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**LEGAL REGULATION OF GAS SUPPLY IN RUSSIA AND CHINA:
COMPARATIVE STUDY**

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Introduction

The relevance of the research topic is due to the following reasons.

Firstly, we are talking about economic needs. Russia is the country with the largest reserves and exports of natural gas in the world, and China is the world's largest importer of natural gas. This means that cooperation between the two countries in the field of natural gas has an objective economic basis, is complementary and mutually beneficial. That is why the issues of Sino-Russian cooperation in the field of natural gas occupy a central place in the joint statement of the People's Republic of China and the Russian Federation on deepening the comprehensive partnership and strategic interaction entering a new era (March 21, 2023), made during the visit of Chinese President Xi Jinping to Russia. It is no coincidence that, in anticipation of this statement, Russian President V.V. Putin suggested that by 2030 the total volume of natural gas supplies from Russia to China will reach 98 billion cubic meters and 100 million tons of liquefied natural gas, and supported the construction of the new "Power of Siberia gas pipeline -2" (50 billion cubic meters of gas)¹. It is also important that the leaders of both countries emphasized the need to achieve carbon neutrality by 2060 as the main goal of climate policy².

In addition, it should be emphasized that in the context of intensifying confrontation between Russia and countries unfriendly to it, a turn to the East, in particular, strengthening economic cooperation with China, has acquired particular importance for easing political and economic pressure on Russia.

¹ Russian-Chinese negotiations / President of Russia. URL: <http://www.kremlin.ru/events/president/transcripts/70748> (date accessed: December 3, 2023).

² Speech by President of the People's Republic of China Xi Jinping during the general discussion at the 75th session of the UN General Assembly URL: <https://news.un.org/zh/story/2020/09/1067222> (date accessed December 3, 2023); Decree of the President of the Russian Federation dated October 26, 2023 No. 812 "On approval of the Climate Doctrine of the Russian Federation." - Access mode: SPS "ConsultantPlus" (date accessed December 3, 2023).

Secondly, the relevance of the chosen topic is explained by the fact that in Russia there are currently no studies of the legal regulation of relations in the field of gas supply in China, and the dissertation will be able to satisfy the needs of Chinese and Russian lawyers for legal knowledge of relevant issues.

Thirdly, “climate change is one of the most serious challenges of the 21st century, and represents a complex interdisciplinary problem.”³ The relevance is related to the need to reform the legal regulation of gas supply in the context of the transition of China and Russia to low-carbon and green energy. Based on the ancient Chinese philosophical thought about “harmony between man and nature,” the author proposes the concept of changing legislation (regulating gas supply issues in relations between China and Russia) (Chapter 1).

In 2020, to ensure non-discriminatory access to the national gas pipeline network for non-state-owned enterprises, China took sweeping measures to reform its legislation and completed the unbundling of the vertically integrated businesses of PetroChina, Sinopec and CNOOC. Thus, the assets of the national gas pipeline network were organized into a single national oil and gas pipeline network company (PipeChina Company), independent of PetroChina, Sinopec and CNOOC. A series of legal market reform measures implemented by the Chinese central government (Chapter 3, § 2) undoubtedly influenced the continued implementation of the original monopoly concession agreements signed between local governments and city gas supply companies (Chapter 2, § 1); stability and stability of monopoly provisions, such as destination restrictions in long-term natural gas purchase and sale agreements signed by Chinese buyers and international sellers (Chapter 2, § 2). The contradiction between market-oriented legal reform measures and the original monopoly agreement is currently a typical conflict between public and private law in China, which needs to be resolved urgently.

³ Decree of the President of the Russian Federation dated October 26, 2023 No. 812 “On approval of the Climate Doctrine of the Russian Federation” - Access mode: ATP “ConsultantPlus”.

Gas supply plays a key role in ensuring Russia's tax revenues and implementing the country's diplomatic strategy. Thus, Russian legal reform in the gas supply sector does not show a steady trend towards marketization, as in China, but is mainly related to the status of Russia's internal economic development and the strategic direction of national diplomatic development. For example, when Russia is in an economic recession, exceptional federal laws are passed to attract capital from specific countries (Chapter 3, § 1). To ensure stable taxation, Russia has always insisted on a model of a vertically integrated natural gas monopoly (Chapter 3, § 2).

The benefits of regulatory measures used by China and Russia to promote market reforms can serve as a basis and guide for further market reforms in the two countries.

The degree of scientific development of the topic. Research on market reforms in the gas supply sector of Russia is presented by the following Russian legal scholars: S. V. Vasilkova, A. P. Vershinin, O. A. Gorodov, N. G. Zhavoronkova, M. I. Cleandrov, K. V. Korepanov, TO. B. Kuznetsov, P. G. Lakhno, A. G. Lisitsyn-Svetlanov, D. A. Petrov, E. G. Pliev, V. F. Popondopulo, V. V. Romanova, O. N. Sadikov, R. N. Salieva, K. S. Semenovich, V. G. Tubdenov, L. I. Shevchenko, A. A. Yakhontova and others. Chinese legal scholars studying market gas reform in China are: Guo Jinping, Deng Haifeng, Li Xiandong, Li Yanfang, Chen Zhen, Zhang Libin Zhou Fenggao, Shi Shaohua and others.

In Soviet times, O. N. Sadikov's book "Legal Issues of Gas Supply" (1961) was published, in which the author examined the legal support and legal regulation of government bodies in the gas industry of the USSR, main gas pipeline transport, city gas supply organizations and contracts for the supply of gas to industrial enterprises.

The historical development of Russian gas supply, types of natural gas purchase and sale contracts and other issues of civil legal regulation of this area were

studied in the dissertation of A. A. Yakhontova “Legal regulation of gas supply in the Russian Federation” (Civil legal aspect) (2005).

A significant contribution to legal science is the doctoral dissertation of R. N. Salieva “Legal support for the development of entrepreneurship in the oil and gas sector of the economy” (2003). It examines various aspects of entrepreneurial activity of subjects of the oil and gas complex.

A study of the problems of legal regulation of environmental protection and ensuring environmental safety in the oil and gas complex was carried out by A. S. Kravtsova in her dissertation “Environmental and legal regulation of the construction and operation of linear facilities of the oil and gas complex” (2022).

K. B. Kuznetsov, in his dissertation “Agreements for the supply and transportation of gas through an interconnected network: legal nature, features of legal regulation” (2012), deeply studied the contract for network supply and transportation of natural gas, the legal nature and features of regulatory acts for the supply and transportation of natural gas in the network.

Scientific research from the perspective of energy law as an independent legal discipline is the main direction of research into gas supply law in the future. V. G. Tubdenov, in his dissertation on the topic “Legal status of extractive energy companies in the oil and gas complex” (2018), based on the characteristics of the energy industry, considers the legal status of extractive energy companies in the oil and gas complex and academically studies it from the perspective of contractual and international law.

K. V. Korepanov’s dissertation on the topic “Legal regulation of the transportation of oil and gas through main pipelines” (2016) also examines the legal relations for the transportation of oil and gas through main pipelines from the point of view of contracts and government regulation.

V. V. Romanova’s doctoral dissertation entitled “Legal regulation of the construction and modernization of energy facilities” (2012) examines the prospects

for the legal regulation of gas supply as a special and important classification of energy law.

A comparative study of the legal regulation of gas supply in Russia and China has not been conducted.

The object of the dissertation research is social relations arising in the field of exploration, production, transportation, storage and supply of natural gas.

The subject of the dissertation research is the legislative norms regulating the supply of natural gas, judicial practice, theoretical developments in China and Russia.

The purpose of the dissertation research is to develop a theoretical basis for promoting market mechanisms in the field of exploration, production, transportation, storage and supply of natural gas in China and Russia, identifying gaps in legal regulation, and formulating proposals for the unification of legal norms governing the mechanism for promoting marketing and commercialization in gas supply sector.

The objectives of the dissertation research are determined by the stated purpose and include:

- proposal for a legislative concept of modern energy law;
- analysis of regulatory legal acts of the People's Republic of China and the Russian Federation, international treaties, legal doctrine and other sources of energy law on the topic of dissertation research;
- study of legislative norms governing market reforms in the gas supply sector in the People's Republic of China and the Russian Federation;
- identifying the features of legal regulation of market reforms in the field of exploration, production, transportation, storage and sale of natural gas in the People's Republic of China and the Russian Federation;
- disclosure of the legal nature of public relations related to marketization reforms in the field of exploration, production, transportation, storage and supply of natural gas in the People's Republic of China and the Russian Federation;
- clarifying the legal requirements for the separation of vertically integrated state-owned oil and gas companies in the People's Republic of China;

- consideration of the legal nature, procedure for concluding and executing a concession agreement on urban gas supply in the People's Republic of China;
- analysis of the concept, legal nature and implementation of fair competition conditions in international contracts for the sale and purchase of natural gas;
- substantiation of conclusions, proposals, scientific recommendations on market mechanisms in gas supply in the People's Republic of China and the Russian Federation.

The methodological basis of the research is general scientific and private methods of cognition: comparative law, historical, synthesis, hypothesis, systemic legal, logical. Among the methods most in demand by the author, attention should be paid to the method of historical research and the comparative method.

The theoretical and practical significance of the study lies in the fact that the results of the study, theoretical principles and recommendations can be used in further study of legal problems that arise when promoting a market mechanism in the field of gas supply, in scientific activities, in the process of rulemaking, law enforcement, as well as in educational activities. process.

The theoretical basis of the dissertation consists of scientific works in the field of energy law by such Russian and Chinese scientists as:

A. P. Vershinin, O. A. Gorodov, K. V. Korepanov, K. B. Kuznetsov, P. G. Lakhno, A. G. Lisitsin-Svetlanov, A. Yu. Moskvichev, D. A. Petrov, V. F. Popondopulo, V. V. Romanova, V. G. Tubdenov, L. I. Shevchenko, A. A. Yakhontova, Wang Meitian (王美田), Deng Haifeng (邓海峰), Lu Miao (吕淼), Meng Yangbei (孟雁北), Sun Zhe (孙哲), Xiao Guoxing (肖国兴), Chen Xinghui (陈兴华), Chen Sinishon (陈新松), Chen Jiaru (陈嘉茹) and others. The works of these Russian and Chinese scientists made a great contribution to the science of energy law and were used in this dissertation research..

Scientific works on Russian and Chinese business, corporate, civil, and tax law were also studied. Among these works are the works of N. G. Zhavoronkova, O. A. Makarova, O. Yu. Skvortsov, Gong Baihua (龚柏华), Ding Ding (丁丁),

Kong Qingjian (孔庆江), Liu Junhai (刘俊海), Xu Yugao (徐玉高), Jiang Shan (江山), Cui Jianyuan (崔建远), Zhang Shouwen (张守文).

The works of foreign scientists were studied, including the works of A. Konoplyanik, Ben Holland, James Atkin, John Roberts, Kim Talus, Michael Polkinghorne, Michal Meidan, Niall Trimble, Paul Griffin, Raphael Heffron, Steven Finizio, Chantal Carriere and others..

The normative basis of the study is the norms of the Constitution of the Russian Federation and federal laws, decrees of the President of the Russian Federation, decrees of the Government of the Russian Federation, regulatory legal acts of federal executive bodies, international treaties; norms of the Constitution of the People's Republic of China, laws, administrative regulations and rules of the People's Republic of China, municipal legal regulations of the People's Republic of China and legislation of foreign countries in the field of gas supply.

The empirical basis of the dissertation research consists of materials from judicial practice, namely acts of arbitration courts of the Russian Federation, acts of the Supreme People's Court of the People's Republic of China and international commercial arbitrations, as well as the provisions of the concession agreement on urban gas supply and international contracts for the sale and purchase of natural gas.

The scientific novelty of the dissertation research lies in the fact that

Firstly, the concept of “the theory of harmony between man and nature” was put forward in energy legislation; And based on this concept of energy legislation, the concept of gas supply was proposed.

Secondly, for the first time in the theory of energy law, it carried out a comprehensive comparative legal analysis of legal norms related to market reform in the gas supply sector of China and Russia.

Thirdly, the result of the study was the creation of the author’s concept of changing the legal regulation of gas supply in two countries and, on this basis, the identification of general trends in market reform in this area, the identification of structures, properties and principles of its implementation, as well as the features of

legal regulation related to the implementation of market reforms in gas supply sector, their structures, properties and principles of construction in China and Russia.

Basic provisions containing elements of novelty submitted for defense:

1. The theory of ancient Chinese philosophical thought about the “unity of nature and man” should be transformed into the legislative concept of energy law.

2. Gas supply, from the point of view of the “theory of the commonality of nature and man,” should be understood as activities to provide consumers with gas, including activities to form a fund of explored gas deposits, production, transportation, storage and supply of gas in conditions of dynamic legal regulation of non-economic purposes such as national energy security and carbon neutrality.

3. According to the legal concept of gas supply (Article 2 of the Federal Law “On Gas Supply in the Russian Federation”), a gas supply agreement should be defined as a general set of agreements in the field of exploration, production, transportation, storage and supply of natural gas. A natural gas purchase and sale agreement should be construed only as a natural gas supply agreement and not as a gas supply agreement.

4. The city pipeline gas concession agreement in China and the agreement for the transfer of the right to use a natural gas field in China or Russia are cross-regulated by public and private law. That is, it is impossible to determine the legal nature of these agreements as exclusively private law or public law.

5. The three main provisions regulating the domestic natural gas import market in international treaties are: “destination restriction”, “take or pay” and “price review”. These provisions ensure balance and stability of the rights and obligations of the buyer and seller in the contract (for a period of at least 15 years) and thereby limit the use of market mechanisms. Competition authorities in natural gas importing countries must consider the contribution of international natural gas supplies to social stability and energy security, and not just consider the market reform demands of their own countries..

6. The reform of gas supply legislation in China was carried out as follows: from a state administrative monopoly to a combination of state administrative supervision with market competition, and a gradual transition to the distribution of market resources.

7. The legal characteristics of the natural gas market reform in China are stability, long-term nature and gradualism, and in Russia - suddenness (quick decision-making), abruptness (rapid change). Although the legal level of market regulation of natural gas supplies in Russia is higher than in China, a comparative analysis shows that market openness and free competition in China in the field of exploration, production and sale of natural gas are much higher than in Russia. As long as Russia can guarantee non-discriminatory access to the gas pipeline network for third parties, it does not need to undertake the kind of legal reforms that have been implemented in China, since this will inevitably lead to the destruction of the national gas pipeline networks of natural gas companies.

Main scientific results:

An analysis of the prospects for cooperation between China and Russia in the field of gas supply was carried out⁴. Based on a summary of the types of natural gas purchase and sale agreements between China and Russia, the following conclusion is drawn: Chinese private enterprises will become important buyers of foreign LNG in the future⁵.

Legislators in China and Russia should benefit from each other's positive experiences. It would be useful for China to regulate resource protection and environmental safety at the legislative level, rather than through administrative regulations⁶. The Russian legislator can be recommended to more actively stimulate

⁴ Gao Yu. Prospects for Chinese-Russian cooperation in the field of gas supply // Legal Energy Forum 2023. No. 2. P. 34.

⁵ *Ibid.*, p. 33.

⁶ Gao Yu, Bolotov M.V. Legal aspects of ensuring national security in the field of subsoil use of natural gas in Russia and China. // Legal Research 2022. No. 2. P.2.

foreign and domestic private companies to participate in competitive relations in the market for exploration and production of natural gas⁷.

A classification and comparison of models of concession agreements on urban gas supply and an analysis of relevant cases in the field of natural gas supply were carried out⁸. A contradiction has been identified between the concession agreement on urban gas supply and the implementation of a market-oriented mechanism in China, and ways to resolve this contradiction have been proposed⁹.

It is shown that in the field of natural gas supply, the administrative monopoly power of the three largest state-owned oil and gas companies in China is the main reason preventing the introduction of a system of legal regulation of the market mechanism in China¹⁰. By analyzing the corporate reforms of China's three largest oil and gas companies to achieve carbon neutrality by 2060, the following conclusions were drawn: The green transformation of China's three largest oil and gas companies facilitated the implementation of the market-oriented "X+1+X" reform in China's natural gas market¹¹.

A critical analysis of the types of gas purchase and sale agreements (short-term, medium-term, long-term and contractual resource pool (LNG portfolio optimization)) concluded by China and Russia in the field of natural gas supplies was carried out¹². The advantages and disadvantages of long-term, short-term and spot contracts for the purchase and sale of natural gas and their competing relationships are considered¹³. By studying the history of changes in price formula

⁷ *Ibid.*, p. 6.

⁸ Gao Yu. Implementation of the market mechanism in the field of gas supply in China // Current problems of modern law in Russia and China in the context of global economic changes 2023. Monograph pp. 107-110.

⁹ *Ibid.*, p.113-114..

¹⁰ *Ibid.*, p.110-111.

¹¹ Gao Yu. Implementation of the market mechanism in the field of gas supply in China // Current problems of modern law in Russia and China in the context of global economic changes 2023. Monograph pp. 107-110.

¹² Semenovich K.S., Gao Y. On ensuring stable supplies of natural gas in China and Japan. // International law and international organizations 2022. No. 1. P.37.

¹³ *Ibid.*, p.38-39.

provisions, oil and gas companies in China and Russia are advised to use the comprehensive emerging trading center price index, spot prices and the price formula calculated by the JCC (Japanese Crude Cocktail) when signing new long-term natural gas sales contracts¹⁴.

Changes and trends in the legal regulation of natural gas market reforms in China have been studied. The method of legal regulation in China has gradually shifted from state administrative monopoly to a combination of state administrative control and market competition, and finally to market resource allocation¹⁵. The effectiveness of lawmaking in China, first of all, depends on clearly setting the goals of introducing legislative changes and assessing their impact on public relations in a systematic connection with other legal institutions¹⁶.

Structure of the dissertation. The dissertation research consists of an introduction, three chapters combining seven paragraphs, a conclusion, and a list of references.

¹⁴ *Ibid.*, p.40-41.

¹⁵ Gao Yu, Bolotov M.V. Legal aspects of ensuring national security in the field of subsoil use of natural gas in Russia and China. // *Legal Research* 2022. No. 2. P. 6.

¹⁶ Panfilov G.P., Gao Y. Reforming the system of oil and gas natural resource payments in order to attract investment: the experience of the People's Republic of China. // *Law and Politics* 2020. No. 3. P. 14.

Chapter 1. General characteristics of the legal regulation of gas supply activities in Russia and China

§ 1.1. Concept of gas supply activities

Differences in the economic systems of different countries determine the features of the legal regulation of relations in the field of gas supply in each country, the goals and objectives of their legislation. Today's energy policy in various states often influences the general trend in the development of current gas supply legislation. Features of the legal regulation of gas supply relations were previously reflected in determining the legal status of gas supply companies and state control over activities in this area. Today this is more reflected in the “impact” of climate policy on traditional relations in the gas supply sector.

Until 2017, the characteristics of the legal regulation of relations in the field of gas supply in China and Russia were similar: the public authorities of both countries were very actively involved in the field of regulation of gas supply and strictly controlled the relevant field of activity. At present, gas supply legislation in China and Russia differs depending on the energy regulatory system, but they require a certain degree of systematization, standardization and modernization. In the field of energy law in China and Russia, there are discussions on general issues, such as the concept of gas supply activities, and the systematization of energy legislation, as well as debates on further improving the legal regulation of relations in the field of gas supply. Although the Chinese market is currently the priority market for Russian natural gas exports, there is little research work in China and Russia that specifically examines the legal structures of gas supplies.

According to Article 2 of the Law of the Russian Federation “On Gas Supply”, the concept of gas supply is defined as: one of the forms of energy supply, which is the activity of providing consumers with gas, including the activity of forming a

fund of explored gas fields, production, transportation, storage and supply of gas¹⁷. Having defined gas supply as one of the forms of energy supply, the Russian legislator poses the difficult task of determining the legal nature of the relevant agreements¹⁸. Legal regulation of gas supply relations is carried out by various regulatory legal acts. Analysis of the sources of energy law allows us to determine the rules for their application¹⁹. Therefore, in this chapter, based on the analysis of energy law, the concept of gas supply is derived.

Before defining the concept of energy law, we should first clarify what energy relations are. V. F. Popondopulo notes, “Energy relations are relations in the production, transmission and consumption of energy, including electricity and its other types.”²⁰ According to R.N. Salieva, The peculiarities of relations in the energy sector are manifested in the fact that they are heterogeneous in nature, these include: relations associated with the extraction of certain types of energy resources (primary energy sources), their subsequent processing, transportation, sale, as well as relations associated with delivery and sale of energy resources to end consumers.²¹ Consequently, energy relations are the object of civil law regulation based on the equality of participants in energy relations, autonomy of will and property independence. Energy relations determine the relationship between the activities of public organizations in the energy sector.

In order to ensure energy security and protect the production and consumption of energy, it is objectively necessary to limit the private freedom of energy companies and energy consumers through antimonopoly regulation and supervision

¹⁷ Federal Law of March 31, 1999 No. 69 Federal Law “On Gas Supply in the Russian Federation” (as amended on March 18, 2023). - Access mode: SPS “ConsultantPlus”.

¹⁸ Yakhontova A.A. “Legal regulation of gas supply in the Russian Federation” (Civil aspect) candidate of legal sciences. Abstract of dissertation. ... Ph.D. M., 2005. P. 4.

¹⁹ Korepanova K.V. Legal regulation of oil and gas transportation through main pipelines. Abstract of dissertation. ... Ph.D. M., 2016. P. 17.

²⁰ Popondopulo V.F. Energy law and energy legislation: general characteristics, trends and developments. // Jurisprudence 2007. No. 3 (272). P. 3.

²¹ Salieva R. N. Specificity of legal relations in the energy sector. // Legal relationship: theory and practice of modern legal regulation, materials of the All-Russian scientific and practical conference. Kazan, 2022. P. 469.

over the access of foreign and private capital, as well as other state supervision of relations in the energy sector. A. G. Lisitsyn-Svetlanov believes that in order to achieve energy security, a proven legal policy is needed that ensures a balance of market relations aimed at making a profit and providing social protection for the population, small and medium-sized businesses²².

According to Zhang Yong, energy relations include all aspects of exploration and development of energy resources, their transportation, storage and sale,²³ which means that energy law has the following characteristics: firstly, it is a prerequisite for the emergence of energy relations; secondly, energy relations differ from social relations themselves, which are adjusted or protected by energy law; Third, transformational development and profound changes in the energy sector mean that complex energy relationships will continue to emerge²⁴. For example, in the context of the transition to renewable energy in the 21st century, energy development must take into account environmental requirements related to environmental protection.

In Chinese and Russian legal literature, scholars from both China and Russia have not reached a consensus on the definition of energy law.

O. A. Gorodov believes that “energy law comprehensively regulates the production, transformation, transmission, sales, use of various types of energy and energy conservation, as well as energy security issues based on permits, prohibitions and obligations. legal norms of social relations.”²⁵ Energy law can be defined as a system of legal norms regulating the production, transformation, transmission,

²² Lisitsyn-Svetlanov A. G. About the monograph “Current tasks of energy law” edited by Doctor of Law, Professor V.V. Romanova. // *Energy Law Forum* 2023. No. 1. P. 13.

²³ 能源基本法研究. 张勇. - 北京: 法律出版社. [Research in the field of the Basic Law of Energy / Ed. Yun, Zhang. - Beijing: Legal Press]. 2011. P. 130.

²⁴ 能源法学. 李响、陈熹、彭亮. 山西: 山西经济出版社. [Energy Law / Ed. Li Xiang, Chen Xi, Peng Liang. - Shanxi: Shanxi Economic Publishing House]. 2016. P. 4.; 叶荣泗. 能源法事业方兴未艾 同志仍需砥砺前行-为纪念能源法研究会成立20周年而作 // 中国能源法研究报告 [Rongxi, Ye The case of energy law is on the rise and comrades still need to move forward - written to commemorate the 20th anniversary of the establishment of the Energy Law Research Association // *China Energy Law Research Report*]. 2018. P. 13.

²⁵ Gorodov O.A. Introduction to energy law: textbook. M.: Prospekt, 2021 pp. 13-14.

organization of sale, sale, use and protection of various types of energy and ensuring energy security on a comprehensive basis of permissions, prohibitions and obligations ²⁶.

V.V. Romanova, defines “energy law as a branch of law that unites legal norms governing social relations (private law and public law) related to extraction, production, supply, processing, transportation, storage, supply, operation, design, construction, operation and modernization of energy facilities related to the extraction, production, supply, processing, transportation, storage and supply of energy resources.”²⁷ According to A.G. Lisitsyn-Svetlanov, “An energy project cannot be considered as a private transaction. It necessarily affects both public interest and public legal regulation.” ²⁸

In accordance with the point of view of S. S. Seliverstov, energy law can be defined as a set of legal norms regulating social relations that develop in the process of economic, investment and regulatory activities of subjects of private and public law related to exploration, extraction, production, processing, storage , transportation, distribution, trade and consumption of energy resources ²⁹.

The concept of energy law in China. The views of Chinese scholars regarding the concept of energy law can be divided into three groups: **the industrial school, the law school and the philosophical school.**

1. Industrial school.

The definition of energy law from the point of view of the industrial school includes the entire cycle of energy production activities, from mining to delivery to consumers. Currently, this approach is the academic view of most scholars in China,

²⁶ Salieva R.N. Public relations in the energy sector and energy legislation in modern Russia. // Energy law: models and development trends, collection of materials from the International Scientific and Practical Conference. Executive editor A.V. Gabov. 2020. P. 70.

²⁷ Romanova V.V. Energy law. M., 2021.P. 9.

²⁸ Lisitsyn-Svetlanov A. G. Legal aspects of ensuring the stability of energy projects. // Legal Energy Forum 2022. No. 2. P. 13.

²⁹ Seliverstov S.S. On the issue of the concept of energy law. // Energy Law 2008. No. 1. P. 57.

as well as energy law experts³⁰. This school of thought mainly defines energy law based on the characteristics and industry regulations of various energy fields. For example, the Energy Law Research Association of the China Law Society defines energy law as a set of rules governing the development, use and management of energy to optimize the energy industry to improve energy efficiency, ensure energy security, economic and social sustainability³¹.

Within this school there are also subtle differences in definitions of energy relations. Thus, according to Li Xiang, energy legislation regulates relations in the field of exploration, development, production, transportation, trade, consumption, use, international cooperation, safety, environmental protection, as well as the implementation of energy security and energy efficiency goals³².

Yu Wenxuan believes that energy law is a general term for the legal rules formulated by the state to regulate various social relations arising from the rational development, processing, transformation, storage, transportation, supply, use, trade and management of energy³³.

Zhou Fenghao distinguishes energy legislation in a narrow and broad sense. In a narrow sense, energy legislation includes the Energy Law of the People's Republic of China. In a broad sense, it includes all legislative and by-laws of China regulating energy relations³⁴.

³⁰ Introduction to the Energy Law Research Society of China Law Society, website:<http://energylaw.chinalaw.org.cn/portal/list/index/id/15.html> (access date: December 3, 2023)

³¹ 能源法学总论. 中国法学会能源法研究会. - 北京: 法律出版社. [General introduction to energy law / Ed. Chinese Law Society, Energy Law Research Association. - Beijing: Legal Press]. 2019. 页 1.

³² 能源法学. 李响、陈熹、彭亮. 山西: 山西经济出版社. [Energy Law / Ed. Li Xiang, Chen Xi, Peng Liang. - Shanxi: Shanxi Economic Publishing House]. 2016. 页 4.

