

Security of Supply and Related Investments

*Speech by Alexey Miller at the 24th World Gas Conference
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Dear Ladies and Gentlemen, Colleagues,

First, I would like to express my gratitude to the International Gas Union and its President, Mr. Ernesto López Anadón, for the fruitful work in the last 3 years after the congress in Amsterdam and the opportunity to address the Conference participants and guests here in Buenos Aires today.

Our Forum is taking place at a crucial point – a period in which we are searching for ways to overcome the consequences of the global financial crisis and industrial recession. In this context, the topic of gas supply security being addressed by our session is particularly vital.

It should be noted that in recent years, the issue of energy security, including security of gas supply, has been a focus of debate at the highest levels and has become a priority item on the agenda of international conferences, meetings of political leaders and even military alliances. Today's Forum is a good opportunity for us to discuss this subject within this assembly of top professionals and highlight strategies that gas market players are pursuing for the sake of increased energy security worldwide, without wasting our time dispelling ideological and political prejudices.

The term 'investments for higher security of supply' will be construed broadly – not only as necessary capital injections, but also as a system of actions and initiatives on a global scale.

Ladies and Gentlemen!

According to the United Nations, by 2030 the world population will grow by nearly one-fourth – up to 8.3 billion people.

Simultaneously, there will be an increase in energy consumption per capita, to be contributed primarily by the most populated countries – China, India, Brazil and Indonesia. These countries are experiencing a rapid process of industrialization, urbanization and automobile use. Energy consumption will be growing on the back of limited opportunities for boosting oil output, narrow bounds for developing the nuclear energy sector and an extremely low contribution from new, alternative non-hydrocarbon energy. All this offers excellent prospects for the gas industry. Most estimates are fairly consistent that in the foreseeable future mankind won't be able to do without fossil fuels. Natural gas will be the most eco-friendly hydrocarbon that will be used on a broader basis, including for power generation purposes and as a vehicle fuel. If the 20th century was our "oil century," then the 21st century stands to be our "natural gas century."

Gazprom is a global leader in supplying the world with natural gas. Our company owns the world's richest natural gas reserves that, at the start of 2009, were estimated at 33.1 trillion cubic meters.

The company's resource base is undergoing continuous development. We are successfully performing geological exploration – over the last four years, gas reserve additions through geological exploration have stably surpassed the volume of gas production. Furthermore, last

year Gazprom obtained licenses for a number of strategically important fields in Russia with aggregate reserves averaging four trillion cubic meters. At the same time, work is successfully underway in obtaining new licenses for promising areas abroad. We believe that Gazprom's efforts targeted at replenishing and expanding our resource base are a crucial aspect of the system we use to provide energy security for all of our customers for decades to come.

Our efforts to develop production capacity also contribute to reinforcing the fundamentals of the global gas industry.

Gazprom is a global leader in gas production, accounting for 17 percent of global gas production and standing as the largest gas exporter.

Available production capacities enable us to extract up to 600 billion cubic meters of gas per annum, which gives my company the opportunity to flexibly respond to gas demand changes and reliably fulfill all of our gas supply contracts.

Gazprom owns and operates the world's largest gas transmission system with a length of approximately 160 thousand kilometers.

Russia's gas supply system is the center of the integrated gas transmission facility that was constructed in the Soviet Union on territory stretching from Siberia and Turkmenistan to the western borders of Belarus and Ukraine from the 1970s to 1980s.

Thanks to centralized management, infrastructural diversity and parallel transmission routes, the Unified Gas Supply System of Russia has a substantial reliability margin and a high maneuvering capability.

Due to continuous upgrades and development of gas transmission capacities, Gazprom today secures the highest reliability of gas transmission by its trunklines and can offer the most attractive business opportunities to our partners from Central Asia and the Caspian region.

Finally, the fourth special quality — Gazprom has the world's largest portfolio of long-term gas supply contracts. According to these contracts, some of which are in effect until 2035, around three trillion cubic meters of gas will be supplied in the years to come.

In terms of long-standing mutual interests and the need to finance enduring investment cycles, long-term business arrangements can offer a competitive advantage translated into stability.

Today, cooperation in the energy sector between Gazprom and hydrocarbon consuming countries is based on the balance between interest and market risks shared among producers and prominent wholesale importers. Such cooperation is feasible due to the existing system of long-term contracts.

