

Research on Measuring the Development Level of Green Finance in the Yangtze River Delta and its Influencing Factors

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Abstract

In recent years, environmental problems such as climate change and resource shortages faced by the world have prompted people to search for more sustainable development paths. In this context, green technology serves as a key innovative application. It has been widely studied and discussed. The development of green technology not only helps promote sustainable economic growth, but also helps improve environmental conditions and improve people's quality of life. Financial functions mainly include two core functions: resource allocation and risk management. From these two perspectives, we analyze the mechanism of green finance on the economy and environment. As an important leader in my country's economic development, the Yangtze River Delta region also faces the challenge of how to achieve high-quality development. Therefore, this article aims to explore the application of green technology innovation in the high-quality economic development strategy of the Yangtze River Delta and provide scientific basis for relevant decision-making. Through in-depth research and analysis, we will explore the potential of green technology innovation and how to strengthen cooperation with green technology in the Yangtze River Delta region to achieve more sustainable and less energy-consuming economic growth.

Keywords

Green Finance; Development Level; Economic Development.

1. Introduction

As the international community attaches great importance to environmental issues, a series of international cooperation arrangements have been introduced. The United Nations Convention on Climate Change formed in 1992 and the Kyoto Protocol formed under this framework are two relatively internationally binding cooperation mechanisms that have established the goal of maintaining global greenhouse gases at a certain level. These two arrangements directly promoted the formation of the international carbon trading market and are of milestone significance in promoting the development of green finance. The Yangtze River Delta is one of the most prominent regions in my country's economic development. It has great advantages in terms of industrial foundation, economic scale and development prospects. Under the social concepts of green ecology and sustainable development, green technological innovation has become a content that has attracted much attention in the process of high-quality economic development in the Yangtze River Delta. The development of green industries is an inevitable choice for China's economic transformation and industrial structure adjustment in recent years. In August 2020, General Secretary Xi Jinping pointed out at the symposium on solidly promoting the integrated development of the Yangtze River Delta that the two key words of

integration and high quality must be closely followed. Lay a solid foundation for green development in the Yangtze River Delta. At present, most of the research on green finance in my country is at the national level, with fewer studies from a regional perspective, and there is a lack of discussion of basic issues in the development of green finance. From the perspective of financial functions, this article attempts to clarify the mechanism and effect of green finance in promoting the development of green industries and improving environmental problems in the Yangtze River Delta.

2. Current Status of Green Finance Development in the Yangtze River Delta

The Yangtze River Delta region is one of the most economically developed and densely populated regions in my country. Due to long-term rapid economic development, the region is also facing severe environmental pollution and resource shortages. From the perspective of green development, the current economic development status of the Yangtze River Delta region has the following problems:

First, environmental pollution. As one of the most dynamic regions in my country's economic development, the Yangtze River Delta region has caused serious pollution to the environment due to industrial production, transportation and other activities. Problems such as air pollution, water pollution, and soil pollution have existed for a long time, causing adverse effects on people's health and quality of life.

Second, energy consumption and emissions are high. The Yangtze River Delta region has a large demand for energy and high traditional energy consumption and emissions, resulting in tight energy supply and increased environmental load. At present, the development and utilization of clean energy is insufficient, and the application of new energy and energy-saving technologies still needs to be improved.

Third, there is the issue of industrial structure. The industries in the Yangtze River Delta region are mainly manufacturing, but a large number of traditional manufacturing industries have problems of resource consumption and environmental pollution. The proportion of traditional industries is still high, the development of high-tech industries and green industries is relatively lagging behind, and the industrial structure is unbalanced.

Fourth, resource utilization is inefficient. During the rapid urbanization process in the Yangtze River Delta region, land resources are limited and their utilization efficiency is low. However, blind expansion and large-scale land occupation problems exist in some places, resulting in waste of resources and destruction of land ecology.

3. The Significance of developing Green Finance in the Yangtze River Delta

Through green technology innovation and application, the development of green finance in the Yangtze River Delta will first help environmental protection and improve the polluted environment. Extremely high population density and long-term rapid industrial development have brought serious environmental pollution problems to the Yangtze River Delta region, including air pollution, water pollution, and soil pollution. Through the innovation and application of green technologies, we can achieve the reduction and control of pollutants and improve environmental quality. For example, promoting cleaner production technology in industrial production can reduce the emission of harmful substances. In addition, green technology can also be used for ecological restoration and environmental governance to protect the ecological environment in the Yangtze River Delta region and improve people's quality of life.

