

INDUSTRIAL POLICY: PROBLEMS AND TASK IN GAS AND OIL SECTOR OF NATIONAL ECONOMY

Saltanat Massakova

T. Ryskulov Kazakh Economic University Kazakhstan
PhD, Associate professor
E-mail: aiabdrzakova@kazeu.kz

Ainur Abdrazakova

T. Ryskulov Kazakh Economic University Kazakhstan
PhD, Associate professor
E-mail: aiabdrzakova@kazeu.kz

—Abstract —

The article is devoted to the research and development of mechanisms for the implementation and improvement of industrial policy in the oil and gas industry, which are currently the most relevant areas of Kazakhstani economy. It is proved that this policy is developed taking into account the interaction between the two groups of factors: the aspirations of the main investors, producers and consumers of oil as well as domestic political, economic and other characteristics of the country with oil reserves. It is shown that the mechanism for the implementation of the industrial policy in the oil and gas sector is a system of interconnected, interdependent forms and methods of production management and its structural constituents.

Key Words: *industrial policy, oil and gas sector, Kazakhstan*
JEL Classification: L520

1. INTRODUCTION

Long-term priority of the Republic of Kazakhstan is to provide a sustainable development of national economy on the basis of achievement of effective economic growth.

The main direction of the forced industrialization is implementation of large investment projects in the export oriented sectors of national economy with achievement of multiplicative effect for new possibilities of small and medium business by a way of development of the Kazakhstan content and manufacturing of products with a high value added.

The determining role in the solution of this question at the present stage belongs to an oil-and-gas sector of economy of the state. The oil and gas complex is a basis for ensuring intensive development of other spheres of domestic economy, its high-quality structural changes, implementation of industrial and innovative strategy of the country.

The oil and gas sector as one of the leading sectors of industrial production is the basis for the development of the economy and largely determines the economic independence of the country. Oil and gas from the first years of independence of the Republic of Kazakhstan has become the locomotive that has played and continues to play a crucial role in the development of the economy of the state. Kazakhstan is one of the top ten global ranking hydrocarbon reserves, is one of the largest suppliers of crude oil in the Central Asian region.

Today the oil and gas sector plays a crucial role in the economy of the Republic of Kazakhstan: in 2009 the share of the oil and gas industry to GDP was 20.8%. Payments to the National Fund for the oil and gas sector totaled 1,371.4 billion, or 36.3% of government revenues. According to proven reserves of oil Kazakhstan has 2.7% of the world's oil reserves. Pipeline areas cover 62% of the republic, and 172 oil fields, of which more than 80 - are being developed.

In the extraction of natural gas Kazakhstan ranks third in CIS, after the Russian Federation and the Republic of Turkmenistan. A year after the occurrence of the global energy market during the period of falling prices, and the oil industry in its own band of lower production, Kazakhstan once again demonstrates the sustainable development of mining projects. At the end of 2011 year, Kazakhstan received more than 80 million tons, and exports of raw materials were - 73.5 million tons (Tokmurzиеv M, 2011). Well as positive trends, there is a range of problems associated with the solution of the implementation of promising routes for the transportation of oil, the refining sector development, environmental

safety. Despite the fact that oil and gas reserves, Kazakhstan is among the top ten oil-producing countries of the world, however, remains outside the major global oil business. This is due to the remoteness of the Republic of potential markets and the relatively high cost of oil. These factors lead to the need to develop strategic directions for the oil and gas industry of Kazakhstan (Egorov, O.I., Chigarkina, O.A., Baimukanov, A.S., 2003). In this context, the strategic objectives of the state assumes the implementation of the following priority directions of development of the oil and gas industry, such as: implementation of the exploration and development of new oil and gas fields, the modernization of the transport infrastructure, reconstruction of existing and development of new oil refineries, the use of modern technology, the development of the legal and regulatory framework to ensure the attraction of investments.