The operating track-record of this system, whereby producers bear the technological and price risks and large importers bear gas offtake risks under the 'take-or-pay' obligations, points to its reliability and viability in the future. This system also serves as a dependable and non-alternative instrument for funding extremely capital-intensive and venture projects aimed at creating gas production and transportation capacities. Finally, this system guarantees the sustainability of gas supply for importers and consumers, and is a crucial element of energy security.

During periods of temporary reduction of gas demand in major markets, the most important factors to ensure stability are observance of pricing principles and gas delivery and offtake rules, including 'take-or-pay' obligations.

Investment sufficiency has been named in the IGU's Triennium Report as one of the top priorities. Our approach is well known. Gazprom invests enough to fulfill its long-term obligations.

For instance, Gazprom's investment program for this year is RUB 761.5 billion, which is approximately USD 25.5 billion.

This means that our investments in 2009, a year of global financial crisis, will exceed the yearly average indicator for the three years since our last meeting in Amsterdam. Those who have signed long-term contracts may be confident even in crisis about the sufficiency of investments for securing deliveries in the next economic cycle.

At the same time, we are investing in important energy security projects. In addition to enhancing our existing gas transmission system and developing our resource base and production capacities, we are working on creating new export corridors.

To reduce transit risks and enhance the reliability and flexibility of gas exports, Gazprom is implementing two new gas transmission projects – Nord Stream and South Stream.

The Nord Stream gas pipeline, with a full capacity of 55 billion cubic meters per annum, will run under the Baltic Sea and link Russia and Northern Europe's gas transmission networks. This pipeline's first line is due to begin operation in 2011. The South Stream gas pipeline system, with a full capacity of 63 billion cubic meters, will traverse the Black Sea, run across Bulgaria, Hungary, Greece and Serbia, and transmit Russian gas to Southeastern Europe no later than 2015. New gas pipelines will enable us to not only diversify Russian gas export routes and reduce transit risks, but also generate extra opportunities to increase gas deliveries.

Gazprom's efforts to develop an underground gas storage system in Russia and abroad would provide a significant safety margin to ensure reliable gas supply to consumers even during seasonal peak periods, which is of principle importance.

Gazprom's most important contribution to enhancing security of global gas supply is through its creation of new gas production regions in Russia. Among these regions are the Yamal Peninsula, Arctic shelf, Eastern Siberia and the Far East. The eastward vector is a special priority of our strategy.

As for Yamal, Gazprom has begun developing the Bovanenkovskoye field, the biggest on the Peninsula in terms of gas reserves. We have also begun constructing the Bovanenkovo – Ukhta gas transmission system. Gas production from the field is projected at 115 billion cubic meters per annum, to be increased to 140 billion cubic meters in the long term.

Another region of Gazprom's strategic interest is the Russian Arctic shelf. The region contains immense hydrocarbon resources, which would enable us to establish a new oil and gas production province. Shtokman field development will become Gazprom's pilot project on the Arctic shelf.

Shaping of the gas industry has begun in eastern Russia. A strategic task in the region is to arrange new gas production centers interlinked by a system of gas trunklines in the Krasnoyarsk Krai, Irkutsk Oblast, Yakutia, Kamchatka and Sakhalin. The plan is to produce some 110 billion cubic meters of gas in these regions by 2020, which is comparable to the annual volume of Russian gas exports to Western Europe. Gazprom is executing specific projects in each of the new gas production centers I just mentioned. Eastern Siberia and Far East resources under development will meet growing energy demand in Russian regions and Asia-Pacific countries.

In the Russian power industry, there is a term referred to as the 'guaranteeing supplier'. If applied to the gas market, over the past 30 to 40 years Gazprom has become a guarantor of reliable gas supplies to Europe.

The large-scale development of gas production in the Eastern part of Russia will enable Gazprom to make a substantial contribution to the energy balance in the whole Asia and Pacific

Region. Our LNG plans include producing 80–90 million tons of LNG by 2020, which will account for up to 25 percent of the share of the global market, depending on the pace of projects implementation abroad. Once these plans are fulfilled, Gazprom will also become a ‘guaranteeing supplier’ on a worldwide scale.

Sustainable development of the gas industry requires that the interests of suppliers and consumers be harmonized. This is the very goal Gazprom is pursuing by advocating for international joint projects and the creation of transnational production chains linking upstream and downstream operations to create a full cycle. To help make natural gas supplies secure, suppliers and consumers can participate in activities across the entire value added chain in the gas industry.

