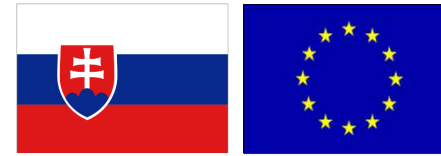




WOC 3 Transport - Triennium 2012 – 2015
March 25 – 27, 2013 Bratislava

Gas business in Slovakia

COUNTRY PROFILE



Area (km²): 49,035

Population: 5,379,000

Capital: Bratislava

Member of OECD, WTO, NATO, EU
Shengen area, Eurozone (2009)



Strategic location with great
export potential

European Gas Transmission Networks

1970

Plynárenské siete/LNG terminály

- plynárenské siete
- 🚢 LNG terminály



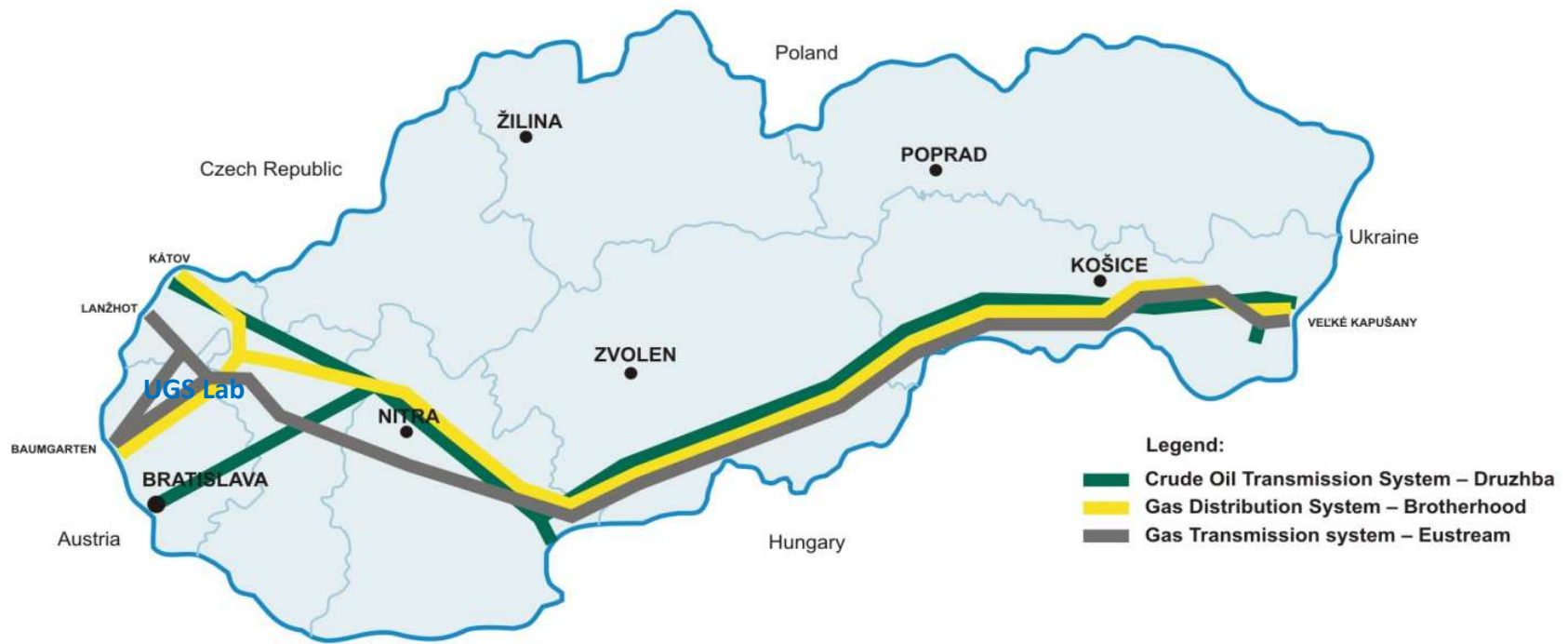
European Gas Transmission Networks

2012

Plynárenské siete/LNG terminály

- existujúce
- ⋯ vo výstavbe
- ⋯ plánované





Central European Gas – Oil Transmission Corridor

SLOVAK INTERNATIONAL GAS TRANSPORT STORY: 1972 - 2013

How to achieve Reliability?

Trust

Build on one solution,
which is 100% reliable



Diversify

Build on many solutions,
which are somehow reliable



SLOVAK INTERNATIONAL GAS TRANSPORT STORY: 1972 - 2013

Europe's Gas Supply from the East before 1997



- Before 1997 Europe's Gas Supply from the East went virtually completely through Slovakia

Trust
Build on one solution ...

SLOVAK INTERNATIONAL GAS TRANSPORT STORY: 1972 - 2013

Europe's Gas Supply from the East – backed by storages



- Before 1997 Europe's Gas Supply from the East went virtually completely through Slovakia
- **Handover of the gas to Western Europe was backed by storages in CZ and SK**



SLOVAK INTERNATIONAL GAS TRANSPORT STORY: 1972 - 2013

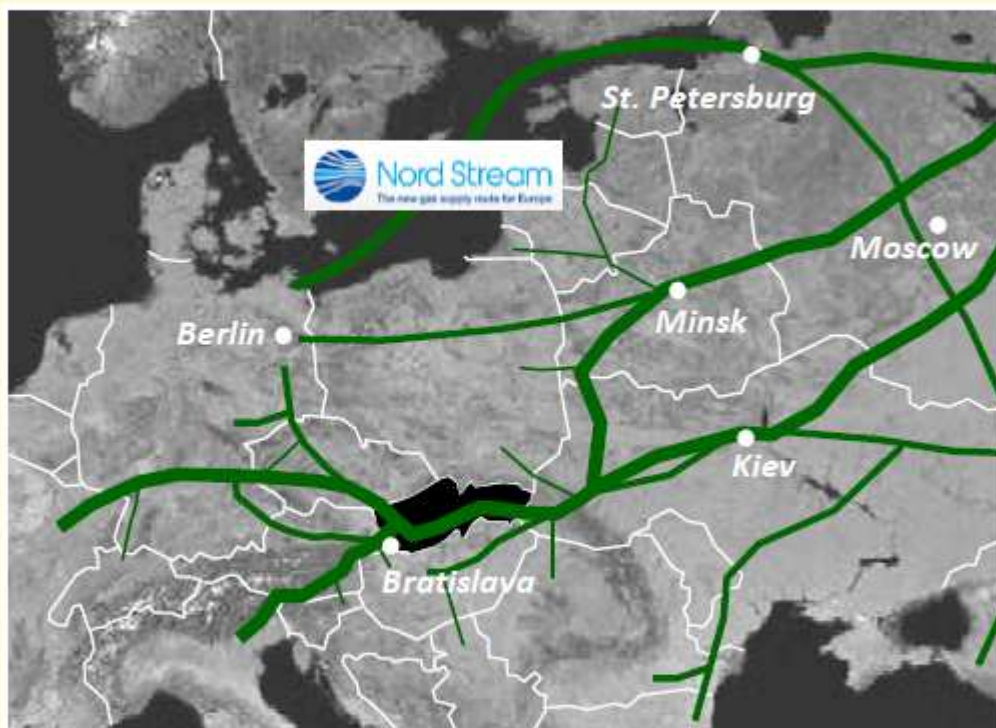
In 1997 Yamal started operation



- Before 1997 Europe's Gas Supply from the East went virtually completely through Slovakia
- Handover of the gas to Western Europe was backed by storages in Cz and SK
- In 1997 the world started to change with Yamal (EuRoPol GAZ)

