# LEGAL REGULATION OF RATIONAL NATURE MANAGEMENT IN THE ENERGY SECTOR

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#### INTRODUCTION

Economic activity in the energy sector is traditionally a subject of public law regulation, and the sovereignty and security of the state entirely depend on the effective management of the commodity market. Natural resources play a huge role in the economic development of any country. The efficient functioning and enrichment of a country depends on how the state uses its resources. For example, the aggregate of Russia's natural resources is about 20% of the world's reserves, and the natural resource potential used by the Russian economy is 95.7% of the country's total national wealth (KRYUKOV, 2018).

Energy is a key industry for many countries around the world in economic, social and political terms.

The level of both national security as a whole and its economic component depends on the state of the fuel and energy complex. This determines the special attention on the part of government bodies to issues of ensuring energy security. It should be noted that the consequences of the international energy crises of the second half of the twentieth century forced the governments of many

countries to pay special attention to the problem of energy security. This situation was the result of insufficiently effective government regulation

in this area. The growing degree of internationalization and globalization of the energy sector, as well as the strengthening of the energy interdependence of individual countries, confirm the thesis that it is impossible to ensure national energy security without solving the problems of international energy security at the regional and global levels, without establishing a rational mode for use of natural resources by economic entities.

In connection with the global growth in the scale of production, one of the main problems is the limited natural resources used to meet the needs of mankind, and, consequently, the problem of rational use of natural resources. Stabilization of the environmental situation, its enhancement is possible only by improving legislation, changing the direction of socioeconomic development, the formation of new values and moral attitudes, the structure of needs, goals, priorities and ways of human activity.

The issues of rational use of natural resources, as well as their effective exploitation for the purposes of economic development, are of paramount importance, including for improving the state of the environment, protecting the sustainable development of the state (Tien et al., 2019). It is impossible to protect the country's natural resources without creating a legislative framework, without discussing these issues with business structures of both regions, the country as a whole, and states in international economic relations.

# **METHODOLOGY**

The work uses various general scientific techniques and methods of logical cognition. The methods of analysis and synthesis were used to study the essence of the legal regulation of the commodity market. The systemic method was used to analyze the structure of the nature management process as an integrated system with its own quantitative and qualitative

composition. The historical method made it possible to trace the changes of the development of the institution of state regulation of rational nature management, to reveal the tendencies of its development. The use of formal legal and comparative legal methods made it possible to compare the concepts, phenomena and processes that determined the existence of legal forms, methods and ways of state participation in the extraction and distribution of natural resources, to identify similarities and differences between them; provided an opportunity to study and define the general and specific in approaches to the regulation of relations in the field of rational environmental management in different countries.

#### **RESULTS AND DISCUSSION**

In its most general form, the use of natural resources is "the exploitation of natural resources, their involvement in economic circulation and other economic activity" (GERASIMCHUK, 2007). This means that in the process of economic activity, natural resources are used both directly, that is, as the main means of making a profit, and indirectly, having a negative impact on the environment. Therefore, in many countries of the world, the question of developing a strategy for rational use of natural resources is becoming more acute.

In modern legislation of most countries, the term "rational use of natural resources" is often used, however, as a rule, there is no legal consolidation of this concept.

One of the types of entrepreneurial activity related to natural energy resources is the activity of prospecting, exploration and production of oil and gas. The relationship between the state and oil and gas companies should be viewed in the context of the exploitation of national resources. Over the past twenty years, a new structure of the hydrocarbon complex was formed in Russia. The state monopoly was replaced by the dominance of large oil and gas companies with minimal state participation.

In the modern world, there are various models of state participation in the regulation of environmental relations. In Russia, the system of subsoil use relations combines licensing and contractual components. In general, the civil law approach prevails in the relations between the leaders of the world oil market, that is, the contractual system of subsoil use relations. As noted earlier, resource extraction activities are usually associated with causing some damage to the environment, therefore, many countries are paying more and more attention to compliance with the requirements of environmental legislation in the implementation of natural resources.

In accordance with Russian legislation, companies, including those working in the oil and gas sector, are responsible for increasing the environmental risks of their activities and raising the negative impact on the environment. However, in general, there is an increase in offenses in nature management activities, and many of them are associated with the irrational exploitation of natural resources.

This situation is primarily due to the fact that the existing legal framework in Russia does not encourage companies to consistently reduce their adverse impact on the environment. The amount of compensation for damage to the environment in Russia is lower than in the OECD (Organization for Economic Cooperation and Development) countries (GURIEV et al., 2011).