Need of transition to active industrial policy is caused by that the majority of national productions treat the third and fourth technological way, i.e. the technologies created still in the middle of last century. Productions of the fifth way much less often meet. At the same time in developed countries transition to the sixth technological way, i.e. to the market of high-technology products are actively performed. It is necessary to recognize that the modern industrial policy is oriented rather to reproduction in the conditions of already developed technological structure, than on creation of new industry structure of the industry and transition to new technological way. It is necessary to note that in modern domestic and western economy speech goes not so much about need of industrial policy, how many about what it shall be rather, and participation of the state in its implementation shall be how great. After all in fact any economic policy is at the same time and industrial.

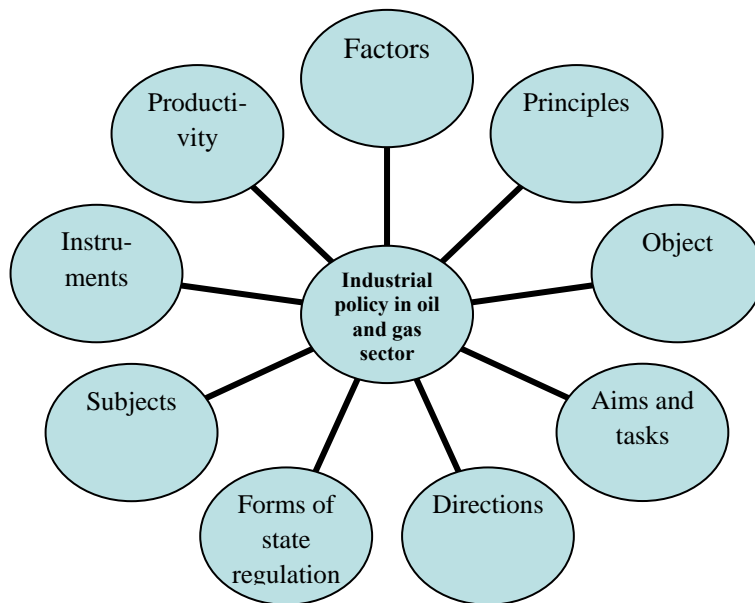
Research and development of mechanisms of implementation and enhancement of industrial policy in an oil and gas industry are now the most actual directions. This policy is created taking into account interaction of two groups of factors. To the first group refer aspirations of the main investors, producers and consumers of oil. The second group of factors represents all variety of natural, internal political and economic characteristics of the country possessing oil inventories.

2 INDUSTRIAL POLICIES IN GAS AND OIL SECTOR: PRINCIPLES, SUBJECTS, PRODUCTIVITY

The mechanism of implementation of industrial policy in the oil and gas sphere represents system of the interconnected forms and methods of control over production and its structural components. The industrial policy is urged to provide development of the oil industry in the directions of the national purposes providing achievement and interests such, as increase of profitability of the state from subsurface use, competitiveness and export development, employment, preserving natural resources, environmental protection, etc.

The most total characteristic of industrial policy in an oil-and-gas sector can be received, having considered as set of the elements influencing its forming and development. The structural model of industrial policy in an oil-and-gas sector is given in the figure 1.

Figure– 1: The structural model of industrial policy in an oil-and-gas sector



Note: figure was developed by authors

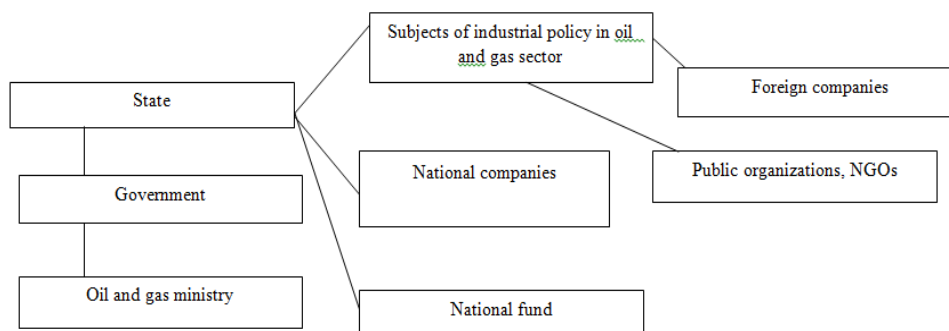
Principles of industrial policy in an oil and gas industry are: social orientation, information transparency, publicity, collective nature (Suleymenova Zh, 2004).

