20. Tosun, H. (2015). Devlet üniversiteleri: Performans değerlendirme finansman modeli ve yeniden yapılanma. Ankara: Uzman Matbaacılık.

21. Stella, A., & Woodhouse, D. (2007). Benchmarking in Australian higher education: A thematic analysis of AUQA audit reports. Melbourne, VIC: Australian Universities Quality Agency.

22. İQAA (2015). Independent agency for quality assurance in education – ranking from https://iqaa-ranking.kz/rejting-vuzov/rejting-vuzov-kazakhstana-2018/natsionalnyj - rejting-luchshikh-mnogoprofilnykh-vuzov-kazakhstana-2

23. Webemetric. Ranking Web of Universities. Retrieved from http:// www.webometrics.info/en

24. Üsdiken, B., Topaler, B., & Koçak, Ö. (2013). Yasa, piyasa ve örgüt tiplerinde çeşitlilik: 1981 sonrasında Türkiye'de üniversiteler. Ankara Üniversitesi SBF Dergisi, 68(03), 191-227.

25. Van Dyke, N. (2005). Twenty years of university reports cards. Higher Education in Europe, 30(2), 103- 124.

26. Ward, J. H. J. (1963). Hierarchical grouping to optimize an objective function. Journal of the American Statistical Association, 58, 236-44.

27. YÖK. (2015a). Higher Education System in Turkey. Retrieved November 15, 2015, from http://www.yok.gov.tr/en/web/uluslararasi-iliskiler/turkiye-de-yuksekogretim-sistemi

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# DEVELOPMENT OF PUBLIC PRIVATE PARTNERSHIP APPROACH IN OIL AND GAS OF RUSSIA

#### Abstract

Although public-private partnerships (PPPs) are new in Kazakhstan and Russia, governments are actively pursuing PPP deployment in transportation, urban infrastructure and the social sector. To bridge the conceptual gap between PPPs' low value for money and efforts aimed at extensive partnership implementation, the government needs to promote PPP social value.

**Key words:** oil and gas complex, investments, utilization, private-public partnership, Russia.

The level of utilization of associated petroleum gas (APG) largely determines the degree of efficiency of development of oil and gas complex of the country. The indicator reflects the position of the state and business regarding the possibility and feasibility of comprehensive exploitation of mineral resources (CON) and skilled use of mined mineral raw materials. In addition, the level of APG utilization shows the degree of interest of the state and business in environmental and conservation activities, since the combustion of APG in flares leads to a significant release of carbon dioxide into the atmosphere. Skilled utilization of APG is always associated with additional capital investments, which often reduces the investment attractiveness of projects aimed on development of reserves and resources of oil, therefore one of the main tasks of the state in regulation of AGP utilization processes - creation of the organizational, administrative, tax and financial incentives for effective business development. In this regard, activities on production and utilization of APG in Russia, is one of the important and priority tasks for sustainable development of oil and gas complex of Russia. The article aims to develop recommendations for increasing efficiency of oil and gas companies due to perfection of cooperation between the state and the private business.

Recent years, the growth rate of production of APG in Russia exceeds the growth rate of oil production that is associated with an increase of the gas factor on Mature oil fields in traditional production centers and the high level of the gas factor on the new fields, primarily in Eastern Siberia[1]. Over the last 5 years APG production in Russia increased by more than 20 %. The increased production of APG was due to commissioning of new projects of oil production in the East of Russia, and in the North of Western Siberia, by large vertically integrated companies, especially the state-owned ("Rosneft" and "Gazprom Neft").

In recent years, large oil companies have stepped up policy of qualified utilization of associated petroleum gas, establish in investment programs substantial funds for the development and attraction of technology for processing of associated petroleum gas. However, despite the deterioration of the macroeconomic situation in the country and the consequent postponement of implementation of number investment projects, including APG utilization, the state's task is to bring to a logical conclusion strategy aimed at full utilization[2].

One of the main aspects of increasing the level of APG utilization in Russia is the development of technologies allowing the efficient use of associated petroleum gas with the features of the field – the amount of raw materials, distance from existing transportation and General infrastructure, as well as other factors[3].

A very low indicator of effective APG utilization found at independent oil producers. As a rule, small companies that, unlike vertically integrated companies do not have significant investment resources for the construction of transport and processing infrastructure for APG utilization to the required level. The relevant Ministries of the Russian Federation strictly adhere to a strategy for achieving 95% recycling. With the increase of APG utilization rate requirements, small independent oil companies (MNC) formed a Complex situation, as the negative factors are the lack of specialized transport infrastructure and equitable access, and low incentives of an economic nature. Therefore, the support of independent producers is an issue that must be resolved at the state level.

