

IMPROVING THE MECHANISM FOR SYSTEMATIC MANAGEMENT OF THE OIL AND GAS INDUSTRY AT THE MACRO LEVEL

^aGULMIRA AKHMETOVA, ^bMAIRA DARISKALIYEVA,
^cZHANAT KHAMIDULLINA, ^dAIGUL NIYAZBAYEVA,
^eGULFIYA ZHAMBYLOVA, ^fLES BAIMUKASHEV,
^gDINARA BASSHYKYZY

^{a-c-e-f}*Kh. Dosmukhamedov Atyrau State University, 600006, 212 Student Ave., Atyrau, Kazakhstan*

^d*Department of State Administration, Aktobe Regional State University named after K. Zhubanov, 030000, 34 A. Moldagulova Str., Aktobe, Kazakhshtan*

^g*Sh. Yessenov Caspian State University of Technologies and Engineering, 130003, 14th Microdistrict, 50, Aktau, Kazakhstan*

email: ^aesentemir@mail.ru, ^bmaira_janel@mail.ru,
^chamidZh@mail.ru, ^ealima-83@mail.ru,

^fLes.baymukashev@mail.ru, ^gdinara.bashykyzy@yu.edu.kz

Abstract: The Republic of Kazakhstan has a dynamically developing oil and gas industry, which plays a significant role in the formation of the state budget. Currently, the share of the oil and gas industry in the total gross product is about 30%.

Keywords: oil and gas industry, management, production, infrastructure, industries.

1 Introduction

Since the presence of large stocks of raw materials is a necessary but not sufficient condition for the development of the oil and gas industry, it is necessary to identify priority areas for its development. The following directions can be designated as such:

- exploration and development of new oil and gas fields (in particular, development of resources of the Kazakhstan sector of the Caspian Sea);
- increase in oil production;
- modernization and development of transport infrastructure for ensuring maximum access to oil and gas companies to export routes;
- reconstruction of existing and creation of new industries (especially petrochemical) with the advanced construction of facilities for deepening oil refining, improving the quality of petroleum products, production of catalysts;
- improving the efficiency of the oil and gas complex (the use of modern production technologies and the integrated use of oil and gas resources, the production of electricity based on modern gas turbine power plants);
- development of the legal system in the oil and gas complex.

2 Materials and Methods

World experience shows that the possession of large hydrocarbon reserves does not lead to national prosperity, it is necessary to develop the service sector of the oil and gas complex as a huge "field" for national investments, development of own production and creation of jobs.

The oil and gas industry of the republic is one of the most attractive for investment by both domestic and foreign investors. This industry has a globally powerful raw material base and a developed infrastructure for the extraction and processing of raw materials. However, there is a high dependence of the results of their activities on the global conjuncture of oil and gas prices associated with mono production. (1-2)

At the same time, in the conditions of market transformations in the oil and gas sector of Kazakhstan's industry, as in other sectors of the economy, positive and negative processes were observed. Among the obvious negative phenomena are the lack of clear goals and an understanding of the mission of the enterprise, inability to identify emerging market opportunities, the disconnectedness of planning and financial services, the

inability of a systematic vision of the functioning of a modern enterprise, and some other.

The further development and successful functioning of the oil and gas sector enterprises in the market requires a review of the management system and methods, and primarily based on a strategic approach. Expanding the scope of strategic planning to the widest possible number of industrial enterprises is a fundamental condition for ensuring sustainable long-term economic growth and diversification of the economy of Kazakhstan.

The use of strategic planning creates the most important advantages in the functioning of the enterprise: prepares the company for changes in the external environment; links its resources with changes in the external environment; clarifies emerging issues; coordinates the work of its various structural divisions; improves control in the enterprise.

It is also necessary to increase the efficiency of vertically integrated oil companies.

The sources of efficiency gains in vertically integrated companies are diverse. The main ones are as follows:

- the ability to organize intensive information exchange between its divisions, which allows you to coordinate plans and schedules for the supply of raw materials, materials, and semi-finished products, their processing and delivery of final products to the consumer;
- the possibility of significantly accelerating the entire cycle of material movement and, accordingly, accelerating the turnover of capital and cost recovery;
- the possibility of saving on the costs of market transactions (costs associated with finding a supplier, negotiating transactions, in case of violation of the terms of the contract, etc.
- especially large in countries with poorly developed market infrastructure).