³³ 中国能源法制导论-以应对气候变化为背景. 于文轩. 北京: 中国政法出版社. [Introduction to China's energy legal system - against the backdrop of addressing climate change / Ed. Wenxuan, Yu - Beijing: Chinese Political and Legal Publishing House]. 2016. 页 3.

³⁴ 周凤翱, 李梦瑶. 中国能源法的域外适用 // 华北电力大学学报(社会科学版) [Zhou Fenghao, Li Mengyao Extraterritorial application of China's energy law // Journal of North China Electric Power University (social science publication)]. 2020. №.4. 页17-18.

Zhao Shuang believes that energy law is the sum of legal rules governing social relations in the field of production, use and management of energy, and is a general term for legal rules governing various social relations in the field of energy³⁵.

In particular, within the framework of this school, the “Revolutionary School of Energy Law” was also formed, represented by the scientist Xiao Guoxing. This school of thought believes that energy law should promote the legislative concept of breaking the monopoly of the energy market and creating a market-oriented system in all areas and parts of the energy sector³⁶.

Xiao Tiaangang believes that the definition of energy law can be divided into energy law in the formal sense and energy law in the essence. Energy law in a formal sense mainly refers to energy law, which is the various forms through which energy law rules are expressed. Energy legislation is intended to regulate relations between energy market entities in the field of exploration, development, production, transportation of energy, trade, consumption, disposal, international cooperation, safety, environmental protection and other areas, as well as to achieve the goals of energy security, energy efficiency and protection environment³⁷.

2. School of Public Law and Private Law.

Since since the founding of the People's Republic of China, its legislation has long been under the “influence of the jurisprudence of the USSR” (“denial of public

³⁵ 能源法学. 赵爽. 北京: 法律出版社. [Energy Law / Ed. Shuang, Zhao. - Beijing: Legal Press]. 2022. 页 25.

³⁶ See the series of works by Xiao Guoxing: “The legal path of development and transformation of energy: from resource advantage to competitive advantage” (“Zhongzhou Academic Journal”, 2013, no. 11); “Legal choice of development and transformation of energy against the backdrop of the energy revolution” (“Legal Science”, 2014, no. 11); “Energy Revolution and Institutional Dimension of Energy Law” (“Journal of Zhengzhou University (Philosophy and Social Sciences Edition)”, 2018, No. 6); “The revolution of the energy system determines energy law” Revolution” (“Legal Science” 2019, no. 12); “On the Legal Implementation of the Low-Carbon Revolution and the Energy Revolution (Journal of Nanjing University of Technology (Social Science Edition)”, 2022, No.2).

³⁷ 能源法. 肖乾刚、肖国兴. 北京: 法律出版社. [Energy Law / Ed. Xiao Gangan, Xiao Guoxing. - Beijing: Legal Press]. 1996. 页 56.; 能源法学. 李响、陈熹、彭亮. 山西: 山西经济出版社. [Energy Law / Ed. Li Xiang, Chen Xi, Peng Liang. - Shanxi: Shanxi Economic Publishing House]. 2016. 页 4.

law and private law”), practically no research has been carried out in this area in China. One of the few works that examines this issue in detail is the article by the Japanese scientist, Dr. Minobe, “Public Law and Private Law.”³⁸ Chinese scholars even believe that the Anglo-American legal system does not consider the separation of public and private law to be the center of its system of legal concepts³⁹.

Although there are very few scholars in China who use the distinction between public and private law to define energy law, their views are very similar to those of Professor V.V. Romanova. For example, Zhang Zhongmin believes that energy law can be divided into public energy law and private energy law. Public energy law mainly regulates issues related to government policy in the energy sector; Private energy law, in particular, achieves its goals by regulating issues of property rights and contract law.⁴⁰

3. Philosophical school.

In 2021, 140 countries have set goals to achieve carbon neutrality⁴¹. The climate agenda and the new energy transition also require a change in the structure of energy consumption⁴². Currently, not only China and Russia, but also most countries in the world are faced with the problem of transition to a low-carbon energy structure.⁴³

³⁸ 但见亮. 中国公法与私法的关系——以“美浓部理论”为线索 // 交大法学 [凌维慈 (译) The relationship between public and private law in China - using the “Minobu theory” as a clue // SJTU Law Review]. 2013. №1. 页132.

³⁹ 卜璐. 外国公法在美国法院的效力和适用 // 国际法研究 [Lu Bu Action and application of foreign public law in US courts // International Law Studies]. 2019. №4. 页78.

⁴⁰ 张忠民. 能源危机的私法应对——以能源合同为中心 // 法商研究 [Zhongmin, Zhang Private law response to the energy crisis - the focus of energy treaties // Legal and business research]. 2013. №2. 页25.

⁴¹ Gao Yu. Background to the implementation of the carbon-neutral policy of Russia, China and the EU in gas supply // Historical sociology and modern social development in Russia and China: collection of articles of the XVIII Russian-Chinese sociological conference. St. Petersburg, 2022. pp. 533-538.

⁴² Semenov K.S. Low-carbon energy in Russia. // Legal regulation of the activities of the fuel and energy complex in modern conditions: collection of proceedings of the conference of young scientists Moscow, 2021. P. 335.

⁴³ Gao Y., Bolotov M.V. Legal aspects of ensuring national security in the field of subsoil use of natural gas in Russia and China // Legal studies. 2022. No. 2. P.2.

And many of the most important national strategic planning documents at the federal level in Russia point to the importance of achieving the best balance between ensuring national energy security and the need to solve existing environmental problems ⁴⁴.

Currently, practical issues related to energy law, such as the environmental impact of energy, climate change mitigation strategies and the transition to a low-carbon economy, are among the most pressing topics and are of greatest concern to human society. “Reducing the negative impact of the fuel and energy complex on the environment and adapting them to climate change” are the goals and priorities of the Russian Federation’s energy development until 2035⁴⁵. Resolving these issues should be considered as the main goal to be addressed by modern energy law.

Natural gas is the most environmentally friendly of hydrocarbons and the best product for the transition to green energy ⁴⁶. Gas supply legislation should include energy policies and laws that reflect modern modernization of energy management. ⁴⁷. Legal regulation of gas supply is inextricably linked with energy policy and climate policy.

Legislation in the field of gas supply is often a legal reflection of the state's energy policy and climate policy. Those. The national “green” agenda cannot do without resolving issues related to gas production and transportation⁴⁸. Most energy

⁴⁴ Kravtsova Ainura Sabyrgalievna Environmental and legal regulation of the construction and operation of linear facilities of the oil and gas complex. Abstract of dissertation. ... Ph.D. M., 2022. p. 4.

⁴⁵ Order of the Government of the Russian Federation dated 06/09/2020 No. 1523-r “On approval of the Energy Strategy of the Russian Federation for the period until 2035” (as amended on 02/28/2024) - Access mode: ATP “ConsultantPlus”.

⁴⁶ Website of the Russian Ministry of Foreign Affairs: <https://www.mid.ru/upload/archive/9c61e3b94ee7ff83a915412ab7be40c6.docx> (accessed December 3, 2023)

⁴⁷ 胡德胜. 生态文明与互联网时代的能源立法现代化 // 中州学刊 [Desheng, Hu Ecological civilization and modernization of energy legislation in the Internet era // Zhongzhou Academic Journal]. 2022. No.8. 页 57.

⁴⁸ Romanova V.V. Modern trends in the development of the legal regime of gas - a strategy for low-carbon and innovative development. // Legal Energy Forum 2023. No. 3. P. 11.

legislation, including the gas supply law, is regulatory in nature⁴⁹. Low-carbon energy goals should be the only way to legally regulate gas supply in China⁵⁰. If the definition of legal regulation of gas supply cannot meet the regulatory requirements of modern energy policy and climate policy, it will lose its legislative significance and role. Therefore, creating practical and enforceable gas laws and systems is fundamental to achieving the goal of carbon neutrality and profound changes in the gas industry⁵¹.

In China, in order to achieve the climate goal of carbon neutrality, China's three largest state-owned oil and gas companies have shifted their business focus from traditional oil and gas to low-carbon and clean integrated energy⁵². Since China is actively implementing a carbon-neutral climate policy, the issue of compliance with

⁴⁹ Iñigo del Guayo, The evolution of principles of energy law (a review of the content of the Journal of Energy & Natural Resources Law, 1982–2022), Journal of Energy & Natural Resources Law, № 1, p.43.

⁵⁰ 邓海峰、刘玲利. 低碳经济与能源法的制度构建 // 中国环境法治 [Deng Haifeng, Liu Lingli Institutional building of low-carbon economy and energy law // Rule of law in the field of environmental protection in China]. 2009. №.1. 页 84..

⁵¹ 邓海峰, 尹瑞龙. 碳中和愿景下我国碳排放权交易的功能与制度构造研究 // 北方法学 [Deng Haifeng, Yin Ruilong Research on the functions and institutional structure of carbon trading in China under the concept of carbon neutrality. //Northern jurisprudence]. 2022. №.2. 页 5.

⁵² Sinopec proposed the company's transformation goals to become "China's No. 1 hydrogen energy company" and "the world's leading clean energy chemical company." PetroChina will follow a transformation path in three stages: "clean replacement", "strategic replacement" and "green transformation". Efforts will be made to create a "low-carbon energy ecosystem" with integrated development of fossil energy and clean energy. European energy giants have taken the most decisive action yet on the energy transition: In 2020, BP and the Italian group Eni abandoned the traditional business structures associated with exploration and production, transport and others of the past and created low-carbon and clean energy businesses. Shell reorganized its oil and gas production and refining activities, combined its natural gas and new energy businesses, and created an "integrated natural gas and new energy division." Total also reorganized and created a "department for natural gas, renewable energy and electricity." 徐东, 陈明卓, 胡俊卿. 国际石油公司能源转型回顾与展望 // 油气与新能源 [Dong, Xu, Chen Mingzhuo, Hu Junqing Review and prospects for energy transformation of international oil companies //Oil and gas and new energy]. 2022. №.2 (34). 页 2.

environmental requirements is becoming increasingly relevant for organizations in the Russian fuel and energy complex⁵³.

The question of how to solve these environmental problems was also included in Russia's 2020 constitutional innovation⁵⁴. According to Article 144 of the Constitution of the Russian Federation, the Government of the Russian Federation is implementing measures aimed at creating favorable living conditions for the population, reducing the negative impact of economic and other activities on the environment, and preserving the unique natural and biological diversity of the country. According to the Energy Strategy of the Russian Federation, one of the tasks in the fight against climate change is the implementation of state regulation of greenhouse gas emissions and other anthropogenic impacts of the fuel and energy complex⁵⁵.

S.A. Svirkov believes that “The main problem of the legal doctrine is the urgent need to develop conceptual (doctrinal) foundations, a certain philosophy (ideology) of individual institutions of energy legislation.”⁵⁶. In fact, the legislative philosophy of the Chinese school of energy law philosophy is almost the same as what China is pursuing in its climate goal of achieving carbon neutrality by 2060: to achieve harmony between nature and humanity⁵⁷. The philosophical school always believes that after the industrial revolution, most countries followed the capitalist logic of profit maximization in the legal regulation of energy⁵⁸. In other words, in the past,

⁵³ Salieva R.N. The compliance control system as part of the corporate management activities of energy companies in the field of subsoil use. // *Legal Energy Forum* 2022. No. 1. P. 34.

⁵⁴ Cleandrov M.I. General problematic approaches to the legal regulation of relations in the field of green energy. // *Legal Energy Forum* 2021. No. 2. P. 15

⁵⁵ Salieva R. N. State regulation in the field of limiting greenhouse gas emissions in the context of the transition to low-carbon energy in the Russian Federation. // *Legal Energy Forum* 2022. No. 3. P. 17.

⁵⁶ Svirkov S.A. Legal regulation of access to technological infrastructure in the fuel and energy complex // *Bulletin of Moscow University. Episode 11: Law*. 2023. No. 3. P. 84.

⁵⁷ Speech by the President of the People's Republic of China Xi Jinping during the general discussion at the 75th session of the UN General Assembly / <https://news.un.org/zh/story/2020/09/1067222> (accessed December 3, 2023)

⁵⁸ Juan Carlos Boue The British model of Petroleum Governance from 1970-2018 The UK North Sea as a Global Experiment In *Neoliberal Resource Extraction*, Platform London and Public

energy legislation focused only on legal analysis, ignoring the interests of future generations and other moral issues⁵⁹. This school of thought also believes that the excessive prosperity of private energy relations in the past has obviously failed to meet the needs of countries around the world to build an ecological civilization in the energy sector⁶⁰. This concept also recognizes that energy law must move beyond an economic-oriented approach and consider solutions to problems that are not based solely on economic interests⁶¹.

The ideas of the representatives of the philosophical school in China can be divided into two groups: **the period of enlightenment and the period of growth**.

Scientists of the Enlightenment period are represented by Cao Mingde and Gong Xiangxiang. In 2006, Cao Mingde noted that the current and future development trends of Chinese environmental resource and energy law are reflected in the ethics of environmental law and energy law, moving from narrow anthropocentrism to the harmonious coexistence of man and nature⁶². However, the joint discussion of energy law and environmental law shows that energy law indeed failed to become an independent legal branch at that time. This also shows that energy law and environmental law are closely related.

In 2007, two Chinese scholars pointed out the relationship between climate change and energy legislation, and the resulting trend of environmental and humanistic energy legislation⁶³. In 2009, Gong Xiangqian also proposed that energy law should be developed in the direction of environmental and sustainable energy,

and Commercial Services Union, 2018. C. 4.

⁵⁹ Raphael J Heffron, Louis De Fontenelle etc. Pathways of scholarship for energy justice and the social contract, *Journal of Energy & Natural Resources Law*, 2023, Vol 41, № 2, p. 223-225.

⁶⁰ 邓海峰. 生态法治的整体主义自新进路 // 清华法学 [Haifeng, Deng A New Approach to Holism in Environmental Law Order // *Tsinghua Law*]. 2014. №.4. 页 169.

⁶¹ Raphael J Heffron, Kim Talus The development of energy law in the 21st century: a paradigm shift?, *Journal of World Energy Law and Business*, 2016, 3, p.2-4.

⁶² 曹明德. 中国环境资源法、能源法的现在与未来 // 法学论坛 [Minde, Cao The present and future of Chinese environmental resource and energy law // *Legal Forum*]. 2006. №.2. 页 5.

⁶³ 马俊驹 龚向前. 论能源法的变革 // 中国法学 [Xiangqian, Ma Junju Gong On changes in energy legislation // *Chinese jurisprudence*]. 2007. №.3. 页 150-155.

and the meanings of many laws should be consistent with the philosophy of coordination theory⁶⁴.

The growth period was represented by Hu Desheng, Li Jing and Ke Jian. Hu Desheng believes that energy legislation covers social relations arising from the production and supply of energy raw materials and products (commodities) by enterprises of the energy complex, as well as the implementation of energy saving and emission reduction measures that directly affect production, supply and energy consumption based on the concept of sustainable development, in order to maintain and promote the healthy development of a market economy in the energy sector, as well as to ensure national security, human well-being and the ecological environment, formulated or approved by the state to define the energy rights and energy obligations of the parties as the content general agreement term of legal norms⁶⁵.

After criticizing the failure of current energy legislation to respond to dual carbon targets, it borrowed the “environmental good” proposed by Ke Jian in environmental law as a legislative concept. He believed that low-carbon transformation and environmental rationality reflect a multidimensional concept of social practices and social values that are inclusive and balanced, such as security of energy supply, environmental protection, low-carbon development, efficiency and citizen protection⁶⁶.

It is worth noting that V.F. Popondopulo already drew attention to the problem of environmental compatibility in energy management in 2007. And he proposed introducing the “magic quadrangle” of energy policy, that is, entities undertake to

⁶⁴ 龚向前. 迈向可持续能源——能源法生态化变革的法理分析 // 中国地质大学学报 (社会科学版) [Xiangqian, Gong Towards sustainable energy - legal analysis of environmental reform of energy legislation // Journal of China University of Geosciences (social science publication)]. 2009. №.2. 页 35-36.

⁶⁵ 胡德胜. 论能源法的概念和调整范围 // 河北法学 [Desheng, Hu On the concept and scope of regulation of the Energy Law // Hebei Law School]. 2018. №.6. 页 43.

⁶⁶ 李静, 柯坚. 价值与功能之间: 碳达峰碳中和目标下我国能源法的转型重构 // 江苏大学学报 (社会科学版) [Li Jing, Ke Jian Between Value and Function: Transforming and Reconstructing Energy Laws to Achieve Carbon Peaking and Carbon Neutrality in China // Journal of Jiangsu University (Social Science Publication)]. 2022. №.3. 页 97.

undertake an energy supply that, as far as possible, should be: a) reliable, b) inexpensive, c) environmentally compatible and d) satisfying the interests of consumers.”⁶⁷.

According to M. I. Cleandrova: “It must be taken into account that today a new scientific and legal algorithm is needed to solve the problem of a “green” energy transition to sustainable economic development, an important goal of which can be considered to ensure compliance with environmental and climate human rights.”⁶⁸ And also, “...the need to really take into account the “green” impact on our economy, primarily when determining the strategic goals of its development.”⁶⁹ In this, this dissertation also agrees with the academic views of M.I. Cleandrova, who noted that solving energy saving issues is a segment of the science of energy law, and the problem of energy ecology already has a considerable amount of problems from the point of view of the science of energy law ⁷⁰.

Representatives of the philosophical school also exist in other countries, so J. Heffron, borrowing the concept of justice and social contract from Rousseau’s theory of social contract, indicated that energy justice should take place as a concept of energy legislation. That is, to address the economic and governance challenges of the energy sector, energy-induced climate change issues, including negative environmental impacts, a new social contract must be forged between the energy sector and society's stakeholders. The theory also borrows Isaac Newton's third law of motion to explain the created triangle model of the law of energy ⁷¹.

It should be noted that Western theories of energy justice cannot effectively

⁶⁷ Popondopulo V.F. Energy law and energy legislation: general characteristics, trends and developments. // Jurisprudence 2007. No. 3. P. 11.

⁶⁸ Cleandrov M.I. “Green” financing of “green” energy as a sector of the “green” economy: a brief overview of the state of scientific and legal support // Legal Energy Forum 2022. No. 2. P. 24.

⁶⁹ Cleandrov M.I. Energy and justice: modern problems of turbulence of legal regulation. // Legal Energy Forum 2023. No. 2. P. 9.

⁷⁰ Cleandrov M.I. Fundamental principles of energy law // Legal Energy Forum 2020. No. 2 (2). C. 20.

⁷¹ Raphael J Heffron, Louis De Fontenelle Implementing energy justice through a new social contract, *Journal of Energy & Natural Resources Law*, 2023, № 2, p.146.

explain the energy policies of countries that adhere to Confucian-Taoist ethics and culture⁷². Asian countries need to have energy legislation that is consistent with their traditional environmental philosophy and national interests⁷³. In order for countries adhering to Confucian-Taoist ethics and culture to borrow the ancient Eastern philosophy of “the unity of nature and man” to enrich their own legislative ideas on energy management and energy law, this ancient Eastern traditional thought must be transformed.

Thus, in this dissertation, the idealistic theory of ancient Chinese philosophical thought about the “unity of nature and man” is transformed into a legislative concept of energy law based on the “theory of the unity of nature and man.” In the “community of nature and man” theory of energy law, “nature” refers to the non-economic goals of legal regulation (such as national energy security and carbon neutrality), and “man” refers to the goals of legal regulation (from the point of view of the economic interests of active energy users). Energy law in the context of the theory of “community of nature and man” presupposes legal control and regulation of the coexistence and joint development of “nature” and “man” in order to realize public non-economic interests.

As a result, gas supply should be understood as the activity of providing consumers with gas, including the activity of forming a fund of explored gas fields, production, transportation, storage and supply of gas in the context of dynamic legal regulation of non-economic goals, such as national energy security and carbon neutrality.

⁷² 杨宗科. 论“新法学”的建设理路 // 法学 [Zongke, Yang On the theory of building a “new legal science” // jurisprudence]. 2020. №.7. 页 77.

⁷³ During the fifth century CE, Chinese Confucian and Taoist ideas were introduced to Korea, Japan, and other Asian countries and integrated with the institutions and cultures that pre-existed there. 张岱年. 中国哲学中“天人合一”思想的剖析 // 北京大学学报 (哲学社会科学版) [Nian, Zhang Dai Analysis of the idea of “Unity of Heaven and Man” in Chinese philosophy // Journal of Peking University (publication on philosophy and social sciences)]. 1985. №.1. 页 1. ; Japanese Confucian Philosophy Stanford Encyclopedia of Philosophy URL: <https://plato.stanford.edu/entries/japanese-confucian/>; Korean Confucianism, Stanford Encyclopedia of Philosophy URL: <https://plato.stanford.edu/entries/korean-confucianism/>

§ 1.2. Legislative and other sources regulating gas supply activities in Russia and China

According to V.F. Popondopulo: “The legislation regulating activities in the gas supply sector cannot but be complex, since activities in the energy sector generate not only horizontal (civil) but also vertical (administrative legal) relations, related, for example, to establishing control over compliance with special requirements for energy organizations, antimonopoly, tariff, technical regulation in this area, etc.”⁷⁴. Legislation regulating gas supply activities is part of the general energy legislation and is a set of laws and other regulatory legal acts regulating activities in the gas supply sector⁷⁵.

According to Article 3 of the Federal Law "On Gas Supply in the Russian Federation", legislative and regulatory regulation of gas supply in Russia is based on the Constitution of the Russian Federation, the Civil Code of the Russian Federation, the Federal Law of the Russian Federation "On Subsoil", the Federal Law of the Russian Federation "On Natural Monopolies", the Federal Law “On the continental shelf of the Russian Federation” and consists of this Federal Law, federal laws adopted in accordance with it, regulatory legal acts of the Russian Federation and regulatory legal acts of municipalities of the Russian Federation. The gas supply legislation system is represented by a) general legislation for all areas of natural gas and b) special legislation regulating the activities of the relevant gas supply areas.

Legislation common to all gas supply sectors is presented by: the Constitution of the Russian Federation. According to Article 9 of the Constitution of the Russian

⁷⁴ Popondopulo V.F. Energy law and energy legislation: general characteristics, trends and developments // Jurisprudence 2007. No. 3 (272). C. 3; 能源法学. 胡德胜. 北京: 北京大学出版社. [Energy Law / Ed. Desheng, Hu. - Beijing: Peking University Press]. 2017. 81.

⁷⁵ Lakhno P.G. Energy, energy, law // Energy and law M., 2008 P. 41.

Federation⁷⁶, land and other natural resources may be in private, state, municipal and other forms of ownership.

According to Article 9 of the Chinese Constitution, natural resources such as mineral deposits, watercourses, forests, mountains, grasslands, wastelands and tidal flats belong to the state.

General legislation also includes codified legislative acts, such as: the Civil Code of the Russian Federation and the Civil Code of the People's Republic of China and others.

Special legislation regulating the activities of the relevant gas supply sectors includes the following three areas:

1) In the field of exploration and production of natural gas:

In Russia, Federal Law No. 69-FZ dated March 31, 1999 “On gas supply in the Russian Federation”; Federal Law of the Russian Federation dated February 21, 1992 No. 2395-1 “On subsoil”; Federal Law of the Russian Federation dated April 29, 2008 No. 57-FZ “On the procedure for making foreign investments in business entities of strategic importance for ensuring the country’s defense and state security” and others.

In China, Order No. 18 of the President of the People's Republic of China of 2009, the Law on Mineral Resources of the People's Republic of China (2009 Amendment); Order of the State Council of the People's Republic of China No. 152 of 1994 "Detailed Rules for the Application of the Mineral Resources Law of the People's Republic of China"; Order of the State Council of the People's Republic of China No. 638 of 2013 “Regulations on External Cooperation in the Development of Onshore Petroleum Resources (Amendment of 2013).”⁷⁷ ; Order of the State

⁷⁶ Constitution of the Russian Federation (Adopted by popular vote on December 12, 1993) (with amendments approved during the all-Russian vote on July 1, 2020) - Access mode: ATP “ConsultantPlus”.

⁷⁷ 中华人民共和国对外合作开采陆上石油资源条例 (Regulations of the State Council of the People's Republic of China dated July 18, 2013 No. 638 “On joint foreign exploitation of onshore oil resources.”) // URI: <https://law.pkulaw.com/chinalaw/85c745367a805f48bdfb.html?keyword=%E5%AF%B9%E5%A4%96%E5%90%88%E4%BD%9C%E5%BC%80%E9%87%87%E9%99%86%E4%B8%8A>

Council of the People's Republic of China No. 607 of 2013 “Regulations on Foreign Joint Exploitation of Offshore Petroleum Resources (2013 Amendment)”⁷⁸ and others.

2) In the field of natural gas transportation:

In Russia, Federal Law No. 147 FZ “On Natural Monopolies”; Decree of the Government of the Russian Federation dated July 14, 1997 No. 858 “On ensuring access of independent organizations to the gas transmission system of the open joint-stock company Gazprom” and Decree of the Government of the Russian Federation dated November 24, 1998 No. 1370 “On approval of the Regulations on ensuring access of organizations to local gas distribution networks” and others.

In China, the Anti-Monopoly Law of the People's Republic of China 2022, adopted by the Standing Committee of the National People's Congress (NPC Standing Committee); Order of the Development and Reform Commission of the People's Republic of China No. 8 of 2014 “Measures for managing the construction and operation of gas infrastructure facilities”; National Development and Reform Foundation of the People's Republic of China No. 965 of 2017 “Medium and long-term planning of the oil and gas pipeline network”; Regulations on the Development and Reform of the Energy Industry of the People's Republic of China No. 916 of 2019 “Measures to supervise the integrity and openness of oil and gas pipeline network facilities” and others.

3) In the field of natural gas supply:

In Russia, for the domestic market: Decree of the Government of the Russian Federation dated 02/05/1998 No. 162 (as amended on 03/19/2020) “On approval of the Rules for gas supply in the Russian Federation”; and for foreign markets: Federal

[%E7%9F%B3%E6%B2%B9%E8%B5%84%E6%BA%90%E6%9D%A1%E4%BE%8B](#) (date accessed: December 3, 2023).

⁷⁸ 中华人民共和国对外合作开采海洋石油资源条例 (Regulation of the State Council of the People's Republic of China dated July 18, 2013 No. 638 “On joint foreign exploitation of offshore oil resources.” // URI: <https://law.pkulaw.com/chinalaw/c0b5f0ba732842d3bdfb.html> (date accessed: December 3, 2023).

Law of the Russian Federation of July 18, 2006 No. 117-FZ “On Gas Export” and others.

In China, there are documents on the issue of attracting private enterprises - Several opinions of the State Council of the People's Republic of China dated February 19, 2005 No. 3 “On encouraging, supporting and guiding the economic development of non-state sectors, such as the private sector”; Several opinions of the State Council of the People's Republic of China dated 05/07/2010 No. 13 “On encouraging and guiding the healthy development of private investment”; Opinions of the National Development Commission of the People's Republic of China dated June 23, 2017 No. 1217 “On accelerating the use of natural gas.” And to attract enterprises financed from abroad: National People's Assembly of the People's Republic of China dated March 15, 2019 Law “On Foreign Investment”; Order of the National Development and Reform Commission of the People's Republic of China and the Ministry of Commerce of the People's Republic of China dated "Special measures for controlling access to foreign investment (negative list) (2018,2019,2021 edition).".

Although China and Russia both belonged to socialist legal systems in the past and now face the legislative goal of transitioning to a market economic system in the field of gas supply, the most basic and significant political theories on which both sides base their gas supply legislation are still different⁷⁹. Article 6 of the Chinese Constitution establishes that the basis of the socialist economic system of the PRC is socialist public ownership of the means of production, that is, public ownership and collective ownership of the working people⁸⁰.

