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**DEVELOPMENT OF PUBLIC PRIVATE PARTNERSHIP
APPROACH IN OIL AND GAS OF KAZAKHSTAN**

Abstract. The article discusses the possible directions of development of public-private partnership in the oil and gas industry. Success in the rational, efficient development and use of fuel and energy resources is largely determined by the innovative activity of enterprises, constant technological renewal of production and confirms the experience of successful oil and gas companies that have mastered several generations of new technologies over the past 25-30 years. To date, the use of public-private partnerships for modernizing the economy has become widespread, new priorities in using the practice of this partnership dictate new theoretical and methodological approaches to assessing the effectiveness of public-private partnerships - projects that, according to the authors, will result in additional budget revenues for growth account investment, production and employment.

Keywords: mineral raw materials, mineral energy, energy, energy, materials, plants, efficiency, production capacity.

INTRODUCTION

Kazakhstan has huge natural reserves of minerals. After the country acquired its sovereignty and independence, the extraction of carbon raw materials more than doubled, while worldwide growth of this indicator was 1.3 times.

Energy as an area of national economy includes a number of special and self-significant industries, namely: electricity, heat, gas industry, coal industry, oil industry.

The fuel and energy complex is a combination of the branches of the fuel industry, electric power industry, means of delivery of fuel and energy.

The structure of world consumption of primary energy sources today is as follows: oil - 34.1%; coal - 29.6%; gas - 26.5%; hydropower - 5.2%; nuclear energy - 4.6%.

The fuel industry is a complex of industries engaged in the extraction and processing of fuel and energy raw materials. Its significance lies in providing fuel and raw materials to other industries - heat and power engineering, petro chemistry, metallurgy, etc. Under the conditions of scientific and technological revolution, the role of the fuel industry increases due to the development of electrification and heat production, causing an intensive increase in energy consumption.

MAIN PART

The fuel industry includes the following industries:

- coal;
- oil;
- gas;
- peat;
- slate;
- uranium mining.

The fuel and energy complex (FEC) is the basic basis for the development of the entire industrial complex of the country, and the use of the achievement of NTP helps reduce the cost component in the products and increase its competitiveness.

Fuel and energy resources play a leading role in the world mineral resource base. The development of society is invariably accompanied by a search for new materials and technologies, an increase in the number of consumer goods produced by industry, an expansion of their range and an improvement in quality. This trend is supported by increasing the volume of extraction and processing of mineral raw materials, in other words, the development of the world economy is associated with a steady increase in the use of mineral resources. Academician P.L. Kapitsa was one of the first who paid attention to the established D.Kh. Midovs has a strong correlation dependence of GDP on energy consumption, making the fundamental conclusion: "If people lose energy resources, their material well-being will fall" [1].

The Caspian Sea is a key region for European energy, however, it was not without problems. Despite the fact that the reserves of resources here make up 60% of Russian, there are no direct deliveries to Europe from here. Kazakh oil, as well as gas from Turkmenistan (the gas resources of which are equal to one third of the Russian gas reserves, although the territory of this state is 50 times smaller than Russia) could easily replace supplies from Moscow.

At present, the search for and active use of new alternative energy sources in many developed countries of the world have been adopted as vital, strategically necessary resources ensuring the prospective development of the economies of these countries.

In the Development Strategy of Kazakhstan until 2030, the leading role is given to the oil and gas industry. This is dictated by the fact that the Republic today belongs to the group of states possessing strategic hydrocarbon reserves, and influences the formation of the world energy market.

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The main challenges facing the fuel and energy complex of Kazakhstan:

1. Ensuring the country's energy security
2. Global energy consumption growth in the region's economies
3. Increasing competitiveness through energy and resource saving, increasing energy efficiency
4. Using the advantages of the geopolitical location of the country, transit and export potential
5. Use of country competitive advantages (coal, uranium, etc.)
6. Ecology and water and energy problems
7. Involvement in the energy balance of RES
8. The introduction of new technologies
9. Improving the safety of electrical equipment and power facilities, improving reliability, reducing accidents
10. Development of scientific potential

The economic resource of renewable energy sources (RES) in the world is currently estimated at 20 billion tons per year, which is 2 times higher than the annual production of all types of fossil fuels. This circumstance indicates the path of energy development in the near future [1].

