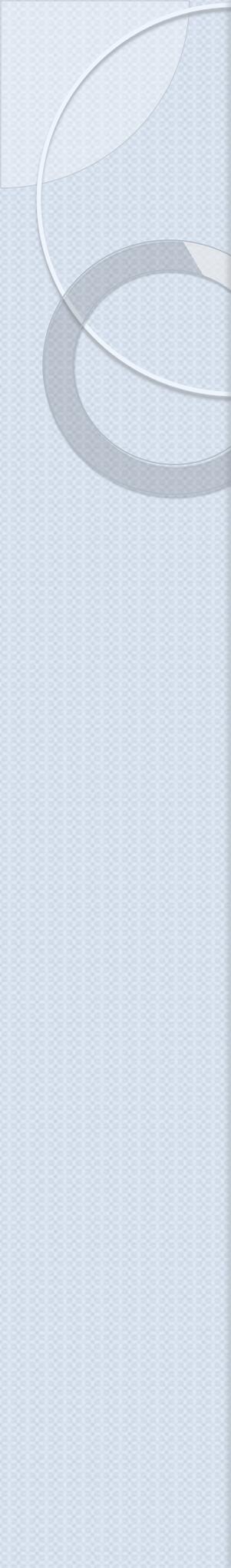


GAS WARS

USE THE FORCE, VLADIMIR

Relationships between EU and Russia: the gas issue
Groupe Idées, 11 January 2016

Photo: eegas.com



1

CONTEXT: Russian economy and gas/energy

2

Russian gas exports

3

Pipeline and gas export strategies volte-face

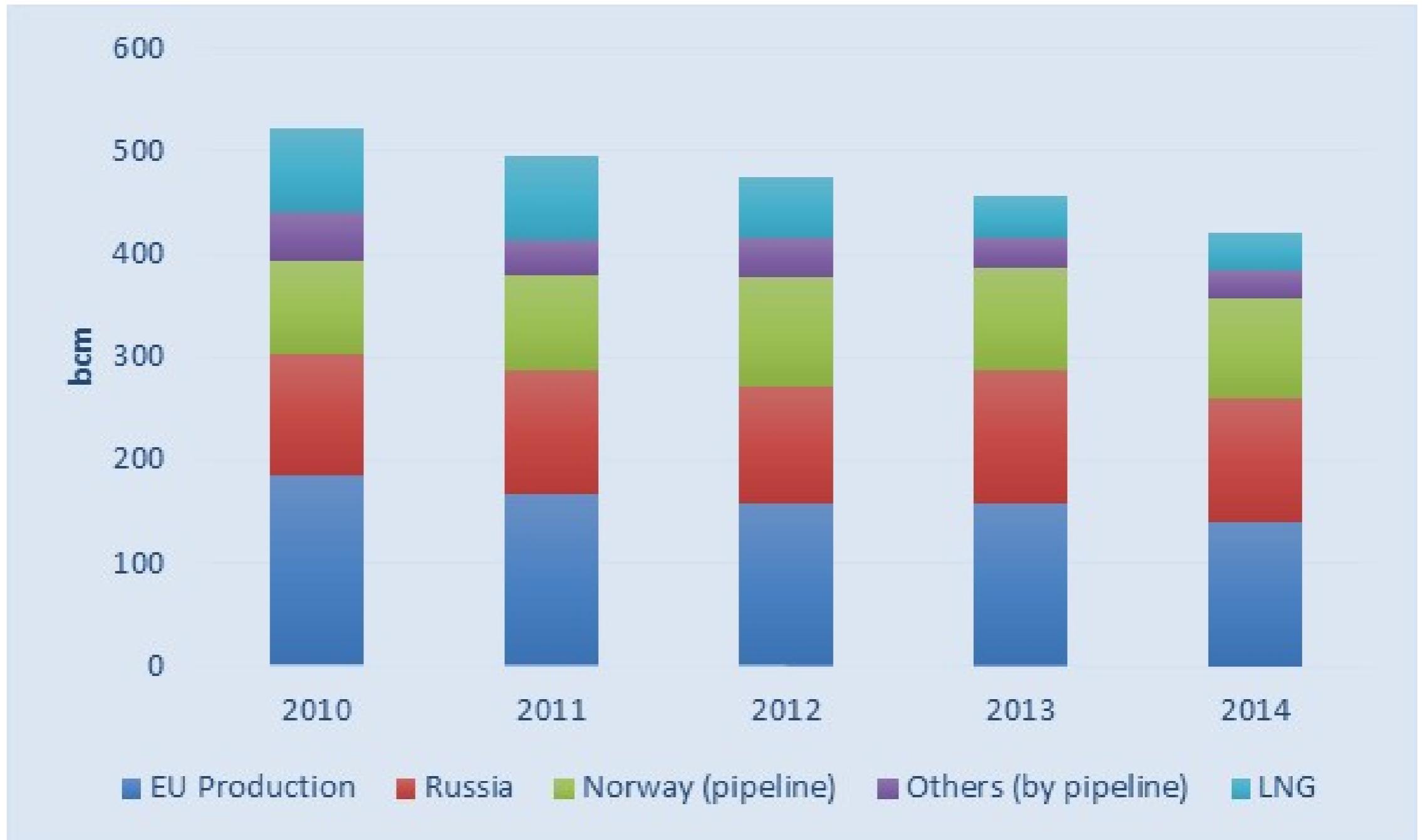


RUSSIAN ENERGY DEPENDENCE

- Gas is far less important as a source of earnings for the Russian government, compared to oil: **gas only contributes 6% of public earnings**, compared to 35% for crude oil and 9% for petroleum products.
- **BUT**
- Gas exports to the EU account for 35% of total sales by Gazprom but **60% of its earnings from gas sales**
- **Gas is the dominant fuel in the domestic economy (54% of energy needs in 2014)**. This gives Russian industries which are heavy users of energy a significant comparative advantage, and allows sales of gas to domestic users at subsidized prices.
- **Natural gas is therefore a pillar of the Russian economy** and a major foundation of domestic politics, as well as being a key source of influence internationally and regionally.



