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Article



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ON THE MAIN TRENDS IN THE SOCIO-ECONOMIC DEVELOPMENT OF THE YAMALO-NENETS AUTONOMOUS OKRUG WITHIN THE FRAMEWORK OF THE RUSSIAN ARCTIC. MESSAGE 1

Abstract: *the article discusses the features of the strategy of socio-economic development of the following regions of the Russian Arctic - Yamal - Nenets Autonomous Okrug - in order to provide them with favorable conditions for attracting investments, providing comfortable living conditions for the population of these regions. At the same time, in these regions it is planned to implement the problems caused by the unsatisfactory state of transportation, namely, the need to build and commission new and reconstruct existing railways and roads, linking these schemes with the northern sea route, providing it with an effective scheme for the transportation of all goods. Solving the set tasks aimed at making the Autonomous Okrug a strategic outpost for the development of the Arctic will achieve the following main results:*

- *creating favorable external conditions for the long-term development of the Autonomous Okrug, modernizing its economy, attracting foreign investment, strengthening its position as an equal partner in the international division of labor and capital;*
- *development of applied scientific activity and improvement of the quality of its results;*
- *development of scientific and technical cooperation in the areas of ensuring environmental safety and environmental improvement of territories, studying climate change and physical factors, preserving natural resources and biodiversity of the Autonomous Okrug with fuel and energy enterprises located on the territory of the Autonomous Okrug;*
- *creation of an effective system for identifying, building up and making the fullest use of intellectual potential in the interests of the region.*

Key words: *Advanced Development Territory, TOR, economic activity, significance, efficiency, socio-economic development strategy, financial condition, sustainable TEP, resources, profit, profitability, priority, preferences, demand, competitiveness.*

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Introduction

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- 1)
- 2) The main directions for the implementation of this Strategy in the Yamalo-Nenets Autonomous Okrug are:
- 3) a) development of the seaport of Sabetta with shipping terminals and a maritime navigation channel in the Gulf of Ob;
- 4) b) construction and development of railway lines Obskaya - Salekhard - Nadym - Pangody - Novy Urengoy - Korotchaevo and Obskaya - Bovanenkovo - Sabetta;
- 5) c) expansion of liquefied natural gas production on the Yamal and Gydan peninsulas;
- 6) d) development of gas fields in the Gulf of Ob with the development of a pipeline gas transportation system;
- 7) e) development of the Novoportovskoye oil and gas condensate and Bovanenkovo gas condensate mineral resource centers, development of the Tambey group of fields and preparation for the development of offshore fields;
- 8) f) development of oil and gas chemical industries in the area of the village. Sabetta, pos. Yamburg, Novy Urengoy and the formation of a diversified industrial and technological complex for gas processing and petrochemistry;
- 9) g) maintenance and development of gas and oil pipeline networks, development of gas and oil mineral resource centers connected to the pipelines of the Nadym-Pur and Pur-Tazov oil and gas regions, including the use of new technologies for the production and development of underlying reservoirs, as well as hard-to-recover oil reserves;
- 10) h) development of technologies for involving low-pressure natural gas into industrial circulation, including gas compression technologies;
- 11) i) expansion of the zone of centralized power supply by connecting settlements to the unified power system;
- 12) j) development of oil and gas services through the creation of industrial zones in key settlements;
- 13) k) organizing the production of building materials in order to meet the needs of the fuel and energy complex and housing construction;
- 14) l) creation of an emergency rescue unit and an Arctic crisis management center in the village. Sabetta;
- 15) m) the formation of a tourist cluster based on the agglomeration, which includes the city of Salekhard, the city of Labytnangi and the village. Harp (Figure 1).



Figure 1. Yamalo - Nenets Autonomous Okrug

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The strategy for the social and economic development of the Yamalo-Nenets Autonomous Okrug until 2035 is a balanced system of guidelines aimed at improving the sustainability of the economy and improving the quality of life of the population of the Autonomous Okrug.

The strategy takes into account the main provisions of long-term planning formulated both at the level of the Russian Federation and in the Urals Federal District (hereinafter referred to as the Ural Federal District). It takes into account the priorities of national and sectoral development.

The Autonomous Okrug, as part of the Arctic zone of the Russian Federation, belongs to the geostrategic territories of Russia, which are essential for ensuring the territorial integrity of the country and the security of the state.

In recent years, the region has become a recognized platform for the implementation of large investment projects, a center for gas and oil production.

The steady growth of Yamal, the effective use of

its competitive advantages is one of the priorities for the development of our country, a condition for the balanced growth of the Russian economy.

Possessing a great natural resource potential, the Okrug is one of the most important strategic territories and one of the most prosperous regions in Russia in terms of socio-economics.

Yamal is the leader in the Arctic zone of the Russian Federation, which reflects the dynamics of key macroeconomic indicators. At the end of 2020, the Okrug's share in the volume of investments in the Russian Arctic is 71%, in the volume of the gross regional product - it is projected at a level of more than 50%.

Taking into account the role of the region, the mission of the Strategy was formed - "The Yamalo-Nenets Autonomous Okrug in 2035 is a region of high quality of life standards, the leader of the Russian economy in the Arctic, ensuring the national energy security of the Russian Federation."



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Figure 2. Administrative-territorial division of the Yamalo-Nenets Autonomous Okrug

The Autonomous Okrug is one of the largest subjects of the Russian Federation.

Its area is 769.3 thousand square meters. km or 4.5% of the entire territory of the country.

The territory of the Okrug is located in the extreme natural and climatic zone of the Far North and the Arctic Circle and belongs to the zones of the greatest (tundra and forest-tundra) and increased (northern taiga) climate discomfort, which directly complicates the life of people, affects the development

of industrial and social infrastructure (Figure 2).

The industrial development of the last decades of the last century contributed to the rapid growth of the district's population. For sixty years, the population of the region has increased by more than 8 times and as of January 01, 2018 reached 538.5 thousand people. At the same time, Yamal remains one of the sparsely populated regions (71st place) with a population share of 0.37% of the total population of Russia.

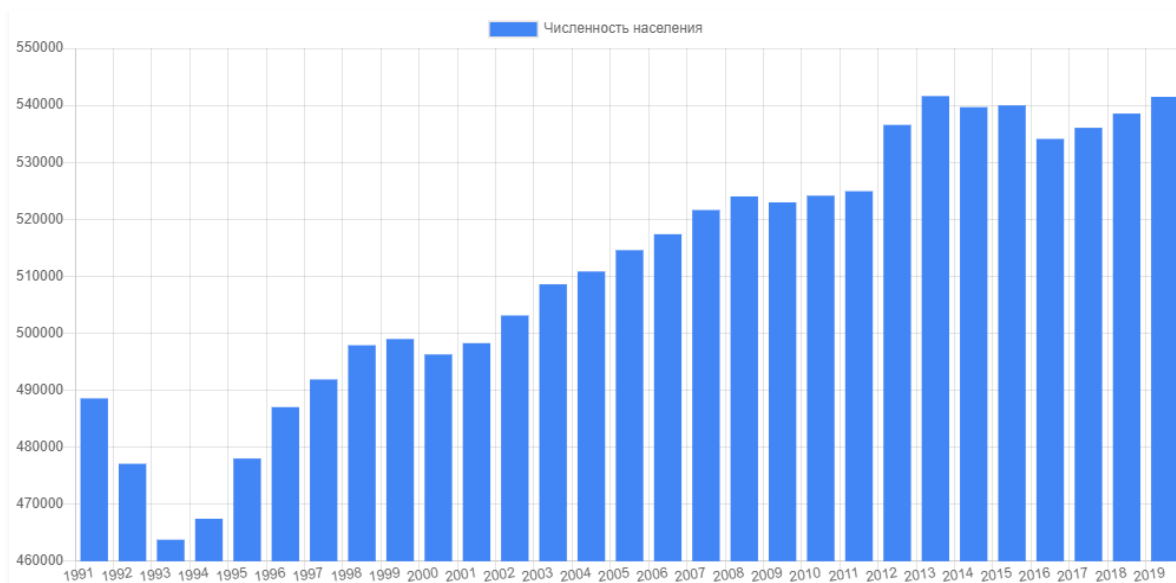


Figure 3. Growth - decline in the population of the Yamalo-Nenets Autonomous Okrug

The increase in the population is mainly due to natural increase, due to the high proportion of young people in the population structure. The average age of the district's residents is 33.3 years (Figure 3).

At the same time, the all-Russian trend of "aging" of the population in recent years has become characteristic of Yamal as well. The share of people over working age has increased from 4.4% in 2000 to 11.6% by 2021. At the same time, the proportion of the population under working age has declined from 26.0% in 2000 to 24.1% by 2021. The national composition of the population is dominated by Russians (62.0%). Ukrainians make up 9.7%, Tatars - 5.6%. The share of the Nenets in the national structure of the resident population is 5.9%, the Khanty - 1.6%, the Selkup - 0.4%.

The distribution of the population in the district is characterized by low density (0.7 people per 1 sq. km), high urbanization and patchy settlement near large resource bases, along river valleys and along transport routes. The main share of the population (84% in 2021) lives in eight cities of the region, of which 41% are in the two largest settlements of the Autonomous Okrug: Novy Urengoy and Noyabrsk.

The current level of urbanization was reached in

the late 1980s and early 1990s. The cities of the Okrug were formed in the 70-80s of the last century as a result of the development of the oil and gas industry and related industries near large base deposits and developed as centers of the production and social infrastructure of mining enterprises.

There are 80 rural settlements in the region. Most of them are located along the rivers Ob, Pur, Taz, which serve as transport routes, and have a significant transport distance from each other.

The main part of the Okrug is the sparsely populated territories of the indigenous peoples of the North in the Autonomous Okrug (hereinafter referred to as the indigenous peoples of the North), where the population density decreases to one person per 10 or more square kilometers. km.

Year-round transport accessibility of all settlements of the Autonomous Okrug is possible only through air transport. The land transport system (railways and highways) has a local development. Of the seven districts, six do not have a permanent connection with the district center. Three districts - Krasnoselkupsky, Yamalsky, Shuryshkarsky do not have year-round motor roads.

Water transport is also developed locally and has

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a seasonal mode of operation. The connection between the settlements of these regions and regional centers is carried out in winter by winter roads, in summer - by water.

Two key transport areas, formed in parallel with the development of deposits in 1970-1990 - western and eastern - in the Autonomous Okrug are not interconnected. The basis of the first is the link between Salekhard and the Labytnangsky industrial and transport hub. In 2010, the Obskaya – Bovanenkovo – Karskaya railway was completed. This is the northernmost operating railway in the world, it delivers cargo for the development of fields on the Yamal Peninsula.

The second region - the eastern one - includes the Novy Urengoy Tyumen section and the medium-sized rivers Nadym, Pur and Taz. Here the road infrastructure is more developed than in the west of the district, with access to the country's highways. The low population density of the region, combined with the significant territorial remoteness of small settlements, create special requirements for the development of transport infrastructure and form a serious challenge to the level and pace of the socio-economic development of the region. The problem of underdevelopment of transport infrastructure is further exacerbated by the state of existing infrastructure elements - a number of airports, railway lines and roads are in need of reconstruction and capacity expansion. The imperfection of the regional transport infrastructure as a whole hinders the diversification of the regional economy.

Main part

The basis of the region's economy is the largest reserves of hydrocarbons.

The Okrug's share in the world's proven gas reserves is 18%, in the all-Russian - 65%, in oil and condensate reserves - 2% and 18%, respectively. At the beginning of 2018, 236 hydrocarbon deposits were discovered in the Autonomous Okrug, of which 89 are being developed, exploration work is underway at 147 deposits.

The production of hydrocarbon raw materials is mainly carried out in the Nadym-Pur-Tazov oil and gas region, where the giant fields are located: Medvezhye, Urengoykoye, Yamburgskoye. The exploitation of these deposits began in the 70s - 80s of the last century, and now the main part of the deposits of the Nadym-Pur-Taz interfluvium has passed into the stage of declining production.

This region is best provided with transport, energy and industrial infrastructure. The prospects for its development are associated with the involvement in the development of hard-to-recover hydrocarbon reserves during the development of deposits of the Bazhenov and Achimov formations.

For the entire production period, 12% of gas, 5% of oil and 2% of condensate from the total volume of

initial recoverable reserves of all hydrocarbon fields were recovered in the district.

New gas production centers are opening in the region, so in 2019, with the commissioning of the Bovanenkovskoye oil and gas condensate field, the industrial development of the Yamal Peninsula began.

For the transportation of the main products of the oil and gas complex, pipeline transport is of fundamental importance. One of the world's largest pipeline systems for gas transportation operates in the district.

Natural gas from the Autonomous Okrug is supplied both to the domestic market and for export through the main gas pipeline system, which includes the main gas pipelines of the "northern" direction (Gazprom transgaz Yugorsk LLC), the "central" direction (Gazprom transgaz Yugorsk LLC) and "south direction (Gazprom Transgaz Surgut LLC).

In connection with the increase in gas production on the Yamal Peninsula, the northern gas transmission corridor of the Unified Gas Supply System of Russia is expanding.

In order to transport the produced gas on the Yamal Peninsula, PJSC Gazprom built the Bovanenkovo-Ukhta and Ukhta-Torzhek gas pipelines with a total length of over 2.4 thousand kilometers. In 2019, the Bovanenkovo-Ukhta-2 main gas pipeline with a length of about 1.2 thousand km was put into operation.

Oil is transported from the fields of the Autonomous Okrug mainly through main oil pipelines with a total length of more than 1500 km: Tarasovskoye - Kholmogory, put into operation in 1981, Kholmogory - Western Surgut, put into operation in 1978 and Purpe - Samotlor, put into operation in 2011 .

The system originates from the main oil pumping station Purpe and is a network of pipelines laid in the same corridor as the gas pipelines of the southern corridor. In 2016, Transneft Siberia JSC completed the construction of the Zapolyarye – Purpe PS oil pipeline, an integral part of the Zapolyarye-Purpe-Samotlor transport system.

There are 6 enterprises of the oil and gas processing industry operating in the region: 2 enterprises processing gas condensate: a branch of the plant for the preparation of condensate for transport of LLC Gazprom Pererabotka and LLC NOVATEK-Purovsky ZPK; 3 enterprises processing associated petroleum gas: Gubkinsky GPP, Muravlenkovsky GPP and Vyngapurovsky GPP - branches of OAO SiburTyumenGaz; one oil refinery is OOO Purneftepererabotka. Over the past 6 years, the gross regional product of the Autonomous Okrug (hereinafter - GRP) in current prices has grown 2.5 times and reached 2 trillion. rubles with an average annual growth rate of 3.0% (in Russia - 2.0%).

The specifics of the region's economy is reflected in the GRP. More than 58.0% of the GRP is

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industry, the basis of which is about 94% the extraction of oil, gas and other minerals. Up to 17% of GRP is created in construction, and about 7% of GRP is created in the field of transport and communications. The products of oil and gas processing enterprises account for more than 95% of the volume of manufacturing industries, their contribution to the region's economy is currently very insignificant - about 2%.

Despite the small share of the population, the indicators of economic activity in the region occupy a significant share in the overall socio-economic indicators of Russia.

The share of GRP of Yamal in the Russian economy is 2.8%. In terms of GRP per capita (3.7 million rubles), in 2019 the Autonomous Okrug ranked 2nd in the country after the Nenets Autonomous Okrug and 1st in the Ural Federal District.

The level of GRP per inhabitant is almost 8 times higher than the average Russian level and 5 times higher than the average value in the Ural Federal District.

Over the past five years, the Okrug has recorded a positive trend in the index of industrial production, the growth of which over this period amounted to about 30%.

The volume of industrial production in 2021 reached more than 2 trillion. rubles or 4% of the total

industrial production of the country.

Yamal is a donor region. In terms of revenues to the federal budget at the end of 2021, it is in 3rd place in the list of subjects with a share of 10.3%.

The Autonomous Okrug is among the leaders in terms of industrial production per capita - 2nd place in Russia, 1st - in the Ural Federal District.

Yamal remains in the top three in terms of investment in fixed assets (more than 1 trillion rubles). In 2021, the Autonomous Okrug took 2nd place (after Moscow) in this indicator with a share of 6.8% in the total volume in the country.

In terms of the average per capita investment in fixed assets, the region exceeds the Russian average by 20 times.

Investment activity in the region is mainly associated with the development of the oil and gas complex and infrastructure industries (transport, communications, construction).

At the same time, the share of investments in the fuel and energy complex (hereinafter referred to as the fuel and energy complex) increased from 57% in 2010 to 79% in 2018, against this background, the share of investments in the transport sector decreased from 28% in 2010 to 6% in 2018. Investment activity in the region largely depends on the volume of attracted investments, mainly funds of holding companies (Figure 4).

