

GAS EXPORT AND ENHANCING RELIABILITY OF GAS SUPPLY TO EUROPE

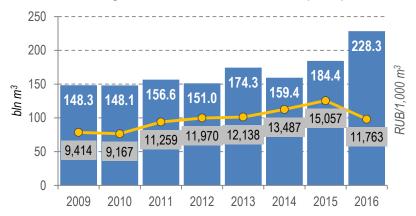
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Deputy Chairman of Management Committee, Gazprom



GAS SALES BY GAZPROM GROUP

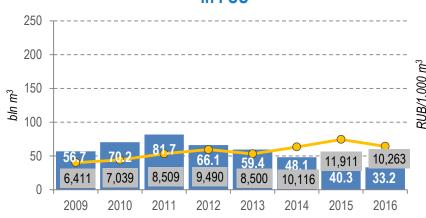
Volume and average price* data of Gazprom Group gas beyond former Soviet Union (FSU)**



Net revenue* from gas sales beyond FSU



Volume and average price* data of Gazprom Group gas in FSU



Net revenue* from gas sales in FSU



Inclusive of (excise tax and) customs duties

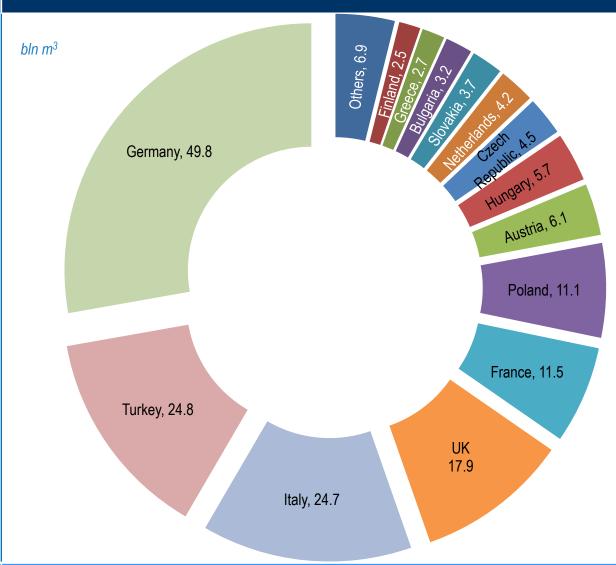
^{**} Gas supplies, including LNG and auctioned gas, to foreign countries, except for FSU, under contracts of Gazprom Export and other Gazprom companies



GAZPROM GROUP'S GAS SALES BEYOND FSU

(UNDER CONTRACTS OF GAZPROM EXPORT AND GAZPROM SCHWEIZ)

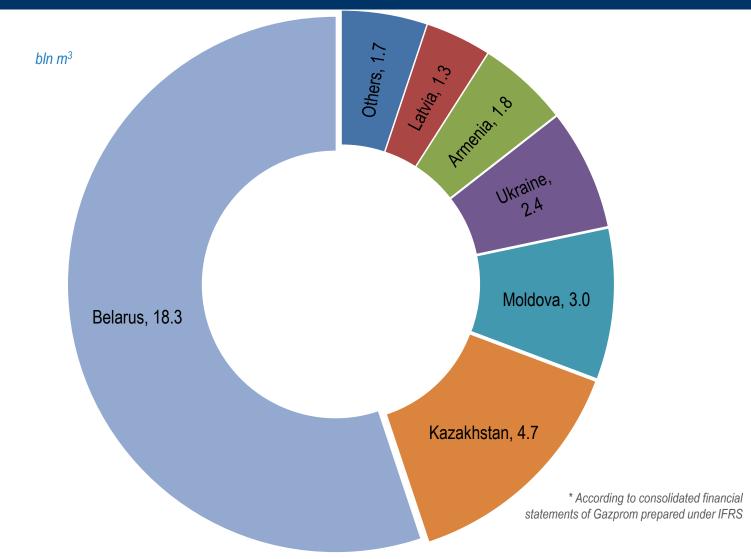
- Total sales in 2016 amounted to 179.3 bln m³
- Increase of 19.9 billion m³ (+12.5%) from previous year
- Major gas buyers in 2016 were Germany, Turkey, and Italy





GAZPROM GROUP'S GAS SALES TO FSU IN 2016

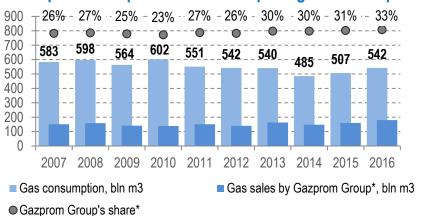
Gazprom's gas sales in FSU totaled 33.2 bln m^{3*} in 2016