EU/RUSSIA INTERDEPENDENCE



Russia is the main single gas supplier of the EU, accounting for 29% of EU supplies in 2014 (i.e. 42% of total imports), compared to 23% from Norway, 4% from North Africa, 10% in the form of LNG, and 30% from domestic production.



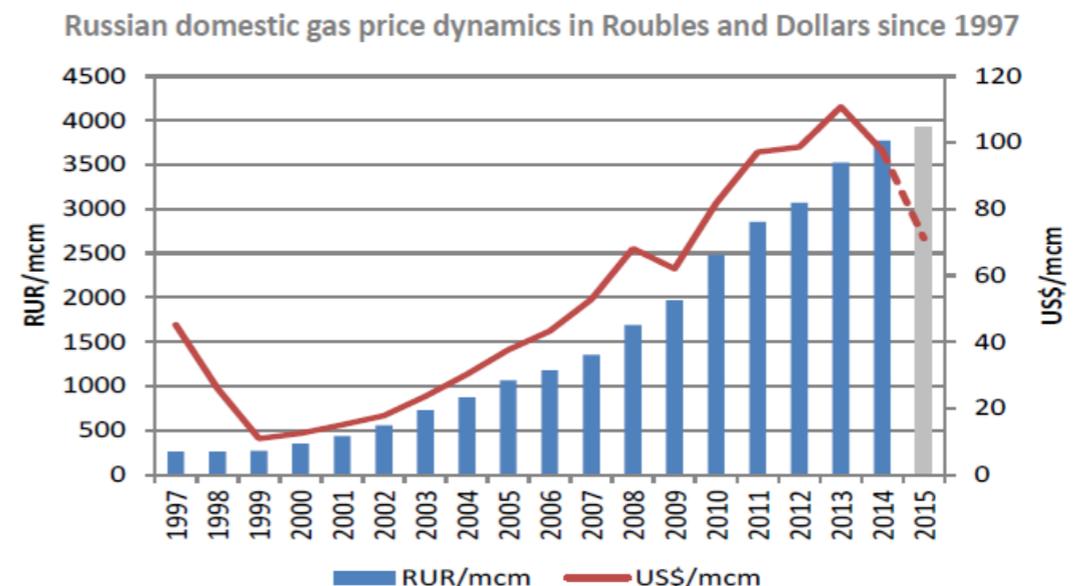
EU/RUSSIA - ECONOMIC AND POLITICAL CONTEXT

- **Unfavourable market trends since the beg. of the decade**
- A push towards a much higher share of spot indexation in pricing formulas and increased buyers' pressure to review long-term contracts
- European Commission antitrust investigations against Gazprom (following allegations of gas market abuse in central and eastern Europe)
- Third-party access requirements for the OPAL pipeline in Germany
- Huge opposition against South Stream pipeline
- Declining EU gas demand
- **A completely new, unfavourable environment in the past two years**
- Economic sanctions against Russia (incl. in the energy sector) after Russia annexed Crimea
- European Commission willingness to reduce dependence on Russian energy (gas) supplies
- Lower exports to Ukraine
- All of this, in addition to the difficult global and domestic market environment (low oil and gas prices, more competition from new suppliers: US shale gas)