SLOVAK INTERNATIONAL GAS TRANSPORT STORY: 1972 - 2013

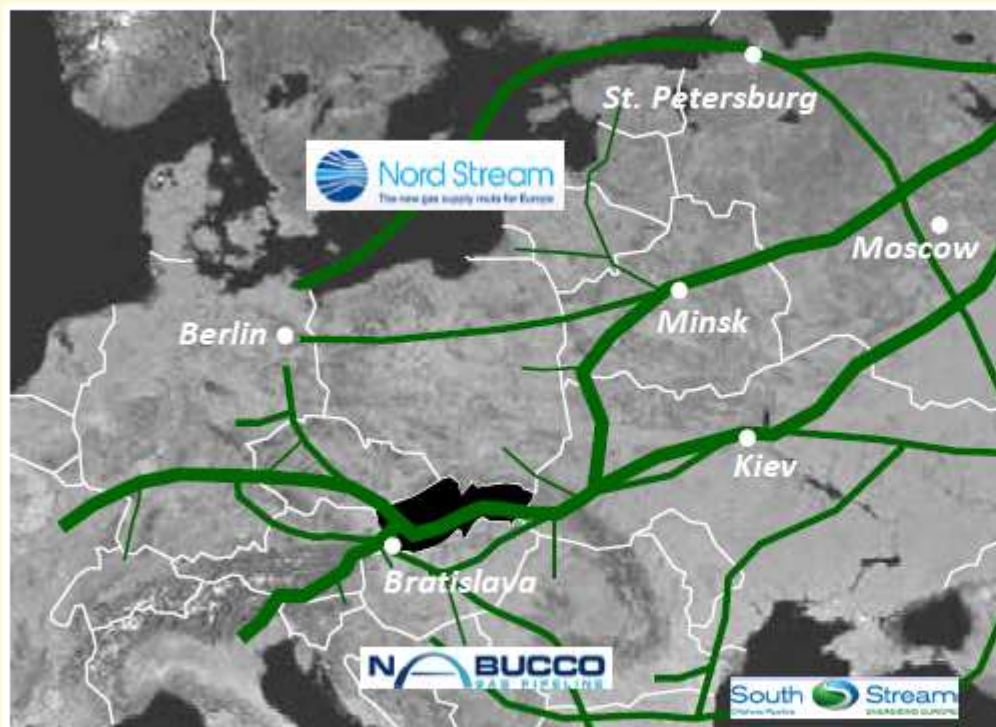
In 2011/2012 Nord Stream started operation



- Before 1997 Europe's Gas Supply from the East went virtually completely through Slovakia
- Handover of the gas to Western Europe was backed by storages in Cz and SK
- In 1997 the world started to change with Yamal (EuRoPol GAZ)
- In 2011/2012 Nord Stream 1 and 2 started operation

SLOVAK INTERNATIONAL GAS TRANSPORT STORY: 1972 - 2013

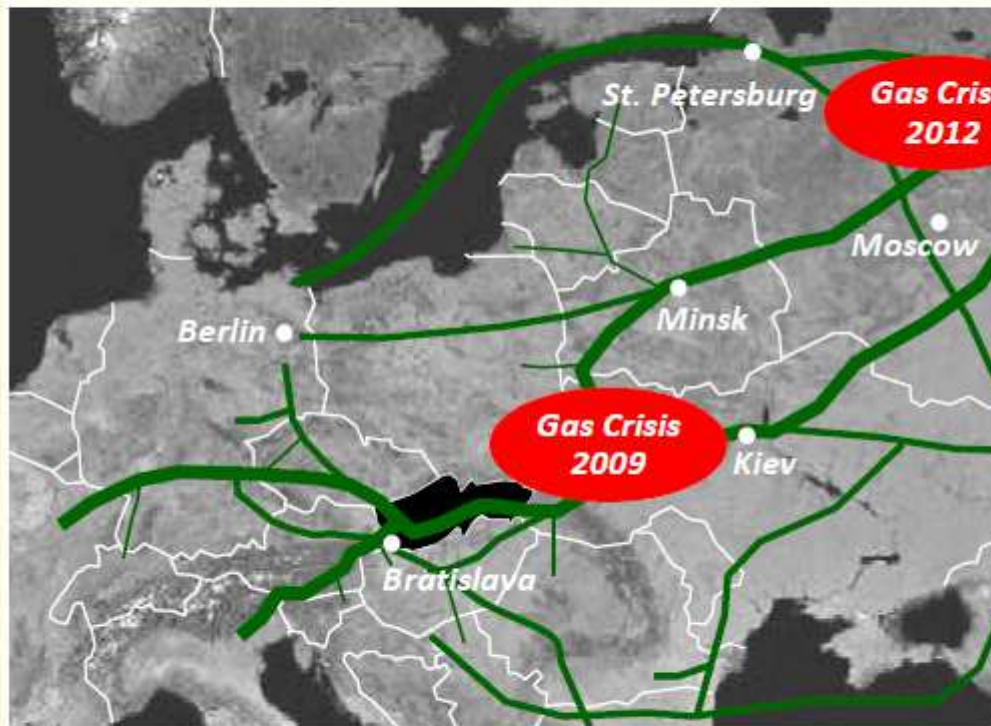
Further pipeline projects are announced



- Before 1997 Europe's Gas Supply from the East went virtually completely through Slovakia
- Handover of the gas to Western Europe was backed by storages in Cz and SK
- In 1997 the world started to change with Yamal (EuRoPol GAZ)
- In 2011/2012 Nord Stream 1 and 2 started operation
- **Further projects are announced:**
 - Nord Stream 3 and 4
 - South Stream
 - Nabucco
 - TAP

SLOVAK INTERNATIONAL GAS TRANSPORT STORY: 1972 - 2013

Nevertheless gas supply became less reliable

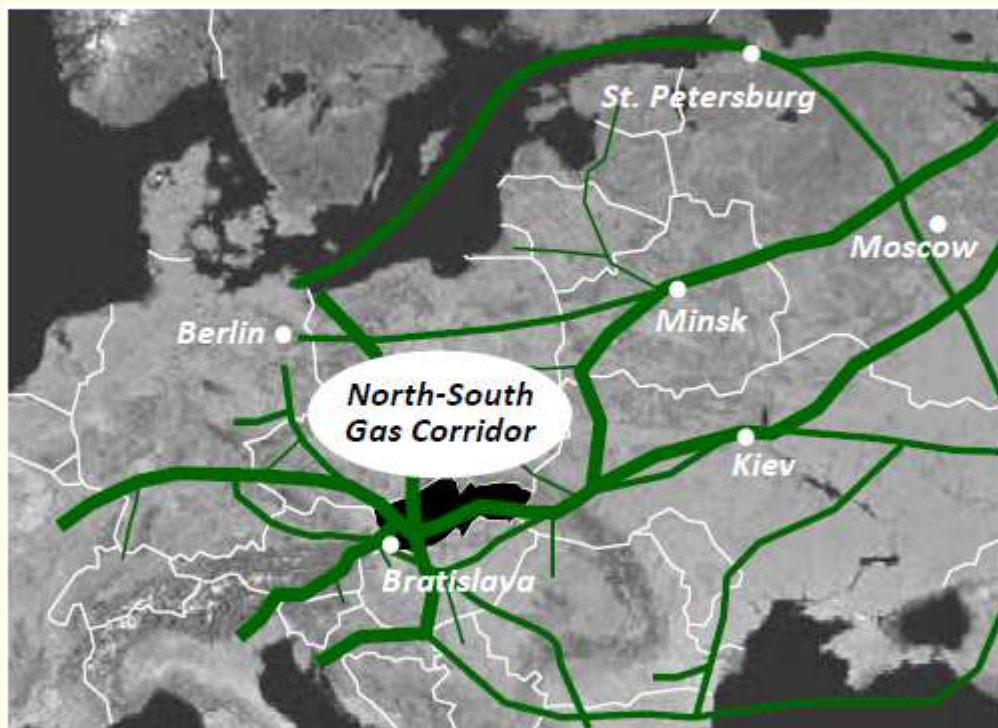


- Before 1997 Europe's Gas Supply from the East went virtually completely through Slovakia
- Handover of the gas to Western Europe was backed by storages in Cz and SK
- In 1997 the world started to change with Yamal (EuRoPol GAZ)
- In 2011/2012 Nord Stream 1 and 2 started operation
- Further projects are announced:
 - Nord Stream 3 and 4
 - South Stream
 - Nabucco
 - TAP

