Research On the Progress Countermeasures of Finance of Green Under the Goal of Carbon Neutrality

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Abstract. Against the backdrop of increasingly severe global environmental issues, environmental changes have posed a serious threat to human society and even become the greatest challenge to human progress. To address climate change, countries around the world are working together. During its progress, China has always adhered to the concept of green progress, actively promoted the construction of ecological civilization, and to address environmental change issues, China has proposed the goals of "carbon peaking and carbon neutrality", practiced the concept that "lucid waters and lush mountains are invaluable assets", and implemented sustainable progress policies. From another perspective, this demonstrates China's responsibility as a major responsible country in fulfilling international responsibilities and promoting the building of a community with a shared future for mankind. This paper comprehensively analyzes the important role of finance of green in promoting the process of carbon neutrality and proposes a series of practical suggestions to provide useful references for promoting the healthy and rapid progress of finance of green and achieving the goal of carbon neutrality.

Keywords: Finance of green; Carbon Neutrality; Sustainable progress.

1. Brief Explanation of Finance of Green

1.1. The progress Foundation of Finance of Green

With the deepening of ecological civilization construction, all industries are actively conforming to the trend of the times, promoting the progress of the ecological environment, accelerating the process of environmental protection, and focusing on improving emission problems such as waste gas and wastewater. As can be seen from Table 1, with the rapid economic progress, China's environmental problems are still relatively severe, and carbon emissions in 2019 were still the highest in the world. Under such a new situation, finance of green is an inevitable choice for achieving sustainable progress[1-3]. The progress of finance of green requires two foundations: green growth and green governance. The progress of "finance of green" is premised on "green growth", while "green governance" is an important guarantee for achieving "finance of green". Incorporating natural resources, environment and ecological resources into the financial system, and using financial policies and technological innovations to balance the negative impact on the environment in production, achieving high-quality, green and environmentally friendly economic progress. From a global perspective, the progress of finance of green should not only focus on reducing environmental pollution, but also strengthen environmental governance to build a greener and healthier global home.

Table 1: Carbon Emission Situations of Major Countries or Regions in 2019

No.	Country/Region	Emissions in 2019		Global share of emissions	
		Numerical value	Growth rate	2019	2010-2019
1	China	14	3.1%	26.7%	26%
2	United States	6.6	-1.7%	12.6%	13%
3	European Union	4.3	-3.1%	8.2%	9.3%
4	Japan	1.4	-1.6%	2.7%	2.8%

1.2. The Current Situation of finance of Green Progress in China

Since 2016, China's finance of green market has developed rapidly. By 2020, the balance of green loans exceeded 12 trillion yuan, accounting for more than 10%, making it a leading finance of green market in the world. (Figure 1) In recent years, through continuous exploration and innovation of the progress path of finance of green, with "top-down" policy guidance and "bottom-up" exploration and innovation, finance of green has gradually been on the right track and increasingly demonstrated its important supporting role in low-carbon and environmentally friendly progress[4-5]. China has gradually established a domestic finance of green market system by introducing a series of measures such as finance of green standards, disclosure requirements, and incentives for green financial product innovation. In terms of the construction of the standard system, in order to ensure the healthy progress of China's finance of green system, three sets of policy frameworks for green standards including green bonds, green loans and green industries have now been formulated, and necessary information disclosure work has also been carried out, effectively reducing financial systemic risks and enhancing the stability of the financial system.

