

# Policies, Problems and Solutions of Green Finance Development in China under the “Dual Carbon” Strategy

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**Abstract.** Given the ongoing challenges of global climate change, China, as a responsible nation, is committed to achieving the “Dual Carbon” objectives. This includes reaching “Carbon peak<sup>1</sup>”, which refers to the highest allowable level of carbon emission, by 2030, and attaining “Carbon neutrality<sup>2</sup>”, which includes fully offsetting carbon emissions by 2060. Green Finance is essential for advancing this policy, and plays an important role in promoting green and low-carbon economic development. While China has made notable progress in Green Finance in recent years, it continues to encounter several challenges, such as inconsistent standards, insufficient product innovation, an imperfect risk assessment system, and a low level of marketization. This essay puts forward a series of countermeasures and recommendations: First, enhance the green financial Standard System by formulating unified standards to improve market credibility and operational transparency. Secondly, boost the innovation of green financial products by introducing more diversified products to meet the market demand. Thirdly, establish a risk assessment framework, such as utilizing a scientific approach to assess environmental benefits and financial risks of green projects; and lastly, advance the market-driven growth of Green Finance, including reducing the dependence on policy and stimulating market activities. Implementing these strategies will support the formation of sustained and healthy development of Green Finance in China, and increase the effectiveness in achieving the “Dual Carbon” goal, along with the transformation to a sustainable economy.

**Keywords:** “Dual Carbon” policy, green finance, risk assessment, market-based development.

## 1. Introduction

As the global climate change problem becomes more and more serious, countries have put forward strategies to cope with it, and as the world's second-largest economy, China is also proactively pursuing a path of green and low-carbon development. In September 2020, President Xi outlined the “Dual Carbon” objectives at the United Nations General Assembly, aiming to achieve “Carbon peak” and “Carbon Neutrality” by 2030 and 2060 consecutively. This policy has established new criteria for advancing China's low-carbon economy. The financial sector plays a pivotal role in economic and social development, and the importance of the development of Green Finance to the realization of the “Dual Carbon” goal is therefore self-evident. However, the development of Green Finance in China still faces many challenges, and further improvements in policy support, financial innovation, and market mechanisms are highly needed. This essay will discuss the development path of Green Finance in China under the “Dual Carbon” policy from three aspects of the current situation of Green Finance development, which includes the problems faced, and the possible countermeasures and suggestions.

## 2. Definition of Green Finance

There is no consensus on the definition of Green Finance among scholars, government agencies and international organizations domestically and abroad. Salazar believes that Green Finance is an essential financial mechanism that not only advances environmental protection but also serves as a critical connection between the environmental sector and the financial industry [1]. In Cowan's opinion, Green Finance benefits from Green Economics and mainly solves the problem of cash payments within Green Economics [2]. Domestic scholars in related fields also have different definitions of ‘Green Finance’. According to Jianliang Gao, Green Finance is an operational strategy. It refers to the act that the financial sector takes the national policy of environmental protection as

one of its basic policies, and embodies the strategy of “sustainable development” throughout their financial activities. Green Finance facilitates environmental resource protection and the coordinated development of the economy, thereby achieving a form of sustainable financial development [3]. On the other hand, Junhua Wang is of the opinion that “green” aspect of Green Finance has to be evident in the business activities. For instance, in order to achieve sustainable economic development and the harmonious development of the economy and ecology, businesses should prioritize treating environmental pollution and protecting the ecological environment during their financing and investment activities. This can be done by allocating social resources appropriately [4].

