

# Research on Green Finance Development under Double Carbon Targets

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## Abstract

As the country with the largest carbon emission, China is in the period of transformation and upgrading of industrial structure and high-quality economic construction and development. It is necessary to explore how to use green finance to promote the green and low-carbon development of China's economic society and achieve the goal of "double carbon". This article discusses the concept and significance of green finance, analyzes the current situation of China's green finance, finds out the needs and obstacles that China's green finance faces in supporting the "dual carbon" goal at the current stage, and then proposes from three levels: policy guarantee, market system, and organizational system. Promote the realization of the "double carbon" goal with green finance.

## Keywords

Green Finance, "Dual Carbon" Goal, Carbon Emission Reduction, Development Status.

## 1. Introduction

Green finance refers to economic activities that support environmental improvement, climate change response, and resource conservation and efficient use. Green finance can not only promote environmental protection and governance, but more importantly, guide the flow of resources from highly polluting industries to technologically advanced industries. As global environmental pollution and climate change become increasingly prominent, green finance has become a hot topic in the global financial field.

In September 2020, General Secretary Xi Jinping put forward the "dual carbon" goal for the first time at the United Nations General Assembly, that is, to achieve carbon peaking in 2030 and carbon neutrality in 2060, which was later included in the "14th Five-Year Plan". The top ten have once again confirmed the development direction of the "dual carbon" goal, and the development of green finance to help the realization of the "dual carbon" goal has become one of the important driving forces for future economic and social development. Green finance and the goal of "double carbon" are in the same direction and promote each other. Green finance promotes the realization of the goal of "double carbon" from multiple perspectives such as serving the real economy, guiding the development of green technology and industries, and easing the financing constraints of corporate carbon reduction. The clearly stated goal also provides unprecedented development opportunities for green finance.

## 2. Significance of developing green finance

### 2.1. Promote environmental protection and sustainable development

Green finance can provide financial support for environmental protection and sustainable development projects, such as renewable energy projects, energy conservation and emission

reduction projects, so as to effectively alleviate the pressure on the environment and resources and achieve sustainable development. By providing financial support for green technology innovation, promoting technological innovation and industrial upgrading, and providing more solutions for environmental protection and sustainable development. Provide financial support for the construction of ecological civilization, such as ecological restoration, ecological protection and other fields. The development of these fields can effectively protect and restore the ecological system and improve the sustainable use of natural resources. It can guide the flow of funds to the fields of environmental protection and sustainable development, promote the transformation and upgrading of the economic model, make the economy healthier and more sustainable, and provide a more solid foundation for future development.

## **2.2. Mitigation of climate change**

Climate change is one of the important issues facing the world, and human society needs to take multiple measures to deal with the challenge of climate change. The development of green finance can reduce greenhouse gas emissions by supporting investment in renewable energy, energy conservation and emission reduction, thereby reducing the impact of climate change, protecting the ecological environment, and providing strong support for the sustainable development of human society. Green finance can provide financial support for renewable energy projects that can reduce the environmental impact of transportation and reduce greenhouse gas emissions. Through the introduction of financial instruments such as green credit and green bonds, it guides the low-carbon development of enterprises and reduces their greenhouse gas emissions, thereby mitigating climate change.

## **2.3. Promoting financial innovation and development**

Green finance can promote the innovation and development of the financial industry, lead the direction of industrial development, enhance the social value and market competitiveness of the financial industry, and promote the innovation of financial products and services, such as green bonds, green credit, green insurance, etc. These new products and Services can provide more effective solutions for environmental protection and sustainable development. It can guide the transformation and upgrading of financial institutions and promote their transformation from traditional financial business to green finance, which will provide new business opportunities for financial institutions and reduce their negative impact on the environment. It can enhance the social value of the financial industry, making it not only exist for economic benefits, but also one of the important industries that can contribute to environmental protection and sustainable development, which will help achieve sustainable development goals and contribute to social and economic development. Long-term stable development provides more solid support. The development of green finance can expand the scale of the financial market and provide a broader space for the healthy development of the financial industry.

# **3. Development Status of Green Finance**

## **3.1. The green bond market continues to expand**

In recent years, as the global emphasis on environmental protection and sustainable development has increased, the green bond market has continued to expand. Governments, financial institutions and enterprises of various countries have issued green bonds one after another, providing financial support for environmental protection and sustainable development. On the morning of November 8, 2019, Apple issued US\$ 2.2 billion in green bonds, making it the largest corporate issuer of green bonds in the United States with a total issuance of US\$ 4.7 billion. The issuance of green bonds provides financial support for environmental protection and sustainable development, and also promotes the development

and innovation of the green financial market. In the future, the global green bond market will continue to expand, and governments and financial institutions will continue to introduce various green financial products and policies to accelerate the process of environmental protection and sustainable development.

### **3.2. The green financial investment market is gradually maturing**

As the global environment and sustainable development issues become increasingly prominent, the green investment market is gradually maturing. This market covers a variety of investment products such as green funds, green stocks, green bonds, renewable energy and energy efficiency technologies. By investing in environmental protection and sustainable development, financial institutions and investors can not only achieve their own financial goals, but also achieve a win-win situation for social and environmental benefits. The gradual maturity of the green investment market provides investors with more investment opportunities, and at the same time promotes environmental protection and sustainable development. In the future, with the continuous escalation of environmental protection and sustainable development issues, the green investment market will also continue to expand and innovate.

### **3.3. The green insurance market is gradually developing**

At present, the global green insurance market is gradually developing. More and more international insurance companies have begun to launch green insurance products with climate change and environmental risks as the main insurance objects to meet market demand. The development of the green insurance market can not only provide policyholders with more comprehensive insurance protection, but also provide insurance companies with new business opportunities. More importantly, the development of the green insurance market can promote environmental protection and sustainable development. In the future, it is expected that with the intensification of global environmental protection and sustainable development issues, the green insurance market will further develop and innovate, and become an important support for the field of environmental protection and sustainable development.

