

Centre Energie - Centre for Energy

Ukraine's future role for gas transit

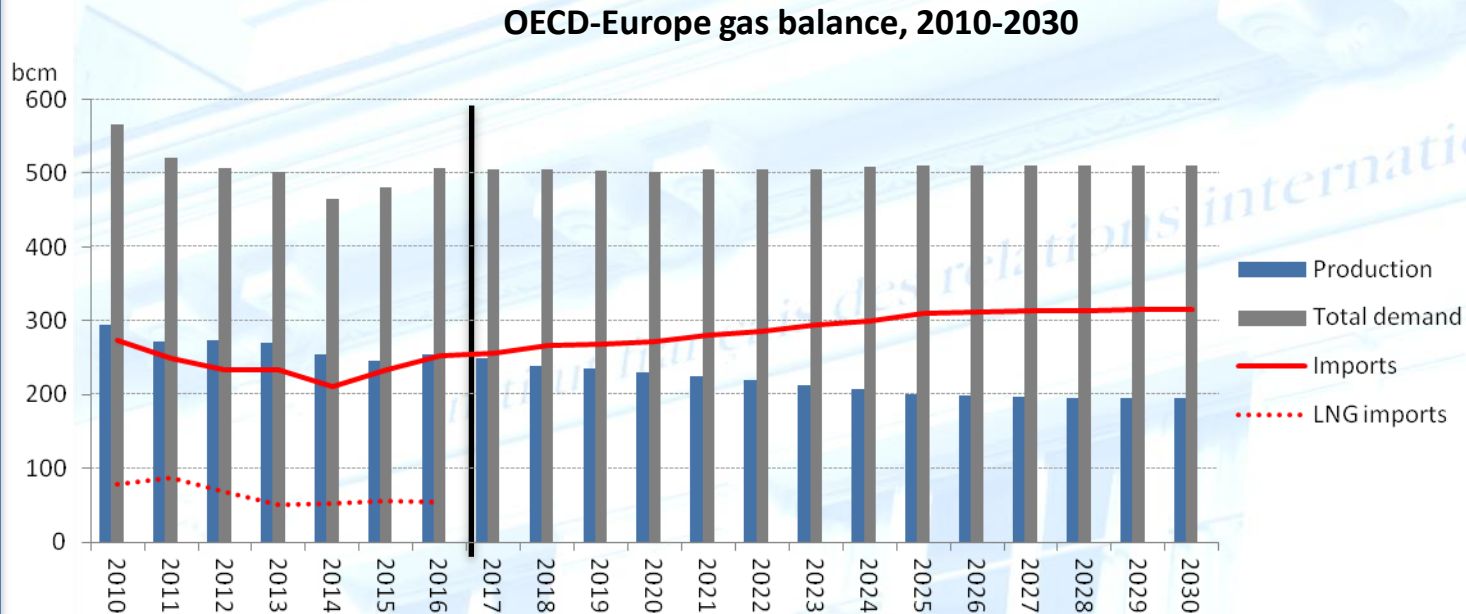


Marc-Antoine Eyl-Mazzega

Director, Ifri Energy Center

Energetika XXI Conference, St Petersburg: 08-10 November 2017

Europe's gas imports are set to slightly increase...

