The Policy of Oil and Gas Producing Regions of Russia in the conditions of technological progress.

Honorable Chairman!
Dear participants and guests of the Conference!
Ladies and gentlemen!

This Conference concurs with the 10\textsuperscript{th} anniversary of Rio de Janeiro meeting which resulted in the adoption of «AGENDA 21» and approval of the «Sustainable Development» concept, the development not at the expense of future generations and without any detriment to the future generations. Today environmental problems do not seem as unsolvable and disastrous as ten, twenty years ago. National governments, including government of the Russian Federation have developed the programs of conversion to the sustainable economic development taking into consideration national peculiarities.

Today world community more often addresses the problems of primary energy resource production and problems of basic resources for society’s sustainable development. The world energy market is unstable and to a great extent it depends on the world political instability. As the tension in the Middle East and oil-gas producing countries intensified the West brings down cooperation with the eastern countries and maximizes business contacts with Russia. In this respect oil and gas producing regions in Russia are relatively safe and reliable.

For the last several decades Russia has been keeping the status of leading oil-gas producer meeting up to 25\% of the world demand for gas and 10\% for oil. Unique hydrocarbon potential, high-capacity production basis, developed infrastructure allow our country to take one of the first positions in the world production of primary energy resources.

As Yamalo-Nenetsky okrug is the main Russian region of gas production, its territory can be considered as the one of strategic interests. Gas potential
is estimated as 93 trillion cubic meters, raw oil reserves and gas condensate account for 16 milliard tons, only 500 million tons of which has been already extracted.

There have been opened 207 hydrocarbon deposits in the district. 53 companies obtained 160 licenses to use the resources. 23 big and middle oil companies extract hydrocarbon. 18 out of all 22 Russian gas fields are considered to be unique with respect to volume of resources. Just three quarters of deposits are about to get developed.

At present Yamalo-Nenetsky autonomous okrug has strong production infrastructure and staff potential. The total length of the main oil and gas transport network is 11 thousand kilometers. The pipeline system capacity to the domestic and foreign markets is more than 600 milliard cubic meters of gas and 100 million tons of oil per year.

The main objective of the policy in Yamal as the one of Russian oil and gas producing regions is to change the structure of hydrocarbon production and apply advanced technologies in oil and gas sector on all levels of the production process -- strike, exploring, exploitation of the deposits, transportation of oil and gas, refining and providing the customer with the high quality product. The new technologies to safe and restore the environment are also taken into consideration.

The necessity of technological changes is determined by the effect of different factors, related to:

- deterioration of hydrocarbon resources, development of which with traditional approaches causes significant increase in expenses and decline in cost efficiency of projects;
- change of hydrocarbon extracting geography;
- technical condition of production base of oil and gas complex in the district.

As gas reserves are reducing the question of extraction and utilization technologies of low-pressure gas comes up. The alternative decision to the expensive transportation of this low-pressure gas can be the establishment of companies based on gas-to-liquid technologies. As horizons of gas fields deepen the portion of rich condensate-containing gas in district production will steadily increase. The decision for this problem requires technical reequipment of fields to work with residue Senomansky gas, which has served modern district economy. The gradual deterioration of hydrocarbon resources inevitably leads to exploitation of small and middle oil and gas fields, more deep fields, reserves which characterized as deposits with complicated mine-geological structure.
One of the problems of «old» as well as «new» fields is the maintenance of full extraction of hydrocarbons requiring use of secondary and tertiary methods of improving oil recovery. The primary goal is determined as complete development of resources, providing the extraction and exploitation of basic as well as concomitant components including accompanying oil gas and oil from fringe of gas pay.

The development of Yamal deposits demands use of detriment-minimizing technologies to fragile polar tundra and water basin and at the same time providing for cost efficiency of big projects.

Yamalo-Nenetsky okrug is considered to be the principal region of Russian energy strategy, according to which, by 2020 it is planned to extract 700-750 milliard cubic meters.

Cooperation with Yamal requires creation of new routes for natural gas transportation. In this connection the project of building sea terminal and first Russian plant for gas liquefaction with capacity of 30 milliard cubic meters a year is developed. Gas, oil and gas condensate will be transported to the Western Europe and the countries of Asia-Pacific region by the Northern Sea Route.

Prospects for Yamal are connected with diversification of the regional economy which means the development of deep hydrocarbon processing industry. Great interest is stimulated by the projects for oil-and-gas processing and oil-and-gas chemistry industries, supplying products to domestic and world markets.

At present situation in Yamalo-Nenetsky okrug and other oil-gas producing regions of Russia is crucial. On one hand, we must solve the backlog of problems of old Soviet technologies, used in the XXI century. On the other hand, favorable world energy market prices and active actions of the government of the Russian Federation in respect of taxation and strengthening the domestic economy improves the investment environment of oil-gas producing regions providing the finance resources for innovations.

Thus, the policy of oil-gas producing regions of Russia in the conditions of technological progress aims at the application of advanced highly effective technologies on all levels of production. It is necessary to timely change the structure of hydrocarbon extraction and guarantee cost efficiency of big projects, rational usage of natural resources and minimize the detriment to environment. All these issues were discussed at the Eleventh International Congress «Innovative Technologies For Oil, Gas, Industrial Energetics And Communication»(CITOGIC’2001).
The Congress that was held under the patronage of the President of the Russian Federation and under the aegis of United Nations agreed to consider Yamalo-Nenetsky okrug as the foundation for international cooperation in the field of implementing the innovative technologies for oil-gas industry to provide the sustainable economic development and protection of arctic ecosystems.

We hope that the 22\textsuperscript{nd} World Gas Conference that will take place in Tokyo next year under the motto «\textbf{Responsible for the future ecology}» will help to solve the above mentioned problems, attract more investors to our region and stir international cooperation.

In conclusion I would like to mention that a number of oil-gas producing regions in Arctic have already attained significant results in this dimension. Interconnection of interests among many countries promotes cooperation, sharing experience, thereby providing strong basis to realize outlined aims and goals.

I believe that the decisions of this Conference will be realized with joint efforts for the welfare of Arctic residents.

I would like to take this opportunity to thank the organizers of the Conference for their hospitality and excellent work of the Conference.

I wish Wealth, Peace and Prosperity to all of you!
Thank you for your attention!