Secondly, it contributes to the efficient use of resources. The Yangtze River Delta region is an important pillar of my country's economy, but its natural resources such as land and water resources are limited. Through green technology innovation and application, efficient utilization can be achieved, resource consumption can be reduced, pressure on the environment can be reduced, and resource utilization efficiency can be improved.

Finally, it will contribute to the transformation and upgrading of the economic structure. Through green technology innovation and application, the upgrading and transformation of the industrial structure can be promoted. The Yangtze River Delta region is dominated by manufacturing, and traditional resource-intensive industries have problems such as high environmental pressure and low efficiency. Through the introduction and application of green technology, it can help enterprises transform their production methods, promote the shift to high-end manufacturing, green industries and service industries, and enhance industrial added value and competitiveness.

Contribute to technological progress and innovation. Green technology innovation and application need to be based on continuous technological research and development and innovation. Second, by actively exploring and promoting green technology, technological progress and innovation capabilities can be promoted. The Yangtze River Delta region has numerous colleges and universities and scientific research institutions, with abundant scientific and technological resources and talent advantages. By strengthening the innovation and application of green technology, we can promote the transformation of scientific and technological achievements into the economy, provide technical support and guarantee, and promote high-quality economic development in the Yangtze River Delta region.

4. Strategies for the Development of Green Finance in the Yangtze River Delta

4.1. Strengthen the Research, Development and Application of Green Technologies

By increasing investment in green technology research and development, we will promote technological innovation and application, and establish an innovation system to promote the widespread application of green technology in energy, transportation, manufacturing and other fields. First of all, the Yangtze River Delta region has many scientific research institutions and universities, which can strengthen cooperation among these institutions and establish interdisciplinary and inter-institutional green technology R&D alliances. Through cooperation, we will carry out collaborative innovation in green energy, clean manufacturing, environmental protection and other fields to improve the research and development level of green technology. Secondly, the Yangtze River Delta region can establish a green technology transfer center to promote the transformation of scientific research results into industrialization. Technology transfer centers can cooperate with scientific research institutions, enterprises and government departments to provide support services such as technology assessment, promotion and application, and industrial transformation to accelerate the marketization process of green technologies. Then, the Yangtze River Delta region should encourage companies to increase investment in green technology research and development and improve relevant policies and measures, such as providing support for R&D funding, tax incentives, and intellectual property protection. In addition, it can also organize technical exchanges and cooperation between enterprises, share R&D resources and results, and improve overall innovation capabilities. In addition, the Yangtze River Delta region can build a number of green technology demonstration projects to demonstrate the application effects of green technology and attract more companies to participate. Demonstration projects can cover multiple fields, such as smart energy systems, low-carbon transportation, waste resource utilization, etc. The

government can provide subsidies and incentive mechanisms to encourage enterprises to participate in demonstration projects and promote their successful experiences throughout the region. It is worth mentioning that as a region with intensive international economic, trade and financial exchanges, the Yangtze River Delta can also actively participate in international cooperation in green technology research and development and innovation, and carry out exchanges and cooperation with outstanding foreign scientific research institutions, enterprises and governments. . By sharing R&D results and experience with foreign partners, the introduction and application of green technologies can be accelerated. In addition, we can learn from international advanced green technology standards and management systems to enhance the international competitiveness of my country's green technology.

4.2. Strengthen Green Infrastructure Construction

Compared with other regions in the country, the Yangtze River Delta region has relatively fast industrial base and economic development. On the one hand, the infrastructure in most areas is relatively complete, but on the other hand, in the core areas of various cities, the layout and construction of infrastructure There are certain difficulties. In this context, the Yangtze River Delta region needs to strengthen the construction of green infrastructure. It should first actively promote the development and utilization of renewable energy, such as solar energy, wind energy, water energy, etc. The government can introduce preferential policies to encourage enterprises and individuals to invest in the construction of renewable energy power stations, and increase the transformation and upgrading of transmission grids to achieve better integration of renewable energy. Then, the Yangtze River Delta region should accelerate the construction of intelligent networked transportation systems. Through intelligent traffic management and vehicle interconnection, we can improve road traffic efficiency and reduce traffic congestion and exhaust emissions. The government can promote the research, development and promotion of relevant technologies, equipment and standards, and provide corresponding support policies. In addition, the Yangtze River Delta region needs to increase investment in water construction and water pollution control. The government can increase the construction and transformation of green water infrastructure such as sewage treatment plants, water supply plants, and water resource allocation. At the same time, we will strengthen water environment supervision and pollution prevention to ensure the sustainable use of water resources and the safety of water quality. In addition, as the Yangtze River Delta is an area with large cities and high building density, the issue of building energy consumption also deserves sufficient attention. To this end, the development of green buildings should be actively encouraged to promote building energy conservation and emission reduction. The government can introduce relevant standards and specifications, promote the application of green building technologies and materials, and encourage enterprises and individuals to adopt energy-saving and environmentally friendly measures in the design, construction and use of buildings. Finally, the Yangtze River Delta region can increase the construction of garbage classification and treatment facilities. The government can increase investment in waste treatment facilities, encourage enterprises to carry out resource utilization and energy recovery, and strengthen publicity and education on waste classification to improve residents' environmental awareness.

