enhancement of LV-LT interconnection, 2020

Poland – Lithuania interconnection GIPL, 2021

Source: COMMISSION DELEGATED REGULATION (EU) of 23.11.2017 amending Regulation (EU) No 347/2013 of the European Parliament and of the Council as regards the Union list of projects of common interest



The main tasks:

- ❖ Determination of annual total allowed revenue for each TSO,
 - ✓ Based on national methodologies, determined by 30 September of each following year
 - ❖ Allocation of annual total allowed revenue to system users' charges on fair and non-discriminatory way
 - ✓ Capacity product tariffs on entry points must be based on 50% recovery of revenue related to primary (cross-border) network. The remaining part of revenue including applied discounts recovered from domestic exit tariffs;
 - ✓ Within the region entry - exit points with tariffs **0 EUR/MWh/day**;
 - ✓ Exit tariffs for domestic points must be calculated by each NRA in accordance with national methodology
 - ❖ Establishment of ITC mechanism will be designed by TSOs and agreed with relevant NRAs.
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Study - Technical assistance to pricing model for the natural gas entry-exit system for the common Baltic-Finnish market

- ❖ **Objective** – to identify the best approach for reference price methodology - Postage Stamp, Capacity Weighted Distance and Matrix.
 - ❖ **Desirable features of tariff methodology**
 - ✓ Economic efficiency
 - ✓ Competition, wholesale prices
 - ✓ Consumer welfare in short-run and long-run
 - ✓ Simplicity, avoidance of significant transfers between national TSOs
 - ✓ Impact on electricity sector
 - ✓ Security of Supply
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- ❖ Agreement on particular methodology
- ❖ Usage of IUGS and Klaipeda LNG potential
- ❖ subsequent treatment of Kaliningrad transit (LT) and Misso IP (EE)
- ❖ TSO compensation mechanism
- ❖ Congestion management on internal borders



Thank you!

