# Press Conference Background Gazprom in Eastern Russia, Entry into Asia-Pacific Markets (June 15, 2018)

Gazprom continues to implement projects under the Development Program for an integrated gas production, transportation and supply system in Eastern Siberia and the Far East, taking into account potential gas exports to China and other Asia-Pacific countries (Eastern Gas Program).

# Resource base and expansion of production capacities

The Gazprom Group's gas reserves in the licensed blocks located in Eastern Siberia and the Far East amount to 5.76 trillion cubic meters, including 4.16 trillion cubic meters in the A+B1+C1 category and 1.6 trillion cubic meters in the B2+C2 category.

### Yakutia and Irkutsk gas production centers

Extensive work is underway to set up the Yakutia and Irkutsk gas production centers with the purpose of creating a large raw material base for pipeline gas deliveries to Russian consumers in eastern regions and to China. The Chayandinskoye and Kovyktinskoye fields are unique, as their gas reserves are not only overabundant, but also multi-component, containing valuable fractions (including helium) for gas processing businesses.

**Chayandinskoye** forms the basis for the Yakutia gas production center. The field's recoverable reserves total 1.24 trillion cubic meters<sup>1</sup> of gas and 61.6 million tons of oil and condensate. The field is ready for commercial development. It is planned to start producing gas from Chayandinskoye in late 2019, with an annual output of up to 25 billion cubic meters.

At present, pre-development is in full swing, with the ongoing construction of gas well pads, gas collectors and power supply facilities, as well as the assembling of core process equipment.

As of the end of 2017, 91 gas wells were drilled. In 2018, 39 and 55 gas wells are to be drilled and built to completion, respectively. Drilling operations are ahead of schedule.

**Kovyktinskoye** is the basis for the Irkutsk gas production center, containing 2.71 trillion cubic meters of gas and 90.6 million tons of gas condensate.

The field's development scheme provides for a phased increase in gas production to 25 billion cubic meters per year.

At present, pilot commercial development is taking place at the field in order to explore the capacity of the existing producing wells. The membrane elements of the pilot membrane unit for helium extraction are undergoing testing.

### **Sakhalin III**

The **Kirinskoye field** is under commercial development. Commercial gas extracted from the two producing wells is fed into the Sakhalin – Khabarovsk – Vladivostok gas pipeline, while gas condensate goes into Sakhalin Energy's oil pipeline.

Upon reaching its design capacity, the field will produce 5.5 billion cubic meters of gas per year. Development drilling was completed in 2017.

<sup>&</sup>lt;sup>1</sup> Recalculated in accordance with the newly-adopted Russian Classification of Reserves and Forecast Resources of Oil and Flammable Gases.

Design and preparatory works are being carried out for the **Yuzhno-Kirinskoye field**.

### **Gas transmission capacity development**

The **Power of Siberia gas pipeline** will deliver gas from the Yakutia and Irkutsk gas production centers to Russian consumers and to China. The pipeline spanning some 3,000 kilometers will have 9 compressor stations with the aggregate capacity of over 1,200 MW.

The bulk of construction and installation for the priority section running from Chayandinskoye to the Chinese border will be completed this year. 2019 will see pipeline tests, installation of power supply, communications and telemechanic systems, and start-up and commissioning. Construction of the Atamanskaya compressor station, which will maintain the required pressure during gas deliveries to China, is underway near the border.

Construction of a two-string crossing under the Amur River within the Power of Siberia gas pipeline is also in progress. Tunneling works are finished for two tunnels. It is planned to complete pipe pulling operations in the first tunnel in the summer of 2018.

The successful operation of the **Sakhalin – Khabarovsk – Vladivostok gas pipeline** contributes to the development of gas infrastructure, power sector and industries in Russia's Far East.

The gas pipeline is more than 1,800 kilometers long.

In order to determine the potential areas for creating **underground gas storage facilities** in Eastern Siberia and the Far East, geological exploration is being performed in the Blagoveshchenskaya area and the Belogorsky block in the Amur Region and the Angarskaya area in the Irkutsk Region. It is planned to drill two prospecting and appraisal wells in the Blagoveshchenskaya area in 2018.