The main directions can be formulated as follows:

- Development of strategy of the oil industry oriented to complex conversion of hydrocarbon resources;
- Strategic planning of oil export, transition to export of competitive products of oil refineries;
- Monitoring and creation of systems of comprehensive regional planning and management of the territories on which the entities of the oil and gas complex, considering ecological and social aspects of development of economy take place;
- Increase of investment appeal, development of qualitatively new mechanisms of investment attraction and protection of the rights of investors.

The industrial policy as a system of regulation of an oil complex represents set of the interconnected state bodies and the subjects of an oil complex creating, regulating and performing a single task of effective functioning and development of the oil industry. Subjects are provided in the figure 2.

Figure – 2: Subjects of industrial policy in oil and gas sector



Note: figure was developed by authors

Strategy of development of the oil industry is created under the influence of compromise search taking into account in coincident interests of characters. This strategy is connected with a choice of the following actions: firstly, to set lower price (coming nearer to the self-financing prices) or higher (in line with world price) internal prices on oil or their any intermediate values. Secondly, to carry out aggressive or moderate export policy, practical policy of the state and the oil companies will combine these extreme actions with prevalence of one or others depending on features of developing situations. Such strategy of flexible reaction, adaptation to changing conditions really is a guarantee of progress of an oil complex as a whole from line items and the state, both consumers, and the oil companies.

The key moment during implementation of industrial policy is the assessment of its productivity. As productivity in an oil-and-gas sector is understood a size of the effect received in case of rational, economic use of all components of resource potential of the oil industry. Productivity characterizes possibility of achievement of a complex of the purposes of industrial policy taking into account features of its development for a certain period of time (Zhumurova A, 2006). It is important to differentiate social and economic, ecological, technological efficiency of industrial policy in an oil-and-gas sector.

The oil and gas industry of the Republic of Kazakhstan in industrial specialization is subdivided into four main sub industries oil-extracting, oil processing, gas and gas-processing. The hydro carbonic capacity of the Republic of Kazakhstan is

considerable its share is 1,5 % from total amount of the reconnoitered world reserves. Currently products of an oil and gas industry of the republic are nearly 12 % from total amount of industrial production. Nevertheless still it is impossible to say that supply of hydro carbonic raw materials of domestic consumers as satisfactory. So, according to statistical data, the Kazakhstan oil refineries still are in dependence from supply of crude oil by the extracting entities of Russia, the oil-processing industry of Kazakhstan for 50-60 % satisfies internal needs for gasoline and diesel fuel, for 20 % - in aviation kerosene. Rather high is a share of the oil industry and in currency receipts of the country. Oil export and oil products constitutes nearly a half from total amount of export of the republic. Dynamics of industries of an oil and gas complex is characterized by unevenness of development. Growth of oil extraction did not play the predetermining role in oil processing development that is connected first of all in that the oil-extracting companies working in Kazakhstan are guided generally by export supply of crude oil.

Table 1: Extracting, export and import of oil and oil products in Kazakhstan

	1997	2001	2004	2008	2011
Extracting					
Oil and gas condensate, mln. tons	25,8	39,9	59,2	87,2	98,7
Export					
Oil and gas condensate, mln. tons	16,5	32,4	48,9	74,7	84,8
oil processing products, mln. tons	0,51	1,71	2,44	-	-
oil processing products to total amount of export,%	3,1	5,3	5,0	-	-
Import					
Oil and gas condensate, mln. tons	3,21	3,4	3,6	3,9	5,6
oil processing products, mln. tons	0,69	0,65	0,91	-	-
oil processing products to total amount of import,%	21,7	19,2	25,3	-	-

As a result of disintegration of the USSR Kazakhstan inherited not complex but only separate entities on production and oil refining which technologically untied among them. Specificity of the domestic market of the country is in remoteness of the main areas of production of oil from the mass consumer of oil products, creates vital issues in a covering of requirements of industries of an economy the appropriate oil resources. Sites of the main oil and gas pipelines passing on the territory of the country were able not carry out a role of reliable transport ways for oil supply and gas both on oil refineries of the republic, and for export for a variety of causes, namely: their linear orientation (generally to Russia), overload with domestic raw materials, control of their productive activity by the owner.

