Competition of existing & new gas supplies to Europe under new paradigm of international energy development: the growing role of political tools

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Presentation at the 11th Annual European Gas Conference, Vienna Marriott Hotel, Austria, January 31, 2018

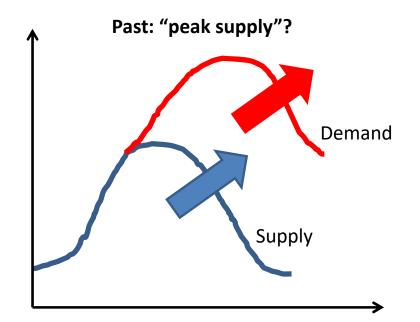
World Energy: The Change of Paradigm?

Supply	Demand	
- Hubbert peak (curve)- Hotelling rent (theorem)- Chevalier turning point	- Economic growth(industrial)- Population growth	

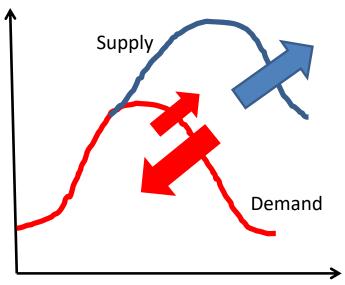
Future energy resources more costly & limited (depletion rent) => low-cost win more rent, high-cost delayed

Supply	Demand
- Technological progress, incl.US shale revolution =>=> Hotelling anti-theorem	Four steps in departure from oilEnergy efficiency (delinking, postindustrial)COP-21 (upper limit/emissions)

Future energy supply less costly & plentiful (partly not in demand?) => competition among suppliers increases => low-cost win, high-cost cut-off



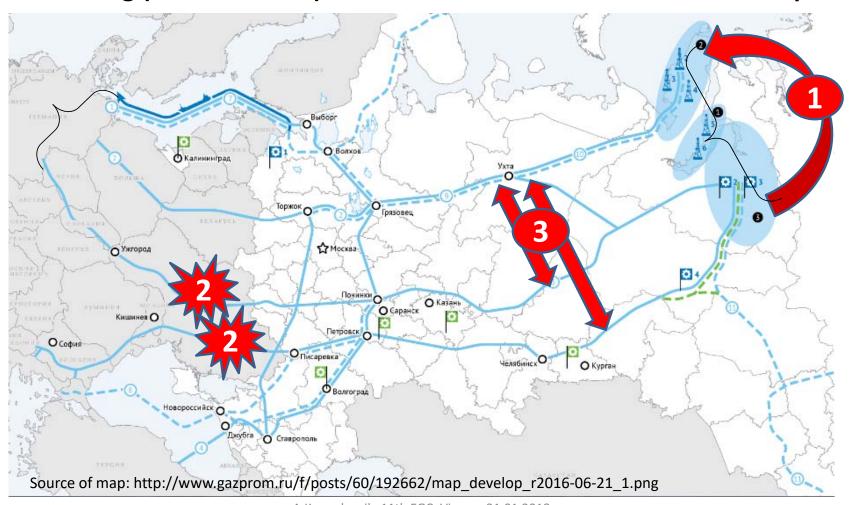
From Current to Future: "peak demand"?



From "Peak supply" to "Peak demand", US LNG & fight against Russian gas in EU (1)

- IEA: Current PRR of non-renewable energies 3 times higher (if produced & utilized) than CO2 emissions to stay within 2 degree Centigrade global temperature increase => "unburnable energy"
- Q: If 2/3 of future CO2 emissions refer to coal, 22% to oil, and only 15% to gas (IEA), why major aim/victim in the fight (incl. for climate change) in EU is (Russian) gas?
- <u>A:</u> many studies have shown that US LNG is not competitive with Russian pipeline gas in EU on LRMC basis => "to kill a competitor" policy within the narrowing competitive niche for gas in EU ("zero-sum-game" approach)
 - To create artificial administrative & other barriers for more competitive Russian gas (f.i. Quo Vadis scenarios, Third Gas Directive amendment proposal) + to develop its negative image (f.i. EXERGIA) & consequences (f.i. REKK on NS2) => to make it non-competitive against US LNG within new energy environment: lower oil prices post-2014, and expected demand limitations induced by "peak demand" paradigm & COP-21 targets

Russia's existing/new supplies to Europe (to the unbundled EU gas market): (1) resource base moves from Nadym-Pur-Taz to Yamal, (2) Ukrainian transit risks & costs increases, => (3) modernization existing (since end-60's) infrastructure vs new construction transportation route

