

The Reform of the Oil and Gas Tenement Management System in the PR of China

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Abstract: The system of oil and gas mineral rights is the property right system of oil and gas resources. At present, China's oil and gas rights system is not perfect, laws and regulations are also not yet perfect. It is critical to formulate and perfect the management system of oil and gas rights in China. This paper summarizes the existing problems in the oil and gas resources management system from the aspects of management institution, laws and regulations and resource management system. This paper mainly explores some of the possibilities of reforming China's oil and gas management system to reform proposals on existing methods as far as possible on existing issues.

Keywords: China, Oil and Gas Tenement, Oil and Gas Reform, Tenement Management

1. Introduction

Oil and gas tenement management system is the property rights system of oil and gas resources. The institutionalization of oil and gas resources is institutionalized by the institutionalization of oil and gas resources, in particular the division, identification, definition, protection and implementation of a series of oil and gas resources property rights system. Compare to the developed and in the United States, China's oil and gas tenement management system laws and regulations are not yet perfect, especially under the existing laws and regulations. Only the oil companies approved by the State Council can obtain oil and gas exploration permits or mining permits, involved in oil and gas exploration. At present, only CNPC, Sinopec, CNOOC and a few state-owned companies have such exploration and development rights [1]. The tenement management system restricts the competitiveness and scale of oil and gas resources exploration and development in China. Excessive capital and technology inputs do not necessarily represent value of exploration and development gains. China's current oil and gas resource management system has been unable to meet the needs of the oil and gas industry. It is necessary to reform and improve the management system of

oil and gas resources in China. Build on the current situation and historical evolution of China's oil and gas resources management system, this paper summarizes the existing problems in China's oil and gas tenement management system. It also provides feasible suggestions for the reform of the oil and gas resources management system.

2. Status and Problems of the Oil and Gas Tenement Management System in China

With the industrial modernization and information technology, China's oil and gas resources exploration and development technology continues to develop. China's oil and gas resources tenement system have been evolving and developing, China's current oil and gas resources, the basic framework of the tenement system, includes the following aspects:

2.1. Oil and Gas Tenement Management Agencies

China's all laws and regulations on resources are clearly defined in China's mineral resources owned by the state. The

state ownership of mineral resources is under the responsibility of the State Council [2-5]. China's existing oil and gas tenements are mainly concentrated in the three major state-owned oil companies, as showed in Table 1.

Table 1. Basic Situation of China 's Oil and Natural Gas Torture Project.

The National Petroleum and natural gas mining projects	Total: 1735 projects	4,074,000 square kilometers	Percentage
CNPC projects	776	1,539,000	37.8%
Sinopec projects	484	982,000	24.1%
CNOOC projects	383	127,000	3.1%

Since the restructuring of CNPC and Sinopec Corp. in 1998, the original administrative functions of the government have been divided into government departments, opening up China's oil and gas industry, separating government and enterprises. At present, China's major oil and gas management agencies are shown in Table 2.

Table 2. China 's oil and gas regulatory agencies.

Agencies	Functions
National Development and Reform Commission	Under the State Council, is the State Council oil and gas resources management of the integrated sector. Mainly responsible for the development of oil and gas resources development plan, put forward the development strategies and major policies.
Ministry of Land and Resources	Land and resources management department, is mainly responsible for the supervision and management of oil and gas resources exploration and development, oil and gas resources, mining rights management and compensation management.
National Energy Administration.	The main organization to develop oil and natural gas and other energy industry policies and related standards, and participate in the development of energy-related resources, finance and taxation, environmental protection and climate change and other policies
The state-owned asset supervision and Administration Commission	CNPC and Sinopec and other large state-owned enterprises management department, mainly responsible for the assessment of business conditions, etc.
Treasury Department	Mainly responsible for the collection and management of oil and gas resources and oil and gas resources related to the development of investment management related work.

2.2. Oil and Gas Tenement Management Laws

China's oil and gas property management laws and regulations started late. Laws and regulations seriously behind the development of China's oil and gas resources exploration and development process [6]. China's current oil and gas tenements of the relevant laws and regulations are as showed in Table 3.

Table 3. China 's oil and gas tenement laws and regulations.

