

Research on ESG Practice of China Manufacturing Industry under the Background of Dual Carbon

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Abstract

Environment, Society and Governance (ESG), as a new development concept, is consistent with the spiritual core of "sustainable development" in China. China's competent authorities and regulatory authorities attach great importance to this. With the development and opening up of China, ESG concept has gradually become the mainstream trend of sustainable development. Based on the background of "double carbon", this paper studies the ESG practice of China manufacturing industry, taking into account many factors such as environmental responsibility, social responsibility and corporate governance, so as to realize the sustainable development of the industry.

Keywords

Dual Carbon Background; Manufacturing Industry; ESG Practice; Sustainable Development.

1. Introduction

ESG is the abbreviation of environment, society and governance. It is an important concept and enterprise action guide that has emerged in the market in recent years, and it is also a concrete projection of the concept of sustainable development at the market and enterprise level.

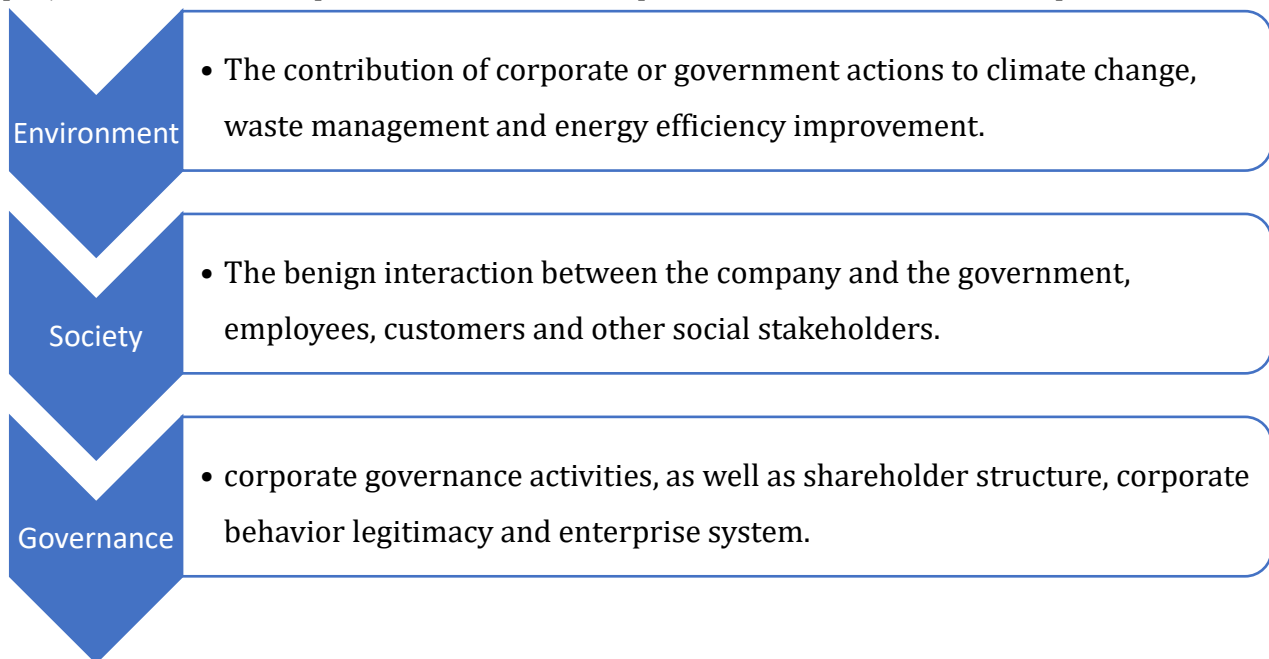


Fig 1. ESG three-dimensional composition

ESG practice mainly focuses on efforts and changes in the environment, social responsibility and governance of the industry. Industry can realize the integrated development of industry interests and social interests by reducing carbon emissions, green management and improving

governance. Establishing an ESG organizational management system and adding ESG development concepts into industry planning can help the industry develop with higher quality. This paper makes a multi-dimensional statistical analysis of ESG performance in different manufacturing industries, and deeply analyzes the manufacturing industries that have great influence on ESG. These industries include high-carbon manufacturing industry, automobile industry and power equipment industry, among which high-carbon industries include plastics, coal, non-ferrous metals, petrochemical industry, textile, leather, wood processing, paper making and other industries with high energy consumption and high carbon emissions.

Under the background of dual-carbon, ESG performance of high-carbon industries is closely watched by the capital market, so it is very important to propose the development direction and implementation path for high-carbon industries in carbon emission management and technological innovation.

