Green Development in China: Connotation and the Path

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Abstract. The paper analyzes the connotation of green development in China, and analyzes the evolution of China's green development. The paper also analyses the path of Chinese green development: promoting the greening of production methods, technological innovation, institutional innovation, and promoting green development with a low-carbon economy.

Introduction

Since the reform and opening up, the scale of China's economic development has expanded rapidly, but the rapid development of the economy has also caused a series of serious ecological and environmental problems. Since the Eighteenth National Congress of the CPC, the CPC Central Committee has emphasized the importance of green development and integrated the construction of ecological civilization into the overall layout of the great cause of socialism with Chinese characteristics. Therefore, green development has become an important development trend.

The Connotation of Green Development in China

Green development is a new stage of human development. Green development emphasizes the unity and coordination of economic development and environmental protection. It is a more active and people-oriented sustainable development path. The connotation of green development includes four main characteristics: ecological health, economic greening, social equity and people's happiness. These four aspects are also the proper meaning of the scientific concept of development. [1] Therefore, green development is a resource-saving and environment-friendly development, which is different from the traditional development mode of "high consumption, high pollution, low efficiency and low efficiency". Green development emphasizes economic development while protecting the environment.

Green development includes four interrelated and complementary aspects: one is to build a resource-saving society; the second is to build an environment-friendly society; the third is to vigorously promote circular economy; and the fourth is to actively develop a low-carbon economy. [2] Green development needs a comprehensive policy system to support its development. China's economic development model should change from "black economy" to "green economy", from ecological development to ecological construction, from ecological deficit to ecological surplus.[3] This shows that in the process of realizing economic development, China will use as little resources as possible to minimize the damage to the environment. Green development is the main component of the scientific concept of development.

China's green modernization is an innovative road. Green development is an inevitable choice for China. Developing green economy, adjusting industrial structure, investing in green energy and coping with climate change will not only be free from affecting China's economic growth, but also greatly improve the quality of economic growth and social welfare, realize the win-win situation of economic development and environmental protection, ecological security, and adaption to climate change.[4] The theme and key words of China's modernization in the 21st century are green development and scientific development. China promotes green development through green modernization, realizing green rise and making unprecedented contributions to the world.

To develop green economy and achieve green development, there are three basic objectives: first, to give priority to solving domestic resource and environment problems; second, to rely on scientific and technological progress to improve resource efficiency and green competitiveness of
industry, to achieve green recovery, as well as to solve growth, poverty alleviation and employment and other development problems; third, to gradually transform the development mode, especially green transformation, from fossil energy sources towards low-carbon and carbon-free new energy sources; to develop energy-saving and environmental protection industries and promote the "greening" of the economic system in order to meet the challenges of long-term climate change and sustainable development.[5]

**China's Green Development Process**

China's green development process can be traced back to the 1970s. In 1973, China’s first national environmental protection conference endorsed the “32-word policy” for environmental protection (comprehensive planning, rational distribution, comprehensive utilization, turning harm to benefits, relying on the masses, everyone’s engagement, protecting the environment, and benefiting the people), and emphasized Concepts such as planning layout, comprehensive utilization and following the mass line. In 1979, the "Environmental Protection Law (Trial)" was promulgated. Later, some major environmental protection laws and regulations were gradually improved.[6]

In 1992, the "Top Ten Countermeasures for China's Environment and Development" was published, and policies of 10 aspects were proposed to announce the implementation of a sustainable development strategy. In 1994, the State Council approved the first national-level sustainable development strategy: “China White Paper on Population, Environment and Development in the 21st Century”. In 1995, China decided to “implement two fundamental changes” (economic system and economic growth mode) and began to control the heavily polluted Huaihe River Basin. In 1996, with the implementation of the “Ninth Five-Year Plan”, the two major measures of “Total Control” and “Green Project” were implemented nationwide,[7] striving to basically control the trend of increased environmental degradation.

In the face of opportunities and challenges in the new era, the Chinese government has formulated a series of policy measures to promote China's green development. At the end of 2006, the Ministry of Science and Technology, the China Meteorological Administration, the National Development and Reform Commission, and the State Environmental Protection Administration and other six ministries jointly issued China's first National Assessment Report on Climate Change. In June 2007, the Chinese government issued the National Plan for Climate Change, and formulated specific targets, basic principles, key areas and policy measures to address climate change by 2010. China also established a national leading group on climate change and energy conservation and emission reduction, and deployed work on climate change. In August 2009, the Standing Committee of the National People's Congress of China approved the "Resolution on Actively Addressing Climate Change", emphasizing the need to develop a green economy and a low-carbon economy based on national conditions, and to actively respond to climate change as a long-term task of achieving sustainable development strategies. Economic and social development planning. At the National People's Congress and the Chinese Political Consultative Conference (NPC & CPPCC) in 2010, ecological environmental protection and sustainable development became the theme of the two conferences. The Prime Minister pointed out in the government work report that it was necessary to vigorously develop new energy, new materials, energy conservation and environmental protection, bio-medicine, information networks and high-end manufacturing. It was also pointed out that we must lay a solid foundation for energy conservation and emission reduction and be prepared for a protracted “war”; we must vigorously develop low-carbon technologies, promote high-efficiency energy-saving technologies, and actively develop new energy and renewable energy. [6] The Central Economic Work Conference in December 2010 determined that the economic work in 2011 should be based on the scientific development concept and accelerate the transformation of the economic development mode. The strategic emerging industries are regarded as new growth points for economic development.