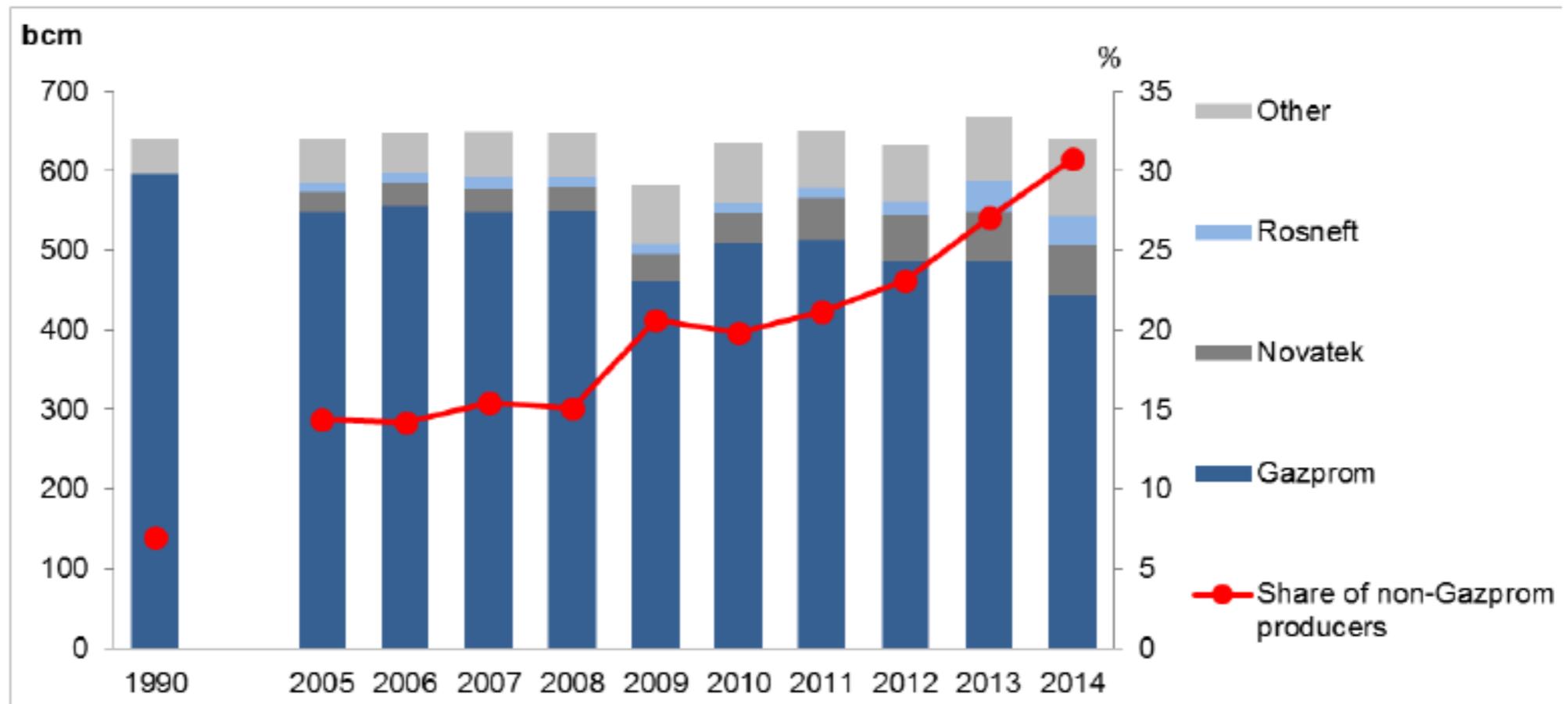


DOMESTIC CHALLENGES

- Economic crisis aggravated by the low oil prices
- Stagnant domestic energy demand
- Frozen domestic gas prices and rising non-payments
- Natural depletion of cheap Soviet legacy fields and the necessity to explore new hard-to-reach and expensive-to-develop oil and gas provinces;
- Increasing problems with the access to financing, as domestic financial market is weak and under developed and foreign capital flows are limited by the sanctions and poor investment climate
- Cuts of investment programs in the oil and gas sector, such as Arctic offshore oil and gas development, LNG and large gas pipeline projects, and slowdowns in maintenance and upgrades



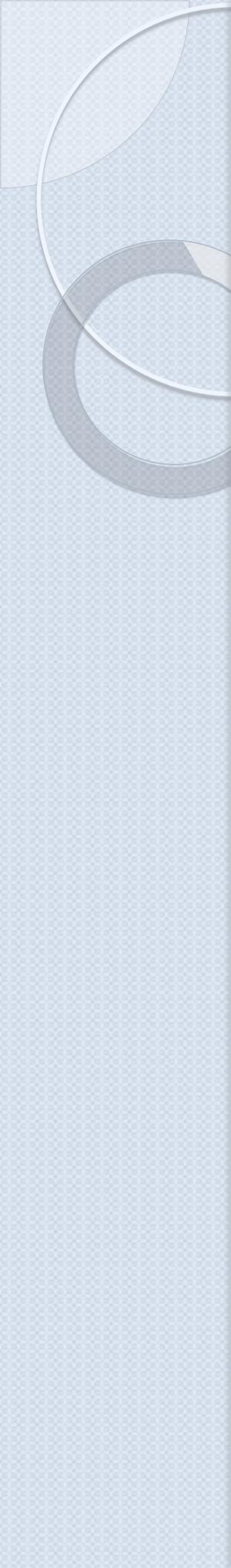
PRESSURE ON GAZPROM ON THE DOMESTIC MARKET



Gazprom produced 444 bcm in 2014 (487 bcm in 2013).

427 bcm (preliminary) in 2015

Share of other producers and their production are rising: 31% in 2014



1

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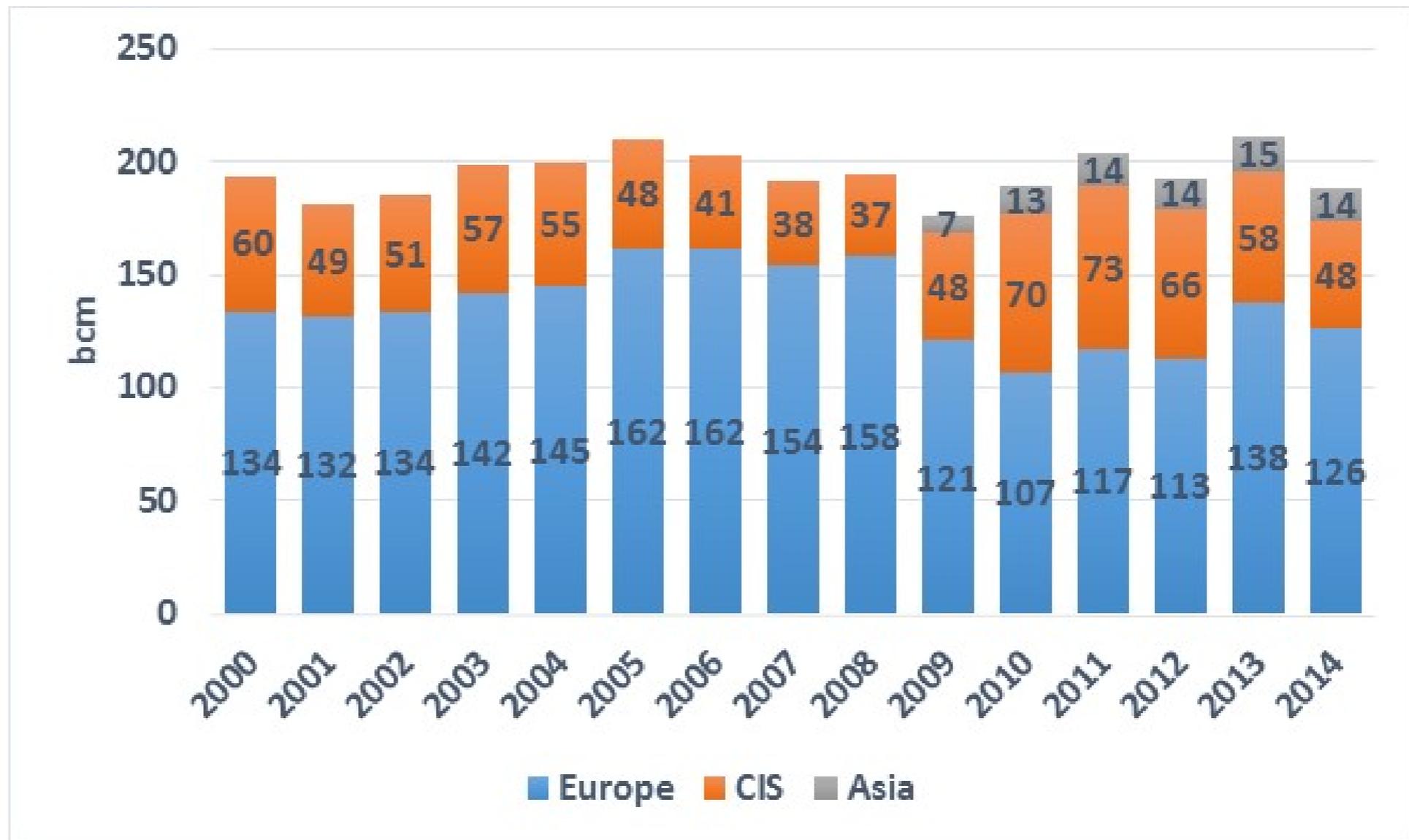
Russian gas exports

