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**PROBLEMS OF LIMITED RESOURCES IN THE REPUBLIC
OF BELARUS AND WAYS TO SOLVE THEM =
ПРОБЛЕМЫ ОГРАНИЧЕННОСТИ РЕСУРСОВ
В РЕСПУБЛИКЕ БЕЛАРУСЬ И ПУТИ ИХ РЕШЕНИЯ**

Limited natural resources increase the pressure on the belarusian economy: with significant local reserves of potash salts, forests, clay, sand and dolomite. The country remains dependent on imports of oil, gas and metals. The dynamics of production shows an increase in certain types of raw materials and a decrease in non-renewable resources, which underlines the need to switch to sustainable use models. The national strategy until 2030 focuses on decoupling, modernizing production, expanding the use of renewable and secondary resources, restoring land and improving water use efficiency. Increasing self-sufficiency, reducing environmental damage, developing technologies and training personnel are becoming key tasks. The strategic course is aimed at forming a sustainable resource management system capable of supporting economic growth without increasing the burden on the environment.

Since ancient times, mankind has depended on natural resources, but in the modern era the scale of consumption has increased so much that the rate of resource use has exceeded their natural recovery. The limited availability of oil, gas, metals, water, and land makes their rational management one of the key challenges of the 21st century. Today global economic growth, technological development, and population growth are increasing pressure on the natural environment, leading to depletion of reserves, environmental risks, and the need to move to more sustainable production and consumption patterns.

Belarus has a certain set of natural resources, but their volume and structure don't fully meet the internal needs of the country. Potash salts and forests remain the most important resources forming the basis of the raw material base. They traditionally support export potential and provide stable revenues to the economy. Nevertheless, Belarus remains dependent on external supplies for a number of key positions. This applies primarily to oil, natural gas, and most types of metals, without which industry cannot function [1].

The country's own oil production is extremely limited: in 2021 it amounted to only 1.7 million tons, and by 2025 it increased to 1.9 million tons. Despite the positive dynamics, these volumes are not comparable with the real needs of the economy, which makes energy imports inevitable.

A similar situation is observed with respect to peat: although it is mainly used

in the energy sector, its production has decreased from 3 million tons in 2021 to 2 million tons in 2025, reflecting both the depletion of available reserves and the transition to more environmentally friendly energy sources

The problem of the lack of iron, aluminum and copper deposits in Belarus is particularly acute. This forces the country to completely depend on metal imports. Thus, the supply of cast iron and steel increased from 1.2 million tons in 2025 to 1.4 million tons in 2025, aluminum imports increased from 150 to 170 thousand tons and copper imports remain stable – about 50–55 thousand tons annually. This dependence makes the industry vulnerable to external price fluctuations and geopolitical risks [4].

At the same time, several other resources are showing moderate, but steady growth. Clay production increased from 1.2 million tons to 1.3 million tons, sand production – from 5 to 5.5 million tons, and dolomite production – from 1 to 1.2 million tons for the period 2021–2025. These materials are actively used in construction, the chemical industry and the production of building materials, which makes them important for the domestic market. In general, Belarus has such useful resources as potash fertilizers, clay, sand and dolomite, but it is experiencing a pronounced shortage of oil, gas and metals. This creates a strategic need for imports and stimulates the search for alternatives – the development of renewable energy, increased processing efficiency and more rational use of local raw materials [1].

An important area of government policy is the implementation of the national strategy for sustainable development until 2030. Its key idea is to achieve so called "decoupling", that is, to ensure economic growth, while reducing the consumption of natural resources per unit of output. This requires a deep modernization of production processes and the introduction of resource-saving technologies [2].

Water use remains one of the priorities. Belarus plans to maintain an extremely high level of water re-cycling – 93,5 % in 2020, 2025 and 2030. This makes it possible to significantly reduce the load on natural water sources. At the same time, the area of disturbed lands will be reduced: from 5.4 thousand hectares in 2020 to 4.8 thousand hectares in 2030. This reflects the desire to restore ecosystems and use land resources more carefully.

To achieve its goals, the country intends to make more active use of local renewable and secondary raw materials, minimize losses during extraction and processing, and gradually replace non-renewable re-sources with renewable ones. The policy will be aimed at improving resource management, introducing environmentally friendly technologies and creating a fair payment system for the use of natural resources.

In the field of land relations, it is planned to modernize legislation, create electronic platforms for public discussion of projects, and introduce geoinformation systems and remote sensing technologies. Special attention is being paid to the preservation of natural heritage: protected areas will be maintained at the level of 8.8 % of the country's area [3].

In the field of water resources, the emphasis is on reducing pollution, expanding the network of wastewater treatment plants, introducing modern monitoring systems and providing the population with high-quality drinking water from un-

derground sources.

As for the mineral resource base, the key tasks remain to increase the level of self-sufficiency, reduce environmental damage and increase the efficiency of resource use. This requires new geological exploration, deep drilling (over 3.5 km), the introduction of modern technologies and the strengthening of cooperation between government and business.

The shortage of qualified personnel – geologists, mining engineers, and technologists – remains a serious challenge. The solution is seen in technical modernization, expansion of international cooperation and professional development, including training abroad.

In general, the sustainable development strategy provides for the creation of a national ecological network, protection of rare species and landscapes, ensuring biosafety and adaptation to climate change. An integrated approach, including strategic planning, technology development, and international partnership, will allow Belarus to reduce resource consumption, increase resource efficiency, and, as a result, increase production without additional pressure on the environment [2].

Thus, the limited natural resources are becoming a serious challenge not only for the world, but also for the Republic of Belarus. The country has several important local resources – potash salts, clay, sand, and dolomite – but it remains dependent on imports for key items such as oil, gas, and metals. This reinforces the need for the rational use of raw materials, the introduction of resource-saving technologies and the expansion of the share of renewable energy sources. The implementation of the national strategy for sustainable development until 2030 is aimed precisely at ensuring economic growth, while reducing the burden on the natural environment, increasing self-sufficiency and moving to a more sustainable model of resource use.

LIST OF REFERENCES

1 The Belarusian way of development (questions and answers): reference book / M. G. Zhilinsky, A. V. Ivanovsky, V. I. Chueshov [et al.]. – Minsk : Academy of Management under the President of the Republic of Belarus, 2017. – 184 p.

2 National Strategy of sustainable socio-economic development of the Republic of Belarus for the period up to 2030. – URL: <https://economy.gov.by/uploads/files/NSUR2030/Natsionalnaja-strategija-ustojchivogo-sotsialno-ekonomicheskogo-razvitiya-Respubliki-Belarus-na-period-do-2030-goda.pdf> (date of access: 01.04.2026).

3 Operational and Analytical Center under the President of the Republic of Belarus. – URL: <https://www.oac.gov.by/public/content/files/files/law/resolutions-oac/2022-6-24-25.pdf> (date of access: 01.04.2026).

4 The official website of the Ministry of Statistics and Analysis of the Republic of Belarus. – URL: <http://www.belstat.gov.by/ofitsialnaya-statistika/realny-sector-ekonomiki/nauka-i-innovatsii/godovye-dannye/kadry-nauki/> (date of access: 01.04.2026).

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