

Regulatory updates related to the Polish gas market

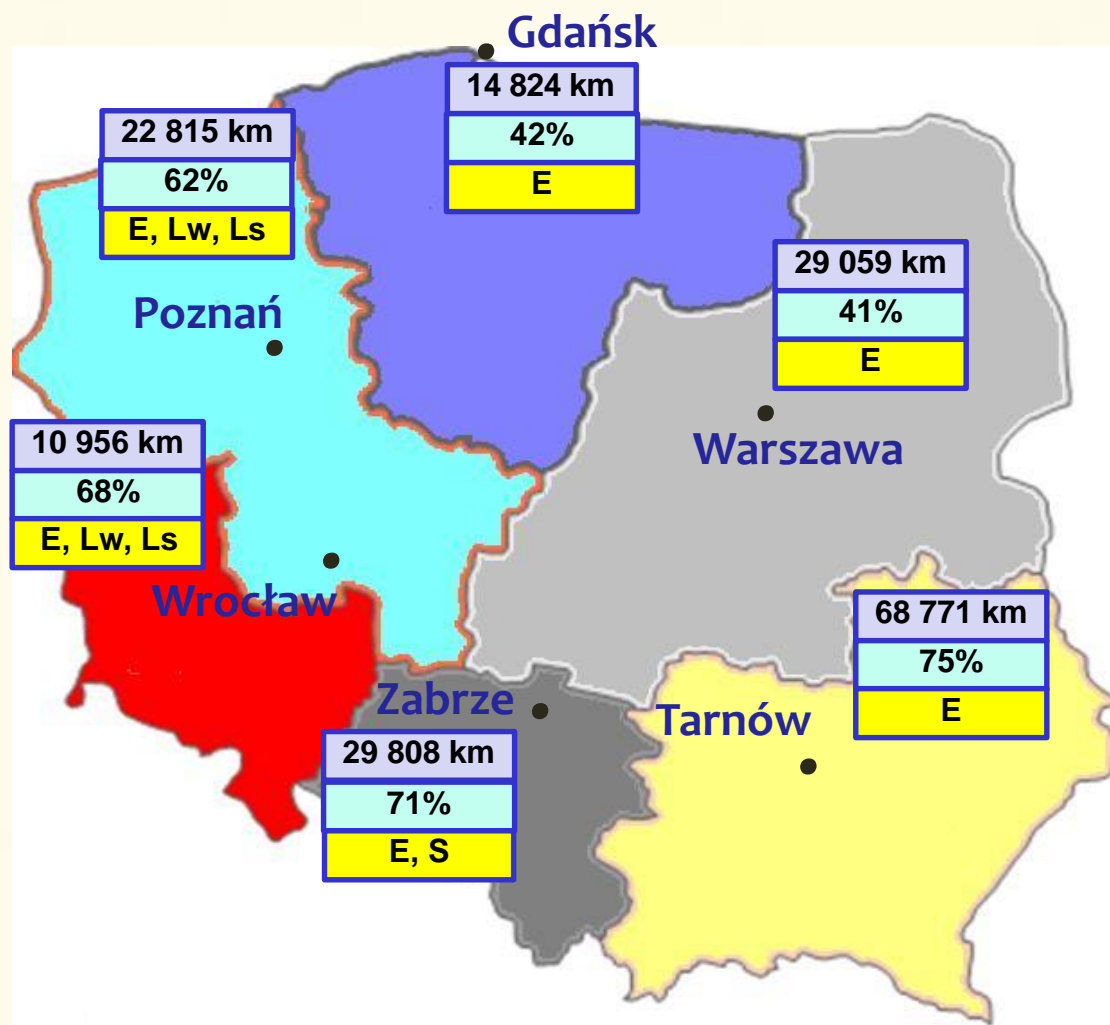
Jacek Loret, Director
Department of Gaseous and Liquid Fuels Markets

Polish Gas Market – general picture (1)

Main actors:

- 1 TSO – Gaz-System (certified);
- SSO – Operator Systemu Magazynowania (2,8 bcm storage capacity);
- 6,9 mln end users (6,6 mln households), 16 bcm consumption (65% industry);
- 172 licences for trading: - main shipper – PGNiG, main retailer – PGNiG Obrót Detaliczny (shares in retail market - 80%);
- 53 DSO;

Distribution System Operators



Polska Spółka Gazownictwa Sp. z o.o.

- the biggest entity fulfilling the function of DSO,
- established by consolidation of 6 regional DSOs belonging to the PGNiG.

- Offices of PSG Sp. z o.o.

