

Research on the High-Quality Development of China's Trade Economy under the Background of Carbon Neutrality

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Abstract: *Since China's reform and opening up, especially after its accession to the World Trade Organization, foreign trade has achieved fruitful results. But at the same time, the extensive growth mode of foreign trade with high energy consumption and high pollution has also caused a rapid increase in carbon emissions, especially in import and export trade, there are a large number of embodied carbon emissions. In order to achieve the strategic objectives of "carbon peak" and "carbon neutrality", and build a green trade system to achieve the coordinated and high-quality development of trade and environment, it is of great significance to study the carbon neutrality strategy for the high-quality development of China's foreign trade economy. According to the study, the optimization and upgrading of China's foreign trade and economic structure must be based on the carbon neutral strategy, which can effectively alleviate the impact of trade barriers brought by the trend of anti-globalization by weakening the dependence on energy imports. Especially for the export of low-end high-carbon industrial manufacturing products and the import of fossil energy, it has important strategic significance. Therefore, this paper puts forward relevant strategies for carbon reduction and emission reduction to promote the upgrading of trade and industrial structure.*

Keywords: *Carbon Neutralization; Import and Export Trade; Trade and Economy High-Quality Development*

1. Foreword

Since the reform and opening up, China's foreign trade and economic development has achieved tremendous growth, with a compound annual growth rate of more than 11%. After more than 30 years of development, China has become the world's largest trading country, with more than 100 countries and regions as its major trading partners. Its total foreign trade accounts for more than 13% of global trade, and its growth rate is much higher than that of global trade[1]. For a long time, China has been at the low end of the value chain of trade economy in global trade, relying too much on labor, resources and other factors of production. On the one hand, in China's export trade structure, resource-intensive and labor-intensive products account for more than 50% of total exports, and this proportion is increasing year by year; Processing trade still occupies an important proportion in China's export trade structure. It can be seen that China's current trade and economic structure is characterized by large scale, low added value and heavy dependence on resource consumption, and the continuous growth of carbon emissions has caused serious pollution to the ecological environment.

According to the statistics of the global carbon budget database, China's total carbon emissions have increased by more than 200% in the past two decades, accounting for 30% of the world's total carbon emissions, making it the world's largest carbon emitter[2]. Excessive carbon emissions will not only have a negative impact on China's economic development, but also destroy the climate and ecological environment. China is not only a big trading country, but also a big carbon emission country. While its trade economic growth drives the rapid economic development, its carbon emissions also rise. In order to achieve the strategic goal of "carbon peak" and "carbon neutrality", it is of great theoretical and practical value to study the high-quality development of China's carbon emissions and trade economy.

2. Carbon neutrality is of great significance to the high-quality development of China's trade economy

2.1 Carbon neutrality can actively promote the optimization and upgrading of trade structure

The high-quality development of trade economy urgently needs the low-carbon transformation of import and export industrial structure, which can not only create new growth points of trade and economic development, provide a wide range of employment opportunities, but also realize the important support of guaranteeing quantity, improving quality and optimizing efficiency in the high-quality development of China's trade economy. From the perspective of the long-term development path of China's trade, the proportion of China's new investment in energy system in the next 30 years will not be less than 3% of GDP in that year, and the total new investment is expected to reach 100 trillion yuan[3]. Through large-scale green investment, we can promote the efficient growth of trade and the development of innovative formats, thus greatly increasing employment and promoting mass employment. In addition, the implementation of carbon neutrality strategy can effectively force the innovation of China's industrial manufacturing industry, innovate the technological upgrading of high-carbon industries in the industrial structure of trade, which can not only improve productivity, but also achieve carbon emission reduction and industrial structure optimization and upgrading. At the same time, the carbon neutral strategy can promote China's trade focus from processing and manufacturing to knowledge and technology services, and enhance the competitiveness of trade and economic development.

2.2 Carbon Neutrality can Effectively Mitigate the Impact of Trade Barriers

In order to protect the interests of local enterprises and prevent carbon leakage and carbon transfer, western developed countries such as North America and Europe are the first to formulate and implement relevant policies and means of carbon neutralization because of their relatively mature industrial structure. In particular, the product carbon footprint tracking standards formulated by the European Union region track the supply chain of various commercial products throughout the whole process, which not only has complete coverage, but also has strict standards. As an important industrial manufacturing base in the world, about 70% of the upstream and downstream enterprises involved in the global trade supply chain are in China[4]. In recent years, the related enterprises in China's trade industry chain have been restricted by trade barriers in Europe and the United States to varying degrees, which has seriously hindered the development of China's trade exports. To this end, China's accelerated establishment and improvement of the carbon neutral strategic system and implementation plan will help the trade industry to integrate into the global supply chain system, enhance the value chain status of the trade economy, and increase the proportion of green technology in the trade industry, thus effectively alleviating the impact of trade barriers and realizing the high-quality development of China's trade economy.