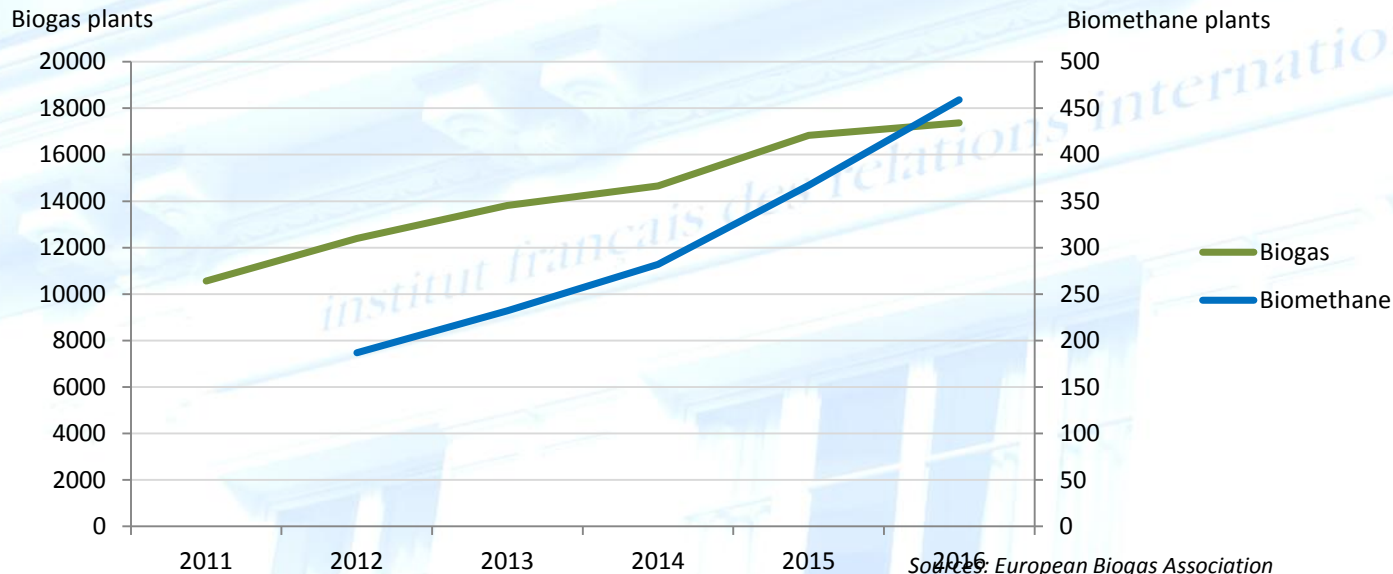


Sources: Ifri, IEA Gas Report 2017, IEA WEO 2016

Europe's gas demand is expected to be flat or in slight increase if carbon instruments are effective to favor gas-fired power generation and if gas utilization develops in the transport sector. Amidst declining production, imports are set to slightly increase.

What if “green gases” more than compensate for the declining NG production?... TSOs are in as they fear stranded assets

Development of EU biogas and biomethane plants over past years

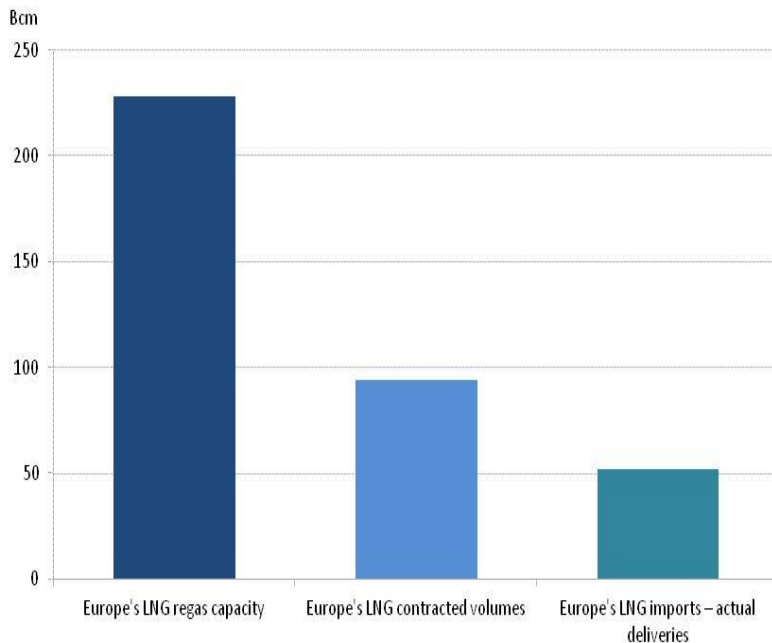


Sources: European Biogas Association

Biogas, biomethane and synthetic methane (syngas) are produced from a variety of sources such as municipal waste, landfills, sewage treatment plants, agricultural residues or manure. Surplus electricity could be converted into hydrogen or syngas (by recycling waste carbon) via a power-to-gas (P2G) process. The industry association target is 50 bcm/y by 2030