As for the definition of ‘Green Financial Policy’, Xiuxing He believes it refers to the act that financial industries prioritize “green” industries, and view them as key projects in terms of investment and support. This includes optimizing the total amount of investment, terms and conditions, interest rate of lending and loans, and the modes of lending while investing [5]. In addition, Pan Yue proposes that a ‘Green Financial Policy’ is a requirement, which exists as a consequence of the law of market economy. ‘Green Financial Policy’ includes using economic means such as taxes, prices, finance, credit, fees, and insurance to regulate or influence the behavior of market activities. Eventually, achieving the coordination with the construction of economy and environmental protection [6]. On 31st August, 2016, the “Guiding Opinions on Building a Green Financial System”, issued by relevant leading departments of the China's State Council, pointed out that Green finance is recognized as an economic activity that enhances environmental quality, addresses climate change challenges, while promoting the efficient conservation and use of resources. For example, offering financial services related to project investment and financing, operational management, and risk mitigation, particularly in areas such as environment protection, renewable energy, sustainable transportation, and “green” construction.

Summarizing domestic and international research on the development of Green Finance, China faces several challenges in this field. Currently, China's green financial system still needs to be improved, as the effective coordination mechanisms for ‘carbon peak’, ‘carbon neutral’, climate investment and financing, and green financial innovation programs have yet to be formed in various places [7]. Meanwhile, under the “Dual Carbon” policy, the legal system and risk management mechanism related to green finance are still incomplete [8]. In conclusion, the awareness of information disclosure in the domestic ESG field is insufficient, and the environmental information disclosure system needs to be strengthened [9, 10].

### **3. Current Status of China's “Green” Financial Development with the “Dual Carbon” Policy**

The “Dual Carbon” strategy has led to a number of developments in China's green finance industry. The green financial policy framework has developed gradually with the help of financial institutions, and the market's demand for “green” financial goods is still rising. In 2015, the policy titled “Opinions on Accelerating the Advancement of Ecological Civilization” was issued.

This policy marked the initial start of Green Finance, emphasizing its important role in promoting the building of an ecological civilization. Its publication laid the foundation for a policy framework for Green Finance and led to the gradual development of related financial products and services.

In 2016, the policy titled “Guiding Opinions on Building a Green Financial System” was issued.

This marks China's initial policy document that thoroughly promote the development of a green financial system, which clearly outlines the definition, scope, and objectives of Green Finance. It has advanced the expansion of the green bond market. Simultaneously, encouraging financial institutions such as insurance companies and banks to explore and innovate within the Green Finance sector.

In 2017, the “Overall Program for Green Finance Reform and Innovation Pilot Zones” was released.

The program involves the establishment of multiple reform experimental zones to drive Green Finance reform and innovation nationwide, encouraging local governments and financial institutions

to experiment with new strategies in this sector. Consequently, this policy promoted local governments to actively engage in Green Finance development, while supported a green transformation of regional economies.

In 2018, “China Green Bond Standard Catalog (2018 Edition)” was released.

This catalog was issued by the People's Bank of China, offering standards and guidelines for issuing green bonds, which played a key role in standardizing the green bond market and enhancing investor confidence. Following the implementation of this policy, the number of green bond issued has risen significantly, resulting in more financial support for green projects.

In 2020, “Guidance on Promoting Green Consumption” was published.

The opinion aims to promote the development of green consumption and the upgrading of the consumption structure through policy guidance and financial support. The implementation of the policy has boosted market demand for green products, while also promoting the development of financial products related to green consumption by financial institutions.

In 2021, “Guidance on Peak Carbon Achievement and Carbon Neutral Work” was released.

The guidance clarifies the overall thinking and key initiatives for achieving “Carbon Peak” and “Carbon Neutrality”, and further strengthens the role of Green Finance in realizing the “Dual Carbon” goal. With the introduction of the policy, the role of financial instruments such as green credit and green bonds in supporting green projects and enterprises has become more prominent.

In 2022, “Announcement on Further Strengthening Financial Support for Green and Low-carbon Development” was published.

The announcement emphasizes that financial institutions should further increase their support for green and low-carbon projects and proposes a specific implementation path. Since the issuance of the policy, financial institutions have significantly increased their investment in green credit and green funds, providing strong financial support for the realization of the “Dual Carbon” goal.

