

# ***The Origin, Present Situation, and Future Development Suggestions of Green Finance in China***

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**Abstract:** At present, with the continuous advancement of the process of globalization, resources and environmental problems have caused a threat to the global economy and human development. Therefore, many countries pay more and more attention to the development of green finance. What is green finance? Green finance refers to economic activities that support environmental improvement, response to climate change, and efficient use of resources, namely, financial services provided for project investment and financing, project operation, and risk management in the fields of environmental protection, energy conservation, clean energy, green transportation, and green buildings. Generally, green finance originated from the "Limits to Growth" promulgated by the Club of Rome in 1972, which proposed the concept of sustainable development for the first time, and environmental finance came into being, which was the predecessor of green finance. With the increasing awareness of environmental protection, green finance has developed rapidly and has become a new means of current environmental management, representing new characteristics, new trends, and new directions of financial industry development. In the future, the development direction of green finance will mainly include the innovation of financial products, the enhancement of information transparency, and the empowerment of technology. This paper will be completed in the form of a literature review. This paper will collect literature from major paper websites and elaborate on the history, current situation, and future suggestions of green finance from three perspectives.

**Keywords:** Green finance, Origin, Present Situation, Future Suggestions

## **1. Introduction**

In the 1970s, with the continuous acceleration of industrialization, many Western developed countries realized that the natural environmental pollution caused by industrial pollution and other factors seriously hindered the development and survival of human beings, so they took corresponding measures. For example, in 1968, the American economist Dales first proposed the concept of "emissions trading rights." In 1974, the former West Germany established the world's first environmental bank to finance environmental protection and pollution control. Especially in the late 20th century, due to the continuous deterioration of the environment, the study of green finance has received more and more attention in regional development, ecological protection, global environmental governance, and sustainable development[1]. Green finance is a global proposition

that is not only related to the development of the world economy but also closely related to the ecological environment in which human beings live.

Nowadays, more and more non-bank financial institutions (insurance companies, fund companies, etc.) and non-financial institutions (government agencies, enterprises, etc.) are beginning to join the green finance circuit. However, with the globalization of green finance, many problems have gradually emerged, such as low information transparency and insufficient ability of governments to support financial institutions, which are still the most significant obstacles facing the current global green finance system.

## **2. The origin and necessity of green finance**

### **2.1. Origin of green finance**

The concept of green finance originated earlier in foreign countries. The world's oldest recorded case of "green finance" is the Superfund Act, which was born out of the famous "Love Affair" in 1980, an event about the chemical contamination leaking in Niagara Falls, New York, USA. This event caused more than 0.2 billion dollars in losses. Therefore, to avoid financial risks caused by environmental problems, Western developed countries have begun to pay attention to green development routes, and green finance was born. At the end of 2002, the International Finance Corporation (IFC) and ABN Amro, part of the World Bank, proposed a corporate lending code at a meeting of leading international commercial banks in London called Equator Principles (EPs), aiming at assessing and managing environmental and social risks involved in project financing. China's green finance concept started late and was divided into three stages. First is a preliminary exploring stage(2012-2014). At the United Nations Conference on Sustainable Development, the Chinese government proposed building a green financial system for the first time and started preliminary exploration. The second is the preliminary construction stage(2015-2016). During this period, the Chinese government published "Guiding Opinions on Actively promoting the development of green finance," a clearing support policy, while central commercial banks started to explore the financial products and services that meet green finance requirements and produced green bonds and other financial tools. Third is the developing and growing stage(2017-). In 2017, nine ministries and commissions of the National Development and Reform Commission and the People's Bank of China jointly issued the Guiding Opinions on Establishing a Green Finance System, further clarifying the key areas and policy measures for promoting green finance in China. After that, the bond market of green finance in China dramatically expanded. Meanwhile, the policies related to green finance have been improved, which means that China's development of green finance has ushered in new opportunities.