In 2009 and 2012 backing of Nafta was the essential pillar of regional supply

STORY: SLOVAK INTERNATIONAL GAS TRANSPORT 1972 - 2013

The North-South Corridor can form a buss-bar



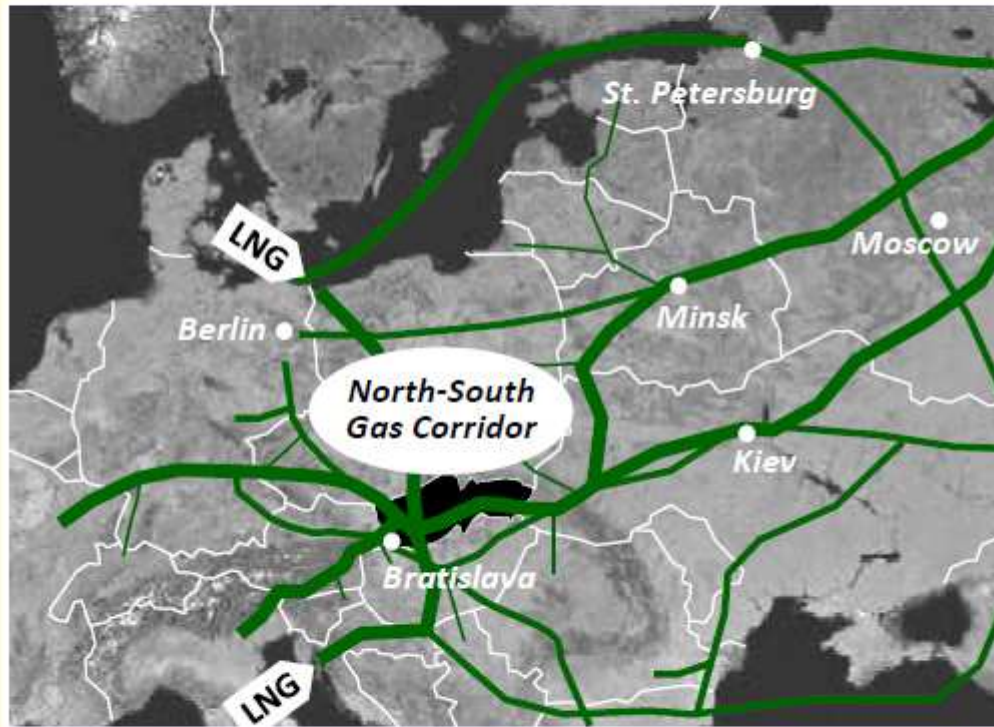
- The North-South Gas Corridor can form a buss-bar for the gas supply from the east

Diversify

Build on many solutions ...

SLOVAK INTERNATIONAL GAS TRANSPORT STORY: 1972 - 2013

Diversify by the North-South Corridor plus LNG



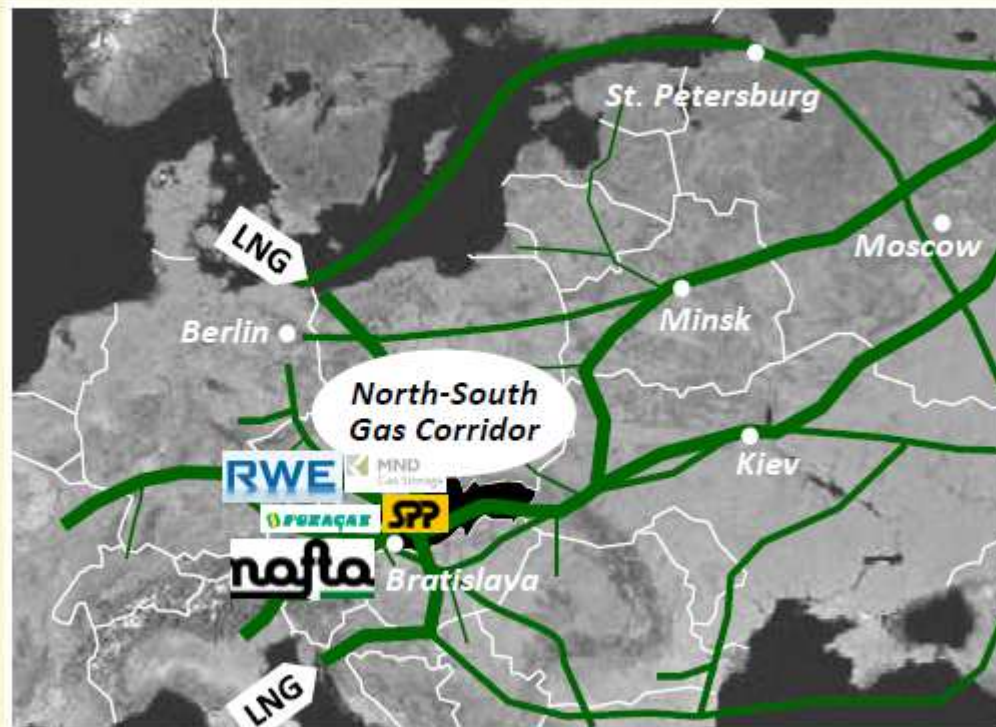
- The North-South Gas Corridor can form a buss-bar for the gas supply from the east
- **Backed by LNG**

Diversify

Build on even more solutions ...