Cooperation of this kind may be best exemplified by our partnership with Germany’s BASF and E.ON. Joint operations include production (Yuzhno-Russkoye field), transmission (Nord Stream gas pipeline) and end consumer relations (gas supplies via WINGAS, a joint venture with BASF, and projects with E.ON in the power sector).

Gazprom is developing the Achimov deposits of the Urengoyskoye field with Wintershall. We are gaining experience in developing deep fields with a complex geological structure. Retaining 100 percent of license rights, Gazprom will use this joint-operation model as a basis for Shtokman field Phase I development with France’s Total and Norway’s Statoil.

Once Dutch Gasunie became a shareholder in Nord Stream AG, a company dealing with construction, operation and management of the Nord Stream gas pipeline, the project status changed from bilateral, Russian-German, to pan-European. This is particularly evident if we bear in mind that 14 companies from seven European countries are now involved in this project’s execution, including through procurement contracts.

South Stream is another international project. The offshore section of the pipeline will be a joint business with Italy’s ENI and possibly France’s EDF. The onshore section will be built by joint ventures established by project participants.

By setting up joint projects with European partners, Gazprom creates a common energy space on the European continent.

Implementation of the Eastern Gas Program has provided Russian and foreign companies with a unique opportunity for collaboration. As part of the Sakhalin II project, Gazprom, Shell, Mitsui and Mitsubishi constructed Russia’s first LNG plant. Foreign partners have made a significant investment and technological contribution to implementation of this project.

Our foreign partners are very interested in executing an integrated LNG project on the basis of the northeastern group of fields on the Yamal Peninsula.

Joint projects, including those based on asset swap deals, strengthen trust among the market players and ensure adequate reaction to market fluctuations and changes in extra-market conditions. This is another important factor of gas market safety.

We should combine efforts to meet challenges the industry is facing and lay groundwork for further development. We believe that a variety of forms of cooperation and coordination among market players is a positive factor.

Therefore, Gazprom actively takes part in many joint initiatives of gas producing countries. In particular, Gazprom actively supports the activities of the Gas Exporting Countries Forum. This organization, which has been considered an informal association until recently, is currently engaged in forming a permanent organizational structure. The Forum headquarters will be located in the Qatar capital Doha. Major objectives include joint analysis of supply and

demand trends of the global gas market, pricing issues, investment programs and coordination of major projects.

However, coordination of activities among major gas exporters is not enough. Further integration of efforts made by natural gas market stakeholders is needed. Despite the obvious benefits of natural gas compared to other fuels, one should not think that the role of gas in the global energy balance is guaranteed. We believe that all of us who are interested in developing the natural gas industry, namely the International Gas Union, should be more active in shaping the world energy development model. So far, the main goal pushed forward by some politicians amount to nothing more than just a decrease in hydrocarbons consumption. Meanwhile, millions of our consumers will be at the mercy of a costly model of future energy consumption, a model that they will have to pay for.

At the same time, calculations prove that a high demand for an environmentally friendly economy may be reached without prejudice to hydrocarbon energy, but owing to it.

Thus, replacement of nearly half of the existing coal-fired power generating facilities in Europe with up-to-date gas-fired combined-cycle power stations will cut CO₂ emissions in the same amount and will cost only one third of the price of that of wind power generation.

Natural gas is the most reliable energy source in terms of energy security during peak load periods when compared to any other source of energy, including nuclear, solar, wind and hydro energy. Nobody can guarantee maintaining peak loads with energy produced from renewable sources.

When determining the balance between environmental and energy interests, it is important for us to convey to the public that it is necessary to be aware of all factors. For example, a potential reduction in CO₂ emissions stipulated by vehicle conversion from oil products to natural gas is not so tangible, if compared to the power industry. Using natural gas in engines will relieve us not only from toxic gasoline and diesel engine exhaust, but also from using fertile land for producing biodiesel fuel in lieu of food. Gas may and should be used in vehicle engines in a compressed form or as a synthetic engine fuel. Thus, natural gas will make another contribution to sustainable development.

Another essential issue we have to face together, particularly within the International Gas Union, is forming the global gas balance as a basic principle for long-term planning across the entire gas industry.

Finally, I would like to mention the initiative announced by the Russian President Dmitry Medvedev to work out and adopt a new international energy treaty to effectively protect the interests of those countries that produce and consume energy resources and to prevent future transit crises.

I hope that during the Conference we will hold a substantive and constructive discussion on all the key issues of the world gas industry in order to operate under present-day conditions.

Being the world's largest company, Gazprom is ready to effectively work in a new environment, to evolve and to keep moving forward!