



Challenges and Development of Green Finance in China Under the “Double Carbon Target”

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ABSTRACT

Green finance is an important focus of financial services to the real economy. It will help China achieve the goal of carbon peak and carbon neutral as soon as possible, and promote the overall green transformation of China's economic and social development. This paper analyzes the development status of green finance in China, points out the problems faced by the development of green finance in China, and puts forward suggestions for the future development of green finance in China.

Keywords: Carbon peaking, Carbon neutrality, Green finance

1. INTRODUCTION

With the outbreak of multiple shocks such as global warming, environmental pollution and energy crisis, the concept of sustainable and green development has been further implemented. Major economies have taken ecological environment protection and adaptation to climate change as major measures to enhance the resilience of economic development. China's commitment to peak carbon emissions by 2030 and achieve carbon neutrality by 2060 is a major strategic decision made at a time when urbanization is accelerating and carbon emissions are still climbing. Green finance is an important focus for financial services to the real economy. It plays an important role in accelerating green and low-carbon economic development, promoting the overall green transformation of China's economic and social development, and striving to achieve the long-term goal of "zero-carbon economy".

2. LITERATURE REVIEW

Green finance refers to economic activities that support environmental improvement, climate change response, and efficient use of resources, namely, financial services for project investment, financing, project operation, and risk management in the fields of environmental protection, energy conservation, clean energy, green transportation, and green buildings. As the main driving force of sustainable development and green

development, green finance has received continuous attention from academic circles at home and abroad.

Wu Chaoxia, Zhang Si (2022) by analyzing the green financial support of low carbon economy development present situation and existing problems, and combing the green financial support mechanism and path of evolution of low carbon economy development, put forward green finance, innovative products and services of laws and regulations, correctly handle the relationship between government and market, a clear division of all kinds of subjects, In this way, green finance can help low-carbon economic development.^[1] Sun Qiufeng, Nian Zongqian (2022) believes that China's financial support policy system is not perfect, the market-oriented green finance system is still in its infancy, and the green finance organization system is not sound enough. China should learn from the financial support experience of the US and THE UK for low-carbon development, improve the legal system of green finance, innovate green financial products and services, and actively guide financial institutions, non-financial institutions and intermediary institutions to participate.^[2] Ba Shusong and Peng Weizhuojia (2022) sorted out the process of green finance practice in the UK and provided reference for the development of green finance in China. As the first country in Europe and the United States to make a legislative commitment to achieve net zero emissions by 2050, the UK has made positive and beneficial explorations in the field of green finance.^[3] Wei Lili and Ying Yang (2022) believe that green finance research should follow the economic research paradigm under the

new constraints in the future, based on the socialist political economy with Chinese characteristics and the thought of ecological civilization, as well as the international vision of a community of shared future for mankind and global governance. Research on innovative green finance policies, markets, theories and practices from the aspects of regional economic coordination system and mechanism, green financial products and services, green technological innovation of enterprises, green behavior of consumers, and climate risk prevention.^[4]Qian Lihua, Fang Qi and Lu Zhengwei (2021) believe that under the guidance of carbon peak and carbon neutrality, China's green finance will show the following trends: First, climate investment and financing will become an important field of green finance; Second, there will be more room for innovation in the green bond market. Third, financial institutions will continue to strengthen climate and environmental risk management.^[5]Zhang Yue, Zhou Yingheng (2021) point out that in the future, China should focus on weakening information asymmetry, promoting financial technology innovation and business improvement, and cultivating national awareness of green development to promote the standardized development of green finance, so as to truly play the role of green finance in enabling green development.^[6]An Guojun (2021) discusses the innovative development path of green finance under the goal of carbon peak and carbon neutrality in view of a series of problems such as lack of relevant standards, incentive mechanism for innovation and difficulty in financing existing in the investment and financing of green technology and climate change. Paper suggested that the rich green financial investment and financing channels and product innovation system, improve the green financial standards, construction of marketization of green technology innovation of the financial system, innovation system and international cooperation framework for development, actively promote carbon financial innovation, green infrastructure construction, promote local green financial reform pilot test area and climate financing.^[7]Xu Zheng and Jiang Xiaopeng (2021) believe that in order for green finance to better play a supporting role for carbon peak and carbon neutralization, it is necessary to integrate the system to ease the financing constraints of green investment from the whole industrial chain, namely focusing on the overall situation, enhancing the price discovery and risk diversification capabilities of the unified carbon market, and promoting the high-quality development of the green financial system. We should transform the driving force from the perspective of carbon emission reduction and carbon absorption to help the industrial structure evolve towards cleaner and more energy efficient. Connect the inside and outside to promote the construction of low-carbon market through the internationalization of green bonds. Facilitate information flow and coordinate decarbonization tools to accelerate the realization of set policy goals.^[8]Li Jindong (2019) took the development

of green finance in China as the research object, analyzed the problems existing in the development of green finance in China from the perspective of low-carbon economy, and put forward countermeasures and suggestions to promote the monitoring and development of green finance in China based on the problems existing in the development of green finance in the context of low-carbon economy.^[9]Wang Yujing and Jiang Hangxiang (2017) explain the path of developing green finance to promote the development of China's low-carbon industry from the perspective of using green finance system to boost the development of low-carbon industry.^[10]

3. DEVELOPMENT OF GREEN FINANCE IN CHINA

Based on the actual situation of economic development, China officially proposed the development of green finance for the first time in 2015. In recent years, China has made remarkable achievements in all aspects of green finance development, including improving the construction of green finance system, expanding the scale of green financial product issuance, rich achievements in international green finance cooperation and orderly implementation of local green finance pilot projects. Top-down policy promotion and bottom-up local pilot are the main characteristics of green finance development in China.