SLOVAK INTERNATIONAL GAS TRANSPORT STORY: 1972 - 2013

The North-South Gas Corridor can be backed by existing storages

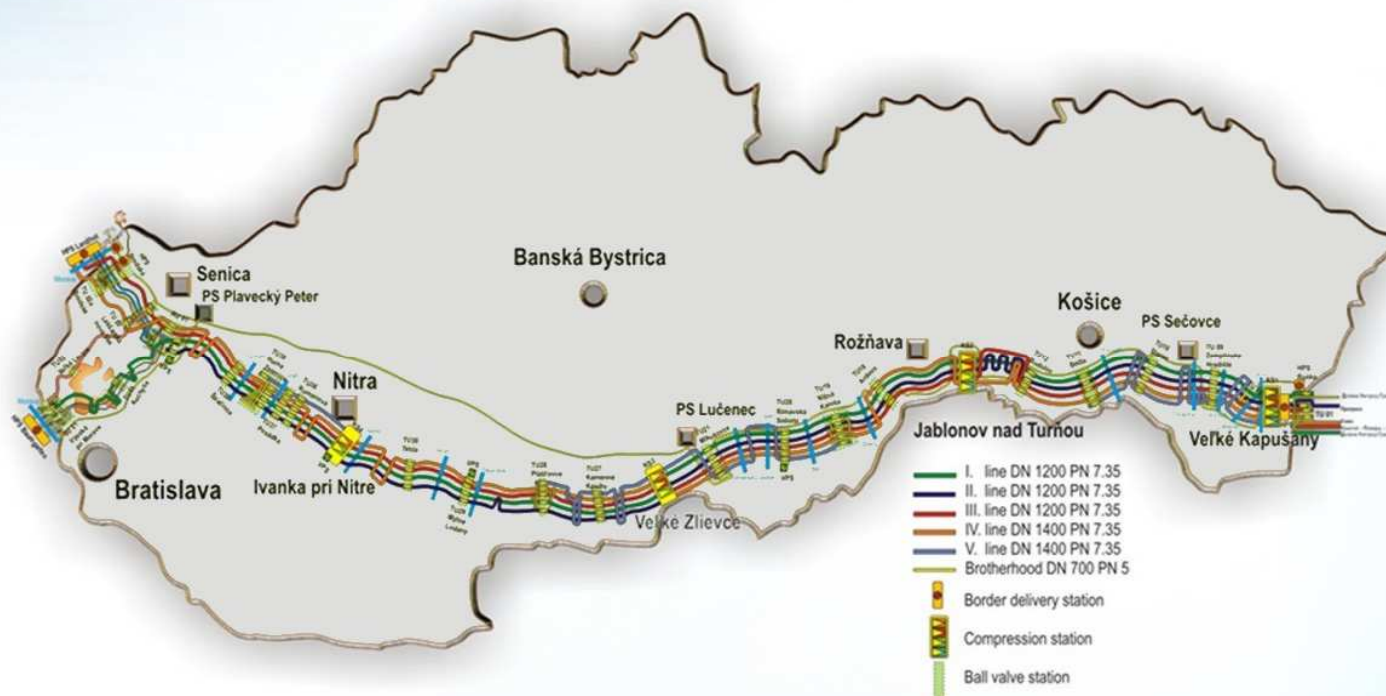


- The North-South Gas Corridor can form a buss-bar for the gas supply from the east
- Backed by LNG
- **And backed by the existing storages**

... back with a solution
you can trust

Diversify
Build on many solutions ...

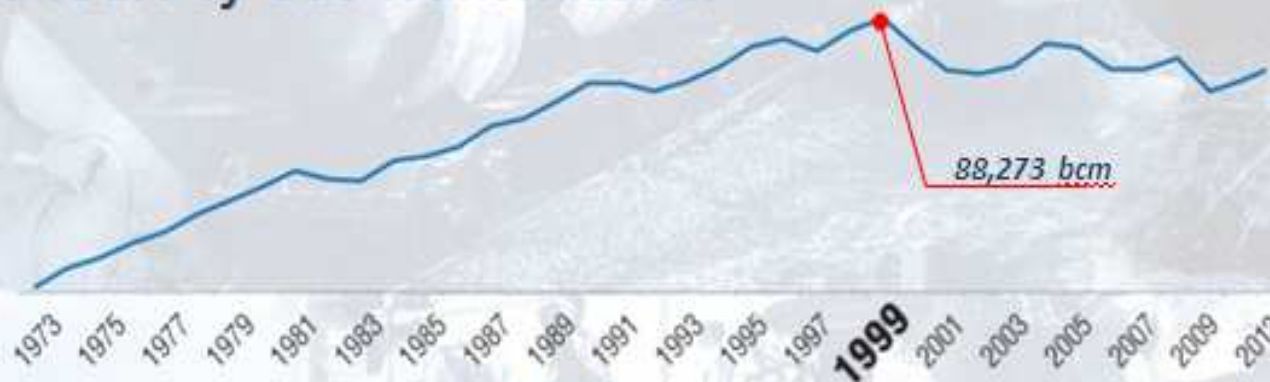
Slovak Gas Transmission System



length of pipelines	> 2,200 km
diameter of pipelines	1,200 and 1,400 mm (> 90%)
transmission capacity	> 93 bcm/a
maximum daily capacity	> 290 mcm
installed power	> 1 GW

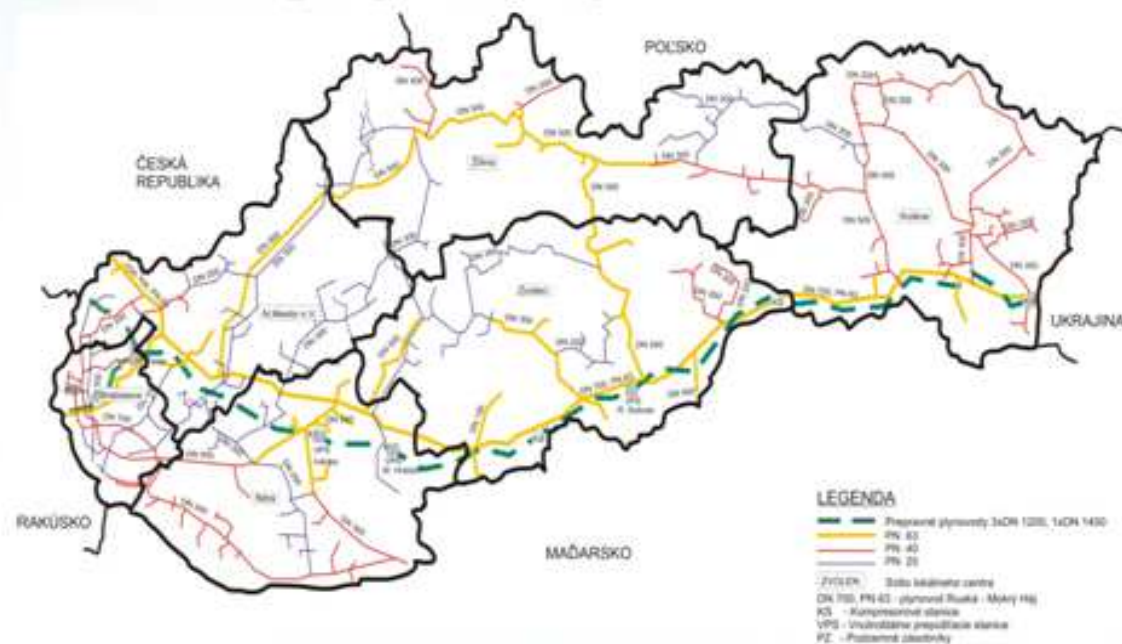


40 Years of Gas Transmission



We transmitted more than **2 216,8 bcm** during the last 40 years.

