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FEATURES OF STRATEGIC PLANNING IN THE OIL AND GAS INDUSTRY

Abstract. In the face of increasing competition in the global energy markets, given the high importance of the oil and gas industry for the Kazakh economy, the topical issue is improving the strategic planning system in the oil and gas industry. In the article, the author examines the existing hierarchy of program documents of strategic planning in the oil and gas industry, highlights the problems inherent in the current system.

The main provisions and objectives of the strategic planning of oil companies are considered. The role of the oil industry in the main macroeconomic indicators of the country's development is shown.

Keywords: strategy, strategic planning, oil and gas market, oil company, trends.

Introduction

The processes of globalization of the world economy over the past two decades have led to major changes in the oil and gas sector. Global competition for access to new sources of mineral resources is increasing due to depletion of developed reserves. The need to develop new, less efficient hydrocarbon deposits, leading to a significant increase in the cost of production of a unit of production, the continuous increase in the cost of material and technical resources used to maintain the technical condition and the development of production capacities, high volatility of fuel prices, the instability of the global financial market, all this makes the successful development of companies engaged in the production, transportation and sale of hydrocarbons very risky and problematic. Increased competition and increased risks dictate the need to choose new development guidelines. Subjects of management of the oil and gas complex of Kazakhstan face the problem of improving the conceptual approaches, methods, tools used in the preparation and adoption of strategic decisions in a new unstable environment [1]. Despite the fact that the fuel and energy sector has already formed management structures that meet the specifics of activities in market conditions, given the high inertia and capital intensity of the oil and gas complex, it is vital at the moment and in the future on a permanent basis in order to achieve sustainability and efficiency of its development in the long term to improve management methods, and primarily strategic planning.

Methods

Oil is one of the most important sources of energy of this century, it is used in all countries of the world. Indeed, our dependence on oil is very strong and does not seem to be easing.

Since oil accounts for 35% of the world's energy and is used in all spheres of our society, it is the main source of energy. To date, there is every reason to believe that the oil and gas industry may have a tendency to its rapid movement towards the supply crisis, after years of crisis of overproduction. This is hard to believe, given the increase in oil production in the US and the growth of optimism in the sector. In general, the situation in the industry is much better than a year ago: oil prices have recovered. If some time ago it seemed that the price was set in the range of approximately 45 US dollars to 50 US dollars per barrel, today Brent oil is trading at the level of more than 70 US dollars. Thus, there is a recovery of the industry after a difficult period, when low prices prevailed, strict financial discipline was maintained, restructuring of the asset portfolio was carried out and high productivity was ensured. At the same time, the International Energy Agency (IEA) has been signaling the possibility of a supply crisis since 2016. And recently, the possibility of a crisis proposal by the end of the decade warned the heads of Total, Eni and Saudi Aramco [2]. With the growing demand for oil and the fact that investment in many large

projects was postponed during the economic downturn, there is a decline in the potential to meet this demand. Oil companies will need to increase production, and there is a risk that some of them may find it difficult to keep up with the growing demand. The fundamental problem of the sector, of course, is its inherent volatility. Producers will need time to take into account factors of unpredictability in terms of oversupply or unsatisfied demand in the market. In addition, they will have to overcome the difficulties associated with the pace and scale of the transition to electricity production from non-fossil sources. Given these uncertainties, oil and gas companies need to develop a viable strategy to mitigate these risks. In other words, although the period of oversupply in the market is over, its effects will continue to be felt. In the short term, companies must maintain strict financial discipline and focus on improving productivity and applying new technologies. In the long term, they need to restructure their asset portfolios so that they become profitable at low break-even prices [3]. Moreover, they will have to consider how to ensure that their portfolio as a whole meets the requirements of tomorrow and protect it in the context of the transition to a low-carbon economy.

Table 1 – Countries with the largest oil reserves

Country	Reserves, billion barrels	% of world reserves
Saudi Arabia	264,1	21
Iran	137,6	10,9
Iraq	115	9,1
Kuwait	101,5	8,1
Venezuela	99,4	7,9
UAE	97,8	7,8
Russia	79	6,3
Libya	43,7	3,5
Kazakhstan	39,8	3,2
Nigeria	36,2	2,9
USA	30,5	2,4
Canada	28,6	2,3
Qatar	27,3	2,2
China	15,5	1,2
Angola	13,5	1,1
OPEC members	955,8	76
Whole world	1258	100
[4]		

As for the prospects for the development of Kazakhstan, since independence, they have been associated with long-term plans for the production of hydrocarbons, the revenues from which should become the basis for the creation of a diversified domestic economy.

Main part

The oil refining industry is defined among the leading branches of the oil and gas complex, the effective development of which depends on the implementation of the long-term strategy of socio-economic development, formulated by the first President of the Republic of Kazakhstan in the strategy «Kazakhstan – 2050».

On the territory of the Republic of Kazakhstan there are 202 oil and gas fields. Projected recoverable oil resources are estimated at 7.8 billion tons and natural gas at 7.1 trillion tons.m3. About 70% of these resources are concentrated in the Western regions of Kazakhstan. The vast majority of them are associated with subsalt deposits and lies at depths of about five or more thousand meters [5].

