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## **РЕГУЛИРОВАНИЕ УГЛЕРОДНОГО РЫНКА КИТАЯ: ПОЛИТИКА, ПРОБЛЕМЫ И РЕКОМЕНДАЦИИ**

*Создание углеродного рынка является основой торговли выбросами углерода. В 2012 году Китай запустил пилотную программу торговли выбросами углерода. После более чем десяти лет разработки пилотный проект по торговле выбросами углерода в Китае достиг замечательных результатов, эффективно контролируя общие выбросы парниковых газов, таких как углекислый газ, и эффективно способствуя корректировке и оптимизации промышленной структуры и структуры энергетики. Развитие углеродного рынка Китая в основном прошло три этапа, и его функционирование зависит от относительно целостной системы регулирования. С тех пор как углеродный рынок Китая начал тестироваться, правительство постепенно ужесточило надзор за торговлей выбросами углерода. В целом, в настоящее время Китай сформировал политическую систему, основанную на «Временных мерах по управлению национальной торговлей выбросами углерода» и охватывающую все аспекты добровольной торговли и соблюдения требований по сокращению выбросов парниковых газов.*

*В данной статье анализируются существующие проблемы и недостатки на основе разбора существующей регуляторной политики.*

*Нынешняя политика регулирования углеродного рынка Китая в основном имеет проблемы, такие как тот факт, что некоторые законы и положения, регулирующие углеродный рынок, были сформулированы ранее, политика регулирования углеродного рынка не является достаточно систематической, чтобы удовлетворить реальные потребности функционирования углеродного рынка, а существующая политика регулирования необходимые механизмы поддержки. В будущем Китаю следует и дальше совершенствовать систему политики регулирования углеродного рынка путем постоянного обновления торговой политики на углеродном рынке, совершенствования механизмов поддержки углеродного рынка и ужесточения нормативных положений. В то же время мы должны также повысить мотивацию всех заинтересованных сторон к участию в углеродном рынке, продолжать укреплять международное сотрудничество и дальше способствовать развитию углеродного рынка Китая на более высокий уровень и глубину.*

**Ключевые слова:** Китай, торговля выбросами углерода, углеродный рынок, Правила, эволюция, экологическая политика, надзор, Пики углерода, углеродно-нейтральный, выбросы углекислого газа.

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# REGULATION OF CHINA'S CARBON MARKET: POLICIES, ISSUES AND RECOMMENDATIONS

Carbon market construction is the core of carbon emissions trading. China launched a carbon trading pilot project in 2012. After more than ten years of development, China's carbon trading pilot has achieved remarkable results, effectively controlling the total emissions of greenhouse gases such as carbon dioxide, and effectively promoting the adjustment and optimization of the industrial structure and energy structure. The development of China's carbon market has mainly gone through three stages, and its operation depends on a relatively complete regulatory system. Since China's carbon market began to be piloted, the government has gradually strengthened the supervision of carbon emissions trading. Generally speaking, China has now formed a policy system based on the «Interim Measures for the Administration of National Carbon Emissions Trading» and covering all aspects of greenhouse gas voluntary emission reduction trading and compliance.

This article analyzes the existing problems and deficiencies on the basis of sorting out the existing regulatory policies.

China's current carbon market regulatory policies mainly have problems such as the fact that some carbon market regulatory laws and regulations were formulated earlier, the carbon market regulatory policies are not systematic enough to meet the actual needs of carbon market operation, and the existing regulatory policies lack necessary supporting mechanisms. In the future, China should further improve China's carbon market regulatory policy system by continuously updating carbon market trading policies, improving carbon market supporting mechanisms, and strengthening regulatory regulations. At the same time, we should also enhance the motivation of all stakeholders to participate in the carbon market, continue to strengthen international cooperation, and further promote the development of China's carbon market to a higher level and deeper depth.

**Key words:** China, carbon trading, carbon market, regulations, evolution, environmental policy, supervision, carbon peak, carbon neutrality, carbon emissions.

In order to respond to global climate change, reduce greenhouse gas emissions, and promote global sustainable development, the United Nations Framework Convention on Climate Change adopted the Paris Agreement at the conference held

in Paris on November 15, 2015, and in November 2016 It officially comes into effect on the 4th. China signed the Paris Agreement on April 22, 2016, and ratified the Paris Agreement on September 3, 2016. This marks that China will participate in the global climate governance process and play a greater role on the international stage. «Carbon emission rights trading is an effective way to comprehensively use economic and legal means to solve the problem of climate change. The so-called carbon emission rights refer to the right of carbon emission rights holders to emit carbon dioxide and other greenhouse gases into the atmosphere under legal conditions and with the permission of the environmental department» [4. С. 94-100]. «Carbon emissions are public goods and require joint action by all mankind» [5. С. 1-4].

