Research on the collaborative thinking of carbon financial products based on the perspective of institutional innovation in the context of carbon neutrality

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Abstract: Under the threat of continuous deterioration of the environmental climate and global warming risks, whether carbon dioxide emissions can be reasonably controlled has become an urgent problem for many countries. Global warming has given birth to a low-carbon economy, and subsequently the carbon trading market and carbon finance industry. In response to global warming, countries around the world have begun to accelerate the development of low-carbon economy, which has given birth to the development of low-carbon finance. The development of carbon finance is of great significance. Carbon finance originated from international agreements to control global greenhouse gases, and is an application of economic means to promote effective emission reduction of greenhouse gases. The existing production and lifestyle needs to be adjusted from a low-carbon perspective to achieve sustainable economic development. Perfecting the national carbon emission rights trading market is an innovation that makes full use of the theory of carbon finance to control environmental pollution and promote the development of green finance. It is also a carbon financial derivative tool that achieves carbon peak and carbon neutrality. As a carrier of financial system innovation, carbon metals require commercial banks to innovate their business models. This article analyzes the problems in its development process, and explains effective countermeasures and suggestions.

1. Introduction

In order to cope with global climate change and promote the implementation of corresponding policies, carbon finance came into being. With the rapid economic development, people are increasingly aware of the various problems brought about by the post-industrial lifestyle, such as air pollution, climate warming, and ecological imbalances. Among them, global warming is a problem that has been widely concerned in recent years, so countries have begun to pay attention to the development of low-carbon economy. Global climate change has become an important factor affecting human survival and development. The subsequent rise of carbon finance has linked global climate change with the economic development of human society. Under the dual crisis of global economic recession and climate warming, low-carbon economy has become another bottleneck in regulating the new pattern of world development, and carbon finance, which holds pricing power, has become the commanding height of low-carbon economic development like a throat. Carbon finance can alleviate the funding problems faced by the low-carbon economy, build a capital platform, form a new economic growth point, and promote the low-carbon transformation of the industrial chain. From a theoretical point of view, carbon finance is through the formulation of various financial policies, financial derivative instrument innovation and various low-carbon project investment and financing activities to achieve the purpose of energy saving and emission reduction, and the realization of economic green transformation and sustainable development. Broadly speaking, carbon finance refers to various financial institutional arrangements and financial transaction activities to reduce greenhouse gas emissions, mainly including trading and investment of carbon emission rights and their derivatives, investment and financing of low-carbon project development, and other related financial intermediaries Activity. In order to achieve the goal of carbon peak and carbon neutrality, the financial industry needs to provide strong support through

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various carbon financial products. There is no doubt that after mankind has experienced the agricultural revolution, industrial revolution and information revolution, the wave of low-carbon revolution has also come.

2. The development status and existing problems of carbon financial products

2.1. Market environment support needs to be improved

The implementation of relevant laws and regulations to regulate the carbon financial market is not in place, individual policies are not specific and detailed, and there is a lack of supporting implementation rules, making it difficult to implement. Carbon financial products have a shorter generation and development time than other financial products, and there are very few related laws and regulations such as regulations and standards for many carbon financial products. A relatively mature business innovation of commercial banks' carbon finance business is to provide intermediary services for carbon trading. Based on this business, develop and innovate other businesses, including the design of various carbon financial retail products and the direct provision of financing services for enterprises [1]. Although the function and role of carbon finance have been known by the financial industry and the banking industry, and its great significance for economic development and energy development and utilization has also been understood by the world, but because of its relatively short rise time, its business development experience Insufficient, so that carbon finance still has many problems. The implementation of relevant laws and regulations to regulate the carbon financial market is not in place, individual policies are not specific and detailed, and there is a lack of supporting implementation rules, making it difficult to implement.

Banks will face many risks in their operations, and the immature pro-xing business faces higher risks. The knowledge of carbon finance is limited, and there is no effective research on its broad development prospects [2]. They lack in-depth understanding and lack of practical experience in developing carbon finance business. At the same time, banks, as enterprises pursuing economic benefits, take into account the input and output issues, and it is difficult for low-carbon projects to increase bank profits in the short term. There are only a handful of carbon financial products available for investors to choose from, and the research and development of carbon financial products is still in the exploratory stage. Insufficient product supply. Investors have more demand for innovative carbon financial products. Commercial banks can provide credit support for the application and promotion of low-carbon technology by providing special loan methods such as intellectual property pledge loans, and encourage enterprises to strengthen exchanges and cooperation with the world, and realize the development of low-carbon technology in all directions at multiple levels [3].