2.3 Carbon neutrality can reasonably weaken the main dependence on energy imports

At this stage, the development of China's trade industry is still highly dependent on the import of fossil energy. Looking at the actual import of fossil energy in China in recent years, the annual import of oil is more than 500 million tons, and the degree of dependence on foreign countries is as high as 70%. At the same time, although China's annual natural gas production can reach 190 billion cubic meters, about 40% of its natural gas consumption still depends on imports[5]. It can be seen that China's existing trade industrial structure and the rapid development of trade economy have a huge demand for fossil energy, and are highly dependent on imports. The implementation of carbon neutral strategy mainly adopts the measures of replacing fossil energy with new energy, using non-fossil energy to promote production, promoting the optimization and transformation of China's energy industrial structure, weakening the import dependence on high-carbon fossil energy, and driving the high-quality development of trade economy.

3. China's Trade and Economic High-quality Development Strategy under the Background of Carbon Neutrality

3.1 Strengthen international and regional cooperation and improve carbon reduction and emission reduction mechanisms

Deepening international and regional trade and economic cooperation can effectively improve China's carbon reduction and emission reduction mechanism and enhance the application of green technology. Based on the strategic background of carbon neutrality, optimizing the FTA can effectively maintain the multilateral trading system, thus promoting the deep coupling of international regional trade and economic cooperation, and providing a good environmental basis for the deep cooperation of global trade and economy and the high-quality development of China's trade and economy. China should actively participate in green carbon reduction technology cooperation in developed countries such as Europe and the United States, improve the technological level in the field of new energy, and help to achieve innovative research and development of new energy technology in China, so as to break through trade barriers. In addition, through cooperation and joint exploration of the construction of international trade carbon emission standards, it is conducive to injecting new momentum into the high-quality development of China's trade economy.

3.2 Optimize the industrial structure of trade and help trade enterprises upgrade

Based on the background of carbon neutral strategy, China urgently needs to increase R&D investment in green low-carbon technologies and further accelerate the upgrading of trade industrial structure, so as to reduce the production cost of new energy and increase the added value of trade products. On the one hand, we should actively promote the upgrading of intelligent technology and realize the green innovation of materials and production processes for the green transformation and upgrading of industries with high energy consumption and high carbon emissions, especially those industries with strong pulling effect on economic growth. On the other hand, through the green reconstruction of trade industrial structure, we should encourage the export of new energy technologies and high value-added products, guide the low-carbon green development of trade enterprises, and force the green technological innovation of high-carbon enterprises, so as to realize the low-carbon transformation and upgrading of trade enterprises.

3.3 Innovating low-carbon technology research and development to promote green trade development

The R&D and innovation of low-carbon new energy technology is the key driving force for the high-quality development of China's trade economy. According to China's strategic goal of carbon neutrality and the development of trade economy, the R&D and innovation of low-carbon new energy technologies need to make full use of market guidance mechanism and price incentive mechanism, invest funds in the important R&D links of carbon reduction and emission reduction, and promote the breakthrough of core technologies of low-carbon new energy technologies. At the same time, we should actively promote the innovation of new energy storage technology, strengthen the deep integration of industry, University and research in new energy technology, focus on breaking through the key core technology of carbon neutrality in industrial manufacturing production, realize the transformation and application of research and development achievements of low-carbon technology, and promote the green development of China's trade economy.

4. Summary

At present, China's trade production mainly relies on high-carbon fossil energy, which not only relies heavily on foreign imports of energy, but also has huge carbon emissions in production, and the added value of trade products is low, which is vulnerable to trade barriers. Therefore, based on the strategic background of carbon neutrality, China urgently needs to innovate the research and development of low-carbon new energy technologies, promote the upgrading of trade industrial structure, increase the added value of trade products, and build a mechanism for carbon reduction and emission reduction rules through multilateral cooperation to promote the high-quality development of China's trade economy.

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