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Shaping the future of energy policies and co-operation in the OSCE region from the private sector perspective

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Eustream is a Critical Piece of Infrastructure Serving European Gas Demand

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- ❑ Critical gas transmission infrastructure to supply Central, Southern Europe and Ukraine
- ❑ Largest transporter of Russian gas into Western Europe

Flow 2018 58.8 bcm
Flow 2018 30.0 bcm
Flow 2018 49.0 bcm
Flow 2018 21.8 bcm
Flow 2018 13.4 bcm

Nord Stream (56 bcm/y)
Yamal to DE (33 bcm/y)
Trans-Balkan Pipeline (23 bcm/y)
Blue Stream (to bcm/y)

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East – West 79.6 bcm/y
West – East 14.9 bcm/y
North – South 24.5 bcm/y

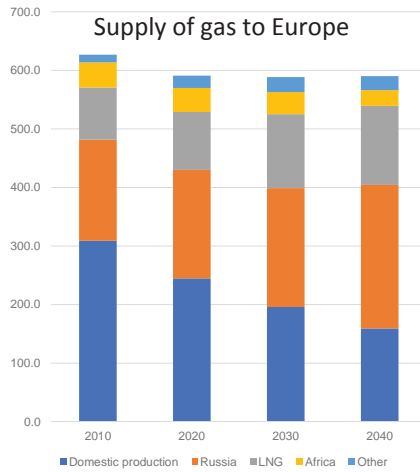
SLOVAKIA
Veľké Kapušany

Source: Company Information, 31/12/2018

Transmission of gas in Europe – outlook

BP Energy Outlook 2019: more LNG and more Russian gas

Supply of gas to Europe



- Stable supply but decreasing production in EU
- LNG vs. Pipe gas
- Slovak transit corridor of essential importance also after NS2/TurkStream completion

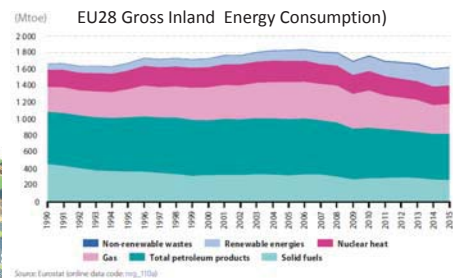
Bcm	2010	2020	2030	2040
Domestic production	308,9	244,9	196,0	159,3
Russia	172,6	185,1	203,0	245,2
LNG	89,1	99,0	126,0	134,8
Afrika	42,9	41,0	37,8	26,7
Iné	13,2	21,0	25,7	24,1

Why such good perspective for gas? Gas is cleanest fossil fuel



GAS:

AT THE HEART OF MODERN ENERGY



Source: Eurostat (online data code: mg_110a)

Natural gas power generation emits up to...



...less than coal.



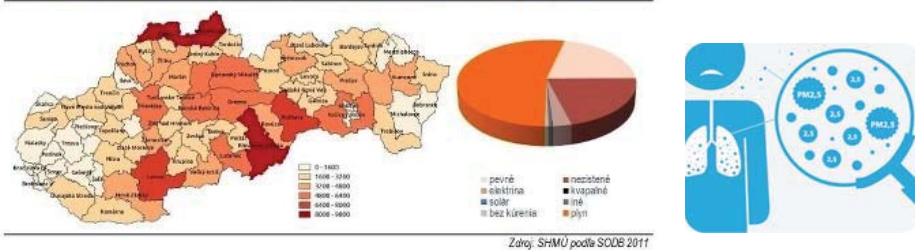
Currently used solid fuels do damage health in CEE

- Particulate matter causes oncology, respiration and cardiovascular diseases
- +
- Household use of solid fuels like wood, coal, lignite leads to uncontrollable and often illegal wood production from forests