Slovak Gas Distribution System the second wide-ranging in Europe



length of distribution pipelines **32,750 km**

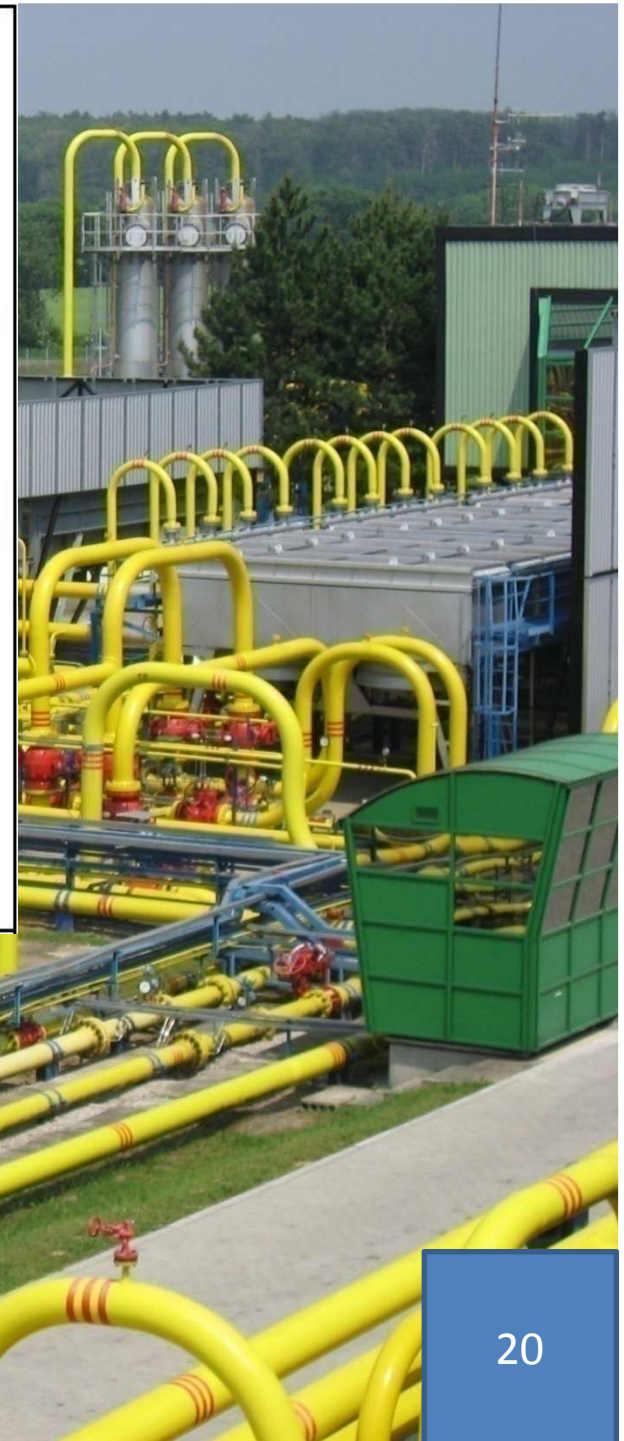
access of inhabitants

to gas distribution system **94%**

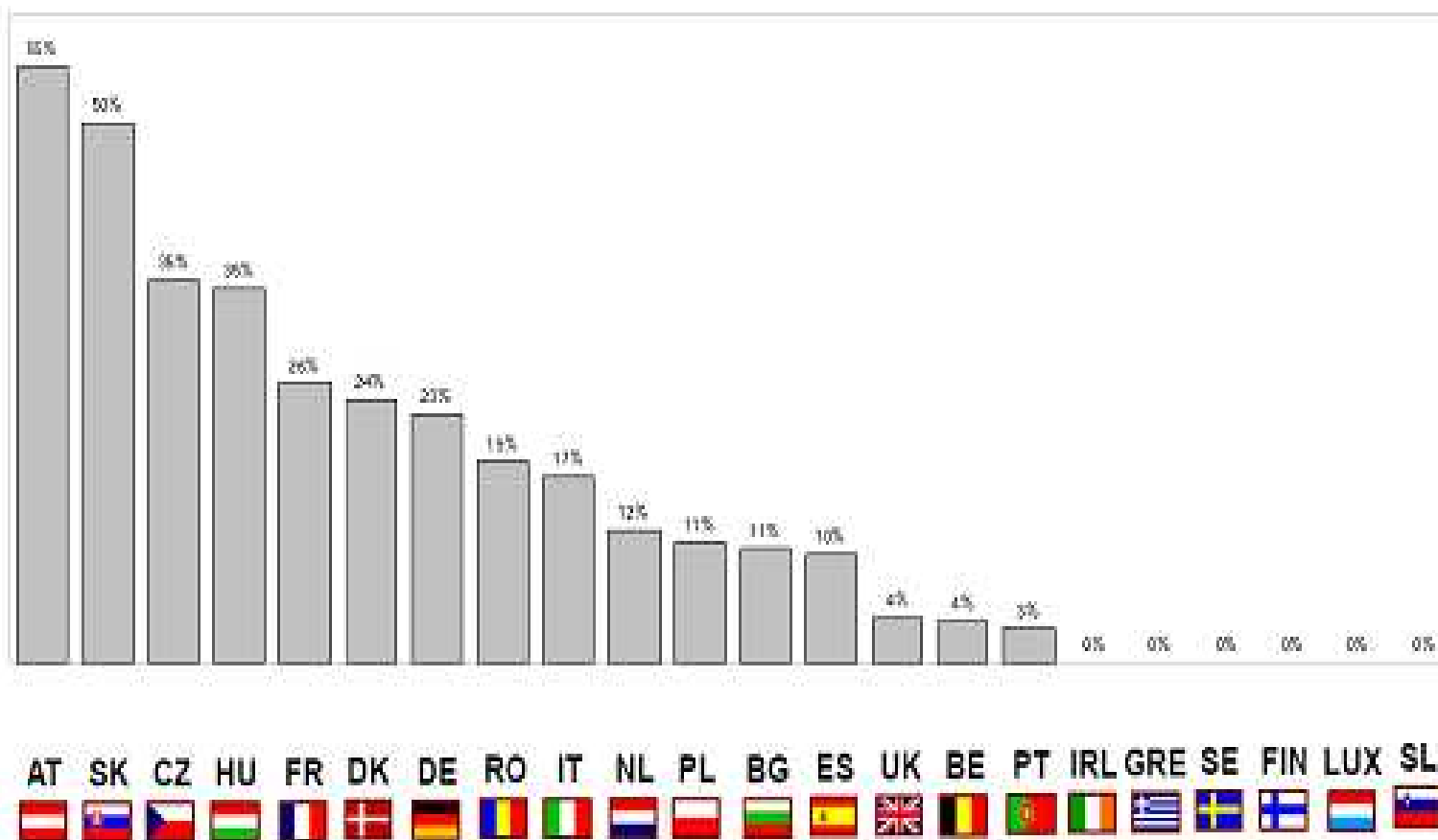
UNDERGROUND STORAGE FACILITIES – TOTAL CAPACITY ALMOST 3 BCM



NAFTA-LÁB 1,2,3 2,13 bcm; POZAGAS-LÁB 4 0,62 bcm
Developing Gajary – báden UGS with capacity 0, 50 bcm