### **2.2. Necessity of green finance**

Green finance is an effective means to promote the transformation of traditional finance. Today's world is developing rapidly, and the cost behind rapid development is increasingly severe environmental problems. In order to alleviate the contradiction between economic development and environmental protection, green finance has become one of the ways to solve the problem. It can reduce environmental costs while vigorously developing the economy, guarantee sustainable development, open up a broader market, and lay the foundation for future economic development.

At present, the transformation of traditional industries has swept the world, and green finance is undoubtedly a direct bridge between traditional industries and new green industries. Moreover, for some developed countries, the implementation of high-quality economic development also depends on green finance, and how to achieve long-term sustainable development has become a top priority. Thus, it is necessary to develop green finance.

### **3. The current situation of green finance in China**

#### **3.1. Green financial products**

##### **3.1.1. Green bond**

"Green Bond" refers to a bond instrument that uses the proceeds exclusively to finance or refinance projects that meet specified conditions, which plays a significant role in green finance.

According to national conditions, the development of China's green bond system can be divided into three stages: The exploratory stage of development(before 2015), the Market-oriented mechanism has taken shape(2015-2019), and the Standardized development stage(2020-). During the first stage, China issued its first carbon bond in 2014. After that, the first overseas green bond was issued in 2015, amounting to \$300 million. In the second stage, the Shanghai Pudong Development Bank and Industrial Bank issued the first green bond in China in 2016, marking the official birth of the domestic green bond market. In 2017, the CSRC further regulated the disclosure of green information and the use of funds and established green finance reform and innovation pilots in many places. In the third stage, the strategic goal of "carbon peak, carbon neutrality" was put forward. Subsequently, the Catalogue of Projects Supported by Green Bonds (2021 edition) was released, which means that a unified classification standard for green bonds has been formed for the first time in China. A year later, with the publication of the "China Green Bond Principles," China established a preliminary unified green bond standard that aligns with international standards.

##### **3.1.2. Green credit**

Green credit is derived from traditional "credit"[2]. It is an essential economic means for the environmental protection department and the banking industry to resist the environmental violations of enterprises jointly, promote energy conservation and emission reduction, and avoid financial risks. China's green credit scale continues to expand, but compared with foreign countries, China's green credit accounted for a small proportion of total loans, and there is still room for growth[3]. By the end of 2019, China's green credit balance had exceeded 10 trillion yuan. By the end of 2022, China's green credit balance was 22.03 trillion yuan.

##### **3.1.3. Green Insurance**

Green insurance is defined differently in a broad and narrow sense. Green insurance is a non-traditional type of environmental liability insurance, which can be understood as an insurance product or risk regulation mechanism to deal with green industry fields such as wind power generation, soil salinization regulation, and ocean purification engineering. In a broad sense, green insurance is a financial valve because of its dual attributes of liability and asset. It can provide economic support for transforming the green industry from the liability end, asset end, and operation end simultaneously [4].

China is a "rising star" in the field of green insurance; in recent years, the number and type of green insurance products have been enriched, and the scope of green insurance products has been more and more extensive, and "green" attributes such as sustainable and environmental protection are being prioritized by more and more insurance institutions. As an essential part of green finance, green insurance is vital in strengthening environmental risk management, facilitating the development of green industries, applying new achievements in green technologies, and strengthening environmental and ecological protection.

Additionally, integrating green insurance and financial sectors can meet different financing needs in green development, effectively solve the problem of insufficient financial support, and realize the function of risk diversification.

### **3.2. Green finance system**

Since establishing the green finance standard system, China has introduced a series of relevant policies to improve the green finance system continuously. In 2007, the "Opinions on Implementing Environmental Protection Policies and Regulations to Prevent Credit Risks" was released, the first normative principle for green credit businesses in China, marking the official entry of Chinese credit businesses into the Chinese market. The Green Credit Guide was born five years later, marking the gradual maturity of the green credit business. In 2015, the People's Bank of China issued the "Green Bond Support Project Catalog," including some projects that meet environmental protection standards. This means that green bonds began to enter the scope of state support. In 2016, the Guiding Opinions on Building a Green Financial System were released, marking the official start of the construction of China's relevant system. In 2017, with the promulgation of the National Carbon Emission Trading Market Construction Plan (Power generation industry), the carbon trading market entered the public eye. In 2018, the Green Investment Guidelines were issued. In 2020, the consultation draft of the "Green Bond Supported Project Catalogue" began to be drafted, and the "Green Bond Supported Project Catalogue (2021 edition)" was released in 2021. In 2022, the Implementation Plan for Developing Green Finance and Supporting Carbon Peak Action will be released. From the initial concept framework of green finance to the series of policies on green finance introduced today, we can see China's determination and attitude towards environmental protection and pollution control.