One of the mechanisms of state support MNC in the direction of increasing the level of associated gas utilization should be the development of public-private partnerships (PPP) along with a number of stimulating measures of tax and monetary regulation.

Production of associated petroleum gas in Russia in 2015 amounted to 78.2 billion cubic meters. In the structure of produced associated petroleum gas more than 60 % made up by dissolved in oil gas, the rest – is the gas from gas-caps.

In the organizational structure of produced associated petroleum gas in Russia in 2015 the share of large vertically integrated companies (VICS) account for about 80 %, the largest of them – "Rosneft", "Surgutneftegas", "LUKOIL" and "Gazprom Neft"[4]. The remaining 20 % of the volume of APG provided by independent producers and operators, and PSA (Production Sharing Agreement).

Regionally, the highest rates of associated gas utilization was achieved in Western Siberia, and more recently in the East of Russia, primarily through effective use of associated gas at the Vankor field in the Krasnoyarsk region. There is still lot of work to do in the Timan-Pechora province, as well as in a number of regions of the Volga-Ural province.

The processes of associated petroleum gas combustion that take place in the operating activities of many oil and gas companies cause numerous negative consequences in the economic, environmental and environmental areas. Thus, APG flaring is reflected both in the financial results of subsoil user companies and on the quality of life in regions and settlements bordering the centers of APG flaring or dispersal.

In order to minimize the cumulative environmental effect, the priority directions of APG utilization are injection of gas into the reservoir, generation of electricity or some methods of using APG at the field itself[5]. But nevertheless, not a single project of gas utilization will be comparable in capacity with the launch and operation of the flare unit. The world community, concerned about the processes of climate change, calls for ratification of the Kyoto Protocol, which regulates the issues of greenhouse gas emissions that contribute to the development of global warming trends. Having also an economic incentive to comply with the Framework Convention in the form of trading in quotas, most developed countries year by year stabilize, and then reduce volumes of flared gas.

Irrational combustion of hydrocarbon raw materials does not characterize a developed and even developing country. At a time when the world community is pursuing goals to optimize the use of natural resources, maximum greening of production and the reuse of products, the destruction of the raw material

resource is an extremely inefficient production management strategy [6]. Thus, the main negative effects of APG flaring are:

- pollution of the atmosphere by emissions of pollutants;

- promoting the processes of global warming and climate change through the emission of greenhouse gases;

- damage to the health, well-being and life of the population of the surrounding regions;

- damage to nature protection zones, bordering on a field or in close proximity to them;

- irrational use of natural resources;

- assistance in further consolidation of the status of the "raw materials economy";

- an obstacle to the development and implementation of the best available technologies in the field of APG utilization and other consequences.

To involve the APG in the economic circulation and increase the level of its use, coordinated programs of oil and gas processing and oil producing companies are required to introduce the required number of oil gathering facilities, preparation of processing and transportation of oil gas. The implementation of such programs will require significant investments from both producers and consumers of APG, and significant government support measures. In the main directions of state policy to address the problem, along with state control and monitoring of the APG utilization processes, mechanisms should be developed to stimulate investment projects for the use of APG, in particular, to facilitate the permitting and conciliation procedures in state bodies.

Private-public partnership is an opportunity to implement strategic investment projects for the country by attracting significant financial resources, providing state guarantees. The implementation of projects to improve the reliability of APG use agreements largely depends on the interest of the parties involved in the relevant business[7]. For processors, these are reliable supplies of APG, for oil workers - guarantees of transportation and processing of gas. One of the problems of reliable development of projects to increase the level of utilization of APG is the guarantees of the parties. Refiners need assurances of reliable supplies of APG, oil companies need confidence that all APG will be transported and processed. One of the implemented approaches is connected with the creation of joint ventures (JVs), in which the risks and obligations of the parties are reinforced by their participation in the property complex of the JV.

To implement and finance APG utilization and processing projects, cofinancing of projects through the RF Investment Fund, federal target programs can be the most effective. State support is provided in the form of financing on contractual terms of investment projects with the registration of RF property rights. The state investments are directed to the creation of federal infrastructure facilities, while stimulating large-scale investments from the private sector. The Government of the Russian Federation has been implementing the program "Development of the Transport System of Russia (2010-2020)" since 2009. Within the framework of this program, it is advisable to finance infrastructure facilities related to the utilization and processing of APG.