⁷⁹ Gao Yu. Implementation of the market mechanism in the gas supply sector in China // Current problems of modern law in Russia and China in the context of global economic changes Monograph M.: Prospect. 2023. pp. 104-108.

⁸⁰ 中华人民共和国宪法(2018修正) (National People's Congress of March 11, 2018 No. 1 “Constitution of the People's Republic of China (Amendment 2018)”). // URI: <https://www.pkulaw.com/chl/7c7e81f43957c58bbdfb.html?keyword=%E4%B8%AD%E5%8D%8E%E4%BA%BA%E6%B0%91%E5%85%B1%E5%92%8C%E5%9B%BD%E5%AE%AA%E6%B3%95&way=listView> (date accessed: December 3, 2023).

Russia, after the collapse of the Soviet Union, adopted privatization, liberalization and the protection of private property rights as the logical starting point for defining energy law. The legislative method or method of legal investigation of the division of public and private law, based on Roman law, has its own stable and timeless status. However, as noted in Section 1 above, the method of separating public and private law is not generally accepted in the Chinese energy law community.

It can be said that the Russian legal system for natural gas supplies is more reliable and complete than the Chinese legal system. For example, in Russia, at the level of legislation and subordinate regulatory legal documents, contractual provisions on relations between the supply of energy resources, provisions on national regulation of prices (tariffs) for energy resources, as well as legal provisions on disputes between suppliers and consumers are enshrined in detail⁸¹. The most obvious difference between the economic system and legal mechanism reform of China and Russia is that China has always relied on Party documents and Party policy decisions to promote the reform of systems and mechanisms⁸².

In the field of legal regulation of gas supply, China's legislative level is lower than Russia's, and the legislation is imperfect. For example, the dates of adoption of the Civil Code regulating domestic contracts for the supply of natural gas were: in Russia (1996) and in China (2021). It took Russia five years from 1991 (after the collapse of the Soviet Union and the reform of the planned economic system) until Part II of the Civil Code of the Russian Federation (1996) came into force. In China, 43 years have passed from 1978 (when the reform of the planned economic system began) until 2021, when the first Civil Code of the PRC came into force.

⁸¹ Romanova V.V. Legal support for the balance of interests of suppliers and buyers of energy resources // Legal Energy Forum 2016. No. 4. P. 8.

⁸² China Energy Law Research Association, "How to Cope with the New Energy Situation and Promote Energy Law—A Brief Review of the 2016 Annual Meeting of the China Energy Law Research Association," China Energy Law Research Report, 2016, P.95.

Due to the imperfection of China's general legislation and the low level of specific legislation in the energy sector, few Chinese energy law researchers pay as much attention to the discussion of legal concepts and legal terminology as Russian scholars. Chinese scientists' push for more research output should be a response to the current government's market reform efforts, such as anti-monopoly policies and attracting private capital to the natural gas market, as well as practical issues such as achieving carbon neutrality.

However, these legislative and theoretical shortcomings in China's energy legislation (including the absence of a gas supply law) cannot hide the fact that the current level of reforms targeting the natural gas market in China is much higher than in Russia (as detailed in Chapters 2 and 3).

The energy revolution, be it a legal transformation or an institutional revolution, is a manifestation of energy marketization.⁸³ To the extent that gas supply legislation creates opportunities for economic freedom for energy legal entities, it strictly stipulates the regulatory and control functions of government agencies.⁸⁴ After a series of reforms of the legal system, the Chinese natural gas market has practically achieved the following results: the power of the government is limited and market mechanisms are used to achieve the efficient allocation of natural gas resources, and the creation of an open market for natural gas resources is encouraged⁸⁵. In other words, since 2017, all reforms of the legal system of the natural gas market have been focused on the following two main goals: 1). liberation of the natural gas market from the monopoly and restoration of the commercial properties of natural

⁸³ 韩兴旺. 能源革命视域下我国能源市场化法律转型研究. [Xinwan, Han. A study of the legal transformation of energy marketing in China from the perspective of the energy revolution. Diss., East China University of Political Science and Law]. 2015. 页2..

⁸⁴ 肖国兴. 能源体制改革抉择能源法律革命 // 法学. [Guoxing, Xiao. The energy system revolution chooses a revolution in energy legislation // Law]. 2019. №.12.页 169.

⁸⁵ 邓海峰、陈英达. “双碳”目标视域下的用能权权利属性分析 // 中国人口·资源与环境 [Deng Haifeng, Chen Yingda Analysis of the characteristics of energy rights from the point of view of “dual carbon” goals // Population, resources and environment of China]. 2022. №.4.页 66.

gas;⁸⁶ 2). development from the point of view of property rights and the creation of a mechanism for market competition and entrepreneurship⁸⁷.

At the moment, in the gas supply sector of China, a legal regulation model “X+I+N+X” has been formed⁸⁸. The first letter “X” refers to the model of fair competition of all market entities in the field of exploration and production of natural gas; the second letter “X” refers to the model of fair competition of all market entities in the field of natural gas sales. “I+N” means that an administrative monopoly model has been formed in the field of natural gas transportation, in which one national pipeline network company “PipeChina” has a natural monopoly on the national trunk network, and several local branches of pipeline network companies coexist at the same time⁸⁹. Future legislation needs to provide for transportation management and market management in the midstream and downstream natural gas sectors⁹⁰.

⁸⁶ 肖国兴. 能源革命与《能源法》制度之维 // 郑州大学学报(哲学社会科学版) [Guoxing, Xiao Energy Revolution and Institutional Dimension of the “Energy Law” // Journal of Zhengzhou University (publication on philosophy and social sciences)]. 2018. No.6. 页 33.

⁸⁷ 肖国兴. 再论《能源法》的理性与制度设计 // 中州学刊 [Guoxing, Xiao Another discussion on the rationality and institutional structure of the Energy Law // Zhongzhou Academic Journal]. 2022. No. 8. 页 51.

⁸⁸ 中共中央 国务院印发《关于深化石油天然气体制改革的若干意见》(Opinions of the Central Committee of the CPC and the State Council of the People's Republic of China dated May 22, 2017 “On deepening the reform of the oil and gas system.”) // URL: <https://www.pkulaw.com/news/> (date accessed: December 3, 2023).

⁸⁹ Gao Yu. Legal reform to ensure free access to China's gas transportation system. // Collection of proceedings of the conference of young scientists “Legal regulation of the activities of the fuel and energy complex in modern conditions” 2021. P.81. In this study, this model reflects the same “X+I+X” model of market reforms.

⁹⁰ 能源法学总论. 中国法学会能源法研究会. - 北京: 法律出版社. [General introduction to energy law / Ed. Chinese Law Society, Energy Law Research Association. - Beijing: Legal Press]. 2019. 页 40. .

Chapter 2. Contractual forms of gas supply activities in Russia and China

§ 2.1. Internal gas supply agreement in Russia and China

Contractual forms of gas supply activities in Russia and China include two types of agreements: a domestic gas supply agreement and an international natural gas purchase and sale agreement. The regulation of the design of a natural gas purchase and sale agreement on the Russian domestic market is characterized by vague terminology used by the legislator, while the model of a similar agreement used in the Chinese domestic market contains internal contradictions that make it difficult to unambiguously determine its legal nature. In addition, the provisions of these agreements need to be improved and changed towards liberalization and marketization (commercialization), since in their current state some of them, in particular those that are designed to regulate the acceptance and transportation of gas, create very favorable conditions for the monopolization of the relevant markets.

There are theoretical and practical problems in the legal provisions on domestic gas supply contracts in China and Russia, respectively. In Russia, theoretical problems mainly arise due to a unclear understanding of the content of the internal gas supply contract. And, therefore, the relevant legal provisions cannot precisely regulate the existing methods of natural gas supply. The main problems in China are the ambiguity of the legal nature of the concession agreement on urban gas supply infrastructure and the agreement on the transfer of the right to use a natural gas field site.

2.1.1 The problem of understanding the natural gas purchase and sale agreement in Russia.

According to L.I. Shevchenko, “The current regulatory and legal framework for contractual relations on gas supply is not systematic; regulatory requirements are often contradictory and require further improvement.”⁹¹

The civil codes of China and Russia do not have separate legal provisions providing for contracts for the purchase and sale of natural gas. In § 6 “Energy supply” ch. 30 “Purchase and Sale” of the Civil Code of the Russian Federation, relations under the energy supply agreement are regulated. This agreement is a type of purchase and sale agreement. According to Article 548 of the Civil Code of the Russian Federation, the rules on energy supply contracts (Articles 539 - 547) apply to relations related to the supply of gas, oil and petroleum products, water and other goods through the connection network.

In ch. 10 “Agreements for the supply of electricity, water, gas and heat” of the Civil Code of the People's Republic of China regulates relations for the supply of natural gas. For water supply, natural gas and heat supply contracts, reference must be made to the relevant provisions of the applicable electricity supply contract.

According to Article 539 of the Civil Code of the Russian Federation, under an energy supply agreement, the energy supplying organization undertakes to supply energy to the subscriber (consumer) through the connected network, and the subscriber undertakes to pay for the received energy, as well as comply with the regime of its consumption stipulated in the agreement, ensure the safety of operation of the energy networks under its control and the serviceability of the energy networks used. them devices and equipment related to energy consumption.

Based on the definition of an energy supply agreement in Articles 539 - 548 of the Civil Code of the Russian Federation, a gas supply agreement is interpreted narrowly. That is, the gas supply agreement is interpreted only as a gas purchase and

⁹¹ Shevchenko L.I. Contractual relations in the field of gas supply and issues of improving their regulatory framework. // Legal Energy Forum 2022. No. 3. P. 6.

sale agreement. This method of defining a gas supply agreement raises doubts, since according to Article 2 of the Law of the Russian Federation “On Gas Supply”, the concept of “gas supply” is defined as one of the forms of energy supply, which represents the activity of providing consumers with gas, including the activity of forming a fund of explored gas fields, production, transportation, storage and supply of gas ⁹².

In relation to the relations under consideration, the norms of the Law of the Russian Federation “On Gas Supply” are special, and the Civil Code of the Russian Federation are general. According to the general legal principle, special laws take precedence over general laws (*Lex specialis derogat legi generali*). Thus, the content of the gas supply agreement must be determined in accordance with the provisions of Article 2 of the Law of the Russian Federation “On Gas Supply”, and be recognized as combining various structures that mediate activities in the field of exploration, production, transportation, storage and supply. In other words, a natural gas purchase and sale agreement is only one type of gas supply agreement; these concepts are correlated as genus and species, where a gas supply agreement is a generic concept, and a natural gas purchase and sale agreement is a specific one. A gas supply agreement cannot be used instead of a natural gas purchase and sale agreement.

It should be noted that in accordance with Resolution of the Council of Ministers - Government of the Russian Federation dated February 17, 1993 N 138, the Russian joint-stock company Gazprom was established on the basis of the state gas concern Gazprom, the authorized capital of which was formed from the property of enterprises included in the unified gas supply structure.⁹³ The legal term “gas supply” must be interpreted strictly in accordance with Article 2 of the Law of the

⁹² Federal Law of March 31, 1999 No. 69 Federal Law “On Gas Supply in the Russian Federation” (as amended on March 18, 2023). – Access Mode: SPS “ConsultantPlus”.

⁹³ Resolution of the Nizhny Novgorod Regional Court dated 02.10. 2018 in case No. 33-11559/2018 “Appeal ruling on the invalidation of a registered property right, recognition of ownership of an apartment in the manner of privatization.” / Nizhny Novgorod regional court. – Access Mode : SPS “ConsultantPlus”.

Russian Federation “On Gas Supply”. Therefore, based on the provisions of the above article, a gas supply agreement should be defined as a generic concept that unites the general set of agreements governing activities in the field of exploration, production, transportation, storage and supply of natural gas.

Taking into account the wording used in the commented act “at the expense of the property of enterprises included in the unified gas supply structure,” if the legal term “gas supply” is understood in the narrow sense as a sale, then RAO Gazprom (the predecessor of PJSC Gazprom) would have to receive only the assets of the sales link . In fact, RAO Gazprom inherited from the state gas concern Gazprom all enterprises and assets of the gas industry, including exploration, production, transportation, storage and sales.

One of the reasons for the unclear legal provisions mentioned above is the fact that with the transition to a market economic system, there was no longer a previous need to use supply contracts according to the model used in the Soviet Union. When formulating the current Civil Code of the Russian Federation, it was decided to preserve supply contracts not as a separate contractual structure, but as one of the types of sales contracts ⁹⁴.

Therefore, the legal term "gas supply" should be used accurately. And the precise use of the legal terminology of a natural gas purchase and sale agreement, in turn, suggests that it should be interpreted only as a natural gas supply agreement, and not as a gas supply agreement.

2.1.2 China Urban Pipeline Gas Concession Agreement.

Before 2003, the ineffective way of direct government involvement in the allocation of public resources under the planned economic system was still practiced in the urban gas supply and other public utilities in China. When China began large-scale construction of urban gas pipelines in 2003, local governments did not have

⁹⁴ Shevchenko L.I. The concepts of “Connected network” and “Main pipeline” and their meaning in distinguishing contractual structures used in the field of supply of energy and energy resources. // Proceedings of the Institute of State and Law of the Russian Academy of Sciences 2016. No. 6. P. 115.

sufficient funds to build and commission them. The country's three largest oil and gas groups did not take large-scale participation in the construction of urban gas pipeline infrastructure. To build urban pipeline networks for the transportation of natural gas, local authorities, in order to attract public, private and foreign capital, use a public-private partnership model (hereinafter referred to as PPP). A similar concept began to find its application in Russia only in recent years. As D. A. Petrov noted, in recent years the transfer of public functions in Russia from the state and municipal levels to the level of private law has increasingly become the subject of scientific discussions on issues of interaction between the state and enterprises⁹⁵.

In Russia, large holding companies like PJSC Gazprom regularly invest in the construction of gas pipelines between populated areas. Currently, the Russian government is also actively promoting the PPP model for the construction of gas pipeline networks and other infrastructure. As V.V. Romanova pointed out, “the Energy Strategy of the Russian Federation provides for a gradual reduction in direct state participation and its replacement with various forms of PPP in the construction and modernization of energy infrastructure while strengthening state regulatory influence in the field of improving and optimizing the institutional environment in the Russian energy sector.”⁹⁶

As a typical example of the application of PPP in the field of natural gas transportation and supply, the design of the city gas concession agreement in China includes two models: the competitive sale of natural gas model and the monopoly sale of natural gas model.

The competitive sale of natural gas model consists of the following elements: construction of a gas pipeline network (PPP model) + natural gas transportation service provider (only one transportation service provider is authorized) + natural

⁹⁵ Petrov D. A. “Privatization” of public functions and self-regulation in the field of entrepreneurship: problems of interfacing // *Civil Law* 2017. No. 5. P. 36.

⁹⁶ Romanova V.V. Legal regulation of construction and modernization of energy facilities. Abstract of dissertation. ... Doctor of Law St. Petersburg., 2012. P. 18.

gas transmission network user (transportation service provider provides transportation services to all eligible applicants) + sale of city gas (free competition, except for housing and communal services (hereinafter referred to as housing and communal services)).

Under this model, multiple natural gas suppliers are equally included in a transmission system governed by natural monopolies and then compete in the natural gas market. In other words, the right to provide natural gas transportation services is granted to the pipeline network developer; Users of the natural gas pipeline network and their sellers can use the network and sell fuel as long as they meet transportation and market access conditions.

The monopoly sale model, which involves the use of a concession agreement for urban gas supply, in turn, includes the following elements: construction of a natural gas pipeline network (PPP model) + natural gas transportation service provider (concessionaire only) + natural gas transmission network user (concessionaire only) + sale of city gas (concessionaire only).

In other words, under this model, all other third parties are prohibited from entering the above-mentioned markets. The concessionaire monopolizes the entire production chain of urban gas supply in a particular city (from the construction of gas pipeline networks to services for the transportation, use and sale of urban gas).

The creation of a natural gas pipeline network has opened up opportunities for economies of scale⁹⁷. This model attracts social capital to participate in the construction and operation of infrastructure and utilities, allowing the concessionaire to monopolize the entire city gas supply chain. Undoubtedly, this has played a huge role in helping to transform government functions and improve the quality of government services⁹⁸.

⁹⁷ 史际春. 资源性公用事业反垄断法律问题研究 // 政治与法律. [Jichun, Shi. Study of antimonopoly legal issues of resource utilities // Law and Politics]. 2015. №.8. 页 4.

⁹⁸ 谭敬慧 沙姣. 特许经营协议的法律性质及可仲裁性 // 北京仲裁. [Jiao, Tang Jinghui Sha. Legal nature and arbitrability of concession agreements // Beijing Arbitration]. 2016. (96). 页 56.

The common feature of these two approaches is that they use an oligopoly model in the construction of gas pipeline infrastructure and urban gas transportation service providers. The significant difference between the two above-mentioned models is that under the free competition model, users of natural gas transportation services intelligently use the gas pipeline network and then compete freely in the natural gas sales market, ultimately benefiting consumers.

The participation of private individuals in the implementation of public tasks (including within the framework of the PPP concept) is one of the most relevant and discussed ideas in modern business life in China and Russia. According to L.I. Shevchenko, one of the most important areas of legal regulation of activities related to organizing gas supplies is the creation of effective mechanisms for resolving disputes between business entities when forming contractual obligations, as well as in the process of their execution ⁹⁹.

In Russia, the legal nature of contracts for the transportation of natural gas is quite clearly defined, in particular the contract for transporting gas through an interconnected network as a civil law rather than an administrative (public) one.¹⁰⁰ . In China, unfortunately, there is no clear understanding of the civil law nature of such contracts, since the courts often apply the rules of administrative law and procedure. In particular, this affects the determination of the nature of PPP agreements as civil law ones.

For example, in a dispute over the contract of the Beijing Zhongshiyuan company, which is engaged in the construction of natural gas pipelines, the courts of first and second instance made diametrically opposed judgments about the nature of PPP.

⁹⁹ Shevchenko L.I. Theoretical and practical issues of protecting the rights of participants in energy markets by judicial, arbitration and antimonopoly authorities. // Problems and tasks of legal support for energy security and protection of the rights of participants in energy markets 2019. Edited by V.V. Romanova M: Lawyer. P. 186.

¹⁰⁰ Kuznetsov K.B. Agreements for the supply and transportation of gas through the connected network: legal nature, features of legal regulation. Abstract of dissertation. ... Ph.D. Ekaterinburg., 2012. P. 9.

The Court of First Instance determined that the gas pipeline concession agreement in Shanli County was a civil contract and made a decision based on the rules of civil procedure. The court of second instance determined that the said concession agreement is an administrative contract, but supported the court of first instance in applying civil procedural law¹⁰¹. The Supreme People's Court of the People's Republic of China believes that administrative contracts have a dual nature, but the features of civil contracts nevertheless prevail. In China, there are no generally accepted approaches to resolving PPP disputes, nor are there clear rules on whether such disputes should be considered under the rules of administrative procedure or civil procedure. Contract disputes under PPP are treated as civil disputes. As a result, the court of second instance recognized the decision of the court of first instance, which considered the case as a civil one, as lawful, and found no errors in the application of the law¹⁰².

In China, when courts consider cases related to PPP, a set of concepts, principles and systems of civil (contract) and administrative law are used in practice. This phenomenon has caused a lively debate in the legal community.

Moreover, the terms of the concession agreement can be the subject of negotiations, and therefore its nature of contract cannot be denied; It also cannot be denied that the content of liability for breach of contract differs significantly from the content of liability arising from non-compliance with an administrative agreement.

¹⁰¹ 上诉人北京中石源管道技术有限公司与被上诉人上栗县住房和城乡建设局合同纠纷一案民事判决书 (2014) 萍民二终字第 130 号 (Civil Judgment of the Intermediate People's Court of Pingxiang City, Jiangxi Province dated January 26, 2016 No. 130 "On the contract dispute between the appellant Beijing Zhongshi Yuanyuan Pipeline Technology Co., Ltd. and Shanli County Housing and Urban-Rural Development Bureau, which filed the appeal" — Access mode: 中国裁判文书网 «China Court Document Network»).

¹⁰² 北京中石源管道技术有限公司、上栗县住房和城乡建设局房屋租赁合同纠纷再审审查与审判监督民事裁定书 (2015) (2015) 赣民申字第 357 号 (Civil Decision of the Jiangxi Provincial High People's Court dated January 14, 2021 No. 357 "On the re-examination and judicial supervision of disputes over residential lease agreements between Beijing Zhongshi Yuanyuan Pipeline Technology Co., Ltd. and Shanli County Housing and Urban-Rural Development Bureau" — Access mode: 中国裁判文书网 «China Court Document Network»).

For example, in Article 1 of the “Administrative Measures for the Concession of Infrastructure and Public Utilities” of the PRC (2015), the legislator gave greater priority to the term “protection of the legitimate rights and interests of the concessionaire” than to the concept of “protection of public interests and public safety of society,” thereby paying more attention to protecting the legal rights and interests of the concessionaire.

Article 26 of the “Administrative Measures for the Concession of Infrastructure and Utilities in the People's Republic of China” (2015) provides that if the executing organization or concession operator does not fulfill its obligations under the concession agreement or its performance of obligations does not meet the agreed requirements, then the party in violation agreement must continue to fulfill obligations, take corrective action, or pay compensation in accordance with the agreement. And all this liability for breach of contract is civil liability for breach of contract (Article 577 of the Civil Code of the People's Republic of China).

Concessionaires are the main players in the natural gas supply market. An important motive for the participation of private capital in PPP projects is to obtain corporate profits, and not to carry out public activities.

Civil law is singled out by scientists as a characteristic representative of private law because of the place occupied in it by the principles of respect for the autonomy of the will and freedom of contract; administrative law is recognized as one of the main branches of public law, since its subjects perform relevant functions focused on the implementation of administrative management; When the court hears these two types of cases, different rules of substantive and procedural law apply.

When applying the procedural rules of the Administrative Procedure Law to PPP cases, Chinese courts are more inclined to apply the principles of civil contract law, aimed at maintaining legal certainty and stability of turnover. In other words, cooperation between the state and business entities, based on the principles of equality and mutual benefit, should be considered a characteristic feature of PPP ¹⁰³.

¹⁰³ Petrov D. A. Public-private partnership: concept and legal forms of implementation. //

The adoption of such a paradigm in the Chinese legal order has led to the spirit of private law, based on respect for the autonomy of the will and the protection of freedom of contract in civil law, and its penetration into the field of administrative law, traditionally focused on protecting and enforcing national or public interests¹⁰⁴.

2.1.3 Legal nature of the agreement on the transfer of the right to use a natural gas field site.

V.V. Romanova believes that the construction of an energy facility should be understood as entrepreneurial activity in the process of extraction, processing, production and transmission of energy. Considering that the construction and modernization of energy facilities are regulated by both private law and public law institutions, there are some differences in the relationship between the sources of regulation¹⁰⁵.

According to L.I. Shevchenko, in the field of development and production, the issue of greatest interest is the application of contractual regulation methods¹⁰⁶. However, the application of regulatory contractual structures in the field of gas supply, both scientifically and practically, still raises a number of questions regarding their legal nature, content, and relationship with energy supply contracts¹⁰⁷. Clarification of the legal nature of the contract for the transfer of the right to use a natural gas field site is also key to clarifying the relationship between public and private law.

The PRC Law on Mineral Resources does not prohibit commercial use of resources such as leasing and contracts for the production of natural gas, but it does

Bulletin of St. Petersburg University. Law 2012. No. 2. P. 38.

¹⁰⁴ 江河. 行政诉讼中民法规范的适用 // 西南政法大学学报. [Jiang He. Application of civil law norms in administrative proceedings // Journal of Southwest University of Political Science & Law]. 2015. №1. 页 93

¹⁰⁵ Romanova V.V. Legal regulation of construction and modernization of energy facilities. Abstract of dissertation. ... Doctor of Law St. Petersburg., 2012. pp. 20-23..

¹⁰⁶ Shevchenko L. I. Contractual regulation of relations for the development of hydrocarbon fields at the national and international levels using unitization agreements. // Legal Energy Forum 2021. No. 4. P. 21.

¹⁰⁷ Shevchenko L. I. Legal regulation of contractual relations in the field of gas supply. // Education and Law 2016. No. 8. P. 76..

prohibit the unauthorized transfer of mineral resources¹⁰⁸. In other words, the two-element licensing system of “integration of rights and certificates” used in the Chinese legal order has too many civil elements enshrined in mining licenses, which leads to the fact that the mining license contains both asset rights provisions, provided for by civil legislation and administrative regulations¹⁰⁹.

In Art. 12 of the Law of the Russian Federation “On Subsoil”¹¹⁰ and Art. 8.2 Regulations of the Russian Federation “On the procedure for licensing the use of subsoil”¹¹¹, there is a similar situation when the legal nature of rights to exploration and production of natural gas cannot be clearly defined. Also, due to the fact that the legislation in the field of subsoil use is not codified, many questions and conflicts often arise when applying the legislation on subsoil use in practice¹¹².

Legislators have unsuccessfully tried to give administrative character to civil contracts in Russia. These agreements include a concession, a production sharing agreement, and a contract for the provision of services. It is impossible to avoid contractual relations between the state and subsoil users.¹¹³

Chinese private law researchers believe that the right to use a natural gas field is a creditor's right or quasi-real right¹¹⁴. The license for the right to extract minerals

¹⁰⁸ 王霜. 我国油气勘探开发合作的相关法律问题研究 // 当代石油石化 [Shuang, Wang Study of relevant legal issues of cooperation in the field of exploration and development of oil and gas in China // Modern oil and petrochemistry]. 2021. №. 6. 页 47.

¹⁰⁹ 韩亚琴, 景东升, 郭丽娜. 我国油气资源勘探开发管理模式研究 // 中国矿业 [Yaqin, Han, Jing Dongsheng, Guo Lina Research on the management model of oil and gas resource exploration and development in China // China mining]. 2021. №.6 (30). 页 31

¹¹⁰ Law of the Russian Federation of February 21, 1992 N 2395-1 “On subsoil”. - Access mode: SPS “ConsultantPlus”.

¹¹¹ Order of the Ministry of Natural Resources of Russia dated October 25, 2021 N 782 “On establishing the form of a license for the use of subsoil and the procedure for registration, state registration and issuance of licenses for the use of subsoil.” - Access mode: SPS “ConsultantPlus”.

¹¹² Ivleva T.V. Talipov I.F. Current legal problems of subsoil use in Russia: theory and practice // Oil, Gas and Law. 2013. No. 1. P. 26.

¹¹³ Prokaev A.V. Civil legal grounds for the emergence of the right to use subsoil. // *Civilist* 2010. No. 3. pp. 86-89.

¹¹⁴ 崔建远, 晓坤. 矿业权基本问题探讨 // 法学研究 [Jianyuan, Cui, Xiao Kun Discussion of the main problems of mineral rights // Legal studies]. 1998. №.4. 页 82.

also provides for civil rights¹¹⁵. The validity of an agreement on the transfer of the right to use a natural gas field has nothing to do with the administrative permit, and it comes into force at the time of conclusion, unless it is legally invalid¹¹⁶. The right to use a natural gas field site is mainly governed by the property rights provisions of the Civil Code of the People's Republic of China. The holder of a natural gas right has the right to own, use and benefit from the minerals. The relevant provisions of the PRC Mineral Resources Law do not meet the needs of commercialization of natural gas exploration and production. That is, the rights of owners to extract minerals and the right to use resources are embodied in the form of permits; and such as land use are regulated through other types of administrative acts. It can be stated that in China, mineral rights and exploration and development licenses are combined into one.