Laws and regulations	Content and significance
1986 «mineral resources law»	Established China's mineral resources ownership system and development and utilization system. The definition of the ownership of mineral resources, the main body belongs to the state and the mineral resources of China's legal system to exclude the amount of mineral resources transactions do not exclude its use
2000 «Provisional Regulations on management of the transfer of mining right transfer»	Further clarify the way of mining and transfer of mining rights
2003 «The prospecting and mining rights for the auction listing management approach (Trial)»	On the transfer of mining rights and other issues were further defined
2006 «The decision of the State Council on strengthening geological work»	To cultivate the mineral resources exploration market, and strive to establish and improve the national unity, competition, open and orderly mining rights market, improve market rules, strengthen market supervision, maintain market order

These laws and regulations are clearly defined in China's oil and gas resources owned by the state owned. China's oil and gas tenements for the central government level management, and regulate the standardization of China's oil and gas resources exploration and development process of many aspects, such as mining rights management, resource taxes and so on. Greatly promoted the process of legalization of oil and gas resources management in China, and played an important role in promoting the development and utilization of resources and improving the oil and gas resources management system in China.

2.3. The Basic System of Oil and Gas Tenement Management

The basic system of oil and gas mineral rights management in China is divided into four types:

1. Oil and gas resources of the national ownership and management system;
2. unified block registration management system;
3. oil and gas resources paid use system;
4. Oil and gas resources tenements income distribution system. (Table 4)

Table 4. China 's Basic System of Oil and Gas Mineral Management.

Basci system	Content
Oil and gas resources of the national ownership and management system	Any enterprise engaged in oil and gas exploration and mining, must be approved by the State Council, only by the Ministry of Land and Resources approval and issue oil and gas exploration permits and mining permits. Local governments and relevant departments at all levels have no right to accept any unit of exploration and exploitation of oil and natural gas resources, nor the right to apply for the approval of oil resources registration procedures, nor the right to issue oil and gas exploration permit, mining license
Unified block regional registration management system	The investigation and registration of mineral resources shall be carried out by the competent department of geology and mineral resources under the State Council. The investigation and registration of mineral resources for specific minerals may be carried out in accordance with the relevant departments authorized by the State Council. Mineral resources exploration block registration management approach developed by the State Council. Stressed the principle of registration by the block and authorized the State Council to develop specific measures.
oil and gas resources paid use system	Mineral resources compensation, resource tax, mining royalties, prospecting royalties, prospecting rights mining rights
Oil and gas resources tenements income distribution system	The Ministry of Finance in March 2006 issued the "State Council on the introduction of special oil proceeds of the decision", began to levy the oil special income tax system of financial system to straighten out the central and local distribution relationship, making the oil tax to become local governments and residents The Main Link of Distribution of Tendency of Oil and Gas Resources. Local governments and residents involved in the distribution of taxes and fees are mainly resource tax, resource compensation and land acquisition compensation. Taking into account the economic development of the land, the state of the resource tax as a local tax, the resource compensation for the central and local share.

According to China's mineral resources law, China's resources are owned by the state, so exploration developers need to pay the state tax of oil and gas resources. China has Management system for the paid use of oil and gas resources. From Provisional Regulations on Resource Tax of the People's Republic of China, the regulations stipulate that China's oil and gas resources tax shall be imposed on a unit basis in accordance with the actual sales volume and self-use. In order to increase the gas tax system, the Ministry of Finance and the State Administration of Taxation in Xinjiang took the lead in resource tax reform in 2010. The provisions of the «Regulations on the Reform of Xinjiang Crude Oil and Natural Gas Resource Tax», the provisions of the Xinjiang natural gas resource tax from the original amount of levy to ad valorem levy (tax payable = sales amount × tax rate), the tax rate is 5%. The State Council amended the «Provisional Regulations on Resource Tax of the People's Republic of China» and began to full implement in 2011 [7-10]. The new regulations impose a resource tax on the rate of natural gas ad valorem, which means that resource tax reform is fully rolled out across the country. In 2014, The Ministry of Finance and the State Administration of Taxation will increase the oil and gas resources tax rate from 5% to 6%. That is 6% of sales revenue. Road resource tax is a local tax, collected by the local government; sea resources tax belongs to the central.

3. The Main Problems of Oil and Gas Tenement Management

In this chapter, a comprehensive analysis of four main problems about oil and gas tenement management is

presented:

1. Oil and gas resources legal system is imperfect;
2. Weak market mechanism;
3. Lack of supervision;
4. Tax reform is imperfect.