19 600 km	Length of network without connections
45%	Gasification level
E, Lw, Ls	Groups of distributed gases

More than 50 companies conduct activity in gas distribution, among the biggest ones the following can be listed:

- G.EN Gaz - with networks of length 2713 km, located in several municipalities,
- EWE energia - with networks of length 1644 km, located in about 30 municipalities.

Polish Gas Market – general picture (2)

Introduction of energy units in Poland was facilitated by EU environment

Grid code amendments (from 1 July 2012):

The quantities of gaseous fuel in the nominations and re-nominations and the imbalance value shall be specified in **kWh**

The definition of the gas day: „A period from **6 am** on the current day **to 6am** on the following day”

Amendment of the Regulation of the Minister of Economy of 28 August 2012 on conditions of gas system functioning:

Definition of **Virtual Trading Point** was introduced that allowed unrestricted trade in gas. Also grid code amendments introduced Virtual Trading Point from 1 January 2013 for concluding transactions on the balancing market

Tariff regulation (amendment - 2013):

the Regulation of the Minister of Economy of 28 June 2013 on the specific rules for setting and calculating tariffs introduced obligation of settlements in energy units :

M – capacity [**kWh/h**], **Q** – quantity of gaseous fuels [**kWh**]

fees from 2013: in energy units, in the entry-exit mode, also for reverse flow services, short-term services, interruptible services

Allocation – CAM NC:

- Auctions organised on Gaz-System Allocation Platform in line with ENSTOG calendar
- Pilot project planned for IP with UA
- Some challenges at PL-DE border (joint platform, competing capacity)

Balancing – BAL NC:

- For operational balancing TSO uses mainly trading platform (Polish gas exchange – TGE)
- Balancing neutrality cash flows
- Information provision – base case
- Interim measures – balancing platform and tolerance (5%)

Congestion management procedures – CMP NC:

- Oversubscription and buy-back
- Long term use it or loose it
- Capacity surrender

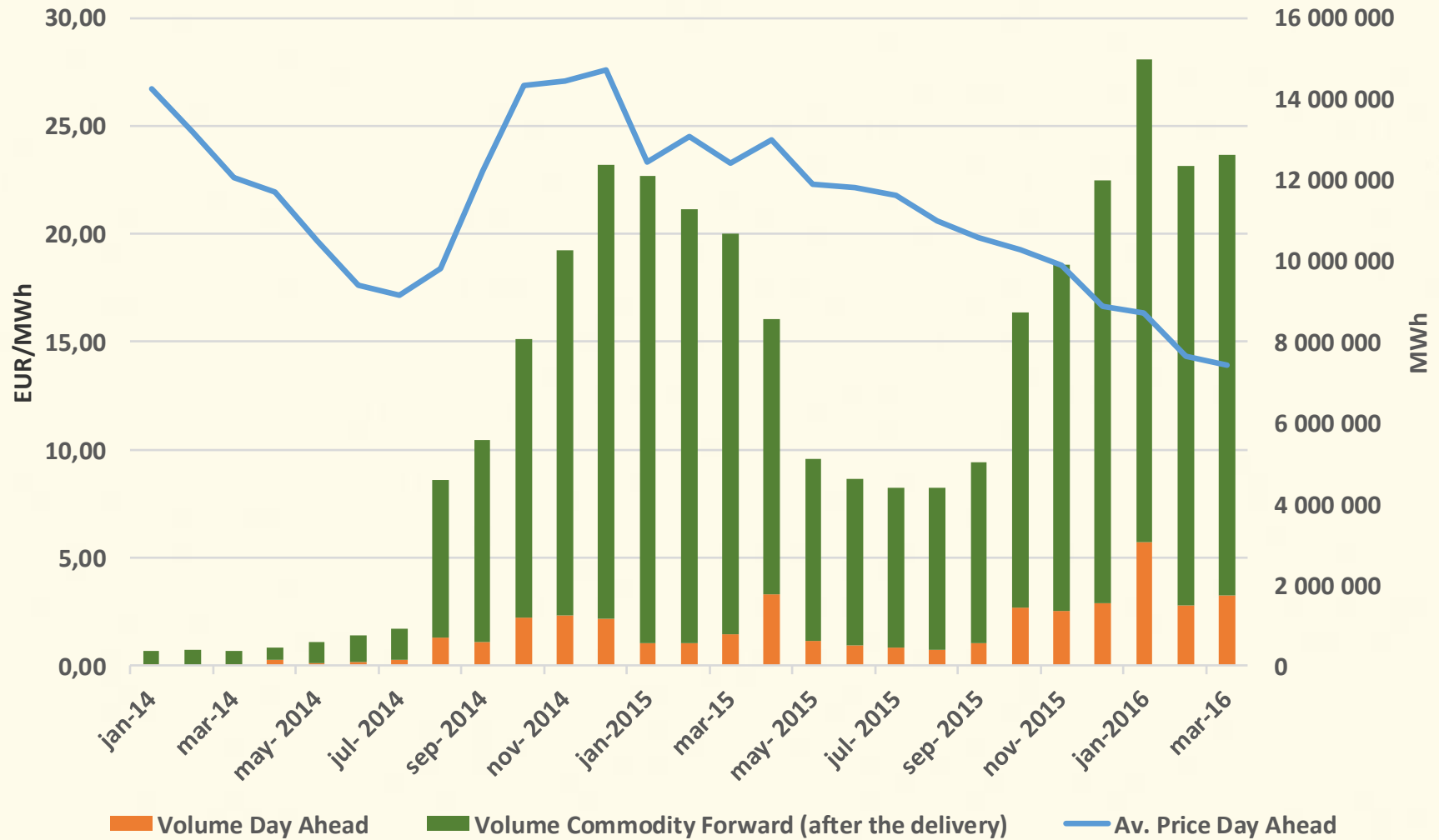
Polish Gas Market – general picture (3)