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Figure 4. Hydrocarbon production in the Yamalo-Nenets Autonomous Okrug

The diversification of the regional economy is constrained by high production costs due to the long duration of the heating season, energy consumption due to the long period of the polar night, isolation from the centralized power supply and poor transport links with developed energy hubs, transport remoteness from the centers of production of consumer goods and industrial production centers. This limits the competitiveness of products and makes it economically unprofitable to develop a wide range of industries in the district.

The raw material nature of the regional economy makes it dependent on the international and domestic prices for hydrocarbons, as well as on the volume of demand for the current and future period. In turn, fluctuations in prices and volumes of supplies in the hydrocarbon market affect the profitability of the regional budget, holding back the development of social and transport infrastructure during crisis periods, which are mainly developed through budget investments. A unique feature of the Autonomous Okrug is the coexistence in a particularly vulnerable and extreme Arctic environment of two diametrically opposed areas of economic activity. One of them is the modern industrial development of the territory of the district, associated, first of all, with the development of the richest reserves of the subsoil of the district,

The following main groups of indigenous

peoples of the North live on the territory of the Autonomous Okrug - Nenets, Khanty and Selkups. Today their number is more than 41 thousand people. About 46% of the representatives of the northern peoples lead a traditional way of life, these are more than 5000 families of the indigenous peoples of the North with a population of 19 thousand people.

In this regard, a special role in the economy of the region belongs to the agro-industrial complex. Its share in regional production is small - 0.1% of GRP. However, this is the main sector of the economy of the Autonomous Okrug, which provides employment and is the main source of livelihood for the indigenous peoples of the North.

Yamal has the largest herd of reindeer in Russia and in the world - about 790 thousand heads. Almost a fifth of the Russian whitefish catch is caught here.

The implementation of a number of large-scale investment projects on the territory of the Autonomous Okrug will provide a new wave of industrial development of the region, which will have a significant impact on the development of territories where the indigenous peoples of the North traditionally live, in connection with which, the development of a policy to regulate the interests of fuel and energy complex organizations and indigenous peoples of the North on is currently one of the most important tasks facing the state authorities of

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the Autonomous Okrug.

The Autonomous Okrug is included in the group of regions with a prosperous social situation, which is characterized by a high purchasing power of the population, a low proportion of the population with incomes below the subsistence level, low unemployment, no arrears in the payment of wages, and an increase in the population due to natural growth. The level of per capita cash income of the population and the real size of accrued pensions is higher than the average Russian level.

The average per capita cash income of a resident of the Autonomous Okrug in 2021 is more than 3 times higher than the cost of a fixed set of consumer goods and services (2.1 times in Russia). Thus, the purchasing power in the district is much higher than the average Russian level.

The share of the population with incomes below the subsistence level in 2021 amounted to 7.5%, which is 5.7% below the national average (in Russia - 13.2%).

The demographic situation in the region since 2016 is characterized by an increase in the population by 2.4% (in Russia - by 2.8%). In 2021, the average annual number is 525 thousand people, in 2020 - 537 thousand people.

Since the 90s of the last century, the district has been included in a small group of Russian regions with a constant positive natural population growth. In 2021, the indicator was 9.1 people per 1,000 inhabitants (in Russia - (-0.9) people per 1,000 inhabitants) (5th place in Russia and 1st place in the Ural Federal District).

More than 8,000 newborns are born in Yamal every year. For every 1,000 inhabitants of the region, 15 children are born annually. In terms of birth rate, the Autonomous Okrug ranks 11th among the constituent entities of the Russian Federation.

In the district there is no queue for kindergartens for children aged 3-7 years. As of January 01, 2022, 32.2 thousand children of this age are provided with various forms of preschool education.

The region has rather low mortality rates of the population - 4.9 people. per 1000 population. This is the third largest in the country.

In 2021, the average monthly nominal accrued salary of one employee in the district was at the level of 89.9 thousand rubles, which is 2.3 times higher than the average Russian level (in Russia - 39,085 rubles). Since 2010, in nominal terms, it has grown 1.7 times, in real terms - 1.15 times (in Russia - an increase of 1.12 times).

The number of pensioners registered with the social protection authorities has increased by 26.2% over the past seven years. The growth of pensioners is due to the aging of the population, which in the 50-60s of the last century came to explore the North. There are 260 pensioners per 1,000 residents of the district (in Russia as of January 1, 2021 - 313.7 per 1,000

people). Today, more than 400 thousand people are employed in the economy of the Autonomous Okrug. Despite a fairly high proportion of the working-age population (Yamal - 66.2%, the Russian Federation - 56.7%), high rates and potential for economic development, combined with sparse population, cause a shortage of labor resources in the region.

About 17.0% of those employed in the economy of the district work on a rotational basis and live outside of Yamal, more than 8.0% of employees are foreign citizens.

The region registers the lowest unemployment rate (of the economically active population) among the regions of the Ural Federal District - 3.2% (at the end of 2020), in addition, the region is among the top five leaders with low unemployment among the constituent entities of the Russian Federation (4th place). On average, in the district, the need for workers, declared by employers to the employment service, exceeds the number of unemployed citizens by more than 5 times.

Despite the demand for labor resources, in Yamal since 2012 there has been a migration outflow of the population. The main reason for the departure of the population is the search for work in the regions of Russia with favorable climatic conditions, therefore, the highest migration activity is typical for the population of working age.

So, in 2021, in the structure of departed migrants, the share of citizens of working age was 71.2%, younger than able-bodied - 13.6%, older than able-bodied - 15.2%.

Large-scale investment projects implemented in the district require the attraction of additional labor resources to the region (including specialists working on a rotational basis). In this regard, for the third year in a row, the number of people employed in the economy has been steadily growing in the region (2021 (estimate) - 420.5 thousand people, 2020 (report) - 403.0 thousand people). A feature of the regional labor market is its mobility. The fluctuation of the need for labor resources depends on the stage of the life cycle of investment projects - during the construction period, it can be ten times higher than the need required at the stage of operation of the facility.

For example, during the construction phase of Yamal LNG, more than

30 thousand specialists of various qualifications. At the stage of operation of the facility, the demand decreased to 1 thousand.

The second feature is the dependence of the profile of the labor resources of the district on the characteristics of the objects being created.

In general, since the beginning of the development of industrial territories, migration has been a natural process of development of the district. The accumulated migration turnover of the population, for example, only in the period 2018-2021 amounted to 607.3 thousand people.

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A certain influence on the process of labor migration has a high sectoral and territorial differentiation of wages. In a number of industries, the level of wages does not cover the high costs of life support in the northern region. In the structure of income of the population of the district, wages make up 75%. In 2021, the average wage in the region reached 89.9 thousand rubles.

The most highly paid in the Okrug are employees of organizations engaged in mining, where the average monthly salary is 1.5 times higher than the average salary in the Okrug. The lowest level of average monthly wages is noted among workers employed in agriculture and fishing - 40% of the average wage in the district. The level of wages in construction is 71% of the average wage in the district (2021 -101%). At the same time, the main need for workers is formed precisely in this industry (more than half of the total need). Intersectoral differentiation in terms of wages also leads to territorial differentiation of average wages. In areas dominated by agriculture, the level of wages is lower, than in large cities and areas of oil and gas production. Recruitment within the regional shift is complicated by the low mobility of labor resources associated with the underdevelopment of transport logistics, as well as the shortage of personnel in the region. Within the district, as well as commuting labor migration does not have a large-scale character in the region.

Intersectoral differentiation in terms of wages and a shortage of personnel can lead to a limitation of economic growth in the region. To meet the needs of the regional economy in labor resources, it is necessary to create conditions for attracting labor migration, including the development of transport infrastructure, the creation of a rental housing market and other social infrastructure.

Under the influence of active industrial development, the environment of the region is subjected to powerful anthropogenic impact. The negative load is growing in parallel with the development of new deposits, as a result of which the parameters characterizing the state of the natural environment of the Autonomous Okrug in recent decades indicate a deterioration in the situation.

In the areas of organization of geological exploration and production of hydrocarbon raw materials, the main anthropogenic pressures on the environment are associated with the action of powerful vehicles in off-road conditions, with drilling operations and testing of deep wells, as well as with

the laying and operation of oil pipelines, gas pipelines, product pipelines, with the creation of artificial storage facilities hydrocarbons, etc. Drilling and emergency flowing of exploratory wells, dumping of spent drilling fluids and raw sewage, damage to main and field oil and gas pipelines and their service systems are the main sources of environmental pollution in developed oil and gas regions. So,

To ensure the production activities of oil and gas enterprises, significant territories are alienated annually. This leads to the expansion of territories where the technogenic load created by the oil and gas complex is very significant. Soil degradation occurs in the areas where oil and gas production facilities are located, which leads to the transformation of the natural landscape.

At the stage of preparation for construction, when drilling wells, performing construction and installation works, laying engineering communications, roads, unsystematic movement of caterpillar vehicles, significant disturbances of the soil and vegetation cover also occur. The processes of water erosion are intensively developing, as a result of which failures and ravines appear. All this leads to waterlogging of the area and degradation of the relief, reduction of the areas of hayfields and pastures.

The prospects for economic development remain at risk of a negative impact of industrial development on the environment.

Today, the Autonomous Okrug is undergoing a transition to rational nature management, which provides for the greening of technological processes and a new type of relationship in the human-nature system, which excludes the destruction and degradation of the natural environment.

The share of enterprises that only consume natural resources will be reduced, and the damage from the exploration and extraction of natural resources will be minimized.

The priority is the use of environmentally sound methods of using land, water, forest, mineral and other resources (through the development of science-intensive nature-saving high-tech industries and environmentally friendly technologies), the fullest possible use of extracted minerals and extracted biological resources, and reducing waste during their extraction and processing. Additional efforts will be focused on curbing all types of illegal use of natural resources, including poaching, and their illegal circulation.

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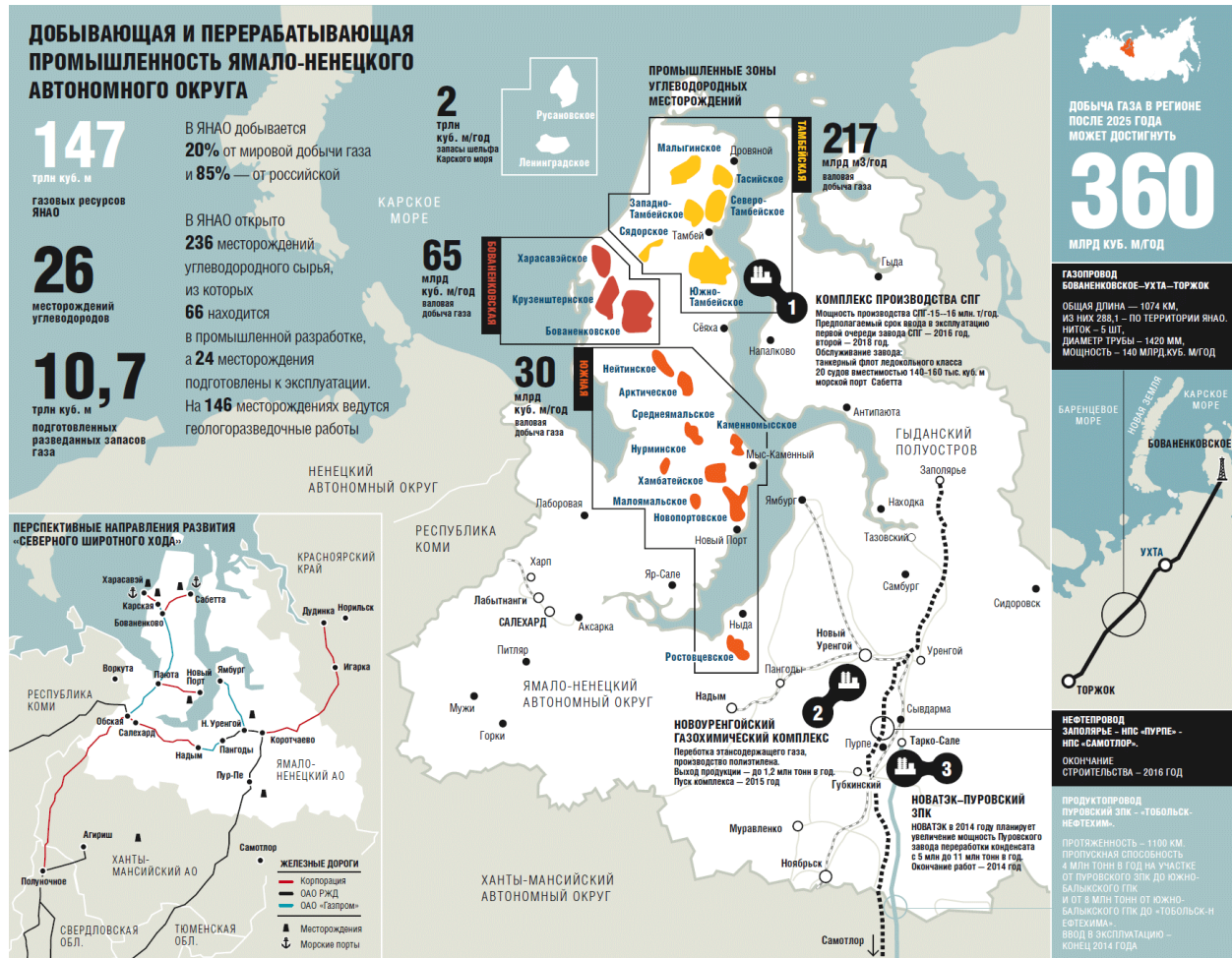


Figure 5. Economic development of the Yamalo-Nenets Autonomous Okrug until 2035

The role of the Autonomous Okrug, as the largest supplier of hydrocarbon raw materials, is defined by the basic documents of the Government of the Russian Federation:

- the Spatial Development Strategy of the Russian Federation, approved by Decree of the Government of the Russian Federation of February 13, 2019 No. 207-r;
- the energy strategy of Russia for the period up to 2035, approved by the order of the Government of the Russian Federation of November 13, 2019 No. 1715-r;
- the state program of the Russian Federation "Socio-economic development of the Arctic zone of the Russian Federation", approved by the Decree of the Government of the Russian Federation of April 21, 2014 No. 366.

According to these documents, promising areas for the development of the Russian energy industry include the formation of a petrochemical cluster on the mineral resource base of the fields of the Yamal Peninsula, the shelf areas of the Kara Sea, the Ob and Taz Bays, including through the implementation of major regional strategic initiatives of the state, region

and business in terms of energy development of these territories of the Arctic zone of Russia (Figure 5).

The competitive advantages of the region are: significant experience in developing fields and implementing large investment projects in the extreme conditions of the Far North, access to the Northern Sea Route, which provides a direct supply of hydrocarbons to the world market.

The target scenario for the social and economic development of the Autonomous Okrug is based primarily on the development of gas production in the region.

A prerequisite for the implementation of this scenario is the growth of world demand for energy resources, despite the change in the structure of world energy.

This is confirmed by the Forecast of the socio-economic development of the Russian Federation for the period up to 2035, as well as the forecast estimates of the International Energy Agency.

Global demand for energy resources will be stimulated by the growth of the economy, the population of the planet (by more than 1 billion people), prosperity in developing countries and

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curbed by the rapid increase in energy efficiency.

Global growth in oil consumption is expected to remain robust until the mid-2020s, after which it will slow down as energy efficiency gains and fuel switching reduce consumption of petroleum products.

Given the volatility in oil prices and the limitation of its production by the countries participating in the OPEC+ deal, which includes Russia, it is assumed that investments in the development of new oil fields in the Autonomous Okrug will be minimal.

The main investments will be connected with the pre-development of existing oil fields and the enhancement of their oil recovery, involvement in the development of deep-seated reserves located in the traditional areas of oil production of the Autonomous Okrug. These measures will help maintain oil production at the achieved level.

Improvement in technology and attention to environmental issues are changing the structure of demand for primary energy resources. In this regard, the role of natural gas, an environmentally cleaner energy carrier, the use of which is receiving great attention in North America and Western Europe, is growing. This is facilitated by the availability of natural gas in many countries of the world, the relative cheapness, and flexibility in use. The volume of supply and the price of natural gas currently have a direct impact on the oil market.

Of considerable importance are also the tendencies to abandon nuclear energy, the desire of a number of countries to reduce the dependence of the economy on imported oil and oil products.

Global consumption of natural gas is estimated to grow by about 20% by 2030, making it the second largest single fuel after oil in the global energy mix.

At the same time, 80% of the projected growth in demand for natural gas comes from developing countries, led by China, India and other Asian countries, where most of the natural gas must be imported.

Liquefied natural gas (LNG) will account for almost 90% of the projected growth in long-distance gas supplies. By 2025, global LNG imports are expected to rise by up to 30%, with more than a third of this increase coming from China, which will become the world's largest gas importer as its energy policy replaces coal used to generate electricity with cleaner natural gas.

It is expected that the commissioning of additional LNG production capacities in the world will not be able to fully meet the growing demand, which may lead to an increase in prices in the LNG market.