3.1. Oil and Gas Resources Legal System is Imperfect

Compared with the developed countries of the United States, China's oil and gas resources management system and laws and regulations are not perfect, especially under the existing laws and regulations, only the State Council approved the oil companies to obtain oil and gas exploration permit or mining license, engaged in oil and gas Exploration and development. At present, China only a few barrels of oil and other state-owned companies (CNPC, Sinopec and CNOOC) have the power of exploration and development [11]. At the same time, the mineral resources law and the accompanying laws and regulations are not perfect, and many of the obsolete provisions of the existing laws and regulations system have restricted the efficiency of oil and gas resources (Table 5). Embodied in the following five aspects:

1. Oil and gas mining rights registration system does not meet the oil and gas production rule
2. Failed to implement the block according to the law to withdraw
3. There is a black-box operation in block transfer
4. Failed to submit information to form a public welfare information
5. Imperfect civil liability for infringement of mineral rights and interests

Table 5. Four deficiencies in the management system.

Deficiencies	Specific performance
The oil and gas industry access system is not perfect	The provisions of the "mineral resources law" and relevant regulations, only the State Council awarded the qualification of oil and gas exploration and development of the enterprise, be engaged in oil and gas exploration and development business, currently only in the oil, Sinopec, CNOOC and other small state-owned oil companies with the qualification of other capital into the oil and gas fields, there are legal obstacles.

Deficiencies	Specific performance
The allocation of oil and gas exploration rights market is relatively low	In the conventional oil and gas field, has not yet established a standard level of mining right market and two market, oil and gas exploration and mining rights to obtain three major oil companies and Yanchang Petroleum Group by applying for registration, the State Administrative Award, other capital to enter, affecting the optimal allocation of oil and gas mineral rights.
Oil and gas mineral rights and mining rights overlap to produce solid security risks	The oil and gas mineral rights direct examination and approval by the Ministry of land and resources issued the license, most of the other examination and approval by the competent department of solid mineral provincial licensing, often caused by oil and gas mineral rights and mining rights of oil and gas solid minerals exist overlap of main exploration and exploration of contradictions, current law allows conventional and unconventional oil and gas oil gas and exploration, but the existing mineral separation, mineral rights division. Although at the request of the competent department under the different mineral safety production agreement signed, but the main exploration and exploration and management of mutual interference, fuzzy boundaries, there are some contradictions and safety hazards.
Some areas of oil and gas exploration investment is obviously insufficient	Because of China's oil and gas complex geological conditions, geological evaluation and understanding of a longer cycle, different prospecting exploration investment is not balanced, some areas there did not complete the statutory minimum exploration investment requirements, especially in deep waters and deep exploration desert is difficult, high technical requirements, investment risk areas of exploration investment significantly insufficient.

3.2. Weak Market Mechanism

At present, China's oil and gas mining rights granted a lack of market mechanism, lack of market competition, oil and gas exploration and development market is too inefficient. China's current oil and gas resources, the primary market of mining rights only contains a certain degree of oil and gas resources, the transfer of mining rights, but this market has too strong restrictions, and can't be called the real sense of the market.

China's oil and gas resources management services are relatively weak or even nominal. Effective exchange of oil and gas resources is sometimes difficult to apply. This results in inefficiency of oil and gas tenement management. China's oil and gas resources management system lacks information exchange and related systems between government and oil enterprises. China has still not established a unique level of oil and gas resources integrated information service system. Oil and gas information services are not in place to cause investors to invest blindly. Mineral exploration has the characteristics of high investment risk, large amount of investment and long investment cycle [12]. In the absence of sufficient information resources, the risk to investors will be expected to be very copious.

3.3. Tax Reform is Imperfect

Under the current tax system in our country, the oil and gas resource tax revenues belong to local government tax, but a real problem is that China's oil and gas distribution is extremely uneven, geographic concentration is too high. China's western China's oil and gas are mainly concentrated in areas with low population density. According to the current resource tax system, the northeast and western regions through the development of resources to obtain a lot of tax [13]. That breeds a serious problem. Local government over-exploitation of resources, resulting in excessive waste of resources, but also contrary to sustainable development and long-term development.

4. Suggestions

Oil and gas are a key strategic resource. The elemental

content of China's energy revolution is to promote China's oil and gas tenement management system and market mechanism reform. In view of the problems existing in China's oil and gas tenement management system and market mechanism, the following policy suggestions are submitted.