Basic data for Poland in 2015

Consumption	– 169,4 TWh
National production	– 43,5 TWh
Import quantity	– 122,7 TWh
– from the East	– 89,3 TWh
– from the EU	– 33,4 TWh
Export quantity (to countries outside the EU)	– 1,6 TWh
Transit quantity (Yamal's pipeline)	– 329,0 TWh



Polish Gas Exchange



<http://www.tge.pl/>

Transmission system in Poland




Planned, ongoing and recently launched investments in diversification projects

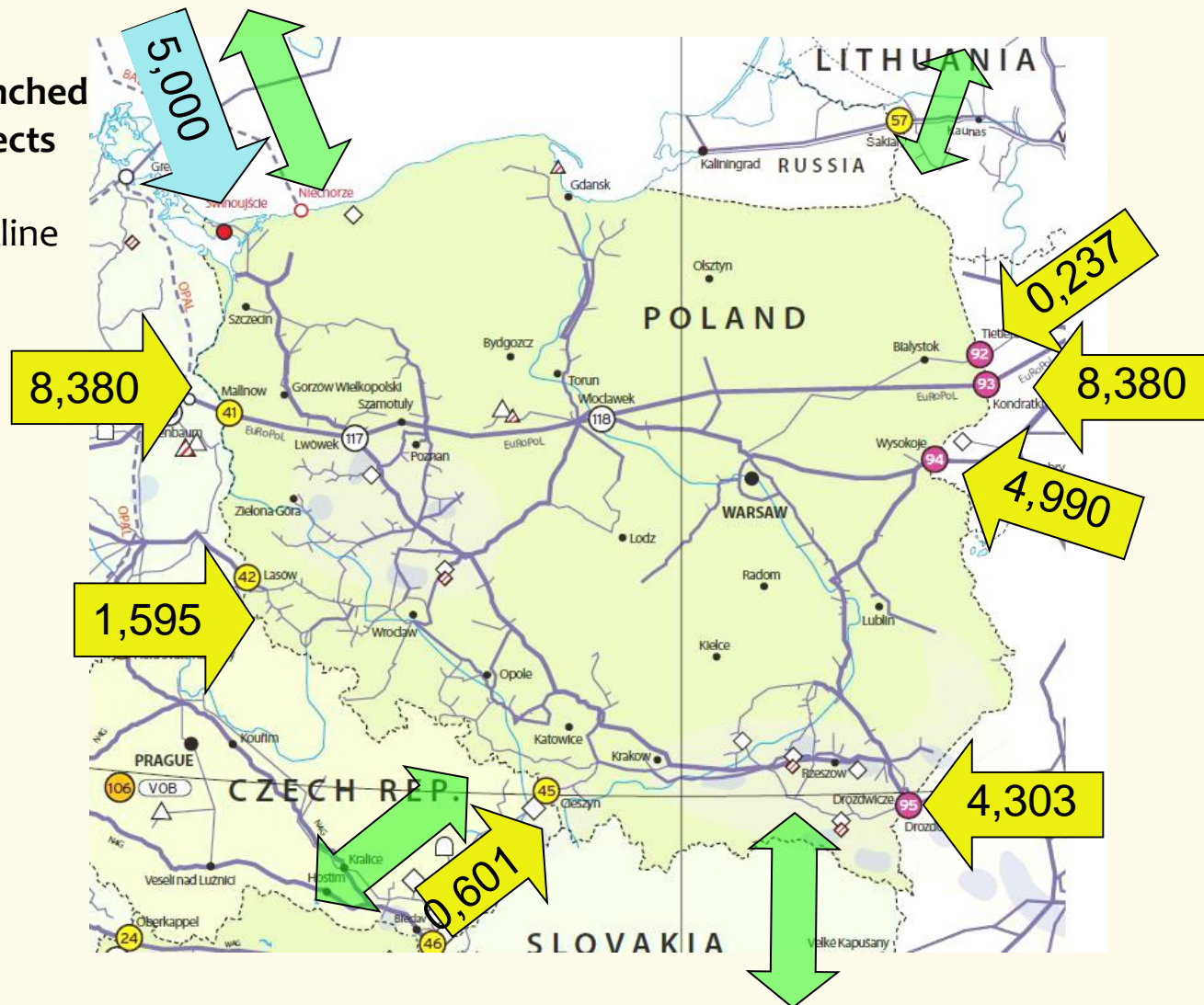
Physical reverse flow on Jamal pipeline
LNG terminal with its possible development