These policies have facilitated the establishment and enhancement of China's green financial system, leading to a progressive enhancement of green financial offerings and continuous growth in the industry. Through policy guidance, the enthusiasm of financial institutions in supporting the green industry has increased significantly, and financial tools such as green bonds and green credit have been widely used, promoting the flow of funds to low-carbon environmental protection areas. The policy's implementation has also raised public awareness of and acceptance of green finance across all societal segments, lending crucial financial support for the achievement of “Carbon Peak” and “Carbon Neutrality” objectives as well as encouraging China's economy to grow sustainably and environmentally.

## **4. Challenges to the Development of Green Finance in China**

Although China's Green Finance has made remarkable progress with the support of policies, it still faces many challenges in the actual development process, which constrain the further development of Green Finance.

### **4.1. Lack of Consensus of Green Finance Standards**

At the current stage, the domestic Green Finance has not formed a unified standard and definition, and there are certain differences in the understanding of Green Finance among different financial institutions and regulatory authorities. This has led to the fact that some financial products may be labeled as “green”, but the actual environmental benefits are not satisfactory, or even “greenwashing”. The lack of uniformity in standards not only weakens the credibility of Green Finance, but also makes it more difficult for investors to screen green products and hinders the standardized development of the market.

#### **4.2. Insufficient Innovation in Green Financial Products**

At present, the domestic Green Finance has not formed a unified standard and definition, and there are certain differences in the understanding of Green Finance among different financial institutions and regulatory authorities. This has led to the fact that some financial products may be labeled as “green”, but the actual environmental benefits are not satisfactory, or even “greenwashing”. The lack of uniformity in standards not only weakens the credibility of Green Finance, but also makes it more difficult for investors to screen green products and hinders the standardized development of the market.

#### **4.3. Incomplete Green Financial Risk Assessment System**

Green Finance covers a wide range of areas and has complex risk factors. However, China has not yet established a comprehensive and effective risk assessment system for Green Finance, which makes it difficult for financial institutions to accurately assess the environmental benefits and financial risks of green projects when financing them. An imperfect risk assessment system not only increases the risk for investors, but may also lead to the flow of funds to projects that do not have the potential for sustainable development, contrary to the original intent of Green Finance. In addition, the lack of independent third-party assessors in the market further exacerbates the difficulty and uncertainty of risk assessment.

#### **4.4. Low Marketization and Policy Dependence**

The development of Green Finance in China relies to a large extent on government policy support, and the market's spontaneous impetus is relatively insufficient. This dependence has limited the dynamism of the Green Finance market and led to the development of Green Finance being vulnerable to policy changes. The Green Finance market may face the risk of stagnant growth once policy support wanes. An over-reliance on policy-driven market development models may also lead companies and financial institutions to focus more on policy dividends than on real environmental benefits when engaging in Green Finance.

### **5. Countermeasures and Suggestions for Promoting the Development of Green Finance in China**

Given the challenges faced in the development of Green Finance in China, such as the lack of uniformity in standards, insufficient product innovation, imperfect risk assessment system, and low degree of marketization, the following targeted countermeasures and recommendations can be taken to promote the further development and deepening of Green Finance.

#### **5.1. Improve the Green Financial Standard System**

To address the problem of inconsistent green financial standards, the Government should take the lead in formulating and promoting uniform green financial standards and definitions. These standards should cover the assessment of environmental benefits of green financial products, classification criteria for green projects, and information disclosure requirements. Harmonized standards will not only enhance market transparency and reduce the “greenwash” phenomenon but also provide clear operational guidelines for financial institutions and investors and enhance the credibility of the market. In addition, encouraging industry associations and third-party organizations to participate in the formulation and promotion of standards will help to forge a broader consensus and industry norms, thereby promoting the healthy development of the Green Finance market.