Against this background, there are obvious prospects for increasing investment in the development of new gas fields in the Autonomous Okrug, increasing capacity and building new LNG plants.

An additional factor in the accelerated development of the mineral resource base of the Yamal Peninsula is the gradual decline in production and the depletion of the main traditional oil and gas fields of the continental part of the region, and, consequently, the need to develop new promising production centers in the Arctic zone of the Russian Federation.

The existing gas transportation infrastructure makes it possible to plan the commissioning of new gas fields, the production of which will replace the gas from fields that are at the stage of declining production.

The creation of industrial production centers on the Yamal Peninsula and offshore fields of the Kara Sea shelf, as well as the integrated development of these territories with the creation of an appropriate transport infrastructure, will help meet the economy's future needs for energy resources, ensure the country's energy security, and sustainable development of related industries and the fuel and energy complex in the long term.

According to the Energy Strategy of Russia for the period up to 2030, approved by the Decree of the Government of the Russian Federation dated November 13, 2009 No. 1715-R, the promising structure of gas production in the Autonomous Okrug will be shifted towards the fields of the Yamal Peninsula and the waters of the Ob and Taz Bays, designed to compensate for the falling volumes extraction of "old" deposits (Urengoykoye, Medvezhye, Vyngapurovskoye and Yamburgskoye).

At the same time, new gas production areas will provide more than one third of the country's gas production, which will not only meet the needs of the Russian economy in the conditions of post-crisis development, but will also solve the strategic task of diversifying the directions and product range of Russian gas exports through the development of the eastern export direction and construction of new LNG terminals.

Thus, the development of new gas fields and an increase in LNG production capacity will be the main driver of the region's economy for the period up to 2035.

For the effective implementation of fuel and energy projects, it is necessary to increase the transport accessibility of the region. The development of the transport infrastructure of the region will take place through the implementation of a large-scale project for the construction of the Northern Latitudinal Railway and the associated non-public railway line Bovanenkov-Sabetta, as well as the construction of the Nadym-Salekhard section of the Surgut-Salekhard highway.

The implementation of these projects will lead to a reduction in transport costs, create opportunities for the development of not only the fuel and energy complex, but also other sectors that can diversify the

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single-industry nature of the Okrug's economy.

The key points for organizing material and technical supply and providing labor resources during the development of new gas production centers will be the western region - Salekhard and Labytnangi, the eastern region - Novy Urengoy, the southern region - Noyabrsk.

In turn, the growth of the economic potential of the Autonomous Okrug will ensure a high quality of life for the population of Yamal, including improvements in education, healthcare and the social sphere.

Preservation and development of human potential, having the necessary competencies for the implementation of strategic projects, will be one of the priorities for the development of the region.

The task of staffing industrial growth in Yamal is being solved within the framework of the regional project "Workforce for the Arctic" with the participation of large enterprises implementing complex infrastructure projects in the district.

In the conditions of objective reality, the current system of education, advanced training and retraining of skilled workers, specialists and managers of all levels will not be able to fully ensure the prompt change in the demand for relevant competencies and qualifications.

The problem will be solved in the future by attracting inter-regional and intra-regional watch. To ensure the mobility of labor resources, attracting qualified specialists to the district, construction of rental housing will be carried out. The implementation of the target scenario of socio-economic development of the Autonomous Okrug can be influenced by both internal and external factors. External factors include:

- 16) the degree of inclusion of the region in the system of global commodity and information exchanges, investment, migration and innovation flows, including technological, organizational and institutional innovations;
- 17) world market conditions (including energy prices);
- 18) the general macroeconomic situation in the Russian Federation, including changes in inflationary processes;
- 19) changes in federal legislation regulating: the socio-economic sphere, including the implementation of pension reform, which will significantly change the structure of the regional labor market;
- 20) changes in budget and tax legislation;
- 21) state policy in the field of subsoil use,
- 22) changes in the investment programs of stakeholders, including their reorientation to the implementation of investment projects in other regions of the Russian Federation.

Key internal factors include:

- dynamics of natural resource and human potential;

- level of development of the institutional environment and institutional infrastructure (including mechanisms for coordination, coordination of interests and stimulation, motivation of all subjects of regional policy);
- structural shifts in the regional economy;
- the level of infrastructure provision;
- the level of transport accessibility, internal and external connectivity of territories;
- the established settlement system;
- demographic and ethnocultural situation.

In order to minimize the negative impact of internal and external factors in the process of implementing the Strategy, constant monitoring of the socio-economic situation will be carried out.

In accordance with this development scenario, the Strategy defines development plans for the region for 12 years (2018-2035), which will be implemented in two main stages.

The first stage - 2020 - 2025, the second - 2025 - 2030, the third - 2031 - 2035. For each of the main stages, the strategy defines targets, as well as targets that need to be achieved in each of the priority areas for the development of the region in 2025 and 2035. The main goal of the Strategy is to ensure a sustainable increase in the level and quality of life of the population based on the formation and development of a competitive economy, while complying with relevant environmental requirements.

The priority directions for achieving the set strategic goal of the social and economic development of the Autonomous Okrug are:

development of the economic potential of the Autonomous Okrug; development of infrastructure and sectors of the social sphere;

development of the information society and digital economy in the region; preservation and development of human potential and traditions;

rational use of natural resources and ensuring environmental safety;

the formation of the Autonomous Okrug as a strategic outpost for the development of the Arctic;

As part of the priority areas of development, the Strategy provides for a set of measures, the implementation of which will be the basis for the development of state programs of the Autonomous Okrug.

The strategic directions for developing the economic potential of the Autonomous Okrug take into account the provisions of the sectoral strategies of the Russian Federation, the strategies of state corporations and large industrial enterprises operating in the Autonomous Okrug.

Oil and gas production is the basis of the economy of the Autonomous Okrug, where the fuel industry (extraction of fuel and energy minerals and production of petroleum products) provides 97% of the total industrial production.

The dynamic development of the oil and gas

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complex of the Autonomous Okrug is predetermined by the unique resource base of hydrocarbons. The potential of reserves and resources of natural gas, as well as oil and condensate on the territory of Yamal is huge and sufficient for the development of the district in the long term, where the fuel industry will remain the basic industry of the region.

Within the framework of the resource-based model of the economy, this position of the resource sector reinforces the corresponding economic specialization of the territory and opens up new opportunities for its socio-economic growth, primarily through the diversification of fuel and energy complex production and transportation of hydrocarbons.

The main risks in the oil and gas industry are due to the volatility of oil prices, increased competition in the LNG market associated with a predicted increase in the number of natural gas liquefaction plants in countries such as the USA, Australia, Qatar, Mozambique and Canada. Another risk is the unstable foreign policy situation around Russia, which may lead to the imposition of sanctions by European countries on the supply of hydrocarbons from Russia, which will limit its sales market and reduce production volumes.

Over the past six years, the fuel industry of the Autonomous Okrug has received a powerful impetus for development, a number of large-scale projects have been launched in the region.

Thus, in 2012, JSC SiburTyumenGaz put into operation the Vyngapurovsky GPP with a design capacity of 2.8 billion m³ of associated petroleum gas (hereinafter referred to as APG) per year. With its launch, the company's large-scale comprehensive program to create a unified network of capacities for processing associated petroleum gas and transporting its processed products in Yamal was finally implemented.

In 2019, the second gas treatment unit (GTU-2) at the Vyngapur GPP was put into commercial operation. With the commissioning of new capacities, the productivity of the enterprise for receiving APG increased to 4.2 billion m³/year. The production of liquefied hydrocarbon gases was increased to 3.2 billion m³. Production of a wide fraction of light hydrocarbons - up to 1,100 thousand tons / year with a degree of extraction of target fractions up to 99%.

The expansion of the Vyngapurovskoye GPP is the final stage in the creation of infrastructure for the collection and processing of associated petroleum gas in Western Siberia. Over the past ten years, the company has doubled the APG receiving capacity in the region and increased the processing depth to the best world analogues. This made it possible to improve the ecological situation in Yamal and Yugra, as well as to expand the raw material base of the Russian petrochemical industry.

In the period 2018-2021, PAO NOVATEK increased the capacity of the Purovsky Condensate

Processing Plant from 5 to 11 million tons per year by putting into operation four process lines for condensate stabilization with a total capacity of three million tons per year.

The most significant event in autumn 2012 was the start of industrial development of the Yamal Peninsula with the introduction of the Bovanenkovskoye field into development.

To transport gas in the corresponding volumes from the Yamal Peninsula, PJSC Gazprom built the Bovanenkovo-Ukhta-Torzhok gas pipeline, its length is more than 2.4 thousand kilometers, of which 288 kilometers pass through the territory of the Autonomous Okrug. The first string of the gas pipeline was put into operation in 2012, the second string in 2020. The capacity of the two gas pipelines is 115 billion m³ per year.

In 2016, JSC Transneft-Siberia completed the construction of the Zapolyarye-Purpe-Samotlor oil pipeline with a capacity of up to 45 million tons of pumped oil per year. This is one of the largest facilities of the Eastern Siberia - Pacific Ocean oil pipeline system, through which oil is sent to the countries of the Asia-Pacific region.

The construction of this oil pipeline made it possible to involve in the development of the largest oil fields in Yamal: Vostochno-Messoyakhskoye and Pyakyakhinskoye. Further growth in oil production will be ensured by putting into commercial development the Russkoye, Zapolyarnoye, Zapadno-Messoyakhskoye and other fields. The resource base of oil and condensate of the fields located in the corridor of the Zapolyarye-Purpe oil pipeline is estimated at 3.2 billion tons.

In 2016, the Arctic Gates of the Arctic oil loading terminal was launched for year-round shipment of Yamal oil from the Novoportovskoye oil and gas condensate field with oil reserves of more than 250 million tons of oil and condensate, as well as more than 320 billion cubic meters of gas. To ensure the operation of the Arctic Gates of the Arctic terminal on the coast of the Gulf of Ob, the accompanying infrastructure for oil shipment was built: underwater and onshore oil pipelines more than 10.5 km long, a tank farm, pumping stations with a water hammer protection system that minimizes the likelihood of a pipeline leak.

In 2017, the first production line of the gas liquefaction plant of the Yamal LNG project was put into operation with a capacity of 5.5 million tons per year of LNG. In 2018, the second and third production lines of the Yamal LNG plant were launched. With the launch of the third stage, the total capacity of Yamal LNG reached 16.5 million tons per year. In addition to the plant itself, a port infrastructure for loading LNG and the Sabetta International Airport have been built, and an ice-class tanker fleet is being created.

In total, the project involves the launch of four technological lines with a total capacity of 17.4

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million tons per year of LNG at the resource base of the South Tambeyskoye field with gas reserves of 1.3 trillion cubic meters and more than 40 million tons of condensate.

An important role in the development of the fuel industry is played by state support and the policy of the region to stimulate investment activity. To this end, the region has formed and regularly updates the List of Organizations Implementing Priority Investment Projects on the Territory of the Autonomous Okrug (hereinafter referred to as the List).

At the beginning of 2019, the List included 19 organizations that received the right to state support in the form of tax preferences. They signed investment agreements on the implementation of 29 projects totaling more than 2.8 trillion. rub.

Over a six-year period, the legislation in the field of regulation of investment activity in the territory of the Autonomous Okrug has been completely modernized.

As part of measures to provide state support measures to investment-active organizations for the period 2018-2021, about 970 billion rubles were attracted to the region's economy, more than 5,200 jobs were created.

In order to provide fuel and energy enterprises with qualified personnel and promote employment of the population of the Autonomous Okrug, materials are published in the media on the possibility of employment of citizens outside their place of permanent residence, including on an intra-regional rotational basis. Unemployed citizens who have expressed their consent to employment in another area are offered free jobs with a rotational work method.

Information about vacancies is placed in the public domain in the information and analytical system All-Russian database of vacancies "Work in Russia" and the interactive portal of the employment service of the Autonomous Okrug. On these portals, the opportunity for job seekers to post resumes is implemented, for employers - to search for employees.

The gradual decline in production and the depletion of the main traditional oil and gas fields in the continental part of the region creates a need for the development of new promising production centers.

In this regard, the region will continue to actively develop its natural resources in new oil and gas production centers - Bovanenkovo, Tambeysky and Novoportovskyy centers located on the Yamal Peninsula, as well as Messoyakhskyy - in the north-east of the territory and Kamennomyssky in the waters of the Ob Bay.

The most important strategic infrastructure projects in the energy sector, the implementation of which has already begun or is envisaged in the near future, include: the development of port and transport infrastructure for the transportation of liquid hydrocarbons, the construction of a gas pipeline

network for the transportation of gas from the fields of the Ob and Taz Bays, the further development of the gas transportation system of the Yamal Peninsula .

The implementation of the Yamal LNG project and the creation of a new Russian LNG production center on the Yamal Peninsula based on the Yuzhno-Tambeyskoye field will continue, with subsequent connection to the project of the Tambeyskoye group fields. Until 2022, the commissioning of the third and fourth lines of the plant is expected.

The focus will be on the development of fields on the Gydan Peninsula, where it is planned to implement the Arctic LNG-2 project to build three stages of an LNG plant with a capacity of 6.6 million tons per year each.

The project involves the development of the resource base of the Salmanovskoye (Utrenneye) deposit, the reserves of which amount to more than 1.5 trillion cubic meters. cube m of natural gas and 65 million tons of liquid hydrocarbons.

More distant plans for the development of the resources of the Yamal Peninsula are associated with the commissioning of fields on the Yamal Peninsula: the Kharasaveyskoye gas condensate field (2024), the Kruzenshternskoye gas condensate field (2025-2030), as well as the commissioning of fields located in the waters of the Kara Sea, such as: Severo-Kamennomysskoe gas condensate (2026-2030) and gas Kamennomysskoe-Sea (2025-2030).

Oil production will remain a promising direction for the economy of the Autonomous Okrug, the volume of which is expected to be increased at the Vostochno-Messoyakhskoye, Pyakyakhinskoye, Russkoye, Yaro-Yakhinskoye and Novoportovskoye fields.

In addition, many smaller investment projects in the fuel and energy sector will be implemented on the territory of the Autonomous Okrug.

In the development of small new and heavily depleted fields around the world, small and medium-sized enterprises work most effectively, provided that access to oil and gas pipelines and primary processing facilities is provided. In the Autonomous Okrug, there are prerequisites for the creation of small and medium-sized innovative companies that are able not only to increase oil recovery, but also to retain the teams of service organizations serving the oil and gas sector.

Sustainable economic growth in the basic sector will lead to the development in the region of such competitive economic activities as oil and gas production services and petrochemicals, capable of diversifying the mono-profile nature of the Autonomous Okrug's economy.

The construction of the Novyy Urengoy gas chemical complex (hereinafter referred to as the NGCC) continues in the region. The complex will process ethane-containing gas, which is a by-product obtained as a result of gas condensate deethanization.

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The capacity of the enterprise for processing raw materials should be more than 800 thousand tons per year, while the plant plans to produce up to 400 thousand tons of polyethylene annually with the possibility of increasing up to 1.2 million tons.

On the basis of the NGCC, it is planned to create a gas chemical cluster and produce packaging materials, household items made of polyethylene, stretch film, etc. The launch of the complex will create about a thousand jobs for Novy Urengoy.

There are prerequisites for the construction in Nadym of a gas processing plant for the production of synthetic liquid fuels (GTL - Gas to Liquids) to provide Arctic transport and energy with non-freezing, environmentally friendly fuel, reducing northern delivery.

The goal of state policy in this area is to conduct effective public administration that ensures the harmonious development of the region's economy, including the fuel and energy complex, on the basis of effective cooperation.

The main task is to stimulate the development of investment activities, as well as interaction with fuel and energy companies operating in the Autonomous Okrug.

Interaction with large fuel and energy companies operating in the Autonomous Okrug will be continued within the framework of cooperation agreements. These agreements regulate the issues of restoration of environmental damage, preservation of the original habitat of the indigenous peoples of the North, implementation of various social projects for the needs of the inhabitants of the Autonomous Okrug.

The current mechanism for granting tax benefits to enterprises implementing priority investment projects in the region stimulates the priority involvement in the implementation of projects of employees from among persons permanently residing in the Autonomous Okrug, as well as contractors, suppliers of raw materials and materials, marketing organizations, other performers of work and services, which are registered with the tax authority and operate on the territory of the Autonomous Okrug.

An indicator characterizing the solution of tasks to support the harmonious development of the fuel and energy complex on the basis of effective cooperation will be the involvement of at least 909 billion rubles in the region's economy. until 2025 (inclusive) and at least 1,183 billion rubles. investments until 2035 (inclusive) as a result of the implementation of priority investment projects.

The result of supporting the development of the fuel and energy complex on the basis of effective cooperation will be sustainable economic development of the Autonomous Okrug, based on an increase in investment and innovation activity, development of transport infrastructure and diversification of the economy.

The power system of the Autonomous Okrug is

represented by centralized and decentralized power supply zones. At the same time, the Autonomous Okrug continues to be an energy-deficient region in terms of having its own sources of electricity generation in the centralized part of the energy system.