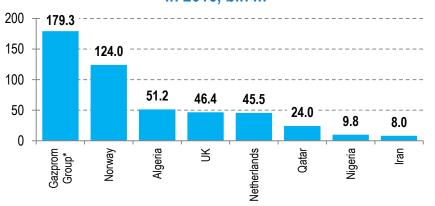


PIVOTAL ROLE OF GAZPROM GROUP'S GAS IN EUROPEAN MARKET

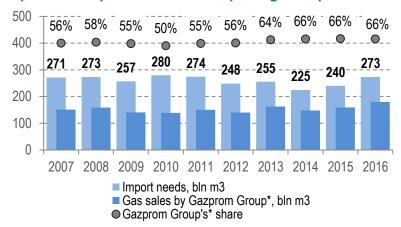
Gazprom Group's* share in European gas consumption



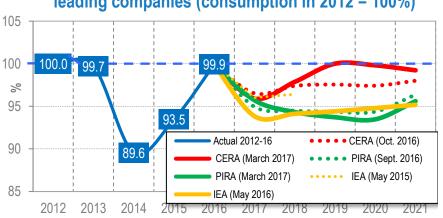
Gas supplies to Europe by major gas exporters and producers in 2016, bln m³



Gazprom Group's* share in European gas imports**



Short-term forecasts for gas consumption from world's leading companies (consumption in 2012 = 100%)



^{*} Gas sales to European countries beyond FSU under contracts of Gazprom Export and GAZPROM Schweiz

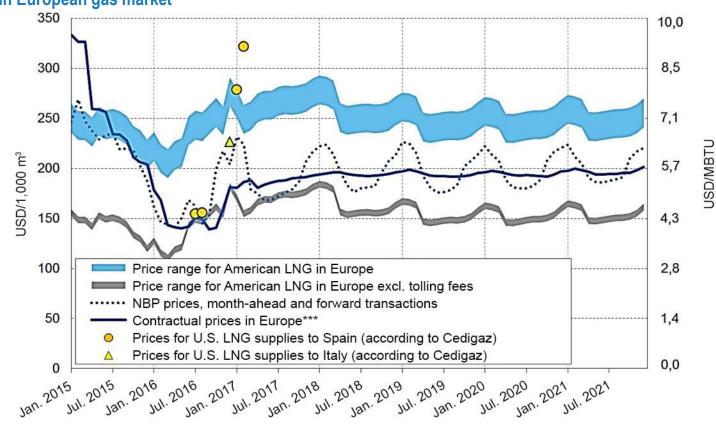
^{**} Difference between consumption and indigenous production



LOW COMMERCIAL ATTRACTIVENESS OF U.S. LNG SUPPLIES TO EUROPE

In current
environment,
forward contract
prices at European
trading platforms do
not cover full cost of
future U.S. LNG
supplies linked to
Henry Hub prices

Estimated price range* for U.S. LNG supplies in Europe versus forward prices** in European gas market



^{*} Based on Henry Hub forward prices, P = HH * 115% + X, where X – costs (liquefaction, shipments, regasification)

Sources: Bloomberg, Cheniere Energy, WoodMackenzie, World Bank

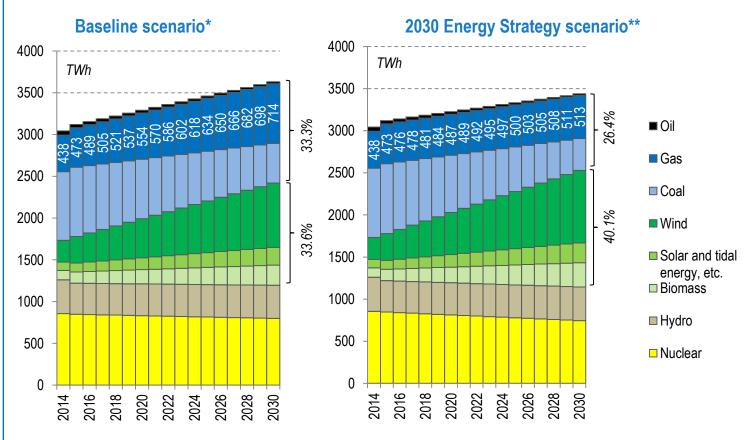
^{**} NBP forward prices

^{***} Historical data: Russian gas prices, including delivery, at German border (according to World Bank), projected data: based on current forward prices of Brent and TTF



FORECASTED GROWTH IN GAS-FIRED POWER GENERATION

Power industry shows highest growth rates in gas consumption across Europe. Even EC's most radical ecology-oriented scenario, with highest subsidies for RES, envisages increased gas use for power generation. According to baseline scenario, by 2025 gas-fired power generation in EU will grow by one-third versus 2015.



^{* 21%} increase in energy efficiency by 2030, 33% reduction of greenhouse gas emissions by 2030 versus 1990, 24.4% share of RES in primary energy consumption by 2030.