It should also be noted that in the hydrocarbon complex itself, the size of the negative impact on the environment, the scale of the harm caused to the environment, especially as a result of oil spills and flaring of associated petroleum gas, can be enormous. At the same time, in practice, the prevention and mitigation of consequences of oil spills and other environmental disasters is often the object of efforts of the Ministry of the Russian Federation for Civil Defence, Emergencies and Elimination of Consequences of Natural Disasters, which can recover full or partial compensation of its expenses from companies in court only after they were actually incurred (GURIEV et al., 2011). The Russian government provides subsidies to all industries, while providing significant benefits to the oil and gas complex, which has a huge negative impact on the environment.

The peculiarities of legal regulation in each state determine the "rules of the game" for oil and gas companies. Often, the same TNC (Transnational Company) in different countries of the world adheres to different options for environmental policy. For example, Shell's activities in

Canada were highly praised by environmentalists, while in the Netherlands, Russia and other countries, the company was heavily criticized. As noted earlier, environmental policy, the practice of legislative regulation of relations in the oil and gas industry in different countries varies considerably.

North America is one of the largest oil and gas regions. The production of hydrocarbons in the United States began about a century ago and continues to this day. According to the U.S. Energy Information Administration, the United States surpassed Russia in oil production for the first time and overtook Saudi Arabia. At the same time, the United States is the largest importer of oil and gas in the world (GERASIMCHUK, 2007).

The recent concentration of industry is particularly noticeable among firms operating in the United States. By 2001, five corporations (ExxonMobil, BP-AmocoArco, Chevron-Texaco, Phillips-Tosco, and Marathon) controlled 61% of the U.S. retail gas market, 47% of the U.S. refining market and 41% of the U.S. oil exploration and production. These firms currently control 15% of the world's oil production more than Saudi Arabia, Yemen and Kuwait combined (GURIEV et al., 2011). The United States of America has a well-developed system of environmental legislation for many years, which is a fairly effective mechanism for protecting the environment.

Firstly, it is the delimitation of the subjects of jurisdiction between the federation and its territorial entities. At the same time, the regulation of environmental management in each state is a complex process, taking into account the general trends of public administration, as well as the historical, environmental, political and geographical characteristics of each state.

Secondly, public opinion and an active position of civil society has developed in the United States, including in relation to environmental protection. There are many environmental organizations in the United States, both general and specific.

Thirdly, not only individuals, but also legal entities can be held criminally liable. Currently, any corporation in the United States is subject to criminal prosecution for actions of its representatives. Consequently, it is assumed that it is possible to impose stricter responsibility for misdemeanors (KRYUKOV, 2018). A different approach to environmental management is applied in China. China is rich in mineral resources; it is not for nothing that it is often called the "storehouse of resources". The People's Republic of China (PRC) has a significant land fund and large reserves of minerals.

According to statistics, today the People's Republic of China ranks third in the world in terms of mineral reserves (about 12% of the world's total). Geologists have confirmed that in the depths of the PRC there are deposits of ten types of energy resources, forty-six types of ferrous and non-ferrous metals, more than ninety types of non-metallic ores, eight types of precious and rare metals (O'ROURKE, CONNOLLY, 2003).

Large potential for the development of China is made up of its oil and gas reserves, namely, 1/3 of China's territory is promising for oil and gas production. The most explored oil-bearing areas are located in the north of the Great China Plain (1/3), in the northeast (1/4) and in the northwest (1/5). The shelf of the Chinese seas is also promising, where oil reserves have been discovered (TIEN et al., 2019).

Mining in China is vertically integrated and under strict government control.

At the moment, the following companies are engaged in oil and gas production in the PRC: China National Petroleum Corporation, China National Marine Oil Corporation, China Petrochemical Corporation (LIN, 2013). The harm caused to the environment is fully compensated by these companies, and the state, in turn, strictly monitors the honesty and timeliness of eliminating the consequences of violations and compensating for the harm caused.

The Russian Federation, like many other European countries, sees the development of an innovative, energy-efficient "green" economy, the implementation of technologies that help minimize environmental damage, ensuring a reasonable balance between the interests of the economy and nature conservation, as one of the fundamental directions for improving the state of the environment. This area includes such measures as increasing the energy efficiency of enterprises, introducing the principles of sustainable nature management into practice,

modernizing the economy taking into account ecosystem services provided by natural ecosystems, as well as including the issue of biodiversity conservation in market mechanisms in the form of payments for ecosystem services (MITYAKINA et al., 2019).

Despite the tendency to focus on alternative, more environmentally friendly energy resources, hydrocarbon raw materials will be in demand for more than a decade. Thus, subsoil use is an important area in many respects, and its regulation at the state level is necessary, first of all, to preserve various socio-economic, environmental, and legal interests of the country's population (TURANIN et al., 2020).