In order to achieve the goal of carbon peaking before 2030 and carbon neutrality before 2060, China launched a carbon trading pilot project in 2012. After more than ten years of development, China's carbon trading pilot has achieved remarkable results, effectively controlling the total emissions of greenhouse gases such as carbon dioxide, and effectively promoting the adjustment and optimization of the industrial structure and energy structure. During the pilot construction process, each pilot has accumulated certain experience in the construction of carbon emissions trading regulatory regulations, and on this basis, it has continuously improved its own regulatory policy system [6. С. 25-36; 7. 1-16; 7. С. 32-38].

### **1. Development history of China's carbon market.**

1) Initial exploration stage (2005-2012). «One of the most developed mechanisms for trading carbon units is the European Union Emissions Trading System (EU ETS). The European Union emissions trading system has existed since 2005» [3. С. 39-56]. China is actively learning about the carbon trading mechanism from the EU [9. С. 33-36; 10. С. 53-56; 11. С. 31-39]. At the same time, during this period, China actively integrated into the international carbon market, especially through participating in the Clean Development Mechanism (CDM) project, and learned valuable carbon trading experience. Such projects provide developed countries with the opportunity to invest in low-carbon technologies in developing countries such as China, thereby assisting them in reducing domestic greenhouse gas emissions. China not only promoted the progress of the new energy industry, but also received initial financial support for carbon emission reduction.

2) Local pilot stage (2013-2020). Since 2011, China has launched carbon emissions trading pilot projects in seven provinces and cities, including Beijing, Tianjin, and Shanghai, aiming to build and test the operating mechanism and regulatory framework of the carbon market and lay a solid foundation for the establishment of a national market. Since 2013, these pilot carbon markets have been put into operation one after another, covering multiple industries and fields such as electricity, steel, and chemicals. «2014 was the year when China released a large amount of carbon emission information. The National Development and Reform Commission issued a carbon emission reporting system for key units and national standards for carbon accounting and reporting guidelines for 10 industries» [12. С. 123-130]. The practice of these local pilots not only provided a large amount of data support for the subsequent construction

of the national carbon market, but also accumulated valuable experience. «As of the end of July 2016, China's seven pilot carbon markets have completed three phases of trial operation. The total transaction volume exceeded 76.69 million tons, and the total transaction amount exceeded 1.76 billion yuan. China has become the second largest carbon market in the world after the EU ETS» [13. С. 77-86].

3) National carbon market construction stage (2021 to present). On July 16, 2021, China officially launched the national carbon emissions trading market, and the power generation industry became the first industry to be included in the market, covering more than 2,000 key emission units. «According to the plans of the Chinese government, in order to reduce the greenhouse effect by 1.5°C, it is necessary to completely decommission coal-fired power plants in China by 2045» [1. С. 21-27]. This milestone marks significant progress in the construction of China's carbon market. Since the launch of the market, its operation has been stable and transaction prices have gradually increased, effectively promoting enterprises' emission reduction actions and green and low-carbon transformation. As the market continues to improve and expand, it is expected that more industries and regions will be included in the carbon market system.

**2. Main policies for China's carbon market supervision.** In order to ensure the effective operation of China's carbon market regulatory policy system, during the pilot phase, the Chinese central government and local governments continued to strengthen the monitoring and verification of corporate emission data and quotas in the pilot areas. On this basis, the Chinese government has successively issued regulations and documents such as the «Carbon Emissions Trading Management Measures (Trial)» and «Enterprise Greenhouse Gas Emission Accounting and Reporting Standards (Trial)». It clarifies the requirements for enterprises to submit annual greenhouse gas emission reports, reporting institutions and procedures, verification institutions and verification procedures, and issues that should be paid attention to during the verification process. In addition, China has also launched a pilot project for a voluntary greenhouse gas emission reduction trading mechanism and gradually established a unified national carbon market regulatory system.

In order to promote the construction of the carbon market, the Chinese government has successively issued the «Carbon Emission Rights Registration Management Rules (Trial Implementation)», «Carbon Emissions Rights Trading Management Rules (Trial Implementation)» and «Carbon Emission Rights Settlement Management Rules (Trial Implementation)» based on the pilot experience) and a series of important documents. These documents provide specific provisions on the establishment, trading mechanism and operation of the national carbon market. Generally speaking, China has now formed a regulatory system based on the «Interim Measures for the Administration of National Carbon Emissions Trading» and covering all aspects of greenhouse gas voluntary emission reduction trading and compliance. These regulations provide important institutional guarantees for the establishment of a national carbon market. On this basis, China has formulated a series of supporting measures to further promote the construction of a national carbon market.

**3. Problems and deficiencies in existing regulatory policies.** In the construction and operation of China's carbon market, government regulatory authorities have played a leading role, and the regulatory regulations they have formulated are an important part of the entire carbon market regulatory system. Although government regulatory authorities have played an important role in the construction of the carbon market, the regulatory regulations they have formulated still have certain problems and deficiencies in actual operation, mainly in the following aspects.