In 2011, five block stations with a total installed capacity of 316 MW supplied electricity to the power system of the Autonomous Okrug, which provided only 21% of the maximum load.

For six years, it was possible to increase the energy independence of the region, 49% of the load in the maximum operating modes of the energy system is provided by its own power plants and mainly due to the commissioning in 2012 of a power unit at the Urengoykaya GRES with a capacity of 450 MW. In 2021, the volume of installed capacity in the synchronous part of the district power system was increased due to the commissioning of the GTPP power plant of the Novy Urengoy gas chemical complex.

The centralized power supply zone was expanded due to the completion of the construction of the Nadym-Salekhard 220 kV overhead line with the Salekhard 220 kV substation, the Northern Lights 110 kV substation and the Polyarnik 110 kV substation with 110 kV supply lines.

To ensure the reliability of power supply to consumers in the Purovsky district (Tarko-Sale, Purpe village, Purovsk village), the construction of the 110 kV overhead line "Kirpichnaya-Kristall", the 220 kV substation Arsenal was completed, the 110 kV substation "Geolog" was expanded.

In order to supply power to NGCC, the construction of a 220 kV overhead line "Urengoy - NGCC" with a 220 kV substation "NGCC" was completed.

For the power supply of the Vankor field, a 220 kV overhead line "Urengoykaya GRES - Mangazeya" and a 220 kV substation "Mangazeya" were built.

Key substations of the energy system were upgraded: 220 kV Urengoy substation, 220 kV Vyangapur substation, 220 kV Yanga-Yakha substation, 500 kV Muravlenkovskaya substation, Tarko-Sale 500 kV substation.

In the decentralized zone of power supply, new diesel power plants were put into operation in the village. Shuryshkari, p. Muzhi, p. Tazovsky.

In the city of Novy Urengoy, the city of Tarko-Sale, with. Kharsaim, p. Gaz-Sale, with. Krasnoselkup, s. Antipayut, p. Only 11 new gas boiler houses have been built, work has been done to modernize thermal energy sources and heating networks. To ensure the heating regime of the Noyabrsk combined-cycle power plant, the main heat network "NPGE-boiler house KGVM-100" was built in Noyabrsk.

Gasification completed. Krasnoselkup through the construction of a gas distribution station and an

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inter-settlement gas pipeline. A new gas pipeline for the village was put into operation. Urengoy, the construction of a reserve gas pipeline to the city of Tarko-Sale was completed, a gas pipeline was built to the microdistrict. Severnaya Niva, Noyabrsk.

At the beginning of 2012, in most settlements there was no drinking water supply and wastewater treatment, in a number of settlements the quality of drinking water did not meet the established requirements.

In the period from 2012 to 2020, the quality of water purification was improved through the installation of block local water treatment systems in 14 settlements of the Krasnoselkupsky, Priuralsky, Purovsky, Tazovsky, Shuryshkarsky and Yamalsky districts. In 2018, work was completed on the installation of water treatment systems in five more settlements of the Autonomous Okrug.

Construction and reconstruction of water treatment facilities continued in Salekhard, Muravlenko, s. Gaz-Sale, md. Vyngapurovsky, Noyabrsk and sewage treatment facilities in Labytnangi, Salekhard, Muravlenko, Gubkinsky, Nadym, p. Yar-Sale and with. Nyda.

In 2012, sewer treatment facilities were put into operation in the city of Gubkinsky, in 2019 the construction of such facilities in the city of Nadym and the first stage of sewage treatment facilities in the Korotchaev district of Novy Urengoy are being completed.

In 2020, the Autonomous Okrug began to implement the activities of the priority project "Formation of a comfortable urban environment". Two municipalities became its pilot participants: the administrative center of the city of Salekhard and the city of Labytnangi.

During the year, 35 courtyards and 19 public territories were landscaped, as well as activities were carried out to purchase and install architectural lighting elements, equip sites for collecting municipal solid waste, sanitize areas and develop a design project.

Modern children's playgrounds and sports grounds have been built on the landscaped territories. Works have been carried out to illuminate the streets, arrange car parks, arrange entrance recreation areas, arrange container sites and arrange a public garden.

During the implementation of improvement measures, 8 yards and public areas were equipped with equipment intended for use by citizens with disabilities.

The goal of the policy in the field of energy and housing and communal services is to ensure the energy security of consumers, improve the quality of housing and communal services, and ensure their accessibility for the population.

The achievement of this goal will contribute to the solution of the following tasks:

23) ensuring sustainable energy supply to

consumers, development of centralized energy systems and distributed generation in isolated energy systems;

24) development of gas supply systems by creating conditions for the construction of inter-settlement gas pipelines and gas distribution networks in the settlements of the Autonomous Okrug;

25) improving the quality of drinking water and wastewater treatment through the modernization and development of water supply and sanitation systems using modern technologies;

26) creation of a comfortable urban environment.

The energy system of the Autonomous Okrug in the long term should meet the needs of the region in the advanced development. Particular attention will be paid to the provision of electrical energy to the main consumers - fuel and energy companies. Both centralized and decentralized power supply zones will be developed.

The prospective balance of electricity (capacity) in the centralized part of the power system of the Autonomous Okrug is characterized as scarce. In this regard, in order to increase the level of energy independence of the region, first of all, it is planned to place additional energy capacities, including through the construction of the Tarko-Sale CCGT power unit.

The efficiency of further placement of generating capacities in the territory of the Autonomous Okrug is due to the close proximity of hydrocarbon deposits and accessible gas transportation infrastructure.

To improve the reliability of power supply and connect new consumers of the oil and gas sector in the Autonomous Okrug, it is planned to continue the development of the power grid complex. In particular, it is planned to build substations of SS 220 kV Iskonnaya, SS 220 kV Yermak, SS 220 kV Slavyanskaya and 220 kV overhead lines.

Further expansion of the centralized power supply zone will be associated with the power supply of infrastructure projects in the Arctic and connection to the power systems of neighboring regions.

It is also planned to consider issues of connection to the centralized part of the power system of settlements: with. Krasnoselkup, s. Nyda, p. Nori, p. Kutopyugan, p. Aksarka, s. Beloyarsk, s. Kharsaim, p. Tazovsky, p. Gaz Sale.

The most promising settlements for connection to the unified energy system are the city of Labytnangi and the town. Kharp of the Ural region. For these purposes, it is planned to build substations of the 110 kV Labytnangi substation and the 110 kV Kharp substation and 110 kV overhead power lines.

In isolated energy systems, the main activity in the field of energy supply will be aimed at the phased replacement of obsolete generation facilities in settlements and the construction of local power plants.

So, at the expense of extrabudgetary funds, new

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sources of electricity supply are planned to be built in the village. Yar-Sale, p. Krasnoselkup, s. Beloyarsk, s. New Port, p. Antipayut.

Due to the considerable remoteness from the main energy hubs of promising industrial centers for the production of hydrocarbons on the territory of the Yamal Peninsula and the Gydan Peninsula, energy supply to individual projects of oil and gas enterprises is planned to be carried out at the expense of local generation sources. In particular, it is planned to complete the construction and commissioning of a power plant for the Yamal LNG project.

The main directions of development in the field of heat supply are associated with the integrated development of this system. New boiler houses are planned to be built in the village. Husband, s. Gorki, p. Purpe.

The task of developing gas supply systems will be solved by expanding the gasification zone and systematically increasing the share of gasified settlements in accordance with the General Scheme for Gas Supply and Gasification of the Autonomous Okrug, the program for gasification of the regions of the Russian Federation on the territory of the Autonomous Okrug and agreements between the Government of the Autonomous Okrug and fuel and energy enterprises.

The shift in the vector of extraction of fuel and energy resources towards the Arctic territories will ensure the active industrial development of the fields of the Yamal Peninsula and the Gydan Peninsula.

In this regard, with the participation of enterprises of the oil and gas complex, gasification is planned with. Antipayut, p. Gyda and s. New Port. It is also planned to consider the possibility of gasification of settlements with. find, p. Samburg and s. Kharsaim.

Reconstruction and re-laying of gas pipelines, as well as their new construction for gasification of built-up areas is planned to be carried out through technological connection to gas supply systems and special allowances to the tariffs of gas distribution organizations for gas transportation services.

In order to develop gas supply systems, state support measures will continue to be provided to gas distribution organizations providing gas transportation services to hard-to-reach settlements.

To solve the problem of improving the quality of drinking water and wastewater treatment, the construction and reconstruction of water supply and water treatment facilities will continue.

The equipping of small settlements with block water treatment plants will continue. By the end of the first quarter of 2019, it is planned to install 17 block water treatment facilities in 15 settlements of the Krasnoselkupsky, Purovsky, Tazovsky, Nadymsky, Priuralsky and Shuryshkarsky districts. Thus, the entire need of municipalities to equip small settlements with water treatment plants will be

satisfied.

Until 2035, it is planned to complete the reconstruction of water treatment facilities in Salekhard, Muravlenko and Nadym, to implement a project to provide drinking water to the population of Labytnangi.

In order to improve the quality of wastewater treatment and reduce the anthropogenic impact on water bodies, it is planned to complete the reconstruction of sewage treatment facilities in Salekhard, Muravlenko and Labytnangi, as well as the construction of such facilities in the town of Tarko-Sale, with. Nyda, p. Yar-Sale, the second stage of the project for the sewerage of the industrial zone of Noyabrsk.

Starting from 2022, small settlements will be equipped with block sewer treatment facilities. The need to equip small settlements with block water supply and sewerage treatment facilities will be fully satisfied.

As part of solving the problem of creating a comfortable urban environment, work will continue on the implementation of priority measures for the improvement of public and courtyard areas with the broad involvement of citizens and stakeholders.

Taking into account the opinion of citizens, the existing rules for improvement will be updated, which will qualitatively change the level of planning and implementation of improvement measures.

Mechanisms to support improvement measures initiated by citizens will be launched, as well as opportunities for financial or labor participation of citizens and organizations in the implementation of improvement measures will be opened, and tools for public control over the implementation of measures on the territory of municipalities will be formed.

As a result of the implementation of priority measures to create a comfortable urban environment, by 2025 it is planned to improve all courtyard areas in need based on the minimum list of works and implement at least 300 design projects for public areas in settlements, which will bring the quality of the urban environment to a modern level and improve the appearance territories of cities and towns in the Autonomous Okrug.

The indicators characterizing the solution of the tasks set for the development of the energy sector and the housing and communal complex of the Autonomous Okrug will be:

- 27) an increase in the total installed capacity of power plants in the centralized power supply zone of the Autonomous Okrug from 979 MW in 2018 to 1,048 MW in 2025 and to 1,448 MW in 2035;
- 28) increase in the number of gasified settlements from 28 in 2018 to 30 in 2025 and up to 32 in 2035;
- 29) increase in the proportion of the population provided with safe drinking water from 88.35%

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in 2018 to 91.1% in 2025 and up to 95.3% in 2035;

- 30) the number of landscaped yard areas (based on the minimum list of landscaping works) by 2025 will be more than 1,700 units;
- 31) the number of landscaped public areas by 2025 will be at least 300 units.

As a result of solving the tasks set, it is planned to achieve the following results:

- 32) improve the energy security of the region;
- 33) to ensure the integrated and balanced development of energy supply, gas supply, water supply and sanitation systems;
- 34) increase the investment attractiveness of the Autonomous Okrug in the field of energy and utility infrastructure, create conditions for the development of investment activity of energy supply organizations;
- 35) increase the number of gasified settlements;
- 36) ensure the normative quality of drinking water and wastewater treatment;
- 37) to increase the level of improvement of the territories of municipalities with a population of over 1,000 people.

The strategic goal of the energy policy in the Autonomous Okrug is the creation of a stable and self-regulating system for ensuring regional energy security.

The implementation of the energy policy on the territory of the Yamalo-Nenets Autonomous Okrug takes into account the specifics of the region and is carried out in coordination with the solution of strategic national tasks for the long-term development of the economy and energy.

The energy intensity of the gross regional product in the Autonomous Okrug is almost two times lower than the average level for the whole country and tends to decrease, in 2018 its value amounted to 7.37 kg of fuel equivalent/thous. rubles. Compared to the previous reporting period, the value of the indicator decreased by 5%, over five years by 50.4%. According to this indicator, the Autonomous Okrug is among the top five among the subjects of the Russian Federation.

The positive dynamics of the energy intensity of the GRP is due to the growth of the gross regional product with a decrease in the consumption of fuel and energy resources in 2018, associated with the implementation of energy-saving projects by the fuel and energy complex enterprises, which occupy the main position in the sectoral structure of the GRP. The main activities and work aimed at the energy-efficient economy of the Autonomous Okrug were completed in the period 2016-2021.

In the budgetary sphere of the Autonomous Okrug, during this period, heat energy and water metering devices were installed, mandatory energy audits were carried out, low- and medium-cost energy saving measures were implemented within the

framework of energy saving programs, including those recommended based on the results of energy audits.

Based on the results of the measures taken, the share of LED light sources in indoor and outdoor lighting of public sector institutions increased from 6.4% in 2018 to 15% in 2021.

The share of buildings equipped with individual heat points in the total number of buildings in the budgetary sphere of the Autonomous Okrug connected to the main heating network also tends to increase: 4.2% in 2018 and 5% in 2021.

The number of energy-efficient buildings (having a preliminary energy efficiency class of at least D) in the public sector of the Autonomous Okrug in 2021 increased by 312 units or 48% compared to the data of 2018. The increase in the share of energy efficient buildings is associated with the commissioning of new buildings that meet energy efficiency requirements, as well as the overhaul of buildings.

A positive trend in the reduction of specific consumption costs of energy resources in multi-apartment buildings was observed in the period 2016–2020. The specific consumption of thermal energy decreased from 0.37 Gcal/sq.m in 2016 to 0.27 Gcal/sq.m in 2021, the specific water consumption decreased from 51.9 cubic meters/person in 2016 to 42, 3 cubic meters/person in 2021.

The downward trend in specific consumption for water and heat energy is due to the implementation of measures to equip the housing stock with energy metering devices within the framework of municipal programs, the overhaul of residential buildings, as well as the demolition of non-energy efficient dilapidated and dilapidated housing.

The priorities and objectives of the regional policy in the field of energy saving and energy efficiency are based on the principles of efficient and rational use of energy resources, support and stimulation of energy saving and energy efficiency, planning, as well as systematic and comprehensive implementation of energy saving and energy efficiency measures, use of energy resources taking into account resource, production and technological, environmental and social conditions.

To achieve the strategic goal of the regional energy policy in the near future, it is planned to continue solving the following tasks:

- improvement of interaction in the field of implementation of energy-saving policy in various sectors of the economy on the basis of the delimitation of powers between the executive bodies of state power of the Autonomous Okrug;
- promotion and stimulation of advanced development and introduction of energy-saving and energy-efficient technologies.
Planned as a priority:
- increase the energy efficiency of lighting systems of

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organizations of the budgetary sphere of the Autonomous Okrug within the framework of existing programs for energy saving and energy efficiency improvement with the involvement of extra-budgetary funds from investors under energy service contracts;

- increase the energy efficiency of street and road lighting systems in the municipalities of the Autonomous Okrug, including by attracting private investment as part of the implementation of energy service contracts;
- provide assistance in the implementation of investment activities in the field of energy conservation and energy efficiency;
- to continue the popularization of energy conservation and the introduction of modern energy-saving technologies.

Indicators characterizing the solution of the tasks set in the field of energy saving and increasing the energy efficiency of the Autonomous Okrug:

- increase in the share of LED light sources in public sector organizations of the Autonomous Okrug from 15% (82,758 units) in 2018 to 21% in 2025 and up to 30% in 2035;
- increase in the share of LED light sources in street and road lighting systems of the Autonomous Okrug from 29% (11,368 units) in 2018 to 45% in 2025 and up to 60% in 2035.

As a result of solving the tasks:

- it is planned to increase the energy efficiency of the lighting systems of organizations of the budgetary sphere of the Autonomous Okrug and street and road lighting systems in the municipalities of the Autonomous Okrug;
- it is planned to increase the investment attractiveness of the Autonomous Okrug in the implementation of energy saving and energy efficiency projects;
- it is expected to increase literacy, energy-saving consciousness and behavior of the population in the field of energy saving and energy efficiency.

Mono profile of the regional economy makes it vulnerable, dependent on external conditions. Therefore, the most important task is the development of new areas of economic activity, increasing the role and importance of Yamal in the structure of the all-Russian economy.

The powerful acceleration of the development of the Russian Arctic zone, as well as the successful development of the resource potential of the region, directly depend on the developed transport infrastructure.

In the Autonomous Okrug, work has begun on the implementation of the largest project for the development of the transport infrastructure of the Arctic zone of the Russian Federation - the creation of the Northern Latitudinal Railway, the need to implement which as a priority for the country as a

whole is determined by the instructions of the President of the Russian Federation, provided for by a number of strategic planning documents.