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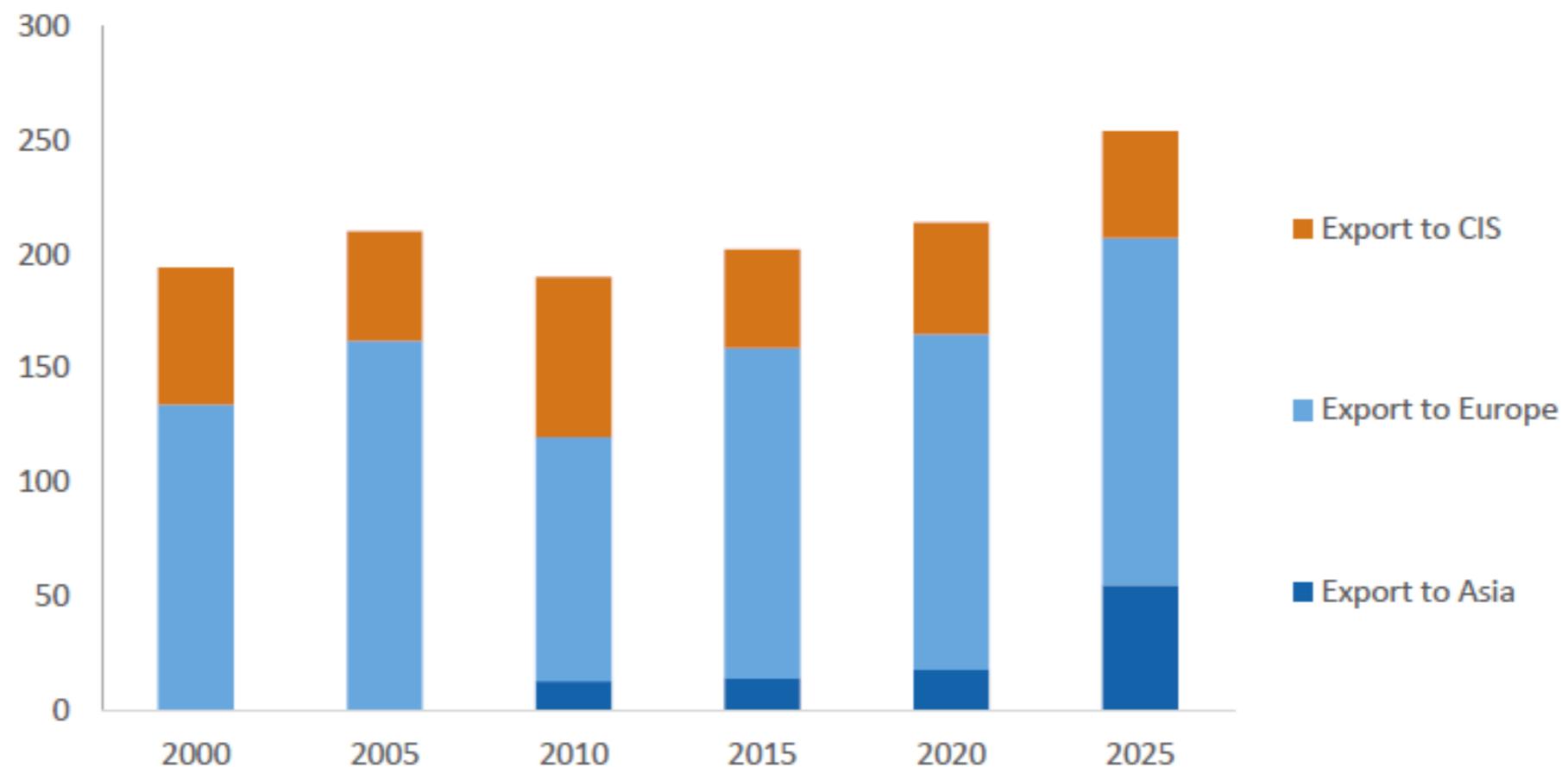
RUSSIAN GAS EXPORTS DYNAMICS