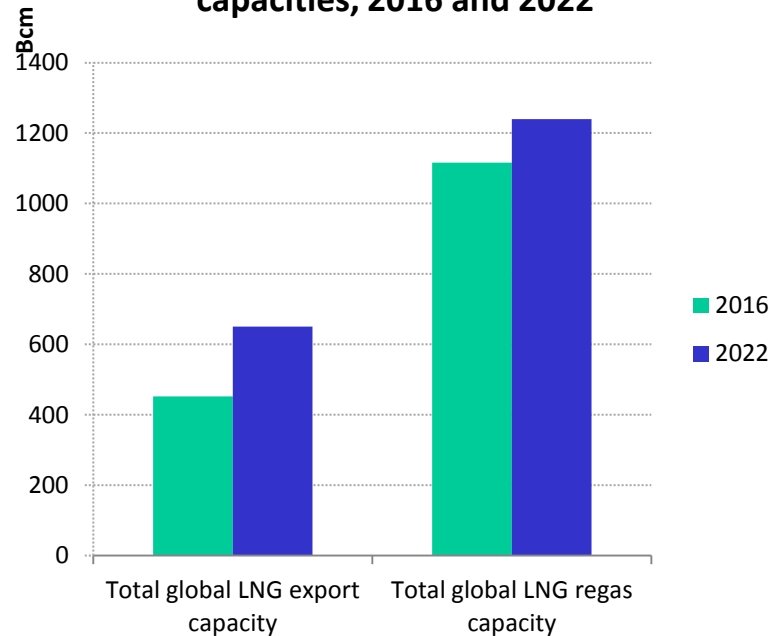
Europe will also see growing competition between LNG and Russian gas, so far LNG imports are low...