For example, in one case, the plaintiff believed that the disputed contract was a contract for the transfer of rights to manage a natural gas field, and not a contract for the transfer of mineral rights. However, the judge considered that the provisions of the civil legislation of the People's Republic of China on the invalidity of the contract apply to this agreement, therefore the agreement on the transfer of rights to mineral extraction was declared invalid¹¹⁷.

Analysis of the legal nature of the acquisition and transfer of the right to use a natural gas field site, as defined above, is very important in resolving

¹¹⁵ 屈茂辉, 陈灵峰. 《矿产资源法》修正的宏观审视与微观设计 // 财经理论与实践 (双月刊) [Maohui, Qu, Chen Lingfeng Macro-examination and micro-design of amendments to the Mineral Resources Law // Theory and practice of finance and economics (every two months)]. 2021. №.5 (42). 页 148-154

¹¹⁶ 崔建远. 矿业权法律关系论 // 清华大学学报(哲学社会科学版) [Jianyuan, Cui On the legal relations of mining rights // Journal of Tsinghua University (philosophy and social science publication)]. 2001. №.3. 页 55.

¹¹⁷ 大庆市肇源县兴隆油田服务有限公司与大庆顺威能源开发有限责任公司确认合同效力纠纷二审民事判决书 (2015) 庆商终字第166号 [Xinglong Oilfield Service Co., Ltd. Daqing Zhaoyuan County and Daqing Shunwei Energy Development Co., Ltd. confirmed the civil decision of the second instance in the dispute over the validity of the contract - Access mode: 中国裁判文书网 «China Court Document Network»..

disagreements between state and non-state natural gas exploration and production companies.

Because natural gas deposits are often of national strategic importance and are necessary to protect public interests in developing countries. This is also one of the main reasons why China has experienced more than 40 years of market reforms, but by 2019, only four state-owned oil and gas companies are still responsible for natural gas exploration and production in China.

However, as part of the comprehensive implementation of the policy of commercialization of the economy, it is now necessary to pay attention to respect for the autonomy of private law and the principles of the law of commercial transactions: “contract wins law” (convention vincit legem). It should also be emphasized that too much emphasis on protecting the rights of private or foreign companies engaged in oil and gas exploration can lead to serious damage and waste of natural gas fields, environmental pollution and environmental damage. Legal regulation of natural gas exploration and exploitation should be a comprehensive law to protect its development and use.

As V.F. Popondopulo believes, dualism of regulation exists objectively, since it is based on a contradiction between the private interests of enterprises and the interests of society, which must be balanced.¹¹⁸ Therefore, state power is aimed at ensuring public interests, such as energy and environmental safety in the field of natural gas production, and private power exists in the sphere of economic value of natural gas resources¹¹⁹.

¹¹⁸ Popondopulo V.F. Personal non-property relations in the system of dualism of regulation. // Theoretical and Applied Jurisprudence 2022. No. 3 (13). P. 24.

¹¹⁹ 刘卫先. 对我国矿业权的反思与重构 // 中州学刊 [Weixian, Liu Reflection and reconstruction of mineral rights in China // Zhongzhou Journal]. 2012. №.2. 页 63.

§ 2.2. Agreements applied in the field of gas supply under special legislation

V.V. Romanova notes that the features of the legal regulation of foreign economic relations in the energy sector deserve to become the subject of legal research. At the same time, the regulation of foreign economic relations in the energy sector continues to develop dynamically at the national and international levels.¹²⁰

In the field of transnational natural gas trade, Russia, as the world's largest seller of exported natural gas, has typically entered into long-term natural gas purchase and sale agreements (via gas pipelines) with foreign purchasing countries. Due to the occurrence of the following three objective circumstances, the provisions on market competition in a long-term natural gas purchase and sale agreement are at risk of revision.

First, the maturity of LNG shipbuilding technology and the success of the US shale revolution

With the development of LNG shipbuilding technology and the success of the American shale gas revolution, three major regional LNG markets have gradually emerged in North America, Europe and Asia-Pacific. These three regional markets have established market pricing mechanisms that are consistent with the characteristics of their respective markets.

In other words, in the international market, the rapid development of the LNG market has affected the existing pipeline natural gas market. LNG has now become a strong competitor to pipeline natural gas. For example, the pricing provisions of the Sino-Russian agreement on the sale of natural gas (pipeline transportation - the Power of Siberia project and the Far Eastern route) were influenced not only by the LNG sales agreements signed between China and Qatar, Australia and the United States, but also by agreements on sales of LNG signed between some Chinese

¹²⁰ Romanova V.V. Peculiarities of legal regulation of foreign economic transactions in the energy sector. // International public and private law 2016. No. 1. P. 18.

companies and Novatek (Yamal LNG project and Arctic LNG-2).

Secondly, the development of the global LNG market has given rise to innovations in the types of natural gas purchase and sale agreements

Short- and medium-term contracts, spot contracts and even contractual resource pools (Portfolio SPA or LNG portfolio optimization) have quickly become widespread in the international natural gas market. Compared to long-term contracts, short-term or spot contracts have undeniable advantages in terms of transportation methods: from the flexibility of transporting LNG via FOB (Free On Board) or DES (Delivered Ex Ship) models to the possibility of using transport vessels on request (chartered vessels, independently operated vessels, etc.); from choosing alternative storage methods (LNG tank or floating storage) to using receiving terminals or renting other cargoes for gasification¹²¹. Increasing competition in the international LNG market and the proliferation of new types of contracts have led natural gas buyers to demand revisions to the competition and antitrust provisions of long-term natural gas contracts.

Thirdly, the implementation of laws and policies related to the liberalization and marketization of the natural gas market.

V.V. Romanova notes that according to the National Plan for the Development of Competition in the Russian Federation, the expected result of the development of competition in the gas supply sector is the transition to market pricing through the formation of exchange and over-the-counter indicators of natural gas prices¹²². Since 2017, China has passed a series of laws and regulations designed to break the market monopoly of China's three largest state-owned oil and gas companies. Currently, the dominant natural gas pricing model is based on market competition.

¹²¹ Ruchdi Maalouf The Portfolio SPA: A Tool of Portfolio Marketing. // Oil, Gas & Energy Law Intelligence 2020. № 3 (18). C.1-5.

¹²² Romanova V.V. Problems and tasks of legal support for exchange trade in energy resources in the Russian Federation and within the framework of the Eurasian Economic Union. // Legal Energy Forum 2019. No. 1. P.11.

In international contracts for the purchase and sale of natural gas, as a result of the impact of market reforms carried out by natural gas importing countries, spot contracts, short-term and medium-term contracts and contractual resource pools (portfolio optimization) began to influence three monopoly provisions of long-term international contracts that are extremely common in world practice purchase and sale of natural gas: the “destination restrictions” clause, the “take or pay” clause and the “price review” clause.

Natural gas importing countries, such as the European Union, Japan and South Korea, routinely conduct antitrust investigations or initiate international commercial arbitration to resolve conflicts between their fair competition policies and monopoly provisions in international natural gas sales contracts following market liberalization. At the same time, China and Russia are more inclined to negotiate among themselves or resort to diplomatic channels and other non-public means to resolve such disputes.

Typically, in addition to influencing the exploration and production market, sellers and buyers of long-term natural gas sales contracts can control and monopolize the sales market through anti-competitive provisions such as “destination restrictions” clauses, take-or-pay clauses (take or pay)” and the terms of “price review” in long-term contracts. Therefore, new market entrants are often largely prevented from entering the two above-mentioned markets to participate in fair competition¹²³. But it is worth noting the dual importance of route flexibility and non-discriminatory access infrastructure to ensure the free flow of gas. The degree of flexibility available to the buyer in determining the destination of LNG will continue to be limited until truly non-discriminatory and fair conditions for third party access to relevant markets are achieved¹²⁴.

2.2.1 Regulations “on destination restrictions”.

The use of destination restriction provisions allows natural gas sellers to

¹²³ K. Talus Long-term natural gas contracts and antitrust law in the European Union and the United States. // The Journal of World Energy Law & Business 2011. № 3 (4). C. 281-285.

¹²⁴ A. James Destination Flexibility in LNG Sales Contracts. // Oil, Gas & Energy Law 2020. № 3 (18). C. 9.

maintain different price zones for the same product by charging different prices to different customers at the same delivery point by limiting the freedom of buyers to resell gas outside a certain region. As such, the designation restriction provision reduces the liquidity and market competitiveness of natural gas and should undoubtedly be considered a major factor limiting competition in the natural gas trade. By establishing a destination restrictions clause, the seller requires the buyer to sell LNG only in a specified geographic area. The obvious undesirability of the consequences of this restriction is the reason why the “destination restriction” clause is currently excluded from LNG sales contracts signed in the EU market ¹²⁵.

In international contracts for the sale of natural gas, the provisions of the domestic contract law of China and Russia are not accepted by Chinese buyers and Russian sellers of natural gas. Uniform rules of international trade, as explained by Incoterms and issued by the International Chamber of Commerce, are becoming increasingly important. Although their use is not mandatory, they are included in the contract and help to significantly reduce the number of potential conflicts between buyer and seller when applying their respective domestic laws¹²⁶.

The allocation of risks and costs between buyers and sellers is usually determined by reference to the Incoterms Transport Rules issued by the International Chamber of Commerce. In "General Rules for the Interpretation of Incoterms 2000" The four groups of E.F.C.D systems are formulated according to the extent of the seller's obligations¹²⁷. In international liquefied natural gas purchase and sale agreements, the most commonly used trade terms are FOB and DES ¹²⁸. An

¹²⁵ K. Talus Long-term natural gas contracts and antitrust law in the European Union and the United States. // The Journal of World Energy Law & Business 2011. № 3 (4). C. 281-285.

¹²⁶ Popondopulo V.F. International private law: nature and development trends. // Russian Law Journal 2018. No. 2 (119). P. 96.

¹²⁷ International Chamber of Commerce 2000 «International Commercial Terms - Incoterm 2000». - Access mode: SPS “ConsultantPlus”.

¹²⁸ DES (Delivered Ex Ship) means delivered from a ship --- named port of destination: the seller is responsible for renting and ordering vehicles, as well as for delivering goods that have passed customs clearance to the designated port of destination at the specified time in the port of destination. The destination is the trade deadline for delivery on board and bear the costs and risks prior to delivery.

important criterion for interpreting a limitation of assignment provision is the inclusion of a definition of when title and risk pass from the seller to the buyer. The person who has the right of ownership and bears the corresponding risks is determined by the close connection of each party to the contract with its subject. Thus, depending on the scope of obligations assumed by the LNG seller, natural gas purchase and sale agreements can be divided into two main categories: FOB type and DES type purchase and sale agreements.

FOB purchase and sale agreement.

The international trade term Incoterms FOB (Free on Board) provides that the seller delivers the goods by loading the goods onto a ship designated by the buyer at the specified port of shipment or by receiving the goods delivered to the ship; The buyer signs the contract of carriage and pays the freight. If the international LNG sales contract specifies that the LNG is supplied FOB, this means that when the LNG is loaded onto the vessel, the buyer is responsible for arranging for the provision of the vessel, title and risk passes to the buyer. Currently, the Russian PJSC NOVATEK has concluded the largest number of contracts for the sale of natural gas on FOB terms for international buyers of natural gas¹²⁹.

When both parties to a contract decide to use FOB trading terms, the destination limitation clause is very likely to violate Chinese anti-monopoly law. On the one hand, in accordance with the provisions of the FOB trading conditions, from the moment the LNG is loaded on board the vessel, ownership and associated risks pass to the buyer, the buyer has almost complete freedom to determine destinations. But the destination restriction provision, on the other hand, prevents the buyer from freely moving and reselling LNG after receiving it, and significantly limits the buyer's ability to carry out other transactions in the commodity market with the purchased fuel. In other words, in the absence of a destination restriction provision,

¹²⁹ For example: in 2015, PJSC NOVATEK concluded a long-term contract with ENGIE for the supply of Yamal LNG (the contract is concluded for 23 years and provides for the annual supply of 1 million tons of LNG. LNG will be delivered on FOB terms to Montoire de Bretagne (west coast of France), where it will be reloaded onto ENGIE tankers.

a buyer may export its own natural gas to a higher-priced market¹³⁰. For example, when European natural gas prices rose in 2022, Chinese companies were able to resell LNG imported from the US FOB into Europe to earn increased profits¹³¹.

Purchase and sale agreement type DES.

The international trade term Incoterm DES (Delivered Ex Ship) assumes that the seller is responsible for the rental and preparation of vehicles, as well as for the delivery of goods, cleared from customs, to the designated port at the specified time. If LNG is delivered under DES trade terms, the seller is responsible for transportation costs and retains title and risk until the LNG is unloaded at the buyer's designated destination¹³².

In scenarios involving the use of FOB and DES contracts, the answers to the question of whether profit-splitting mechanisms (PSM) violate the principle of fair competition also differ. In a FOB contract, a profit sharing clause may make it unprofitable for the buyer to resell the goods and may be considered an anti-competitive clause. However, under DES trading conditions, if the LNG seller does not prevent the buyer from transferring the LNG and receives a reasonable share of the profits, the profit sharing provision can be called fair, since the additional remuneration compensates the seller for the risk of fuel leakage, the difficulties caused by the need for him to take specific organizational measures and incurred by him additional costs. Those. if the profit-sharing provision eliminates or reduces the incentive for buyers to divert LNG, PSM is found to have anti-competitive potential. It should be noted that in 2017, China's CNOOC, Japan's JERA and South Korea's

¹³⁰ Chantal Carriere The effects of Japan's push for greater LNG market flexibility on LNG pricing and destination restrictions. // The Journal of World Energy Law & Business 2018. № 2 (11). C. 136-144.

¹³¹ Steven P Finizio Destination Restrictions and Diversion Provisions in LNG Sale and Purchase Agreements. // The Guide to Energy Arbitration 2019. № 3. C. 224.

¹³² For example, in 2022, NOVATEK and Zhejiang Energy signed a long-term contract for the supply of LNG, which provides for the supply of up to 1 million tons of LNG per year from the Arctic LNG 2 project for 15 years. LNG will be delivered on DES terms to Zhejiang Energy's LNG receiving terminals in China (The official website of PJSC NOVATEK: https://www.novatek.ru/ru/press/releases/index.php?id_4=4825).

KOGAS signed a joint memorandum of understanding on business cooperation in the field of LNG, in order to increase purchasing power and optimize the terms of contracts with LNG exporters, including the removal of restrictions on destinations¹³³.

2.2.2 “Take or pay” clause.

In international natural gas sales contracts, a take-or-pay clause usually means that, except in cases of force majeure¹³⁴, the buyer must pay a certain amount of purchased energy (for example, natural gas) from the seller, even if the buyer is unwilling or unable to accept these quantities. The legal composition of the “take or pay” clause has two elements:

1) the buyer unconditionally pays for the gas to be supplied, and the obligation to pay is irrevocable;

2) the seller unconditionally provides natural gas to the buyer as agreed, and such delivery is irrevocable¹³⁵.

The take-or-pay clause is primarily a commitment to the buyer. The buyer is obliged to either buy and receive a certain amount of gas, or pay for the gas regardless of whether it is received or not. In fact, this clause is mainly aimed at strengthening the buyer's obligation. That is, regardless of whether the buyer chooses natural gas or not, he must pay for the planned delivery stipulated in the contract.

Thus, Article 5.5 of the LNG purchase and sale agreement (FOB) between Sabine Pass Liquefaction LLC (seller) and Korea Gas Corporation (buyer) defines

¹³³ Chantal Carriere The effects of Japan’s push for greater LNG market flexibility on LNG pricing and destination restrictions. // The Journal of World Energy Law & Business 2018. № 2 (11). C. 136-144.

¹³⁴ Sometimes sellers also refer to force majeure clauses to protect their inability to comply with the "take or pay" provisions when delivering gas to buyers. For example, in November 2022, the Stockholm Arbitration Court ruled that the decree of the President of Russia on the transition to payment for Russian natural gas in rubles was a force majeure clause, and the arbitration court confirmed the legality of the suspension of Gazprom LLC by the Export of natural gas supplies to the Finnish company Gasum.

¹³⁵ Gina Cohen Long-Term Gas Contracting Terms, definitions, pricing – Theory and practice. // An IENE Study (M55) 2019. №. C. 12, 29.

the buyer's purchase obligations as follows: in any contract year, the buyer pays the planned quantity of goods less:

(a) any quantity of LNG not delivered by the seller for any reason attributable to the seller;

(b) any quantity not received by the buyer due to force majeure, the quantity of liquefied gas.

The take-or-pay clause also has different consequences for the parties to the contract. For the seller, when a new international LNG project comes online, exploration and production risks, as well as financial pressures from natural gas sellers, will be largely transferred to buyers through take-or-pay provisions. Throughout the contract period, natural gas buyers are in a relatively weak bargaining position, and their own business risks are often difficult to transfer to fuel sellers. In a situation where the sales market is undergoing market reforms, natural gas buyers will often find it difficult to continue to comply with this clause.

For the seller of natural gas.

When initiating a project, sellers need to obtain funds (investments or financing) from banks or other institutions that the creation of natural gas exploration, production and transportation infrastructure requires. Investors may be more willing to finance a seller provided it receives long-term commitment and guarantee from the natural gas buyer for the purchase of its products¹³⁶. Therefore, at this stage, both parties have very close long-term interests and a high degree of interdependence. The Yamal LNG and Arctic 2 projects, jointly invested by China and Russia, effectively use take-or-pay provisions.

Yamal LNG project

In the agreement between the government of the Russian Federation and the government of the People's Republic of China on the Yamal LNG project (Signed in 2014 for a period of 30 years), Article 1 provides for investments in infrastructure facilities, such as exploration and development of the South Tambey gas condensate

¹³⁶ *Ibid.*, P.12,29.

field; construction and operation of an integrated complex for the production, treatment, liquefaction and storage of natural gas; construction and operation of port infrastructure in the Sabetta port area. To achieve these goals, paragraph 3.1.2 of the agreement provides that the Chinese side ensures the acquisition by CNPC Corporation or its subsidiaries of at least 20 percent of the shares of Yamal LNG OJSC, as well as the provision of loans to Yamal LNG OJSC by financial institutions of the PRC on the basis of appropriate provisions of the agreement between CNNK Corporation and NOVATEK OJSC. At the same time, CNNK Corporation or its subsidiaries must purchase at least 3 million tons of LNG per year¹³⁷.

Subject to the above contractual provisions (guaranteed by take-or-pay clauses), investors (banks or large consortia) agree to invest (or lend) in the infrastructure projects of the gas seller. For example, in 2016, Sberbank PJSC and Gazprombank PJSC provided a 15-year credit line in the amount of 3.6 billion euros for the Yamal project¹³⁸. The Export-Import Bank of China and the China Development Bank are providing a loan of 9.3 billion euros and 9.8 billion yuan for the Yamal project, also for a period of 15 years¹³⁹. Raiffeisen Bank International AG and Intesa Sanpaolo are offering a credit line of up to EUR 425 million for a period of 14 years¹⁴⁰.

Arctic LNG 2 project

In the Arctic LNG 2 project¹⁴¹, before the final investment decision on the

¹³⁷ Yamal LNG Project Agreement between the Government of the Russian Federation and the Government of the People's Republic of China on cooperation in the implementation of the Yamal LNG Project. // Moscow, Beijing January 13-20, 2014; Yamal LNG Project Protocol to the Agreement between the Government of the Russian Federation and the Government of the People's Republic of China on cooperation in the implementation of the Yamal Project LNG"; Federal Law No. 1-FZ of 29.01.2016 of 2016 "On Ratification of the Protocol to the Agreement between the Government of the Russian Federation and the Government of the People's Republic of China on Cooperation in the Implementation of the Yamal LNG Project". - Access mode: SPS "ConsultantPlus"..

¹³⁸ NOVATEK from 2016 "Yamal LNG signed a loan agreement with Sberbank and Gazprombank." - Access mode: SPS "ConsultantPlus".

¹³⁹ NOVATEK from 2016 "Yamal LNG signed loan agreements with the Export-Import Bank of China and the China Development Bank." - Access mode: SPS "ConsultantPlus".

¹⁴⁰ NOVATEK from 2017 "Yamal LNG attracted financing under insurance coverage from export credit agencies of Sweden and Germany." - Access mode: SPS "ConsultantPlus".

¹⁴¹ Participants in the Arctic LNG 2 Project are NOVATEK (60%), CNPC (10%), CNOOC

project was made on September 5, 2019, Novatek, as the main shareholder of the project, entered into a number of natural gas purchase and sale agreements with international buyers; Sale and purchase agreement for a share in Arctic LNG 2 with Total (March 5, 2019)¹⁴²; Arctic LNG 2 LNG supply agreement with Repsol (April 2, 2019)¹⁴³; agreement for the supply of LNG "Arctic LNG 2" with Vitol S.A. (April 2, 2019)¹⁴⁴; purchase and sale agreement for a 10% interest in Arctic LNG 2 with the consortium Mitsui & Co ("Mitsui") and the Japan National Oil, Gas and Metals Corporation JOGMEC ("JOGMEC") June 29, 2019¹⁴⁵.

These share purchase and sale agreements and international LNG purchase and sale agreements have created conditions under which the buyer will be able to bring stable income to Arctic LNG 2 on a take-or-pay basis. Only after this, the Bank of Russia and international banks (China Development Bank and Export-Import Bank of China) began lending to such large international projects as Arctic LNG 2. In other words, unless an international gas sales agreement contains a take-or-pay clause, investors (banks or large consortiums) will not invest in (or lend to) the exploration and production infrastructure of a natural gas seller.

To summarize, for natural gas sellers, the rationale for a take-or-pay clause was

Limited (10%), Total (10%) and Japan Arctic LNG, a consortium of Mitsui & Co., Ltd. and JOGMEC (10%). "The total capacity of the plant of this project, consisting of three technological lines, will be 19.8 million tons of LNG per year. The launch of the first line is planned in 2023, the second and third in 2024 and 2026, respectively. Capital investments to launch the Project at full capacity are estimated at the equivalent of 21.3 billion US dollars." (https://www.novatek.ru/ru/investors/events/?id_4=3405)

¹⁴² On March 5, 2019, PJSC NOVATEK and the Total concern signed a purchase and sale agreement for a 10% stake in the Arctic LNG 2 project (https://www.novatek.ru/ru/press/releases/index.php?id_4=3058).

¹⁴³ The agreement provides for a 15-year contract for the supply of 1 million tons of LNG per year for the Arctic LNG 2 project and other NOVATEK projects. (https://www.novatek.ru/ru/press/releases/index.php?id_4=3123).

¹⁴⁴ The agreement provides for a 15-year contract for the supply of 1 million tons of LNG per year from the Arctic LNG 2 project, as well as other NOVATEK projects. LNG will be shipped on FOB terms to the company's transshipment terminal in the Murmansk region (https://www.novatek.ru/ru/investors/events/?id_4=3122).

¹⁴⁵ Japanese players purchase about 2 million tons of LNG per year from Arctic LNG 2 on a long-term basis. (https://www.novatek.ru/ru/investors/events/?id_4=3280).

that the buyer participates in sharing the risks and financial obligations of the seller to establish infrastructure such as natural gas exploration and production. This financial commitment can be used as an indirect guarantee of the seller's financing of the project, providing the seller with a stable income stream on a take-or-pay basis¹⁴⁶. As Shafir A.M. notes, in the field of gas supply, it determines the direct impact and determining influence of the energy consumption mode on the mode of its production¹⁴⁷.

For the buyer of natural gas.

Many long-term LNG sales agreements with take-or-pay clauses are for a minimum of 15 years. This means that through this clause, buyers will largely monopolize the natural gas market in the region for at least a decade and a half. Following market reforms, sellers are increasingly affected by buyer competition in the domestic natural gas market and antitrust laws¹⁴⁸. According to the antimonopoly authority, in order to ensure that project participants are able to recover the high cost of investment and make a profit, both parties to the contract deliberately use strict and stable contract terms, such as clauses on exclusivity and destination restrictions, controlling the natural gas consumption market for a long time time¹⁴⁹.

A take-or-pay clause can reduce the number of flows and substitutability of natural gas in the market by establishing long-term links between project participants, and also create significant obstacles to the liberalization of the relevant market¹⁵⁰. The implementation of market reforms and anti-monopoly measures in the fuel market clearly impedes the fulfillment of this point by buyers. Therefore, the

¹⁴⁶ Michael Polkinghorne Take or Pay Conditions in Gas Supply Agreements. // Oil, Gas & Energy Law 2015. № 6 (13). C. 2.

¹⁴⁷ Shafir A.M. Energy market: general theory of legal regulation // Bulletin of the University named after O.E. Kutafina (MSAL). 2020. No. 3. P. 119.

¹⁴⁸ G.B. Greenwald Natural Gas Contracts Under Stress: Price, Quantity and Take or Pay. // Oil, Gas & Energy Law 2006. № 1 (4). C. 13-14.

¹⁴⁹ Paul Griffin Changing Markets and Contracts of the LNG Business. // Journal of Energy & Natural Resources Law 2015. № 1 (21). C. 86.

¹⁵⁰ Michele Polo, Carlo Scarpa Liberalizing the gas industry: Take-or-pay contracts, retail competition and wholesale trade. // International Journal of Industrial Organization 2013. № 1 (31). C. 66.

intensity of contractual disputes over the price or quantity of supplied natural gas is beginning to increase¹⁵¹. This phase includes the US natural gas market reform in the 1970s and 1980s, the three EU energy reforms and the reform of China's energy market system since 2017. Let's take China's reform of its natural gas commercialization system since 2017 as an example.

Before this reform, only China's three largest state-owned oil and gas companies had the right to import natural gas, which entered into long-term natural gas supply agreements with Chinese city gas companies. The latter monopolized the local sales market through concession agreements on city gas supply. As a consequence, if the price of imported natural gas increases along with the international price of oil, the consequences of price fluctuations may eventually be passed on to the end consumers.

As a result of the reform, the existing import monopoly mechanism was broken, and the city monopoly concession mechanism for gas supply also suffered. Consumers (city gas companies and large industrial consumers) were able to freely purchase LNG at a lower price. As a result, the three largest oil and gas companies must make the following choices: either receive natural gas at a contract price and resell it at a lower market price at a loss, or negotiate a price or quantity of supply on a take-or-pay basis¹⁵².

In other words, the take-or-pay clause was originally freely negotiated between buyers and sellers on equal terms. The condition was set to match the level of demand for natural gas from consumers in the buyer's country at a particular time¹⁵³. However, when the natural gas industry transforms from a monopoly or semi-monopoly industry to a competitive one, the buyer may not be able to sell all of the natural gas in the take-or-pay volume due to loss of market share. At this stage,

¹⁵¹ Jean-Michel Glachant, Michelle Hallack Take or pay contract robustness: A three step story told by the Brazil–Bolivia gas case? // *Energy Policy* 2009. № 2 (37). C. 651-657.

¹⁵² K. Talus, S. Looper, L.L. Burns Long Term Take or Pay Agreements in Natural Gas Industry: Past, Present and Future. // *Oil, Gas & Energy Law* 2020. № 3 (18). C. 8-10.

¹⁵³ Ben Holland Enforceability of take-or-pay provisions in English law contracts – resolved. // *Journal of Energy & Natural Resources Law* 2016. № 4 (34). C. 443-449.

buyers are often looking for a solution that would not only stop taking delivery, but also refuse to pay on the take-or-pay terms they agreed to in the past¹⁵⁴.

Interaction with limitation provisions.

