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Main Trends and Priority Directions for the Development of the Oil and Gas Industry of Uzbekistan

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ABSTRACT: Based on the use of the methodological apparatus of economic analysis, the article assesses the current state of the industry, where trends and development problems are identified, and the main priority areas in the context of solving the identified problems in the oil and gas industry of the Republic of Uzbekistan are substantiated.

KEY WORDS: oil and gas industry, industry, company, energy resources, production structure, production costs, production efficiency, production efficiency, innovation, modernization, development strategy.

I.INTRODUCTION

The oil and gas industry is a large, of strategic importance for Uzbekistan, production complex, an integral part of its economy. The oil and gas complex of the Republic of Uzbekistan occupies a prominent place among other sectors of the national economy. So, its share in: the country's GDP is 10.2%, industrial output - 15.4%, the state budget revenue - 19.0%, foreign trade turnover - 11.7%. [1]

It should be noted that natural gas production in the country amounted to 63 billion m³ (natural gas reserves are 1.8 trillion m³, of which 57.7% belong to Uzbekneftegaz JSC, which is a large company operating in the oil and gas industry of Uzbekistan, and 42 , 3% - to foreign companies). On average, about 750 thousand tons of oil (69 fields) and 2 million tons of gas condensate are produced annually, with an annual demand of 7-8 million tons of liquid hydrocarbons. At the same time, according to the World Bank, the republic has reserves of about 590 million barrels (80.5 million tons) of oil. [2]

For the period 2010-2019 in the development of the industry, certain changes have occurred in its structure, technical and technological state of production, the level of oil and gas processing based on the innovative factor.

At the same time, at present, the needs of the population and the economy in energy resources are insufficiently provided, while the financial efficiency of the oil and gas industry enterprises is desired. So, despite the increase in natural gas production in Uzbekistan over the past 20 years by 8%, the volume of its production by domestic enterprises decreased by 29%, confirmed reserves of natural gas in 2008-2018 decreased by 4 percent, the average rate of replacement of natural reserves of natural gas for the past 5 years amounted to about 70%. [2]. This situation is due to a number of reasons, primarily - ineffective exploration, incomplete implementation of the planned investment projects and the imperfection of pricing for industry products.

For the analyzed overshoot, an increase in production costs was observed, which led to an increase in the cost of extracted and manufactured products. Expenses at hydrocarbon mining enterprises have risen sharply. One of the main factors of this is the state and effectiveness of the use of fixed assets. In particular, 26.4% of structures, 59.6% of transfer devices, 55.6% of machinery and technological equipment of oil and gas enterprises are outdated. [1] At the same time, the average level of capacity utilization of oil refineries in the republic amounted to only 34.2% [2]. In addition, due to unfulfilled modernization for several years, industry losses remain extremely high - 20-23% [3] of the volume of natural gas production, the main reason for which is the deterioration of equipment, gas mains and gas distribution stations. So, the share of gas pipelines (MG) and gas distribution stations (GDS) to be reconstructed (age from 20 years and above) is 73.7% and 51.5%, respectively. [4] Due to the fact that the industry uses outdated



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technology, a high level of energy consumption is preserved, which negatively affects the economic efficiency of the industry. So, the specific energy consumption at existing domestic plants is 2-3 times higher than foreign analogues. [5] If we take into account the fact that the cost of extracted and manufactured products is the basis for determining the offer price for products, it has a direct impact on profit and profitability, then it becomes clear how important this is for the effectiveness of the industry and ensuring its financial stability.

Another problem arises from this problem - with an outdated technical and technological base it is impossible to ensure a sufficient degree of quality of the extracted and processed products. Despite the fact that during the analyzed period, investments were mainly aimed at the exploration of hydrocarbon raw materials, due to a sharp reduction in the reserves of old wells of hydrocarbon raw materials, their production volumes were significantly reduced. This is mainly related to oil and condensate production. A sharp increase in demand for polyethylene and liquefied natural gas mainly in the domestic market caused a significant increase in the production volumes of these products. Oil refineries process oil into refined products with a higher

value added (gasoline and diesel). Price of light low sulfur

Crude oil is higher than the price of heavy crude oil with a high sulfur content, which is why the quality of petroleum products in the industry remains low. This is manifested primarily in the fact that, on the one hand, the share of petroleum products with high added value is extremely small in the export structure, on the other hand, relatively cheap petroleum products prevail, such as vacuum gas oil, liquefied gas, straight-run gasoline, diesel fuel low quality compared to European sulfur requirements.

Thus, during the analyzed period, a reduction in the resource base was observed, as a result of which there is a deficit in covering the needs of the country and neighboring regions, a high degree of depreciation of fixed assets (machinery and equipment, buildings, transfer devices, as well as gas pipelines, gas distribution stations) remains, there is a shortage of production capacities in oil refining, the quality of extracted and processed products was insufficiently ensured, production costs continuously increased, to some extent prevented the increase of financial stability and profitability of enterprises. At the same time, the lack of funds did not allow for the modernization of the industry. In general, the industry is currently not fully utilizing its resource and production potential.