4.3. Cultivate Green Industrial Clusters

The Yangtze River Delta region has rich industrial foundation and human resources, and can cultivate and develop green industrial clusters through government guidance. These clusters can integrate relevant enterprises and R&D institutions to form a cooperation platform for green technology innovation and improve R&D efficiency and technology transformation capabilities. In order to achieve this, local governments can introduce a series of preferential policies to attract the development of green industries, such as tax incentives, land concessions, loan concessions, etc. These policies can promote enterprises' investment in green technology

research and development, manufacturing, sales and promotion, and improve the competitiveness of green industries. At the same time, the Yangtze River Delta region can establish entrepreneurial incubation bases to provide green industry start-ups with services such as space, funds, technical support, and marketing. The government can set up special funds to support the innovative and entrepreneurial activities of green entrepreneurs, and provide support such as entrepreneurial training and consulting. Based on this, we should increase support for green technology research and development, encourage enterprises to increase investment in research and development, and strengthen cooperation with universities and scientific research institutions. The government can organize the application and review of scientific research projects, provide scientific research funding and intellectual property protection and other support, and promote the application of innovative technologies in green industries. At the same time, the Yangtze River Delta region can strengthen the supply chain construction of green industries and form a complete industrial chain. The government can guide and support cooperation among enterprises, optimize the supply chain structure, and encourage enterprises to adopt sustainable development methods such as green procurement and recycling to promote the greening of the supply chain. Finally, cities in the Yangtze River Delta region also need to form a pattern of complementary industries and coordinated development through coordinated development. The government can formulate policies and plans for collaborative development, encourage cooperation and exchanges among enterprises, promote resource sharing and mutual benefit, and further enhance the competitiveness of the entire region's green industry.

4.4. Actively Promote the Development of Green Finance

The Yangtze River Delta is the region with the most developed financial industry in my country. Therefore, in the context of green technology innovation and application, it is necessary to give full play to the advantages of the financial industry in the region. To this end, the Yangtze River Delta region can establish a complete green financial system, including the establishment of green development funds, green bond markets, and green credit mechanisms. The government can introduce relevant policies and regulations to guide financial institutions to provide green financial products and services, and encourage enterprises and individuals to invest and finance with a focus on green projects. The government can provide innovation incentives and financial support, promote the application of financial technology, develop green financial products and services, provide accurate green financial information and assessment tools, and help enterprises and investors assess and manage green risks. Relevant units and enterprises can organize activities such as green finance forums, seminars, and training courses to improve the understanding of the concept and role of green finance from all walks of life, encourage enterprises and individuals to actively participate in green finance actions, and promote awareness and behavior of sustainable development. Of course, in addition to technical and industrial cooperation, we can also strengthen cooperation and exchanges with domestic and foreign green finance-related institutions and organizations. The government can promote the establishment of cooperation mechanisms between local financial regulatory agencies and domestic and foreign green finance associations to jointly research and formulate green finance standards and regulations, and promote the internationalization and interconnection of the green finance market. It is worth mentioning that necessary supervision is indispensable at any development stage and background. Therefore, relevant departments can be established based on actual conditions to strengthen the approval and supervision of green financial products and projects to prevent and combat green financial risks and illegal activities. conduct and maintain the good order and image of the green financial market.

5. Conclusion

To sum up, as one of the most economically developed regions in my country, the high-quality economic development of the Yangtze River Delta region has positive significance in driving the high-quality economic development of the country. Today, in the context of the rapid development of green finance, actively encouraging green technology innovation will help promote the upgrading of the economic structure and enhance industrial competitiveness in the Yangtze River Delta region. The application of green technology can effectively reduce environmental pollution and resource consumption, thus supporting sustainable development. In addition, strengthening cooperation in the Yangtze River Delta region and the field of green technology can promote technological exchanges and innovation and further promote the development of green finance. It is believed that with the innovative application of green technology, the economy of the Yangtze River Delta region will achieve higher-quality sustainable development, thereby driving the high-quality development of the entire country.

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