### **3.4. The green financial policy system is gradually established**

As the world pays more and more attention to environmental protection and sustainable development, more and more countries and regions have begun to establish and improve green financial policy systems to encourage the development of green finance. The implementation of these policies and measures has effectively promoted the development of China's green financial market. Up to now, China's green financial market has gradually formed, including green bonds, green credit, green insurance and other fields. In general, the establishment of the green financial policy system provides policy guarantee and guidance for the development of green finance, and at the same time promotes the process of environmental protection and sustainable development. In the future, with the continuous development and innovation of global green finance, the green financial policy system will continue to improve and expand to provide more comprehensive support for environmental protection and sustainable development.

## **4. The practical path for green finance to support the “dual carbon” goal**

### **4.1. Improving the policy system for green finance to support the “double carbon” goal**

Improve the construction of laws, regulations and systems related to green finance. Laws and regulations are the prerequisites for green finance to support low-carbon development. Only by defining the responsibilities and obligations of various market participants in green development through laws and regulations can escort the development of green finance.

Explore and improve green standards, and establish a green project library. On this basis, a supply-demand docking mechanism between financial institutions and green projects can also be established. Financial institutions can choose enterprise projects that have an early cooperation foundation or have an understanding of their credit status to provide them with personalized financial services.

Vigorously develop the green ecological economy and form industrial advantages. Achieving the "double carbon" goal requires vigorous development of the green ecological economy, and the development of the green economy is also the fundamental purpose of the development of green finance. The top level of the government promotes and encourages the active participation of market micro-entities. The government actively creates an atmosphere for the development of the green economy, strengthens policy publicity and education, strives for discounts, tax incentives, technical guidance, etc. for green projects, stimulates the initiative and enthusiasm of micro-entities in the development of green industries, turns resource advantages into industrial advantages, and enhances the ecological environment. Carbon sink capacity.

#### **4.2. Deepen and enrich the market system for green finance to support the "double carbon" goal**

Innovate and enrich green financial products, and promote the inclusiveness of green finance. Green finance puts more emphasis on social benefits. It takes a long time to gain economic benefits and takes a long time to take effect. It is necessary to use financial incentive policies such as interest discounts, guarantees, and risk compensation to compensate for the positive externalities of green finance and stimulate the endogenous power of green finance. Encourage and guide financial institutions and social capital to increase investment in green projects, support and encourage financial institutions to innovate green financial products, and at the same time rely on the supply and demand docking mechanism between financial institutions and enterprises to create specializations such as one enterprise, one policy, one item, one policy, etc. Green financial products adopt the PPP model to guide social capital to participate in the green industry and build a multi-dimensional, comprehensive green financial product system with full coverage. On the basis of the development of inclusive finance in the early stage, integrate green finance and promote green inclusive financial products.

Develop transformational finance, deepen the green financial system, and support the green and low-carbon transformation of industries and energy. Under the "Double Carbon" goal, industrial transformation and energy transformation require huge capital supply and diversified financial instrument support, while green finance has limited coverage of transformation areas, and transformational finance is needed on the basis of ensuring energy security and achieving orderly transformation Complement and perfect.

#### **4.3. Build an organizational guarantee system for green finance to support the "dual carbon" goal**

Build a green information disclosure platform, promote departmental coordination, and accelerate the construction of a carbon information sharing mechanism. On the basis of establishing a green project library, encourage all regions to explore and build green information disclosure platforms, formulate unified and specific information disclosure standards, and gradually improve the environmental information disclosure system from less to more, from basic to comprehensive, from voluntary to mandatory, Allow investors to quickly and efficiently understand project information. Set up a corporate carbon account, collect corporate carbon emissions, carbon footprint and other information on this platform, set up a green financial service area, promote data sharing and docking of various green financial entities, and improve investment and financing efficiency.

Establish a green finance evaluation system. In the evaluation of green finance, my country mainly uses indicators such as the total amount of green finance and the proportion of various green financial products as references, which cannot play a role in guiding, promoting, and supervising. Therefore, it is necessary to establish a set of top-down, inside-out green finance evaluation system.

Cultivate interdisciplinary talents in green finance and carbon management. The formulation of green financial standards, the development of green financial products, risk prevention and supervision, and the management and calculation of carbon emissions all require comprehensive talents with both financial and environmental knowledge. The cultivation of talents can be carried out in colleges and universities by carrying out relevant courses, building low-carbon economy majors, etc., or gradually cultivating such compound talents through school-enterprise cooperation.

## References

- [1] Li Shanmin . Research on the micro-mechanism of promoting the sustainable development of green finance from the perspective of supply and demand [J]. Contemporary Economic Management , 2021, 43(12): 76-84.
- [2] Li Wenda . Research on Green Financial Policy Support for China's Energy Transformation under the Background of Supply-side Reform [D]. Xi'an University of Science and Technology , 2017.
- [3] Wu Qi , Li Yanfei . Research on the Integration and Development of Green Finance and Green Accounting of Policy Banks [J]. Financial Accounting , 2022(06):14-21.
- [4] Ouyang Yuchu , Wang Yao . Research on the Development of Green Finance in the Yangtze River Economic Belt under the "Double Carbon" Goal [J]. Enterprise Economics , 2023,42(05):128-139.
- [5] Chen Jiabin . From the perspective of high-quality development, green finance promotes the realization path of "double carbon" goals [J]. Journal of Changchun Institute of Technology ( Social Science Edition ), 2023, 24(01): 35-39.