For the period 2018-2021, as part of the interaction between the Government of the Autonomous Okrug, JSC Russian Railways, PJSC Gazprom and other stakeholders of the project, joint work was carried out to update the organizational, legal and financial model of the project. Agreements with shipper organizations confirmed the planned volumes of freight traffic.

The developed organizational and legal model of the project provides for its implementation on the basis of a federal concession as part of a private concession initiative, where the Russian Federation (represented by the Federal Agency for Railway Transport) will act as a concessionaire, and a special project company created with the participation of Russian Railways OJSC will act as a concessionaire (At the end of 2017, OOO Northern Latitudinal Walk was established as a concessionary company, a joint venture between JSC Russian Railways and OOO Spetstransstroy).

As part of the implementation of the Yamal LNG large-scale project for the production of LNG, in 2014 the Sabetta Airport was commissioned, which meets all the requirements that apply to international-class airports, in 2015 - an air terminal.

At the end of 2018, the infrastructure of the Sabetta seaport was put into operation, designed to ensure the transshipment of hydrocarbons by sea to the countries of Western Europe, North and South America and the countries of the Asia-Pacific region.

During 2017, the construction of the root part of the South-Eastern ice protection structure with a length of 2800 m, onshore facilities was completed, and in December the first shipment of LNG was made from the Yamal LNG terminal in the port of Sabetta to the gas tanker Christophe de Margerie.

Despite the fact that the Autonomous Okrug is the main gas producing region of Russia, the use of compressed (compressed) natural gas on its territory is characterized as extremely unsatisfactory. The task of developing the infrastructure of the gas station network has not been solved, there is an insufficient level of equipment and use of gas motor fuel on vehicles of municipal motor transport enterprises. As of the beginning of 2018, there are 3 CNG-filling compressor stations in the Autonomous Okrug in the cities of Salekhard and Nadym, as well as in the village of Yagelny, Nadymsky District.

The availability of transport services is one of the most important parameters that determine the quality of life of the population and the level of economic development of the Autonomous Okrug.

In six years, the construction of a bridge over the Pyaku-Pur River on the highway Entrance to the city of Tarko-Sale was completed, which made it possible to provide year-round motor transport links between

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Tarko-Sale and the regional road network, as well as the road part of the bridge over the Nadym River in the section Old Nadym - Nadym of the Surgut - Salekhard highway.

As part of the project for the construction of the Surgut - Salekhard highway, the length of the Nadym - Salekhard section put into operation was 170 km (the total length is 344 km).

A 13 km section of the Surgut-Salekhard - YNAO-Gubkinsky border road was completed with reconstruction, which made it possible to bring the throughput capacity of the road section in line with regulatory requirements.

In order to ensure the accessibility of the transport services market to the population, during 2018-2021, passenger transportation by air and water transport was subsidized, which made it possible to maintain the socially significant route network of the region.

The total length of inland waterways in the Autonomous Okrug is 4,088 km, including 2,742 km with guaranteed clearances for ships.

In order to organize the safe movement of passenger ships, as well as the delivery of goods to ensure the life of settlements located within the boundaries of the Autonomous Okrug, measures are taken annually to maintain navigational aids and carry out dredging.

In 2013, high-speed passenger vessels of the A-145 project were purchased, provided with a modern interior, a high level of technical excellence of the vessel and meeting established international requirements and standards.

In 2015, the complex of the river station in Salekhard was put into operation. The building houses service and recreation areas, hotel rooms and administrative offices.

In 2015, a multifunctional railway station was put into operation in Novy Urengoy. The new modern building combines the functions of the railway and automobile stations.

The goal of the transport infrastructure development policy is to form a single economic space of the Autonomous Okrug based on the balanced development of an efficient transport infrastructure.

Priority areas for the implementation of the Strategy in the field of road infrastructure are based on the provisions of the Transport Strategy of the Russian Federation for the period up to 2035, approved by the order of the Government of the Russian Federation.

The main efforts will be aimed at creating

interregional transport corridors in order to realize the transit potential of the Autonomous Okrug, ensuring uninterrupted year-round communication between settlements in the Autonomous Okrug and the regional road network, administrative centers of municipal districts and settlements in the Autonomous Okrug with the regional and (or) all-Russian road network.

Until 2025, it is planned to implement one of the largest investment projects in the region to create a new railway line - the Northern Latitudinal Railway (Obskaya - Salekhard - Nadym - Pangody - Novy Urengoy - Korotchaevo), which includes:

- 38) construction of a combined bridge over the river. Ob in Salekhard area (with railway approaches from Salekhard station and Obskaya station);
- 39) construction of the railway line Salekhard - Nadym;
- 40) construction of a railway bridge across the river. Nadym;
- 41) reconstruction of the railway section Nadym (Khorey) - Pangody;
- 42) reconstruction of the railway line Konosha - Kotlas - Chum - Labytnangi of the Northern Railway, including the reconstruction of the Obskaya station;
- 43) reconstruction of the railway line Pangody - Novy Urengoy - Korotchaevo of the Sverdlovsk railway.

The implementation of this project will allow:

- 44) reduce the length of transport routes from the fields of Western Siberia to the European part of Russia and the ports of the Baltic basin by more than 700 km;
- 45) to build an efficient hydrocarbon cargo logistics system, to minimize the logistics costs and risks of subsoil users while ensuring the development, supply and operation of fields;
- 46) stimulate further exploration and development of deposits in the western part of the Autonomous Okrug and promising areas for subsoil use;
- 47) develop and expand export-oriented processing industries in the field of oil and gas processing;
- 48) ensure transport accessibility and year-round communication of the main cities and towns of the region;
- 49) create new jobs, both on the railway itself and in related industries;
- 50) stimulate entrepreneurial and business activity of the population through the development of the territory.

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Figure 6. Prospective construction of railways in the Yamalo-Nenets Autonomous Okrug until 2035

It is also planned to build and put into operation the non-public railway line Bovanenkovo - Sabetta with a length of 169.5 km (Figure 6).

The implementation of this project will ensure direct access of hydrocarbon raw materials planned for production at the fields of the Yamal Peninsula to sea export channels along the Northern Sea Route through the seaport of Sabetta, as well as the creation of a reference point for the development of the Arctic shelf on the basis of the seaport of Sabetta. The project will give a new impetus to the development of the richest mineral resource base in promising areas for subsoil use.

In order to ensure full and high-quality

satisfaction of the demand of the population of the Autonomous Okrug for passenger transportation, it is planned to build a railway station in the village of Purpe.

The priority is the task of building roads. It is planned to complete the construction of the Surgut - Salekhard highway, the Nadym - Salekhard section. The implementation of this investment project will provide access to the all-Russian road network for six settlements in the western part of the district.

The issue of the construction of a highway in the direction "Korotchaevo - Krasnoselkup", including the construction of a bridge over the river. Pur".

The implementation of the project will expand

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the transport infrastructure of the Autonomous Okrug, exclude a number of settlements from the territories with limited delivery times. The bridge will provide year-round transport accessibility with a significant reduction in freight and special transport fares relative to current commercial pontoon crossing rates. At the same time, the passage for passenger cars will be free.

The issue of building "chord" roads is also being considered, which will significantly reduce the overrun of road transport and, accordingly, the cost of such transportation. On the terms of the concession, it is planned to build the Muravlenko-Nadym highway.

In addition to the construction of roads, measures will be implemented aimed at bringing the road network to the normative state, reducing the number of places where traffic accidents are concentrated, respectively, and reducing deaths as a result of road traffic accidents.

To optimize cargo flows, the issue of building transport and logistics centers in Noyabrsk and Muravlenko will be considered. Such centers should become logistics hubs for chain retailers that transport goods mainly by trucks. The development of transport and logistics infrastructure will make it possible to organize an efficient scheme for the movement of large-capacity transport at the entrance to the district, to eliminate the need for its arrival at the centers of nearby cities.

As part of solving the problem of increasing the consumption of natural gas as a motor fuel in the Autonomous Okrug, it is planned to develop gas filling infrastructure through the construction of automobile gas filling compressor stations in the urban-type settlement of Pangody, Nadymsky District, as well as in the cities of Noyabrsk and Novy Urengoy.

In addition, it is planned to purchase vehicles using natural gas as a motor fuel.

As part of solving the problem of developing air transport, it is envisaged:

- 51) reconstruction and modernization of airport complexes in the city of Salekhard and in the village of Krasnoselkup;
- 52) design, construction, reconstruction and use (operation) of the airport complex in Novy Urengoy on the terms of a concession agreement;
- 53) acquisition and replacement of special vehicles and special equipment that have exhausted their assigned resource;
- 54) construction and reconstruction of helipads for organizing the transportation of passengers.

As part of solving the problem of developing water transport, it is envisaged:

- 55) construction of modern berthing facilities;
- 56) acquisition of high-speed and displacement

- comfortable passenger ships;
- 57) improvement of navigation conditions;
- 58) increasing the level of transportation safety.

The task of ensuring the availability of transport services for the population not provided with land transport communications will be solved by subsidizing passenger transportation by water and air transport along socially significant routes.

Also, subsidies will be provided to organizations engaged in airport activities, for which the rates of airport charges and tariffs for ground handling of aircraft are set below the economically justified expenses of the airline as a result of state regulation of tariffs.

The indicators characterizing the solution of the tasks set for the development of the transport complex will be:

- 59) increase in the volume of passenger traffic through airports from 1680 thousand people. in 2018 up to 1750 people. in 2025 and up to 1800 thousand people. in 2035;
- 60) an increase in the length of public roads of regional or intermunicipal significance due to new construction by 180 km by 2025 and by 118 km by 2035;
- 61) expansion of the route network of air and water transport of socially significant routes that provide regular communication with the settlements of the Autonomous Okrug from 42 units. in 2018 to at least 46 by 2025 and maintaining this level until 2035;
- 62) maintaining the density of the network of public roads (except federal roads) that meet the regulatory requirements for transport and operational indicators at the level of 2.2 km/thous. sq. km;
- 63) an increase in the share of the length of public roads of regional or intermunicipal significance that meet the regulatory requirements for transport and operational indicators of the total length of public roads of regional or intermunicipal significance from 66.1% in 2018 to 67.7% in 2025 and up to 69% in 2035;
- 64) increase in the consumption of natural gas as a motor fuel in the Autonomous Okrug from 21.1 thousand cubic meters. in 2018 to 15 million cubic meters in 2025 and up to 20 million cubic meters. in 2035, subject to the provision of a federal subsidy to reimburse the costs associated with the conversion of vehicles to run on natural gas;
- 65) increase in the number of gas filling infrastructure facilities from 3 in 2018 to 5 in 2025 and up to 9 by 2035.

The solution of the tasks set aimed at the development of the transport complex will make it possible to achieve the following main results by the end of 2035:

- 66) reduce the level of transport discrimination

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- existing in the Autonomous Okrug;
- 67) increase the investment attractiveness of the territories of the Autonomous Okrug through the creation of new railway lines;
- 68) maintain socially significant transportation by air and water transport, providing year-round transport accessibility of settlements that do not have alternative land transport links;
- 69) increase the level of use of natural gas as a motor fuel in public road transport and transport of road and communal services.

One of the most important conditions for the

socio-economic development of the region is the development of informatization and communications.

In 2021, a number of problems still remain acute in the Autonomous Okrug, caused by the poor development of intrazonal terrestrial trunk communication lines, the high cost and lack of satellite resources necessary to provide communication channels to hard-to-reach and remote settlements, and the high congestion of copper cables of urban and rural distribution telephone networks xDSL equipment.



Figure 7. Map of the transport scheme in the Yamalo-Nenets Autonomous Okrug until 2035

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The main fiber-optic communication lines covered the only settlement - the city of Noyabrsk. Mobile communication was represented by a limited number of federal level operators and one regional level operator. The average cost of broadband Internet access services was the highest among the regions of the Russian Federation.

The development of the communications sector in the Autonomous Okrug in 2018-2021 was characterized by a significant modernization and expansion of the backbone terrestrial infrastructure, the transition to the widespread use of optical technologies both at the backbone level and at the level of access networks, a significant expansion of the mobile radiotelephone (mobile) communication network with the transition to use of 3rd and 4th generation technologies.

So in 2016, the optical backbone communication line reached the cities of Novy Urengoy and Nadym.

In 2017, a radio relay communication line was put into operation to the village of Krasnoselkup, in 2014 the Nord Optical Stream reached the city of Salekhard.

In 2018, a radio relay line Yamburg - Cape Kamenny was built, extended in 2016 to the village of Novy Port.

In 2019, the city of Labytnangi was connected to the optical highway, which completed the process of connecting cities of district significance to optical highways.

In 2020 - 21 radio relay lines to the village of Tazovsky and the village of Gaz-Sale were modernized, another high-speed digital radio relay line Salekhard - Yar-Sale was put into operation.

Significant changes in the communications infrastructure have allowed operators to expand the range of modern communications services and reduce prices, while improving the quality of the services provided. At the end of 2018, in the region, the share of households with fixed broadband access to the Internet was 78.0%, and taking into account mobile broadband access to the Internet - 93.3%. The share of active users of mobile broadband access to the Internet from the total number of residents of the Autonomous Okrug was 111.4%.

Official statistics for 2020 confirm the stable position of the Autonomous Okrug in the group of leaders in terms of indicators characterizing the penetration of modern communication services, both among the regions of the Ural Federal District, the Arctic zone of the Russian Federation, and on a nationwide scale.

By the beginning of 2021, the construction of all 29 objects of the digital terrestrial television and radio broadcasting network was completed in the district, the coverage of the population with the broadcasting of the first package of RTRS-1 channels was 92.4%.

The goal of the communications development policy is to implement the tasks set by the President of

the Russian Federation in Decree No. 204 of May 7, 2018 "On National Goals and Strategic Objectives for the Development of the Russian Federation for the Period up to 2025" (hereinafter referred to as the Decree of the President of the Russian Federation of May 07, 2018 year No. 204).

The implementation of the tasks set will be carried out within the framework of the national program "Digital Economy of the Russian Federation" and include a number of infrastructure measures aimed at further development and modernization of the communications infrastructure in the region. Until 2025, it is planned to provide:

- connection of socially significant objects to the Internet (health care institutions, feldsher-obstetric centers and educational institutions);
- connection to the regional interdepartmental telecommunications network of the Autonomous Okrug of city, district and rural administrations.

In addition, the main efforts will be focused on eliminating digital inequality in the territory of the Autonomous Okrug and providing rural settlements with a population of over 500 people with communication services and broadband Internet access. These measures will make it possible to connect small remote settlements and trading posts to the Internet, to provide the population with access to state and municipal services in electronic form.

In order to develop and modernize the information and telecommunications infrastructure, the regulatory and legal framework of the Autonomous Okrug will be improved, public-private and municipal-private partnerships will be actively introduced.

The development of competition will be facilitated by ensuring equal operating conditions and equal accessibility of state and municipal related infrastructure for all telecom operators.

Mobile operators, expanding existing networks in the territory of the Autonomous Okrug, will carry out the construction of 4th generation mobile communication networks.

Plans to improve the quality of long-distance and international telephone communications, mobile communications, significantly increase the speed of Internet access, as well as expand the volume of services provided are associated with the ongoing commissioning of terrestrial communications infrastructure, including fiber optic and radio relay transmission lines.

The development of communications will also be aimed at providing mobile communications to remote sparsely populated areas of the Autonomous Okrug and seasonal roads, the presence of several mobile operators in remote settlements, and ensuring continuous coverage of regional roads.

In order to create conditions for the provision of communication services in remote and hard-to-reach settlements of the Autonomous Okrug, it is planned to

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continue work on providing state support to municipal districts in the Autonomous Okrug. The result should be an improvement in the quality of communication services provided in 9 remote rural settlements of the region.

It is planned to improve the quality of television image and sound, increase the number of received TV channels and the range of services provided in the Autonomous Okrug by expanding the digital television network.

In order to maximize the coverage of the population of the Autonomous Okrug with digital terrestrial broadcasting of the first package of RTRS-1 channels, it is planned to build 2 additional digital broadcasting facilities in the city of Labytnangi and at the Obskaya station. As a result, the expected coverage of digital broadcasting services will be 96.08%.

Creation and development of a unified regional television and radio broadcasting network in the Autonomous Okrug is provided on the basis of the existing distribution network of district radio and television channels using the created terrestrial communication channels.

Work will also continue on organizing joint broadcasting of regional and municipal programs.

The indicators characterizing the development of communication infrastructure in the Autonomous Okrug will be:

- an increase in the share of households with broadband Internet access (including mobile broadband access) from 93.3% in 2017 to 97% in 2025 and up to 98% (including mobile) in 2035;
- an increase in the share of factories with an Internet connection out of the total number of factories included in the State Register of factories of the Autonomous Okrug and meeting the technical conditions for connection, in 2025 to 20%, in 2035 to 40%;
- increase in the share of authorities of the Autonomous Okrug, local governments connected to the Internet by 2025 to 100%;
- increase in the share of city, district and rural administrations in the Autonomous Okrug connected to the regional interdepartmental telecommunications network of the Autonomous Okrug by 2025 to 100%;
- an increase in the number of settlements with terrestrial communication channels for organizing regional television broadcasting by at least 20 in 2025 and at least 40 in 2035 (there were no such settlements in the region in 2018).