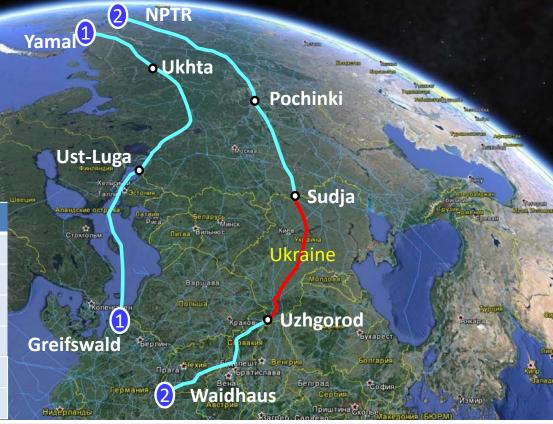




Length comparison of different gas routes from Yamal to Germany



	Yamal - Germany	km.
1	Yamal – Greifswald:	4166
	Yamal – Ust-Luga (within RF)	2977
	Ust-Luga – Greifswald	1189
2	Yamal – NPTR – Waidhaus:	6051
	Yamal – Sudja (within RF)	3987
	Sudja – Waidhaus	2064



Length of the route via Nord Stream is 1885 km shorter than through UA GTS, incl. that within Russian territory the distance is shorter by 1010 km.

Route via Ukraine is 45% longer than via Nord Stream.

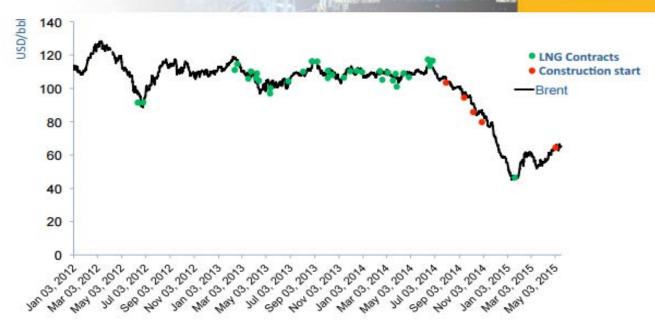
A.Konoplyanik, 11th EGC, Vienna, 31.01.2018

Fight against NS2: multilayer task for EU (& other players)

- To force Russia continue gas transit to EU via UA post-2019 & to pay transit fees (instead of supporting UA from EU/US public finance)
- Special Third Gas Directive amendments for NS2: to slow down (if not to prevent) construction/start-up + export EU acquis (MTPA/ competition between Russian companies)
 - Export EU acquis upstream cross-border gas value chains = regular long-standing EU task in favour of EU business
 - Most recent: new concept "upstream-downstream partnership" in Quo Vadis 2nd preliminary report (13.12.2017)
- Additional (hidden?) aim (?): to provoke further conflict between Gazprom & Rosneft (on Russian gas market "liberalization" issue):
 - Gazprom: state agent (sole pipeline exporter by law) on monetizing Russian pipeline gas (maximize marketable rent) => to escape Rusgas-to-Rusgas competition
 - Rosneft: would like to monetize its large gas resources (preferably internationally), agent agreements on gas marketing at external markets: with GPE vs with BP
 - Political consequences: open conflict between two Russian state companies = a blow on prestige of "Putin's regime"?

Buyers seem to became cautious on the competitiveness of Henry Hub based LNG

Medium-Term Market Report 2015



- Financing of projects with previously signed contracts is unproblematic
- Only one small contract (0.75 Mt/Y) was signed since oil peaked

Source: Costanza Jacazio, Senior gas analyst, International Energy Agency. Gas: medium-Term Market Report 2015.

Market Analysis and Forecast to2020. – Presentation at The Center on Global Energy Policy, Columbia University, New York, NY, USA, 20.06.2016, https://energywatch-inc.com/wp-content/uploads/2015/07/IEA-Medium-Term-Gas-Market-Report-Presentation.pdf

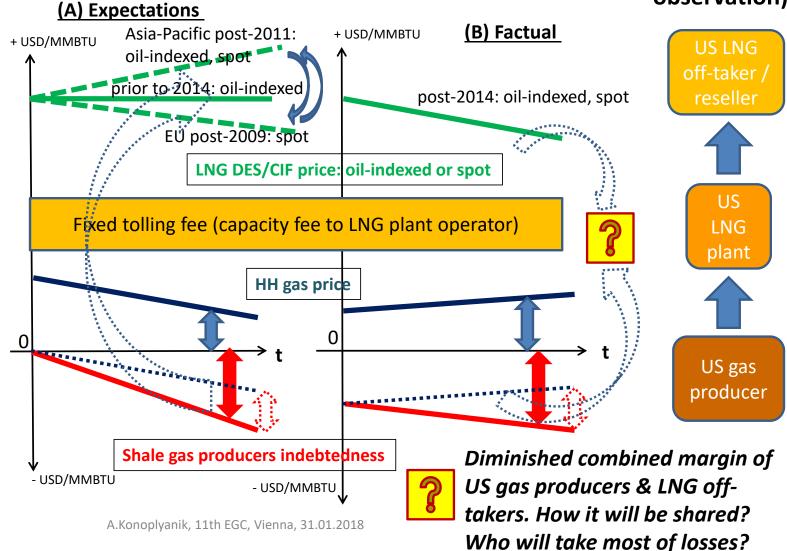
=> Prior to 2014/2016:

- (1) US gas price decrease (US = "energy island") plus (2) accelerated growth of shale gas producers indebtedness (debt financing) => perception to compensate (in plenty) current losses at domestic US market by future LNG export at high Asian price (oil-indexation plus post-Fukushima Asian price premium);
- EU market not attractive for US LNG post-2011 (EU oversupply post 2009) despite excessive/free regaz EU capacities.

=> Post 2014/2016:

- USA not "energy island" anymore (2016 onwards) => HH-price to grow? => shale gas producers revenue to grow, but their indebtedness grow as well and converted in "junk debt"; LNG prices (oil-indexed, spot) fell (2014 onwards) => margins of LNG off-takers/wholesale resellers diminished, price risks grew (=> portfolio sales growth); indebtedness of shale gas producers continues => to sell LNG at any price (above SRMC) to diminish losses (sunk costs approach)?
- => Higher LNG prices needed for "US Energy Dominance"/"America First"!

Expected & factual profitability zone for US LNG prior to & after export begins (2016) and oil prices falls (2014) (principal scheme; no scale observation)



Possible application consequences (schematic) of five Quo Vadis scenarios (4+1), selected for quantitative modelling, under their most negative interpretation for Russian side

Texisting key delivery points of Russian gas to the EU

🔭 New delivery points of Russian gas to the EU as proposed in Quo Vadis report

Existing LNG terminals

New LNG terminals

Development of new pipeline infrastructure from existing LNG terminals to existing delivery points of Russian gas within the EU as proposed in Quo Vadis report

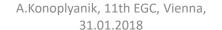
Shift of existing delivery points of Russian gas inside the EU to their new locations at the external border of the zone of EU acquis application as proposed in Quo Vadis report

Transfer of existing transit business of Russian gas to existing delivery point within the EU to the mid-stream companies of the EU as proposed in Quo Vadis report

New merged regional gas market zones as proposed in Quo Vadis report

New North-South EU gas pipeline corridor in the Eastern part of the EU to connect new LNG terminals

port



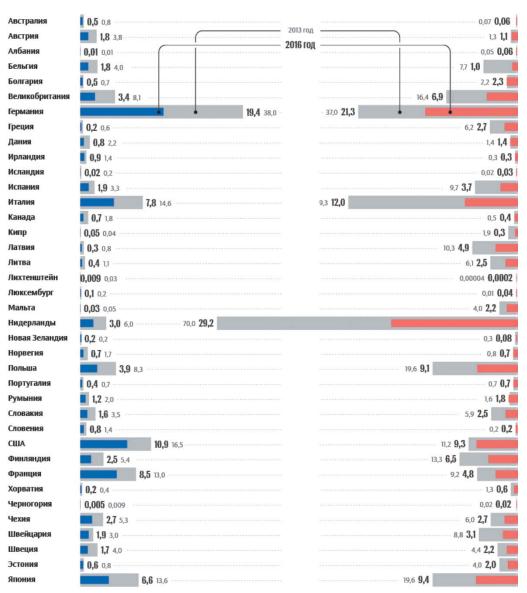
Source: A.Konoplyanik. EU Quo Vadis: a theoretical exercise with an anti-Russian Flavour? // "Natural Gas World - Global Gas Perspectives", 19 October 2017; https://www.naturalgasworld.com/gpp-eu-quo-vadis-a-theoretical-exercise-with-an-anti-russian-flavour-56079

Quo Vadis, Russian pipeline gas & US LNG in EU: attempt of unfair competition? At the cost of EU? What the Presidents are saying...

- In its current structure Quo Vadis seems to be factually aimed at justification of substitution in EU by more expensive US LNG of more cheap Russian pipeline gas; on the routes of the latter to EU (both on existing and on prospective ones) it is modelled to create incremental barriers. => Quo Vadis scenarios well correlate with new anti-Russian US sanctions against existing and new Russian export pipelines and might lead not to increase but to decrease of EU welfare. It seems that Quo Vadis scenarios are constructed not in favour of EU, but in favour of US:
 - US President D.Trump (Warsaw, 04.07.2017): "Maybe, the price will come slightly higher but that's OK..." ("US Energy Dominance" & "America First" strategies)
 - Russian Prime-Minister <u>D.Medvedev</u> (St.Petersburg, 21.09.2017): "...American Administration and Congress... try to promote its own suppliers and to substitute Russian Federation at this market"
 - Russian President V.Putin (Sochi, 19.10.2017): "... recent sanctions' package adopted by US
 Congress openly aimed at pushing Russia away from European energy markets, to force Europe to turn to more expensive US LNG ..."