Stagnation in gas exports
Low diversification towards Asia
Fall in CIS exports (Ukraine)

ADAPTATION: SOME DIVERSIFICATION OF SUPPLIES TOWARDS ASIA AND MORE LNG EXPORTS

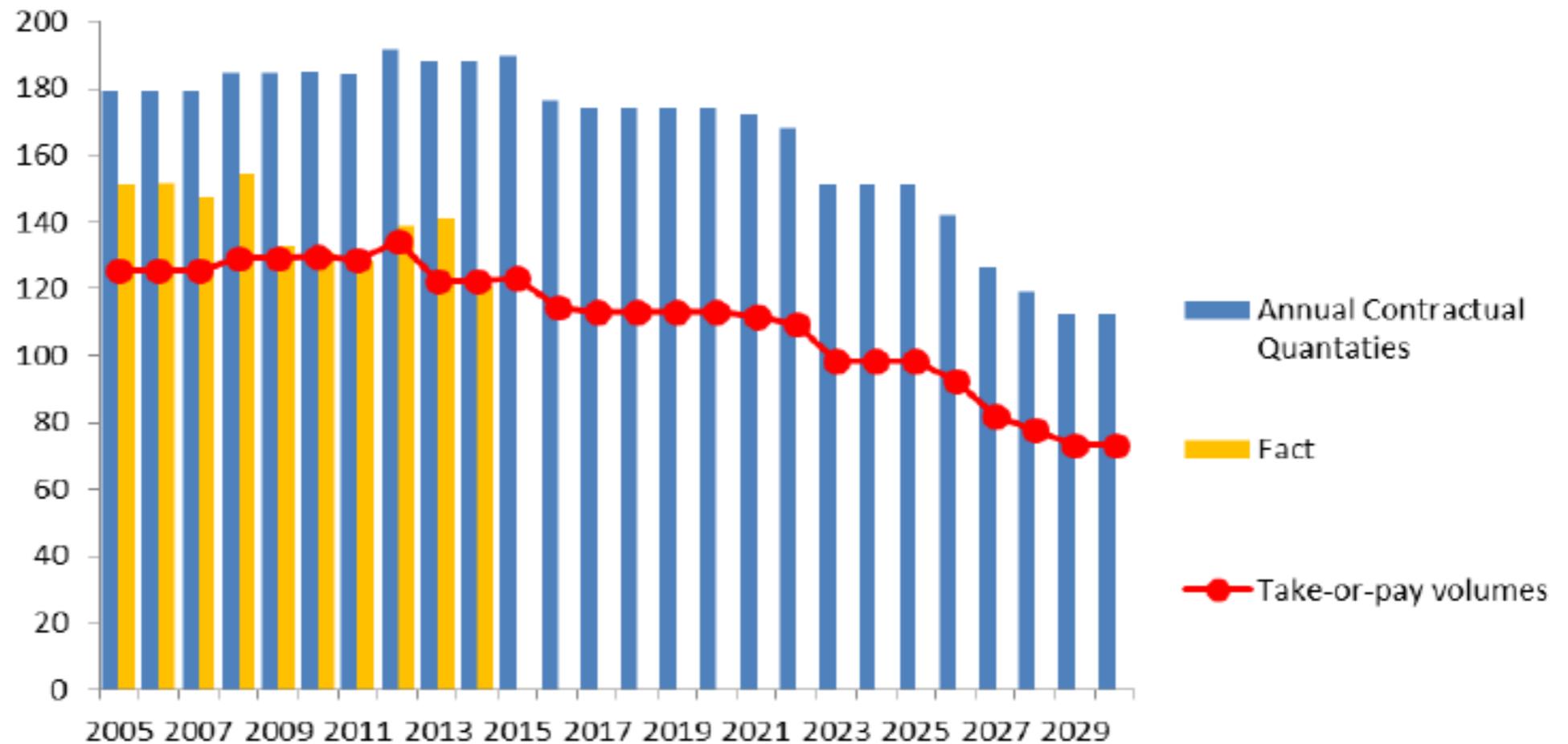
Russian natural gas export forecast, bcm



