Research on Climate Finance Policies in the Context of Carbon Peaking and Carbon Neutrality

Xiaoqi Zhou
Anhui University of Finance and Economics, Bengbu 233030, China.

Abstract: To achieve the "dual carbon" goal, we should take the goal of nationally determined contributions and low-carbon development as a solid guide. We will vigorously promote the development of investment and financing in addressing climate change, guide financial products, tools and services to enter the field of addressing climate change in an orderly manner, explore new markets, and gradually establish an energy, industrial structure, and way of production and life capable of mitigating and adapting to climate change. Therefore, starting from the evaluation of the development of climate investment and financing, this paper concludes the theoretical basis and analytical framework of the systematization research policy system construction, and clearly analyzes the theoretical framework of the construction of the climate investment and financing policy system. On the basis of summarizing and refining the research methods of element decomposition of the policy system, this paper summarizes several element mechanisms for constructing the policy system of climate investment and financing, and expounds the direction and content of the policy system construction and development in detail.
Keywords: Climate Investment and Financing; Factor Analysis; Carbon Neutralization

1. Introduction

The Finance Committee of the United Nations Framework Convention on Climate Change defines climate finance broadly as financing activities aimed at reducing greenhouse gas emissions, enhancing greenhouse gas pooling, reducing the vulnerability of humans and ecosystems to the negative impacts of climate change, and maintaining and enhancing their resilience [1]. In October 2020, the five ministries and commissions jointly issued the Guidelines on Promoting Investment and Financing in Response to Climate Change. This is the first top-level design of climate investment and financing from the national level, which opens a new situation of climate investment and financing in China. It is of great theoretical and practical significance to explore how China can promote the work of tackling climate change by constructing a climate investment and financing policy system, realize the vision of reaching carbon peak and carbon neutrality on schedule, and gradually transition to a low-carbon economy. Climate investment and financing policy is a complex and dynamic system composed of many factors [2]. It is the use of financial markets as a medium for financing climate-friendly projects from public, private or other sources of finance or to assist in the climate risk management of projects, with the aim of supporting mitigation and adaptation to climate change. Climate investment is the direct investment of funds into climate-friendly projects or financial investment products related to climate change mitigation and adaptation. Climate investment and climate finance are inseparable and mutually reinforcing. In climate finance, reducing financing costs will help attract capital to climate-friendly projects and strengthen the commercial feasibility of climate investment. On the other hand, in climate investment, the development and promotion of exemplary and high-quality investment projects is the basis for enhancing the attractiveness of climate finance. In combination with China's actual economic development and current policy system, this study comprehensively understands the policy needs of China's climate investment and financing development, and analyzes and explores the key elements of the construction of China's climate investment and financing policy system on this basis.

2. Research status of climate investment and financing policies

Climate investment and financing is the key to achieving China's climate change goals and an essential tool to achieve carbon neutrality. How to meet the needs of climate investment and financing while taking into account economic development is a major challenge for China's climate investment and financing policies. Building an active and effective climate investment and financing policy system will help fill the financial gap in meeting the targets of addressing climate change, and is of great significance in promoting the goal of achieving carbon peak neutrality. The climate investment and financing policy system is a new policy system construction work, mainly serving the investment and financing activities related to climate change mitigation and adaptation. However, at present, there is no unified definition of the concept of climate investment and financing policy system at home and abroad, and countries' climate investment and financing policies vary greatly according to their own national conditions and economic development needs. The international climate investment and financing system is mainly a financial mechanism established on the basis of international climate negotiations, as well as relevant domestic climate investment and financing incentives and support policies. In China, the climate investment and financing system is an important part of the green finance system. As one of the important parts of green finance, climate investment and financing pay more attention to and focus on activities related to climate change mitigation and adaptation, with more precise scope and more significant benefits. The benefits generated by climate investment and financing have a direct impact on China's ecological civilization construction, climate change response and carbon peak carbon neutrality. It also plays a key role in balancing economic development efficiency with low-carbon green transformation [3].

In the analysis of the interaction between finance and economy in modern economic theory, Patrick divided the financial development mode into two types: "demand-following" and "supply-led" real economy. "Supply-led" financial development, with capital (savings) drivers at its core, dominates the early stage of economic growth. In this stage, financial development precedes the demand for financial services and acts as a de facto "engine" of economic growth. Once economic development enters a mature stage, the "engine" function of "supply-guided" financial development will inevitably stagnate and weaken, which is mainly manifested by the stagnation of savings rate growth and the reduction of marginal contribution rate of capital factor growth to economic growth. At this point, the effective investment of funds and the improvement of investment efficiency will become the key and core issue for financial development to support economic growth, and the "demand-following" financial development oriented by the fund service demand of industrial sectors will become the mainstream. As an important part of green finance, climate investment and financing aims to guide and promote more investment in climate change mitigation and adaptation in the financial market. Therefore, according to the two financial development models of "demand following" and "supply guiding", the climate investment and financing system can also be divided into "bottom-up" and "top-down" development models. The bottom-up climate investment and financing development mode refers to the market-based development mode, supplemented by government, to solve the externalities of carbon emissions and public goods through market-based approach. It mainly appears in western developed countries with relatively advanced and mature low-carbon economic development.

3. Development and evaluation of climate investment and financing

The Guidelines define climate investment and financing as investment and financing activities that guide and promote more capital to address climate change, mainly supporting climate change mitigation and adaptation. The former mainly supports the transformation of industrial structure, the optimization of energy structure, and the development of new technologies conducive to emission reduction. The latter mainly improve their adaptability through infrastructure construction. In the process of effectively playing the role of climate investment and financing, improving the policy system and standards of climate investment and financing is an important basis to ensure its development, and also one of the key factors influencing financial institutions to participate in climate investment and financing activities. In addition, the Opinions also proposed that we should adhere to market orientation and give full play to the decisive role of the market in climate investment and financing. Among them, as one of the most representative market chemical tools, carbon emission trading scheme will provide the core carbon pricing support for climate investment and financing activities[4].