Baltic Pipe

Connections with Lithuania, Czech Republic and Slovakia

Capacity [bcm/year]

-  existing
-  ongoing
-  planned



LNG Terminal in Poland

The investment of Poland's first liquefied natural gas terminal at Świnoujście in the north-west of the country was accomplished.

The LNG Terminal is an import – regasification terminal, operated by Polskie LNG company.

Current technical characteristics of the facility include:

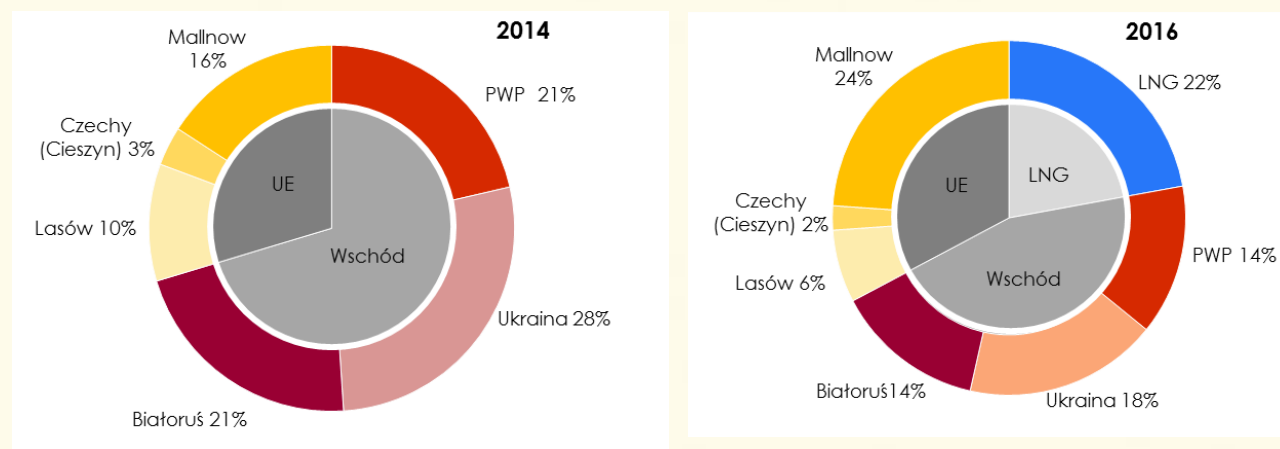
- *a single unloading platform (jetty) allowing to unload LNG carriers of 120.000m³ to 216.000 m³ LNG capacity,*
- *two LNG storage tanks of 160.000 m³ net usable capacity each,*
- ***regasification capacity of 5 billion Nm³ of natural gas per annum***

*In the first period of operations, the LNG terminal will **receive 5 bcm** of natural gas per year. Subsequently, depending on the demand for this type of fuel, the re-gasification capacity may be **increased to 7.5 billion cubic meters**, with no need to expand the Terminal's technical area.*

First gas supplies for technological purposes were accomplished in December 2015 and commercial use is planned from June 2016

Diversification of directions and sources of supply

Degree of diversification in the years 2014 and 2016



Source: Ten-Year Network Development Plan of the Polish TSO - OGP Gaz-System SA - for the years 2016 - 2025

**Thank you for your
attention**

