

A Review of Research on the Impact of Corporate ESG Performance on Carbon Neutral Targets and Prospects

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Abstract: The proposal of carbon neutrality goal puts forward higher requirements for China to better realize green and low-carbon development in the new development stage, and ESG as a method of evaluating the sustainable development capability of enterprises can be used to promote enterprises to enhance the effectiveness of carbon reduction to make greater contributions to carbon neutrality goal. Therefore, it is necessary for us to sort out the research on the impact of corporate ESG on carbon neutrality.

Keywords: ESG; Carbon Neutral Goal; Research Review

1. Introduction

At the United Nations General Assembly, General Secretary Xi Jinping solemnly declared that “China will achieve carbon peak by 2030 and carbon neutrality by 2060”. This not only demonstrates China’s image as a responsible great power, but also shows our strategic determination to adhere to green and low-carbon development in the new development stage. Due to the influence of our own resource endowment, industrial structure, energy structure and development process, the energy consumption per unit of GDP is higher than the global level, and we have a long way to go to realize the goal of “carbon neutrality”. To solve the above dilemma, in addition to relying on government promotion and industry traction, we can also consider ESG as an important hand for carbon neutrality, and vigorously develop ESG to promote the green and low-carbon development of enterprises, so as to promote the realization of the goal of carbon neutrality from the end of enterprises.

A large part of ESG standards is directly related to the environment and emissions. With the introduction and deepening of the carbon neutrality goal, the actions and results of carbon emission reduction have even become an important element in measuring the performance of corporate environmental dimensions among various rating agencies. When enterprises promote their overall ESG performance, they will inevitably reduce resource consumption at source, increase energy saving and emission reduction, carry out green transformation of processes, and recycle waste and intermediate materials in industrial production, and enterprises will greatly enhance their green and low-carbon development level. In addition, the development of ESG investment also brings new opportunities to promote the sustainable development of green finance, which will further promote the development of green finance in China and provide financial support for the green and low-carbon transformation of enterprises.

2. ESG Connotation and Measurement

ESG as a measure of corporate sustainability and fulfillment of social responsibility has received widespread attention from all walks of life in recent years. ESG (environmental, social, governance) refers to the integration of environmental, social and corporate governance factors into investment decision-making and business management concepts, which can be used to monitor and standardize the performance of the enterprise itself, while ESG is also a way for investors to measure the performance of an enterprise. At the same time, ESG is also an important indicator for investors to measure the comprehensive performance of enterprises. Its core connotation is to emphasize that enterprises should not only pursue profits and financial performance, but also pay attention to their performance in social responsibility and corporate governance.

At present, it is commonly used by scholars at home and abroad is the ESG unified measurement framework, which categorizes ESG-related information into subcategories, attributes these subcategories to the three dimensions of E, S, and G, and assigns certain weights and scores, which are ultimately combined to obtain the final ESG score, and the academia mostly adopts ESG scores of listed companies

provided by third-party rating agencies, such as Bloomberg, Huazhou, Shangdao Ronglv, and so on.

3. The synthesis of research on the realization of corporate ESG on carbon neutral goals

(1) Research on ESG behavior and its consequences

ESG and investment and financing, some researchers have found that corporate excellence at the ESG level improves corporate investment efficiency and enhances the likelihood and scale of outbound investment by listed companies. Some researchers have studied the impact of ESG from the aspect of corporate financing, and concluded that there is a significant negative relationship between corporate ESG performance and corporate financing costs, and the impact of environmental performance on corporate financing costs has been increasing in recent years.

ESG and enterprise value, the current academic research generally believes that corporate ESG performance can significantly improve corporate performance. In recent years, some scholars have studied the impact of corporate ESG performance on corporate performance from the perspective of industry, and some scholars have studied from the perspective of innovation, and concluded that corporate ESG performance will enhance its own level of green innovation and thus improve corporate performance. Some scholars have also studied that corporate ESG performance as a comprehensive performance can effectively alleviate corporate financing constraints, adapt to financial challenges and overcome external shocks.

ESG and green innovation, some scholars have empirically studied the impact of corporate ESG performance on carbon emission intensity, and the results show that corporate ESG performance has a significant positive impact on the level of corporate green innovation, and the adoption of ESG policies can help enterprises improve financial performance, alleviate financing constraints, and provide capital accumulation for green innovation activities, which will have a positive impact on the promotion of green innovation. Some researchers have also found that the improvement of ESG performance promotes the level of corporate green innovation, which ultimately has a significant positive impact on corporate value.

