Research on Sustainable Development of China’s Green Enterprise Economy

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ABSTRACT

This paper aims to explore how China’s green economy can promote the sustainable development of enterprises. With the rapid growth of China’s economy, problems such as environmental pollution, resource depletion, and ecological imbalance have become increasingly prominent. The article first expounds the meaning and consensus of green economy and sustainable development. Then it discusses the environmental protection industry as an important part of the green economy, including its rise, international trends and development status. The article analyzes the impact of the green economy on the sustainable development of enterprises, including environmental benefits, economic advantages and social impact. Discusses the challenges and opportunities faced by enterprises in technological innovation, market demand, and policy support in the green economy. Finally, the article proposes strategies for enterprises to achieve sustainable development, including practices such as sustainable resource management, clean production technology, and corporate social responsibility. Therefore, the author’s research provides guidance for Chinese enterprises to realize the sustainable development of green economy, and provides insights and suggestions for promoting the development of green economy and sustainable development of enterprises.

INTRODUCTION

Environment and development are two major themes in today’s world, with green economy and sustainable development at its core. China’s economy is growing rapidly, and economic growth indicators continue to improve. However, this growth has also been accompanied by serious environmental pollution, resource depletion and ecological imbalance. If environmental costs are deducted, China’s real economic growth index has not yet reached the level of the statistics. China’s economic growth must change, and a green economy is one of the most important ways to meet this challenge.

With the rapid growth of China’s economy, problems such as environmental pollution, resource depletion, and ecological imbalance have become increasingly prominent. A green economy is seen as an effective way to address these issues. Enterprises embody the concept of sustainable development by emphasizing the production of green economic products and the recycling of products. Therefore, a large number of small and medium-sized enterprises in my country have started the transformation of low-carbon enterprises to meet the needs of sustainable economic development.

Low-carbon economy is a green economy with “low energy consumption, low emission and low pollution”, which is in line with a new economic model of sustainable development. The development of low-carbon economy, promote green development, based on the theory of sustainable development, is an important idea and solution to solve the global climate problem, it is different from the traditional mode of economic development model (Meng et al., 2020). The current climate change problem is becoming more and more serious, the development strategy of green low-carbon economy is getting more and more widespread attention, as a high-carbon industry oil companies, should comply with the current general trend of social and economic development, the implementation of green low-carbon economy sustainable development strategy.

Green economy is an economic form that focuses on resource efficiency and environmental friendliness. It is characterized by low resource consumption, low environmental pollution, high value-added products, strong technological innovation, and intensive production methods. 2006 to 2020, China entered the first phase of green transformation, and 2020 to 2030 is the second phase of large-scale emission reduction, focusing on reducing carbon dioxide emissions. The widespread adoption of the green development concept is rapidly affecting all aspects of China’s economic and social development, including the resource environment (Wang et al., 2022), technological progress, economic agglomerations, industrial restructuring, government interventions, and public transportation (Shao et al., 2022).

Contemporary economies are increasingly emphasizing the development of environmentally friendly economies. In this context, sustainable development of any economy involves increasing environmental benefits in any area. The promotion of green jobs is becoming increasingly important and employment policies and strategies at national and European level are increasingly supporting green jobs. In a green economy, the development of green jobs becomes the basis for sustainable economic
development. Green jobs are at the heart of sustainable development and key to addressing global challenges such as environmental protection, economic development and social inclusion (Wang et al., 2022). This paper describes the role of green jobs in ensuring sustainable economic development and emphasizes China’s position in this regard. This study starts with a conceptual analysis of the terms sustainable development, green economy and green jobs to capture the linkages between these concepts. It aims to explore how China’s green economy can contribute to sustainable business development and provide practical recommendations for future green economy development and sustainable business development.

LITERATURE REVIEW

Basic Overview of The Green Economy

There is a broad consensus on the content of green economic activities. One is the industrialization of environmental protection, aimed at protecting the environment, promoting scientific and technological progress, and preventing the emergence of new factors detrimental to the environment and ecological damage during the implementation of environmental protection measures. The second is the greening of the primary industry focusing on agriculture. The realization of ecological agriculture is the common ideal of mankind. The last is the greening of the secondary industry, or more broadly the greening of all manufacturing industries. Green economy represents the concept of harmonizing human economic activities with environmental protection. It mainly refers to the emerging environmental protection industry and the changes in industry and agriculture triggered by environmental protection. Green economy can be regarded as a general term for the ideal economic activities of human beings in the future, and all economic activities should be based on ecological principles. It is the pursuit of harmony between human beings and nature, which meets the current needs of human survival and development while also protecting the ecological environment and realizing the important prerequisite of sustainable development.