OECD-Europe LNG import data for 2016



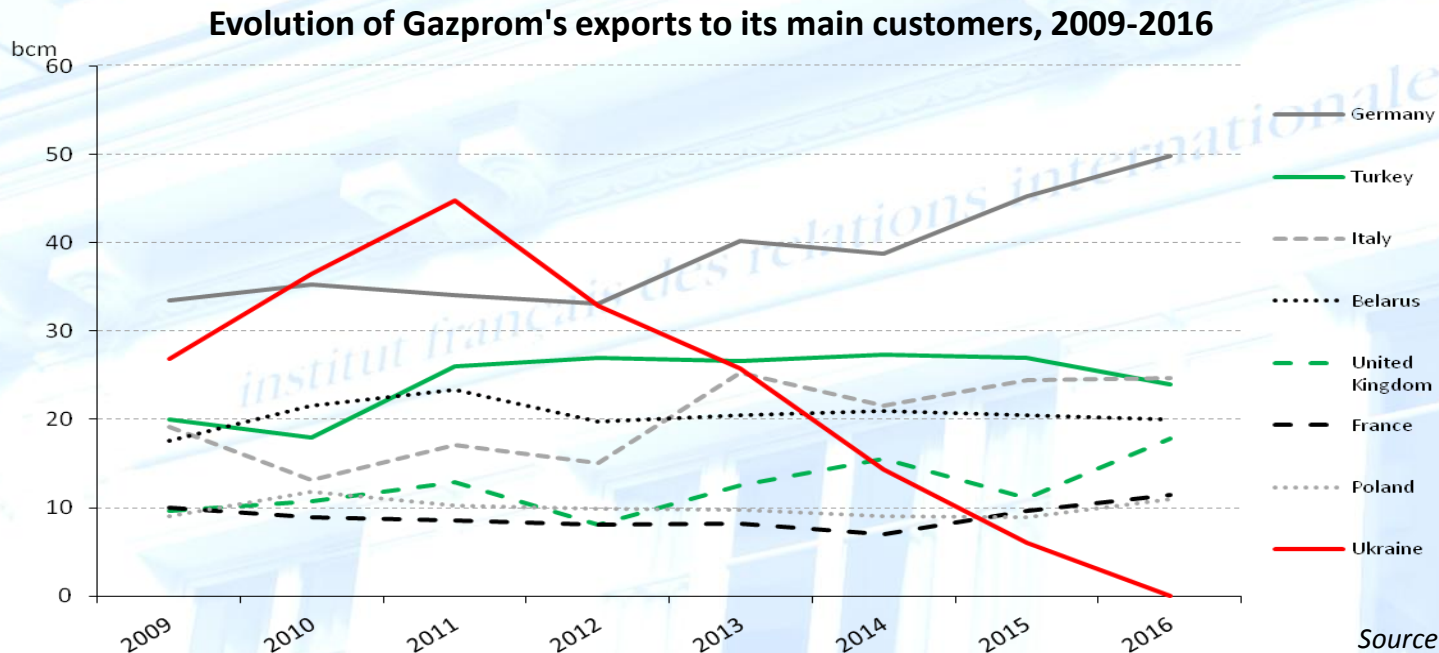
Source: IEA Gas Report 2017

Comparison of global LNG import/export capacities, 2016 and 2022