To ensure economic growth requires identifying market opportunities in areas where the company will have a clear competitive advantage. It is possible to develop a growth strategy based on an analysis conducted at three levels. At the first level, identify opportunities that the company can take advantage of at the current scale of activity (opportunities for intensive growth). At the second level, the possibilities of integration with other elements of the industry's marketing system (opportunities for integration growth) are identified. At the third stage, opportunities that open up outside the industry (opportunities for diversification growth) are identified. (3)

Intensive growth is justified when the company has not fully used the opportunities inherent in its traditional markets. The three main varieties of intensive growth opportunities are:

- the deep market introduction consists in finding by a company way to increase sales of its products in existing markets through more aggressive marketing;
- expanding the boundaries of the market lies in the company's attempts to increase sales by introducing existing products into new markets;
- product improvement is the company's attempts to increase sales by creating new or improved products for existing markets.

Integration growth is justified when the company's business area has strong positions and/or when the company can get additional benefits by moving back, forward or horizontally within the industry. (4)

Regressive integration is the company's attempt to acquire or put more stringent control over its suppliers. Progressive integration is the company's attempts to acquire or tightly control the

distribution system. Horizontal integration is the company's attempts to acquire or put under more stringent control of some competing enterprises.

Diversification growth is justified when the industry does not give the company opportunities for further growth or when growth opportunities outside this industry are much more attractive. Diversification does not mean that a company should take on any opportunity that has come up. The company should identify areas that will help eliminate its shortcomings. There are three varieties of diversification:

- concentric diversification, i.e. replenishment of its product range with products that, from a technical and/or marketing point of view, are similar to existing company products;
- horizontal diversification, i.e. replenishment of its assortment with products that are not related to manufactured products, but which may cause interest of existing consumers;
- conglomerate diversification, i.e. replenishment of its nomenclature with products that have no relation either to the technology used by the company, or to its existing goods and markets. (5-6)

3 Results and Discussion

Currently, there is a tendency to transform large companies interested in their further growth into multinational companies. From ethnocentric companies that consider their foreign operations as something secondary, they are transformed into geocentric companies that consider the whole world a single market. Company growth is one of the main sources of increasing its effectiveness and a means of survival in the competition. One of the reasons stimulating the growth of companies is the desire to save on the scale of the sphere of activity.

In the long run, there is no optimal company size, as its growth is limited only by resources and the ability of managers to adapt to the new dimensions of the organization and maintain the integrity of the company. However, the faster the growth, the more difficult it is for the corporate governance structure to adapt to changing external conditions and the higher the adaptation costs that are opposed to savings on growth. With the growth of the company, management functions and the organizational structure of management should radically change. Only in this case will it be able to maintain stability and realize the potential for economies of scale in production. (7)

World experience in the organization and management of enterprises and sectors of the fuel and energy complex indicates the need for fairly strict regulation of their activities by the state. This is due to the following:

- the enterprises of the complex are few, belong to strategic sectors of the economy, and a large extent determine the industrial and military potential, as well as the state of affairs in ecology;
- oil and gas in various forms are consumed by absolutely all members of society, and the feature of this process is its continuous nature.

This means that the issues of oil and gas production and processing were and remain political issues; the oil and gas industry is characterized by high development inertia, huge capital intensity and concentration of material resources, the need for large-scale and comprehensive development of national natural resources, a predominantly monopoly position in the market and the inability to duplicate some industries in a certain territory. (8)

For these reasons, the governments of most foreign countries prefer to keep many of the fuel and energy industries in state ownership with very strict regulation of the activities of industries and enterprises that did not get there that are directly related to the functioning of the national oil and gas industry.

The following can be noted as the main tasks of state regulation in the oil and gas industry:

- creating conditions for fair competition;
- contributing to the stable development of oil and gas production;
- environment protection;
- regulation of corporate profit margins.

The degree of state participation in the regulation of the fuel and energy sectors, as international experience shows, entirely depends on the stage of development, the specific situation, the nature and scale of the tasks to be solved. For the effective functioning of the economic mechanism, an optimal combination of market methods and methods stipulated by state regulation is necessary. The state and dynamic interconnection between the systems of commodity-money relations and state regulation of the economy are essential. Without state participation, the reproduction process is simply impossible. Forms and methods of financial and economic state regulation are not stable. They evolve depending on specific conditions. The experience of industrialized countries confirms that the sharper the situation, the more actively the state intervenes in the regulation of the fuel and energy sectors.