#### **5.2. Increase Green Financial Product Innovation**

To address the lack of innovation in green financial products, financial institutions should strengthen the research, development, and promotion of green financial products. First, the

Government can, through policy guidance and incentives, encourage financial institutions to develop diversified green financial products, such as green funds, green insurance, green equity investment, etc. These innovative products can provide more choices for different types of investors and meet the increasingly diversified needs of the market. Second, the application of financial technology should also be more widely promoted in the innovation of green financial products. For example, technologies such as big data and blockchain can be utilized to enhance the transparency and traceability of green financial products, thereby increasing investor confidence in these products. Through the continuous introduction of innovative products, the green financial market can be further enriched and its vitality and attractiveness enhanced.

### 5.3. Sound Green Financial Risk Assessment System

In order to solve the problem of imperfect green financial risk assessment systems, there is a great need to establish a sound green financial risk assessment system. Governments and regulators can promote the establishment of a comprehensive set of risk assessment standards for Green Finance, covering environmental benefit assessment, financial risk analysis, and market risk assessment. These standards should be based on scientific methods of risk analysis, combined with international advanced experience to ensure the comprehensiveness and accuracy of the assessment. In addition, encouraging independent third-party organizations to participate in the risk assessment of green financial projects can improve the objectivity and fairness of the assessment results, thus providing financial institutions with a more reliable basis for risk control. A sound risk assessment system not only helps to reduce the risk of investors but also guides the flow of funds to green projects with real potential for sustainable development, thus better realizing the goals of Green Finance.

### 5.4. Promoting Market-Based Development of Green Finance

To solve the problems of low marketization and strong policy dependence, it is necessary to increase the marketization of Green Finance. While continuing to play the role of policy guidance, the market's over-reliance on policy should be gradually reduced and the spontaneous momentum of the market should be stimulated. The government can encourage more social capital to invest in the field of Green Finance by establishing market-based incentive mechanisms, such as tax incentives and Green Finance award policies. In addition, the promotion of the free trading of green financial products in the capital market and the enhancement of their liquidity and marketization will enable investors to freely choose and trade green financial products in the market, thereby enhancing the competitiveness and vitality of the market. Through market-oriented development, Green Finance can better adapt to market demand, form endogenous growth momentum, and accelerate China's transition to a green and low-carbon economy.

## 6. Conclusion

With the promulgation of the “Dual Carbon” policy, China's green financial development has made several achievements but also faces many challenges. By improving the standard system, strengthening product innovation, improving the risk assessment system, and promoting market-oriented development and other measures, China's Green Finance development prospects will be broader, which will not only help to achieve the “Dual Carbon” goal but also promote China's economic green transformation and sustainable development.

## References

- [1] Salazar J. Environmental finance: linking two world // a Workshop on financial innovations for biodiversity Bratislava. 1998, 1: 2-18.
- [2] Cowan E. Topical issues in environmental finance. Research paper was commissioned by the Asia Branch of the Canadian International Development Agency (CIDA), 1999, 1: 1-20.

- [3] Gao Jianliang. Green finance and sustainable financial development. *Financial Theory and Teaching*, 1998, (04): 20-22.
- [4] Wang Junhua. On the “Green Revolution” in the financial sector. *Ecological Economy*, 2000, (10): 45-48.
- [5] He Xiuxing. The implementation of “green finance” policy is a strategic choice of the financial industry for the 21st century. *Journal of Nanjing Gold College*, 1998, (04): 22-25.
- [6] Pan Yue. Talking about the new policy of environmental economy. *Environmental Economics*, 2007, (10): 17-22.
- [7] An Guojun. Discussion on green finance innovation path under carbon neutral goal. *Southern Finance*, 2021, (02): 3-12.
- [8] Zhang Jie. Research on the dilemma and countermeasures of green finance development in china under the goal of “Double Carbon”. *Southwest Finance*, 2022, (09): 81-93.
- [9] Su Jing. Current situation, challenges and path of green finance development in the context of “Dual Carbon”. *Technical Economics and Management Research*, 2022, (09): 79-82.
- [10] Zhu Lan,Guo Xibao. The construction of China's green financial system since the 18th Party Congress [J]. *Reform*, 2022, (06): 106-115.