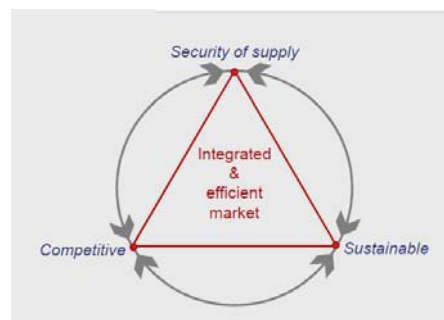
Natural gas is a preferred tool how to eliminate this challenge

Graf 25: Počet bytov v rodinných domoch s tuhými palivami v okresoch (legenda), podiel palív v SR



Zdroj: SRI/MU podľa SOBE 2011

EU strategic goals



Security is a top priority

CEE region was behind West EU in Security. CEE needed:



1. New gas pipelines (Diversification of import routes, Increased interconnectivity)
2. Diversification of sources
3. Market liberalisation/EU market rules implementation

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Vulnerability of some CEE/SEE region countries

ENTSOG Union wide security of supply report



Demand curtailment
No 
Yes 

-140 GWh/d
(-13 mcm/d)

Scenario 1: Disruption of transit via Ukraine
Duration: 2 months of disruption

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2009 gas crisis boosted cooperation and development

Increasing flexibility

- Bidirectional pipelines
- New interconnectors
 - SK-HU (in operation)
 - SK-UA (in operation)
 - PL-SK
 - PL-CZ
 - PL-UA
 - BG-GR
 - SRB-BG
 -
- New LNG terminals (Swinoujscie (PL), Krk (HR), ...)

Legal Framework

- SoS Regulation(s)
- EEP and CEF financing schemes of EU



Eustream has built reverse flow pipeline to Ukraine from the EU (Budince)



Existing Ukrainian Reverse Flow Options:

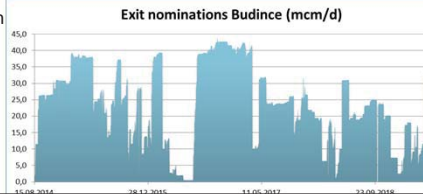
from Poland
(capacity 1.6 bcm/y)

from Slovakia
(capacity 14.6 bcm/y)

from Hungary
(capacity 6.3 bcm/y)



Eustream has an important position within gas transmission to Ukraine thanks to offering the biggest reverse capacity ready to increase it if interest of shippers arises; In case of no reverse flows, Ukraine would not be able to overcome winter post-Maidan.



HU-SK was built, now ready for Black Sea gas transport



- After 2009 SK/HU built important SoS interconnector
- Helped to connect SK and HU market
- Now in the game for transport of new Black Sea gas to Europe

PL-SK gas Interconnector



Gateway for LNG and Baltic pipe gas



Planned operation 2021
CS1 Veľké Kapušany (SK) – Strachocina (PL)
Length 164 km (103 km SK)
Diameter DN 1,000 mm
Flow bidirectional
Technical capacity
4.7 bcm/y (PL-SK), 5.7 bcm/y (SK-PL)



Increasing connection from West



Market requests significant increase of capacity from the West

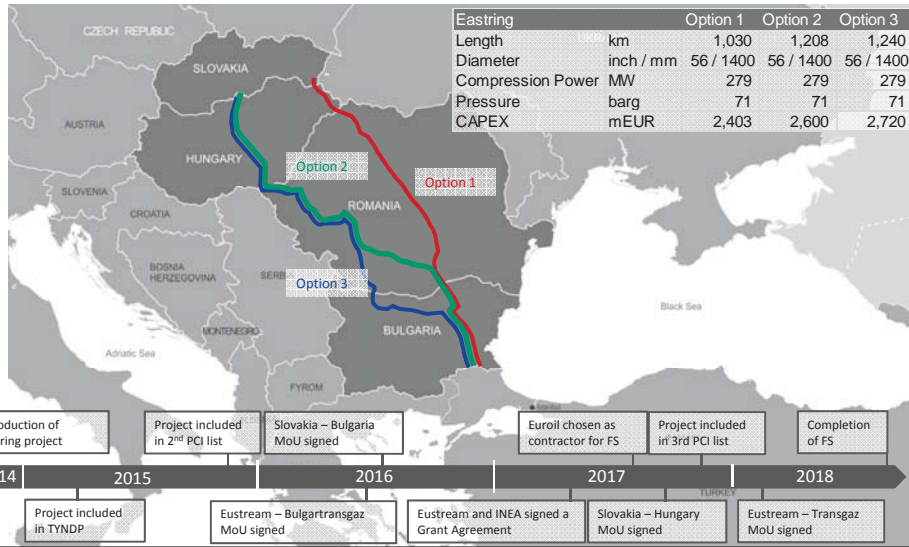
We work on increased flexibility of other points AT, HU, UA and PL (from 2021)