The strategic management changes necessary for sustainable development of oil companies should include:

- organizational and economic consolidation of the company and its subsidiaries;
- allocation of support and service services;
- a sharp increase in the quality of financial management, primarily in terms of the budget, accounting, and control of production and marketing costs;
- creation of powerful marketing systems;
- development of a modern integrated management information system;
- substantial development of the human resources management system. (9)

Thus, foreign experience in managing the oil industry in the form of vertically integrated companies is extremely important for Kazakhstan. In the former USSR, perhaps the world's most integrated oil and gas complex management system existed, although some parts of the technological chain belonged to different departments. All threads converged in the former Governmental plan, where the planned balances for the production, refining, and distribution of oil and oil products were developed at prices set above, which ensured the integration of the entire system - from the well to the gas station. However, this was not economic integration based on the interest of equal partners, but administrative-command based on non-economic management methods. Not only in the conditions of the market, but also in the transition to it, such a system could not be maintained, because it contradicted the logic of reforms. The collapse of the planning and distribution system in the oil and gas complex turned out to be extremely painful when, as a result of the liquidation of the USSR, certain parts of a single technological chain ended up in different independent states, and long-term ties were broken. At present, some relations have been restored, and the need for their restoration in full, but on other, mutually beneficial grounds, is obvious. Further development of vertically integrated companies and the realization of the potential laid down in their structure should play a significant role in this integration process not only within the Republic of Kazakhstan but also on the economic territory of the whole CIS.

4 Conclusion

In conditions of high uncertainty and instability of the economic situation, vertically integrated companies have significant advantages over independent production and intermediary firms both in terms of the survival of their units and in terms of normalizing the overall economic situation in the country. The integration allows you to increase the efficiency of the company and its survival in the competition. The advantage of an integrated company is a balanced distribution. When the price of

oil falls, the profit of the producing units decreasing, but the refining and petrochemical industries increase the profit, since the decrease in the cost of raw materials is usually greater than the decrease in the cost of the product, so the losses of one are compensated by the acquisitions of the other unit.

In general, as practice shows, the vertical integration of companies engaged in the oil business has competitive advantages over enterprises and specialized firms.

In implementing their strategies, domestic oil and gas companies can in the future compete with similar foreign companies not only due to the presence of the richest reserves of oil and gas and cheap labor (i.e. natural, raw material qualities, which, undoubtedly, are a big plus and reserve) but also with their developed qualities obtained as a result of the implementation of their own original managerial decisions and approaches, knowledge and ideas.

Literature:

1. Abramenko GV, Shorin AA. *Primeneniye sistemnogo analiza v tekhnike i ekonomike* [Application of system analysis in engineering and economics]. Moscow; 2016.
2. Aganbegyan AG. *Upravleniye i effektivnost* [Management and efficiency]. Moscow: Ekonomika; 2012.
3. Ansoff I. *Strategicheskoye upravleniye* [Strategic management]. Moscow: Ekonomika; 2015.
4. Akhtyamov EF. *Ob odnom podkhode k resheniyu zadachi optimizatsii struktury sistemy upravleniya predpriyatiyem* [About one approach to solving the problem of optimizing the structure of the enterprise management system Problems of the transition economy (proceedings of a conference of young scientists)]. Ufa; 1997.
5. Nazarbayev NA. *New Kazakhstan in a new world. The Kazakhstan-2030 strategy at a new stage in the development of Kazakhstan. Message from the President of the Republic of Kazakhstan to the people of Kazakhstan dated February 28, 2007.* Almaty; 2007.
6. Ivanov RV. *The Seventh All-Russian Conference of Young Scientists, Specialists on the Problems of the Russian Gas Industry named after I.M. Gubkina: Vnedreniye instrumentov kontrollinga v sistemu upravleniya predpriyatiy gazovoy otrasli* [Implementation of controlling tools in the management system of gas industry enterprises]. Moscow: LLC Intercontact Science; 2007.
7. Abykanova BT, Sariyeva AK, Bekalay NK, Syrbayeva SJ, Rustemova, AI, Maatkerimov NO. *Technology and prospects of using solar energy. News of National Academy of Sciences of the Republic of Kazakhstan, Series of Geology and Technical Sciences.* 2019; 3:173-9.
8. Sanalieva LK, Baitenizov DT, Akhmetova GT, Biryukov VV, Maydyrova, AB, Goncharenko LP. *Intellectual potential of self-employment as the sign of the labor market. Bulletin of National Academy of Sciences of the Republic of Kazakhstan.* 2018; 4(374):147-52.
9. Akhmetova G, Kanatova A, Oteshova A, Nurpeiis G, Dariskaliyeva M. *Financial factors of forming a favorable investment climate in the Republic of Kazakhstan. Ad Alta Journal of Interdisciplinary Research.* 2019; 9(2):54-9.
10. Dzhumamuhambetov J, Bakitgul A, Gorur A. *A novel dual-band microstrip bandstop filter based on stepped impedance hairpin resonators. Progress in Electromagnetics Research Letters.* 2019; 84:139-46.

Primary Paper Section: J

Secondary Paper Section: JP, JS