Business interest in participating in PPP projects Achieved on the basis of creating a clear legal environment that guarantees achievement of a high level of efficiency in the implementation of projects. In this regard, the state must guarantee a certain level of profitability of the business with acceptable risk for projects, as well as transparent operating environment, low levels of corruption and a favorable business climate in the country and in the region.

In general, the condition of PPP in the region should determine by the development of the legislative framework and institutions. As these institutions that provide systematic application of PPP approaches can be distinguished: the special economic zones of regional level industrial parks, advisory bodies or centers of PPP at the regional organs of executive power, uniting officials, businessmen and experts, investment funds, systematic work with institutions development (for example, with the European Bank for Reconstruction and Development), etc.

An optimal option for taking measures within the framework of state regulation aimed at reducing APG flaring in the Russian Federation is a step-bystep action plan,

The first stage is the definition in the system of executive authorities of a single federal body to ensure more effective monitoring of the implementation of legislation, licensing agreements for the disposal of APG and the inevitability of penalties for their failure to comply.

At the first stage, it is necessary to strengthen control and increase the responsibility of subsoil users for compliance with the terms of license agreements, which is partially realized.

At the second stage it is planned to develop a system of effective state stimulation of utilization of APG. First of all, it is necessary to develop a mechanism for stimulating subsoil users using the latest technologies and equipment to increase the level of utilization of oil gas and meet the requirements of the license agreements on the utilization of petroleum gas.

At the third stage, it is planned to improve the legislation by introducing changes to the existing legislative framework, to develop a special chapter devoted to the associated petroleum gas, which would fix at the legislative level all measures taken in relation to the extraction and utilization of APG.

Analysis of the situation in Russia, as well as consideration of foreign experience, allows us to consider that, at the federal level, along with monitoring the use of APG, measures should be taken, primarily economic ones, aimed at supporting enterprises implementing APG processing projects. An effective measure is to attract service companies to solve the problem of the useful use of associated petroleum gas. Lack of attention to the solution of the problem of effective use of APG should be punished in various ways - fines, suspension or termination of licenses for nature management. It is necessary to balance incentive and punitive measures to the enterprise considered utilization of APG without its burning to be the only correct and economically viable action. Taking into account the foreign experience and complex geographic conditions of many fields it is also necessary to envisage the option, when the APG is economically disadvantageous to utilize under certain conditions of a certain field, and this should not be caused by punitive measures on the part of the state.

### **References:**

1. Eder LV, Filimonova IV, Moiseev SA Oil and gas complex of Eastern Siberia and the Far East: trends, problems, current state // Drilling and oil. - 2015. -  $N^{\circ}$  12.

2. Button M. (ed.). A Practical Guide to PPP in Europe // Working, City & Financial Publishing. –2006.

3. Engel E., Fisher R., Galetovic A. Public-private partnerships: when and how. Centro de EconomiaAplicada, Universidad de Chile, 2008.

4. Kontorovich AE, Eder L.V. New paradigm of the development strategy of the resource base of the oil-extracting industry of the Russian Federation // Mineral Resources of Russia. Economics and Management. - 2015. - No. 5. - P. 8-17.

5. Emissions of pollutants into the atmosphere // Interactive version of the State report State report "On the state and protection of the environment of the Russian Federation in 2014".

6. Eder L.V., Filimonova I.V., Mochalov R.A. Efficiency of business strategies of Russian oil and gas companies / / Drilling and oil. - 2015. - No. 3. - P. 3-10.

7. Korzhubaev AG, Lamert DA, Eder L.V. Problems and Prospects for the Effective Utilization of Associated Petroleum Gas in Russia // Drilling and Oil. - 2012. - № 4. - P. 4-7.

8. Engel E., Fisher R., Galetovic A. Public-private partnerships: when and how. Centro de EconomiaAplicada, Universidad de Chile, 2008.

#### Аннотация

Хотя государственно-частное партнерство (ГЧП) является новым в Казахстане и России, правительства активно развивают ГЧП в сфере транспорта, городской инфраструктуры и социальной сферы. Для преодоления концептуального разрыва между низкой стоимостью ГЧП и усилиями, направленными на широкое внедрение партнерских отношений, правительству необходимо поощрять социальную ценность ГЧП.

**Ключевые слова:** нефтегазовый комплекс, инвестиции, утилизация, государственно-частное партнерство, Россия.