3.1 The policy framework of green finance has been continuously improved.

In 2006, the central government began to introduce policies related to green finance. In September 2015, "Building a green financial system" was mentioned for the first time in the Overall Plan for The Reform of the Ecological Civilization System. In 2016, the Guidelines on Building a Green Financial System jointly implemented by the seven departments became the first systematic policy document on green finance in the world. The fourth Plenary Session of the 19th CPC Central Committee in 2019 emphasized the necessity and importance of green technology innovation. The 14th Five-Year Plan will bring broad space for promoting all-round green transformation of economic and social development and accelerating green and low-carbon development.

3.2 The green financial market system has developed rapidly.

Green financial products and services are constantly innovated, and the market size is gradually expanding. Green finance has diversified from single credit. A system of green credit products, including green loans, green financial leasing, green trust, green credit cards, and green bond issuance and underwriting, has been

initially established. The protection function of green insurance is improving, and environmental pollution liability insurance covers more than 20 industries with high environmental risks, such as heavy metals, petrochemicals and pharmaceutical waste. Green investment and financing continued to advance, and standardized debt financing instruments and asset securitization developed rapidly. China has included green bonds and green credit in the scope of qualified collateral for central bank lending facilities.

3.3 The green financial system has been gradually improved

China's green finance has made great progress in the construction of statistical and regulatory systems, the formulation of green finance standards, the mandatory and normative disclosure of environmental information, and the cultivation of diversified green investment subjects. Indicators, rankings, ratings, standards and other decision support tools to guide green investment are gradually improved, especially the green finance standard system is gradually unified.

3.4 The pilot zone for Green finance reform has achieved remarkable results

Since its establishment in 2017, the green Finance reform Pilot zone has achieved rapid development, exploring replicable and scalable schemes that can adapt to different regions for the construction of China's green finance system. The scale of green finance has increased significantly. The construction of green finance market infrastructure, mainly consisting of green project database, green finance statistics and detection mechanism, green credit information system and green finance standard system, has been further strengthened. It has promoted the improvement of green financial incentive mechanism and risk prevention mechanism.

4. CHALLENGES FACED BY CHINA'S GREEN FINANCE DEVELOPMENT UNDER THE "DOUBLE CARBON TARGET"

4.1 The green financial policy system is not sound.

The current policy and legislation level of green finance is relatively low, which affects the implementation effectiveness of laws and regulatory systems. At present, restrictive and mandatory policies are mainly adopted, but there are few supportive policies to encourage financial institutions and non-financial institutions to actively participate in financial support, which cannot fully mobilize the enthusiasm of all parties. At present, fiscal and tax incentive policies for financial

institutions to operate green finance business are not in place. A scientific and reasonable indicator system has not been established to measure the comprehensive performance of green finance business of financial institutions. The disclosure of green credit by financial institutions lacks consistent caliber and many data are not comparable. The disclosure of green finance risk information and risk sharing mechanism are not sound.

4.2 The green financial product system is not perfect.

At present, the main products of green finance in China include green credit, green insurance, green bonds, etc., which cannot fully meet the multi-level and multi-type market demand. Although carbon bond, carbon fund, carbon emission right (credit) pledge financing and other products have been developed one after another, they are mainly focused on loan financing related to emission reduction projects, while carbon forward, carbon swap, carbon index and other financial derivatives are still to be developed. China's carbon finance market is still in its infancy and exploration stage, and is still at the bottom of the entire carbon trading industry chain worldwide, and has not yet formed a financial trading platform in a real sense.

4.3 The organizational system of green finance is not efficient

The responsibilities of the government and the market are overlapping and unclear, resulting in low efficiency and poor results. There is no effective coordination mechanism for carbon peak, carbon neutrality, climate investment and financing, and green finance innovation. Financing for climate projects is also patchy. In terms of project financing, green finance and related incentive mechanism need to be improved urgently for low-carbon development projects in urban transportation, energy, environmental protection, construction, municipal administration and other fields, especially public infrastructure projects.

5. CONCLUSIONS

Facing many challenges in the development of China's green finance under "double carbon target", the financial sector should expand the depth and breadth of green finance reform and innovation, improve the green and low-carbon policy framework, and ensure that "double carbon target" is achieved as scheduled.

(1) Green financial market system should be improved.

The central bank should give preferential reserve ratio to banks with good green credit. In order to promote the development of green credit, we can add central bank green bills, green credit support plan and other tools.

Financial institutions should be encouraged to innovate in green supply chain finance, green direct financing, green insurance and other products through interest discount, guarantee and incentive measures. In addition, the government should focus on carbon-related fields to promote the innovation of carbon financial products system and the healthy development of carbon trading market. On the basis of a unified national carbon market, open carbon trading channels should be established to improve the facilitation of foreign investment into China's carbon market.

(2) Supporting systems for green finance should be improved.

We will accelerate the improvement of the green finance standard system and the incentive and restraint mechanism, with the goal of carbon peak and carbon neutrality as constraints. We should revise and improve the green finance standard system in due course, including the evaluation standards for green projects and the evaluation and certification standards for green bonds. We should build and improve a green and low-carbon project library. We should continue to improve the green finance performance evaluation system for financial institutions and expand the application of evaluation results. A more effective green financial incentive mechanism should be established to guide financial resources towards green and low-carbon projects.

(3) The legal and regulatory system of green finance should be improved.

The healthy development of green finance needs to be guaranteed by laws and regulations. China should actively explore the establishment of green finance law, and take environmental protection as the goal of financial compliance operation, which is conducive to standardize the credit and investment behavior of financial enterprises. At the same time, the Chinese government should continue to promulgate and improve standards, and improve the legal system of green finance.

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