4.1. Promoting the Oil and Gas Mineral Rights Management Mechanism Reform

The energy industry is a highly integrated industry. Its development should follow the rules of market economy, but also government management and coordination. At present, the energy management in China has a number of departments scattered and long-term, comprehensive performance poor. Therefore, China should be learn from the experience of many countries. China focus on macro energy management and the establish an independent distribution of energy integrated departments. Energy management will be centrally managed to avoid duplication and cross - government functions.

4.1.1. Establishing a Department in Charge of Management of Independent Professional Oil and Gas

At present, oil and gas management functions are scattered in various energy related departments, that creates a decentralized management phenomenon. China needs to establish an autonomous specialized department, focus on the functions of various departments in oil and gas management, and promote the development of oil and gas resources. The new oil and gas rights management agencies must clearly define the boundaries of the government and the market, to achieve "government homing, market relaxation". In the government decentralization, change the government functions in the government in the oil and gas resources management.

- (1) Clear government management rights;
- (2) Responsibilities on the clear conditions of oil and gas companies, all types of oil and gas companies (including private, and even foreign-funded enterprises) should be fair access;
- (3) Responsibility list of the main behavior of the Government's duties clear and refined.

4.1.2. Straightening out the Relationship Between the Central and Local Governments

At present, oil and gas, as a special mineral, are the first level management of the state. In practice, the oil and gas tenement management system has exposed many problems. In the case of strict restrictions on government agencies, the central authorities (such as the Ministry of Land and Resources) to manage a large number of block access and exit of the transfer, or even dozens of hundreds of companies operating is unrealistic. China can learn from the experience of the United States. Government can try to build the central and local multi-level management. Unified management can mobilize all aspects of positive factors and take into account the differences around. That will prevent local division and regional protection.

4.1.3. Strengthening the Supervision of Oil and Gas

China timely set up specialized, independent oil and gas regulatory agencies, is responsible for monitoring the implementation of relevant policies.

(1) Strengthen the government regulatory functions, establish and improve the market economy in line with the requirements of oil and gas management and regulatory system.

(2) Actively carry out the oil and gas exploration and mining program review to ensure that the oil and gas exploration and development activities of scientific and rational.

(3) Strengthen the supervision and inspection of oil and gas block refund, to strengthen the order of oil and gas mining rectification, to protect the legitimate rights and interests of the teneers.

(4) Supervise and check the collection and management of geological data and ensure that the basic geological data obtained by the government are truly public welfare and serve the society.

4.2. Strengthening the Legal System Construction of Oil and Gas Resources

The future of China's oil and gas laws and regulations should be the oil and gas resources of the state ownership as the cornerstone to safeguard the national energy security as the core. It is guided by the market mechanism under the supervision of national science, and it is necessary to pay attention to environmental protection, resource conservation and people's life safety and property protection. China should improve the legal and regulatory system, in order to deepen the oil and gas tenement management system and market mechanism reform to provide a legal basis.

4.2.1. Speeding up the Revision and Perfection of the Law of Mineral Resources

China should intensify their efforts to modify and improve the "mineral resources law" and related regulations and

policies, establish a unified system of oil and gas resources exploration and mining laws and regulations, provide the basis for the reform of the oil and gas mining right market development, diversification, exploration and development of the main geological data mining oil and gas management and other mineral resources law and related laws and regulations do not apply to the construction of mining rights market. Some of the provisions of the development has seriously lagged behind the market, the market is not conducive to the allocation of mining rights. The provisions of the law on the distribution of prospecting and mining rights are subordinate laws and regulations of laws, regulations and mineral resources, which exist in many different places and even in some conflicts. Therefore, it is necessary to revise the "mineral resources law" and relevant laws and regulations, in addition to eliminate the "apart from the enterprise merger, joint venture and cooperation with other business enterprises, or by the sale of assets or other changes in the property rights of the enterprise assets need to transfer the prospecting and mining rights, not to mortgage, leasing or other transfer of prospecting and mining rights" and other regulations. And government set up sections of the provisions of the mining rights transfer system, clearly stipulates the prospecting rights, briquette can be through mortgages, leasing, price financing way to carry out circulation. In addition, the government adjusts the irrational resource structure of property and reduces the externalities generated in the current system. Through the form of legislation, the owner of the ownership of resources to the damage to the resources of the people (or the current free oil and gas resources by the benefits of people) to subsidize those who due to devaluation of resources for no reason damaged people (or oil and gas resources can not be exclusive Its beneficiaries).