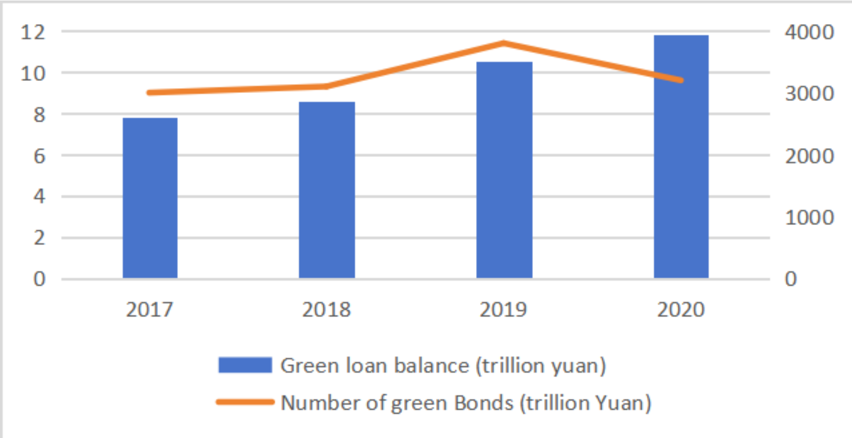

Figure 1: The progress of finance of green in China from 2017 to 2020

2. The Advantages of finance of green progress under the Background of Carbon Neutrality

2.1. Expanding the Market Scale

At present, environmental protection work has received great attention from all sectors of society. As an important means to achieve the goal of carbon neutrality and economic transformation, finance is becoming increasingly important. In order to promote the progress of finance of green, the Chinese government has introduced a series of incentive policies, focusing on macro-level institutional design and business guidance. For example, in the document "Notice on Conducting Green Credit Performance Evaluation of Banking Deposit-taking Financial Institutions" issued by the Central Bank in 2018, green credit was included in the macroprudential supervision of deposit-taking financial institutions for the first time. Another example is the "Notice on Supporting the Issuance of Green Debt Financing Instruments in finance of green Reform Pilot Zones" issued by the People's Bank of China in April 2019. The main contents include that the raised funds can be invested in green progress funds, the raised funds of green enterprises do not have to correspond to specific projects, and green asset-backed note innovations are encouraged. The implementation of these policies has promoted the healthy progress of the finance of green market and can also promote the economy to develop in a more sustainable and green direction.

2.2. Meeting the Transformation Demands of High-Carbon Industries

Under the severe challenge of global climate change, achieving low-carbon economic transformation has become the consensus of governments and the international community. To achieve this goal, we need to vigorously develop green industries, promote the rapid progress of clean energy, energy conservation and environmental protection and other fields, and focus on the transformation and upgrading of carbon-intensive industries to reduce carbon emissions and improve resource utilization efficiency. In the guidance directory issued by the National progress and Reform Commission in 2019, the classification and standards of green industries and projects were summarized and defined, while also taking into account high-carbon industries such as steel, coal and cement with the strongest transformation demands[6-7]. A good credit regulation policy orientation effectively fills the loan gap in high-carbon industries. As early as 2016, the People's Bank of China issued relevant opinions, requiring financial institutions, mainly banks, to meet the reasonable capital demands of high-carbon industries such as steel and coal. Bank loans are the most commonly used indirect financing method in the transformation process of various high-carbon industries. Through providing loan assistance, the transformation and progress of the industry is promoted to meet the transformation demands of high-carbon industries. The issuance scale of green bonds is constantly expanding, providing more market-based financing means for high-carbon enterprises and contributing to the healthy progress of the finance of green market.

2.3. Achieving the Goal of Carbon Neutrality

Due to the increasingly severe constraints of resources and environment, finance of green, as an important force to promote the green and low-carbon transformation of the economy, should develop in the direction of standardization and normalization. In the past documents, there were inconsistent recognition standards. For example, the progress and utilization of nuclear energy was not recognized as a green project in the "Green Bond Announcement", but was included in the "Green Bond Guidelines". Inconsistent standards often increase unnecessary economic costs, and the increased economic costs lead to a reduction in the economic productivity of funds. Therefore, based on the actual progress situation, unified finance of green standards should be established to efficiently achieve the goal of carbon neutrality. Information disclosure is not only an important link in interim supervision, but also an important means to understand the destination of funds. A good information disclosure mechanism is the prerequisite for the healthy operation of the market. Strengthening the information disclosure work of financial institutions is a major trend in future financial progress and also a necessary guarantee to promote the sustainable and healthy progress of the finance of green market.

3. Countermeasures for the progress of finance of green under the Goal of Carbon Neutrality

3.1. Promoting the Green Upgrade of the Financial Industry

In the context of increasingly severe global climate change and environmental problems, promoting the progress of finance of green and achieving the goal of carbon neutrality has become the consensus of the international community. Drawing on international experience and improving relevant policy regulations is the key to promoting the progress of finance of green in China. To this end, it is necessary to establish a unified standard for the carbon finance market in China, strengthen the research on the pricing model of carbon emission rights, strengthen the research on the method of financial carbon accounting, and gradually establish a national carbon accounting system, and promote the establishment of a unified national carbon emission rights trading market. In addition, more carbon finance products such as carbon finance derivatives, forward, futures and options contracts of carbon emission rights, and swap products between different carbon assets can be issued in combination with the actual progress situation[8-9]. At the same time, the government can gradually establish and improve the reward and punishment mechanism of carbon finance, and actively promote carbon trading through policy guidance and incentives to prompt enterprises to actively explore and reduce their own carbon emissions. In future practice, we should continue to deepen the research and practice in the field of carbon finance and contribute more wisdom and strength to promoting the healthy and rapid progress of finance of green and achieving the goal of carbon neutrality.