Solving the tasks aimed at developing the communication infrastructure will make it possible to achieve the following main results by the end of 2035:

- eliminate the problems of digital inequality in the territory of the Autonomous Okrug;
- ensure the technological possibility of obtaining state and municipal services in electronic form,

including in inter-settlement areas;

- ensure the availability of communication services, telematic services, state and municipal services in electronic form to all segments of the population by further reducing tariffs by operators in connection with the development of a competitive environment;
- ensure the availability of telecommunications infrastructure for doing business, including for small and medium-sized businesses;
- to expand the television network, including interactive television, which has regional and municipal television programs in the broadcast content.

One of the main resources of the agro-industrial complex is the world's largest deer population of 788 thousand heads. The total area of reindeer pastures in the district is 49 million hectares - half the area of the entire region.

Reindeer products are supplied to both domestic and foreign markets. Yamal is the Russian leader in the supply of reindeer meat abroad. Over the past 10 years, the level of exports of Yamal reindeer meat to the EU countries has increased 10 times. During this time, deliveries were made to Germany, Sweden, Finland. Since 2008, more than three thousand tons of venison have been exported.

Processing of reindeer products in Yamal is seven high-tech complexes that produce products of impeccable quality and taste. Thanks to the development of the processing base, the volume of reindeer meat production over the past 10 years has been doubled, including through the active involvement of reindeer herders and national communities in the production process.

The range of finished products is constantly expanding.

The priorities of the regional agro-industrial complex are the transition to a qualitatively new level of development: the introduction of innovative technologies for the deep processing of reindeer breeding products - antlers, blood, skins and skins of reindeer. This will serve to create new commodity chains, develop the food industry, develop new sales markets and increase demand for Yamal products.

Another resource of the agro-industrial complex, along with reindeer husbandry, is aquatic biological resources. Fishing in Yamal is a traditional industry. The volume of fish production in the Autonomous Okrug is about 9 thousand tons. Favorable fishing conditions and high-quality organization of fishing contribute to consistently high catches.

Salekhard Plant LLC, which plans to start selling its products abroad, can become a key enterprise - exporter of fish products in the Autonomous Okrug.

At the same time, the enterprises of the Autonomous Okrug produce products that are in demand not only in the Okrug, but also outside it, in particular, fish products go to the trade network of the

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cities of Moscow, St. Petersburg, Tyumen, Yekaterinburg, Omsk, Novosibirsk, Samara, etc. . Thus, according to the Veterinary Service of the Autonomous Okrug, the volume of shipped goods of own production in 2017 amounted to 7,734 tons of fish and fish products.

The main threat to the development of the fishing industry is the active industrial development of the region, the development of new deposits in areas of whitefish reproduction (the Ob and Taz bays, the Ural tributaries, the upper reaches of the Taz River), which leads to a reduction in the population of valuable fish species in the Ob basin. To preserve the natural populations of whitefish species in the district, work is underway to artificially reproduce aquatic biological resources.

The main problems of the agro-industrial complex of the Autonomous Okrug are:

unfavorable general conditions for the functioning of agriculture, primarily the disparity in prices for agricultural products and material and technical resources used in agricultural production, the unsatisfactory level of development of market infrastructure;

shortage of qualified personnel caused by the low level and quality of life in rural areas;

the absence of a well-organized system of deep processing of products of the traditional economy, which significantly reduces the price competitiveness of traditional industries.

There are also a number of risks in the industry: outbreaks and spread of especially dangerous diseases in the region, depletion of the forage base of reindeer pastures in conditions of exceeding the standard number of reindeer by more than two times, the introduction of tariff restrictions that can lead to a decrease in domestic production, restricting access to agricultural products complex of the Autonomous Okrug to foreign markets.

Over the past 6 years, the industry has been implementing new priorities - deep non-waste processing of reindeer products, improving the productive qualities of reindeer, developing the food industry, developing new markets and increasing demand for environmentally friendly products of reindeer breeding and the fishing industry.

In 2012, the processing of reindeer meat was carried out by 3 complexes, by 2025 their number has increased to 6, there is also a workshop for processing reindeer meat in the city of Salekhard.

As part of the Cooperation program, a modular slaughter complex with a capacity of 100 heads per shift was purchased in Tarko-Sale for Verkhne-Purovsky State Farm LLC. The construction of a slaughterhouse in the village is being completed. Gyda, Tazovsky district, with a capacity of 200 heads per shift.

The construction of the complexes made it possible to significantly increase the production of

deer meat (from 1939 tons in 2018 to 2850 tons in 2025), including through the active involvement of reindeer herders and national communities in the production process.

Work continues to increase the volume of exports of reindeer products. In 2020, 442 tons of reindeer meat were exported, which is 5% higher than in 2018.

The meat processing complex "Payuta", located in the Priuralsky district, received the right to supply reindeer meat to the EU countries and, along with the municipal enterprise "Yamal Deer", became another Yamal exporter of venison abroad.

In March 2018, the first fish hatchery in Yamal was put into operation, the purpose of which is to restore populations of valuable fish species in the Lower Ob basin. In addition, the plant serves as a scientific base for improving existing and developing new technologies for the artificial reproduction of aquatic biological resources in the Arctic.

In 2018, 25.6 million fry of whitefish species (muksun, broad whitefish, peled) were released into the floodplain system of the Ob River. The release of valuable whitefish species into the rivers of the Ob-Irtysh basin is being increased.

Also in the city of Salekhard, a project of a farm for the commercial cultivation of sturgeon on a closed water supply cycle was implemented. The innovative technology used in the project ensures complete independence of the production process from natural and climatic conditions and seasons, and reduces the time for growing fish. In 2021, the sale of sturgeon amounted to 8 tons.

In order to develop aquaculture (fish farming), a list of fish breeding sites has been approved, which includes 10 lakes. There are 7 economic entities engaged in commercial aquaculture in the Okrug.

In order to increase the volume of production (catch) of fish and organize the fishing of aquatic biological resources in water bodies, work was carried out to expand the fishing zone. 7 fishing sites were formed in new fishing areas for coastal fishing in Baidaratskaya Bay.

The expansion of the fishing zone has allowed to increase the volume of fish production and enables enterprises to work year-round.

To ensure the primary processing and delivery of aquatic biological resources, to involve additional human resources in the production process, a river-sea class vessel Num was built, as well as a unique refrigerated vessel of the Arctic class Polar Star.

In 2016, the Hermes transport refrigerator was repaired and modernized. The refrigerated vessel "Germes" is of great importance for the fishing enterprises of the Tazovsky region. The presence of such a vessel makes it possible to expand the use of fishing grounds, and makes it possible to transfer crews of fishermen mobilely.

Its exploitation in remote fishing areas of the

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Gydan Bay contributes to an increase in the production of aquatic biological resources, in particular vendace and omul.

There are four fish processing complexes on the territory of the Autonomous Okrug - Salekhard Plant LLC, Pur-Ryba LLC, Orion RA and NP Pur LLC, whose activities are maximally focused on the deep processing of aquatic biological resources mined in the region.

To expand the assortment at processing complexes, work is underway to develop new recipes for the manufacture of fish products, the use of new types of containers in the production of canned fish.

The development of the traditional branches of the agro-industrial complex of the Autonomous Okrug is carried out jointly with such branches as dairy farming and crop production.

In 2012, 9 enterprises were engaged in milk production, and in 2021 there are already 10 enterprises, where 1,145 heads of cattle are kept, which is 27% more than in 2012, of which 525 forage cows are dairy cattle.

In the period 2018 - 2021, a modern livestock complex was put into operation in the village. Aksarka, Priuralsky district, a milk processing shop in Salekhard and a dairy farm in the village of Purpe, Purovsky district, pedigree animals were purchased to renew the dairy herd, which had a positive effect on milk production.

To test a new direction - meat herd horse breeding in the Krasnoselkupsky district in the village of Tolka in 2015, horses of the Yakut breed were purchased, and already in 2021, the production (cultivation) of horses in live weight amounted to one ton.

State support for potato growing contributed to a 4-fold increase in the gross harvest of potatoes in agricultural enterprises, so in 2018 this figure was 60 tons, and in 2021 - 248.5 tons of potatoes.

In order to develop the infrastructure of the crop production industry, in 2021, a container-type vegetable storage facility with a capacity of 100 tons in the city of Salekhard was purchased for the Yamal Potato LLC enterprise.

Gross harvest of other early vegetable crops of open ground (cabbage, beets, carrots, onions) at the enterprises of the agro-industrial complex amounted to 34 tons.

The district events Obdorskaya Fair and Buy Yamal!

The development of the agro-industrial complex is also associated with the improvement of the living conditions of citizens engaged in labor activities in rural areas. Thus, in the period from 2018 to 2021, 1,066 rural families improved their living conditions, of which 501 were families of young professionals. More than 75,000 square meters of new housing have been built and purchased. The goal of the policy in the field of development of the agro-industrial complex is

to achieve sustainable growth in production in the agricultural and fishing industries.

To achieve this goal, it is necessary to solve the following tasks:

- 70) preservation and development of reindeer breeding;
- 71) preservation and development of the fishing industry;
- 72) development of the dairy farming industry;
- 73) approbation of meat herd horse breeding;
- 74) development of crop production;
- 75) improving the quality, competitiveness and increasing the volume of exports of agricultural products;
- 76) providing organizations of the agro-industrial complex with qualified personnel.

The task of developing reindeer breeding will be solved by increasing the volume of meat harvesting, rational use of reindeer pastures and ensuring a favorable epizootic situation.

Reindeer pasture surveys and animal counts will be carried out regularly. To reduce the pressure on reindeer pastures in the tundra zone of the Yamal, Tazovsky and Uralsky regions, scientific research will be carried out on the use of fencing technologies in the taiga regions of the Autonomous Okrug (Nadymsky, Purovsky regions). Based on the results of scientific research, pilot projects for the development of fenced reindeer husbandry will be implemented.

It is planned to purchase and install modular complexes for slaughter and processing of deer meat with a capacity of 100 heads per shift in the Tazovsky, Priuralsky, Shuryshkarsky and Purovsky districts.

This will improve working conditions, mechanize the production process and slaughter deer in accordance with the requirements of the technical regulations of the Customs Union "On the safety of meat and meat products" and increase the production of reindeer meat in carcass weight from 2800 tons in 2018 to 3500 tons in 2035 year due to the intensification of procurement activities and the involvement of a larger share of private sector deer in the production process.

At the slaughter complexes, it is planned to organize the processing of reindeer skins, the collection of endocrine glands during the slaughter of deer and their shipment for further deep processing.

In addition, it is planned to put into operation lines for the processing and conservation of endocrine-enzymatic, antler raw materials, which will intensify the process of processing deer.

In order to develop the processing base of reindeer breeding, it is planned to build reindeer meat processing workshops in the village of Tazovsky, Novy Urengoy and Nadym, which will allow the processing and sale of reindeer meat in the eastern part of the Autonomous Okrug.

The task of preserving and developing the traditional fishing industry will be solved through the

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rational use and reproduction of aquatic biological resources, as well as increasing the competitiveness of products of district producers in domestic and foreign markets.

Fishing will be carried out in the volumes necessary for the restoration, conservation and expansion of the resource and raw material base, as well as the processing of fish raw materials.

The fish catch will be relatively stable. The fishery in the bays of the Kara Sea has the potential for growth. To increase the catch volumes, raw material research will be carried out in the Baidaratskaya and Gydanskaya bays, which will allow introducing additional volumes of aquatic biological resources into the fishery.

Currently, most of the ships in the industry, built according to the designs of the 1970-1980s, have high wear. In this regard, the modernization of the existing and the acquisition of a new fleet involved in the fishing industry will be carried out.

It is planned to build piers at the largest fishing enterprises of the Autonomous Okrug (Salemal village, Aksarka village, Gorki village), as well as the development of a processing base by modernizing the fish processing plant Pur-Ryba LLC (Tarko-Sale).

In order to preserve and restore the stocks of whitefish species and increase the natural fish productivity of the reservoirs of the Taz basin, it is planned to build a fish hatchery on the Taz River, and increase the output of LLC NPO Sobsky Fish Breeding Plant from 25.6 million pieces in 2018 to 140 million pieces juvenile whitefish species in 2035.

An increase in the release of juvenile whitefish species will further increase the volume of fish catch by the fishing enterprises of the Autonomous Okrug, and revive the industrial catch of whitefish.

Further development of the dairy farming industry will mainly be associated with the provision of social institutions of the Autonomous Okrug with dairy products of its own production. In the period up to 2035, it is planned to build and modernize livestock complexes, including:

- 77) expansion of production capacities of MUP "Agricultural complex "Noyabrsky";
- 78) construction of a dairy farm in the village. Yar-Sale, Yamal region;
- 79) construction of a livestock complex with a pigsty and outdoor poultry farm in the village. Only Krasnoselkupsky district;
- 80) reconstruction of a dairy farm in the village. Men of the Shuryshkarsky district;
- 81) expansion of a dairy farm in the village of Purpe, Purovsky district.

The approbation of a new direction of animal husbandry - meat herd horse breeding will continue. For its development, grant support will be provided to persons who have expressed a desire to engage in herd horse breeding. Grant support will be directed to the purchase of horses, the construction of industrial

buildings. By the end of 2035, it is planned to increase the volume of production (breeding) of horses in live weight up to 8.5 tons per year.

It will also continue to provide support for fur farming, rabbit breeding, pig breeding, poultry farming and the collection of wild plants.

For the development of the crop growing industry in the municipalities of Salekhard and Noyabrsk, it is planned to build greenhouse complexes with a year-round cycle of growing vegetables based on the use of modern economical technologies, including the use of energy from gas-piston cogeneration plants, which make it possible to provide the complexes with cheap heat and electricity all year round.

In the future, it is planned to increase the acreage in the municipalities of Salekhard, Shuryshkarsky and Krasnoselkupsky districts, as well as modernize the infrastructure of the industry through the acquisition of machinery, equipment and storage systems.

To solve the problem of improving the quality, competitiveness and increasing the volume of exports of agricultural products, modernization and updating of the material and technical base of enterprises of the agro-industrial complex will be carried out.

The increase in the volume of sales of agricultural products, the growth of exports of agricultural products produced in the Autonomous Okrug, will be facilitated by the participation of local producers in exhibitions and fairs, both in the Autonomous Okrug and in large cities of the Russian Federation and abroad. The results of such events will contribute to marketing and advertising campaigns in the domestic and international markets.

Also, one of the mechanisms aimed at creating a sustainable positive image of local producers of agricultural products and products of its processing, stimulating the release of new products, will be the district competition "The Best in Yamal".

Work will continue on the accreditation of enterprises of the agro-industrial complex for export deliveries.

The development of market infrastructure, including logistics, taking into account the collection, sale and preservation of the quality of agricultural products, will be carried out through the acquisition / construction of vegetable stores, refrigerators. The presence of these facilities will allow for the receipt and storage of products of several business entities, as well as the formation of joint consignments of goods for subsequent shipment. The possibility of building wholesale distribution centers is being considered.

For the development of agricultural production sectors, qualified specialists and production technologists are required. In this regard, one of the main tasks is to provide organizations of the agro-industrial complex with qualified personnel. Training of specialists will be carried out on the basis of the Tyumen State Agricultural Academy of the State

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Agrarian University of the Northern Trans-Urals and GBPOU YaNAO "Yamal Polar Agro-economic College".

Young professionals living in rural areas, including those engaged in or expressing a desire to work in the agro-industrial complex, will be provided with social benefits.

The involvement of specialists in the agro-industrial complex will also be facilitated by measures to improve the living conditions of the residents of the Autonomous Okrug living in rural areas. Until 2035, it is planned to improve the living conditions of at least 500 families.

The indicators characterizing the solution of the tasks set for the development of the agro-industrial complex will be:

- 82) maintaining the index of agricultural production in farms of all categories, in % of the previous year, not less than 100.4% until 2035;
- 83) increase in the volume of exports of reindeer products from the total volume of reindeer products from 16% in 2017 to at least 20% in 2025 and maintain this level until 2035;
- 84) improving the living conditions of at least 220 families by 2025 (inclusive) and at least 500 families by 2035 (inclusive) living in rural areas.
- 85) increase in the volume of extraction (catch) of aquatic biological resources by at least 9,000 tons until 2025 and maintaining this level until 2035.

The implementation of a set of measures in the development of the agro-industrial complex will make it possible to achieve the following main results by the end of 2035:

- 86) increase the volume of production and the share of exports, as well as expand the range of food products produced in the Autonomous Okrug;
- 87) create conditions for deep processing of agricultural products through the implementation of investment and innovation projects;
- 88) introduce modern technologies into production to produce products with high added value;
- 89) improve the living conditions of residents living in rural areas;
- 90) preserve and increase the volumes of production (catch) of aquatic biological resources.