In this regard now with a view of effective use of available stocks of resources, growth of export of hydro carbonic raw materials it is necessary not only sharp increase in production, but also creation of the reliable and economically effective infrastructure providing, first, free export of oil and gas, secondly, filling of domestic market with energy resources.

Given the importance of the oil sector in Kazakhstan, to companies in this industry have to face a number of economic and technological requirements to ensure national energy security. The oil industry is one of the most competitive in this regard, this barrier makes it possible to survive only the largest companies with a stable financial security. It is also very important market capacity where necessary earn potential buyers to earn their trust, as the oil industry is quite specific industry. In addition to such barriers, there are strategic, such as the amount of additional investment in equipment, the degree of product differentiation and the nature of long-term contracts with third parties.

From an economic point of view, investors in the mining industry are often faced with the presence of the investment risk. In the case of oil field development, this risk is related to the fact that the project could prove to be unprofitable in mind the poor quality of the oil, which will increase the cost of production, processing and transportation. In addition, there is a risk that the price policy, the introduction of rules and quotas for the drilling and production of energy resources. These risks could cause serious harm to the financial and reputational of an oil company and affect the ecological, socio-economic situation of the region.

Technologies and equipment for oil production in the region, often determine the strategy of the company involved in the oil sector. Usually the technological aspect of the development of oil fields is associated with future earnings of oil

companies. This aspect encourages companies to develop the technology of oil production, to focus on research, the introduction of advanced technology, oil field machinery and equipment for a new generation of enhanced oil recovery, integrated methods of effective development of stranded. You cannot forget about the infrastructure, which is an integral part of the oil-producing complex and often elevated oil companies during the exploration and production of energy resources. Together technological requirements for the development of oil fields, designed to reduce environmental risks and improve safety and security of the possible force majeure and accidents and create conditions for the so-called "natural selection" of enterprises and companies able to survive in these conditions and to conduct systematic work exploration and production fields.

The current state of the oil industry in Kazakhstan is characterized by the completion of the volume growth of recoverable oil, an increase in the quality and pace of their entry, the increase of exploration and development drilling and reducing the number of inactive wells. For long-term sustainable development of the oil industry of Kazakhstan, economic efficiency and technological balance of production, processing and transportation of oil, the expansion of competitive products with high added value should speed up changes in the production structure of the oil and gas industry, introducing technological and organizational innovation.

Kazakhstan's export potential in 2012 was not significantly increased - up to 71 million tons, which is 2.8% more than in 2011 (Report of Rating Agency "RFCA", 2011). Oil supplies are continuing in a number of countries, has long collaborated with Kazakhstan - China, Italy, the Netherlands, France, Switzerland, etc. It is important to note that China, India, and also to become major importers of oil, and long-term demand is expected to increase by almost 2 times. The European Union, another major importer of "black gold", is now in search of oil suppliers in connection with the imposition of an embargo on oil supplies from Iran. According to the European Commission, the issue of finding a source of oil is not too critical, for not taking into account the Iranian oil reserves in the European Union will last for several years. Iran, in turn, plans to partially reroute oil to alternative consumers, especially India and China (the current import - respectively 0.31 and 0.55 million barrels per day), and to use work-around out, especially in the European market (for example, through the Turkey).