**But far below European export revenues
Europe remains the main partner**

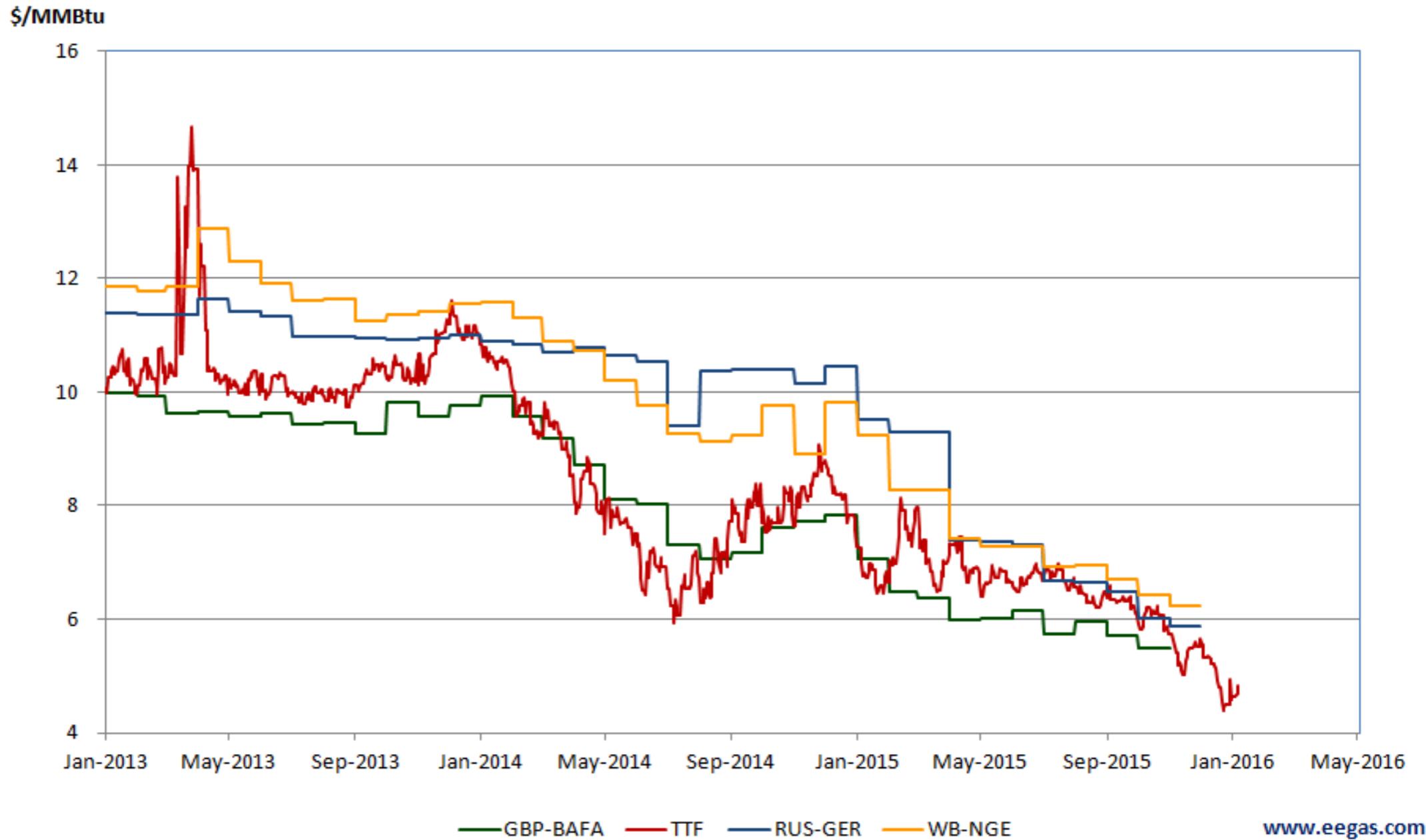
EXPORTS TO EUROPE

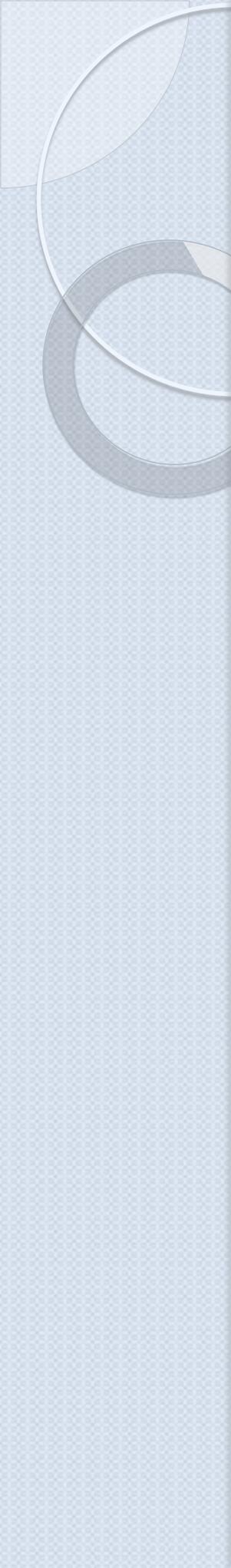
Contract volumes and supply volumes of Russian gas to Europe, bcm



Existing long-term contracts guarantee stable sales to Europe until at least 2022

COMPETITION: VOLUMES OR PRICES?





