How Does Anhui Province Develop a Carbon Finance Development Path under the Background of "Dual Carbon"

-- Reference and Innovation

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Abstract

The solemn commitment made by our country’s leaders in the international community to the "3060 Goals" has brought new opportunities to the development of carbon finance and also posed challenges to the development policy of carbon finance. In recent years, the international carbon finance market has expanded rapidly, and concepts such as low-carbon economy have gradually received attention from various countries. Cooperation and exchanges on carbon finance among countries have also gradually increased. As the background for the construction and development of Anhui’s carbon finance system, this article first summarizes the current status of global carbon finance, introduces the operation of several major foreign carbon finance trading markets, and analyzes the development trends of global carbon finance. It pointed out the difficulties and challenges encountered in the construction and development of the carbon financial system in Anhui Province, including the problems that must be solved during the construction and development of the carbon financial system, and put forward suggestions for solving these problems.

Keywords

Carbon Finance; “Double Carbon” Background; Green Finance.

1. Introduction

Green development is one of the strategic goals for the long-term economic and social development of our country. Economic development cannot be at the expense of the environment and must follow the path of sustainable development. In recent years, international carbon finance has developed rapidly, and its concepts such as carbon emissions trading and low-carbon economy have gradually received attention from various countries, and related cooperation, exchanges and research between countries have gradually increased. Carbon finance is a variety of carbon market trading forms derived from the current international emission reduction mechanisms. Generally speaking, the development of carbon finance has initially formed a relatively mature operating mechanism. Compared with the rapid development of international carbon finance, the development of my country's carbon finance is still in its infancy. Under the current national carbon market construction path and working mechanism, the price discovery and risk management functions of the financial system are still difficult to achieve in the secondary carbon market. play. The financial attributes of the carbon market are not clearly defined, financial management departments are less involved in the construction of the carbon market, and there are many deficiencies in the experience and theoretical construction of carbon finance development policies.
2. Current Status and Development Trends of Global Carbon Finance

2.1. Current Status of Global Carbon Finance

2.1.1. Types of Carbon Funds

According to the establishment methods of carbon funds in developed countries, there are four types of carbon funds: jointly established by international organizations and governments, jointly established by governments, jointly established by governments and enterprises, and jointly established by enterprises.

<table>
<thead>
<tr>
<th>Carbon fund classification</th>
<th>Carbon fund name</th>
<th>Establishment year</th>
<th>Invest funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Organization Management Fund</td>
<td>PCF</td>
<td>2000</td>
<td>$180 million</td>
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<tr>
<td></td>
<td>CDCF</td>
<td>2004</td>
<td>$128.6 million</td>
</tr>
<tr>
<td></td>
<td>NCDMF</td>
<td>2004</td>
<td>44 million euros</td>
</tr>
<tr>
<td></td>
<td>NECF</td>
<td>2004</td>
<td>$180 million</td>
</tr>
<tr>
<td></td>
<td>ICF</td>
<td>2004</td>
<td>US$ 80 million</td>
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<tr>
<td></td>
<td>DCF</td>
<td>2005</td>
<td>$70 million</td>
</tr>
<tr>
<td></td>
<td>SCF</td>
<td>2005</td>
<td>170 million euros</td>
</tr>
<tr>
<td></td>
<td>UCF</td>
<td>2006</td>
<td>$250 million</td>
</tr>
<tr>
<td></td>
<td>CFE</td>
<td>2007</td>
<td>50 million euros</td>
</tr>
<tr>
<td></td>
<td>BioCF</td>
<td>2007</td>
<td>$91.9 million</td>
</tr>
<tr>
<td>Government establishment and management of funds</td>
<td>Finnish Carbon Fund</td>
<td>2000</td>
<td>10 million euros</td>
</tr>
<tr>
<td></td>
<td>Austrian Carbon Fund</td>
<td>2003</td>
<td>72 million euros</td>
</tr>
<tr>
<td>The government manages funds based on an enterprise model</td>
<td>UK Carbon Fund</td>
<td>2001</td>
<td>£66 million</td>
</tr>
<tr>
<td>Jointly established by government and enterprises, commercial management base gold</td>
<td>KFW Carbon Fund</td>
<td>2005</td>
<td>60 million euros</td>
</tr>
<tr>
<td></td>
<td>Japan Carbon Fund</td>
<td>2005</td>
<td>$140 million euros</td>
</tr>
<tr>
<td>Enterprise establishment, enterprise management</td>
<td>European Carbon Fund</td>
<td>2007</td>
<td>50 million euros</td>
</tr>
</tbody>
</table>