Theoretical Overview of Green Economy

Loiseau E, Saikku L, Antikainen R emphasized that the traditional way of economic growth has caused significant environmental damage, and advocated an economic model that focuses on environmental protection to achieve simultaneous development of the economy and the environment (Loiseau E et al., 2016). Since then, the concept of green economy has been globally recognized and promoted, and has become a prominent symbol of the economic model in the new era. Song Jinzhao, Hu Xiangxiang, Wang Xiaoping, and Wang Keyang proposed a new green economy theory (Song JZ et al., 2022). They proposed to add a new element - social organization capital - on the basis of traditional economic factors such as labor, land and capital. Under the green economy framework, social organizational capital is considered a key factor in achieving green economic development. This perspective goes beyond the over-reliance on physical capital in economics in the past and emphasizes the importance of non-material resources so as to achieve a balance between material and non-material aspects. Many scholars have also contributed to defining this concept, Loiseau et al. (2016) emphasized the close relationship between green economy and sustainable development. Prof. Cai Linhai is the founder and advocate of the green economy theory in China, and has proposed a more comprehensive green economy theory and practice (Cai ,2009). He further emphasized that the green economy pursues efficient, harmonious, and sustainable development, with ecological agriculture, recycling industry, and sustainable service industry as the core composition of economic structure, growth mode, and social form. The development of green economy needs to realize the efficient use of resources and sustainable economic growth through technological innovation, industrial transformation, policy guidance and other measures.

To summarize, green economy is not only an important new research topic today, but also a necessary research direction for the development of the times. Therefore, how to develop the green economy, the development of green economy enterprises as well as sustainable development is the important research object of this paper.

The Relationship between Green Economy and Sustainable Development

The introduction of the theory of sustainable development was accompanied by a big discussion on the two theories of limit of growth and infinite growth. Both theories have their drawbacks. Former Norwegian Prime Minister Mrs. Brundtland pointed out in the report “Our Common Future” that the world has a tendency to change the earth’s environment, threatening the lives of many species, including human beings. The report cites a series of major global environmental problems and reveals the relationship between the environment and development, namely, that development in the traditional sense leads to the destruction and depletion of environmental resources, while environmental degradation restricts economic development. The report provides a comprehensive and systematic evaluation of the current problems facing mankind in terms of economic development and environmental protection. She pointed out that we recognize the importance of economic interdependence among countries, and we are now feeling the interdependence of the economies of the globalized economies. The current economic development, however, should not be irreversible on the premise of ecology and environment, but should follow a cyclical and gradual development. General Secretary Xi Jinping of China has also put forward the development
goal that only green water and green mountains are mountains of gold and silver, and is striving to achieve the goal of carbon neutrality by 2050.

**Status of Green Economy Development**

The development of green economy aims to realize the synergistic development of economic growth and environmental protection. Market-oriented, it promotes the transformation and upgrading of traditional industries, adopts new production methods, technologies and management concepts, and minimizes the impact on the environment and the consumption of resources. The development status of green economy is reflected in economic growth premised on the protection of ecological and environmental protection and resource conservation. With its emphasis on ecological and environmental protection and resource conservation, the green economy has been able to better meet the growing environmental protection and health needs of the people, and has therefore gained the support and widespread attention of an increasing number of countries and all sectors of society.

![Figure 1: The measurement curve of green economic benefits in the past four years](https://journals.e-palli.com/home/index.php/ajebi)

As can be seen from Figure 1, the distribution curve of China’s green economy development shows an overall trend of rightward shift (Liu et al., 2022). The magnitude of this change is relatively small, and the height of the main peak increases year by year, but at a slow pace. The distribution curve also shows a right-sloping tail, indicating that some regions have a greater potential for green economic development, but overall there is a dominant peak and no obvious regional polarization. This indicates that the level of green economy development in China’s central and western regions is generally improving, and the absolute differences between regions are gradually narrowing.

Overall, the efficiency of China’s green economy development is improving, but the growth rate is relatively slow, and there is still a certain degree of volatility and instability in certain aspects.

**METHODOLOGY**

**China’s Green Economy Policies And Practices**

This paper uses data analysis method, literature research method, induction and summary method, and data analysis method to evaluate Chinese enterprises in many aspects. These include the evaluation of green

![Figure 2: Analysis of China’s green economy transition and low carbon economy from 2014-2022](https://journals.e-palli.com/home/index.php/ajebi)
production products of enterprises, the evaluation of environmental protection performance of enterprises, the evaluation of low-carbon resource-saving enterprise transformation, and the transformation factors of enterprises manufacturing green. And through EXCEL, Origin and other production software to display the data in the form of charts in the thesis research. The transition to a green economy represents China's transformation to a low-carbon, resource-saving society, which is inextricably linked to economic prosperity, social development, and ecological harmonization (Li, Jiang et al., 2013). The column analysis of carbon pollution emission is shown in Figure 2.