Many international LNG buyers are monopoly or semi-monopoly suppliers of natural gas in a particular region of the country and have undertaken a large number of take-or-pay obligations in that market. If the buyer does not have sufficient customer demand or is unable to profit from the delivery market specified in the contract, the removal of the destination restriction clause (i.e. the buyer is free to transport LNG to various destinations or markets) is important to the buyer, since it allows, if necessary, to reduce the amount of fuel that it must accept in accordance with the take-or-pay clause.

However, if the repeal of the destination limitation clause affects the guarantee bond given by the natural gas seller to the bank to obtain bank financing, then the natural gas seller will likely prevent the clause from being repealed. The trend towards lifting destination restrictions and questioning the legality of take-or-pay clauses in connection with China's introduction of market mechanisms is undoubtedly directed against Russia's past policy of restricting free exports and is intended to weaken Russia's export position in the global natural gas market.

To summarize, take-or-pay has its rationale and its disadvantages. When the monopoly contained in the take-or-pay clause is reflected in stability and long-term nature, the take-or-pay clause demonstrates its greater rationality. Its rationality is reflected in the following three points:

For natural gas sellers, through this clause sellers can receive investments (loans) from banks (and consortia);

For buyers of natural gas, buyers thanks to this clause can receive stable supplies of natural gas for a long time (at least 15 years);

For importing countries, this clause can ensure long-term security of energy

¹⁵⁴ Nour-Eddine Terki Penalty clauses and "take or pay" clauses in international long-term contracts. // International Business Law Journal 2014. № 2. C. 127.

supply to importing countries.

When the monopolistic nature of the clause or its anti-competitive factors is reflected (i.e., in this case, the monopolistic nature of the clause or its negative effects on fair competition outweigh its positive effects on stability and long-term effect), this clause will be reviewed by the natural gas buyer or antitrust authority of the importing country.

Currently, this situation can be divided into two categories:

1) When the market for natural gas buyers is subject to the laws and policies of the country that promote liberalization and marketization;

2) When the natural gas seller encounters force majeure circumstances.

Therefore, it is recommended to include a “rebalancing” provision in the take-or-pay clause. The “rebalancing” provision can be defined as follows: when the original balance of rights and obligations of buyers and sellers of natural gas is upset by objective circumstances, the buyer and seller must again discuss and agree on the balance of rights and obligations of both parties based on the change in objective circumstances and the original balance of rights and responsibilities.

2.2.3 Regulations “Price review” provision.

In international natural gas purchase and sale agreements, the price of natural gas is usually determined in three ways:

(a) Price formula with the price of crude oil or natural gas substitutes as parameters.

In the 30-year long-term natural gas purchase and sale agreement between the PRC and the Russian Federation, prices are calculated by agreeing on a formula for calculating natural gas prices linked to the prices of oil or other energy resources;

(b) Natural gas trading center price.

This method involves using the price set by one of the natural gas trading centers, in particular, such as the energy exchange of JSC SPbMTSB in Russia; international natural gas trading centers in Shanghai, Chongqing and Shenzhen; European natural gas trading hubs (NBP in the United Kingdom, TTF in the

Netherlands and NCG in Germany) and Henry Hubs in the United States.

(c) Contractual resource pool method (Portfolio SPA or LNG portfolio optimization)

Large sellers can combine and manage different sets of agreements with different pricing mechanisms (regional spot indices such as Henry Hub, TTF, JKM indexing), coordinating each link in the entire supply chain, and also combining the first two pricing methods using contract pooling methods resources and hybrid pricing.

The price of natural gas, linked to the price of crude oil, is stable and, in general, usually quite acceptable to both parties to the contract. However, following reforms of the international and regional natural gas market, this pricing formula cannot adapt to changes in the natural gas buyer's market. As the world's largest importer of LNG, China faces this challenge even more acutely.

Before the reform of the market system in natural gas supply, when the price calculated by the price formula rises with oil prices and exceeds the prices in China's domestic or international natural gas market, Chinese buyers still have the opportunity to pass on the losses caused by the use of the price formula, on Chinese domestic consumers through its domestic monopoly position. In this case, in international natural gas sales agreements for Chinese buyers, the international seller of natural gas will likely be considered to have market power (an entity with a dominant position in the market); in urban pipeline gas concession agreements for domestic consumers in China, it could also be considered to occupy a similar position. Market power refers to the ability of a business or business group to influence market parameters, including market price levels, production and sales, profitability and profit amounts, composition of sellers and buyers, size of obstacles, etc¹⁵⁵.

In other words, the price calculated in accordance with the established price

¹⁵⁵ Petrov D. A. Market power and bargaining power as categories of antimonopoly regulation. // Competition Law 2021. No. 1. P. 5.

formula has a significant deviation from the market price, which cannot reflect the real relationship between supply and demand in the natural gas trading market. In addition, China's state-owned oil and gas companies cannot effectively influence changes in the pricing formula. Therefore, excessive natural gas prices ultimately fall on the shoulders of domestic consumers.

After the reform, thanks to the stimulation of consumers to independently choose resources, routes and forms of gas supply, as well as the active development of delivery methods from two and several sources, the previous monopoly market model was broken, and market orientation was mainly implemented to determine the price of fuel¹⁵⁶. As a result, Chinese monopoly buyers who entered into a long-term contract on terms linked to the price of crude oil were unable to pass on price losses caused by price fluctuations to consumers. At the moment, natural gas sellers are being required to revise the price established by a previously signed long-term agreement¹⁵⁷.

Russian energy industry is objectively export-oriented; its infrastructural development and legal regulation must take into account international trends in the field of innovation in the energy sector and follow the principle of coordination of domestic and international law¹⁵⁸. Particularly following the successful shale gas revolution in the United States, where spot and short-term contract prices for LNG are typically significantly lower than long-term contract prices for natural gas¹⁵⁹.

¹⁵⁶ 国务院关于促进天然气协调稳定发展的若干意见 (Opinion of the State Council of the People's Republic of China dated August 30, 2018 No. 31 “On promoting the coordinated and stable development of natural gas.” // [URI:https://www.pkulaw.com/chl/0f8797d8c112cb13bdfb.html?keyword=%E5%9B%BD%E5%8A%A1%E9%99%A2%E5%85%B3%E4%BA%8E%E4%BF%83%E8%BF%9B%E5%A4%A9%E7%84%B6%E6%B0%94%E5%8D%8F%E8%B0%83%E7%A8%B3%E5%AE%9A%E5%8F%91%E5%B1%95%E7%9A%84%E8%8B%A5%E5%B9%B2%E6%84%8F%E8%A7%81&way=listView](https://www.pkulaw.com/chl/0f8797d8c112cb13bdfb.html?keyword=%E5%9B%BD%E5%8A%A1%E9%99%A2%E5%85%B3%E4%BA%8E%E4%BF%83%E8%BF%9B%E5%A4%A9%E7%84%B6%E6%B0%94%E5%8D%8F%E8%B0%83%E7%A8%B3%E5%AE%9A%E5%8F%91%E5%B1%95%E7%9A%84%E8%8B%A5%E5%B9%B2%E6%84%8F%E8%A7%81&way=listView) date accessed: December 3, 2023)

¹⁵⁷ Niall Trimble Changing LNG markets and contracts. // *The Journal of World Energy Law & Business* 2018. № 5 (11). C.427-430.

¹⁵⁸ Lisitsyn-Svetlanov A. G. Development of legal regulation of innovative relations in the energy sector of the economy. // *Legal Energy Forum* 2021. No. 1. P. 8.

¹⁵⁹ D. Phua and E. Stennett J.P. Terceño The LNG View: Gas-Pricing Disputes Coming to Asia. // *Transnational Dispute Management* 2018. № 7 (15). C. 3.

The LNG spot market and lower short-term contract prices influence the prices determined by the formula for calculating monopoly prices in long-term natural gas supply contracts¹⁶⁰. This situation has meant that the previous natural gas pricing formula used in long-term contracts no longer reflects current market prices in Europe or Asia¹⁶¹. As a result, over the past 10–15 years, the number of arbitration proceedings on changes in price conditions (the so-called disputes on the revision of natural gas pricing) and in Asia¹⁶², and on the European¹⁶³ markets has increased significantly¹⁶⁴.

Pricing revisions often give rise to highly contentious disputes that can cost the equivalent of billions of dollars, since a change of just a few cents in the disputed value can have a dramatic effect on the price of the contract over the life of the contract¹⁶⁵. When applying a new pricing formula, in some cases other fair competition provisions may be changed, and major changes to other contract provisions may invalidate the original rights and obligations of both parties in the contract and distort the balance of economic benefits¹⁶⁶. It can be said that the price revision clause is the central and most important clause of the entire contract.

¹⁶⁰ Article 15.1 of the Long Term LNG Sales and Purchase Agreement signed by Qatar Liquefied Gas Company Limited and Pakistan State Petroleum Company Limited in 2016 stipulates that the price is linked to the price of Brent crude oil and is calculated using a price formula.

¹⁶¹ Shi Xunpeng Experiences of developing European gas trading hubs and their implications for China. // *Natural Gas Industry* 2017. № 8 (37). C.111.

¹⁶² At the beginning of 2018, the first public report in Asia was an arbitration case regarding a dispute over the price of LNG between South Korea's KOGAS and Australia's North West Shelf Gas.

¹⁶³ *Gasum v. Gazprom Export* (Stockholm ad hoc Arbitration); *Polskie Górnictwo Naftowe i Gazownictwo v Commission* (Commitments by Gazprom). (Case T-399/19) (February 2, 2022); *OAQ Gazprom v. The Republic of Lithuania* (PCA Case No. 2011-16) (March 31, 2015).

¹⁶⁴ For example: *Gazprom Export, LLC v. Turkmengaz S.C.* SCC case ; *Polskie Naftowe i Gazownictwo S. A. v. Gazprom Export, LLC*; *Public Gas Company of Greece S. A. v. Petroleum Pipe; line Corporation*. ICC case; *Eni S. p. A. v. Gas Terra B.V.* UNCITRAL case; Decision of the Supreme Court of Sweden. Case N T 7931-16 (4 July 2019). *Republic of Lithuania v. Gazprom PJSC*

¹⁶⁵ Rahul Donde Laurent Lévy The arbitrator's role. // *Gas and LNG Price Arbitrations: A Practical Handbook*, Second Edition 2020. C.122.

¹⁶⁶ Ben Holland, Phillip Spencer Ashley Natural Gas Price Reviews: Past, Present and Future. // *Journal of Energy & Natural Resources Law* 2015. № 1 (30). C.29.

If no agreement is reached on the issue of renegotiation of the price, the buyer and seller, due to the sensitivity of the price formula and commercial confidentiality, will usually refer the dispute to the International Commercial Arbitration Court¹⁶⁷.

Regarding disputes regarding the determination of the price formula, two relevant standards have been published in international commercial arbitration practice¹⁶⁸.

The first criterion is known as the "cause and effect" criterion, i.e.

- a) the circumstances are beyond the control of the party to the contract;
- b) the circumstances lead to a significant change in the buyer's market;
- c) the pricing formula must be changed to accommodate this significant market change;

The second criterion is known as "elementary analysis", namely:

- a) changes in economic conditions during the execution of the contract;
- b) the change is obvious;
- c) the change has occurred in the buyer's country or market;
- d) the change is beyond the control of the contracting party¹⁶⁹.

Examining the balance between the rights and obligations of the parties (economic interests) before or after market reform is a key task of arbitration. In the context of reforming the global natural gas market, more attention is paid to the balance of rights and obligations (economic interests) of the parties. For example, in the 2013 case of RWE v. Gazprom Export LLC, the International Chamber of Commerce arbitration granted RWE's request to adjust the contract price formula, eliminating the calculation formula linked to the price of oil and replacing it with a link to the market price of spot natural gas¹⁷⁰. In some cases, this method of

¹⁶⁷ Official site Law Business Research: <https://www.lexology.com/library/detail.aspx?g=dd3009c2-de6c-4e38-87d1-86556a606a12> (date accessed: December 3, 2023).

¹⁶⁸ Ben Holland, Phillip Spencer Ashley Natural Gas Price Reviews: Past, Present and Future. // *Journal of Energy & Natural Resources Law* 2015. № 1 (30). C. 33-37.

¹⁶⁹ Lisa M. Bohmer Arbitrating international LNG disputes: lessons learned over two decades. // *The Journal of World Energy Law & Business* 2015. № 5 (8). C. 487.

¹⁷⁰ Segun Osuntokun Gas price reviews: is arbitration the problem? // *Global Arbitration Review* 2014. №. 1. (30). C. 1-4.

recalculating prices in accordance with current market conditions without taking into account the balance of rights and obligations (economic interests) determined by the buyer and seller at the conclusion of the contract causes a lot of disputes between buyers and sellers¹⁷¹.

In *GNA v. Atlantic LNG Co. of Trinidad Tobago*, Atlantic's seller requested an increase in contract prices to account for the cost of natural gas in the New England market. Arbitration split the original single price into two different values; for the price in Spain, the original price formula was retained, but its components were revised; for New England prices, a “New England market adjustment” has been added. Both parties to the dispute objected to the arbitration court's decision¹⁷².

Imposing a pricing scheme that distorted the original transaction was Plaintiff Atlantic's main attraction.

The Court of Appeal ruled that

(a) the arbitral tribunal did not impose restrictions on the application of the double price structure and literally interpreted the following text of the contract (disputed issues);

(b) in reviewing the contract price <...> the parties shall take into account the levels and trends in prices for LNG and natural gas supplies <...> and take into account all characteristics of such supplies (including, but not limited to, quality, quantity, interruptibility, flexibility of supply and delivery time);

(c) the contract price revised in accordance with this Article shall take into account, in particular, all relevant operations, services and risks at the points of import for the processing and marketing of natural gas in all market segments¹⁷³.

Buyers of Chinese natural gas tend to be companies with close ties to the

¹⁷¹ J. Baily, R. Lidgate LNG price reviews: a sign of the times. // *The Journal of World Energy Law & Business* 2013. № 2 (7). C.140-152.

¹⁷² Semenovich K.S., Gao Y. - On ensuring stable supplies of natural gas in China and Japan // *International Law and International Organizations / International Law and International Organizations*. 2022. No. 1. P. 34 - 45..

¹⁷³ S.D. New York United States District Court *GNA v. ATLANTIC LNG CO. OF TRINIDAD TOBAGO*. 2008. Site: <https://casetext.com/case/gna-v-atlantic-lng-co-of-trinidad-tobago>.

government, so Chinese and Russian gas companies are more willing to negotiate and resolve price issues rather than submit disputes to international commercial arbitration¹⁷⁴. Before the natural gas market reform, China's long-term agreement did not contain detailed and strict provisions on price revisions. In particular, pricing clauses rarely include provisions addressing market reforms such as “significant changes in the economic environment of a particular market.”¹⁷⁵. With the reform of the buyer's domestic natural gas market, if the seller refuses to enter into or renegotiate the contract, the buyer can easily be replaced by another seller who is willing to accept the buyer's terms¹⁷⁶.

Currently, natural gas buyers such as China are advised to use a hybrid pricing formula based on the developed market price index, spot price and JCC (Japanese Crude Cocktail) when signing new or renegotiating existing long-term contracts with Russian suppliers¹⁷⁷. In this way, the disadvantages of short-term or spot contracts, such as high transport costs and large price fluctuations, are avoided, while also taking advantage of demand flexibility¹⁷⁸. The Chinese government's market-oriented natural gas reform has promoted the transformation of a pricing formula linked to an oil price index into a market-based pricing mechanism based on various underlying natural gas indices. Get rid of the traditional natural gas pricing mechanism tied to oil¹⁷⁹.

The above-mentioned destination limitation clauses, take-or-pay clauses and

¹⁷⁴ Katja Yafimava Outlook for the Long-Term Contracts in a Globalizing Market. // 5th Gas Centre Industry Forum 2014. C.1-5; Jonathan Lim and Justin Li Duncan Speller Oil and Gas Arbitration in the Asia-Pacific Region. // The Asia-Pacific Arbitration Review 2019 C.30-38.

¹⁷⁵ Agnieszka Akon Price reviews and arbitrations in Asian LNG markets. // Oxford Institute for Energy Studies 2019. C.18.

¹⁷⁶ Popondopulo V.F. Market power of producers and consumers of goods, forms of its manifestation and legislative regulation. // Competition law 2021. No. 4. P. 9..

¹⁷⁷ Niall Trimble Changing LNG markets and contracts. // The Journal of World Energy Law & Business 2018. № 5 (11). C. 427-430.

¹⁷⁸ Patrick Heather The evolution of European traded gas hubs. // Oxford Institute for Energy Studies 2015. №. C.6.

¹⁷⁹ Chantal Carriere The effects of Japan's push for greater LNG market flexibility on LNG pricing and destination restrictions. // The Journal of World Energy Law & Business 2018. № 2 (11). C. 136-144.

price revision clauses are widely used in international LNG trade, but the domestic laws of China and Russia do not clearly define the rules for such clauses, so they are rarely used in China and Russia contracts. sale of natural gas on the domestic market. Market-oriented natural gas reform in China and Russia has primarily focused on the agreement between buyers and sellers on the above contract terms. Gas industry reform in China and Russia has always sought to find the best balance between liberalization of natural gas sales contracts and national protectionism¹⁸⁰.

¹⁸⁰ Popondopulo V.F. International private law: nature and development trends. // Russian legal journal 2018. No. 2 (119). C. 94

Chapter 3. State regulation of gas supply activities in Russia and China

§ 3.1. Legal reform to introduce a market mechanism in Russia and China

3.1.1. Legal reform to introduce a market mechanism in Russia

Russia and China have much in common in the historical reform process to introduce a market mechanism in the field of gas supply. Since the establishment of the Soviet Union's Ministry of Gas Industry in 1965, it has maintained a vertically integrated management model for exploration, production, transportation, storage and sales.

With the collapse of the Soviet Union in 1991, the following Russian laws and regulations were adopted directly related to the supply of natural gas: Decree of the President of the Russian Federation dated June 1, 1992 No. 538 “On ensuring the activities of the country’s Unified Gas Supply System”; Decree of the President of the Russian Federation dated November 5, 1992 No. 1333 “On the transformation of the State Gas Concern Gazprom into the Russian Joint Stock Company Gazprom”; Decree of the President of the Russian Federation dated December 8, 1992 No. 1559 “On the transformation into joint-stock companies and privatization of state-owned enterprises, associations and organizations of the gas industry of the Russian Federation”; Resolution of the Council of Ministers-Government of the Russian Federation dated February 17, 1993 No. 138 “On the establishment of the Russian joint-stock company Gazprom.”

As a result, the transition in Russia's gas supply from the system of state administrative management embodied by the USSR Ministry of Petroleum Industry under a planned economy to a system of market economy, privatization and commercialization was completed quite quickly. Market reform in the field of gas supply in Russia proceeded faster than in China. In terms of diversification of corporate capital and market-oriented operations, it took Russia only about three

years to complete the transformation of the National Ministry of Oil into a corporate system.

The procedure for the privatization of the state gas concern Gazprom into the Russian joint-stock company Gazprom was determined by the President of the Russian Federation. Decree of the President of the Russian Federation dated January 29, 1992 N 66 “On accelerating the privatization of state-owned enterprises in the RSFSR” stipulates that the assessment of property is carried out by an enterprise on the basis of its complete inventory data; based on the results of the inventory, discrepancies identified during its implementation in the actual availability of values against accounting and reporting data, etc¹⁸¹. In law enforcement practice, there are also numerous decisions that note that, by virtue of clause 2 of Decree of the President of the Russian Federation of December 8, 1992 N 1559 “On the transformation into joint-stock companies and privatization of state-owned enterprises, associations and organizations of the gas industry of the Russian Federation,” the property of production operating bases, gas filling stations, high and medium pressure gas distribution networks, including structures on them, are federal property¹⁸².

In the absence of government oversight of the privatization process, market transactions with state oil and gas capital were not put up for auction at market prices until 2003, so private capital was not attracted and conditions for the development of private property were not created¹⁸³. The process of privatization of state-owned

¹⁸¹ Resolution of the Fifteenth Arbitration Court of Appeal dated January 10, 2018 N 15AP-21614/2017 “In the case of the appeal of the Interregional Territorial Administration of the Federal Agency for State Property Management in the Krasnodar Territory” / Fifteenth Arbitration Court of Appeal. - Access mode: SPS “ConsultantPlus”.

¹⁸² Resolution of the Federal Arbitration Court of the Central District dated May 25, 2010 N F10-1920/10 “In the case of the cassation appeal of OJSC Maloyaroslavetsmezhragaz against the decision of the Arbitration Court of the Kaluga Region dated December 7, 2009 and the decision of the Twentieth Arbitration Court of Appeal dated March 4, 2010 in case N A23-1768/09G-15-176” / Federal Arbitration Court of the Central District. - Access mode: SPS “ConsultantPlus”.

¹⁸³ Resolution of the Federal Arbitration Court of the Volga District dated 02.12. 2003 No. 12-17775/02-C35 “In the case of the cassation instance to verify the legality and validity of decisions (rulings, orders) of arbitration courts that have entered into legal force” / Federal Arbitration Court of the Volga District - Access mode: ATP “ConsultantPlus”; Naletov K.I. Once

oil and gas companies before 1998 allowed the fortunes of Russian oligarchs to develop to a certain extent to the detriment of national interests¹⁸⁴.

Therefore, since 2005, in order to increase the “controllability” of trade and the natural gas market and increase national taxation, the state began to carry out reforms to nationalize Gazprom¹⁸⁵. Decree of the President of the Russian Federation dated May 22, 2012 No. 695 “On measures for the privatization of federally owned blocks of shares in the largest companies in the fuel and energy complex” established requirements for the privatization of state-owned companies.

As a result, Russia has increased state control and administrative control of Russian oil and gas companies in terms of ownership and corporate organizational structure, and the mechanism of market competition has gradually weakened. This ensured the stability of Russian society and the development of the economy at a time when industry in Russia generally fell into sharp decline¹⁸⁶. It is worth noting that “today, the norms regulating the activities of companies with state participation are not systematized, there are no uniform principles for the activities of these companies, approaches to assessing the activities of companies with state participation have not been developed, taking into account the industry affiliation and the specifics related to this. including the need for proper maintenance of energy infrastructure, its modernization, and construction of a new one.”¹⁸⁷.

again about the legal nature of the concession agreement in the field of subsoil use. // *Legislation and economics* 2005. No. 10. P.7.

¹⁸⁴ Konovalov A.I. Privatization of fuel and energy facilities: results and prospects. // *Business Law* 2013. No. 1. P. 22-26.

¹⁸⁵ Mazaev V.D. Nationalization as a constitutional phantom. // *Comparative Constitutional Review* 2013. No. 5 (96). C. 101.

¹⁸⁶ Kalinov V.V. Reforming the gas industry of the Russian Federation in the 90s // *Bulletin of the Surgut State Pedagogical University* 2015. No. 5. P. 169.

¹⁸⁷ Romanova V.V. Problems and tasks of legal support for corporate governance in companies with state participation in the energy sector. // *Legal Energy Forum* 2020. No. (1). C.9.

Legislative reform of legal regulation of the implementation of market mechanisms in China

Compared to the rapid reforms in Russia, China has come a long way in reforming its legal system, aimed at introducing market mechanisms. In other words, since China's introduction of a planned economic system in 1949, it has only been until 2020 that China has fully completed the capital structure diversification reform of the parent company of state-owned oil and gas companies. The history of legal reforms to introduce market mechanisms in the supply of natural gas in China can be divided into the following three stages:

1) Stage of planned economy (1949-1978).

After the founding of the People's Republic of China in 1949, ownership and management of mainland China's oil and gas industries were nationalized. Apart from the constitution, there was no law or regulation governing state-owned oil and gas enterprises at the time¹⁸⁸. Before the reform and opening in 1978, the sales chain adopted a planned economic policy of “unified procurement and sales.” The state is responsible for all gas supply activities. The guiding and regulatory role of economic laws and legal regulations was practically non-existent.

2). Transition to a corporate system (1978-2016).

In order to attract Western capital and advanced technology, before the adoption of the PRC Law on Companies, China decided to first enact some laws regulating foreign investment, in particular: the PRC Law on Sino-Foreign Joint Ventures (1979); Law of the People's Republic of China "On Enterprises with Foreign Capital" (1986); Law of the People's Republic of China on Sino-Foreign Cooperative Enterprises (1988). These three laws were also exceptions to the subsequent PRC Law on Companies (1993) and the PRC Law on Partnership

¹⁸⁸ 中华人民共和国宪法 (1954) (National People's Congress of September 20, 1954 “Constitution of the People's Republic of China (1954).”) // URI: <https://www.pkulaw.com/chl/089435da920a5457bdfb.html?way=textLawChange> (accessed December 3, 2023).

(1997).¹⁸⁹ The above three laws not only became the main acts governing the formation of enterprises with foreign investment until 2019, but also laid the foundation for foreign investment to enter the natural gas market in China.

In 1982, the PRC Regulation “On Foreign Cooperation in the Exploitation of Offshore Petroleum Resources” was adopted in order to attract foreign capital to the exploration and exploitation of offshore oil and gas fields, and at the same time the China National Offshore Oil Corporation “CNOOC” was established (hereinafter referred to as “CNOOC” company). In 1983, the State Council of the People's Republic of China decided to create the China Petrochemical Corporation (formerly Sinopec). The administrative orders of this company directly transferred 39 petrochemical enterprises under the control of the Ministry of Petroleum, the Ministry of Chemical Industry and the Ministry of Textile Industry. In 1988, the Chinese Ministry of Petroleum was reorganized into the China National Petroleum Corporation (formerly CNPC).

In 1998, the State Council of the People's Republic of China reorganized the "three oil and gas giants" (the former CNPC, the former Sinopec and the CNOOC), and introduced a management mechanism and introduced a management system of state monopoly and geographical separation¹⁹⁰. As a result, CNPC has grown into a vertically integrated business exploring, producing, transporting, selling, importing and exporting oil and natural gas in 12 provinces north of Qinlin Mountain in China; Sinopec has obtained the same rights in 19 provinces south of Qinlin Mountain in China; CNOOC is responsible for the offshore oil and gas business in China¹⁹¹.

¹⁸⁹ 丁丁. 从双轨到并轨：外商投资企业的法律适用之变 // 法律适用 [[Ding Ding From dual direction to parallel: Changes in the application of laws for enterprises with foreign investment // Applicable law]. 2019. №.14.页 56.

¹⁹⁰ 江山, 黄勇. 论中国石油行业的反垄断法适用 // 现代法学. [Jiangshan, Huang Yun. On the application of antimonopoly legislation in the oil industry of China // jurisprudence, modern]. 2011. №.7 (33).页 81.

¹⁹¹ 孟雁北. 垄断行业改革法律问题研究：以石油天然气产业为例证. [Yanbei, Meng. Study of legal issues of reforming a monopolistic industry: using the example of the oil and gas industry]. 北京：法律出版社, 2016. 页227.

3). Free competition stage (2017-present).

A turning point in the legal reform to introduce market mechanisms in the gas supply sector in China was “Several Opinions on Deepening the Reform of the Oil and Gas System” (2017).

Legal reforms before 2017 were slow and incomplete; legal reforms after 2017 were faster and more systematic. Although this document is only an administrative regulation promulgated by the Central Committee of the Communist Party of China and the State Council and has a relatively low legal status, it defines the guiding ideology, basic principles, general ideas and main objectives of China's gas system reform. For example, this administrative regulation stipulates that the market should play a decisive role in the allocation of resources.