Source: IEA Gas Report 2017

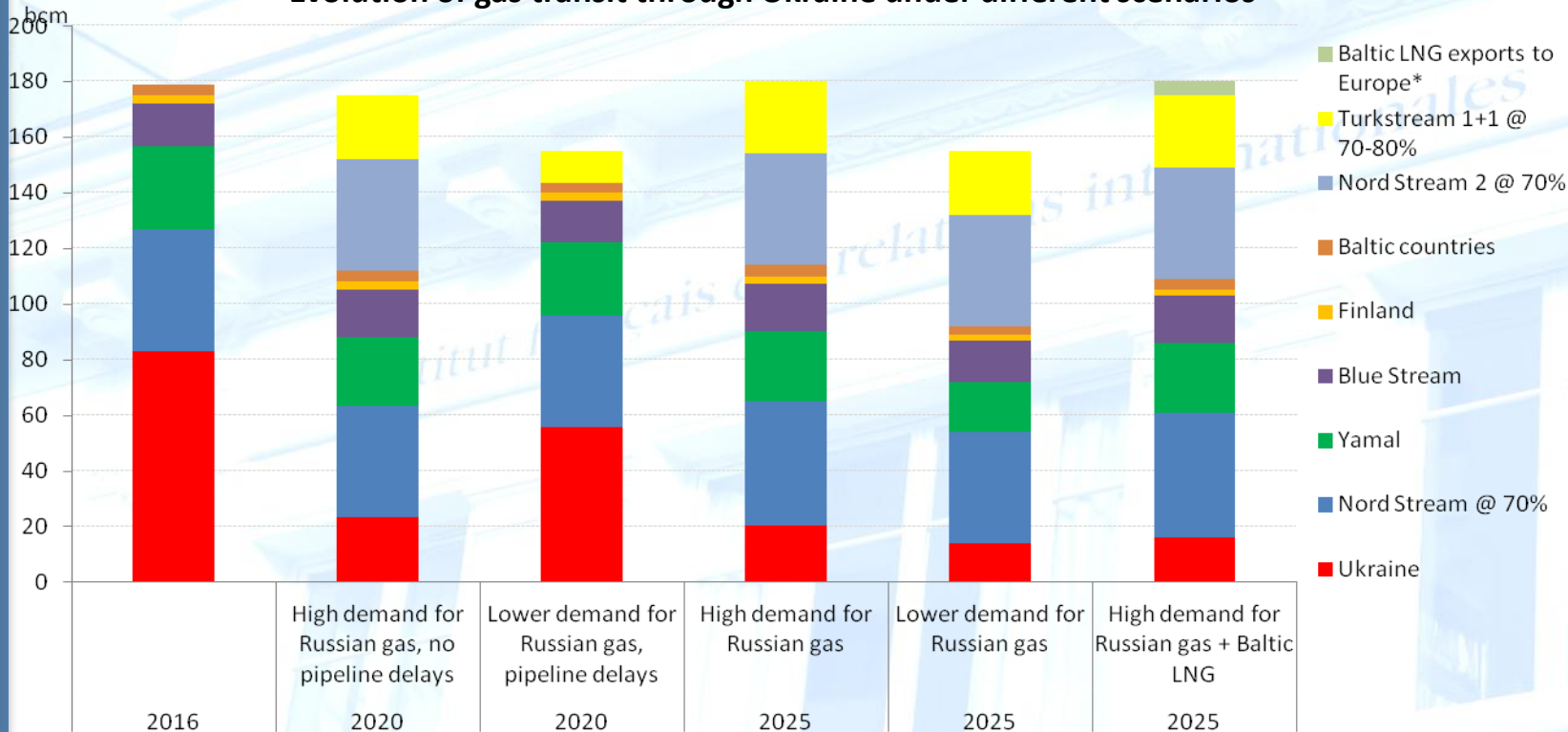
Gazprom is currently winning everywhere as its commercial strategy has adjusted, to the benefit of Ukraine's transit role