**Influencing Factors Of Green Economy Transition**

At present, the influencing factors and realization paths of green economic transformation mainly focus on green economy and natural resource endowment, green economy and environmental pollution. Some scholars have analyzed the driving factors of green transition potential, emphasizing the importance of carbon emission reduction, green innovation, and public green awareness. They believe that energy saving and emission reduction mainly through promoting technological progress to promote the growth of green total factor productivity, which in turn realizes the win-win situation of the environment and the green economy (Wang et al., 2016), and demonstrates the carbon emission reduction effect of environmental regulation green economy technological innovation (Jiang et al., 2022). Relevant influencing factors are shown in Figure 3.

In summary, the factors affecting the green transformation of the manufacturing sector can be summarized at three levels:

**Basic Level**

Fundamentally, the international economy plays a crucial role as a fundamental influencing factor. Turbulence in the international economy will affect China's carbon neutral strategy and prompt industrial restructuring of the manufacturing industry. Climate cooperation is a fundamental factor influencing carbon neutral targets.

**Intermediate Level**

Includes factors such as financing capacity, business model innovation, supply chain management, and energy structure. These factors interact with each other and are influenced by the carbon trading market, new infrastructure projects, energy infrastructure development, and the willingness of enterprises to make a green transition. Enhancing financing capacity, improving technology introduction, and optimizing supply chain management are important initiatives at this level.

**Surface Level**

Focuses on the actual initiatives of enterprises to realize green transformation and upgrading. This includes improving production efficiency, restructuring energy mix, and developing new market competitiveness under the carbon neutrality goal. By considering these three dimensions together, policymakers and enterprises can synthesize multiple factors and take comprehensive actions to promote green transformation in manufacturing.

**Impact of Relevant Policies**

Inadequate policy measures. Green low-carbon economic development model is mainly to solve the problem of energy utilization, control of greenhouse gas emissions, waste treatment and recycling, etc., has a strong policy, and requires sound laws and regulations to escort the policy. For all walks of life, low-carbon economic development should bear the brunt, should be constrained by a number of policies and regulations, but at present China's policy in this regard, the formulation of laws and regulations is not sound, the lack of special laws and regulations specifically for the low-carbon economy, there is no better implementation of the system, there is no legal, institutionalized, supervision and regulation of the laxity of the phenomenon, resulting in a number of enterprises bidding for carbon emissions, waste waste discharge phenomena, seriously polluting the surrounding production and living environment, the waste treatment and recycling. Serious pollution of the surrounding production and living environment. So to carry out the road of green economic transformation, the need to force enterprises to implement energy saving and emission reduction and energy consumption double
control measures. At the same time, it also emphasizes the role of government administrative intervention in the control of environmental pollution within the enterprise and the development of green technological innovation. Such intervention can effectively reduce the marginal abatement cost of enterprises, increase their income, and promote the development of green economic development model, low-carbon energy system and modern circular economy industry from the source.

RESULTS AND DISCUSSION
Impact of Green Economy on The Life Cycle of Enterprises and Related Suggestions
The Impact of The Green Economy on The Life Cycle of Corporate Sustainability
The impact of the green economy and the birth period of the enterprise. The green economy will also have an important and direct impact on other stages of the enterprise life cycle. Green marketing of green product strategy and green strategy 4P (i.e., green probe, green segmentation, green priority, green positioning) requires the birth of the enterprise, in the product investment and process selection to prioritize low consumption, no pollution, no side effects, no adverse consequences of the products and processes; in the development of the market, pay attention to the probe of the green market, the size of the green market and the selection of green economy enterprises in the product in the minds of consumers green positioning; the green economy in the product in the minds of consumers; and the green economy in the product in the consumer's mind; the green economy in the product in the consumer's mind; the green economy in the product in the consumer's mind. Green positioning in the minds of consumers; at the same time, but also to the concept of green marketing, and gradually establish a green corporate image recognition system. Visible, in the current green market, green business concepts are not mature conditions, the green economy, although the short-term increase in the birth of some of the work of the difficulty (such as the development of green market and the establishment of green identification system), but it reduces some of the work (such as the approval of the work) of the resistance, and for the sustainable development of enterprises to lay a solid foundation (Wei et al.,2011).

Green economy and business growth. Green economy due to the implementation of green strategy 4P and tactics 4P (green products, green channels, green price, green promotion), although the enterprise's green products due to the addition of de-pollution costs have higher prices, but because of its friendly to the social environment and the ecological environment, coupled with the role of the green promotions, the product is more likely to be accepted by the market, the market share may be larger, the sales volume rose faster, the enterprise has more room for development. The enterprise has more space for development. However, if the enterprise only from the growth period began to import the green economy concept, in the green market is not mature, its development speed will be limited.