The Opinions “On Accelerating the Use of Natural Gas” (2017)¹⁹² indicate that a mechanism has been created for the independent selection of resources and gas supply routes by natural gas consumers. The Opinions of the Central Commission of the People's Republic of China on the comprehensive deepening of reforms “On the implementation of the reform of the functioning mechanism of the oil and gas pipeline network” (2019)¹⁹³ provide for:

1. Create a national unified oil and gas pipeline network company controlled by state capital and with diversified investment organizations;
2. To form an oil and gas market system with a multi-subject and multi-channel supply of oil and gas resources in the market for exploration and production of

¹⁹² 关于印发《加快推进天然气利用的意见》(Ministry of Science and Technology Opinions of the National Development and Reform Commission, Ministry of Industry and Information Technology, etc. from 2017 “On accelerating the promotion of the use of natural gas.”) // URI: <https://www.pkulaw.com/chl/c96d6bca957f1efabdfb.html?keyword=%E5%8A%A0%E5%BF%AB%E6%8E%A8%E8%BF%9B%E5%A4%A9%E7%84%B6%E6%B0%94%E5%88%A9%E7%94%A8> (accessed December 3, 2023).

¹⁹³ 《石油天然气管网运营机制改革实施意见》(Opinions of the Central Commission for the Comprehensive Deepening of Reforms of 2019 “On the implementation of the reform of the functioning mechanism of the oil and gas pipeline network” // URI: https://pkulaw.com/chl/3ac40c12173e2_d59bdfb.html?way=textRightFblx (accessed December 3, 2023).

natural gas, a national unified pipeline network for the efficient collection and transportation of natural gas, as well as full competition in the natural gas supply market.

Regarding access to foreign investment, on March 15, 2019, China's first law to comprehensively regulate foreign investment, the Foreign Investment Law of the People's Republic of China, was promulgated. After the promulgation of the "Special Measures to Control Foreign Investment Access (Negative List) - 2021 Edition)"¹⁹⁴. In the market under consideration, a differentiated policy regarding foreign investment is no longer implemented¹⁹⁵. In the field of natural gas exploration and exploitation, the Chinese market is completely open to foreign companies¹⁹⁶. In addition, in China there is no legal regulation of strategic natural gas deposits similar to Russia (for example: Federal Law No. 57-FZ dated April 29, 2008 "On the procedure for making foreign investments in business entities of strategic importance for ensuring the country's defense and state security") (hereinafter referred to as Federal Law No. 57-FZ of April 29, 2008), this may indicate that, compared to Russia, China has a higher level of market openness in the field of exploration and production of natural gas.

By studying the historical changes in the above laws and administrative regulations, the following reform trends can be traced:

¹⁹⁴ 外商投资准入特别管理措施(负面清单)(2021年版) (Order No. 47 of the National Development and Reform Commission of the People's Republic of China and the Ministry of Commerce of the People's Republic of China of 2021, "Special Measures for Managing Foreign Investment Access (Negative List) (2021 Edition) // URI: <https://www.pkulaw.com/chl/0a30dd9923e2260abdfb.html?keyword=%E5%A4%96%E5%95%86%E6%8A%95%E8%B5%84%E5%87%86%E5%85%A5%E7%89%B9%E5%88%AB%E7%AE%A1%E7%90%86%E6%8E%AA%E6%96%BD%20%EF%BC%88%E8%B4%9F%E9%9D%A2%E6%B8%85%E5%8D%95%EF%BC%89&way=listView> (date accessed: December 3, 2023).

¹⁹⁵ 孔庆江. 《中华人民共和国外商投资法》与相关法律的衔接与协调 // 上海对外经贸大学学报 [Qingjiang, Kong Communication and coordination of the Law of the People's Republic of China "On Foreign Investment" and relevant laws // Journal of Shanghai University of Foreign Economics and Trade]. 2019. №.3 (26). 页 12.

¹⁹⁶ 陈嘉茹. 2019年版外商投资准入负面清单对中国油气行业的影响 // 国际石油经济 [Jiaru, Chen The impact of the 2019 Foreign Investment Negative Access List on China's oil and gas industry // International Petroleum Economics]. 2019. №.7 (27). 页 58.

1). Before the 2017 reforms, the administrative authority and decisions of China's central government played a decisive role in market access, market structure, and sectoral changes in the natural gas market¹⁹⁷. Almost all key reforms of the market mechanism result in strong administrative power of the central government (for example, the creation of the three largest oil and gas giants in the 1980s and the restructuring of the oil and gas industry in 1998).

2). The gas supply management method gradually changed from state administrative monopoly to a combination of state administrative supervision and market competition, and then gradually moved to market resource allocation¹⁹⁸.

Compared to Russia's rapid and systematic implementation of the corporate system in the gas supply sector since the implementation of the reform and opening-up policy in 1978, the parent companies of China's three largest state-owned oil and gas companies were not converted to the corporate system until 2020. In fact, from 2017 to 2020, PetroChina (2017), CNOOC (2017), and Sinopec (2020) respectively completed corporate system reform. In other words, in 2020 alone, the parent companies of the three largest state-owned oil and gas companies successfully transformed from enterprises owned by the entire people (under a planned economy) to a system of limited liability companies (under a market system).

The reasons for China's slow or even unsuccessful reform of the three largest state-owned oil and gas companies until 2017 can be explained by the following two points:

Point 1: Pseudo-corporate governance model.

Some Chinese scholars use the theory of "pseudo-corporate governance" to explain why the reform of the socialist market economy system has not affected the reform of the corporate system of the parent company of state-owned oil and gas

¹⁹⁷ 时颖. 油气行业民间资本准入状况及问题研究——以油气体制改革为研究背景 // 中国国土资源经济 [Ying, Shi Research on the status of access and problems of private capital in the oil and gas industry - taking into account the reform of the oil and gas system as the basis for the study // Land and Resource Economics of China]. 2020.№.05 (33). 页 27.

¹⁹⁸ Liu Dengjuan Li Pu Li Xin Review and Prospect of Market-Oriented Reform of China's Mining rights Transfer System // China Mining Magazine, 2019. Vol. 28. № 9. Pp. 2-4.

companies. And they believe that from 1993 to 2013, the corporate system reform for SOEs was market-oriented reform only in form, while in reality there was no market reform.

For example, a subsidiary of PetroChina successfully completed corporate restructuring and became a joint stock limited liability company in 1999. PetroChina was listed on the New York Stock Exchange, the Hong Kong Stock Exchange and the Shanghai Stock Exchange. At the same time, its parent company CNPC remained 100% state-owned until 2017. In other words, the PetroChina subsidiary uses a market-based corporate governance structure. In this case, the actual activities of the subsidiary are subject to the administrative management mechanism of the unlisted parent company CNPC¹⁹⁹. In practice, the board of directors and managers of the parent company still carry out personnel planning in accordance with the administrative management methods of government departments, and the current corporate governance structure remains ineffective²⁰⁰.

Clause 2. Legislative contradiction

Some Chinese scholars are also exploring the reasons for the failure in terms of regulations for SOEs. Li Jianwei believes that since 1979, China has formed a dual model of business legislation for oil and gas companies²⁰¹.

¹⁹⁹ 王爱武. 混合所有制改革过程中国有企业公司治理问题研究. 中共中央党校. [Aiwu, Wang. A Study of Corporate Governance of Chinese State-Owned Enterprises in the Process of Mixed Ownership Reform. Diss., Party School of the Central Committee of the Communist Party of China]. -2018. 页 74.

²⁰⁰ Compared to Russian state-owned oil and gas companies, although there has long been a three-level system of management bodies: the general meeting, the board of directors and executive bodies in the corporate governance structure of Gazprom. And also a relatively complete legislative system and corporate governance system have been formed for a long time. However, in practice there is still a certain gap between the corporate governance of Russian state-owned enterprises and the provisions of the law. Gubin E.P. believes that the number of independent members of the board of directors of Russian companies, selection criteria and work mechanism are not very satisfactory.

²⁰¹ 李建伟. 国有企业特殊法制在现代公司法制中的生成与安放 第41页 // 中南大学学报(社会科学版). [Jianwei, Li. Formation and place of a special legal system of state-owned enterprises in the system of modern corporate law // Journal of Central South University (publication on social sciences)]. 2017. №.3 (23). 页 41-48.

The first model is to legislate the establishment of enterprises in accordance with the source of ownership of the oil and gas company. This concept was created within the framework of a planned economy, so the company's activities are still strictly planned and directive. According to the People's Own Industrial Enterprise Law of the People's Republic of China (1988), the Ministry of Petroleum of China was reorganized into the China National Petroleum Corporation in 1988.

The second legislative model is the legislative regulation of oil and gas enterprises in accordance with the PRC Law on Companies. In fact, the reform of state-owned enterprises was included in the scope of regulation of the PRC Law on Companies of 1993²⁰². In judicial practice, the first model (Law of the People's Republic of China "On Industrial Enterprises of National Property" (1988) is almost never used in legal proceedings.

Reasons for accelerating the introduction of market mechanisms.

Since 2017, the main reason for the rapid implementation of laws and policies to introduce market mechanisms is that the Chinese government and the three largest state-owned oil and gas companies began to implement laws and policies for low-carbon and green transformation.

Although natural gas is seen as an energy source for the clean and green energy transition, natural gas is inherently a non-renewable energy source²⁰³. In the past, natural gas was considered the key to national energy security. Therefore, gas supply has always been considered a monopoly industry in China and has not been affected by the adoption of laws and policies that promote market mechanisms.

However, after the entry into force of the Paris Agreement²⁰⁴ in 2016, the

²⁰² 蒋大兴. 国企应从公司法中撤退——从“商事公司”向“公共企业”演进 // 中国工商管理研究. [Daxing, Jiang. State-owned enterprises must deviate from the company law, transforming themselves from a “commercial company” into a “state-owned enterprise”. // Research on business administration in China]. -2013. -№.12.-页 19-25

²⁰³ Popondopulo V.F., Petro D.A., Silina E.V. Hydrogen energy: concept, stimulation of development and legal regulation. // Law and Business 2022. No. 2. P. 10.

²⁰⁴ Paris Agreement of December 12, 2015 (came into force for the Russian Federation on November 6, 2019) // URI: <http://publication.pravo.gov.ru/Document/View/0001201911060026> (accessed December 3, 2023) .

agreement is essentially a “commitment to ending fossil fuels.”²⁰⁵. Most notably, in 2021, the District Court of The Hague in the Netherlands ruled that oil and gas companies should be held accountable for absolute carbon emissions rather than carbon intensity targets. This resolution became a turning point in the development of the global oil and gas industry²⁰⁶.

Since the Chinese government announced a national strategy in 2020 to achieve carbon neutrality by 2060, part of the role of natural gas in ensuring national energy security has been replaced by renewable energy sources. Spurred by carbon neutral policies, three state-owned oil and gas companies have proposed plans to transform oil and gas companies into integrated energy companies.

Especially, China's modern energy system plan "14th Five-Year Plan" released in 2022 believes that the low-carbon transformation of global energy will comprehensively promote the accelerated restructuring of global energy and industrial systems. The plan includes requirements to accelerate the green and low-carbon energy transformation, mainly the development of non-fossil energy, and ensure the transition of the entire energy system to the decentralization trend²⁰⁷.

In the context of this energy transition, private companies and foreign companies have since 2017 quickly gained opportunities and legal protections to compete fairly with state-owned companies.

²⁰⁵ 徐玉高, 鲍春莉, 武正弯. 《巴黎协定》对油气行业发展的影响 // 国际石油经济 [Yugao, Xu, Bao Chongli, Wu Zhengwan The influence of the Paris Agreement on the development of the oil and gas industry // International Petroleum Economics]. 2017. №.1 (25). 页 48.

²⁰⁶ 徐东, 陈明卓, 胡俊卿. 国际石油公司能源转型回顾与展望 // 油气与新能源 [Dong, Xu, Chen Mingzhuo, Hu Junqing Review and prospects for energy transformation of international oil companies // Oil and gas and new energy]. 2022. №.2 (34). 页 2.

²⁰⁷ “十四五”现代能源体系规划 发改能源〔2022〕210号 (National Development and Reform Commission National Energy Administration of Energy Development and Reform [2022] No. 210 “14th Five-Year Plan” Planning for a Modern Energy System.) // URL: https://www.ndrc.gov.cn/xxgk/zcfb/ghwb/202203/t20220322_1320016.html (date accessed: December 3, 2023).

§ 3.2. Legal reform of the third-party access system to natural gas transportation facilities and LNG terminals in Russia and China

3.2.1 Third-party access system

The third-party access system (free and fair access to natural gas transportation facilities and LNG terminals) is the main concept of legal regulation of gas transportation infrastructure. The concept of third party access is reflected in Russian legislation in the form of a non-discriminatory regime defining the regulation of gas supply.

Transportation of natural gas through pipelines falls within the sphere of natural monopoly (Article 4 of the Law of the Russian Federation “On Natural Monopolies”)²⁰⁸. And a natural monopoly is a state in the goods market in which demand is satisfied more efficiently in the absence of competition due to the technical features of production (due to a significant decrease in production costs per unit of goods as production volume increases), and goods produced by a natural monopoly cannot be replaced by other goods in consumption, therefore the demand for goods produced by a natural monopoly in this product market depends to a lesser extent on the price of this product compared to the price of other types of goods needed (Article 3 of the Law of the Russian Federation “On Natural Monopolies”)²⁰⁹.

From an economic point of view, the construction of gas transportation infrastructure involves large sunk costs, and competitive construction of elements of such infrastructure will only increase the cost. To achieve the most optimal result, duplication of construction of infrastructure facilities should be avoided, allowing market participants to access an already existing communications system. Since the gas transportation infrastructure, including the pipeline network, storage systems, liquefaction, also has no economic value when rebuilt within a certain geographical range, it is endowed with the attribute of a natural monopoly under the laws of various countries.

²⁰⁸ Federal Law of August 17, 1995 N 147-FZ (as amended on June 11, 2021) “On Natural Monopolies” - Access mode: SPS “ConsultantPlus”.

²⁰⁹ *Ibid.*, Art.3.

In accordance with Article 10 of the Law of the Russian Federation “On the Protection of Competition”²¹⁰: in order to prevent the creation of discriminatory conditions, federal law or a regulatory legal act of the government of the Russian Federation may establish rules for non-discriminatory access to commodity markets and to infrastructure facilities used by natural monopoly entities directly for the provision of services in spheres of activity of natural monopolies. Therefore, the gas pipeline network as a type of natural monopoly must comply with the requirements of providing non-discriminatory access (third party access).

Today, Russia has developed a certain system of regulations that ensure non-discriminatory access to energy networks²¹¹. Legislation, which contains a body of specialized legal norms aimed at ensuring non-discriminatory access to gas pipeline networks, is based primarily on the Law of the Russian Federation “On Gas Supply”, supplemented by by-laws, such as Decree of the Government of the Russian Federation No. 858 of July 14, 1997. “On ensuring access of independent companies to the gas transportation system of OJSC Gazprom”, Decree of the Government of the Russian Federation dated November 24, 1998 N 1370 “On approval of the Regulations on ensuring access of organizations to local gas distribution networks”²¹².

According to Article 27 of the Law of the Russian Federation “On Gas Supply,” organizations that own gas supply systems are obliged to ensure non-discriminatory access of any organizations operating on the territory of the Russian Federation to the free capacity of the gas transmission and gas distribution networks they own²¹³.

The gas pipeline network in Russia is divided into a system of main gas pipelines (the gas transmission system of PJSC Gazprom) and a local distribution

²¹⁰ Federal Law of July 26, 2006 N 135-FZ (as amended on July 10, 2023) “On the Protection of Competition” - Access mode: ATP “ConsultantPlus”.

²¹¹ Romanova V.V. Legal support for effective public administration in the energy sector. // Legal Energy Forum 2016. No. 1. P. 8.

²¹² *Ibid.*, p.8

²¹³ Federal Law of March 31, 1999 No. 69 “On gas supply in the Russian Federation.” - Access mode: SPS “ConsultantPlus”.

network. According to Article 1 of the Decree of the Government of the Russian Federation No. 858 of July 14, 1997. “On ensuring access of independent companies to the gas transmission system of OJSC Gazprom”, the gas transmission system of PJSC Gazprom is a system of main gas pipelines of the unified gas supply system of PJSC Gazprom, including gas pipeline branches.²¹⁴ According to Art. 3 of the Decree of the Government of the Russian Federation No. 858 of July 14, 1997, any organization has the right of non-discriminatory access to the gas transmission system of PJSC Gazprom for gas transportation.

PJSC Gazprom provides access to independent organizations to its gas transmission system on the basis of agreements concluded by these organizations with PJSC Gazprom or, on behalf of PJSC Gazprom, with its gas transmission organizations, subject to the following conditions:

- 1). availability of free capacity in the gas transmission system from the connection point to the gas selection point for the gas supply period proposed by the gas supplier;
- 2). compliance of the quality and parameters of the supplied gas with the standards and technical conditions and other regulatory and technical documents in force in the Gazprom PJSC system;
- 3). the presence of supply gas pipelines from suppliers and gas pipelines - branches to buyers with metering and gas quality control points by the gas supply start date proposed by the gas supplier.

According to Article 2.3 of the Decree of the Government of the Russian Federation of November 24, 1998 No. 1370 “On approval of the Regulations on ensuring access of organizations to local gas distribution networks”²¹⁵, local gas distribution network - a system of gas pipelines and structures designed to supply

²¹⁴ Decree of the Government of the Russian Federation dated July 14, 1997 No. 858 “On ensuring access of independent organizations to the gas transportation system of the open joint-stock company Gazprom” (as amended on June 19, 2014) - Access mode: SPS “ConsultantPlus”.

²¹⁵ Decree of the Government of the Russian Federation dated November 24, 1998 No. 1370 “On approval of the Regulations on ensuring access of organizations to local gas distribution networks” (as amended on August 8, 2013). - Access mode: SPS “ConsultantPlus”.

gas to gas buyers within one territorial entity (subject of the Russian Federation, city, district, etc.). According to Art. 3.4 of this Resolution, access of organizations to local gas distribution networks is provided in the presence of: free capacity in local gas distribution networks (from the connection point to the gas sampling point) for the declared period of gas transportation; supply gas pipelines and gas branch pipelines to gas buyers with metering and gas quality control points prepared for the start of gas supply; compliance of the quality and parameters of the supplied gas with the requirements of the current regulatory and technical documentation.

When the available capacity of the natural gas transportation system is insufficient to satisfy all applications considered, priority is given to:

firstly, to natural gas suppliers who satisfy the public and domestic needs of the population, and transport suppliers who obtain dry natural gas by processing petroleum (associated) gas;

secondly, to organizations that sell and buy natural gas at organized auctions;

thirdly, compared to other applicants, natural gas suppliers provide longer supplies of natural gas.

Article 3.6 of the Decree “On approval of the Rules for the supply of gas in the Russian Federation” also provides for a similar order of priority: “buyers of gas for government needs, for municipal needs and the population, as well as buyers who have entered into supply agreements have a priority right to conclude gas supply agreements.” gas earlier - for the extension of these contracts.”²¹⁶

In addition to the non-discriminatory principle, the third party access system must operate in a transparent manner for all relevant users. Examples include publishing information about available capacity, requiring conditions under which such capacity may be available (eg cost), imposing rules related to third party access, reserving unused capacity, refusing reasonable requests for access. That is, information openness is at the core of a third party access system that must operate

²¹⁶ Decree of the Government of the Russian Federation dated 02/05/1998 No. 162 “On approval of the Rules for gas supply in the Russian Federation” (as amended on 03/19/2020) - Access mode: ATP “ConsultantPlus”.

on a non-discriminatory and transparent basis for all relevant users.

At the same time, in practice, vertically integrated gas companies sometimes have gas pipelines idle, since information about their throughput is not transparent. Even vertically integrated gas companies can accumulate capacity, thereby preventing their competitors from using gas pipelines²¹⁷. For example, independent producers and Gazprom often disagree on the publication of information about pipeline capacity. OJSC Gazprom noted that the corresponding part of the Unified Gas Supply System (UGSS) does not have free production capacity. However, independent manufacturers claim the presence of such capacities²¹⁸.

Thus, the level of legal support for the development of entrepreneurship in the oil and gas sector of the economy is still far from ideal²¹⁹. To improve the level of protection of the rights and interests of end consumers and improve the efficiency of use of gas transmission infrastructure, owners or operators of these elements of gas transmission infrastructure must allow third-party users to use the infrastructure fairly, equitably and transparently.

3.2.2 Separation of vertically integrated oil and gas companies.

Regarding the division of the gas pipeline network, China divided the pipeline assets of the three largest state-owned oil and gas companies in a very radical way in 2020. The Chinese government's approach to rapidly dividing the natural gas transportation business and assets of the three largest state-owned oil and gas companies by administrative means is completely different from the Russian government's approach. As noted by D.A. Petrov, "the role of the state in the PRC is to develop and enforce competition rules consistent with a socialist market economy, improve macro control and promote a unified, open, competitive and orderly market

²¹⁷ Adrien de Hauteclouque, Kim Talus Third Party Access: A Comparative Study on Access Regimes in EU Electricity Grids and Natural Gas Pipelines. // Oil, Gas & Energy Law Intelligence 2011. № 3 (9). C. 21-31.

²¹⁸ Konovalov Alexander Ivanovich Privatization of fuel and energy complex facilities. // Society and Law 2013. No. 1 (43). P. 103.

²¹⁹ Salieva Roza Nailievna Legal support for the development of entrepreneurship in the oil and gas sector of the economy. Abstract of dissertation. ... Doctor of Law Tyumen., 2003. P.4.

system.”²²⁰

Vertically integrated business model of PJSC Gazprom

All regulations and reforms aimed at the Russian gas pipeline network are carried out on the basis that the gas pipeline network cannot be excluded from a natural monopoly.

Currently, gas producers are represented by two groups of commercial organizations - OJSC Gazprom (PJSC Gazprom) and its subsidiaries, on the one hand, and independent gas producers, on the other (Rosneft, Novatek, Gazprom Neft, operator of the production sharing agreement, Lukoil); And there is also competition between Gazprom and independent producers in the field of exploration, transportation and sales of natural gas²²¹.

Under such circumstances, there are two points of view in Russia on the question of whether it is worth dividing the Russian gas transportation network. One group advocates identifying and separating the competitive aspects of natural gas exploration, production, and sales from the natural monopoly aspects of natural gas transportation and storage. Supporters are mostly independent producers. Their main argument is that gas pipelines controlled and monopolized by Gazprom are opaque and do not promote fair market competition²²². And current laws and regulations on gas transportation do not provide independent gas producers with non-discriminatory access to Gazprom’s trunk and distribution pipeline systems²²³.

According to Art. 21 of the Law of the Russian Federation “On Gas Supply”, the provision of gas transportation services through pipelines is carried out under conditions of a natural monopoly. But it does not say that this requires that only one

²²⁰ Petrov D.A. The system of antimonopoly regulation in the People's Republic of China. // Journal of Entrepreneurial and Corporate Law 2018. No. 3. P. 43.

²²¹ Dukhovich D.V., Lakhno P.G., Rusanov A.N. Legal aspects of increasing the efficiency of natural gas sales. // Energy Law 2010. No. 1. P. 45-56.

²²² Baranov V.D. OJSC "Gazprom" - some problems in the implementation of the post-crisis global strategy. // Legal World 2011. No. 3. P. 60.

²²³ Chursina M.A. Legal regulation of access of independent organizations to the main gas pipeline. // Proceedings of the Institute of State and Law of the Russian Academy of Sciences 2010. No. 1. P.58.

company, Gazprom, have a natural monopoly. To manage a natural monopoly, having an independent company specializing in pipeline transportation is also quite suitable. In this regard, fundamental changes to the current legislation are necessary.

Another group advocates continuing to implement the vertical integration model in the gas industry. Vertically integrated operations are always of great importance in ensuring national management and control of energy security²²⁴. Currently, PJSC Gazprom is responsible for ensuring stable and low prices for natural gas for social public service organizations (which are not able to pay high prices)²²⁵.

In addition, PJSC Gazprom still remains a monopoly in the entire gas supply chain. For example, in the field of natural gas transportation, according to Art. 13 of the Federal Law of March 31, 1999 No. 69-FZ “On Gas Supply in the Russian Federation”, Gazprom is the owner of the Unified Gas Supply System of Russia, which is responsible for continuous dispatch control of the functioning of the facilities of the Unified Gas Supply System and manages the functioning of the Unified Gas Supply System. Further, according to Article 3 of the Federal Law “On the Export of Natural Gas,” Gazprom has the exclusive right to export natural gas in a gaseous state²²⁶. At the same time, Gazprom and Gazprom Export LLC, Gazprom Gas Oil Product Holding LLC have exclusive rights to export natural gas in a liquefied state²²⁷. Therefore, in a situation where Russia is experiencing an economic crisis, Gazprom has the opportunity to ensure the normal use of natural gas in the homes of ordinary people.

²²⁴ Sadikov O.N. Legal issues of gas supply. Moscow: Gosyurizdat, 1961 P. 39.

²²⁵ James Henderson, Arild Moe Russia’s gas «Triopoly»: implications of a changing gas sector structure. // Eurasian Geography and Economics 2017. № 4 (58). C. 14.

²²⁶ Federal Law of July 18, 2006 No. 117-FZ “On Gas Export” (as amended on November 2, 2023) - Access mode: ATP “ConsultantPlus”.

²²⁷ Order of the Government of the Russian Federation dated July 14, 2014 No. 1277-r “On approval of the list of organizations granted the exclusive right to export natural gas in a liquefied state” (as amended on November 10, 2020) - Access mode: ATP “ConsultantPlus”. According to this decree, the remaining 5 companies owning the rights are: Rosneft OJSC, Yamal LNG OJSC, Arctic LNG 1 LLC, Arctic LNG 2 LLC, Arctic LNG 3 LLC.

PJSC Gazprom also believes that its division into separate companies could lead to a threat to the energy security of the Russian Federation²²⁸. At the same time, the experience of the European system of antimonopoly regulation has been largely adopted by Russian legislation²²⁹. Despite the differences and the obvious underdevelopment of Russian regulation, one should not make hasty conclusions about the need to reform Russian legislation in a “European” direction (division of the gas pipeline business)²³⁰. Because the most significant difference between the European Chinese natural gas markets and the Russian natural gas market is that China and Europe are importers of natural gas, while Russia is an exporter of natural gas. Differences in import and export structures determine differences in legal oversight and incentive mechanisms. A.G. Lisitsyn-Svetlanov noted: “it becomes obvious that at present their fundamental reform towards demonopolization is unlikely due to their technical and economic characteristics”²³¹. Thus, considering the appeal of Gazprom Transgaz Surgut LLC against the decision of the Moscow Arbitration Court dated April 28, 2017, the court cited an important reason for the indivisibility of the specified gas transportation system: according to paragraph 2 of Decree of the President of the Russian Federation dated May 5, 1999 N 544 “On ensuring reliable functioning of the Unified Gas Supply System when OAO Gazprom implements measures to improve its structure, taking into account the features of the Unified Gas Supply System, which is a technological, organizational and property complex, it is important for the Ministry of Justice of the Russian Federation to ensure registration of rights to main gas pipelines and other real estate included in the Unified Gas Supply System which are owned by OAO Gazprom,

²²⁸ Volkov A. K Legal regulation of ensuring free access to the gas transportation system in the Russian Federation and the EU. // *Jurisprudence* 2017. No. 5 (334). P.101-108.

²²⁹ Commercial (entrepreneurial) law: Textbook: In 2 volumes, 4th ed., revised. and additional / Ed. V.F. Popondopulo. M.: Prospekt, 2010. T. 1. P. 355.