Which Western countries suffered most from anti-Russian sanctions

Source: https://ria.ru/infografi ka/20171123/1509243542.html?inj=1

How homogenous is EU (what about internal EU solidarity)? What about Transatlantic solidarity?



SUMMARY

The United States and Poland on January 27 took a common stand against a planned gas pipeline linking Russia to Germany, saying it is politicizing energy and undermining attempts to make Europe less dependent on Russian resources.

EU vs USA: allies or competitors?

- Joint sanctions against Russia
- Joint support of Ukraine

- > EU = "old" EU + "new" EU or "old" EU vs "new" EU?
- > A lot of EU-Russia energy politicization comes either from "new" EU or from abroad
- "New" EU vs "old EU" (still dividing lines?):
 - Expectations (pre-2004/2007) vs realities (post-2004/2007) =>
 - Brussels vs Washington
 - EU vs NATO (funding etc)
 - Russian pipeline gas vs US LNG (& EU welfare)
 - NWE vs CEE/SEE gas prices/pricing

BUT: to jointly oppose Russia, to depart from Russian energy = more costly energy for EU => less competitive EU manufacturing globally => who wins in global competition from anti-Russian sanctions undertaken within Trans-Atlantic solidarity? => Anti-Russian sanctions as an instrument of weakening EU global competitiveness??? ("America First. Nothing personal. Only business.")

Dividing line from Baltic to Black sea (Project "Intermarium") – major aim of USA in Europe (acc. to G.Friedman, "Stratfor")



"...final aim of the US consists in creation of "Intermarium" – territory between Baltic and Black Seas, which concept was developed as far back as by Pilsudski. First aim for US is not to allow that German capital and German technologies were united with Russian natural resources and labour resources in the invincible combination. ... Trump card of US which defeat such combination - dividing line between Baltic states and Black Sea."

(https://www.thechicagocouncil.org/event/europe-destined-conflict)

Source: Presentation of George Friedman, Founder and President of private intelligence agency "Stratfor" at the conference of "The Chicago Council on Global Affairs", 4 февраля 2015 г., https://www.youtube.com/watch?v=iOY1dDqa7F0;

https://www.youtube.com/watch?v=xewzbMYmC I

A.Konoplyanik, 11th EGC, Vienna, 31.01.2018

Thank you for your attention!

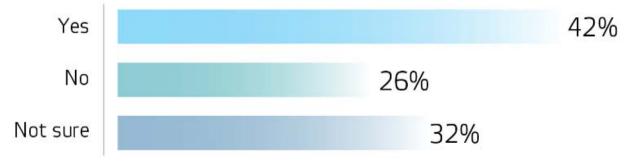
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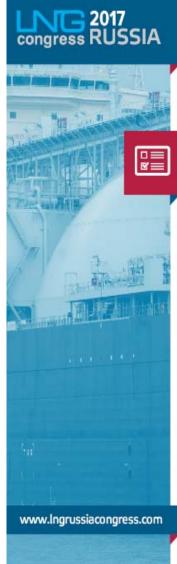
Results of the poll for the audience of the Webinar «US LNG and European gas market» 26.10.2016 (1)



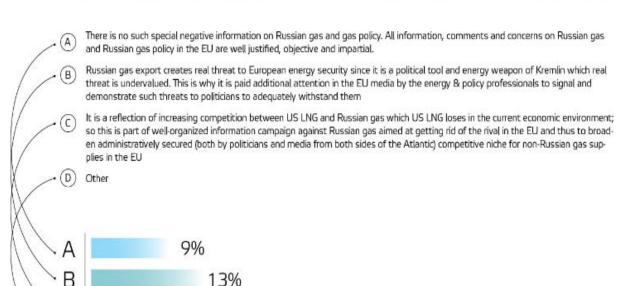
Po you think that US LNG will undermine Russia's gas monopoly in Europe?



Results of the poll for the audience of the Webinar «US LNG and European gas market» 26.10.2016 (2)



How can you comment on the currently increasing inflow in public domain of negative information about Russian gas (too risky to rely upon, it is more dirty that other gases, etc.), Russian gas policy in the EU (political weapon of Kremlin), and new projects on its delivery to the EU (not commercially, but politically motivated)?



22%

57%