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Corporate Green Development Strategy Under the Carbon Peaking and Carbon Neutrality Goals

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Abstract: How can enterprises control energy consumption and carbon emissions within a reasonable range in their business activities while ensuring a certain amount of economic output, and achieve green and low-carbon products or services as much as possible in the R&D and production processes Innovation has become a key issue in the sustainable development of enterprises at this stage. To achieve carbon peak and neutrality targets, this paper analyzes the low-carbon development path of enterprises from the dimensions of resources, R&D, technology, products, and markets.

Keywords: Carbon peak and neutrality; Green development; Low-carbon developmental path

1. Introduction

Since the carbon neutral and carbon peak target was put forward, how companies can adjust their strategies to meet the needs of the country's low-carbon strategy has become a common concern. Enterprises should continue to carry out green development strategic transformation under the goal of carbon peak and carbon neutrality, and formulate practical and feasible green development paths in order to stand out in the adjustment of industrial structure.

2. Path Design of Enterprise Green Development Strategy

The purpose of the development path design is to provide enterprises with a technical management tool to decompose complex enterprise development issues. Under the goal of carbon peak and carbon neutrality, this paper designs the green development path of enterprises from the five levels of resources, R&D, technology, products, and markets.

2.1 Resource low-carbon development path

The low-carbon development path of resources is a prerequisite for the green development of enterprises. The low-carbon development path of resources refers to enterprises that carry out technological innovation and implement energy-saving technological transformations to minimize resource consumption and high carbon emissions, and improve resource conversion efficiency and energy use efficiency. At the same time, the company should also improve the management process with low-carbon resources and speed up the promotion of paperless office process

The implementation of the low-carbon path of enterprise resources can be considered from the following two aspects: On one hand, the optimization of the resource structure. Enterprises should keep up with the forefront of low-carbon technology development, accelerate the modernization of technology and equipment, promote cleaner production and promote source reduction. At the same time, the adjustment of the industrial structure should be accelerated so that all kinds of resources can be allocated scientifically and rationally, the elimination of backward production capacity should be increased, and the low-carbon transformation of the production process should be gradually realized. On the other hand, cascade utilization of energy. Enterprises will use a lot of resources in their operations and production activities, which will inevitably cause energy loss. The energy cascade utilization that belongs to the category of circular economy refers to the classification of resources according to the grade and conversion efficiency of energy in the process of energy utilization, and then use them step by step. It can be said that the cascade utilization of energy is one of the best measures to improve resource utilization and reduce emissions.

2.2 R&D low-carbon development path

The R&D low-carbon development path refers to the optimization of the production process through continuous technological advancement and improved management in the enterprise's research and development activities. Companies develop new low-carbon technologies to reduce harm to the environment and humans.

The key to the R&D low-carbon development path is to develop low-carbon standards for R&D. The implementation of R&D low-carbon development path for enterprises requires the formulation of relevant R&D low-carbon guidelines and R&D low-carbon evaluation standards. This will help form a group of model companies implementing R&D low-carbon development path in the industry, which can be promoted, and ultimately help to form Standardized R&D low-carbon path.

2.3 Technology low-carbon development path

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The technology low-carbon development path means that enterprises can maximize resource productivity, resource utilization efficiency, use efficiency and life cycle of low-carbon products through the application of low-carbon technologies, and at the same time, minimize carbon dioxide and waste emissions. Under the guidance of the development path of technological emission reduction, enterprises should break through technological development bottlenecks so that resource utilization efficiency can be improved and carbon dioxide emissions can be reduced. At the same time, they should actively seek alternative raw materials to improve the quality of low-carbon products. Only by technological progress can the company's low-carbon technological innovation goals be fundamentally achieved, and the low-carbon economy can be further developed.

Specifically, the technological innovation directions of the technological low-carbon development path are as follows: First, alternative technologies. Substitution technology is a technology that replaces "old" with "new". Through technology research and development, new resources can replace old resources and new processes can replace old ones, and ultimately low-carbon production of enterprises can be realized. Second, volume reduction technology. Volume reduction technology is to realize technological innovation and process innovation through low-carbon technology research and development, and achieve the production purpose of achieving greater benefits with less resource consumption. Third, reuse technology. Reuse technology realizes repeated and multiple use of resources through technological innovation, prolongs its corresponding use cycle, and maximizes its benefits.

2.4 Product low-carbon development path

The low-carbon development path of products means that the company takes low-carbon development as the goal and strictly controls the production and emission of waste and harmful substances in the entire production process of the company.[1] The low-carbon development path of products helps to coordinate the relationship between corporate interests and the environment. Specifically, the Product low-carbon development path is to coordinate all links from design, procurement, production, processing, sales, consumption to waste treatment to reduce corporate carbon emissions.

The implementation of product low-carbon development path includes the following three aspects: First, product low-carbon design. Companies should use the minimum environmental pollution and damage as the criteria in the selection of raw materials and design product performance, and take the product's adverse impact on the environment as the most important parameter for product design. Second, manufacturing low carbon. Low-carbon manufacturing is a modern green manufacturing concept. Its core idea is to improve resource utilization and minimize the negative impact of product lifecycle on the environment. Low-carbon manufacturing can be comprehensively considered in terms of resources, energy consumption, and the environment to achieve the coordination and optimization of corporate economic, environmental, and social benefits. Third, low-carbon recycling. Recycling low-carbon refers to the recovery of value from used and scrapped materials, products and components, that is, fully and effectively reusing the waste and defective products generated in the production and consumption process to minimize the negative impact on the environment .[2]

2.5 Market low-carbon development path

Only by in-depth research on market development trends and future target markets, and focusing on solving the problems in the production process, can enterprises establish unique development advantages. Consumers' consumption habits are also changing in the context of the green economy. How to meet the new market demand is a question that companies must think about. Market demand is driving the elimination of outdated production capacity, stimulating the development of new technologies, encouraging companies to improve efficiency, and guiding low-carbon technological innovation.

3. Conclusion

Through the research on the low-carbon development path of enterprises, we can better understand the process and phase characteristics of the low-carbon development of enterprises, and then provide the basis for strategic decision-making for the sustainable development of enterprises. From the perspective of the long-term development of an enterprise, only by adhering to the concept of green development and reducing the damage to the environment by its own development can they gain a competitive advantage in the future market environment.[3]

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