3.2. Strengthening International Cooperation in finance of green

At present, various economies around the world have made many unilateral commitments to achieve carbon neutrality. However, the final implementation, supervision mechanism and binding force of these commitments are still not perfect. As for the standard setting, information disclosure and evaluation mechanism of climate governance, global consultation is required. Through the green fund method to unite global partners, we can use institutions such as the Silk Road Fund, the World Bank, the Asian progress Bank and the Asian Infrastructure Investment Bank and international capital to achieve the green progress of the "Belt and Road Initiative". At the same time, we should also actively extend outward, actively establish green funds under the framework of friendly cooperation between China and foreign countries, and attract more international capital to participate in China's green and low-carbon technology reform process. Through policy incentives and market-oriented operations, a diversified participation pattern jointly constructed by government funds, financial institutions and foreign capital is formed to jointly promote global green and low-carbon progress.

3.3. Supporting Energy Conservation and Environmental Protection Projects

At present, with the increasingly prominent global climate change and environmental problems, financial institutions play a key role in promoting the progress of finance of green and achieving the goal of carbon neutrality. They can supervise and influence the behavior of enterprises by controlling credit capital, so that enterprises pay attention to and solve environmental pollution and energy consumption problems in production and operation, consciously save energy and reduce emissions, and continuously internalize the external costs of the environment. Financial institutions should incorporate environmental risks into the consideration of financial risks, classify and identify customers, appropriately raise the threshold for industries that do not meet the requirements of low-carbon economic progress, strictly control new high-carbon industries, and force enterprises to transform and upgrade and save energy and reduce emissions. The financial industry can also introduce the public's investment tendency into low-carbon economic industries to promote the realization of the goal of carbon neutrality. Commercial banks and other financial institutions, as important promoters of finance of green, should be committed to providing financing convenience for the green industry, supporting the progress of some small and micro enterprises in the green industry, and providing them with interest rate concessions or some green credit products. The financial industry introduces funds into new energy, green technology, afforestation and other related projects to accelerate the realization of the goal of carbon neutrality, create new economic benefits in the process of carbon neutrality, and promote sound and rapid economic progress.

3.4. Establishing a Talent Team for finance of green

Due to the vigorous progress of finance of green and the proposal of the dual-carbon goal, the complexity and professionalism of the finance of green system are increasing day by day, and the update speed of green information is also becoming faster and faster, which puts higher requirements on talents in the field of finance of green. It is necessary to cultivate a team of finance of green talents with professional qualities and practical abilities.To meet the pace of progress of the times, it is necessary to combine various progress needs and establish a professional finance of green talent training institution in the shortest time to carry out theoretical and practical teaching related to finance of green and provide internal staff with a comprehensive knowledge system and practical experience of finance of green. At the same time, we can make full use of national university resources to establish a joint training system and provide a continuous stream of professional talents for the progress of the finance of green system through batch and multi-level training methods[10-11]. Through the efforts of all parties and the formation of a joint force, more talents with professional qualities and practical abilities will be cultivated for the finance of green field to promote the continuous improvement and progress of the finance of green system and contribute to the realization of the dual-carbon goal and sustainable progress.

3.5. Improving the Construction of the finance of green System

Under the background of increasingly severe global climate change and environmental problems, the government strengthens corresponding policy support and promotes the progress of finance of green to achieve the goal of carbon neutrality and promote industrial energy conservation and green progress. For example, the government adopts incentive measures such as tax preferences and emission reduction assistance funds to guide enterprises to save energy and reduce emissions. The government revises finance of green standards, adjusts green bond standards and green industry catalogs, and standardizes the certification process of green credit and the determination standard of green benefits[12]. The information disclosure is gradually strengthened, and banks and other financial institutions are required to disclose carbon footprints and promote listed companies to mandatorily disclose environmental information. The government strengthens the incentive mechanism for low-carbon investment by financial institutions, such as establishing a green re-lending mechanism. When evaluating the quality of economic progress, the government can also introduce relevant indicators of green and low-carbon to promote the economy to develop in a more sustainable and green direction. Through improving the supervision mechanism related to finance of green, the default risks of green credit and green bonds are effectively prevented to ensure the stable operation of the financial system to support carbon neutrality projects.

4. Conclusion

China's finance of green is in a stage of rapid progress. Under the background of global low-carbon emission reduction, when China proposed the goals of "carbon peaking and carbon neutrality", higher requirements were put forward for the progress of China's finance of green system. Thus, the progress of high-quality finance of green has become an inevitable trend. In terms of the current progress situation of finance of green in China, based on the actual progress situation, through the implementation of a series of countermeasures such as promoting the green upgrade of the financial industry, strengthening international cooperation in finance of green, supporting energy conservation and environmental protection projects and improving the construction of the finance of green system, the healthy and rapid progress of finance of green is promoted. In addition, the implementation of these countermeasures will also drive the progress of the green economy, promote the optimization and upgrading of the industrial structure, and improve the quality and efficiency of economic progress, providing strong support for achieving the goal of carbon neutrality.

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