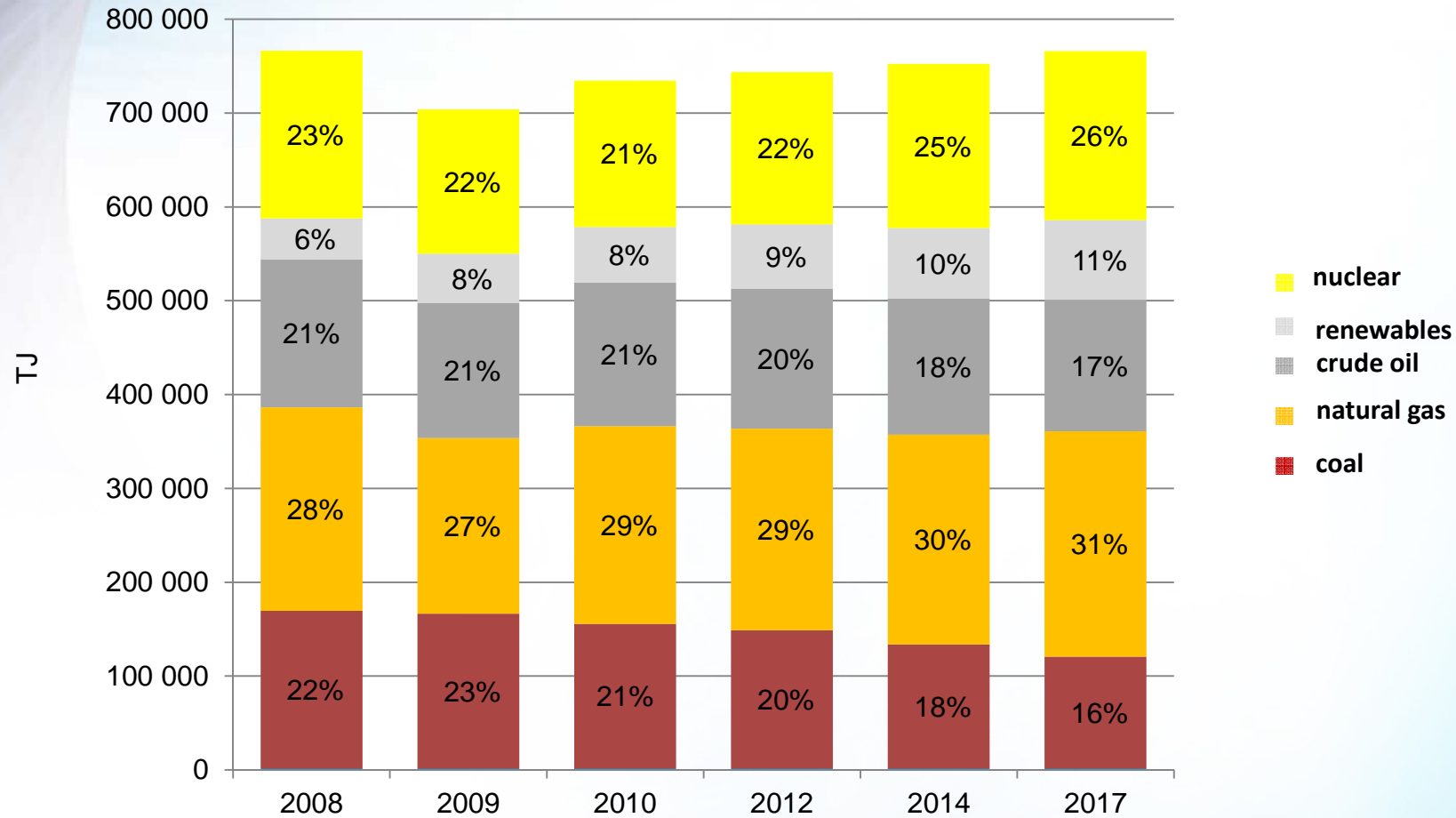


Storage to gas consumption ratio in EU countries

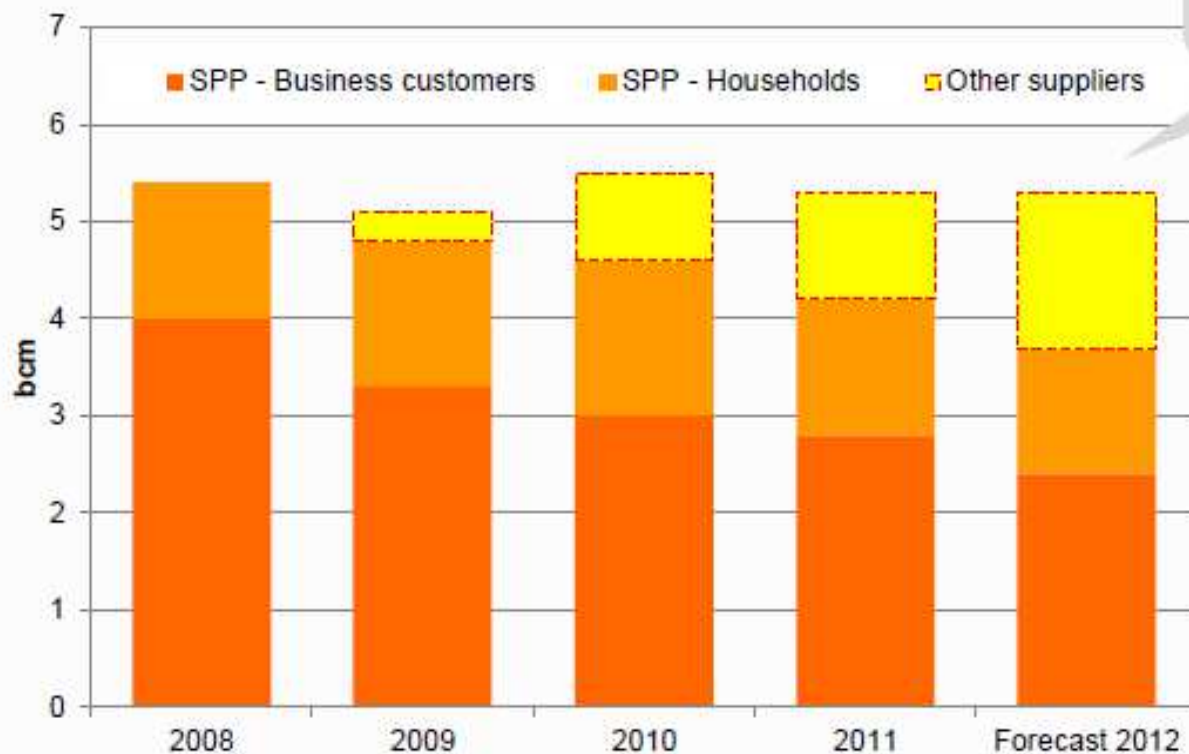


Source: Eurogas, Gas Storage Europe, OMV

Gross domestic consumption of Slovakia

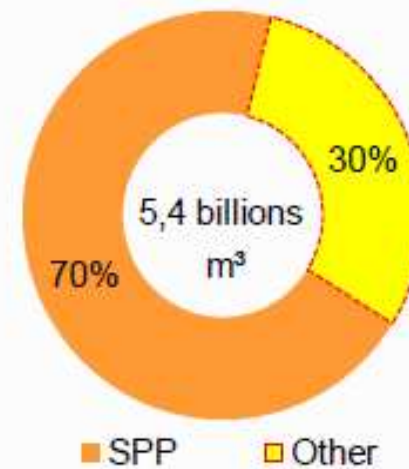


Gas sale at Slovak market



More than 20 competitors
(including 10 also in the household segment)