In this situation, it is advisable to change the administrative, tax and customs policy for stimulating exploration, commissioning new deposits using modern methods of increasing the utilization of oil. By changing the organizational and economic conditions of the oil complex, creating a transportation and processing infrastructure, providing diplomatic and political support for the Kazakh oil and gas companies in the international markets will ensure sustainability of the entire oil sector of the country and support the long-term development goals of the economy, strengthen economic and geopolitical position of Kazakhstan in world.

3. CONCLUSION

In spite of the fact that recently the economy of Kazakhstan shows a certain growth, in the country still it is not possible to restore this key branch. Currently the republic has no modern technologically coordinated petrochemical productions, which allows to provide requirement of various branches of economy and to realize the potential of the competitive producer of petrochemical production of high commodity readiness. Against the effective results received owing to rational use of hydro carbonic resources in leading powers of the world, Kazakhstan is not yet using the oil and gas raw materials with high degree of integrated approach. Therefore in industrial policy it is necessary that during short time the domestic oil and gas processing and petro chemistry receives a push for growing its potential. Increase of efficiency of use of oil potential is connected with a branch diversification – expansion of repartitions in the territory of the country for the purpose of obtaining the maximum income. Diversification problems in oil sector are solved by modernization of the standing enterprises and construction of new petrochemical complexes (clusters). Moreover, it is necessary to do an emphasis on development of productive forces in regions of new development large on stocks of mineral and raw and fuel and energy resources, and also placement here new productions should be carried out in close interrelation with that economic potential which is already created and operates. Such interaction can yield real notable results, as the revealed reasonable equation by demanded types of resources (primary, secondary, etc.) will allow to define production wastes optimum economic structure of the region to establish need of

creation of concrete processing branches, depth and integrated approach of use of primary resources, the directions of deliveries of separate types of production. It causes, in turn, need of the synchronous solution of transport, infrastructure problems.

In summary, we can conclude that the main areas of increase of competitiveness of Kazakhstan's oil and gas industry include the development and implementation of programs aimed at:

- modernization of production facilities on the basis of the total increase of investment attractiveness of the sector;
- facilitating the mobilization on mutually beneficial terms of foreign investment;
- expanding the raw material base of the oil and gas industry;
- stricter requirements for energy conservation;
- promoting diversified export structure, increase the volume of exports of products with high added value;
- diversification of energy markets;
- the formation of a common energy and energy transportation infrastructure in the neighboring regions of Europe and Asia;
- reorientation of the use of energy from fuel commodity purpose.

All range of the problems which were gradually becoming aggravated in domestic oil industry, quite clearly can't be solved at once. For this purpose time, a choice of the partners capable really to participate in development of all links of an oil and gas complex, attraction of necessary investment resources as from the countries of the near and far abroad, and national state and commercial structures is required.

BIBLIOGRAPHY

Egorov, O.I., Chigarkina, O.A., Baimukanov, A.S. (2003) "Neftegazovyi kompleks Kazakhstana: problemy razvitiya i effektivnogo funkcionirovaniya". Almaty: Institut ekonomiki MON RK

Report of Rating Agency "RFCA" (2011) "Kratkyi obzor neftedobyvauschei otrasli Kazakhstana" Summary of the oil industry in Kazakhstan". Almaty

Suleymenova, Zh.U. (2004) “Ekonomicheskaya osenka neftegazovogo potesiala Respubliki Kazakhstan” *Problems geology i ineftegazovogo kompleksa Kazakhstana. Materialy mejdunarodnoi nauchno-prakticheskoi konferensyi*. pp. 27-30

Tokmurziev, M. (2011) “Tendecii razvitiya neftedobyvauschei otrasli Respubliki Kazakhstan”. *Aktualnye voprosy ekonomicheskikh nauk. Materialy mejdunarodnoi nauchno-prakticheskoi konferensyi*. pp. 41-45

Zhumurova, A.K. (2006) “Mnogovektornost neftyanoi politiki Kazakhstana” *Materialy mejdunarodnoi nauchno-prakticheskoi konferensyi*. Almaty: T. Ryskulov KazEU. pp. 122-127