Gazprom's oil indexed pipeline supplies are more competitive than current LNG export costs from the USA to Europe, except marginal supplies. Gazprom has also benefited from the fall in Groningen production, posting record high sales volumes.

Transit volumes through Ukraine expected to decrease, yet not proportionally to the alternative capacity added

Evolution of gas transit through Ukraine under different scenarios

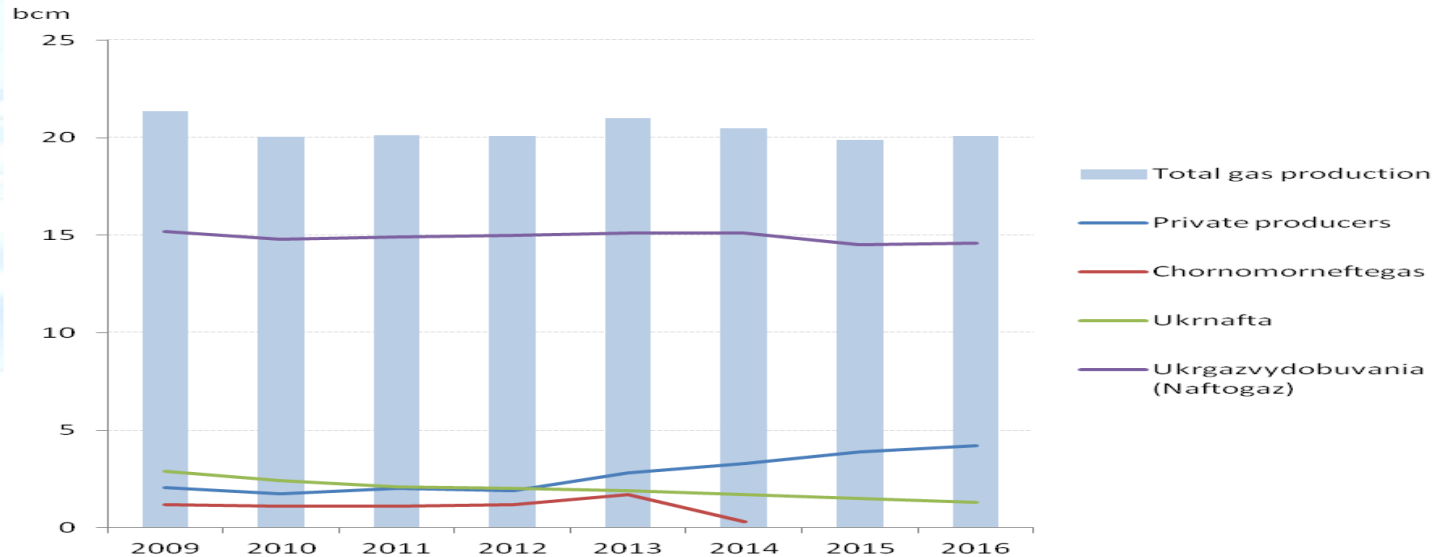


Source: Ifri, Naftogaz, Gazprom

Note: this analysis assumes load factors of new pipelines, if realized, at 70%

Raising gas production is of strategic importance, full and urgent sector shake up is required as clock is ticking

Evolution of Ukraine's gas production, 2009-2016

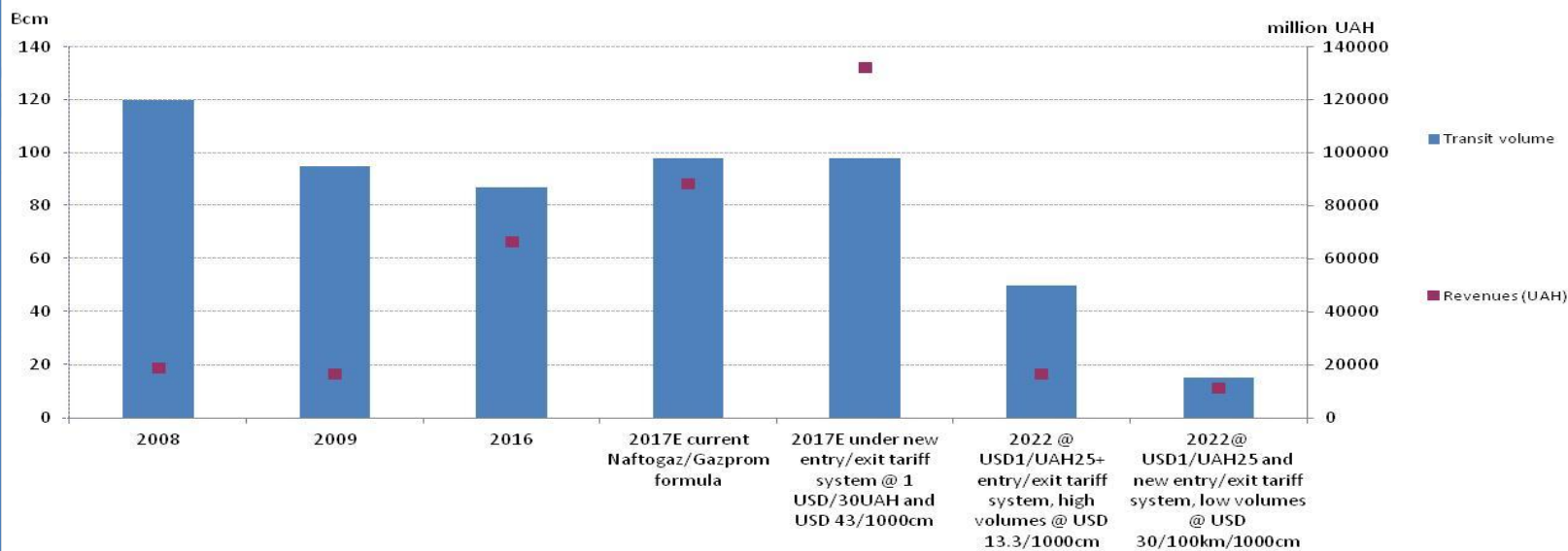


Source:
Naftogaz

Ukraine's upstream segment is dominated by UGV which now has the resources to increase production by 2023. For foreign private companies, Ukraine is one of the worst places to invest. Reversing this is key to reach gas self sufficiency, increase tax collection and increase the use of the GTS.