An assessment of the financial resources required for the implementation of the priority area, and information on the state programs of the Autonomous Okrug, approved in order to implement the Strategy, are presented in Sections V and VI.

The most important condition for improving the quality of life of the population is the improvement of housing conditions.

Until 2012, the average provision of housing per inhabitant of the region was 19.0 sq. m. per person, which is 18% less than the average Russian level (23.0 sq. m. per person).

Over 1.4 million sq. m. of housing, the provision of housing per inhabitant reached 20.7 sq. m. per person, but the average Russian indicator could not be reached (Russian Federation - 24.9 sq. m. per person).

In 2021, the task of resettling citizens from dilapidated housing, set by the Decree of the President of the Russian Federation "On measures to provide citizens of the Russian Federation with affordable and comfortable housing and improve the quality of housing and communal services", was completed in Yamal. For the period from 2018 to 2021, more than 232 thousand square meters were settled. m. of uninhabitable housing stock formed at the beginning of 2016. As part of the implementation of these measures, more than 5.3 thousand families improved their living conditions.

However, with the annual volume of the settled area from 50 to 80 thousand square meters. meters, emergency recognized annually from 90 to 150 thousand square meters. m., which significantly exceeds the volume of settled housing. So over the past five years, more than 570 thousand square meters have been recognized as subject to resettlement. m. emergency housing stock, of which 120 thousand square meters. m. was resettled.

From 2018 to 2021, about 70 billion rubles were allocated to improve the living conditions of citizens. at the expense of the district budget. Almost 24,000 families have improved housing conditions.

Resettlement to areas with a more favorable climate is an urgent need for many northerners. Since 2021, the number of Yamal residents wishing to travel outside the Autonomous Okrug has increased from 48.5 thousand to 55 thousand people.

To solve this problem, 22 multi-apartment residential buildings were built in the city of Tyumen for the resettlement of 5.2 thousand Yamal residents during the specified period.

In addition, at the expense of the federal budget and the budget of the Tyumen region, social payments were provided for the purchase of residential premises in areas with favorable conditions for 1.4 thousand Yamal residents.

The main goal in the field of housing policy in the region is to ensure the improvement of housing conditions for at least 18 thousand families per year in 2025 and maintain this level until 2035.

To achieve it, it is planned to solve the following tasks:

- 91) increase in housing construction;
- 92) ensuring a sustainable reduction in the uninhabitable housing stock;
- 93) fulfillment of state obligations to certain categories of citizens;
- 94) formation in the Autonomous Okrug of an affordable rental housing market and development of a housing fund for social use for

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citizens with a low level of income;

95) development of the state regional housing stock;

96) increasing the availability of mortgage lending.

To solve the problem of increasing the volume of housing construction in 2025, it is planned to ensure the commissioning of about 360 thousand square meters. m. of housing and maintain this level of annual housing commissioning until 2035.

This result is planned to be achieved both through state support measures and by increasing the inflow of private investment and credit resources into housing construction, developing modern technologies and improving the system for training skilled workers in this area, eliminating administrative barriers in the implementation of projects and providing land for housing construction engineering infrastructure.

State support will be provided to individual developers, special attention will be paid to supporting individual developers in rural areas.

In pursuance of the provisions of Decree of the President of the Russian Federation dated May 07, 2018 No. 204, the implementation of measures to resettle citizens from uninhabitable housing stock will continue.

The task of providing housing for large and young families, indigenous peoples of the North, veterans, disabled people, orphans and other categories of citizens provided for by federal law will be solved by acquiring residential premises in the ownership of the Autonomous Okrug with subsequent provision under a social contract of employment, a contract of employment specialized housing fund or hiring a housing fund for social use, or by providing social payments for the purchase (construction) of housing.

State support for citizens wishing to leave the Autonomous Okrug for areas with favorable climatic conditions has been and will be provided through the provision of social payments for the purchase (construction) of housing.

As part of solving the problem of creating a market for affordable rental housing for commercial and social use (rented houses) in the Autonomous Okrug, the construction of rental houses in the cities of Salekhard and Novy Urengoy began at the expense of the district budget, it is planned to create an organization with the functions of an operator for the construction and operation of rental housing.

The construction of rented houses will allow citizens whose total family income does not allow them to acquire a dwelling in their ownership even at the expense of a housing loan or loan, to improve their living conditions by renting a dwelling.

Already, local governments have begun to keep records of citizens who need to provide residential premises under contracts for the rental of residential premises of the housing fund for social use.

In order to build rental housing, state support

will also be provided to investors, including reimbursement of expenses to legal entities related to the payment of interest on loans received from Russian credit institutions for the construction of rental housing.

Thus, the creation of an affordable rental housing market in the region and the development of non-profit housing stock is an important aspect for the transition to sustainable functioning and development of the housing sector in the region.

To solve the problem of developing the state regional housing stock, a part of the volume of the housing stock being commissioned in the region will be used, which will be provided to Yamal residents under rental contracts.

The need to provide living quarters for specialists of public sector organizations, such as healthcare, education, culture and sports institutions, is still at a high level.

In this connection, it is planned to direct part of the commissioned housing for these purposes by assigning residential premises on the right of operational management to institutions, which will also allow attracting highly qualified specialists from these industries to work in the Autonomous Okrug.

Increasing the availability of mortgage lending will be carried out by creating opportunities for them to purchase (construct) housing using a mortgage loan, the rate of which should be less than 8 percent, including for families with an average income.

The solution of this problem will be carried out in accordance with the program of preferential mortgage lending, implemented by Yamal Mortgage Company JSC together with DOM.RF JSC, under which citizens can receive mortgage loans at reduced interest rates.

Today, such a reduction is possible by three percentage points from the current interest rate set by DOM.RF JSC, which allows citizens to receive mortgage loans at a rate of 5.75%, and for large families at a rate of 5.25%.

The indicators characterizing the solution of the tasks set for the development of the housing sector will be:

97) increasing the level of housing provision for the population of the Autonomous Okrug from 20.7 sq. m. per inhabitant of the Autonomous Okrug in 2018 to 25 sq. m. in 2025 and maintaining this level until 2035;

98) increase in the volume of annual housing commissioning from 0.44 sq. m. of the total area of residential premises per inhabitant of the Autonomous Okrug in 2018 to 0.67 sq. m. in 2025 and maintaining this level until 2035 (pursuant to the Decree of the President of the Russian Federation dated May 07, 2018 No. 204);

99) reduction of uninhabitable housing stock from 450.1 thousand sq. m. m. in 2017 to 294.0

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thousand sq. m. m. in 2025 and up to 94.0 thousand sq. m. m. in 2035 (pursuant to the Decree of the President of the Russian Federation dated May 07, 2018 No. 204);

100) improving the living conditions of families, including using mortgage housing loans, from 11 thousand families in 2018 to at least 18 thousand families per year in 2025 and maintaining this level until 2035 (in pursuance of the Decree of the President of the Russian Federation dated 07 May 2018 No. 204);

101) an increase in the share of families who have improved their living conditions in the total volume of Yamal families wishing to improve their living conditions, from 53.15% in 2018 to 60% by 2020 on an accrual basis, starting from 2012 (in accordance with Decree of the President of the Russian Federation dated May 07, 2012 No. 600 "On measures to provide citizens of the Russian Federation with affordable and comfortable housing and improve the quality of housing and communal services").

Solving the tasks aimed at improving the living conditions of the residents of the Autonomous Okrug will allow achieving the following main results by the end of 2035:

102) increase the pace of housing construction;

103) reduce emergency housing;

104) fulfill state obligations to provide housing for certain categories of citizens;

105) develop engineering infrastructure for housing construction;

106) increase the flow of private investment and credit resources into housing construction;

107) increase the level of housing affordability for the population.

The partnership of civil society entities, businesses and authorities in the implementation of the human capital development policy will steadily increase the status of the Autonomous Okrug among the regions - leaders of the Russian and international levels. At the same time, the education system, which in many respects forms the basis of a person's success, is moving from the providing sphere to the area of development management.

Currently, 527 organizations conduct educational activities in the region. The created network makes it possible to satisfy the right of citizens to education, taking into account their interests, needs, level of development and state of health.

These are 254 capital buildings (in 2012 - 122 buildings). In six years, 39 educational facilities for 9123 places have been built, 29 kindergartens for 5570 places have been reconstructed. In the Autonomous Okrug, the queue of children aged 3 to 7 years has

been completely eliminated.

The share of schools that have created conditions that meet the requirements of the federal standard increased from 57% in 2012 to 98%. All Yamal schools have broadband access to the Internet, a wireless Wi-Fi network at the initial stage of education, an automated system "Network City. Education".

In terms of the level of computerization, the region is approaching European standards. The ratio of students per one personal computer reached 1.1 people (in 2012 - 4.4). This is the best result in Russia.

In five years, the proportion of schoolchildren who are generally covered by modern learning conditions has reached 100% (2012 - 90%), which made the district a leader among the subjects of the Russian Federation.

In 2017, the education system achieved 77% coverage of children with additional education, which is almost 18% more than in 2012. The coverage of engineering and technical creativity has doubled.

The result of working with gifted and talented children was an increase in the effectiveness of participation in international and all-Russian olympiads, competitions, conferences (34%).

Every fifth student of Yamal takes part in competency-based Olympiads. The number of winners and prize-winners of the All-Russian Olympiad for schoolchildren is growing.

The participation of students in vacation intensive subject schools of different levels was organized, in which more than 1200 Yamal schoolchildren have been trained in 5 years.

A universal barrier-free environment has been created in 30 educational organizations (11 in 2012), which makes it possible to provide joint education for children with special educational needs.

More than 70 thousand schoolchildren of the district, or 96%, are covered with hot meals, of which almost 27 thousand children receive two hot meals a day (breakfast and lunch).

Within the framework of the Nomadic School project, 22 educational organizations provide education in nomadic places in the Autonomous Okrug. 452 children receive training, education and development in various forms of pre-school education in the places of nomads (in 2012 - 183).

The educational and methodological support for teaching the native languages of the indigenous peoples of the North is being improved.

In 2016 - 2020, four new generation educational and methodological complexes were created to teach children in grades 1-4 in their native languages.

The goal of the policy in the field of general education is to increase the competitiveness of Yamal education, to bring up a harmoniously developed and socially responsible personality based on the spiritual and moral values of the peoples of the Russian Federation, historical and national cultural traditions.

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To achieve the goal of ensuring the educational potential of the population of the region, taking into account the provisions of the Decree of the President of the Russian Federation of May 07, 2018 No. 204, the following tasks are to be solved:

- 108) achievement of modern quality of education;
- 109) ensuring 100% accessibility of pre-school education for children under the age of three.

One of the main tasks of the development and modernization of education - improving the quality of education - will be implemented through the following set of measures:

- 110) introduction at the levels of basic general and secondary general education of new methods of training and education, educational technologies that ensure the development of basic skills and abilities by students, increasing their motivation for learning and involvement in the educational process, as well as updating the content and improving the teaching methods of the subject area "Technology" ;
- 111) formation of an effective system for identifying, supporting and developing abilities and talents in children and youth, based on the principles of justice, universality and aimed at self-determination and professional orientation of all students;
- 112) creation of conditions for the early development of children under the age of three, the implementation of a program of psychological, pedagogical, methodological and advisory assistance to parents of children receiving preschool education in the family;
- 113) creation of a modern and safe digital educational environment that provides high quality and accessibility of education of all types and levels;
- 114) creation of conditions for the development of mentoring, support for public initiatives and projects, including in the field of volunteerism (volunteering);
- 115) formation of a socio-cultural infrastructure that contributes to the successful socialization of children and integrates the educational opportunities of educational, cultural, sports, scientific, educational, sightseeing, tourist and other organizations;
- 116) ensuring equal access to the infrastructure for raising children who require special care from society and the state, including children with disabilities.

The availability of pre-school education for children under the age of three is planned to be ensured by creating additional places in educational institutions.

Additional places will be created through the construction and reconstruction of kindergarten

buildings, the adaptation of the premises of preschool institutions for nursery groups, and the opening of short-stay groups.

- 117) an increase in the proportion of children under the age of 3 enrolled in preschool education from 79.8% in 2017 to 100% in 2025 and maintaining the achieved level until 2035 inclusive;
- 118) increase in the share of students in the first shift from 84% in 2017 to 97% in 2025 and maintain the achieved level until 2035 inclusive;
- 119) an increase in the share of educational institutions that provide access to the infrastructure for raising children who require special care from society and the state, including children with disabilities from 22.3% in 2017 to 40% in 2025 and up to 60% in 2035;
- 120) increase in the share of educational organizations covered by voluntary (volunteer) activities from 17% in 2017 to 50% in 2025 and up to 100% in 2035;
- 121) increase in the share of educational organizations that use the assessment of learning outcomes by organizing educational activities in the electronic information and educational environment from 0 in 2017 to 100% in 2025.

The solution of the tasks set, aimed at the development and modernization of the formation of the Autonomous Okrug, will achieve the following results by the end of 2035:

- 122) full provision of the population with free preschool education;
- 123) providing high-quality accessible general education in accordance with federal state educational standards;
- 124) accessibility for all categories of children of high-quality education, contributing to the satisfaction of their individual needs, the development of creative abilities, regardless of place of residence, financial situation of the family, state of health;
- 125) development and successful implementation of regional and municipal targeted programs to support gifted children, creating conditions for the development of abilities in the field of education, science, culture and sports, including through the creation by 2025 of a regional center for identifying and supporting children who have shown outstanding abilities;
- 126) creation of a modern educational environment aimed at preparing citizens for the digital economy, including through the creation of three Quantorium technology parks for children;
- 127) development and support of socially significant children's, family and

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parental initiatives, ensuring the continuity of the activities of children's and youth public associations, including through the creation in 2025 of a consultation center for methodological, psychological, pedagogical, diagnostic and advisory assistance to parents.

A healthy population and high demographic potential are significant components of the quality of life of the population, factors in the effective reproduction of human potential and economic growth, evidence of the success of social and economic transformations.

In 2016-2020, the situation in the healthcare sector has improved significantly.

Medical assistance to the population of the Autonomous Okrug, including the indigenous peoples of the North, is provided by employees of 16 feldsher-obstetric and 9 feldsher points, 18 medical outpatient clinics, 10 district hospitals, 12 central and district city hospitals, 3 ambulance stations, a district tuberculosis dispensary, 3 neuropsychiatric dispensaries, 3 dental clinics, a district center for the prevention and control of AIDS, a medical prevention center, a district clinical hospital.

For six years, 14 healthcare facilities have been put into operation on the territory of the district.

Inter-municipal medical centers were organized on the basis of the Salekhard District Clinical Hospital, the Novourengoy Central City Hospital of the YaNAO, and the Noyabrsk Central City Hospital of the YaNAO.

Two regional vascular centers were opened in the Salekhard District Clinical Hospital and the YaNAO Noyabrsk Central City Hospital.

With the commissioning in 2016 of a modern perinatal center in Noyabrsk, equipped with modern medical equipment, the creation of a three-level system of obstetric and gynecological care was completed in the Autonomous Okrug.

A three-level model of oncology service has been built in the Autonomous Okrug, which includes 11 primary oncology rooms, 2 inter-municipal oncology departments and a regional oncology center, which provides specialized, including high-tech, assistance in the field of oncology, and also coordinates the work of the oncology service of the district. An oncological register is being maintained, and a system of reconciliation of statistical information has been established.

The region completed the formation of a full-fledged structure of medical prevention, consisting of four health centers (in the cities of Salekhard, Nadym, Noyabrsk, Novy Urengoy), six departments, eight rooms and the Center for Medical Prevention in the city of Nadym, which provides coordination and methodological support for the activities of all medical organizations Autonomous Okrug in the field of disease prevention.

Taking into account regional peculiarities,

prevention in the Autonomous Okrug has gone far beyond the limits of offices; On the basis of the Center for Medical Prevention, there is a mobile consultative and diagnostic complex "Mobile Health Center", acquired by the Government of the Yamalo-Nenets Autonomous Okrug for conducting field examinations of residents of remote areas.

Specialists of the district center for medical prevention, health centers, departments and cabinets of medical prevention actively carry out all types of preventive work with the population: individual, group and mass.

To date, there are 15 smoking cessation cabinets in the Okrug, in 15 medical organizations the work of the "Trustline" has been organized, on issues of disease prevention, including the prevention of tobacco, alcohol, narcotic and psychotropic substances.

In order to ensure optimal accessibility for the population (including residents of settlements located in remote areas and the nomadic population), a network of medical organizations providing primary health care has been formed and mobile medical teams have been organized.

Emergency medical assistance to the population of the Autonomous Okrug is provided by 4 stations and 20 divisions (departments) of emergency medical care, which fully ensure the availability of emergency medical care.