This situation demonstrates, on the one hand, the existence of an outdated, opaque, management system. At the same time, enterprises with state ownership in the industry are cumbersome and managed to solve current problems and tasks, and, on the other hand, the need to accelerate modernization in the industry, related, inter alia, to the current level of development of Uzbekneftegaz, globalization processes and its integration into the system of world economic relations. At the same time, modernization should include not only technological processes and production, but also a management system.

The main prerequisite for the improvement of the management of JSC Uzbekneftegaz is the lack of investment resources required to modernize various aspects of the company's activities related to increasing the level of competitiveness and building up its export potential, which contributes to growth and their profitability, primarily, taking into account the fact that the basis effective activity of the oil and gas industry lies in the further expansion of the resource base through an increase in hydrocarbon reserves, which provide for the growing demand of the country's economy in fuel and energy resources, the basis of which are oil and gas.

To solve the above problems, it is necessary to modernize the infrastructure of hydrocarbon production facilities, improve technological processes of field development and hydrocarbon production. Under these conditions, there is an acute question of involving new territories and deeply submerged rock complexes in the geological exploration process in order to search for oil and gas deposits and increasing the hydrocarbon base of the republic, introducing economically viable and energy-efficient technologies into the hydrocarbon production system, and accelerating the commissioning of a number of discovered oil and gas fields, extraction of unconventional and hard-to-recover reserves in order to increase the production of liquefied petroleum gas as an alternative type of fuel for further sustainable gas supply to the republic and increase the export of natural gas. [6]

Modernization of JSC Uzbekneftegaz requires solving problems based on the development and implementation of innovative technologies to ensure priority development of the oil and gas refining and petrochemical industries. Currently, only 2% of natural gas is processed deeply in the oil and gas industry to produce products with high added value, although there is every opportunity to increase this figure by 7 times over the next 10 years. [2]

It is also necessary to accelerate the introduction of innovations in the processing of hydrocarbons. This will provide an opportunity to improve the quality and increase the output of the final finished product. By updating equipment and introducing innovative technologies, production efficiency is improved. Thus, calculations show that an increase in labor productivity of only 1% will allow for an increase in the added value of industry by 1-2%. [2] The



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main factors in the use of this reserve are the acceleration of the modernization of fixed assets and the technical re-equipment of industry. In addition to saving material and labor resources, modernization saves time by ensuring compliance with modern requirements. At the same time, modernization requires less investment than expansion, new construction, since modernization implies a change in already functioning production. However, to modernize the extraction and processing of oil and gas resources, it is necessary to attract financial resources. This is possible by strengthening the financial stability of the industry, which will make it possible to increase the sources of own funds for the needs of modernization. For this, it is necessary to improve the tax policy in relation to JSC Uzbekneftegaz and improve the pricing policy in the industry. At the same time, it is necessary to improve the mechanisms by attracting additional financial resources to the advanced processing of hydrocarbons and the production of products with high added value, which will reduce the dependence on the volatility of world prices for energy raw materials.

In order to give a new impetus to the development of the oil and gas industry, the Decree of the President of the Republic of Uzbekistan "On measures to ensure stable provision of the population and the economy with energy resources, financial recovery of the oil and gas sector and improvement of its management system" (July 9, 2019) was adopted, aimed at ensuring sustainable development of the oil and gas industry on an innovative basis, ultimately, providing a sufficient degree of energy resources of the population and economy of the country. In particular, it is planned to implement the following measures to improve management in the industry: reduction of intermediate links in the management system; the transformation of six oil and gas producing and gas processing organizations into structural divisions of Uzbekneftegaz JSC without the formation of a legal entity (the purpose of the transformation is to establish direct management of production divisions); creation of Khududgaztaminot JSC on the basis of territorial gas supply branches of Uztransgaz JSC; transfer of a share of JSC Uzbekneftegaz in the authorized capital to a number of trading and livestock complexes, service organizations and markets. [2]

New approaches to corporate governance in the industry require new approaches to risk management. To this end, Uzbekneftegaz joint-stock company should introduce a unified risk management system in joint-stock companies and organizations operating in the oil and gas sector. This will allow timely measures to reduce and prevent potential risks in the manufacturing and economic sectors and will serve as the basis for the sustainable development of the company. An important step in modernizing corporate governance is the development of public-private partnerships. In particular, this will allow the private sector to invest in gas distribution companies, which is expected to be the result of a public-private partnership agreement. These steps are aimed at developing healthy competition in the industry and improving the quality of services provided to consumers.

Thus, the widespread introduction of universally recognized international standards of corporate governance in the practice of Uzbekneftegaz will improve the management system, its management structure will be flexible and efficient, which, in turn, will strengthen the economic position of the company, increase its efficiency, transparency, and investment attractiveness. Carrying out modernization aimed at improving the production potential on the basis of innovation, the introduction of modern equipment, technologies and methods for the production of competitive products will improve the efficiency of production of extracted and processed products, expand the raw material base of the industry, develop new types of industries, and expand the range of manufactured goods. Moreover, all this will give the opportunity to achieve a balanced and sustainable development of the industry and, ultimately, to satisfy the needs of the economy and the population in energy resources.

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