Oil production is carried out at 55 fields. The largest fields are Tengiz (oil), Uzen (oil and gas), Karachaganak (oil and gas condensate), Zhanazhol (oil and gas condensate), Kalamkas (oil and gas). Oil companies cannot do without long-term planning.

At the moment there are a number of large foreign companies in the domestic oil industry, representing more than 45 countries, including USA, UK, France, Italy, Switzerland, Germany, Russia, Japan, China, Indonesia and other. In total, in 2000-2013 they invested 150.1 billion US dollars in the oil and gas industry, including 18 billion US dollars in geological exploration (GE). During this period, the volume of investments increased by almost 5 times. The largest investment activity is shown by such large

companies as «North Caspian Operating Company» (18 %), JV «Tengizchevroil» (15 %), JC «Mangistaumunaigas» (12 %), JC «CNPC-Aktobemunaigaz» (11 %), JC «Ozenmunaigaz» (8 %), JC «Embamunaigaz» (4 %), JC «PetroKazakhstan Kumkol Resources» (3 %), JC «Turgay — Petroleum» (3 %), JC «Karazhanbasmunai» (2,5 %) and «Buzachi Operating Ltd» (2 %) [6].

According to the data announced by departmental sources [4] in recent years, Kazakhstan adheres to a pragmatic scenario focused on a consistent increase in oil production to 95-100 million tons in 2020, to 110-115 million tons — by 2030, stabilization in 2040-2050 at the level of 110 million tons [7].

The main problems in the field of production and processing of oil and gas raw materials today include the shortage of Kazakhstan's specialized personnel, a small number of processing enterprises for hydrocarbon raw materials and a relatively small hydrocarbon recovery rate.

One of the central issues unresolved today is the shortage of qualified specialists in the oil and gas sector. This problem is directly related to the problems of the education system of the Republic of Kazakhstan. Personnel shortage of oil workers, natives of Kazakhstan, was felt almost at all times. Now, as before, this problem is solved by inviting specialists from abroad to senior positions.

Solving the problems of dynamic development of oil and gas enterprises and the state as a whole, it is necessary not only to act decisively, but also to think carefully about future steps. In short, the oil and gas complex is the driving force of the socio-economic reforms carried out in the Republic, the conductor of modern innovative and managerial decisions.

The time-line of the project from exploration to commissioning is 10-12 years. In the developed regions, with other favorable conditions, it is possible to keep within five years. In the developed regions, under favorable conditions, it is possible to cope within five years. On average, it takes another 5-7 years from the first oil to the output of the field to the design level of production. To a normal return on capital, under which it makes sense to invest 15 years. That is, the average payback horizon of the field development project from scratch is 20-25 years. If the project is associated with the application of new technologies, the decade may be required only to ensure that this technology is ripe. A good example is the development of shale oil fields in the United States. The pioneers of the industry began drilling their first wells in the 1990s, and their efforts paid off in the 2010-s [8].

The development of a strategic plan, the final version of which must be supported by extensive research and evidence, is a daunting challenge. To function effectively in a highly competitive environment, oil companies must constantly collect and analyze vast amounts of information about the industry, market, competitors and other factors.

Strategic plans should be designed not only to remain coherent over long periods of time, but also to be flexible enough to be modified and reoriented as necessary. The overall strategic plan should be seen as a programme in which an oil company operates for a predetermined period of time. At the same time, it is necessary to realize that the conflict and constantly changing business and social situation makes constant adjustments to the strategic plan inevitable.

Strategic planning is the only way to formally predict future challenges and opportunities, and therefore provides the basis for appropriate management decisions. In addition, formal planning helps to reduce risks when making management decisions, including due to consideration of erroneous or inaccurate information about the capabilities of the corporation or the external situation. Planning, because it serves to formulate goals, helps participants in all business processes to create a common goal within the oil company [9].

A widespread methodological mistake that occurs in the strategic management of the development of an oil company is that certain aspects of development are considered and particular tasks are separately solved (development of the production technological base, formation of an investment program, intensification of production), which leads to inconsistency, and often to the unrealizability of management decisions. With this in mind, in order to improve the efficiency and coordination of management decisions, the development of an oil company should be considered as a single cross-functional business process. This process covers the analysis of the market environment of the system, the formation, coordination and optimization of options for «technological» development and financial and economic schemes of their implementation. This takes into account the results of operating and financial activities of the company, acting on the basis of a unified methodology and modern information management technologies.

As a rule, the strategy of oil companies is aimed at expanding the scale of operations, increasing sales and profits. However, in real conditions, the implementation of such a strategy may be limited by numerous factors, the main of which are: market saturation, competition with manufacturers of similar petroleum products, the possibility of falling under the antitrust law when trying to oust competitors from the market, causing damage to the environment, etc.

The following strategic approaches can help mitigate these constraints [10]:

– inception into new geographical markets;

– development and supply of new types and grades of oil products to the existing or new market;

– acquisition of technology for production of promising products from another company or merger with the manufacturer in order to expand the range of products (this way is faster than the development of new products on their own, but requires significant financial resources).