China's "Eleventh Five-Year Plan" clearly sets out the green development goals, and strives to optimize the structure, improve efficiency and reduce energy efficiency. It proposes that during the "Eleventh Five-Year Plan" period, the energy consumption per unit of GDP will be reduced by
about 20%, and the total amount of major pollution emissions will have a 10% reduction. Green energy has begun to take a pivotal role in China's energy supply. For the first time, the “Twelfth Five-Year Plan” outlines the concept of “green development” in an independent chapter and shows the determination and confidence of China to adhere to scientific development. The planning outline clarifies the incentive and restraint mechanism for green development. For the first time, the deepening of resource-based product prices and environmental protection fee reform are defined as the direction of the five-year planning reform. It is required to strengthen the responsibility assessment of energy conservation and emission reduction targets, rationally control the total energy consumption, and carry out green development throughout all aspects of economic activities. The “Thirteenth Five-Year Plan” puts forward “focusing on improving environmental quality as the core, concentrating on solving outstanding problems in the ecological environment, increasing ecological environmental protection, improving resource utilization efficiency, providing more high-quality ecological products to the people, and jointly promoting the wealthy life of people, rich and powerful nation, and beautiful China.” "Build a resource-conserving and environment-friendly society and form a new pattern of harmonious development of man and nature."[8]

Since the 18th National Congress of the Communist Party of China, President Xi Jinping has repeatedly elaborated on the concept of building an ecological civilization and realizing green development on various important occasions at home and abroad. At the party's 19th National Congress, Xi Jinping once again stressed the need to adhere to the new development concept including green development, indicating that China's traditional development concept has been completed in the green economy.

The Path of the Realization of China's Green Development

Green development is a sustainable development concept and model that links energy, environment and economy. Green development aims to reduce dependence on natural resources, is supported by sustainable energy supply, and pays attention to the protection of ecological environment in the process of development. It is a sustainable development economy. To promote green development and realize ecological civilization, it should start from the following four aspects: promote the greening of production methods, promote green development with scientific and technological innovation, promote green development with institutional innovation, and promote green development with low-carbon economy.

Promoting green development with greening production methods

Accelerating the greening of production methods is a key factor in achieving green development and the main focus of promoting green development. Promoting the greening of production methods requires the implementation of cleaner production and the promotion of green transformation of traditional manufacturing industries; enterprises need to upgrade traditional technology and equipment, creating a green industrial system, and building an ecological system for green development. It is also necessary to strengthen the independent research and development of recycling technology and low-carbon technology, fully consider the impact of technology on the environment in technological innovation, not only ensure steady economic growth, but also seek a balance between development and the environment, and take green technology innovation to lead the development of green industry. [9]

Promoting green development with technological innovation

Promoting the green development with science and technology innovation is manifested in two aspects: on the one hand, transforming traditional industries with technological innovation, and on the other hand, strengthening environmental protection and ecological governance through technological innovation. (1) Renovate traditional industries with scientific and technological innovation, accelerate energy technology innovation, reduce the proportion of coal in energy use structure, vigorously develop wind, water, solar, nuclear and biomass energy, and actively exploit coal-bed methane, combustible ice, and shale Gas, to optimize energy supply structure; promote the comprehensive development and utilization of coal, petroleum and other mineral resources, reduce resource waste and environmental pollution, and build a safe, efficient, low-carbon and clean
modern energy system. (2) Promote ecological environmental protection with scientific and technological innovation, save intensive and efficient use of resources and energy, and reduce emissions of various pollutants. On the one hand, it relies on scientific and technological innovation to deal with waste liquor, waste gas and residue, and realize pollution-free discharge. On the other hand, it relies on scientific and technological innovation to increase the recycling and reuse of waste liquor, waste gas and residue. [10]

Promoting green development with regulation innovation

Regulation construction is an important basis for restraining and regulating social behavior. The formation of a green development mode requires a series of systems to provide protection. By promoting regulation reforms, we will accelerate the formation of a green development system, especially through the establishment of a sound system of natural resource use and ecological environmental protection, improve the legal and regulatory system for promoting green development, and establish a scientific assessment of the level and quality of green development system. Through continuous revision and improvement of the legal and regulatory system, it provides legal guarantees for green development, strengthens law enforcement, and promotes the rule of law in green development. [10]

Promoting green development with low carbon economy

Developing a low-carbon economy is not only a key measure to solve global warming, but also an important means of implementing the scientific development concept. Effective use of energy, implementation of energy conservation and emission reduction are the cores of low-carbon economic development, and promoting sustainable development is the development direction of low-carbon economy. We must carry out scientific planning, development of a low-carbon economy, efficient use of land, energy and resources, as well as environmental protection, and realize the low-carbon and recycling of industrial layout. Low-carbon economy is an important connotation of green development. It is necessary to build a green economy system, a green transportation system, a green logistics system, a green agricultural system, develop green buildings, and advocate green consumption. China has recently vigorously developed wind, nuclear, solar and tidal energy, but the fact that 65%-70% of energy comes from coal is difficult to change. Therefore, at all levels of the national economy, all measures must be taken to develop a low-carbon economy in order to achieve the goal of that “China’s carbon dioxide emissions will not rise after 2050”. [11] The low carbon economy contributes to the goals of economic, social and environmental development. [6]

Conclusion

Green development is a more active, people-oriented approach to sustainable development, which includes four interrelated and complementary aspects including building a resource-saving society, establishing an environment-friendly society, promoting a circular economy, and developing a low-carbon economy. Since the 1970s, China has achieved green development through the improvement of various rules and regulations, and has achieved a series of results. Promoting green development and realizing ecological civilization should start from the following four aspects: promoting the greening of production methods, promoting green development through technological innovation, promoting green development with regulation innovation, and promoting green development with a low-carbon economy, thus, to "Coordinately advance the people's prosperity, the country's prosperity, and the beautiful China." [12]

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References