Efforts continue to develop the **NGV** refueling infrastructure in the Far Eastern Federal District, with two CNG filling stations of Gazprom already in operation and an increasing amount of natural gas used as a vehicle fuel. Sales at the CNG station in Petropavlovsk-Kamchatsky rose from 31,000 cubic meters of gas in 2017 to 153,600 cubic meters in January–April 2018, while the CNG station in Yuzhno-Sakhalinsk sold 286,000 cubic meters of gas in 2017 and 438,500 cubic meters in January–April 2018. The Company plans to build new gas filling units in the region.

# **Hydrocarbon feedstock processing**

As a way of pursuing its systematic policy for sustainable mining, Gazprom will process gas from the Chayandinskoye and Kovyktinskoye fields at the Amur Gas Processing Plant (GPP), which will become the biggest such plant in Russia and second-largest in the world. The GPP will have an annual design capacity of 42 billion cubic meters of gas. It will also include a helium production facility (up to 60 million cubic meters per year).

The Amur GPP will have six production lines, each producing 7 billion cubic meters per year. Two of those lines will come online in 2021 as part of the first start-up complex. Later, the remaining trains will be put in operation successively.

The plant entered the construction phase in 2015. A utility system is already in place, along with a wharf on the Zeya River. The railroad infrastructure is under development. The project is currently at the main stage of implementation, as key gas processing facilities are being set up.

### **Natural gas deliveries to Asia-Pacific under Eastern Gas Program**

Asia-Pacific is among the world's most promising regions in terms of natural gas consumption. Due to limited indigenous production potential, relatively high rates of

economic growth, and state policies aimed at improving environmental conditions and spurring gas infrastructure development in the region, Asia-Pacific is expected to show a high rate of growth in both pipeline gas and LNG imports in the long term.

With its high rates of gas consumption growth (about 15 per cent in 2017), China is the most promising gas market in the world. The share of gas imports in the overall consumption is increasing due to the lower growth rates in indigenous production. Gazprom is implementing the project for Russian gas supplies to China via the eastern route (Power of Siberia).

In December 2017, Gazprom and CNPC signed the Heads of Agreement for natural gas to be supplied from Russia's Far East to China. The document outlines the basic parameters of future supplies, namely the volumes, the term of the contract, the starting date of supplies, the surge period, and the cross-border point. The corresponding contract is expected to be inked before the end of 2018.

Asia-Pacific is a traditional LNG market for the Gazprom Group: between 2005 and 2017, over 75 per cent of the Group's LNG was shipped to this region. In 2017, the Company supplied 2.8 million tons of LNG to Asia-Pacific.

In early 2015, Gazprom Marketing & Trading Singapore (part of the Gazprom Group) and Yamal Trade signed a long-term contract to supply up to 2.9 million tons of LNG per year from the Yamal LNG project. The contract mostly concerns deliveries to the Indian market. As part of the eight-year contract, the Group's portfolio will add 1.2 million tons of LNG per year to be shipped from the floating LNG plant in Cameroon starting from 2018. Some of that LNG may be later shipped to Asia-Pacific.

Gazprom is also implementing its own new LNG projects oriented toward the Asia-Pacific markets. The Company's priority is to expand its trade in the region by constructing the third production train of the LNG plant within the Sakhalin II project.

## Sakhalin II project

In 2017, the Sakhalin II project produced 18.26 billion cubic meters of gas and 5.81 million tons of oil and condensate. The output of the LNG plant within the project stood at 11.49 million tons of LNG, a new production record (the previous maximum was set in 2016 at 10.93 million tons).

In June 2015, Gazprom and Shell signed the Memorandum to construct the third production train of the LNG plant on Sakhalin Island.

The project envisages the construction of a new production train of the LNG plant within the Sakhalin II project, similar to the two existing trains (annual capacity of up to 5.4 million tons of LNG), an additional LNG storage facility, and port structures, as well as the expansion of the trunkline's compressor capacities.

In the course of 2017, the FEED and project documentation for the third production train was completed, the LNG jetty was expanded, and the gas transmission system was renovated. In addition, all of the required approvals were obtained from the state expert reviews.