(2) Research on ESG Disclosure and Evaluation System

Scholars' research shows that when enterprises are forced to disclose ESG information will greatly promote the development of green transformation of Chinese enterprises, improve the transparency of the capital market, and reduce the information asymmetry between enterprises and investors. At the same time, the disclosure of non-financial information will also bring higher credibility and lower risk and cost of capital for enterprises. The research of some scholars concludes that the establishment and improvement of China's ESG disclosure system is necessary, and gives the path conception and some policy suggestions for the construction of China's ESG disclosure system.

The existing ESG evaluation system mostly focuses on one of the three dimensions of ESG, and a relatively perfect ESG disclosure and evaluation system has not yet been formed in China, and some scholars have pointed out that it is necessary to accelerate the establishment of an ESG evaluation system rich in Chinese characteristics, so as to provide institutional-level guarantee for the rapid development of ESG in China.

(3) Realization of Carbon Neutral Goal

The goal of carbon neutrality is a manifestation of China's active commitment to its international responsibilities and a strategic choice based on its new stage of development. It is a great decision that balances its own development with the fulfillment of its international mission. Since the carbon neutrality goal was proposed, scholars have begun to study its strategic significance. Some scholars believe that under the carbon neutrality goal, a forcing mechanism will be established, which will gradually promote green technological innovation, promote the green transformation of China's economic and social development, and realize high-quality development. Some scholars have studied the main factors affecting carbon emissions, the first is that China's energy supply is not far enough and the consumption structure is unreasonable, the process of industrialization is more backward than in the West, and the industrial structure is unreasonable, high energy-consuming enterprises account for a large proportion. Other scholars have studied China's macro initiatives to achieve the dual-carbon goal, and believe that we should focus on both science and technology and green investment, and adhere to the concept of win-win cooperation, actively participate in global governance and international cooperation, and jointly work together to promote the process of global carbon neutrality.

(4) Research on the Impact of ESG Performance and Carbon Neutrality

With the popularity of ESG in recent years, scholars generally believe that ESG and carbon neutrality are intertwined and inextricably linked, and that the flourishing development of ESG will inevitably promote the green and low-carbon transformation of enterprises, which in turn will promote the realization of carbon neutrality. Some researchers believe that ESG, as an important support for the achievement of the “3060” goal, is an important step in improving China’s green financial system. From the analysis of the policy and regulatory level, it is concluded that the inclusion of ESG in the consideration of policy formulation can effectively play a guiding role in policy and further promote the green transformation of industries. The regulator will build a unified ESG disclosure standard for the industry and incorporate ESG performance into the industry norms, which can promote the industry’s energy utilization efficiency, reduce the industry’s carbon emission level and the risk of carbon neutrality, and will effectively promote the process of carbon neutrality. The integrated and orderly carbon reduction efforts of enterprises and the goal of enhancing ESG performance are organically unified. Promoting carbon reduction makes enterprises pay more attention to the role of innovation, and technological innovation enables enterprises to gain a lasting green competitive advantage, which is conducive to expanding profit margins and promoting the performance of corporate financial performance.

4. Research Prospect

Summarizing the above, most of the current research on enterprise ESG focuses on ESG information disclosure and its value, the construction of evaluation system, ESG on enterprise value, financial performance, the impact of ESG on enterprise green low-carbon transformation and green innovation; for the research related to the “3060” goal, the factors affecting carbon peak and carbon neutral are mainly energy, technology, industry, and technology, which are the main factors affecting carbon reduction and carbon neutrality. For the “3060” goal, the factors affecting carbon peak and carbon neutrality are mainly energy, technology, industrial structure and economy, and some scholars have carried out research on the realization path of carbon neutrality and its strategic significance; at present, there is less research literature on the relationship between ESG and carbon neutrality, and some scholars have studied the close relationship between ESG and carbon neutrality at the theoretical level, pointing out that ESG performance promotes the goal of carbon neutrality, and that theoretical analyses have been carried out at the three dimensions of policy regulation, enterprise level and financial institution level. The theoretical analysis from three dimensions: policy regulation, enterprise level and financial institution level, concludes that ESG can effectively promote the role of policy guidance, the concept of ESG can expand the scale of investment in the green field, and the enterprise’s incorporation of ESG into its planning can provide a guarantee for realizing the green transformation of the enterprise and accomplishing the goal of carbon neutrality. The above studies are based on the analysis of conceptual theories, with the lack of science and rigor, the lack of empirical verification and the lack of a complete theoretical framework and path, which is also the direction of the scholars’ future efforts.

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