Eastring – connecting markets in the South



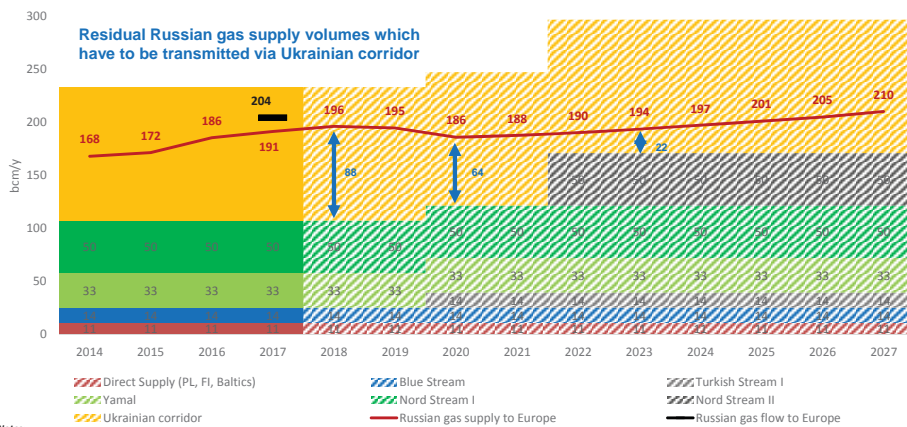
ROUTING AND TIMELINE – RECENT FEASIBILITY STUDY



CEE gas markets are linked to Ukraine



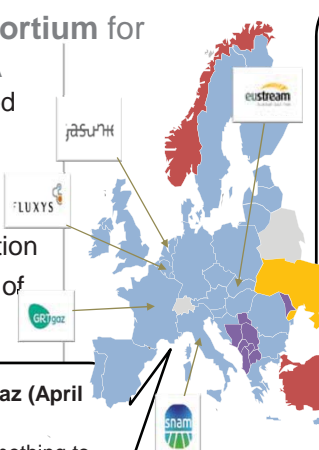
- There is no option for Europe other than Ukrainian corridor to deliver residual Russian gas;
- Velké Kapušany (the entrance to Eustrim’s system from Ukraine), represents the major part of the Ukrainian corridor;
- Even if all capacities are utilized 90%, Ukrainian capacity still needed to deliver substantial Russian gas;



Ukrainian gas transit after 2019

Eustream and consortium for cooperation with UA

- NS2 will not be finalized 2019?
- Permitting process in Denmark
- Amended Gas Regulation
- Expected continuation of trilateral talks (RU-UA-EC) May/October



Anatoly Yanovsky, deputy energy minister, Russia (April 2019)

"We expect that, to some extent, we will be able to reach an agreement with Ukraine on the transit of gas... If this does not happen in May, it will probably happen in October."

Andryi Kobolyev, Naftogaz (April 2019)

"I think Russians have something to discuss with us. They have a difficult situation with the Nord Stream 2. They need to think about how to transport gas after 2019. They definitely have an interest."

Klaus-Dieter Borchard, EC (April 2019)

"There will be some years of delay (NS2) and that is our trump card with Russia... This is something that will bring the Russian side to the table."

- Členovia EU
- Členovia Energy Community
- Pozorovatelia Energy Community

Thank you for the attention