Green economy and enterprise maturity. With the further launch of green demand and green consumption, the green market will continue to expand, the non-green market will be squeezed, the saturation of the green product market slows down, when more enterprises to implement the green economy model, split the green market and lead to market saturation, the enterprise enters the maturity period. In the maturity period, due to the formation of green mode business philosophy and the establishment of green image recognition system of enterprises, enterprises and products have a high reputation, therefore, the maturity period of enterprises will last for a long time.

Strategies and Suggestions for Promoting Sustainable Development of Enterprises
Each enterprise should actively and rationally develop new technologies to utilize new energy. China's green economy enterprises to implement green low-carbon economic development strategy, need to actively and rationally develop new technologies to utilize new energy. The rational development and utilization of new energy is the fundamental way out to solve the increasingly serious environmental and energy problems. From a policy perspective, new projects and products should be strictly reviewed, and energy efficiency standards should be strictly enforced and improved; backward production capacity should be eliminated, and enterprises should be encouraged to develop low-carbon technologies and utilize low-carbon energy. Strengthen the exchange and cooperation with developed countries in carbon emissions, carbon treatment, biological carbon sequestration and other technologies, promote technology transfer from developed countries to China, strengthen digestion, absorption and utilization of innovation, and jointly construct a technological cooperation platform for energy resources and ecological environment, so as to promote the development of green and low-carbon technologies and the comprehensive utilization of new energy sources (Wang ,2012).

Enterprises should strengthen scientific and technological innovation and develop low-carbon industries. As a petroleum enterprise to strengthen scientific and technological innovation, the development of low-carbon industry, mainly from the innovation of new energy research and development technology, innovation of low emission technology, innovation of carbon dioxide treatment technology, innovation of new energy research and development technology, accelerate the effective use of energy or the pace of renewable energy; innovation of low-emission technology, reduce the standard of carbon emissions; innovation of carbon dioxide treatment technology, effective recycling of carbon emissions or purification of air quality Low Carbon Awareness Enterprises should be firmly low-carbon awareness. Green economy enterprises should combine enterprise
development with skills and emission reduction, solid low-carbon awareness, and advocate low-carbon consumption. First of all, green economy enterprises should formulate a macro strategy and long-term planning for low-carbon development, reflecting low-carbon awareness from the overall strategy; secondly, they should establish corresponding energy saving and emission reduction systems, and strengthen the low-carbon awareness of enterprise personnel from the perspective of the management system; thirdly, they should formulate an effective low-carbon evaluation system and incentives, which not only manages the carbon efficiently, but also reduces the carbon emissions effectively, improves the economic benefits, and makes the carbon management and economic benefits linked to daily life.

CONCLUSION
First of all, the development of green economy can effectively improve the ecological environment, improve the economic efficiency of enterprises, promote the transformation and upgrading of industrial structure, and realize the organic unity of economic, environmental and social benefits. Promoting the high-quality development of green economy enterprises and the development of green economy requires the joint efforts of the government, social groups and enterprises. Enterprises in social environmental protection as the main body is particularly important to create green economic value. It needs to balance social responsibility, economic benefits and ecological benefits, and constantly innovate the enterprise development model in the process of developing the green economy to enhance market competitiveness.

Secondly, the green low-carbon economic development model reflects the concept of sustainable development, the implementation of the green low-carbon economic development strategy is the way to implement the sustainable development strategy, and the development of the green low-carbon economy is also the current trend of international economic development. Constructing a green low-carbon economic development mode with high efficiency and energy saving and low emission, implementing a green low-carbon economic development strategy, establishing a responsible image by actively participating in the formulation of low-carbon policies, laws and regulations, and effectively carrying out carbon management; technological innovation, development of low-carbon industries, rational development of new energy sources, optimization of the industrial product structure, and improvement of the competitiveness of enterprises as well as their benefits; and setting up a low-carbon awareness to enable enterprises to carry out daily low-carbon management and establish a sound low-carbon management mechanism. In addition, it is necessary to establish a sound low-carbon management mechanism. In short, the implementation of green low-carbon economic strategy is the inevitable road for enterprise development in all walks of life.

In short, with the continuous and stable development of the social economy, maintaining the ecological environment has become a factor that must be considered for the development of every small and medium-sized enterprise in China, and it is also an indispensable factor for the development of green economic enterprises. Small and medium-sized enterprises must not only implement the concept of sustainable development, it is also necessary to promote green economy enterprises and products. Because nature is the basis for our survival and development, it has a great influence on the production and development of green environmental protection and sustainable development. It is also the primary goal of meeting the goal of comprehensive carbon neutrality in 2050. Therefore, green economy enterprises are not only the core lifeline of future enterprise development, but also an important goal of human economic transformation.

REFERENCES