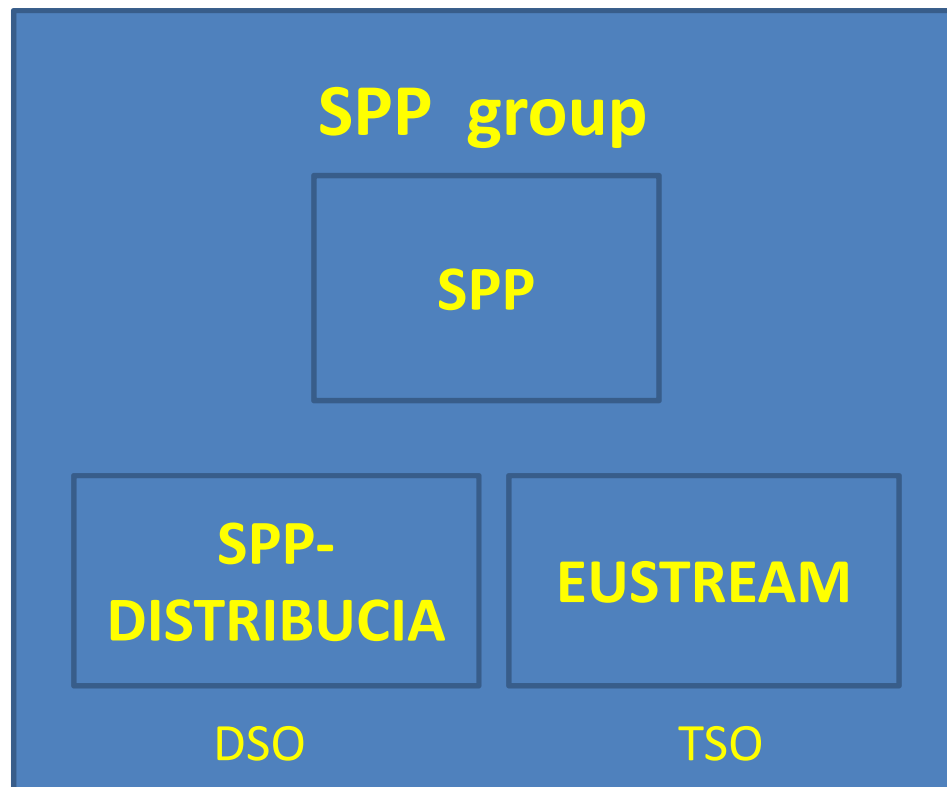
SK market forecast in 2012*



* Sales to end customers



The main players in Slovak Gas Industry



51% SR, 49% EPH



SSO

56% SPP
40% E.ON Ruhrgas



SSO

35% SPP
35% NAFTA
30% GdF SUEZ



Pipe-to-Pipe Competition


eustream 93 bcm/a
SLOVAK GAS TSO


EuroPol GAZ s.a. 33 bcm/a


Nord Stream 2 x 27.5 bcm/a


South Stream 63 bcm/a


BUCCO 31 bcm/a




Nord Stream


EuroPol GAZ s.a.


eustream


South Stream


BUCCO



Security of supply The North-South Gas Corridor



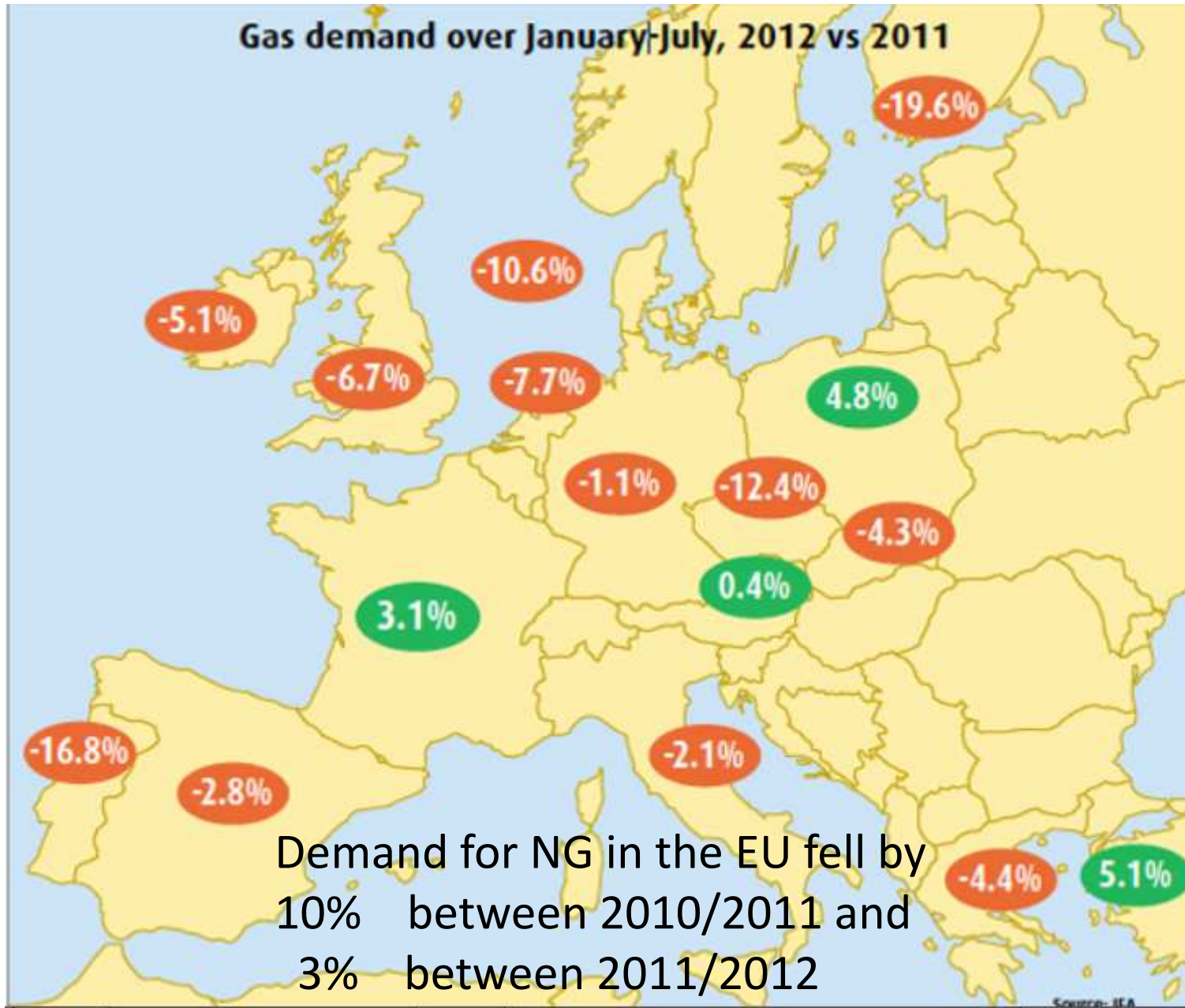
Planned SK-HU and PL-SK interconnectors



The Slovak-Hungarian Gas Interconnector

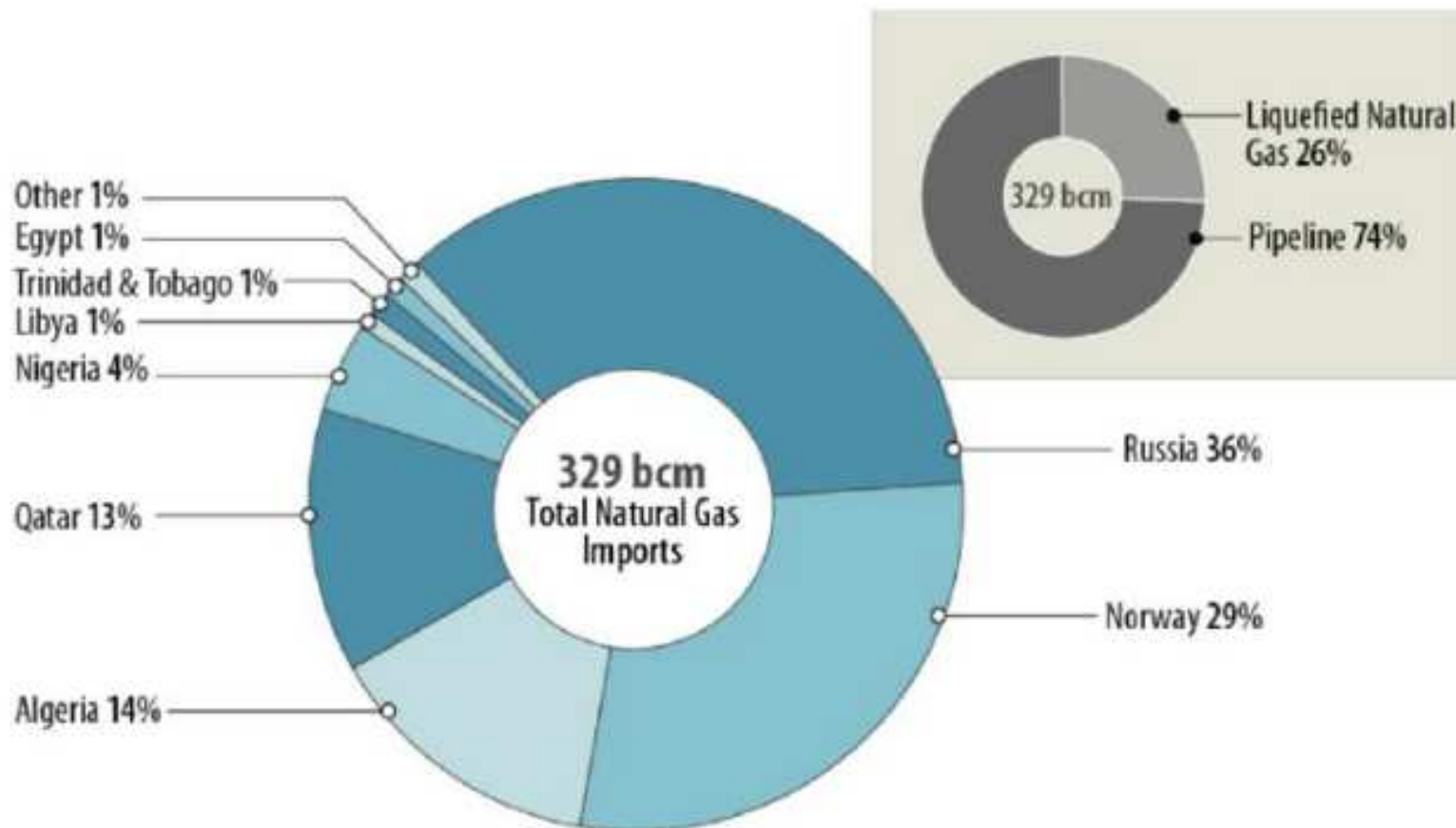
- 115 km of pipeline length
- 5 bcm/a of (design) capacity
- reverse flow
- investments app. EUR 160 million
- financing under EERP (EUR 30 million)
- start of operations planned for 2015