²³⁰ Volkov A. K Legal regulation of ensuring free access to the gas transportation system in the Russian Federation and the EU. // *Jurisprudence* 2017. No. 5 (334). pp. 101-108.

²³¹ Lisitsyn-Svetlanov A. G. Natural monopolies in the energy sector of the economy: legal problems of reform. // *Energy law forum* 2021. No. 4 (4). P. 10.

registration of the rights of OAO Gazprom and the business companies created by it to the property transferred by OAO Gazprom to their authorized capital as enterprises - property complexes²³².

Regardless of whether the existing system undergoes changes or Russia abandons the division of the gas pipeline network, it seems that resolving the issue of commercial entities entering the energy grid to obtain the energy capacity they require will remain a priority. At the same time, it is obvious that the regulation of legal relations in the field of energy supply requires maintaining a balance of rights and legitimate interests of energy supply organizations and energy consumers, and it is the degree of assistance in achieving this balance that should be the criterion for assessing any legal regulation²³³. Currently, positive trends in the field of natural monopolies in Russia are a reduction in the presence of the state in the economy (proposals to ban the creation of state-owned enterprises, to subordinate natural monopolies to the general principles of competition law). In addition, as V. F. Popondopulo notes, the norms of antimonopoly law are designed to limit freedom of enterprise in order to ensure the common good - competition, compliance with legal norms by market participants (economic entities) and compliance with the “rules of the game” by public authorities regulating this market²³⁴. In other words, deciding which industries and public services should be opened to the private sector and market, and how to regulate private enterprises and markets after opening, is always a difficult problem²³⁵.

²³² Resolution of the Ninth Arbitration Court of Appeal dated April 28, 2017 “In the case of the appeal of Gazprom Transgaz Surgut LLC against the decision of the Moscow Arbitration Court.” / Ninth Arbitration Court of Appeal - Access mode: ATP “ConsultantPlus”.

²³³ Popondopulo V.F., Gorodov O.A., Petrov D.A. On the issue of the legal regime of renewable sources of electrical energy. // Social and legal mechanisms for ensuring energy saving: current state, trends and development prospects Collection of articles of the All-Russian Scientific and Practical Conference. 2018. P.160.

²³⁴ Popondopulo V.F. Freedom of entrepreneurship and antimonopoly legislation. // Russian legal journal 2019. No. 2 (125). P. 161.

²³⁵ 陈新松, 孙哲. 我国特许经营制度的困境及完善构想——以天然气下游市场为例 // 城市燃气. [Xinson, Chen, Sun Zhe. Dilemma and concept for improving the franchising system in China - using the example of the downstream natural gas market // Gorodskoy gas]. 2018. №.10

Separation of the vertically integrated businesses of the three largest oil and gas companies in China.

As presented in Chapter 2.1.2 of China's urban pipeline gas concession agreement, China's previous energy shortages were not caused by problems with production and construction capabilities, but because market signals did not fully reflect the relationship between supply and demand²³⁶. Those. Since state-owned oil and gas enterprises occupy a monopoly position, there is no market competition pressure from private enterprises and foreign enterprises, resulting in the supply and demand relationship between the city's natural gas supply and the four major state-owned oil and gas enterprises and consumer demand cannot help but lead to contradictions²³⁷.

For example: some local authorities knowingly violate the provisions of Articles 34 and 35 of the PRC Anti-Monopoly Law²³⁸, still use various methods to exclude or limit the participation of out-of-town operators in local bidding, investing or opening branches, and even issue administrative orders directly interfering with market competition²³⁹.

(524).页 25.

²³⁶ 江山. 政策融合视野下中国能源行业管制与竞争的法律建构——以石油行业为中心 // 当代法学 [Shang, Jiang Legal interpretation of regulation and competition in the Chinese energy industry from a policy convergence perspective - focused on the oil industry // Modern Jurisprudence]. 2014. №.6.页 99.

²³⁷ 江山. 政策融合视野下中国能源行业管制与竞争的法律建构——以石油行业为中心 // 当代法学 [Shang, Jiang Legal interpretation of regulation and competition in the Chinese energy industry from a policy convergence perspective - focused on the oil industry // Modern Jurisprudence]. 2014. №.6. 页 99.

²³⁸ 中华人民共和国反垄断法(修正草案) (Law of the People's Republic of China dated October 23, 2021 “On Anti-Monopolies (Draft Amendment).”) // URI: <https://www.pkulaw.com/protocol/9b316e9f6ef74d466bcc3f3b02cb066dbdfb.html?keyword=%E4%B8%AD%E5%8D%8E%E4%BA%BA%E6%B0%91%E5%85%B1%E5%92%8C%E5%9B%BD%E5%8F%8D%E5%9E%84%E6%96%AD%E6%B3%95%28%E4%BF%AE%E6%AD%A3%E8%8D%89%E6%A1%88%29> (date accessed: December 3, 2023).

²³⁹ 陈兴华, 董倩. 我国城镇燃气特许经营权的纠纷表现及解决机制研究 // 中国石油大学学报(社会科学版). [Xinghua, Chen, Dong Qian. Research on the effectiveness and dispute resolution mechanism of urban gas franchise in China // Sciences), Journal of China

Obviously, such a situation where the government is directly involved in competition in the local natural gas market does not promote fair and meaningful competition between city gas companies²⁴⁰. The task of the state is to protect relations that develop within the framework of the free market and the law, and not to regulate them²⁴¹.

After nearly 20 years of development, the original urban gas supply model has become an obstacle to operating and competing in the Chinese natural gas market²⁴². For example: concessionaires often commit various violations of antitrust laws²⁴³. In order to promote fair competition in the city gas market, it is feasible to introduce a market mechanism in the city natural gas market²⁴⁴.

The following are legal measures to implement market reforms in the city

Petroleum University (publication publication]. 2021. №.2 (37).页 47

²⁴⁰ 陕西蒲城县中天洋天然气有限责任公司与陕西通源天然气股份有限公司,蒲城民东新能源有限公司,侵权责任纠纷二审民事案 [Civil Decision of the High People's Court of Shaanxi Province dated November 29, 2019 No. 668 "On Tort Liability" Pucheng County Zhongtianyang Natural Gas Co., Ltd. v. Shaanxi Tongyuan Natural Gas Co., Ltd., Pucheng Mindong New Energy Co., Ltd., civil case of second instance in tort disputes"] Access mode: 中国裁判文书网.

²⁴¹ Popondopulo V.F. Freedom of entrepreneurship and antimonopoly legislation. // Russian legal journal 2019. No. 2 (125). C. 156.

²⁴² 林须忠. 管道燃气“特许”属性的扭曲与还原 // 城市燃气. [Xiuzhong, Lin. Distortion and restoration of the pipeline gas “concession” attribute // City Gas]. 2019. №.3 (529).页 34-39; 周淑慧, 孙骥姝, 王军. 对省级天然气管网设施公平开放与监管的思考——以陕西省为例 // 天然气工业. [Shuhui, Zhou, Sun Jishu, Wang Jun. Reflections on the fair for the opening and supervision of provincial gas pipeline network facilities - using the example of Shaanxi Province // Gas industry]. 2017. №.6 (37).页 108;

²⁴³ 陈兴华. 新形势下能源企业反垄断合规必要性研究. [Xinghua, Chen. Study of the need for antimonopoly compliance of energy enterprises in new conditions]. 中国法学会能源法研究会2018年会论文集: https://www.sohu.com/a/249525694_816704, 2018. - 页16.

²⁴⁴ 张淑英. 论天然气输配领域的自然垄断与监管 // 西南石油大学学报(社会科学版). [Shuying, Zhang. On natural monopoly and supervision in the field of transmission and distribution of natural gas // Sciences), Journal of the Southwestern Petroleum University publication]. 2009. №.4 (2).页9; 吕淼. 国家管网公司成立对城市燃气行业的影响及政策建议 // 国际石油经济. [Miao, Lu. Impact of the creation of a national pipeline network company on the urban gas industry and policy proposals // Economics, International Petroleum]. 2020. №.6 (28).页 21.

natural gas market:

1). *Reforms aimed at the national oil and gas pipeline network*: introduction of independent accounting of transportation, warehousing and other operational activities of the gas pipeline network. The natural gas transportation business and the oil and gas production and sales business are separated to ensure the independent operation of oil and gas pipeline network facilities (Article 10 “Measure for Supervising the Fair Opening of Oil and Gas Pipeline Network Facilities” (2019)). In October 2020, PipeChina acquired the gas pipeline network assets of three of China's largest oil and gas giants. China's three largest oil and gas giants retained only assets and businesses involved in oil and gas exploration, development and sales²⁴⁵.

With the establishment of the National Pipeline Network Company (PipeChina Company), oil and gas suppliers have the right to supply gas directly from the national transmission pipeline to commercial consumers, such as large industrial consumers. LNG supply companies can also use tank cars to organize supplies to commercial customers.

2). *Measures to break the monopoly of the urban gas supply model*: encouraging large users to connect directly to the national backbone network. (The Guangdong Provincial Development and Reform Commission issued a “Notice on Adjustment of Issues Related to Direct Natural Gas Supply to the Province.”)²⁴⁶.

²⁴⁵ 国家发展改革委、国家能源局、住房城乡建设部、市场监管总局关于印发《油气管网设施公平开放监管办法》的通知 (National Energy Administration Notice of the National Development and Reform Commission, the Ministry of Housing and Urban-Rural Development and the State Administration for Market Regulation dated May 24, 2019 No. 916 “Measures to supervise the fair opening of oil and gas pipeline network facilities”.) // URL: <https://www.pkulaw.com/chl/2f59849e3654573abdfb.html?keyword=%E6%B2%B9%E6%B0%94%E7%AE%A1%E7%BD%91%E8%AE%BE%E6%96%BD%E5%85%AC%E5%B9%B3%E5%BC%80%E6%94%BE%E7%9B%91%E7%AE%A1%E5%8A%9E%E6%B3%95> (date accessed: December 3, 2023).

²⁴⁶ 关于调整省内天然气直供有关事宜的通知 (of 2020 No. 1583 “Notice on the adjustment of issues related to direct supplies of natural gas to the provinces.”) //URL: https://www.meizhou.gov.cn/zw/gk/zfjg/sfzhggj/xgzc/content/post_2075048.html (accessed December 3, 2023).

3). *Implementation of the principle of third party access*: oil and gas pipeline network operating companies must provide transportation, storage, gasification and other natural gas services without discrimination. (Article 12 “Measure to supervise the fair opening of oil and gas pipeline network facilities” (2019))²⁴⁷.

Even if the Chinese central government does not take the initiative to introduce and market natural gas, with the development of the entire global market (especially since liquefied natural gas has recently become an advantageous competitor to pipeline natural gas), the original city gas supply concession agreement will hinder further development China's natural gas market towards commercialization and introduction of market competition.

Finding the optimal balance of interests of all parties in the initial concession agreement on city gas supply is a key issue in implementing the policy of promoting market relations and fair competition in the natural gas market. Therefore, determining the legal nature of the urban gas supply concession agreement in the theory and practice of law is the key to resolving the contradiction between the agreement-defined scheme of relations between the parties and the innovations dictated by the introduction of market mechanisms by the central government (See also: 2.1.2 Urban pipeline gas concession agreement in China).

²⁴⁷ 国家发展改革委、国家能源局、住房城乡建设部、市场监管总局关于印发《油气管网设施公平开放监管办法》的通知 (National Energy Administration Notification of the National Development and Reform Commission, the Ministry of Housing and Urban-Rural Development and the State Administration for Market Regulation dated May 24, 2019 No. 916 “Measures to supervise the fair opening of oil and gas pipeline network facilities.”) // URI: <https://www.pkulaw.com/chl/2f59849e3654573abdfb.html?keyword=%E6%B2%B9%E6%B0%94%E7%AE%A1%E7%BD%91%E8%AE%BE%E6%96%BD%E5%85%AC%E5%B9%B3%E5%BC%80%E6%94%BE%E7%9B%91%E7%AE%A1%E5%8A%9E%E6%B3%95> (accessed December 3, 2023)..

**§ 3.3. Legal reform of the access system to attract foreign investment in
Russia and China**

3.3.1. Reform of legal regulation of the access system to attract foreign investment in Russia

As a strategic resource, natural gas is intended to protect national financial interests and meet national energy security interests²⁴⁸. As mentioned in Chapter 3.2, in Russia the gas industry is significantly monopolized: PJSC Gazprom accounts for 87% of natural gas production in Russia; also dominates the distribution and marketing of natural gas, controlling approximately 70% of natural gas distribution organizations; PJSC Gazprom is the owner of all main gas networks and underground gas storage facilities in Russia²⁴⁹.

Although the Law “On Foreign Investments in the Russian Federation”²⁵⁰ is aimed at attracting and effectively using foreign material and financial resources, advanced equipment and technology in the economy of the Russian Federation, legal regulation of the gas supply sector in Russia as a whole (especially with regard to the exploration, production and transportation sectors) is characterized by the fact that foreign investors do not are encouraged to enter this market. In particular, this conclusion can be drawn on the basis of the following legal provisions.

According to Article 15 of the Federal Law of March 31, 1999 No. 69 “On Gas Supply in the Russian Federation” (hereinafter referred to as the Federal Law “On Gas Supply in the Russian Federation”), the privatization of a strategic gas company can only be carried out on the basis of federal law. In most cases, shares of strategic joint-stock companies and strategic enterprises are included in the forecast program

²⁴⁸ Resolution of the Ninth Arbitration Court of Appeal dated December 18, 2013 No. 09AP-42235/2013AK in case No. A40-90092/12 “The current legislation on taxes and fees of the Russian Federation provides taxpayers with the right to involve experts and specialists in the procedure for considering audit materials” / Ninth Arbitration Court of Appeal Russian Federation. — Access mode: SPS “ConsultantPlus”

²⁴⁹ Chernavsky S.Ya. Eismont O.A. Economic analysis of the liberalization of the natural gas market in Russia. // Economic science of modern Russia 2008. No. 4 (43). C. 63.

²⁵⁰ Federal Law of July 9, 1999 No. 160-FZ “On Foreign Investments in the Russian Federation” (as amended on December 29, 2022) — Access mode: SPS “ConsultantPlus”.

for the privatization of federal property after the decision of the President of the Russian Federation to reduce the level of participation of the Russian Federation²⁵¹.

According to Part 3 of Art. 9 of the Federal Law of February 21, 1992 No. 2395-1 “On Subsoil”, users of subsoil in subsoil areas of federal significance on the Russian continental shelf can only be legal entities that have at least 5 years of experience in developing the subsoil of the Russian continental shelf, in which a share (contribution)) the state in the authorized capital is more than 50% and (or) in respect of which the state has the right to directly or indirectly dispose of more than 50% of the total number of votes attributable to the voting shares (shares) constituting the authorized capital of such legal entities. Today only Gazprom and PJSC NK Rosneft meet these conditions²⁵². To date, the Russian Government has not yet made a final decision on whether Russian non-state companies and foreign oil and gas companies can develop the subsoil of the Russian continental shelf ²⁵³.

As soon as natural gas reserves in Russia exceed 50 billion cubic meters. m, they are classified as subsoil resources of federal significance (Article 10 of the Federal Law “On Gas Supply in the Russian Federation”). In order to ensure a stable gas supply, the Russian Government determines a list of subsoil plots of federal significance that are provided for use without auctions for exploration and production of gas or for geological study of subsoil, exploration and production of gas carried out under a combined license, an organization to the owner of the Unified Gas Supply System or an organization - the owner of the regional gas supply system (Article 12 of the Federal Law “On Gas Supply in the Russian Federation”).

In addition, by decision of the Government of the Russian Federation, subject

²⁵¹ Romanova V.V. Legal regulation of business activities in the energy sector at the present stage: features, problematic aspects - Access mode: SPS “ConsultantPlus”.

²⁵² Tubdenov V.G. Legal status of extractive energy companies of the oil and gas complex. *diss... Ph.D. M.*, 2018. P. 151.; Petrushin M. The influence of federal law No. 57-FZ on the processes of consolidation of the oil industry in Russia. // *Oil, Gas and Law* 2013. No. 5. pp. 13-16.

²⁵³ Zhavoronkova N. G., Agafonov V. B. Current state and prospects for improving legislation in the field of granting the right to use subsoil plots and environmental protection of the Arctic zone of the Russian Federation. // *Current problems of Russian law* 2018. No. 6 (91). pp. 192-193.

to prior approval from the Government Commission for Control of Foreign Investments in the Russian Federation, provided in the manner prescribed by Federal Law No. 57-FZ dated April 29, 2008 “On the procedure for making foreign investments in business entities with a strategic importance for ensuring the defense of the country and the security of the state,” the transfer of the right to use subsoil is allowed.

Further, in order to ensure the defense of the country and the security of the state, this Federal Law establishes restrictive exemptions for foreign investors and for a group of persons²⁵⁴. (Article 1 of the Federal Law “On the procedure for making foreign investments in business entities of strategic importance for ensuring the country’s defense and state security”). That is, in Russia, the use of foreign capital must take into account public and state interests in the strategic sphere over the interests of private foreign business.

Currently, Russia's revision of legislation on the admission of foreign capital and private enterprises to the natural gas market is largely aimed at mitigating the economic and political pressure caused by sanctions imposed by unfriendly countries²⁵⁵.

For example, when Russia came under Western sanctions in 2014 after Russia put forward a national “pivot to the east” strategy, China-Russia cooperation on natural gas laid the foundation for the models of Sino-Russian cooperation now used in the political and energy fields. and a strong foundation for political and economic friendly cooperation between the two countries. In fact, many large-scale gas agreements between China and Russia are initiated and supported by the Chinese

²⁵⁴ Federal Law of April 29, 2008 No. 57-FZ (as amended on April 28, 2023) “On the procedure for making foreign investments in business entities of strategic importance for ensuring the country’s defense and state security” - Access mode: SPS “ConsultantPlus”.

²⁵⁵ The main laws regulating the access of foreign investments are: Federal Law dated July 9, 1999 No. 160-FZ “On Foreign Investments in the Russian Federation”, Federal Law dated December 30, 1995 No. 225-FZ “On Production Sharing Agreements”, Federal Law dated 04/29/2008 No. 57-FZ “On the procedure for making foreign investments in business entities of strategic importance for ensuring the country’s defense and state security” and other laws - Access mode: SPS “ConsultantPlus”.

and Russian governments.

Agreement for the purchase and sale of Russian gas along the “eastern” route (the Power of Siberia gas pipeline)

Joint Chinese-Russian investments in the Power of Siberia project are Russia’s first global response to Western policies of economic sanctions²⁵⁶. In accordance with the agreement between the Government of the Russian Federation and the Government of the People’s Republic of China on cooperation in the supply of natural gas from the Russian Federation to the People’s Republic of China along the “eastern” route, the total value of the agreement is 400 billion US dollars, the period is 40 years.²⁵⁷ (Art.21), annual supply volume is 38 billion cubic meters per year²⁵⁸.

And also, in order to maintain its strategic position in the field of gas supply, Gazprom prefers a “supply + market” approach when buying and selling natural gas, rather than the traditional “investment + supply” approach²⁵⁹. In accordance with this agreement, in 2014, CNPC (中国石油天然气集团公司) will provide an advance payment of \$25 billion, which Gazprom will use for the construction of the Power of Siberia domestic gas pipeline (eastern route). In addition, in the development of the Kovyktinskoye and Chayandinskoye fields, the total investment

²⁵⁶ Tsyplin V. G. Russian-Chinese energy contacts against the backdrop of American sanctions. // *Modern Eurasian Studies* 2018. No. 3. P. 14.

²⁵⁷ *The relevant legislative bodies of China and Russia are requested to pay attention to the fact that the timetable for the implementation of the agreement does not coincide with those officially announced by China and Russia. The publication period in China is 30 years, see the website of the Chinese Government (https://www.gov.cn/xinwen/2017-12/14/content_5246735.htm) (accessed December 3, 2023); and the publication period in Russia is 40 years, see the website Official publication of legal acts of the Russian Federation (<http://publication.pravo.gov.ru/document/0001201505200022?index=1>). (accessed December 3, 2023)*

²⁵⁸ Federal Law of May 2, 2015 No. 106-FZ “On the ratification of the Agreement between the Government of the Russian Federation and the Government of the People’s Republic of China on cooperation in the field of natural gas supplies from the Russian Federation to the People’s Republic of China along the “eastern” route” <http://publication.pravo.gov.ru/document/0001201505200022?index=1>

²⁵⁹ Andrei V. Belyi, Ulrich G. Klaus Russia’s Gas Exports and Transit Dispute Resolution under the ECT: Missed Opportunities for Gazprom or False Hopes in Europe? // *Journal of Energy & Natural Resources Law* 2015. № 3 (25). C. 215.

in the project's infrastructure will be more than \$70 billion, and more than \$20 billion of this came from China, but Chinese companies are not participating in direct investments²⁶⁰. Those. As a first step in the strategic shift of Russian natural gas exports to the Asian market, this agreement relies on Chinese capital and the Chinese market to solve the problems of financing the construction of trunk and branch gas pipeline networks in Siberia and the opening of natural gas sales channels²⁶¹.

Even in the context of Russian fuel exporters facing Western sanctions, Chinese and Russian companies still signed an agreement “On cooperation in the supply of natural gas from the Russian Federation to the People’s Republic of China along the Far Eastern route.” (further - project “Far Eastern Route”)²⁶².

Especially when unfriendly countries of Russia imposed sanctions against Russia from February 2022, and Russia actually left the European natural gas market, on March 20-22, 2023, when Chinese President Xi Jinping visited Russia, Russian President V.V. Putin suggested, that by 2030 the total supply of natural gas from Russia to China will reach 98 billion cubic meters and 100 million tons of liquefied natural gas, and contributed to the construction of the new Siberia-2 gas pipeline (50 billion cubic meters of gas)²⁶³. The Power of Siberia 2 project is seen as an alternative plan, a kind of “compensation” for the inability of the Nord Stream 2 gas pipeline to export gas normally, in order to cope with sanctions imposed by unfriendly Western countries²⁶⁴. “The most visible part of the pivot to the East has

²⁶⁰ Plyaskina N.I., Kharitonova V.N., Vizhina I.A. Will the Power of Siberia gas contract be a driver for gas and petrochemical clusters in eastern Russia? (part 1). // *Drilling and oil* 2015. No. 2. P. 18.

²⁶¹ Sidortsov.R., A. Ivanova, F. Stammler Localizing governance of systemic risks: A case study of the Power of Siberia pipeline in Russia. // *Energy Research & Social Science* 2016. № 16. C. 58.

²⁶² Order of the Government of the Russian Federation dated January 28, 2023 No. 171-r “On the signing of an Agreement between the Government of the Russian Federation and the Government of the People’s Republic of China on cooperation in the field of natural gas supplies from the Russian Federation to the People’s Republic of China along the “Far Eastern” route” - Access mode: ATP “Consultant Plus”.

²⁶³ Russian-Chinese negotiations // URL: <http://www.kremlin.ru/events/president/news/70748> (accessed December 3, 2023).

²⁶⁴ Manushin D.V. World sanctions economy, sanctions, counter-sanctions and new world

been the increasing role and importance of China in the Kremlin's eastern policy"²⁶⁵.

Yamal LNG project

Since 2014, in order to avoid the adverse consequences of Western sanctions, in order to attract Chinese capital to projects such as Yamal, Russian laws have indeed made exceptions to existing legal norms, providing many preferential terms to Chinese investors and buyers. Analysis of changes in the legal regulation of taxation allows us to fully understand the investment policy and direction of the country's development²⁶⁶.

Compared to three production sharing agreements (Sakhalin-1 (operator ExxonMobil), Sakhalin-2 (operator Sakhalin Energy), Kharyaginskoye field (operator Zarubezhneft-Dobycha Kharyaga LLC)²⁶⁷, In the Yamal and Power of Siberia projects, the Russian government carefully controls the taxation of all aspects of natural gas exploration, production and export.

For example, in accordance with Article 3 of Federal Law No. 1-FZ dated January 29, 2016 "On the ratification of the Protocol to the Agreement between the Government of the Russian Federation and the Government of the People's Republic of China on cooperation in the implementation of the Yamal LNG project", within the framework of the provisions, the Government of the Russian Federation has established preferential tax rates: 0 percent (0 rubles) for the mineral extraction tax (hereinafter referred to as MET) for the production of natural gas; 0 percent (0 rubles) on mineral extraction tax for gas condensate production; zero rate of export customs duty on LNG; zero rate of export customs duty on stable gas condensate; exemption from value added tax on technological equipment; and it is even indicated that the

currency. // Russian Journal of Economics and Law 2022. No. 2 (16). C. 364.

²⁶⁵ Torkunov A.V. Streltsov D.V., Koldunova E.V. Russian turn to the east: achievements, problems and prospects // Polis. Political Studies 2020. no. 5 P. 13.

²⁶⁶ Panfilov G.P., Gao Yu. Reforming the system of oil and gas natural resource payments in order to attract investments: the experience of the People's Republic of China // Law and Politics. 2020. No. 3. P. 9.

²⁶⁷ 王佳慧. 《俄罗斯战略外资法》内容、变化及实施效果 // 俄罗斯学刊 [Jiahui, Wang Contents, changes and consequences of the application of the RDF Law "On Strategic Foreign Investments"]. // 2014. №.4 (22). 页 116.

Russian Side will make all necessary efforts to ensure that the Eurasian Economic Commission makes decisions on exemption from import customs duties on relevant technological equipment²⁶⁸.

The new capacity of the Power of Siberia gas pipeline increases investment attractiveness in Russia²⁶⁹. China is also becoming the largest foreign investor and main creditor of the Yamal LNG project²⁷⁰, for which he provided a total of up to 60% of the capital ²⁷¹.

It should be noted that in order to cope with the current temporary crisis, exceptions (special preferential treatment) are often made for a certain party in the legal regulation in private law (production sharing agreement) or public law (tax incentives). But whether the state of exception (special preferential treatment) will be effectively implemented when the crisis is resolved is an important question worthy of study by legal scholars and legal practitioners.

Currently, there are a number of mechanisms for attracting foreign capital to the Russian gas supply sector: the creation of joint ventures, the purchase of shares in Russian vertically integrated companies, the acquisition of small non-integrated oil and gas companies, participation in service contracts and contracting work of oil and gas companies, participation in projects under separation agreements products (hereinafter referred to as PSA)²⁷². Since China and Russia successfully signed the

²⁶⁸ Agreement between the government of the Russian Federation and the government of the People's Republic of China on cooperation in the implementation of the Yamal LNG project; Federal Law of January 29, 2016 N 1-FZ of 2016 "On the ratification of the Protocol to the Agreement between the Government of the Russian Federation and the Government of the People's Republic of China on cooperation in the implementation of the Yamal LNG project." - Access mode: SPS "ConsultantPlus"..

²⁶⁹ Decree of the President of the Russian Federation dated January 16, 2017 No. 13 "On approval of the Fundamentals of State Policy for Regional Development of the Russian Federation for the period until 2025."

²⁷⁰ In 2016, the Chinese Silk Road Fund acquired a 9.9% stake in Yamal LNG OJSC; In addition to the 20% stake acquired by CNPC in 2013, Chinese companies have already acquired a 29.9% stake in the Yamal LNG project.

²⁷¹ Leksytina Ya. V., Chuzhon G. China in Russian Arctic LNG projects: motivation for participation, role and results. // Society: politics, economics, law 2022. No. 2. P. 15.