Transit revenues at record levels, governance & ownership of MGU + professionalism & independence of regulator key

Evolution of Ukraine's transit revenues under Gazprom/Naftogaz contracts and under the new entry/exit capacity booking tariff system



The new entry/exit involves a reevaluation of assets & accelerated amortization over the period 2016-2020. It incentivizes long-term use at high level of Ukraine's GTS. Yet the tariff system would require adjustments and additions to foster market liquidity.

Russia's interest should be to have a gas consortium set up in Ukraine via a separation of dedicated assets

- Gazprom will need to continue using the Ukrainian route post 2020
 - Uncertain volumes, yet seasonality will remain = flexibility
- Gazprom will need competitive and risk-free access to the route
- Ukraine has large and potentially cheap storage services
- Consortium would ensure:
 - Modernization
 - Reliability
 - TSO certification
 - Transparency
 - Non-discrimination
 - Competitiveness

Why is UA's successful gas market reform key to Russia?

- Establishment of gas consortium requires full and effective unbundling
- Requires TSO with high corporate governance standards
- Implies professional, predictable and impartial regulation & dispatching
- Would ensure fair and reasonable tariffs
- Gazprom and Naftogaz share the same interest: low transportation and storage tariffs
- To incentivize Naftogaz to ensure low entry cost at RU-UA border, need to offer attractive gas sale formula at that border; even if UA re-exports, Gazprom wins given the saving from the shorter distances
- Transit tariff would not subsidize domestic transportation
- Development of domestic gas potential and stabilization of economy would ensure increased gas production is shipped through system and meets higher demand, enabling to maintain the remaining system
- Retail sector liberalization & unbundling would enable modernization of the distribution assets

Why would Ukraine agree to a gas consortium?

- Consortium would strengthen confidence in Ukraine route, ensure effective and competitive operations and modernization of the transport system and higher volumes in transit
- Yet consortium implies to split assets, to share profits and to give up some control
- If Ukraine thinks volumes will be very low and short lived, it has no interest for a consortium; it's interest is to maximize short term profit or refuse transit flows
- If Ukraine thinks volumes can remain substantial over the longer term, it has an interest in a consortium
- Total estimated profit must be at least 3 times higher than the worse case scenario for Ukraine: most minimal volumes and high transportation tariff
- Ukraine may agree to consortium if volumes are a minima of 36-44 bcm/y steady until 2030

Why would Western institutions and TSOs invest into a gas consortium?

- Consortium secures gas supplies and makes NG a safe fuel
- Consortium offers reasonable rate of return, based on significant volumes, reasonable investments, predictable revenues, fair and appropriate tariff, reasonable taxation
- Consortium enables to operate system independently without political interferences
- Consortium provides guarantees for good governance and transparency... EBRD
- Consortium enables to secure long term use of onwards infrastructure

What if only low volumes remain post 2020 should TS, NS2 and Baltic LNG be started?

- Ukraine can be expected to set a prohibitive East-West transport cost
- Gazprom can accept to pay and all is fine
- Decision to offer to drop gas at the UA-RU border and change gas selling points in the respective contracts
 - Transfer of transport responsibility to buyers
 - Complex price renegotiations with buyers
 - Buyers will only agree if they trust they will win and can rely on Ukraine
 - Consortium still possible though if volumes substantial
- Decision is made to temporarily and partly disrupt supplies
 - Prices shoot up, LNG comes in
 - Buyers may ask for compensation in arbitration
 - Natural gas as a reliable fuel is tarnished again

→ Urgent need to start discussions as soon as Stockholm ruling is known as political change will come in Kiev and Brussels



Centre Énergie – Centre for Energy

Martine **Breux**, Assistant
breux@ifri.org

27, rue de la Procession, 75740 PARIS CEDEX 15
Tél. +33 (0) 1 40 61 60 00 • Fax : +33 (0) 1 40 61 60 60
www.ifri.org