There are strategic principles that will keep the business at the expense of meeting the requirements of tomorrow, regardless of market volatility in the short term:

- continuous management of the asset portfolio as a whole at significantly lower break-even prices regardless of actual oil prices;
- the observance of strict financial discipline;
- when investing and carrying out activities, shift the focus to maintenance of assets;
- it is necessary to replace the «owner-operator» model with an approach in which only the owner is important and profitability is a priority;
- implementation of digitalization policy;
- professional development of specialists to prepare them for work in the era of new technologies.

Strategic planning usually includes 4 areas of management:

1) resource allocation programme;
2) ways to adapt to the environment;
3) internal coordination areas;
4) organizational strategic foresight.

The resource allocation programme includes the allocation of typically limited organizational resources, such as investment funds, scarce managerial staff and technological expertise.

Adaptation to the external environment covers all actions of a strategic nature that improve the relationship of the corporation with its external environment. Oil companies need to adapt to both favourable and unfavourable external conditions, develop appropriate best practices and ensure that the strategy is effectively adapted to the environment, primarily through the development of better production systems, through interaction with the authorities, the creation of a favourable image, etc.

Internal coordination includes the coordination of strategic activity for display strong and weaknesses of the corporation with the aim of achieving effective integration of internal actions of the components of its business processes.

Effective internal operations ensuring is an integral part of the Corporation's management activities.

The search for organizational strategies is the main goal of organizational strategic foresight. In its framework, among other organizational tasks, the tasks of systematic development of managers ' thinking are solved by creating such a training organization in which they can learn from previously adopted strategic decisions. The ability to learn from experience enables the oil company to correct its strategic direction and improve the level of management in the field of strategic management.

We can distinguish the following main stages of solving the problems of strategic planning [11]:

– identification of strategic development goals and criteria for their achievement;

– diagnostics of problems and opportunities of the organization, including their definition, establishment of the reasons and consequences for the organization;

– development of different solutions to problems and/or use of available opportunities;

– analysis of the likely consequences of each of the planned options;

– choosing of the most appropriate option;

– planning — transition from a description of what should be done to a description of how it should be done (formation of budgets, schedules, distribution of tasks between performers, etc.);

– measuring and forecasting results, comparing them with the intended goals;

– assessment of trends and major changes taking place both within organizations and in the external economic environment;

– bringing the elements of the strategic plan to the performers and creating a motivational environment for its implementation.

The obtained results (conclusions)

The implementation of these stages of the strategic planning process should ensure the formation of long-term strategic development programs for vertically integrated companies and monitoring their implementation. If the function of strategic planning is successfully set in the oil company, the formation of long-term programs will be carried out on the basis of a unified methodology, formal models and methods, information technology and software and algorithmic decision support tools.

Thus, the proposed measures for the introduction of modern methods of work at the enterprise level and the creation of a comprehensive system of strategic planning are becoming increasingly important for Kazakh oil companies operating in a highly competitive environment. Despite the fact that strategic planning as a separate element does not guarantee success, it simultaneously creates conditions for the emergence of some important and favorable factors for the development of the company.

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МҰНАЙ-ГАЗ СЕКТОРЫНДАҒЫ СТРАТЕГИЯЛЫҚ ЖОСПАРЛАУДЫҢ ЕРЕКШЕЛІКТЕРІ

Аннотация. Әлемдік энергетикалық нарықтардағы бәсекелестіктің артуына қарамастан, мұнай-газ саласының қазақстандық экономиканың маңыздылығы ескеріле отырып, мұнай-газ саласында стратегиялық жоспарлау жүйесін жетілдіру өзекті мәселе болып табылады. Мақалада автор мұнай-газ саласындағы стратегиялық жоспарлаудың бағдарламалық құжаттарының бар иерархиясын қарайды, қазіргі жүйеге тән проблемаларды айқындайды.

Мұнай компанияларын стратегиялық жоспарлаудың негізгі ережелері мен міндеттері қарастырылады. Мұнай өнеркәсібінің ел дамуының негізгі макроэкономикалық көрсеткіштеріндегі рөлі көрсетілген.

Түйін сөздер: стратегиясы, стратегиялық жоспарлау, мұнай-газ нарығы, мұнай компаниясы, үрдістер.

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ОСОБЕННОСТИ СТРАТЕГИЧЕСКОГО ПЛАНИРОВАНИЯ В НЕФТЕГАЗОВОЙ ОТРАСЛИ

Аннотация. В условиях усиления конкуренции на мировых энергетических рынках, с учетом высокой значимости нефтегазового комплекса для казахстанской экономики актуальным вопросом является совершенствование системы стратегического планирования в нефтегазовой отрасли. В статье автор рассматривает существующую иерархию программных документов стратегического планирования в нефтегазовой отрасли, выделяет проблемы, присущие сложившейся системе.

Рассмотрены основные положения и цели стратегического планирования компаний нефтяной промышленности. Показана роль нефтяной отрасли в основных макроэкономических показателях развития страны.

Ключевые слова: стратегия, стратегическое планирование, нефтегазовый рынок, нефтяная компания, тенденции.

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