Residents of remote and hard-to-reach villages, the tundra population, the main volume of emergency and emergency care is provided through the emergency specialized care unit with sanitary-aviation evacuation, which consists of 4 territorial departments.

On the basis of the air ambulance department, a single dispatch service was created for prompt decision-making and coordination and advisory work. Air transport is also used for the purpose of accompanying re-evacuation of patients after inpatient treatment.

There is a system of palliative care in the region, which includes: 3 palliative care rooms, mobile patronage services for palliative care for adults in 9 medical organizations in the region, and for children in 4 medical organizations in the region. Palliative care beds have been set up in each municipality.

Significant measures are being taken in the Autonomous Okrug to preserve and develop human resources, improve their professional level, and optimize the number of medical workers.

In 2020, the provision of the Autonomous Okrug with doctors was 45.9 per 10 thousand people, which is higher than the average for the Russian Federation.

The shortage of doctors over 6 years has decreased by 187 people, the shortage of nursing staff by 493 people, but the problem remains in staffing medical organizations of the Autonomous Okrug with doctors providing primary health care on an outpatient

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basis.

Work is systematically carried out to attract medical personnel from other regions of the Russian Federation, information about available vacancies is posted on the Internet.

Particular attention is paid to the issues of improving the quality and accessibility of drug supply to the population, as well as providing certain categories of citizens with effective and safe medicines and medical devices.

Preferential drug provision of citizens entitled to state social assistance at the expense of the federal and district budgets is carried out by 24 pharmacy organizations and 20 feldsher-obstetric stations.

The Autonomous Okrug has maintained a guaranteed level of drug supply for the population, provided for by the territorial program of state guarantees.

Since 2013, a regional health information system has been operating in the Autonomous Okrug to ensure effective interaction between government bodies, medical organizations and the population.

All medical organizations of the Autonomous Okrug are connected to medical information systems and use them in their work: they keep electronic medical histories and medical records, issue and dispense preferential medicines, interact with the territorial compulsory medical insurance fund, 100% of the workplaces of employees of medical organizations are equipped with computer technology.

The region has created and operates regional information systems of oncological clinical information, the results of the analysis of medical examinations of the adult population, operational monitoring of mortality, which make it possible to form specialized databases. Services for patients have also been introduced, allowing you to make an appointment with a doctor, call a doctor at home, order medical documentation in electronic form.

In order to apply the methods of remote provision of medical services to the population, a telemedicine network has been organized in the Okrug on the basis of the Health Department of the Autonomous Okrug and 27 subordinate medical organizations. The regional infrastructure is included in the multilevel telemedicine network of the Ministry of Health of the Russian Federation.

As a result, it is possible to provide telemedicine consultations both at the regional level (by 5 regional centers) and by federal telemedicine consultative centers through the telemedicine network of the Ministry of Health of the Russian Federation.

Despite the extreme climatic conditions and the habitation of the indigenous population, the dynamics of the health indicators of the population is positive.

The mortality rate decreased compared to 2016 (5.3) by 8% and amounted to 4.9 deaths per 1000 population in 2021, which is lower than the same indicator in the Russian Federation (12.4) and Ural

Federal District (11.7) by 60.5% and 58.1%, respectively.

The level of general morbidity of the population of the YaNAO at the end of 2021 amounted to 2152.2 cases per 1000 population and increased by 3.0% compared to the same indicator for 2016 (2082.7).

The largest increase in the level of general morbidity in 2020 compared to 2016 is recorded for the following classes of diseases:

symptoms, signs and abnormalities (up 42.5%); congenital anomalies and malformations (growth by 9.7%);

diseases of the digestive system (growth by 8.6%). The greatest decrease was registered in such nosological forms as: mental and behavioral disorders (decrease by 11.1%);

injuries and poisoning (decrease by 4.2%); neoplasms (decrease by 0.3%).

The level of coverage of the population of the YaNAO with dispensary observation in 2021 increased by 10.3% compared to 2018 (285.4) and amounted to 314.7 per 1000 population.

Despite the positive demographic situation, the following health problems persist in the Autonomous Okrug:

- 1) There has been an increase in the incidence of neoplasms in the population, including malignant ones, over the past five years, along with the global trend. The increase in the incidence of malignant neoplasms leads to an increase in the number of cancer patients in need of specialized treatment.

An analysis of the work of the oncological service showed that the lack of radiation therapy today is the most acute problem in the provision of oncological care in the region. The oncology departments available in the medical organizations of the Autonomous Okrug do not allow for a full cycle of specialized antitumor treatment due to the lack of radiological beds and equipment for radiation therapy.

Patients in need of radiation therapy are referred to specialized oncological institutions outside the Autonomous Okrug.

- 2) The main difficulty is the transportation of patients with acute myocardial infarction or stroke to regional vascular centers, due to the specifics of the region - extreme climatic and geographical conditions, low population density (0.7 per 1 sq. km.), Complex transport scheme, the presence of hard-to-reach, small settlements with the population in long-term isolation (distances to the district center from 50 to 400 km); lack of roads, especially in rural areas, unfavorable weather conditions in winter for air ambulance flights.
- 3) Not all medical organizations have the material and technical base for providing medical care to

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children that meets modern requirements.

The goal of health policy is to improve the demographic situation and life expectancy, improve the quality and accessibility of medical care.

The main guidelines for the development of the healthcare sector will be the provisions of the Decree of the President of the Russian Federation dated May 07, 2018 No. 204.

To achieve this goal, the main efforts will be focused on solving the following tasks:

- increase in the proportion of citizens leading a healthy lifestyle;
 - improving the quality and accessibility of medical care, including: for patients suffering from oncological and cardiovascular diseases;
 - women during pregnancy and childbirth, including ensuring the availability of in vitro fertilization for women with infertility;
 - children and citizens of the older generation;
- the rural population;
- improving the equipment and efficiency of the use of medical equipment and hospital beds;
 - health system staffing;
 - increasing the degree of informatization of the healthcare sector and the development of telemedicine technologies;
 - construction and modernization of healthcare facilities, including the creation of a modern infrastructure for providing medical care to children.

The formation of a healthy lifestyle among the population of the region is ensured by informing and motivating citizens to the need for a responsible attitude to their own health, including a healthy diet, giving up bad habits, an optimal level of physical activity, regular visits to doctors for preventive purposes, which will increase the duration of a healthy and active life. . The implementation of the above activities will be continued within the framework of the regional project "Formation of a system of motivating citizens to a healthy lifestyle, including healthy eating and giving up bad habits in the Yamalo-Nenets Autonomous Okrug."

Solving the problem of improving the quality and accessibility of medical care will be aimed at developing outpatient care with strengthening the preventive, diagnostic and dispensary components.

Lean technologies in the Yamal healthcare system will be further developed, allowing to optimize production processes and reduce time and financial losses, increasing the availability and quality of medical care to the population. The waiting time for patients in the queue when citizens apply for an appointment with a medical organization will be systematically reduced.

The formation of a network of medical organizations of primary health care using a geographic information system in the field of healthcare will be completed.

To increase the availability of medical care to the rural population, work will continue on the development of mobile forms of planned medical care by increasing the number of visits of mobile medical teams.

A control system for vaccine-preventable infections will be created in the region.

To increase the availability of intravascular interventions, taking into account the transport scheme of the district, it is planned to open a third regional vascular center in Novy Urengoy.

In order to provide timely medical care to cancer patients, it is planned to introduce radiation therapy in the territory of the Autonomous Okrug.

The re-equipment of medical equipment will be carried out within the framework of the regional projects "Fight against cardiovascular diseases" and "Fight against oncological diseases", which are part of the national project "Health".

The system of prenatal diagnostics of the risk of chromosomal disorders in the fetus will be improved.

The development of the material and technical base of medical organizations of the Autonomous Okrug that provide assistance to women during pregnancy, childbirth and the postpartum period and newborns will be carried out within the framework of the regional project "Program for the development of children's health care in the Yamalo-Nenets Autonomous Okrug, including the creation of a modern infrastructure for providing medical care to children", which is part of the national project "Health".

Innovative medical technologies will be introduced into the medical organizations of the district, including an early diagnosis system and remote monitoring of the health of patients.

The use of new types of treatment will contribute to the formation of medical tourism in the region.

To provide rehabilitation assistance to patients suffering from chronic diseases, it is planned to organize medical rehabilitation departments in the eastern and western zones of the region.

For the effective use of the bed fund of medical organizations and medical equipment, the implementation of measures to optimize the structure of the bed fund of medical organizations, the material and technical, drug supply of hospitals in accordance with the 3-level system of medical care, and the improvement of patient routing schemes will continue.

The strengthening of human resources will be aimed at providing medical organizations of the healthcare system with qualified personnel, including the introduction of a system of continuous education of medical workers, including the use of distance technologies within the framework of the regional project "Providing medical organizations of the healthcare system of the YNAO with qualified personnel".

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Informatization of the healthcare sector will be further developed through the introduction of laboratory information systems, a central archive of medical images, including the connection of diagnostic devices.

Measures will be continued to protect personal data in medical information systems and services, as well as the development of electronic services for the population of the Autonomous Okrug through a single electronic registry.

To increase the availability of medical services, remote territories located in hard-to-reach places will be connected to the regional telemedicine system and remote monitoring of the patient's condition will be organized.

The modernization of healthcare facilities provides for the construction of primary health care facilities that meet established sanitary and hygienic standards, as well as the development of a network of children's and rural clinics, which will improve their material and technical base. These activities will be implemented within the framework of the regional project "Development of the primary health care system", which is part of the national project "Health".

In addition, in all rural settlements, it is planned to place feldsher-obstetric stations or feldsher stations in a modular design.

The indicators characterizing the solution of tasks for the development of the healthcare system will be:

- an increase in life expectancy at birth from 73.5 years in 2017 to 76.2 years in 2025 and to 80 years in 2035;
- reduction in infant mortality from 6.6 per thousand in 2018 to 4.6 per thousand in 2025 and maintaining this level until 2035 inclusive;
- reduction in mortality of the working-age population, per 100 thousand of the population of the corresponding age, from 380.8 cases in 2018 to 280 cases in 2025 and maintaining this level until 2035 inclusive;
- reducing mortality from diseases of the circulatory system from 191.5 cases per 100,000 population in 2018 to 180.0 per 100,000 population in 2025 and maintaining this level until 2035 inclusive;
- reduction in mortality from neoplasms, including malignant ones, from 89.3 cases per 100,000 population in 2018 to 87.0 cases per 100,000 population in 2025 and maintaining this level until 2035 inclusive.

The implementation of a set of measures in the healthcare sector in the Autonomous Okrug will achieve the following main results by the end of 2035:

- reducing mortality from all causes to the level of targets;
- further development of preventive medicine and the formation of a healthy lifestyle for the

residents of the Autonomous Okrug;

- improving the quality and accessibility of medical care to the population;
- improvement of the material and diagnostic base of medical organizations.

An integrated approach to the development of physical culture of sports contributes to improving the level of public health, the upbringing and education of children, adolescents and youth, as well as the formation of national self-awareness and a healthy moral and psychological climate in society.

For the period from 2018 to 2021, there has been a positive trend in the development of the sphere of physical culture and sports. Physical culture and sports have become a fashionable trend, as well as a family leisure activity.

The increase in the availability of services in this area made it possible to increase the number of those involved in physical culture and sports by 15.3% during this period, including women - by 8%.

More than doubled in relation to 2012 (up to 13%), it was possible to increase the number of people with disabilities and people with disabilities involved in physical culture and sports.

The number of residents of rural areas involved in physical culture and sports increased by more than 1.7 times.

The number of people involved in national sports has increased, as well as the number of athletes of the Autonomous Okrug who are members of the sports teams of the Russian Federation - from 82 people in 2018 to 94 people in 2021.

The construction of prefabricated and low-cost modular sports facilities has been developed in the region.

Since 2016, 280 units of sports facilities have been put into operation in the Autonomous Okrug, their total number has reached 1169 units. The share of provision with sports facilities on average in the district increased by 27.9% and amounted to 52.9%.

At the end of 2020, 25% of the residents of the Autonomous Okrug successfully met the standards of the All-Russian Physical Culture and Sports Complex "Ready for Labor and Defense" (GTO), showing excellent physical shape and commitment to the values of a healthy and active lifestyle.

In accordance with the approved roadmap for the modernization of the sports reserve training system in the Autonomous Okrug, in 2020, 33.3% of educational institutions of additional sports education were transferred to the status of sports institutions of a new type.

To accompany the development and improvement of professional skills of specialists in the field of physical culture and sports in 2020, departments of organizational and methodological work on the preparation of a sports reserve and experimental and innovative activities have been created at the Center for Sports Training of the

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Autonomous Okrug.

The goal of the state policy in this area is the development of physical culture and mass sports in the Autonomous Okrug, the development of elite sports and professional sports.

To achieve it, it is planned to solve the following tasks:

- increasing the mass character of the population of the Autonomous Okrug, engaged in physical culture and mass sports;
- ensuring access of socially oriented non-profit organizations to the provision of services within the framework of regional programs in the field of physical culture and mass sports (hereinafter referred to as SONKO);
- creation of a developed sports infrastructure on the territory of the Autonomous Okrug;
- development of elite sports and professional sports;
- improvement of the sports reserve training system;

Conclusion

The implementation of the Strategy is designed to meet the main demographic challenge of the long-term development of the Republic of Karelia. In conditions of rather high mobility of the population, people choose to live in those regions where they can realize their potential. The answer to this should be an appeal to the needs and capabilities of every inhabitant of the Republic of Karelia and positioning the state as an assistant, the role of civil society in governance should be radically changed, mechanisms for effective feedback from residents should be established.

Therefore, at the center of the Strategy are people and their wealth.

The strategic goal of the socio-economic development of the Republic of Karelia is:

improvement of transport, engineering, housing and communal infrastructure as a necessary condition for the development of the economy and the social sphere;

increasing the level of economic connectivity of the territory, which will ensure the growth of the quality of engineering infrastructure in the Republic of Karelia, including transport and energy;

reduction of territorial differentiation of transport and energy supply of municipalities.

The Republic of Karelia will be transformed in terms of indicators of the quality of life of the population and the value of leisure, the creation of a humanistic urban environment in urban districts, new jobs, the transition to a model of sustainable environmental and economic development. The role of the Republic of Karelia as a center of ecological and health tourism in Russia, as well as a center of science and education of the North, an original and diverse, dynamically developing region with traditional and high-tech industries, is growing.

The system of 7 strategic directions is linked to 7 long-term strategic goals and is generally aimed at creating conditions for the integrated development of human potential and the consolidation of the population in the republic through providing basic needs in education, healthcare, infrastructure, a favorable environment, jobs, including highly qualified, concomitant development of services and institutions (table 1).

Table 1. Priority areas and strategic goals of the Strategy

Strategic Direction	Strategic goal
Infrastructure for life	Improvement of transport, engineering, housing and communal infrastructure as a necessary condition for the development of the economy and the social sphere
Development of the economy and entrepreneurship	creating new jobs, increasing investment attractiveness, pursuing a cluster policy, developing traditional industries and services, creating conditions for the development of new industrial clusters
Development of tourism and hospitality industry	preservation of the cultural and historical heritage of the Arctic regions: Yamal - Nenets Autonomous Okrug, Krasnoyarsk Territory, Republic of Sakha (Yakutia), Chukotka Autonomous Okrug, Komi Republic, creation of a modern hospitality industry in the Arctic regions: Yamal - Nenets Autonomous Okrug, Krasnoyarsk Territory, Republic of Sakha (Yakutia), Chukotka Autonomous Okrug, Komi Republic.
Sustainable spatial development	expansion of international cooperation, implementation of a balanced spatial policy aimed at strengthening the economies of municipalities in the regions of the Russian Arctic: the Murmansk region, the Republic of Karelia, the Arkhangelsk region, the Nenets Autonomous Okrug, the creation of a comfortable urban environment, the introduction of new technologies
Enhancing environmental sustainability and safety	implementation of the value system of sustainable development, green economy, ensuring the reproduction of a healthy population, as well as the growth of life expectancy and quality by solving environmental problems to pass on to future generations for subsequent multiplication of the opportunities that the region currently has

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JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

social development	ensuring a high quality of life for the population by increasing the availability of high-quality social services, the implementation of spiritual and cultural development, interethnic harmony
Effective Governance: Implementation Tools	creation of a modern development management system, introduction of advanced practices of public participation, new instruments of tax, budget and investment policy

The implementation of the Strategy is designed to respond to the main demographic challenge of the long-term development of the Russian Arctic regions. In conditions of rather high mobility of the population, people choose to live in those regions where they can realize their potential. The answer to this should be an appeal to the needs and capabilities of each inhabitant

of the regions of the Russian Arctic and positioning the state as an assistant, the role of civil society in governance should be radically changed, mechanisms for effective feedback from residents should be established. Therefore, at the center of the Strategy are people and their well-being.

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