It is obvious that, in addition to improving legislation in the field of rational environmental management, a necessary condition for increasing the efficiency of environmental practices of companies is the creation of conditions for strategic planning (TURANIN et al., 2019). It is about maintaining macroeconomic and political stability, increasing the transparency of the activities of oil and gas companies, including through corporatization and public offering of shares. Improving the environmental practices of companies is also impossible without encouraging innovation and implementing the best environmental technologies. It is also extremely important to form an objective understanding of the role of the environmental factor in the activities of officials, managers and employees of companies, scientists and other stakeholders (MITYAKINA et al., 2016).

#### CONCLUSIONS

As a result of the theoretical and legal analysis of approaches to ensuring the rational use of natural resources, the following conclusions can be drawn.

The term "rational use of natural resources" should be understood as such an organization of the use of natural resources, which ensures not only their complete withdrawal and the achievement of the highest economic results, but also minimization of harm to the environment in the process of extraction and processing of resources.

It is necessary to create such a social model of a reasonable combination of economic benefits and environmental preservation in the interests of the present and future generations, which would include the appropriate theoretical and legal principles, a developed ecological culture of nature users, current legal norms, the result of their implementation (a system of socially desirable practical activities for nature management, "green" economy).

In our opinion, to create a better legal framework for the rational use of natural resources in the oil industry in Russia, it is necessary to toughen administrative (penal) sanctions against oil and gas companies. The amount of the fine should be adequate to the harm caused, this will serve as the best preventive measure to increase the level of responsibility and conscientiousness of business entities. It is advisable to place production and exploration of hydrocarbons under state control, while the provision of services should be left under the control of private companies.

In our opinion, the key to ensuring the energy security of the state, creating a system of rational use of natural resources is the proper use within the traditional methods of the appropriate means of regulatory impact:

- administrative: arbitration of conflicts between participants in the energy market; setting tariffs for electricity and heat; state procurements; permission to commission a fuel and energy complex facility; energy standardization; state control and supervision in the energy sector and other measures;
- economic: budget subsidies and subventions to compensate for losses caused by violation of the current legislation; customs tariffs, loan rates, depreciation rates to stimulate energy efficient production; establishment of payments for extraction and use of natural resources and for harmful effects on the environment; concessional loans for implementation of energy saving and energy efficiency measures;

- regulatory legal methods include the creation of a regulatory framework capable of efficiently and timely regulating energy legal relations both at the regional and international levels;
- organizational: determination of the order of organization and activities of government bodies in the field of energy resources use and rational nature management; inclusion of energy security issues in state targeted, regional and local programs of social and economic development; the state system for monitoring environmental safety; ensuring access to justice on energy security issues, and the public - to information on the status of the energy market.

### CONFLICT OF INTEREST

The authors confirm that the information provided in the article does not contain a conflict of interest.

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#### Legal regulation of rational nature management in the energy sector

Regulação legal da gestão da natureza racional no setor energético

Regulación legal de la gestión racional de la naturaleza en el sector energético

## Resumo

Os autores ressaltam que a regulamentação jurídica do uso racional dos recursos naturais é um dos mais importantes direcionamentos da atuação do Estado para a garantia da segurança energética, papel do setor energético na configuração do curso econômico, político e social do país. é notado. Com base em uma análise jurídica comparativa, os autores empreendem uma busca pelos melhores métodos, métodos e meios de regulação estatal de gestão ambiental racional. É obvio que sem a devida compreensão teórica, analise jurídica comparada, é impossível prever formas de otimizar a regulação estatal do mercado de commodities, garantindo seu desenvolvimento sustentavel.

Palavras-chave: Apoio jurídico. Gestao da natureza. Recursos naturais. Meio ambiente. Segurança energética.

## **Abstract**

The authors make a point that the legal regulation of the rational use of natural resources is one of the most important directions of the state's activities to ensure energy security, the role of the energy sector in shaping the economic, political and social course of the country is noted. On the basis of a comparative legal analysis, the authors undertake a search for the most optimal methods, methods and means of state regulation of rational environmental management. It is obvious that without proper theoretical understanding, comparative legal analysis, it is impossible to predict ways to optimize state regulation of the commodity market, ensuring its sustainable development.

**Keywords:** Legal support. Nature management. Natural resources. Environment. Energy security.

#### Resumen

Los autores señalan que la regulación legal del uso racional de los recursos naturales es una de las direcciones más importantes de las actividades del estado para garantizar la seguridad energética, el papel del sector energético en la configuración del curso econômico, político y social del país, se anota. Sobre la base de un analisis jurídico comparativo, los autores emprenden una búsqueda de los métodos, métodos y medios más óptimos para la regulación estatal de la gestion ambiental racional. Es obvio que sin una comprensión teórica adecuada, un análisis jurídico comparativo, es imposible predecir formas de optimizar la regulación estatal del mercado de productos básicos, asegurando su desarrollo sostenible.

Palabras-clave: Apoyo legal. Manejo de la naturaleza. Recursos naturales. Medio ambiente. Seguridad