An important achievement of the Republic of Kazakhstan is a dynamically developing foreign trade, a special place in which is occupied by the products of the fuel and energy complex. Natural gas reserves in Kazakhstan are estimated at 5.9 billion cubic meters. m and gas condensate - 1 438 million tons .. The area of promising oil and gas areas of the Republic of Kazakhstan is 1 million 700 thousand square meters. m, which is 62% of its entire territory. In Kazakhstan, 1.2 million barrels of oil are extracted daily, of which 1

million is exported. The government plans to increase production to 3.5 million barrels per day by 2015, having caught up with Iran on this indicator.

The presence of a development strategy and the ability to realize it are closely related to the potential of natural resources. If the wealth of the subsoil is the property of all subsequent generations, then a thought-out strategy and its implementation are the key to achieving this goal.

Over the past 50 years, the global average temperature has risen by almost 1 ° C, from 13.87 in 1950 to 14.53 in 2004. Since the start of temperature registration, more than a hundred years ago, it has reached the highest average annual temperature in the world, marked over the past 20 years. For 300 years of the industrial revolution, the concentration of carbon dioxide in the atmosphere has increased by 31%, including 18% since 1960. The more the temperature rises, the less the ocean is able to absorb soot. It is established that its content in the ocean is 50 times higher than in the atmosphere. As the ocean temperature rises, their ability to absorb soot from the atmosphere decreases. it

Foreign trade activities cover a wide range of energy trade. A certain influence on the energy strategy of the two countries is exerted by the current viewpoint in the countries that oil companies, being private, work “for themselves”, do not share with the budget and do not even develop their own business, being satisfied with short-term profit.

The most promising project today is the development of the Karachaganak field, which is operated by Karachaganak Integrated Company (hereinafter - KIO), including British Gas, Agip, Texaco, and Lukoil. The total reserves of the field are 1.2 billion tons of oil and 1.35 trillion. cubic meters of gas. Production at the Tengiz field (whose total reserves are estimated at 2.7 billion tons of oil) is constantly growing. The development of the field is conducted by Tengizchevroil JV, which includes the companies Chevron Texaco Overseas, ExxonMobile, Kazmunaygas and LUKARCO.

About 60% of foreign investment accounted for oil and gas companies.

Foreign trade activities cover a wide range of energy trade. A certain influence on the energy strategy of the two countries is exerted by the current viewpoint in the countries that oil companies, being private, work “for themselves”, do not share with the budget and do not even develop their own business, being satisfied with immediate profit.

Opposite view is held by those who believe that with the strengthening of the public sector, super-profits of the oil business and supplementing the budget and the Stabilization Fund of the state appear.

According to scientists of the Institute for the Strategic Development of the Fuel and Energy Complex, supported by the Government of Kazakhstan, the public sector ensures the creation of an oil business system. In percentage terms, the share of the state increased from 10 to 40%, which is lower than in the USA, Great Britain, China, Norway, France, Italy and other countries.

One of the main goals of the innovation method in scientific research is public-private partnerships and ensuring the reliability and sustainability of specialists and managers of science, increasing their creative potential and professional skills. The method of innovative teaching research is learning self-learning and self-development.

In the fuel and raw materials complex, the innovation policy will be focused on the development and implementation of modern methods of prospecting, exploration and monitoring of reserves, strategic and scarce types of mineral raw materials, increasing their recoverability and processing, as well as the development of highly reliable and environmentally friendly transportation systems, in oil and gas complex - to increase the efficiency of geological exploration, increase production rate and recoverability at fields with hard-to-recover reserves and residual reserves oil stocks in flooded areas, construction of wells in the shelf zone and frozen rocks, deepening of gas and condensate processing to produce motor fuel and target chemical products, as well as creating highly reliable, environmentally friendly and low-energy-intensive transportation systems;

in the oil refining industry - to increase the production of motor and jet fuels through the development of deep oil refining processes, developing and creating catalysts of a new generation, high-octane and oxygen-containing additives, as well as improving environmental safety and reducing energy intensity;

The lack of awareness of energy management and the lack of sufficient skills to implement energy efficiency measures is due to the fact that the requirements for energy efficiency have been tightened in a short time. This revealed a significant shortage of qualified technical inspectors.