## **4. Problems in the development of green finance**

### **4.1. Green products lack innovation**

Despite the continuous introduction of green products in China, there is still a significant gap compared with developed countries. Green credit still accounts for a high proportion of the green finance market[5]. In contrast, green securities, green finance, and other products account for a small proportion of carbon futures and options, which are almost in the embryonic stage. There are three main reasons for this. First, for small and medium-sized enterprises, their financing is more complicated. Second, China only innovates some green financial products and does not cover the whole green financial market. Third, financial institutions ignore safety and operational risks when conducting business.

### **4.2. Lack of uniform standards**

Take the Equator Principle, for example. Only seven banks in China have adopted the principle, such as the Industrial Bank, Bank of Jiangsu, and Bank of Chongqing, the first bank in China to join the "Equator Principle," while the rest of the banks have not adopted it. In addition to the Industrial Bank, the remaining banks participating in the "Equator Principles" are urban commercial banks and rural commercial banks, and the large state-owned banks that are the main force of green credit issuance have not joined, resulting in China's green credit standards have not yet been unified. In addition, due to regional differences in compliance with green project standards, the evaluation criteria and results of green projects in different regions are quite different.

### **4.3. The green finance system is not yet sound**

Although China has promulgated a series of policies related to green finance in the early years, they are only at the macro level, and there are still many problems at the micro level. For example, consulting institutions and law firms in China have no business related to green finance, resulting in enterprises' independent supervision of green standards in most cases, which cannot ensure the authenticity and effectiveness of information.

### **4.4. Lack of relevant talent**

Due to the late start of China's green finance industry, the lack of a long-term talent accumulation process, and the fact that most universities in China currently offer few courses on green finance, there is an extreme talent shortage in this field. In addition, because many people misunderstand the green finance industry, believing that it is an industry with high risks and low returns, few people choose to join it.

## **5. Suggestions for future development**

First, improve the green finance system. We will vigorously promote the orderly and healthy development of the carbon market and form a complete green financial system. In addition, continue to explore green insurance and green funds, green securities, and other aspects, gradually expand the market share and form a stable green financial system.

The second is to unify the management and evaluation standards of green projects to ensure the punctuality and reliability of information. The state and the government should dispatch professionals to collect and summarize the green standard evaluation programs in various regions to form a unified and detailed green finance management and evaluation standard. At the same time, a unique green financial information disclosure institution is set up to ensure information authenticity and reliability and improve information transparency and sharing.

Third, cultivate professionals in green finance[6]. Due to the short development time of China's green finance, the professional quality of many relevant talents is limited, which makes some information about green finance misleading. Therefore, government departments actively set up professional green finance teams, organize relevant training and practice, and try their best to develop professionals with potential in this field. In addition, Chinese universities and vocational schools should also introduce relevant courses and cooperate with relevant institutions to train professional green finance talents.

## **6. Conclusion**

To sum up, environmental protection, energy conservation, and emission reduction are the central development themes in China and even the world. With worsening environmental problems, China should vigorously promote the steady development of green finance and its related industries to achieve high-quality economic development. At the same time, in the face of existing problems, China should actively carry out reform and innovation and promote China's green finance to a higher platform by improving the relevant system of green finance, unifying the management and evaluation standards of green projects, and training professionals. However, regarding the current Chinese green finance market, the content covered in this article is not comprehensive enough, for example, the carbon market, because this aspect is almost in the blank stage in China. With the rapid development of green finance, the research on the carbon market will become more and more critical in the future, which is also the direction that this paper will explore.

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