2.1.2. Development and Importance of the Carbon Financial System

As global climate change intensifies, governments around the world have begun to actively respond to environmental issues and continue to promote the development of low-carbon economies. The carbon financial system refers to a financial system that aims to reduce greenhouse gas emissions and uses financial tools and services as a means to promote the development of a low-carbon economy and respond to climate change. This concept was first proposed by the United Nations Environment Program in 2005 and has received attention and support from more and more countries and regions.

The application of the carbon financial system is gradually gaining popularity. Since 2017, China has taken a series of measures to promote the development of carbon finance, including
establishing a green finance policy framework, issuing green bonds, and supporting green investment funds. At the same time, major commercial banks and financial institutions have launched related financial products and services, such as green loans, green credit, green insurance and other measures.

The carbon financial system is one of the important means to achieve a low-carbon economy and respond to climate change. The carbon financial system can help enterprises and individuals better consider environmental and social factors in the investment and financing process, promote the application of low-carbon technologies, and promote the development of green industries. In addition, the carbon financial system can also promote the stable and sustainable development of the financial market, encourage investors to achieve a balance between risks and returns, and improve the risk resistance and adaptability of the financial market.

2.2. Development Trends of World Financial Markets

The purpose of developing the global carbon financial market is to promote greenhouse gas emission reductions and respond to the increasingly urgent global climate change. Therefore, the international community’s climate change response process has a decisive impact on the development of the carbon financial market. After negotiations and discussions at three climate change conferences, the international community has a deeper understanding of the carbon emission reduction framework. Countries have, to varying degrees, formulated carbon market and financial development roadmaps that are in line with their own national and regional interests. Against this background, the future development prospects of the global carbon finance market are mainly reflected in two aspects.

2.2.1. The Development of the Global Carbon Finance Market is not Optimistic in the Short Term

Under the influence of various economic and financial factors, the global response to climate change has not developed as planned as previously expected. Especially after the emission reduction framework of the Kyoto Protocol was reached, the international community was once concerned about achieving global goals in the short term. There have been relatively optimistic expectations for mandatory emission reductions in China. However, as the end of the first commitment period of the Kyoto Protocol continues to approach, after several efforts, the international community is basically hopeless to reach an agreement on the distribution of emission reduction responsibilities before 2013. This means that starting from 2013, the global will officially enter the comprehensive voluntary emission reduction stage. As far as the formation mechanism of the carbon trading market and carbon finance is concerned, the institutional arrangements for voluntary emission reduction will no longer exert mandatory emission reduction pressure on emitting countries and emission entities. That is, global carbon emissions will no longer inject into the carbon trading market and carbon finance. This is the main reason why the scale of global carbon trading, including the EU carbon market system, has gradually shown a shrinking trend in terms of volume and price in recent years. Therefore, in the short term, there is no reason to make overly optimistic estimates of the global carbon finance market.

2.2.2. In the Medium to Long Term, there is Still the Possibility of Tatters in the Development of the Global Carbon Trading Market and Carbon Finance

Fortunately, along with the current shrinkage of the world's major carbon trading markets and carbon finance, there are positive signals in major emitter countries to promote low-carbon development and try to create emerging carbon trading markets and develop carbon finance in order to respond to climate change. Especially in the United States, the largest carbon-emitting developed country that has traditionally been passive, out of considerations such as green development and energy security, it has recently gradually strengthened relevant legislation.
and regulatory processes in the field of carbon emission reduction, and in the original eastern states. Based on the regional carbon trading framework, regional emission reduction agreements have been formed among several western provinces and parts of Canada, and relatively active institutional arrangements have been made for market transactions after carbon emission reductions. Similarly, China has also made clear and positive policy arrangements for carbon emissions trading in its future planning, and has recently begun pilot work on carbon trading in seven cities across the country. In addition, although the major emitters have not made clear their stance on the development process of the long-term mandatory emission reduction framework, the Durban Climate Conference still passed a unanimous resolution to start building a globally unified carbon emission reduction framework after 2015. These roadmaps have great influence on the global carbon trading market and carbon finance development are both positive signals. Therefore, in the long term, it is still possible for the global carbon trading market and carbon finance to get out of short-term development difficulties and achieve a new round of development climax under the new international political and economic background.