The technical potential of energy saving in the republic is estimated at the level of 27.75% of the total consumption of primary energy resources - 17.36 million tons per year. At the same time, in the conditions of Kazakhstan, the realization of only a part of this potential will be economically justified - 19% of the total consumption of primary energy resources, or about 12 million tons per year. The necessary amount of investments for the realization of the economic potential is \$ 4 billion.

If the number of discoveries, inventions, their importance, the depth of the research, estimates scientific and technical activity commercial indicators characterize the innovation activity: profit, economic efficiency, competitiveness. World experience shows that only 33% of ideas reach a specific technical solution, of which only 15% have a successful commercial development, and only 9% of ideas reach production. Universities are able to perform basic and applied research. The appearance of territorial associations in the form of large scientific and educational centers (based on a large university) and other research organizations (NTO, OKB) is remarkable.

CONCLUSION

Over the past few years, the issue of improving energy efficiency and energy conservation in the Republic of Kazakhstan has received close attention. To regulate energy, the state sets high standards for both ordinary people and enterprises: the people pay a large tax for energy, so no one dares to be wasteful of electricity, as well as using gas, water, and enterprises set high standards for protection the environment. The Constitution of the country has such an article that says about the human right to live in a normal natural environment.

The study of the development of economic potential on the basis of public-private partnership in the oil and gas producing regions of Kazakhstan makes it possible to state with complete confidence that the total volume of reserves of raw materials at relatively new fields, forecasts for those in the process of geological and exploratory research, as well as the existing prerequisites for increasing reserves are sufficient grounds for the republic to become attractive for investments in the oil and gas industry about and neighboring countries and, of course, the Russian Federation.

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РАЗВИТИЕ ГОСУДАРСТВЕННО-ЧАСТНОГО ПАРТНЕРСТВА В НЕФТЕГАЗОВОЙ ОТРАСЛИ

Аннотация. В статье рассматриваются возможные направления развития *государственно-частного партнерства в нефтегазовой отрасли. Успехи в рациональном, эффективном освоении и использовании*

топливно-энергетических ресурсов в значительной мере определяются инновационной активностью предприятий, постоянным технологическим обновлением производства и подтверждает опыт успешных нефтегазодобывающих компаний, освоивших за последние 25–30 лет несколько поколений новых технологий. На сегодняшний день получило широкое распространение использование *государственно-частного партнерства* для целей модернизации экономики, новые приоритеты в использовании практики данного партнерства диктуют новые теоретико-методологические подходы к оценке эффективности *государственно-частного партнерства* – проектов, которые приведут, по мнению авторов к дополнительным бюджетным доходам за счет роста инвестиций, производства и занятости.

Ключевые слова: минеральное сырье, минеральные ресурсы, энергетические ресурсы, материальное благосостояние, новые технологии, производство электроэнергии, электростанции, эффективность, мощность производства.

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МҰНАЙ-ГАЗ СЕКТОРЫНДАҒЫ МЕМЛЕКЕТТІК-ЖЕКЕ СЕРІКТЕСТІКТІ ДАМУ

Аннотация. Мақалада мұнай-газ саласында мемлекеттік-жекеменшік әріптестікті дамытудың мүмкін бағыттары талқыланды. Жанармай-энергетикалық ресурстарды ұтымды, тиімді игерудегі және пайдаланудағы табыстар, негізінен, кәсіпорындардың инновациялық белсенділігі, өндірістің үнемі технологиялық жанаруы және соңғы 25-30 жылда жаңа технологиялардың бірнеше ұрпағын игерген табысты мұнай-газ компанияларының тәжірибесін растайды. Бүгінгі таңда экономиканы жаңғырту үшін мемлекеттік-жеке меншік серіктестіктерді кеңінен тарату, осы серіктестіктің тәжірибесін қолданудың жаңа басымдықтары мемлекеттік-жеке меншік серіктестіктің тиімділігін бағалаудың жаңа теориялық және әдіснамалық тәсілдерін - авторлардың пікірінше, қосымша бюджет кірістеріне әкелетін жаңа теориялық және әдіснамалық тәсілдерді талап етеді. Өсу есебінен инвестициялар, өндіріс және жұмыспен қамту.

Түйін сөздер: минералды шикізат, минералдық ресурстар, энергетикалық ресурстар, материалдық әлауқат, жаңа технологиялар, электр энергиясын өндіру, электр станциялары, тиімділігі, өндірістік қуаты.

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