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Research on the Penetration and Development Path of China's Energy Conservation and Environmental Protection

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ABSTRACT. *The energy-saving and environmental protection industry can not only play a role in the growth of the national economy and environmental protection, but also provide jobs for the society. As a strategic emerging industry of the country, the state and the government have provided assistance in various aspects for the energy conservation and environmental protection industry. The penetration of the energy conservation and environmental protection industry integrates the energy conservation and environmental protection industry with traditional industries and promotes the continuous development of the economy and society. This paper provides some general theoretical analysis for relevant personnel by analyzing the penetration of energy-saving and environmental protection industry and the research of industrial development path.*

KEYWORDS: *Energy saving and environmental protection, Permeability, Development path*

1. Introduction

The energy conservation and environmental protection profession mainly includes three industries: the first is the environmental equipment industry, the second is the energy conservation industry, and the third is the resource recycling industry. In recent years, the state has required the construction of a resource-saving and environment-friendly society, which has provided conditions for the development of energy-saving and environmental protection industries. Through analysis of the development of the energy-saving and environmental protection industry, problems and countermeasures are identified to promote the sustainable development of the energy-saving and environmental protection industry.

2. Development Situation of My Country's Energy Conservation and Environmental Protection Industry

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With the continuous development of the times and science and technology, my country's energy conservation and environmental protection industry has gradually matured, with relatively complete environmental protection technology and environmental protection equipment. In the energy conservation and environmental protection industry, some important core technologies have gradually developed towards industrialization. With the country's continuous emphasis on environmental protection, the demand for energy conservation and environmental protection is increasing. The economic growth of the energy conservation and environmental protection industry in recent years has been rapid and the momentum of development is rapid. The state has issued a series of policies on energy conservation and emission reduction that provide favorable policies for the energy conservation and environmental protection industry, and provide better financial and technical support for the energy conservation and environmental protection industry. The promulgation of some laws and regulations also provides a basis for maintaining the energy-saving and environmental protection industry market, and can better maintain market order. [1] my country's energy conservation and environmental protection industry is in a period of vigorous development. With the advocacy of energy conservation and emission reduction by the state and society, the energy conservation and environmental protection industry will usher in a larger market and opportunities.

3. Problems in the Development of My Country's Energy Conservation and Environmental Protection Industry

3.1 The Innovation Capability of the Energy-Saving Industry Needs to Be Improved

As a new type of high-tech technology industry, the energy-saving and environmental protection industry has high requirements for technological innovation. Many companies have insufficient innovation capabilities, lack of experience and investment in technology R&D and capital investment, and many links and components still need to rely on imports. Enterprises must pay attention to the importance of technological innovation, the cultivation of scientific researchers, and actively develop new technologies.

3.2 Lack of Unified Coordination among Various Regions

Due to the historical development and the different speeds of regional economic development, the development of various fields within the industry is uneven. For example, in the secondary recycling, the recycling of some renewable resources is higher than the resource cost consumption originally developed, which limits the development of the enterprise itself.

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3.3 The Development of the Service Industry of the Energy Conservation and Environmental Protection

industry is relatively backwardIn all areas of the energy conservation and environmental protection industry, China's service sector accounts for a small proportion and its development is relatively backward. The degree of marketization and specialization of the service industry is low, and some advanced technologies and concepts have not been introduced in time to meet the market demand.

4. Characteristics of Energy Saving and Environmental Protection Industry

4.1 Target Characteristics

Due to the large population in my country, the low resource share per capita, and the relatively weak environmental carrying capacity, it is very important to build an energy-saving and emission-reducing, environmentally friendly, and environmentally friendly society. [2] Although the industrial structure, organization and form of the energy-saving and environmental protection industry are different in various fields, the overall goals of developing energy-saving, emission-reduction and low-pollution are the same. The state and society advocate energy conservation and environmental protection. They should save existing resources, encourage the people to establish energy conservation and emission reduction awareness, and pay more attention in daily life.

4.2 Process Characteristics

In the relatively traditional industry classification, products or services are related to each other, and the energy-saving and environmental protection industry has a large span and different organizations and structures in various fields. Therefore, it is more difficult to analyze and study as a whole. Need some interdisciplinary knowledge and talents. In addition, we can conduct research from a horizontal perspective to better analyze and grasp the final value and characteristics generated by products and services of the energy-saving and environmental protection industry. [3] In the development in recent years, the country classified the energy-saving and environmental protection industry as a knowledge-intensive industry, which is a key development industry in the high-tech industry. Whether it is energy saving in family life or building, transportation, waste disposal, and integrated utilization of resources, it is a key part of the energy conservation and environmental protection industry. Although there are large differences in various fields, the core is knowledge and technology, such as ecology and engineering. At this stage, an important part of my country's energy-saving and environmental protection industry is still manufacturing, and the service industry accounts for a relatively small proportion. Many of the energy-saving and environmentally friendly manufacturing industries were developed in the previous traditional machinery manufacturing, and the production of products was mainly

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based on the staff's labor and knowledge technology. The three types of energy-saving and environmental protection industries are also very different. The first type is for public administration, mainly including the management of public facilities, sewage treatment, domestic garbage treatment, etc. The second type is based on family and daily life, such as the sale of some noise pollution, energy-saving appliances, as well as some pure water purifiers, environmental protection of interior decoration raw materials, etc. The third type is mainly industrial neutralization and service energy-saving and environmental protection industries, such as industrial wastewater treatment, energy-saving transformation of some enterprises and factories, and so on. By dividing these three types, we can clearly see that although the different fields are different, we can understand and classify the object oriented and service.After that, there may be more environmental protection fields entering our field of vision.