2.2. The unified trading platform of the carbon finance market is not sound enough

The current number of participants in the carbon financial market is relatively small, and many financial institutions have not yet joined the carbon financial trading market. This is because in the carbon financial trading market, there are no clear regulations on the trading entities of carbon financial products, and because the carbon financial market is an emerging market, many investment entities are still unclear about the market participation risks and all products. The role of the carbon market is relatively limited [4]. The ability to obtain information in the carbon finance market needs to be improved, especially in the field of environmental protection. To a certain extent, there are local protection barriers in some places, which will have a certain impact on the realization of the development goals of carbon finance. Carbon finance has not yet risen to the level of preferential interest rates or product design for low-carbon credit. The scope is mainly related to enterprises. Low-carbon car loans and low-carbon housing loans related to individuals are rarely involved.

Commercial banks need to keep in touch with major institutions and organizations in the society to better expand their carbon finance business, thereby establishing a relatively close legal relationship with these institutions and organizations. Commercial banks can improve their bargaining skills for international business and strengthen their business dealings with international financial institutions. The carbon finance business of commercial banks faces certain policy risks. This is because China has not yet issued a relatively complete monetary policy to deal with global warming, and related policies are not yet complete and specific, which cannot meet the needs of carbon finance business development.

The government has also taken some measures to promote the development of carbon finance, but the external environment for the development of carbon finance business is still imperfect. Regulatory agencies also lack unified regulatory standards for the supervision of the carbon financial market, and lack management experience in many transactions in the carbon financial market, which will inevitably lead to improper supervision and "fish that slip through the net" [5]. Since the establishment of the carbon trading market requires the investment of a large amount of capital, manpower and perfect carbon trading market operating system rules, the basic environment of this market system needs to be further improved.

3. Countermeasures and Suggestions for the Development of Carbon Finance

3.1. The development of carbon finance requires strong support from financial institutions

Since the green finance market is not yet complete, in different regions, for carbon financial products such as pledges or mortgage loans based on carbon emission rights, many carbon financial trading markets have different requirements for companies, qualification reviews, and standard methods for registering mortgage products. Financial institutions, especially commercial banks, play a very important role in the development of carbon finance. The development of a low-carbon economy is inseparable from policy, funding and technical support. Effective policies are the basis to ensure that funds and technologies are in place, as well as a guarantee for the unity of concepts, actions, and interests. However, the current carbon finance policies are relatively inadequate and lack specific The operability, systemicity and long-term nature. The development of carbon finance undertakes the important task of guiding the transition of the financial industry from resource-intensive to technological. Under such a general environmental situation, financial institutions need to adjust the credit structure according to the requirements of industrial structure adjustment, and promote the adjustment of the stock credit structure. Social financing is coordinated with the development of carbon finance [6]. During the construction phase of low-carbon environmental protection projects, according to the needs of the project sponsor, various financial institutions can provide support for borrowers to construct projects through carbon credits, carbon bonds, carbon leases, or a combination of the above-mentioned financing carbon financial products. The existing carbon trading cooperation agency process is shown in Figure 1.