First, some carbon market regulatory regulations were formulated earlier, and the laws and regulations they are based on have undergone major changes, resulting in situations in which they are unable to adapt to new situations in actual operation.

Second, the carbon market regulatory policies are not systematic enough and cannot meet the actual needs of the carbon market operation. «In the pilot carbon market, Shanghai, Guangdong, Hubei and Fujian issued carbon emission trading management measures in the form of government orders, which are local government regulations, while Tianjin only has normative documents» [14. С. 1-8]. At present, China's supervision of the carbon market is mainly based on the «Interim Measures for the Administration of Carbon Emissions Trading». Although this measure is conducive to the improvement of the carbon market system to a certain extent, the measure has the following problems in actual implementation:

1. Legal Lower rank.
2. Too much emphasis on the industry level and neglect of the enterprise level.
3. The punishment is too light.
4. The operability is not strong.

Third, existing regulatory policies lack necessary supporting mechanisms, which has a greater impact on the operation of the carbon market. The supervision of carbon emissions requires reliable carbon emissions data, so corresponding data detection and reporting mechanisms are needed. «Accurate monitoring of greenhouse gas emissions is a major technical challenge. For regulatory authorities, it is difficult to accurately judge that the emission data reported by companies is «high quality and trustworthy», and there are also huge difficulties in counting the true emissions of various industries» [15. С. 262-266]. Although the current regulatory regulations formulated by China are generally relatively complete, they lack the necessary supporting mechanisms to ensure the effectiveness of laws and regulations, which affects the functioning of the carbon market.

**4. Policy recommendations.** The development history of China's carbon market and the evolution trend of regulatory regulations reflect China's efforts to continuously improve the regulatory system in the process of promoting the construction of the carbon market. The carbon market is a complex stakeholder network in which governments, businesses and individuals all play varying degrees of role. As an institutional arrangement for mutual coordination and joint action among stakeholders such as the government and individuals, carbon market regulatory regulations are an important guarantee for promoting the healthy development of the carbon market.

Regarding the current issues in China's carbon market regulatory policies, this article puts forward the following suggestions.

1) Continuously update carbon market trading policies based on the transaction scale and transaction types of China's carbon market. At the same time, we can learn from the advanced experiences of other countries to prevent carbon market risks.

2) Improve the carbon market supporting mechanisms, strengthen data quality supervision, and explore the establishment of effective compliance mechanisms. Promote carbon emissions trading by clarifying the legal responsibilities of all parties and strengthening law enforcement. At the same time, relevant laws and regulations will be further improved and penalties for various violations will be strengthened. In addition, the monitoring and verification mechanism of the carbon trading market should be strengthened to further ensure the fairness and justice of China's carbon market.

3) In order to further strengthen the supervision of China's carbon market, the following aspects should be strengthened in the future: First, the relevant legal system and supporting systems should be further improved. The second is to clarify the qualification requirements, rights and obligations, and liability for breach of contract of carbon emissions trading entities. The third is to refine the emission standards and greenhouse gas emission reporting requirements for different types of enterprises. The fourth is to strengthen the construction of carbon trading market monitoring and verification mechanisms.

At the same time, in order to better promote the construction of the carbon market, this article also puts forward the following two suggestions.

1) Enhance the motivation of all stakeholders to participate in the carbon market. The government can attract companies to participate in the carbon market by reducing quota prices. Encourage and support financial institutions to support low-carbon economic development by providing subsidies and other means. Encourage the public and non-governmental organizations to actively participate in the carbon market.

2) Continue to strengthen international cooperation. Currently, countries around the world are committed to establishing a unified carbon trading market. «A harmonized carbon trading mechanism would allow countries to avoid double carbon taxation and meet part of their emissions reduction targets through the purchase of offset credits» [2. C. 470-495]. In the future, China should continue to strengthen international cooperation and further improve the construction of relevant policy systems in the unified national carbon emissions trading market. «It is expected that China will accelerate the connection between the national carbon market and the international carbon market, promote mutual recognition and interoperability of technology, methods, standards, and data, increase the international influence of the national carbon market, and actively respond to the EU carbon border adjustment mechanism» [16. C. 16-27].

Since the start of pilot construction, the supervision of China's carbon market has generally shown a stable trend, and all aspects of work are being carried out in an orderly manner. In the future, China's carbon market regulatory system should

continue to improve government-led regulatory policies while increasing incentives for various stakeholders to participate in the carbon market. China should continue to strengthen the construction of supporting mechanisms for the carbon market, continuously improve the carbon market regulatory system, and strengthen international cooperation. This will further promote the development of China's carbon market to a higher level and deeper level.

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