4.3 Permeability of Energy Saving and Environmental Protection Industry

The current penetration of the energy-saving and environmental protection industry is mainly reflected in both horizontal and vertical aspects. From a horizontal perspective, every link of design, R&D, manufacturing and industrial services in the energy-saving and environmental protection industry and other industries are closely related and interpenetrating. “Green water and green mountains are Jinshan and Yinshan”. With the national emphasis and advocacy on energy saving and emission reduction, enterprises and factories will take more into consideration of environmental protection when carrying out R&D and design.

The assessment and forecasting have become necessary procedures. In the procurement of raw materials and project evaluation, the relevant staff should pay attention to and refer to the standards stipulated by the state, recycle and reuse the sewage and waste produced in production, and do a green, environmentally friendly and sustainable development. [4] The penetration of the energy-saving and environmental protection industry is also reflected in the circulation of the market and consumer consumption. Because the state and the government now promote green energy-saving and environmental protection, such as energy-saving and emission-reducing cars, green and pollution-free cosmetics, and so on. Enterprises have also begun marketing on energy saving and emission reduction, and guide more consumers to understand the importance of green, energy saving, emission reduction, and recycling. From a vertical analysis, the energy conservation and environmental protection industry penetrates into the traditional primary, secondary, and tertiary industries. Some energy-saving and environmental protection concepts and technologies have been applied to all aspects of traditional industries, and products have been further innovated and improved to make traditional industries develop in a more environmentally friendly direction. With the penetration of the energy-saving and environmental protection industry, there are more and more connections between industries and enterprises, which further develops the relationship.

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5. Development Path of Energy Saving and Environmental Protection Industry

5.1 Reasons for the Formation of Energy Saving and Environmental Protection Industry

In the initial stage of the development of my country's energy conservation and environmental protection industry, some key links are controlled by the government or large enterprises. For the procurement of raw materials and equipment during the project, this link focuses on product development and manufacturing. As the environmental carrying capacity decreases year by year and the degree of pollution intensifies, it is difficult for the government and large enterprises to undertake too many projects. It is necessary to open engineering construction to the society and the market. The focus of the project construction is the development of the energy-saving and environmental protection industry at this stage. . [5] When the demand for the environmental protection industry is increasing and the government and enterprises cannot afford too many energy-saving renovation and pollution control projects, professional facility operation services will begin to be produced. This development stage is centered on operation services. When the energy-saving renovation and some waste treatment effects are not as expected, they will eventually enter the comprehensive development stage with energy conservation and environmental protection as the goal and core. When the division of labor and specialization of these products reaches a certain level, an industry of energy conservation and environmental protection is formed.

5.2 The Formation Process of Energy Saving and Environmental Protection Industries

The process of energy conservation and environmental protection industry integration is divided into three stages: technology integration, product and business integration and market integration. Technology integration refers to the integration of some common technologies into other industries and fields, reducing energy consumption, promoting sustainable development, and improving production efficiency. After technical integration, we must innovate and transform design and development, production routes, and product management on the basis of the original. For example, the combined heat and power cooling system is transformed into a three-in-one integration for the convenience of residents after the integration of technology. The combined heat and power cooling system is a representative example of product and business integration. After technology integration and product and business integration are completed, development needs to be guided by market integration. Enterprises should consider whether the integration of technology and business meets the needs of market development and whether they can change people's current consumption concepts and consumption content.

5.3 Results of the Development of Energy-Saving and Environmental Protection Industries

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Regulatory deregulation and technological innovation are the main reasons for industry integration. Technological innovation is the productivity of the environmental protection industry. It can change the traditional production technology in the past, enrich the previous business model and content, and change the consumption direction and consumption characteristics of the previous industry. Technological innovations have also changed market demand and provided the possibility for industrial integration. Regulatory deregulation is an external factor for industrial integration. Deregulation will cause some other industries to join the competition and cooperation in this industry, thereby effectively promoting industrial integration. The result of industrial integration will change and promote the relationship between original industries and enterprises, blur the boundaries of industries gradually, and even re-define the boundaries. So when restructuring this industry, there may be a full range of environmental protection industries across multiple disciplines.

6. Conclusion

With the continuous destruction of the ecological environment and the intensification of environmental pollution, people are increasingly aware of the importance of protecting the environment and saving energy and reducing emissions. The country has also strengthened the protection and legislation of the environment in recent years, and it is necessary to govern the environment at the source. The state has stepped up its efforts to help the energy conservation and environmental protection industry, providing financial and technical support. With the continuous development and improvement of the industrial chain, the development of my country's energy-saving and environmental protection industry has progressed steadily. With the continuous penetration of energy-saving and environmentally-friendly products and energy-saving and environmental-friendly technologies, more and more applications of energy-saving and environmental protection in the traditional industry. Under the requirements and development of resource conservation and environment-friendly society, the energy conservation and environmental protection industry will continue to innovate and apply, thereby enriching the connotation of the energy conservation and environmental protection industry.

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