The essence of climate investment and financing is to provide credit for climate mitigation and adaptation, and to promote technological progress and industrial structure upgrading by guiding capital allocation, so as to achieve sustainable economic and social development. Climate investment and financing can be seen as a composite system of climate investment and climate financing, and the two subsystems are coupled and coordinated to achieve long-term development. On the one hand, climate finance promotes financing development through both mitigation and adaptation investments; on the other hand, climate finance promotes investment expansion through the development of mitigation and adaptation projects [5]. From the macro level, climate finance leverages capital accumulation by providing climate-friendly projects with credit resource tilting, fiscal discount interest, direct financing of bonds and other ways to provide capital production factors for sustainable economic development. At the same time, climate investments and financing support the development of mitigation and adaptation projects, thereby promoting emissions reduction and governance and providing production factors for sustainable economic growth. At the micro level, climate investment and financing encourages enterprises to carry out innovation in net zero emissions and pollution control, and encourages or restricts enterprises to participate in emission trading and carbon offsetting activities, providing systematic guarantee for the realization of net zero goal. Timely assessment of the contribution of climate investment and finance-related activities provides an important guarantee for timely adjustment of relevant policies and solving the bottlenecks and problems encountered in the development of climate investment and finance-related activities.

As a core market-based tool for climate investment and financing, carbon market has been widely adopted and implemented by countries all over the world, making great contributions to greenhouse gas emission reduction. Although climate change is a global problem, current efforts to mitigate CO2 emissions apply only to a subset of regional emitters. Due to the loss of competitiveness of regulated producers, in an open economy, production and associated emissions will move to unregulated areas, resulting in emissions leakage. Carbon pricing may be an important tool in facilitating the transition from brown-black to green development, although such a transition may be a slow process and may be hampered by policy uncertainty [6]. On the one hand, carbon market provides the basis for cost-benefit assessment of climate investment and financing through carbon pricing and internalization of external costs. On the other hand, carbon market provides the core functions of emission trading and offset trading, quantifying trading costs and emission reduction, making the assessment of energy saving and emission reduction effect more feasible. China's climate investment and financing work is still in the early stage of development. From the policy level to the implementation level, the relevant policy system and standard system need to be improved. With the continuous improvement of relevant mechanisms, financial institutions have gained a certain driving force to carry out weather investment and financing business, but at the same time, they also face many obstacles.

Demand analysis of climate investment and financing policies is conducive to promoting the construction of relevant policy systems, creating a policy environment good for the development of climate investment and financing, promoting the construction of relevant standards for climate investment and financing, and gradually improving the system of relevant policies and standards for climate investment and financing. Improving the establishment of the access mechanism, incentive and performance mechanism, information mechanism and market mechanism of financial institutions for climate investment and financing is an important part of the climate investment and financing policy system [7]. Climate investment and financing refers to investment and financing activities that guide and promote more capital to address climate change in order to achieve the goals of Intended Nationally Determined Contributions and low-carbon development. The scope of support mainly covers mitigation and adaptation. According to this requirement, access to climate investment and financing can be targeted at the following three aspects: first, tools and products that meet the conditions for climate investment and financing. Second, projects applicable to climate investment and financing work. Third, enterprises and units engaged in climate investment and financing activities should set access conditions and work norms. Therefore, standardizing climate investment and financing access mechanism has become a basic policy requirement for building climate investment and financing policy system. Climate finance as a key tool for reducing emissions will also grow rapidly in response to the vision of carbon peaking and carbon neutrality. In the process of rapid development, how to effectively identify some behaviors and projects seeking financing convenience in the name of "emission reduction" and "low carbon" is an important premise to ensure the orderly development of climate investment and financing.

4. Conclusion

The establishment of the climate investment and financing policy system is an important institutional work for the goal of "carbon peaking and carbon neutrality", as well as an important starting point for China's response to climate change. The establishment of China's climate investment and financing policy system can more efficiently achieve the target of nationally determined contributions and effectively serve the medium - and long-term climate work. Climate investment and financing is the key to achieving China's climate change goals and an essential tool to achieve carbon neutrality. To explore the development of China's climate investment and financing policy system, it is necessary to find out the current situation and performance of the development of China's climate investment and financing. The coordination mechanism of climate investment and financing policy system is the core element to ensure the efficient operation and effectiveness of the policy system, and is the scheduler to coordinate various work related to climate investment and financing and corresponding institutional arrangements.

References

[1] Cao XJ. Combined application of incentive policy tools in climate policy: Practice and Inspiration from the European Union [J]. Journal of China University of Geosciences (Social Sciences Edition), 2014,14 (04): 60-66.

[2] Li G. Accelerate the establishment of climate investment and financing policy system [J]. China Finance, 2020, 23:51-52.

[3] Hong W. Accelerate the building of a resilient climate investment and financing system [J]. Contemporary Financiers, 2020, 12: 33-36.

[4] Di Leva C. Financing climate mitigation and adaptation [J]. Carbon & Climate Law Review, 2017, 11(04): 314-324.

[5] Ma S. The development and prospect of green finance in China [J]. Comparison of Economic and Social Systems, 2016:25-32.

[6] Li G. Gather the strength of the whole society to promote the realization of the carbon peak goal [J]. Environment and Sustainable Development, 2021, 46 (02): 6-10.

[7] Wu J, Wang Z, Han Y. Scale and efficiency of climate finance. Financial Expo, 2016, 02: 10-11.