²⁷² Protasova S.K. Analysis of the liquefied natural gas industry and problems in it (using the example of YAMAL-LNG) Materials of the XII All-Russian Youth Scientific and Practical

the Power of Siberia gas pipeline will reach 48 billion m³ (compared to 50.7 billion m³ supplied to Germany in 2021).

Cooperation between China and Russia in the above-mentioned areas of gas supply is mutually beneficial. These cooperations not only correspond to Russia's need to develop export markets to the east due to Western sanctions (cessation of investments, withdrawal of foreign partners and service companies from the Russian market, ban on transport insurance, etc.), but also contribute to China's goal of achieving peak emissions carbon dioxide by 2030 and achieving carbon neutrality by 2060²⁷⁵.

As a result, to ensure the well-being of its own people, the country controls a sufficient amount of resources in order to maintain its own national strategic interests on its territory²⁷⁶.

In Russia, there are some differences from the national strategic energy policies formulated by China and the European Union to achieve climate goals and develop low-carbon and new energy²⁷⁷. Russian measures of legal regulation of foreign investments in the field of gas supply are at the intersection of domestic energy strategy and Russian foreign policy relations²⁷⁸.

Natural gas can be traded on the market as a commodity after its extraction, and

D0%BE%D0%BC%D1%83%20%D0%BC%D0%B0%D1%80%D1%88%D1%80%D1%83%D1%82%D1%83 (date accessed: December 3, 2023).

²⁷⁵ Lapshina O.A. Prospects for increasing gas supplies to the Chinese market. // Gas industry 2023. No. 2. P. 38.; Vasilkova S.V. Legal support for the construction of energy facilities by Russian companies abroad: current tasks of the science of energy law. // Legal Energy Forum 2019. No. 4. P. 23.; Kozmenko S. Yu. East-West: geo-economics and politics of Russian gas projects. // News of the St. Petersburg State Economic University 2020. No. 4 (124). p. 25.

²⁷⁶ Doraev M., Kryazhevskikh K. Raw materials nationalism: trends in legal regulation in Russia and foreign countries // Corporate lawyer 2009. No. 5. P. 15-16.

²⁷⁷ Zhavoronkova N.G., Shpakovsky Yu.G. Energy strategy - 2035: legal problems of innovative development and environmental safety // Bulletin of the O. E. Kutafin University 2020. No. 3. P. 32.

²⁷⁸ Belitskaya A.V., Lakhno P.G. Foreign investors in the field of subsoil use in the Russian Federation and foreign countries: legal regulation. // Bulletin of St. Petersburg University 2010. No. 4. P. 59-60; Vasilkova S.V. Legal support for energy security and protection of the rights of participants in energy markets. // Scientific notes of the Faculty of Law 2021. No. 1. P. 9.

is regulated by civil law²⁷⁹. However, almost all reforms of legislation regulating gas investments in Russia are associated with Russia's final withdrawal from Europe and the redistribution of trade, economic, raw materials and energy flows towards Asia (mainly China)²⁸⁰. Therefore, it would now be incorrect and clearly insufficient to study the commercialization policy in the field of gas supply only from the point of view of legal content, ignoring Russia's national strategy and the situation when Russia is under sanctions from unfriendly countries.

3.3.2 Legal reform of the access system to attract foreign investment in China.

The International Energy Agency (IEA) believes that the creation of an open and competitive production market is one of the necessary conditions for facilitating the construction of a natural gas market system²⁸¹. In contrast to Russian legislation, which does not support and even restricts the access of foreign investment, the legal regulation of the gas supply sector in China as a whole (especially as regards the exploration, production and transportation sectors) is characterized by the fact that foreign investors are encouraged to enter this market. In particular, this conclusion can be drawn on the basis of the following legal provisions.

Article 11 of the Constitution of the People's Republic of China states that the private economy and other forms of non-state economy are an important part of the socialist market economy. In addition, paragraph 3 of Article 206 of the Civil Code of the People's Republic of China establishes that the state ensures a socialist market economy and guarantees equal legal status and opportunities for development of all market participants. Those. The non-state economy (private and foreign economy) has an important legal status, and the PRC government encourages, supports and

²⁷⁹ Romanova V.V. Legal regime of gas as an object of private law relations. // Lawyer 2015. No. 5. P. 13.

²⁸⁰ Luzyanin S.G. Far Eastern change in the Russian turn to the east. Will China close Russia's sanctions "Gaps"? // Asia and Africa today 2022. No. 6 P. 6.

²⁸¹ 国际能源署. 天然气市场化改革 国际经验要点及对中国的启示. (International Energy Agency. Natural gas market-oriented reform: key points of international experience and knowledge for China). Beijing: Petroleum Industry Press, 2019. 页8.

guides the development of the non-state sector of the economy.

1). Reform of legal regulation of investments in gas supply.

To ensure that non-state oil and gas companies can freely enter the market and participate in market competition. The State Council of the People's Republic of China (hereinafter referred to as the State Council) and the Ministries of the People's Republic of China introduced amendments to a number of regulations.

For example, according to the Opinion of the Ministry of Natural Resources of the People's Republic of China dated December 31, 2019 No. 7 "On a number of issues to promote the reform of mineral resource management (trial implementation)", after May 1, 2020, domestic and foreign companies registered in the territory of the People's Republic of China with net assets of at least 300 million yuan, are eligible to obtain oil and gas rights²⁸². O. Yu. Skvortsov believes that these measures show that the Chinese government is "denationalizing" investment regimes²⁸³.

Further, in the "Special measures for managing access to foreign investment of the PRC ("negative list" or "Negative list of foreign investment in China") (2019 edition)" the paragraph stating: "exploration and development of oil and natural gas fields (including coalbed methane, other than oil shale, tar sands, shale gas, etc.) is limited to joint ventures and cooperation."²⁸⁴.

²⁸² 关于推进矿产资源管理改革若干事项的意见（试行）（Opinions of the Ministry of Natural Resources dated December 31, 2019 No. 7 "On a number of issues to promote the reform of mineral resource management (trial implementation)"/URL:<https://www.pkulaw.com/chl/587faacff81602babdfb.html?keyword=%E5%85%B3%E4%BA%8E%E6%8E%A8%E8%BF%9B%E7%9F%BF%E4%BA%A7%E8%B5%84%E6%BA%90%E7%AE%A1%E7%90%86%E6%94%B9%E9%9D%A9%E8%8B%A5%E5%B9%B2%E4%BA%8B%E9%A1%B9%E7%9A%84%E6%84%8F%E8%A7%81&way=listView> (date accessed: December 3, 2023).

²⁸³ Skvortsov O. Yu. Ideology of investment law reform in China. // Lex Russica 2019. No. 11 (156). C. 148.

²⁸⁴ 外商投资准入特别管理措施（负面清单）（2019年版）（Order No. 25 of the National Development and Reform Commission of the People's Republic of China and the Ministry of Commerce of the People's Republic of China of 2019 "Special Measures for Managing Access to Foreign Investment (Negative List) (2019 Edition). // URL: <https://www.pkulaw.com/chl/38491d99ef571e72bd7b.html?keyword=%E5%A4%96%E5%95%86%E6%8A%95%E8%B5%84%E5%87%86%E5%85%A5%E7%89%B9%E5%88%AB%E7%AE%A1%E7%90%8>

According to V.F. Popondopulo, the model of the “positive list” (“Positive list of foreign investment in China”) can be understood as follows: the continental system, including the Russian system, forms an administrative structure based on the principle of prohibiting everything that is not permitted by law²⁸⁵. Those. the implementation of the “negative list” model is more open and extensive than the “positive list” model. Since the “negative list” model contains the legal logic that “everything that is not prohibited is permitted” and the market legal principle of the autonomy of private rights. Further, foreign oil and gas companies can participate and operate anything that is not prohibited by Chinese law²⁸⁶. Thus, the introduction of the “negative list” model is also one of the most important signs of investment liberalization in the Chinese natural gas market.

According to Articles 9 and 14 of the Foreign Investment Law of the People's Republic of China (2019), foreign oil and gas companies and Chinese state-owned oil and gas companies are equal before the law. They are equally subject to government policy measures aimed at supporting the development of enterprises and preferential treatment²⁸⁷. Newly established foreign natural gas exploration and production enterprises are managed in accordance with the PRC Company Law or the PRC Partnership Law. Thus, investment options currently available to foreign companies include:

[6%E6%8E%AA%E6%96%BD%20%E6%BC%88%E8%B4%9F%E9%9D%A2%E6%B8%85%E5%8D%95%E6%BC%89%E6%BC%882019%20%E5%B9%B4%E7%89%88%E6%BC%89&way=listView](#) (date accessed: December 3, 2023).

²⁸⁵ Popondopulo V.F. Market power of producers and consumers of goods, forms of its manifestation and legislative regulation. // Competition law 2021. No. 4. P. 7.

²⁸⁶ 龚柏华 “法无禁止即可为”的法理与上海自贸区“负面清单”模式 // 东方法学 [Baihua, Gong Legal principle “Whatever is not prohibited is permitted” and the “negative list” model of the Shanghai Free Trade Zone // Eastern Law], 2013. №.6. 页 141.

²⁸⁷ 孔庆江, 丁向群.
关于《中华人民共和国外商投资法》立法过程及其若干重大问题的初步解读 // 国际贸易问题 [Qingjiang, Kong, Ding Xiangqun Preliminary interpretation of the legislative process of the PRC Foreign Investment Law and several basic issues // International Trade Issue]. 2019. №.3. 页 2.; 刘俊海《外商投资法》的理念升华与制度创新 // 人民法治 [unhai, Liu Sublimation of the concept and institutional innovation of the Law of the People's Republic of China "On Foreign Investment" // People's Rule of Law State]. 2019. №.6. 页 48.

- a). Formation of joint ventures or joint ventures with three large state-owned oil companies;
- b). Creation of joint ventures with Chinese companies other than the three large state-owned oil companies;
- c). Creation of completely foreign enterprises.²⁸⁸

The fact that China surpassed the United States in 2020 to become the world's largest recipient of foreign direct investment proves that China's legal reform measures to attract foreign investment are undoubtedly successful²⁸⁹.

2). Reform of legal regulation of exploration and production of natural gas.

In addition to the above-mentioned market access for private and foreign companies, an important objective is to promote the creation of a market-oriented mechanism for the allocation of rights to use natural gas²⁹⁰.

Private law experts have called for the end of administrative interference in mineral rights transactions. Natural gas rights should be treated as a commodity and the rules of trade in ordinary goods should be applied to facilitate their circulation in the market.²⁹¹ In the past, natural gas rights were obtained through a free transfer "first to claim" method. The vast majority of oil and gas rights are owned by four companies: CNPC, Sinopec, CNOOC and Yanchang Oilfield.²⁹² In this case, even if the trading of natural gas field rights in the market is not promoted, it cannot guarantee that non-state market participants will compete with state-owned oil and

²⁸⁸ 徐东, 崔宝琛, 唐建军. 国内油气资源对外合作面临的新变化及对策建议 // 国际石油经济 [Dong, Xu, Cui Baochen, Tang Jianjun New changes and measures to counter external cooperation of domestic oil and gas resources // International Petroleum Economics]. 2019. №.10 (27). 页45-46.

²⁸⁹ UNCTAD Global Investment Trend Monitor, No. 38. // 2021. №. C. 3.

²⁹⁰ Zhang Weihua. Cross border mergers and acquisitions in the oil and gas industry: a legal and practical guide, Press: China legal publishing house, 2019. C 341.

²⁹¹ Qu Maohui Chen Lingfeng Macroscopic Examination and Microscopic Design of the Amendment of «Mineral Resources Law» // The Theory and Practice of Finance and Economics, 2021. № 5 (42). P. 150.

²⁹² 高阳, 刘立, 罗玲. 基于矿业权出让角度的税费制度思考 // 矿产保护与利用 [Yang, Gao, Liu Li, Luo Ling Reflections on the system of taxes and fees from the point of view of the assignment of rights to mineral extraction // Protection and use of mineral resources]. 2018. №.4. 页 9.

gas companies to obtain issued natural gas field rights through market competition.

The essence of the concept of fair distribution of rights to use natural gas areas is to ensure the transfer of rights to use subsoil areas through the use of competitive institutions of market competition and make full use of the leading role of the market in resource allocation.

3). *Elements of commercialization in mining tax reform.*

In the past, a policy of low prices for the sale of natural gas has been pursued for a long time, and a price mechanism has not been created that reflects the actual balance of supply and demand in the natural gas market. As a result, most Chinese gas fields are in a state of loss or insignificant profit, which causes low enthusiasm of private and foreign enterprises in terms of investment activities²⁹³.

However, foreign oil and gas companies always complain that the tax burden is too high, which is significantly higher than that of companies from other energy sectors²⁹⁴. In contrast, the governments of China and Russia believe that too low taxes and fees will lead to wasteful exploitation and waste of resources by foreign oil and gas companies, and the companies do not pay attention to environmental issues²⁹⁵.

To attract and encourage foreign investment to participate in the exploration and exploitation of natural gas resources, the Chinese government has also established some tax incentives²⁹⁶. In 2017, the State Council of the People's Republic of China began reform of the mineral joint stock fund system, which

²⁹³ 王美田. 中国天然气产业财税政策研究. 中国石油大学 [Meitian, Wang. A study of the fiscal and tax policies of the Chinese gas industry. Diss., China Petroleum University]. 2013. 页119-123.

²⁹⁴ 张晶. 我国油气资源税费政策现状及优化建议 // 油气田环境保护 [Jing, Zhang Current situation and proposals for optimizing China's tax policy in the field of oil and gas resources // Environmental protection of oil and gas fields]. 2016. №.04 (26). 页54.

²⁹⁵ 海梦杰, 姚文英. 新疆油气资源开发央地企利益分配关系研究 // 绿色财会 [Mengjie, Hai, Yao Wenying Study of the distribution of interests between central and local enterprises in the development of oil and gas resources in Xinjiang // Green accounting]. 2019. №.03. 页49..

²⁹⁶ 景韬 王娟. 完善矿产资源税费体系的思考 // 税务研究 [Tao, Jing, Wang Huan Considerations for improving the system of taxes and fees on mineral resources // Tax Research]. 2018. №.3. 页100-101.

unified the methods of taxation and collection of various types of Chinese and foreign oil and gas capital²⁹⁷. In particular, the PRC Law on Mineral Resources (draft amendment 2019) established a system of taxes and fees for subsoil use based on fair competition²⁹⁸.

4). *Reasons why reforms failed before 2017*

Before China implemented market reforms in 2017, the operating model of "resources owned by the state and state-owned enterprises responsible for monopoly" was implemented to maintain the privileges and administrative monopoly of this state-owned oil and gas company in China²⁹⁹. In other words, until 2017, the legal regulation of non-state companies (foreign and private companies) for entering the market for exploration, production and transportation of natural gas was very similar to the current legal regulation in Russia.

Previous market reforms have not been systematic or meaningful, and none of them have been very successful in China. The reasons for the failure can be reduced to the following two points:

a). The legal effectiveness of laws and regulations implementing market mechanisms is relatively low

All reform measures are administrative regulations with relatively little legal force. For example, in "certain conclusions of the State Council of the People's Republic of China on the encouragement, support and direction of development of

²⁹⁷ 张守文. 论“发展导向型”的税收立法 // 法学杂志 [Shouwen, Zhang On “development-oriented” tax legislation // Legal Journal]. 2016. №.7. 页 9.

²⁹⁸ 关于《中华人民共和国矿产资源法（修订草案）》（征求意见稿）的说明 (Ministry of Natural Resources 2019 “Explanation on the “Law of the People's Republic of China on Mineral Resources (Revised Draft)” (Draft for Comments).”) // URL: <http://www.npc.gov.cn/npc/c30834/201912/2671cca9197b4eee868dcc9088e1ffc8.shtml> (date accessed: December 3, 2023).

²⁹⁹ 郭楠, 秦鹏. 能源体制改革下油气对外合作开采的规制失灵与规范路径——以《对外合作开采海洋（陆上）石油资源条例》为研究 // 国际经贸探索 [Guo Nan, Qin Peng Regulatory violations and the regulatory path of joint exploitation of oil and gas fields within the framework of energy system reform - consideration of the Regulation on foreign joint exploitation of offshore (onshore) oil resources as a subject of research // International Economic and Trade Research]. 2016. №.3 (32). 页 103-112..

the non-state economy” (2005) it is established that non-state (private and foreign) capital is allowed to enter monopoly industries; market competition mechanisms have been introduced in industries such as oil and gas; non-state enterprises are allowed equal access to rights to explore and produce natural gas resources³⁰⁰. “Several Opinions of the State Council of the People's Republic of China on Encouraging and Guiding the Healthy Development of Private Investment” (2010) once again stipulates that private capital is encouraged to participate in oil and gas construction. Cooperation between private capital and state oil companies in the field of exploration and development of oil and gas is supported³⁰¹.

However, laws with a relatively high legal status still hinder the implementation of marketization. For example, the relevant provisions of the PRC Mineral Resources Law, the PRC Foreign Investment Law and the PRC Anti-Monopoly Law directly or indirectly prohibit foreign capital and private capital from entering the natural gas exploration and production market.

b). No targeted or professional laws were adopted.

Legal regulation of gas supply has features of complexity inherent in many regulatory legal acts, and elements of the legislative system, and elements of the legal system³⁰². China's legal reforms in the gas supply sector have essentially become more systemic, comprehensive and comprehensive since 2017. “Several opinions on deepening the reform of the oil and gas system” (2017) - this regulatory

³⁰⁰ 关于鼓励支持和引导个体私营等非公有制经济发展的若干意见 (Several opinions of the State Council dated February 19, 2005 No. 3 “On the encouragement, support and guidance of economic development of non-state sectors, such as the private sector.”) // URI: http://www.gov.cn/zwggk/2005-08/12/content_21691.htm (date accessed: December 3, 2023).

³⁰¹ 国务院关于鼓励和引导民间投资健康发展的若干意见 (Several opinions of the State Council dated 05/07/2010 No. 13 “On encouraging and guiding the healthy development of private investment.”) // URI: <https://www.pkulaw.com/chl/b3b0fab4be7d2da1bdfb.html?keyword=%E5%9B%BD%E5%8A%A1%E9%99%A2%E5%85%B3%E4%BA%8E%E9%BC%93%E5%8A%B1%E5%92%8C%E5%BC%95%E5%AF%BC%E6%B0%91%E9%97%B4%E6%8A%95%E8%B5%84%E5%81%A5%E5%BA%B7%E5%8F%91%20%E5%B1%95%E7%9A%84%E8%8B%A5%E5%B9%B2%E6%84%8F%E8%A7%81&way=listV> (date accessed: December 3, 2023).

³⁰² Petrov D. A. Concept and types of state regulatory influence on socio-economic relations. // Bulletin of St. Petersburg University. Law 2013. No. 4. P. 19.

legal act clarified the guiding ideology, basic principles, general ideas and main tasks of deepening the reform of the oil and gas system.

The Opinions on Accelerating the Use of Natural Gas (2017) stated that the market should play a critical role in the allocation of natural gas resources. The natural gas exploration and production market should be viewed as a competitive segment, and the entry of all types of capital into exploration, production and construction of the necessary infrastructure should be encouraged³⁰³. To date, 50 companies (including central enterprises, state-owned enterprises and private enterprises) have become holders of rights to extract oil and gas (including shale gas and coalbed methane)³⁰⁴.

To protect the rights of non-state oil and gas companies, first of all, they are allowed to enter the exploration and production market, which allows them to be active in increasing their presence in the exploration and production market³⁰⁵. As V.F. Popondopulo believes, the state coordinates relations between various market entities through economic development systems, corporate capital systems and other similar reform measures, thereby creating an optimal market environment³⁰⁶.

³⁰³ 关于印发《加快推进天然气利用的意见》(Ministry of Science and Technology Opinions of the National Development and Reform Commission, the Ministry of Industry and Information Technology, etc. from 2017 “On accelerating the promotion of the use of natural gas.”) // URI: <https://www.pkulaw.com/chl/c96d6bca957f1efabdfb.html?keyword=%E5%8A%A0%E5%BF%AB%E6%8E%A8%E8%BF%9B%E5%A4%A9%E7%84%B6%E6%B0%94%E5%88%A9%E7%94%A8> (date accessed: December 3, 2023)..

³⁰⁴ 刘娅昭, 张海君, 刘超英. 放开油气勘查开采准入限制对国有大型石油公司勘探开发活动的影响 // 中国石油勘探 [Yazhao, Liu, Zhang Haijun, Liu Chaoying The impact of liberalization of restrictions on access to oil and gas exploration and production on the exploration and development activities of large state-owned oil companies // Chinese Oil Exploration and Production]. 2021. №.1 (26). 页103.

³⁰⁵ 崔建远. 法律平等保护物权原则的位阶论 // 浙江社会科学 [Cui Jianyuan, Hierarchy of the principle of legal equal protection of property rights // Zhejiang Social Sciences]. 2020. №. 12. 页 40..

³⁰⁶ Popondopulo V.F. Market power of producers and consumers of goods, forms of its manifestation and legislative regulation. // competition law 2021. № 4. P. 5.

Conclusion

As a result of a comparative study of Russian and Chinese theoretical and legal concepts, regulatory regulation of these countries, as well as law enforcement practice, including decisions of state courts and international commercial arbitrations, the following conclusions were formulated that are important for domestic and cross-border relations in exploration and production , transportation and supply of natural gas.

Currently, legislators in Russia and China are seeking to resolve the common legal problem of ensuring an effective transition to a green, low-carbon energy model.

To analyze the problem under consideration, the idealistic philosophical concept of “harmony between nature and man”, developed by the philosophical thought of Ancient China, can be applied, which allows us to formulate the principle of the commonality of nature and man in relation to the field of energy law.

From the standpoint of this principle, nature refers to the goals of legal regulation that are “non-economic” in their content, such as national energy security and carbon neutrality, and man symbolizes the goals of legal regulation associated with the active use of the fuel and energy complex, that is, of an economic nature.

Thus, in the context of the concept of “community of nature and man,” energy law must ensure harmonious legal regulation, which allows for a balance between these components in order to achieve public, including non-economic interests.

The application of the principle under consideration allows us to formulate the author’s definition of gas supply, which is understood as the activity of providing consumers with gas, including the formation of a fund of explored gas fields, production, transportation, storage and supply of gas in conditions of dynamic legal regulation, allowing the achievement of non-economic goals, such as national energy security and carbon neutrality.

The historical and legal analysis undertaken during the study made it possible to establish that Russia and China are faced with similar problems in the field of legal regulation of gas supply, which, among other things, is due to the transition from a planned to a market system of regulation of social relations, to one degree or another characteristic of both of them. countries

Thus, the fundamental problem of regulating gas supply for China is to overcome the legal contradictions that arise between the new system, based on the introduction of modern market mechanisms, and the previously operating “monopoly” economic system.

2017 was a turning point in reforming the system of legal regulation of natural gas supplies in China. Before this date, the application of market mechanisms in the gas supply sector was slow and unsystematic. Market reforms of 2017 led to the creation of a systematic, orderly and detailed legal regulation of the considered sphere of public relations.

Since 2017, China has comprehensively and systematically promulgated laws and regulations to implement market-based competition mechanisms in natural gas exploration, production and supply.

The new rules, which provided for the separation of the monopoly business of pipeline networks from the business of the three largest state-owned oil and gas companies (PetroChina, Sinopec and CNOOC) and the creation of an enterprise with a single national network of oil and gas pipelines (PipeChina), completely transformed the sphere of natural gas transportation gas in China. They not only caused numerous legal disputes within the country (for example, regarding urban pipeline gas concession agreements in China), but also influenced the implementation of three key principles for cross-border natural gas transactions - the “destination restrictions” provision. ", "take or pay" provision and "price review" provision:

1. Disputes regarding agreements on the transfer of the right to use a natural gas field site

It is necessary to pay attention to compliance with the principles of private and commercial law, which include autonomy of will and the priority of discretionary contractual regulation over legislative provisions (“convention vincit legem”). At the same time, too much emphasis on protecting the rights of private or foreign companies engaged in natural gas production can lead to predatory exploitation of natural gas fields, waste of field resources, environmental pollution and environmental damage.

2. Disputes regarding the city pipeline gas concession agreement in China

Since 2003, Chinese local governments have used concession agreements to build urban natural gas pipeline networks to attract public, private and foreign capital.

Currently, their action is an obstacle to the development of competition in the natural gas market. This legal problem can be resolved by establishing the legal nature of these concession agreements through the efforts of academic theorists and implementing the recommendations they have developed in law enforcement practice.

3. Disputes regarding the international natural gas purchase and sale agreement

Destination restrictions are often viewed by natural gas importing countries as impeding the free movement of goods, market competition, and fair competition rules.

Likewise, a “take or pay” provision may be viewed by their antitrust authorities as intended to restrict competition.

It seems that determining the balance between the rights and obligations of the parties (economic interests) in applying the above conditions in post-reform conditions can be ensured as a result of the activities of commercial arbitrations.

In addition, a solution to the problem under consideration may be the inclusion of special provisions on “rebalancing” in international contracts for the sale and

purchase of natural gas, the essence of which can be defined as follows: when the initial balance of rights and obligations of the buyer and seller of natural gas is violated due to objective reasons, they it is necessary to adjust the content of their contractual obligations taking into account the changes that have occurred.

Russian energy law has also gone through a difficult transition from a planned to a market economy.

Since the collapse of the Soviet Union, Russian legislation has largely focused on maintaining the vertically integrated monopoly business model of the Russian gas industry. Characteristic features of changes in regulation of the natural gas market in Russia are suddenness (quick decision-making) and sharpness, that is, speed of introducing regulatory changes.

The Russian system of legal regulation is more detailed and complete than the Chinese one. Thus, federal legislation separately regulates the exploration, production, transportation and sale of natural gas, and regulates in detail the rights and obligations of participants in this market, such as buyers of natural gas, sellers and investors.

The form of the federal law is also used to regulate the purchase and sale of Russian gas along the “eastern” route (the Power of Siberia gas pipeline) and formalize cooperation during the implementation of the Yamal LNG project.

The wording contained in these regulations is strict and precise. This circumstance allows Russian scientists to pay closer attention to theoretical and legal problems, such as the construction of a legal system and legal concepts in the field of gas supply.

The harmonious development of many laws in Russia, including the Law on Gas Supply, the Civil Code and the Law on Subsoil, has made it possible to avoid the emergence of legal conflicts similar to those currently faced by Chinese law enforcers.

At the same time, despite the fact that Russia considers privatization, liberalization and protection of private property rights to be the logical starting point

for building a system of energy law, the level of imperative legislative regulation of gas supply in it significantly exceeds China. Thus, an analysis of Russian legal regulation in the field of exploration, production, transportation and supply of natural gas allows us to assert that the Government of the Russian Federation exercises stricter control and regulation of gas supply compared to the Government of China.

A fairly significant number of restrictions on the use of market mechanisms allows us to assert that market openness and free competition in various areas of exploration, production and sale of natural gas in China are much higher than in Russia.

Thus, China's experience in the field of energy market liberalization may be of significant practical interest to Russian legislators.

The obvious difference between the approaches of the two compared countries to the regulation of gas supply relations is that Russia is currently implementing changes to the current legislation aimed at stimulating large-scale trade in natural gas and the development of investment projects.

Thus, in order to attract Chinese investment in the Power of Siberia and Yamal LNG projects in the context of sanctions restrictions, Russia has provided a fairly large number of exceptions and benefits, including tax ones.

Taking into account the above, when analyzing legal relations in the field of gas supply in Russia, it is necessary to take into account not only the basic principles of civil law, such as equality and justice, but also the realities of Russian domestic and foreign economic policy, in which natural gas is a special commodity with a strategic.

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