2. ESG Analysis of High-carbon Industry

In recent years, the rapid development of industrial economy has brought about ecological and environmental problems. Based on the background of dual carbon, China advocates the concept of green and sustainable development, and brings the construction of ecological civilization into the overall layout. Due to the large amount of carbon emissions from petrochemical, coal, non-ferrous metals and other manufacturing industries, these industries can emit nearly 25,000 tons of carbon dioxide every year. Therefore, this section mainly analyzes the manufacturing industries with large energy consumption and carbon emissions, including plastics, coal, non-ferrous metals, petrochemical, textile, leather, wood processing, paper making and other industries.

Due to the high energy consumption and carbon emissions in high-carbon industries such as industrial manufacturing, it is necessary to focus on energy consumption management and air pollutant management in terms of environment (E). Because most of the high-carbon industries are concentrated in the material industry and industrial manufacturing, it is necessary to ensure the management and supervision of production safety and product quality in view of social (S) aspects. Under the concept of promoting green sustainable development, in view of governance (G), high-carbon industries need to innovate technology, increase investment in resources, and make strategic positioning and planning.

3. Research on ESG Analysis of Automobile Industry

Due to the large carbon emissions generated by the automobile manufacturing industry, in order to achieve green and sustainable development, it is necessary to formulate relevant measures to achieve carbon emission reduction.

Based on the background of dual carbon, the automobile industry should give consideration to high-quality development, but also actively lead the development direction of automobile electrification and intelligence, and promote the industry to improve quality and efficiency. The country needs to make a strong country strategy and a double carbon strategy to promote the good development of new energy and automobile industry. With the development of new energy automobile industry, the burden of traditional automobile production and sales has increased. For environment (E), we need to focus on resource management and carbon emission management. Due to the frequent occurrence of automobile safety problems in recent years, we need to pay attention to the quality of automobile industry. In view of the social (S) aspect, it is necessary to focus on supply chain management to ensure the quality of the automobile industry.

As the core competitiveness of new energy vehicles lies in technological innovation, in terms of industry (G) governance, new energy vehicles need to upgrade key technologies and increase technology research and development in this industry. In addition, it is necessary to strengthen data security protection capabilities.

The sustainable development of the industry mainly depends on the performance in resource management and green development. The new energy automobile industry can achieve energy conservation and emission reduction and promote the goal of green and sustainable development. In terms of resource management, there is still much room for improvement in the industry as a whole. The industry needs to strengthen the reasonable evaluation of energy and formulate relevant management systems to improve the ability of sustainable development of the automobile industry.

In recent years, the new energy automobile industry has developed steadily, and it is more and more important for the industry to practice ESG concept. The industry should establish an ESG management framework, clarify the ESG management objectives, enhance the sustainable development ability, and strengthen the core competitiveness of the industry.

4. ESG Analysis and Research of Power Equipment Industry

Power equipment industry is an important part of China's national economy. This industry guarantees the good and stable development of all sectors of the national economy. Battery, power grid equipment, photovoltaic equipment and other power equipment are concentrated in the whole power industry chain, which can realize the sustained and healthy development of the national economy.

Under the background of dual carbon, China needs to transform and upgrade the power grid industry accordingly, so that the industry can improve energy efficiency and develop rapidly in many fields. The policies promulgated by the state are also closely related to the development of the industry. Advocating green development is the main development trend. The industry needs to optimize the energy structure and bring new opportunities and development space for new energy equipment and related industries. In terms of environment (E), we can take the road of low-carbon economy in combination with policies, transform the power equipment industry into green development, optimize the production process of products, promote energy conservation and emission reduction, and bring new opportunities and broad market prospects to the new energy industry. In view of the social (S) aspect, it is necessary to improve the supply chain management ability and the competitiveness of the industry. The industry also needs to improve product quality and service capabilities. In terms of governance (G), it is necessary to increase the research and development of core technologies, enhance the comprehensive ability of the industry, and constantly innovate to promote the progress and development of the industry and provide development space for the development of the industry.

5. Conclusion

China is the largest manufacturing country in the world. Under the background of "double carbon", the manufacturing industry needs green development, which is of great significance to promote China's modernization. The green development of manufacturing industry is an important measure to maintain the competitive advantage of China's manufacturing industry. The goal of green development is to improve the industrial production environment, reduce energy consumption and environmental pollution, and enhance the ability of sustainable development.

In order to realize the green transformation of manufacturing industry, ESG disclosure practice will evolve in the direction of "full coverage, unification and transparency", and "high activity,

excellent management and courage" will help the development of ESG in the industry. Therefore, it is necessary to consider the incentive intensity of carbon neutrality to market players from the policy level, effectively play the decisive role of the market in resource allocation, and adhere to the coordinated promotion of carbon neutrality and "steady growth" in order to realize the green transformation of manufacturing industry.

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