^{** 27%} increase in energy efficiency by 2030, 40% reduction of greenhouse gas emissions by 2030 versus 1990, 27% share of RES in primary energy consumption by 2030. Source: European Commission, ENTSO-E



USE OF NATURAL GAS AS VEHICLE FUEL IN LONG TERM

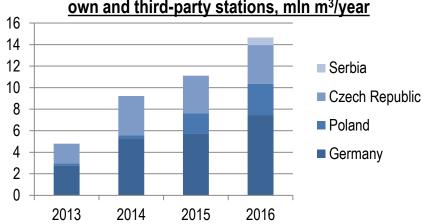
Between 2013 and 2016:



- Number of Gazprom Group's gas filling stations in Europe increased from 23 to 69
- In 2016, Gazprom Group entered Serbia's NGV market, with retail services offered at two stations
- Gazprom's supplies of CNG and LNG to its own and third-party gas filling stations grew from 4.8 to 14.6 mln m³
- In collaboration with local companies, Gazprom NGV Europe (part of Gazprom Group) implements Europe's first projects for introducing LNG as vehicle fuel in public bus transportation in Poland: 11 buses in Olsztyn and 35 buses in Warsaw



Gazprom's sales of gas as vehicle fuel through its own and third-party stations, mln m³/year



<u>Prospects for gas demand increase in transportation</u> sector:

- Heavy-duty truck can consume up to 200–300 kg of LNG daily
- Transportation company with 20–40 trucks consumes several mln m³ of gas per year
- Europe's demand for natural gas as vehicle fuel can reach up to 27 billion m³ by 2025*

^{*} ACER (Agency for the Cooperation of Energy Regulators) forecast.



UNDERGROUND GAS STORAGE: ENSURING STABLE, GAZPROM RELIABLE AND FLEXIBLE SUPPLIES

2016: development of Europe's underground gas storage network



During 2016/2017 withdrawal season, Gazprom operated **5 bln m**³ of storage capacities in Europe.

Maximum daily deliverability of UGS facilities in Western Europe was 83.3 mln m³ during 2016/2017 withdrawal season.

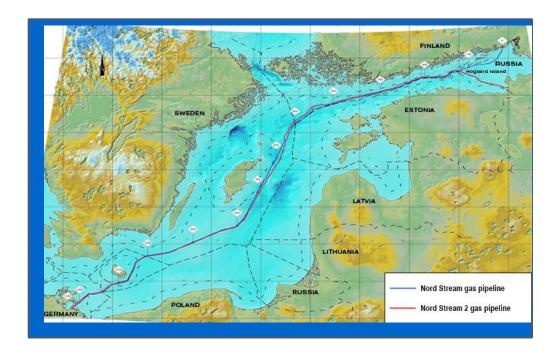
Katharina and Damborice UGS projects are in progress:

- Katharina UGS facility has 6 operational caverns with total working capacity of 315 mln m³ and maximum daily deliverability of 23.2 mln m³. On April 1, 2017, UGS surface facilities were brought onstream.
- On July 1, 2016, Damborice UGS facility with design working capacity of 456 million m³ was put into operation in Czech Republic. At present, Gazprom has access to 156 mln m³ of Damborice's storage capacity, with maximum daily deliverability standing at 3.7 mln m³.



NORD STREAM 2

- Nord Stream 2 project envisages construction of gas pipeline across Baltic Sea with entry point in Kingisepp District of Leningrad Region and exit point near Greifswald in Germany
- Length of gas pipeline: around 1,200 km
- Annual capacity: 55 bln m³ of gas
- In addition to higher reliability of supplies, Nord Stream 2 project is consistent with EU objectives for energy security and harmful emissions reduction
- Nord Stream 2 AG project company was set up to deliver project
- Nord Stream 2 AG signed financing agreements with ENGIE, OMV, Royal Dutch Shell, Uniper, and Wintershall for Nord Stream 2 gas pipeline project

















TURKSTREAM

- TurkStream is project for transit-free export gas pipeline stretching across Black Sea from Russia to Turkey and further to Turkey's border with neighboring countries
- First string (15.75 bln m³ in capacity) of gas pipeline is intended for Turkish consumers, while second string (with same capacity) will deliver gas to EU countries
- On October 10, 2016, Russian and Turkish Governments signed Agreement on TurkStream project
- South Stream Transport B.V., wholly-owned subsidiary of Gazprom, is responsible for construction of gas pipeline's offshore section
- On May 7, 2017, pipe-laying of TurkStream gas pipeline started near Russian coast (Audacia vessel owned by Allseas)
- Pioneering Spirit, world's largest pipe-laying vessel, has arrived in port of Anapa to build TurkStream pipeline in deepwater area of Black Sea
- TurkStream is expected to come onstream before late 2019







THANK YOU FOR YOUR ATTENTION!