1

CONTEXT: Russian economy and gas/energy

2

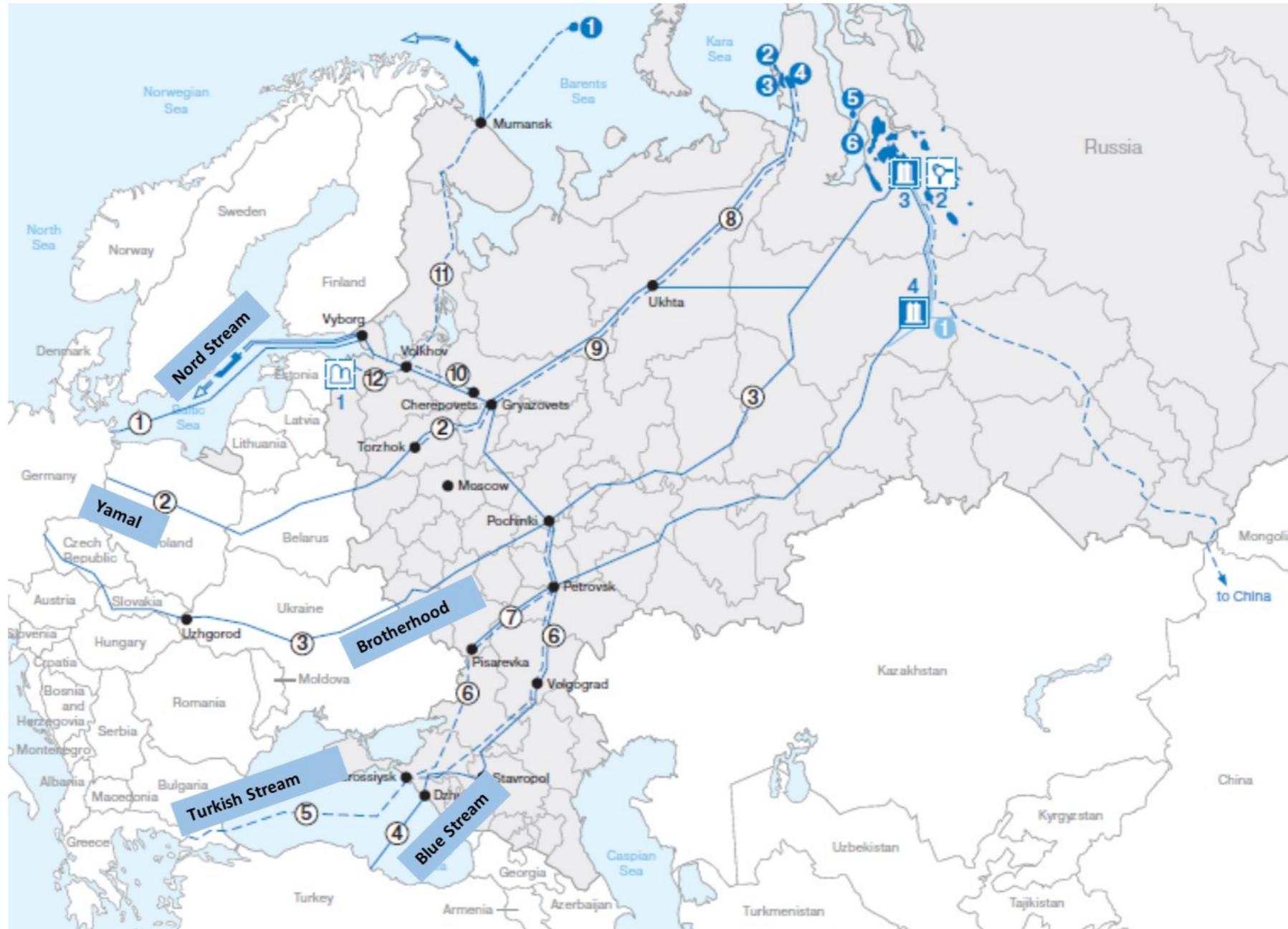
Russian gas exports

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Pipeline and gas export strategies volte-face



MAJOR GAS EXPORT PIPELINES



Current export capacity: around 240 bcm/year



2014: A FUNDAMENTAL REORIENTATION OF RUSSIAN GAS EXPORT POLICY?

- The South Stream cancellation in December 2014 was rapidly followed by four other important gas events in Europe
- Gazprom's failure to continue its fight to obtain an exemption for 100% of capacity in the OPAL pipeline;
- The abandonment of its asset swap with BASF which would have given it full control of the Wingas joint venture.
- South Stream replaced by Turkish Stream
- End of transit through Ukraine by the end of 2019, instead sales at the Turkish/Greek border
- All of this was consistent with the announcement by Alexey Miller that the company was **abandoning its long held strategy of direct sales to European end-users**
- **The opening of a new export route to Asia, plans for an expanded LNG business and a re-focussing of Gazprom's European export strategy were three of the key directions**



2015: A NEW COMPLETE SHIFT IN GAZPROM'S STRATEGY TOWARDS EUROPE

- Nord Stream II
- Completion of BASF/Gazprom assets swaps
- First sale auctions by Gazprom Export (3.2 bcm in September 2015)
- Suspension of Turkish Stream in December 2015
- Gazprom started negotiations with Ukraine about future transit fees

TRIGGERS

- New market realities
 - US LNG exports are starting
- New market opportunities
 - Groningen decline (in addition to the structural decline in European production)
 - European import demand to rise significantly even in a scenario with low demand
 - Gazprom exports to Europe rose in 2015 in line with increased gas consumption
- Regulatory pressure
 - EC antitrust investigation



TURKSIH STREAM



END OF HONEYMOON WITH TURKEY

RATIONALE

- Turkey is Gazprom's second largest customer (27 bcm in 2014)
- Turkey: Willingness to become a gas hub for Europe (TANAP, Turkish Stream, LNG, Storage)