Gas demand over January-July, 2012 vs 2011



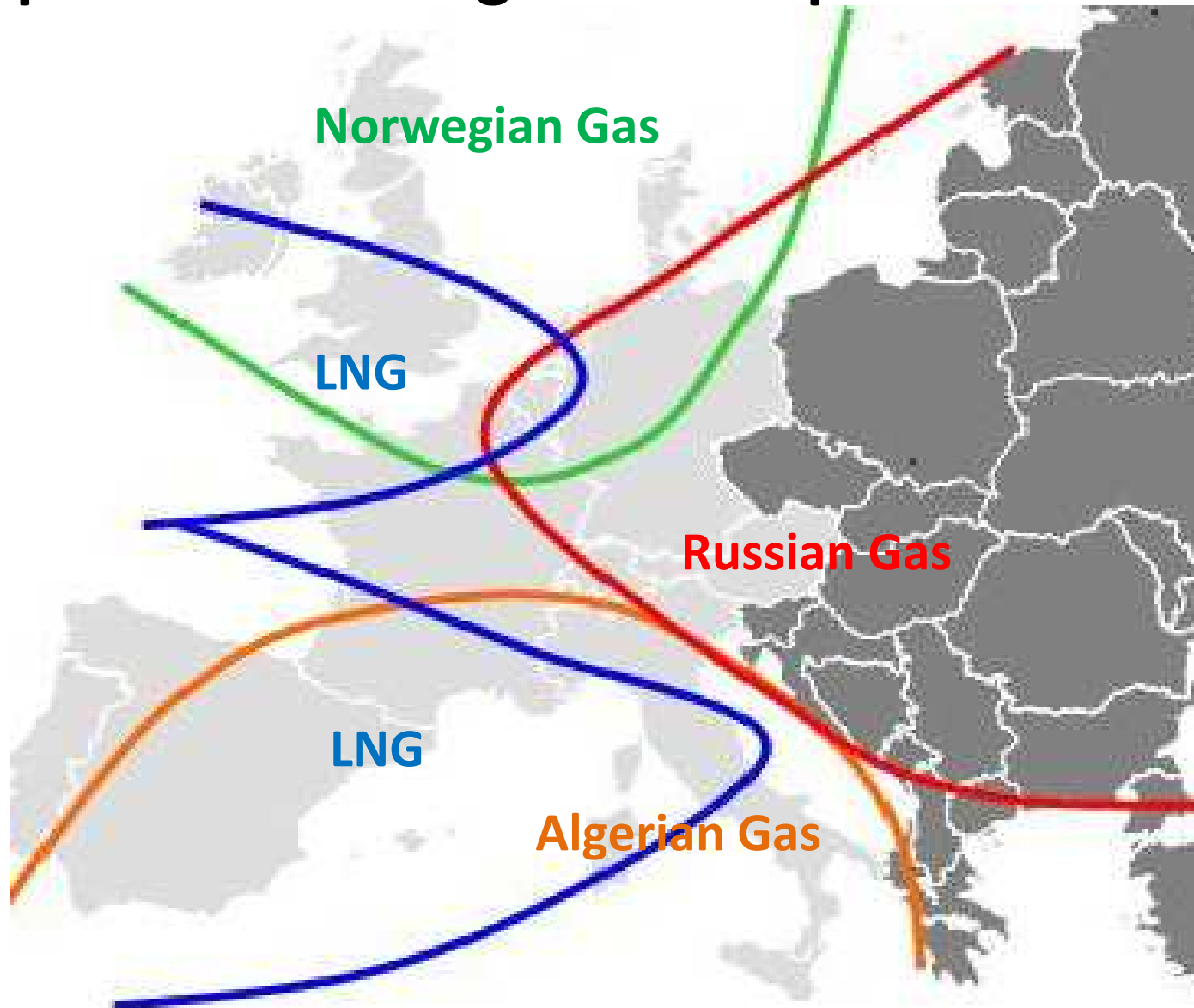
Demand for NG in the EU fell by 10% between 2010/2011 and 3% between 2011/2012

Import of natural gas in the EU



Source: BP Statistical Review of World Energy 2012.

Import of natural gas in Europe



Slovak Gas Industry celebrated its 157 anniversary /19 March 1856/

SGOA builds on a tradition originated from the foundation of Union of Gas experts in Austro – Hungarian Monarchy in 1881 and of Czechoslovak Gas and Water Association in 1919

An independent association of 63 companies and 218 individuals active in gas, partly in crude oil and related industries, registered with the Administration Section of the Slovak Ministry of Interior



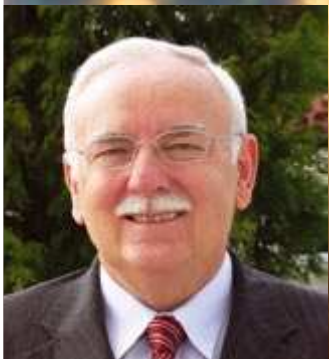
Slovak Gas and Oil Association



Main mission and objectives:

1. Promotion of corporate members` interests in the Slovak Republic
2. Representation of gas industry in terms of the development of legal and technical regulations in the context of the Slovak legislation process and especially with respect to the approximation of respective legislation to the legal environment in EU
3. Active support of technical and economic progress within Slovak Gas Industry
4. Representation of the Slovak Republic in the IGU and an active participation in its activities, cooperation with other European and global non-governmental organizations /MARCOGAZ, CEOCOR, etc./
5. Support of the transfer of information and advanced technologies from all over the world to the Slovak Republic, dissemination of collected knowledge in Slovakia
6. Support and strengthening the image of natural gas as an energy-efficient and environmentally friendly fuel

Thank you for your attention



Ján Klepáč Executive Director of the SGOA
klepac@sgoa.sk