4.2.2. Speeding up the Construction of Supporting Laws and Regulations

China should pay attention to build of «Energy Law», «Oil and Natural Gas Law» and other laws and regulations. Clear «Energy Law» and «Mineral Resources Law» duty in the oil and gas resources management laws. That contribute to the adjustment of oil and gas resources management functions、responsibilities and institutions. According to the "Environmental Protection Law" and other oil industry to develop specific environmental protection and environmental management practices, government should complete China's oil and gas regulatory laws and regulations.

4.3. Improve the Oil and Gas Mineral Rights Management System

China should actively promote the reform of the system of access, set the appropriate access threshold based on the national overall control, let the real strength, the exploration and development of qualified enterprises to enter the upstream oil and gas exploration and development areas, the establishment of market access principle of scientific and reasonable and strict, the market competition main body to implement national treatment management, make full use of

foreign capital, technology and expertise to develop exploration and development block access threshold, improve capital standards, productivity standards, environmental standards, technical standards, equipment capacity standard of industry rules, standardize the bidding management process, allowing the strength of private enterprises by way of bidding in oil and gas exploration and development.

4.3.1. Mining Right Registration System for Bidding System

China establish an open and transparent exploration and mining rights tender system. Enterprises get oil and gas exploration rights through market competition. The government strictly implement the prospecting system and strengthen the inspection of the registered oil and gas blocks. The competent department of the tenements shall promptly recover the blocks that do not make substantial exploration beyond the prescribed time limit. And through re-open tender to other oil and gas enterprises. That will gradually establish an effective refund mechanism.

4.3.2. Improve the Use of Geological Data Transfer Mechanism

China strengthens the supervision and administration of the collection and delivery of geological data. And investigate and deal with non-compliance with the geological information submitted by the obligation.

(1) Strengthen the construction of the network of geological information collection institutions, organize professional personnel to carry out two and more development of oil and gas geological data, and improve the level of management and service of geological information collection institutions.

(2) Construct of oil and gas geological information sharing and social service system, improve the social utilization of oil and gas geological data benefits for the government, society and enterprises to provide services

(3) Strengthen the exploration and sharing of exploration information between oil companies, organize major discoveries of oil and gas exploration and development, and exchange ideas.

4.4. Oil and Gas Resources Tax System Reform

In accordance with the "reasonable burden, scientific tax" principle, China promote oil and gas finance and tax system reform, and also give full play to the role of fiscal and taxation leverage.

4.4.1. Optimization of Oil and Gas Resources Tax System

Actively promote the clean up fees, and gradually fade and cancel the special petroleum proceeds, to further standardize the resource tax, resource tax clear positioning, promote oil and gas resources tax and mineral resources compensation with the formation of a new resource tax. The establishment of flexible oil and gas resource tax policy, improves the oil and gas resource tax with the price adjustment mechanism and levy [14-16]. The implementation of differentiated resource

tax rate structure, according to the quality of oil and gas resources, resource endowments and development costs and other factors, the implementation of differential tax policy, flexible adjustment of income differential protection, poor resource endowment of oil and gas fields.

4.4.2. Establishing and Improving the Ecological Compensation Mechanism

China embodies the ecological value as the core goal to explore the establishment of oil and gas industry green tax system. The government timely levy oil and gas resources and environmental taxes. And also establish the ecological compensation mechanism and green tax system [17].

(1) Establish a national carbon trading market as soon as possible, improve the carbon trading market system, give full play to the market mechanism in the optimization of energy-saving emission reduction resource allocation in the decisive role.

(2) Actively promote the carbon tax legislation and strengthen the control of oil and gas consumption and guidance.

(3) Improve the unconventional oil and gas resources development of financial subsidies and large oil and gas enterprise income tax rebate policy, give full play to the fiscal policy of interest adjustment mechanism and reasonable leverage.

5. Conclusion

This paper offers an institutional framework for the establishment of oil and gas resources tenement management system in China, for the better development of China's oil and gas industry. The Chinese government should boldly reform though the reality of China's oil and gas exploration and development. First of all, according to China's current oil and gas resources laws and regulations of the status quo, strengthening China's oil and natural gas resources laws and regulations. That will provide a legal basis for comprehensively promoting the reform of oil and gas management system. Secondly, China must vigorously promote oil and gas management system reform and strengthen oil and gas resources management. Third, the reform of the oil and gas resources tax system. Only in this way could be the establishment of an oil and gas resources tenement management system is more effective and systematic.

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