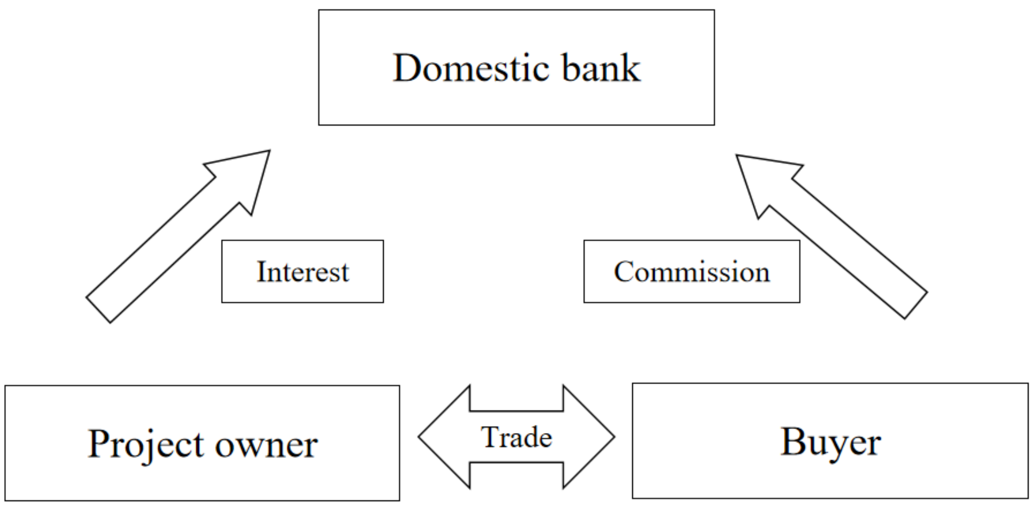

Figure 1 Flow chart of existing carbon trading cooperation institutions

Commercial banks should, with the help of relevant government departments, concentrate on strengthening market supervision, standardizing carbon emission trading mechanisms, formulating carbon emission-related policies, and comprehensively building a sound, reasonable and scientific carbon financial trading platform [7]. Through transparent pricing of carbon emission indicators in the financial market, a carbon financial system supported by a series of financial instruments including direct investment, bank loans, carbon funds, carbon indicator trading, and carbon option periods can be improved. The development of a low-carbon economy is an inevitable trend in today's world development. As a special social enterprise, commercial banks should see the long-term value of developing carbon finance. As the core force of the financial system, supporting the development of a low-carbon economy is their social responsibility.

3.2. Vigorously research and develop carbon finance related products

Compared with the general market, the carbon market has commonality and particularity. The commonality is that cost is also the basis for determining prices. The particularity is that it is a market formed under the government's institutional design. Supply and demand have a certain degree of particularity. The initial supply of allowances From the government, the total supply in the market is not sensitive to price fluctuations. Therefore, the market may lose its self-adjustment mechanism when there is too much distribution or insufficient demand. It is necessary to accelerate the research and development of carbon finance-related products and expand the carbon finance business. Regardless of whether it is private equity or public equity, carbon funds should be a promising financing method in the future [8]. Low-carbon environmental protection has gradually gained the attention of financial institutions. Due to the short development period of commercial banks' carbon finance, there are few commodities related to carbon finance, which hinders the development of carbon finance to some extent. Promote commercial banks to vigorously develop financial business innovation represented by the carbon right pledge loan business. There is a great demand market for carbon financial derivatives that are innovative and have a large value-added space. In the carbon finance market, the participation of many financial institutions is insufficient, and there is a lack of relevant professionals and capital investment in carbon financial product innovation research. This requires financial institutions to increase their participation and increase their participation in carbon financial products. Investment and R&D efforts. In practical applications, in order to encourage enterprises to reduce carbon emissions, financial leasing and carbon right pledge loans can be combined, that is, preferential loan support is given to enterprises that actively use leased equipment. At the same time, similar to the wealth management products that are developed linked to stock indexes or dollar returns, carbon emission rights can become the target of wealth management investment product development due to their financial characteristics.

4. Conclusions

With the rapid popularization of the concept of green environmental protection and sustainable development, low-carbon economy has become the main theme of the current world economic development. Carbon finance covers a variety of factors such as financial markets, financial products, and financial services, and provides an important conceptual basis for coping with global climate change. The realization of the low-carbon goal requires the joint efforts of the whole society, not only on the rectification of the real economy, but also on the promotion of the financial market. In order to better assist physical enterprises in achieving a stable and low-carbon transition, financial institutions should help accelerate the development of the national carbon market, give full play to the positive role of various carbon financial products, and achieve the effect of 1+1>2 through collaborative applications. Financial institutions should continue to provide intellectual support for low-carbon environmental protection based on their rich experience in the field of carbon finance. The innovative development of carbon financial products is in line with the trend and requires more investment. Carbon finance is a huge market pie for financial institutions, but it also hides risks that traditional financial products do not possess.

References

[1] Wu Yuerui, Du Jinxiang. Research on carbon financial product innovation in the context of carbon neutrality[J]. Cooperative Economy and Technology, 2021(18): 2.

[2] An Guojun. Discussion on the path of green finance innovation under the goal of carbon neutrality[J]. Southern Finance, 2021(2):10.

[3] Yan Tianxi. Thinking of China's Rural Carbon Finance Development from the Perspective of Low-Carbon Economy[J]. Hubei Agricultural Sciences, 2018, 057(014):133-135.

[4] Yang Fan, Xia Rongli, Yang Wei. Research on the development trend of new energy under the background of carbon peak and carbon neutrality[J]. China Engineering Consulting, 2021(9): 5.

[5] Weng Zhixiong, Ma Zhong, Liu Tingting. Current status, challenges and countermeasures of China's carbon market under the goal of carbon neutrality[J]. Environmental Protection, 2021, 49(16): 5.

[6] Yang Na, Zhang Yingbin. Casting new product "new value" between millimeters and racing against time to help carbon neutral "acceleration"——Interview with Zhang Yingbin, head of Trina Solar's product strategy and marketing[J]. China National Electric Industry, 2021(6): 2.

[7] Yan Tianxi. Thinking of China's rural carbon finance development from the perspective of low-carbon economy[J]. Hubei Agricultural Sciences, 2018, 57(14):3.

[8] Yu Fenghui. Carbon neutrality and carbon trading are great innovations[J]. Foreign Investment in China, 2021(8):1.