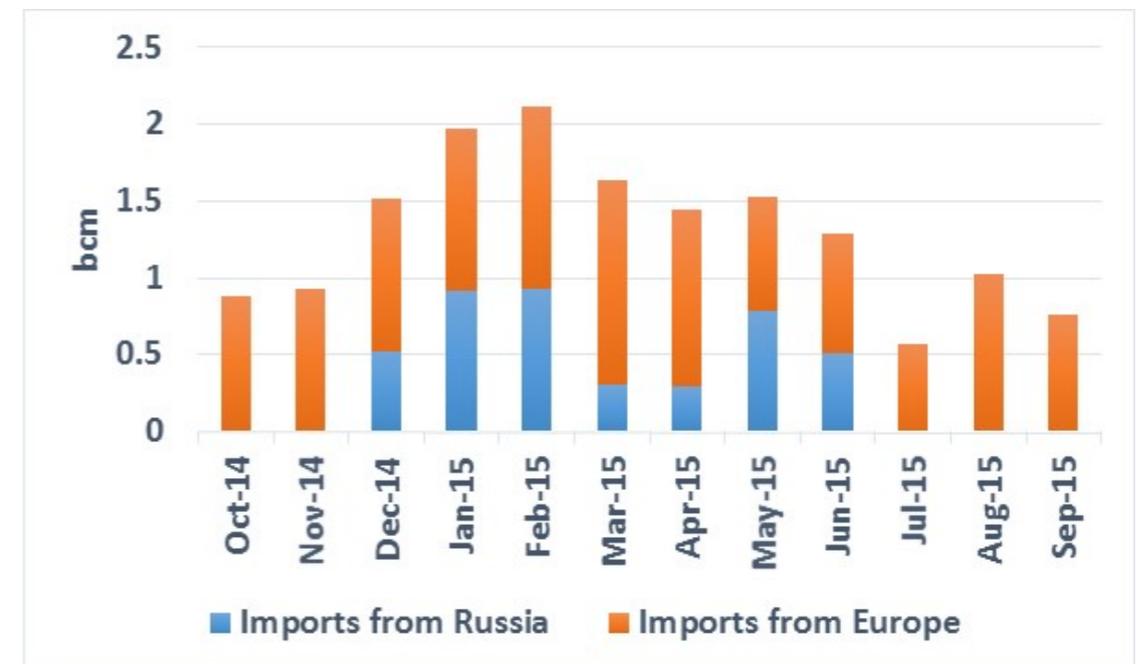
BUT

- Political dimension (Syria)
- Economic dimension
- Turkish Stream (63 bcm/year) is a bad concept as not backed by customers
- Turkish Stream (1 to 4) does not make economic sense (financing issues, future gas demand: Turkey and South Europe)
- Price disagreement: no State bilateral agreement reached in July 2015. Russia announced that only 2 lines would be built (32 bcm/year) and delays
- Escalation of political tensions between the two countries led to suspension of the whole project in December 2015
- **Billions of pipe dream are sitting at the Black Sea coast**



RUSSIA/UKRAINE

- Since winter 2014/15, Russian deliveries under the « **Winter Gas Package** », a tripartite agreement involving Ukraine, Russia and the EC (costly security of supply for Europe)
- Ukraine strongly needs the transit fees (2 billion \$ /year)
- Reducing dependence from Russian gas and natural gas
- **Reverse flows** (mainly from Slovakia)
- **Market liberalization** (new Law adopted in March 2015)



In 2015, Ukraine imported 16.4 bcm, of which 10.3 bcm from Europe and only 6.1 bcm from Russia

NORD STREAM II: THE BIG DIVIDE AMONG EU COUNTRIES

- Nord Stream II: 55 bcm/year (lines 3 and 4)
- September 2015: Shareholders Agreement signed between Gazprom (50%) and Engie, E.on, Wintershall, OMV and Shell
- Germany is the biggest Russian gas consumer (40.3 bcm in 2014)
- 8 Central European countries and Italy and Ukraine strongly oppose the project
- Nord Stream II added to the agenda of the European Council of 18 December 2015
- The adopted Conclusions diplomatically avoid mentioning Nord Stream II. The compromise text states:
 - “The European Council calls for [...] swift implementation of projects of common interest and optimal use of infrastructure for the benefit of a fully-functioning and interconnected market and energy security. Any new infrastructure should entirely comply with the Third Energy Package and other applicable EU legislation as well as with the objectives of the Energy Union.” (that is, the reduction of energy dependency and the diversification of supplier sources and routes)
- If Nord Stream II was to be constructed, it would increase Europe’s dependence on one supplier and concentrate 80% of Russian gas imports [to the EU] on one route.



GAZPROM GAS SALES AUCTION

- **First auction in September 2015: 3.2 bcm offered**
- **One motivation for the move is price:** Gazprom to receive higher prices in the auction than it currently does under its long-term contracts pegged to the weak oil price
- **Another reason is the Opal pipeline** that runs through Germany.
- At the end of the process, a total volume of 1 bcm was sold to 15 clients for the winter period from October 2015 to March 2016.
- 10% of gas sales could be auctioned in 2016/2017



OPAL PIPELINE

- The OPAL and NEL gas pipelines connect Nord Stream with the European gas system. The OPAL gas pipeline (36 bcm/year) is operated by OPAL Gastransport (Gazprom/Wintershall).
- At present, Gazprom is allowed to use 50% of OPAL's capacity, and is unable to make full use of the Nord Stream pipeline
- The capacity on OPAL from Greifswald to Brandov is exempt from TPA and tariff regulation under the condition that, unless a gas release program is implemented, only up to 50% of capacity may be booked by undertakings dominant on any gas market in the Czech Republic. This currently applies to Gazprom.
- **Full use of the pipeline is crucial for Gazprom's future plans to reduce transit of its gas through Ukraine.** Without it, the expansion of the Nord Stream pipeline across the Baltic Sea would make little sense
- **OPAL gas pipeline operator holds auction for free capacities on 1 October 2015** (*for the winter season of 2015-2016 from October 1, 2015*)



CONCLUSION

Russian options

| | No Nord Stream expansion | Nord Stream-3 | Nord Stream-3 and 4 |
|------------------------|---|---|---|
| No Turkish Stream | Transit through Ukraine ~ 60 bcma | Transit through Ukraine ~ 30 bcma | No transit through Ukraine if NS is completely utilized, otherwise limited Ukraine transit |
| Turkish Stream 1 | Transit through Ukraine ~ 45 bcma | Transit through Ukraine ~ 20 bcma | No transit through Ukraine |
| Turkish Stream 1 and 2 | Transit through Ukraine ~ 30 bcma | No transit through Ukraine if NS is fully used, otherwise limited Ukraine transit | No transit through Ukraine |
| Turkish Stream 1,2,3 | Transit through Ukraine ~ 10-15 bcma | No transit through Ukraine | No transit through Ukraine |
| Turkish Stream 1,2,3,4 | No transit through Ukraine | No transit through Ukraine | No transit through Ukraine |

EU/Russia gas relationships

→ Reconciling political and commercial interests

A change in strategy is gradually taking place

Gazprom is adapting to new European regulatory and market conditions

Nord Stream II: a test case for the Energy Union and an opportunity for a Russia/Ukraine/EU compromise