3. Challenges Encountered in the Development of Carbon Finance in Anhui Province

Carbon finance is essentially a derivative product of the carbon emissions trading market. Its development is limited by the global climate change response process and progress in carbon governance. Therefore, the development of carbon finance in Anhui Province cannot be separated from the domestic and local efforts in carbon emission reduction. The overall economic environment and policy background cannot be independent of the development direction of the global carbon trading market. In the near future, the development of carbon finance in Anhui Province will still face greater institutional obstacles and challenges than opportunities, and the prospects are not optimistic.

To develop carbon finance around carbon exchanges, a country or a region must have several basic requirements, including a climate change response system with emission reduction as the core, market-centered emission reduction policy arrangements, and total volume control as the core. the emission reduction institutional framework. As the largest carbon finance area, the EU owes its current scale to its relatively mature overall response system and policy system.

3.1. No Carbon Trading Platform has been Established Yet

In recent years, carbon emission trading platforms have been established in various parts of my country. The relatively complete ones include the Shanghai Environmental Energy Exchange, Beijing Environmental Exchange and Tianjin Emissions Exchange. In addition, there are more than a dozen exchanges that have been listed. Anhui Province does not have a carbon trading platform and needs to rely on other carbon trading platforms for development. Although there are many exchanges in our country, they are all small in scale, not very complete, and the cost is relatively high, making it difficult to form cohesion. If there is no unified trading platform, it will easily lead to chaos, difficulty in management, and difficult to control risks; if there are too many trading platforms, it will be a waste of resources, material resources, human and financial resources, and the entire market will be divided into several parts. In the long term, establishing a unified national trading platform is crucial to the development of China's carbon finance.

3.1.1. Lack of Unified Trading Platform

There are three earliest carbon trading platforms in China, all established in 2008, in Shanghai, Beijing and Tianjin. In the past six years, carbon exchanges have been established in 16 places including Luliang, Dalian, Guiyang, Kunming and Shenzhen in Shanxi Province. There are too
many trading platforms and no unified trading platform, and they cannot meet China’s demand for carbon trading. To sum up, if China’s carbon finance wants to develop well, a unified trading platform must be established.

3.1.2. Lack of Risk Monitoring Mechanism
At present, my country has many risks such as policy risks, legal risks, default risks and price risks in carbon trading. What is more important is that my country lacks monitoring of market entities. The supply and demand of carbon trading volume in each country are determined by the country's existing technological level and the effectiveness of emission reduction projects. These cause large fluctuations in carbon trading prices, making it more difficult to predict. Policy risks will also have a great impact on the future carbon trading market. Since transactions need to be carried out in different countries, the laws involved are also different. Since policy risks and legal risks have a great impact on market entities, they are difficult to control. However, so far, our country has not established an effective prevention and monitoring mechanism.

3.2. The Carbon Finance Organization and Service System has not Yet been Improved.
A well-developed carbon trading market is inseparable from a complete and effective carbon financial organization and service system, which includes regulatory agencies, commercial banks, policy banks, fund companies, trust investment companies and other intermediary institutions. Regulators serve in this organizational service system. As a manager, it should provide an environment suitable for financial institutions to develop carbon finance. However, since there is no listed exchange in Anhui Province, the existing regulatory agencies do not have enough support for carbon finance. Commercial banks play the role of financial intermediaries in this organizational service system. They mainly play a role in connecting the international market and domestic enterprises. At present, my country's commercial banks are not very familiar with carbon finance and do not know much about the international trading system. Policy banks play a supplementary support role in this organizational service system. It can be said that my country's policy banks have not played a big role in the development of carbon finance. Its characteristic is that it is not for profit, and it has not been reflected. Professional financial intermediaries include fund companies, insurance companies, trust investment companies and other institutions. They each play different roles. These institutions do not know much about the trading system, rules and operation methods of carbon finance. They have not yet established carbon funds, Carbon brokerage companies, carbon banks and other financial institutions.

3.3. Carbon Finance Policy Support is not Strong
Since there is no regional carbon finance exchange in Anhui Province, the government's supervision is not strong. At the same time, our government’s awareness of carbon finance is not very great, and the content of the policies promulgated is not very complete. Most of them are just understanding level, lack of specific operability. In addition, tax reduction policies for enterprises are also inappropriate. Relying solely on market supervision without government guidance is very detrimental to the development of carbon finance.

The government's support is insufficient, and the development process of carbon finance will generate many risks, including major policy risks and legal risks, as well as credit risks, market risks and operational risks. Our country has been undertaking the task of reducing emissions since 2012, and policy issues have become increasingly important. The government’s guidance is not strong, and it is mainly aimed at promoting carbon finance. For many people, promoting carbon finance is only a matter for entrepreneurs, scientists and the government. In fact, the government plays a guiding role in this process. The key is to look
The government attaches great importance to promotion from top to bottom, and the degree of emphasis gradually decreases, resulting in little corporate participation. If carbon finance wants to develop rapidly, it cannot be separated from a large amount of transaction volume, and large transaction volume requires the participation of enterprises, individuals and organizations.

4. Development Suggestions for Carbon Finance in Anhui Province

4.1. Increase Policy Incentives for Carbon Finance Development and Improve the Market System for Carbon Finance Transactions

The government needs to introduce corresponding policies at the macro level to encourage enterprises to invest in energy-saving and emission-reduction industries. Under the green and low-carbon economic development model, by formulating a sound carbon financial development institutional system, the government's environmental policy support system for related industries should be improved. Rules and policy guidance will promote the development of the carbon financial market, further change the financing model of microeconomic entities, use the leverage of funds to guide the flow of funds into green and environmental protection industries, and improve energy-saving and emission reduction technologies in the entire industry, especially in high-pollution and high-carbon emission industries. At the same time, the innovation of carbon financial products should be further encouraged and corresponding institutional guarantees should be provided to increase market research participation and activity in the carbon financial trading market, form a transformation and development of industrial capital to green capital, and ultimately promote the upgrading of the industrial structure. Realize the transformation from an extensive growth model with high pollution, high emissions and high energy consumption to a green and conservation-oriented economic growth model, and ultimately build a reasonable and stable industrial structure.

4.2. Increase Efforts to Support Low-carbon Technologies and Low-carbon Industries

Under the new economic normal, future economic competition will largely depend on competition in low-carbon technologies. Advance arrangements should be made for emerging industries and fields, and the role of the carbon financial trading market should be further brought into play to guide the development of energy-saving, emission-reducing and low-carbon industries. Clustering, gradually forming a relatively complete and sustainable green industrial form, while formulating corresponding policies to eliminate backward production capacity, using various policy measures to eliminate industries with backward production capacity, and achieve industrial upgrading.

4.3. Improve the Risk Allocation Mechanism for Industrial Upgrading

Carbon finance provides financial guidance for the transformation of industrial structure towards green development. However, under the current technical conditions, the green transformation of various industries faces the characteristics of large initial investment, high risk and long payback period, which will hinder to a certain extent. Upgrading of industrial organizations. To achieve coordinated development between the carbon financial market and industry upgrading, a sound risk allocation mechanism is essential. It can be combined with the green credit method in green finance to share the risks of green emerging industry projects. The institution itself has relatively complete management capabilities and operating mechanisms. It can detect and evaluate the operational risks of enterprises, control and reduce investment risks of enterprises, promote enterprises to improve management, and then promote the upgrading of industrial structure.
5. Conclusion

In an important strategic period for my country’s economic development, the development of low-carbon economy and carbon finance is of great significance. Transforming my country’s traditional economic development method by using the leverage adjustment function and financial coordination function of carbon finance will have a positive impact on some of the more successful international projects currently. Conduct an in-depth analysis of carbon finance development policies. This article studies several countries with relatively developed carbon finance development policies in the world, such as the European Union, the United States and Japan, hoping to provide diverse reference for domestic carbon finance policies. For the development of the carbon financial market, suggestions are put forward to establish a unified carbon trading platform, improve the carbon financial organization and service system, innovate carbon financial products, strengthen government support, etc., hoping to integrate into international competition and increase the right to speak in the international market.

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References