

Reflection on the Harmonious Development of Low Carbon Economy and Circular Economy

Jianhua Ci

School of Economics, Sichuan University, Chengdu, Sichuan, 610064, China

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Abstract: With the development of society and the progress of science and technology, the development of nature is becoming higher and higher. However, in the process of exploitation of nature, the natural environment and resources have been destroyed to a certain extent. Therefore, this paper discusses the contents of low-carbon economy and circular economy, expounds the problems existing in the development of low-carbon economy and circular economy in China, and puts forward some relevant strategies to promote the coordinated development of low-carbon economy and circular economy.

1. Introduction

Recycling economy and low-carbon economy are facing human resource crisis, environmental pollution, ecological damage self-reflection, is the relationship between man and nature to re-recognize and summarize, to ecological and ecological civilization, sustainable development as the goal. Low-carbon economy put forward a time later than the circular economy, but the two are not substitutes for each other, the development has its own focus, there is mutual promotion, complementarity, coordinated development of the internal mechanism. Circular economy can promote the implementation of low-carbon economy to provide a good environment, it advocates the source of conservation of resources, green production, as many as possible or multiple use of resources, reduce resource consumption, reduce pollution and reduce emissions, which are Low carbon economy carbon reduction ideas are the same. In addition, the circular economy after so many years of development, in theory and practice, technology and market demand, institutional arrangements and other aspects of low-carbon economic development has laid a good foundation. Low-carbon economic development focused on carbon emissions, a very important aspect is around the "carbon" element production, circulation, consumption, waste disposal process economic activities, which extends the connotation of circular economy for the development of circular economy a clear Can be quantified, assessment and manipulation of the way. In short, the development of circular economy and explore more effective recycling economy development of low-carbon economy can provide a better platform for the development of low-carbon economy is conducive to circular economy industrial chain of the perfect and extension of the two coordinated development is our Promote the construction of ecological civilization, to achieve sustainable and realistic and feasible choice.

2. The Theory and Practice of Low Carbon Economy

In general, the "low-carbon economy" is proposed based on three large backgrounds. The first is the global climate warming challenges. As early as 1896, the Swedish chemist Alelius predicts: fossil fuel combustion-based industrial civilization, will greatly increase the concentration of carbon dioxide in the atmosphere, leading to global warming. Today, this prediction is not only fully validated, but also the serious consequences of global warming, degradation of ecosystems, frequent natural disasters, food problems, water problems, health problems, energy problems and so on. , Has a full range of impact to the survival and development of mankind. Control of greenhouse gas emissions, response to global warming is recognized as the next 20 years the world's most important issue. Second, the limited nature of fossil fuels. Fossil energy use is the foundation of

modern industrial civilization. Today, the contradiction between the limited fossil energy and the unlimited demand of economic development is becoming more and more obvious. The cost of using fossil energy is getting higher and higher. The development of mankind is an urgent need to improve the efficiency of fossil energy use, the development of other non-carbon-based clean energy, renewable energy, and gradually get rid of dependence on fossil fuels. Low-carbon economy is put forward for sustainable development, sustainable development of energy for strategic considerations. Third, developed industrialized countries to lead the development of a new model. The concept of low-carbon economy was first proposed by the United Kingdom, has been the United States, Japan, the European Union and other developed countries more extensive support and response. From the process of industrialization, these countries have now completed the industrialization and urbanization of the historic task, through a large consumption of fossil energy-based support of the development stage. In the past 20 years, the developed countries have focused on the development of the new economy represented by the information service industry and the modern financial industry, and transferred the real economy with manufacturing as the core to the developing countries represented by the BRIC countries. Economic strength of developing countries has been increasing, while the Western developed countries as a result of the financial crisis hit, economic competitiveness has been significantly affected. In this sense, low-carbon economy is the economic model developed by developed countries to reshape economic competitiveness and leading position, through this new platform, the use of its technological superiority, the development of new standards and international rules, and establish economic competition Advantages and world economic development of the initiative, widening the gap with developing countries. According to developed countries, low-carbon ideas in the global economic situation, industrialized countries and developing countries will be due to economic activities, "low carbon" standards and once again widen the gap.

3. Low-Carbon Economy Operating Mechanism

Enterprises are the main force in the development of low-carbon economy, in the development of low-carbon economy in the dominant position. On the one hand, companies are the main source of energy consumption and carbon emissions. On the other hand, enterprises are also the main body to provide low-carbon consumer products, low-carbon productive consumption and low-carbon non-productive consumption of the bridge. As long as each enterprise is low-carbon, you can achieve the whole society of low-carbon production.

Enterprises have three reasons for the development of low-carbon economy. First, the development of low-carbon economy will be greenhouse gas emissions generated by the externalities of internal and external costs for businesses and consumers, including energy, raw materials, inputs, intermediate products and the final product prices will continue to rise. In the face of great changes in the price system of production factors, enterprises will consciously reduce energy consumption and improve the utilization of resources and energy by technological innovation, thereby reducing production costs and improving economic performance and market competitiveness. Second, with the low-carbon production and low-carbon consumer awareness of the concept of continuous enhancement, the competitiveness of enterprises will change due to changes in consumer choice. In the face of consumers' increasing willingness to pay for low-carbon products and services, companies will consciously reduce energy intensity and carbon intensity, improve resource and environmental use efficiency, establish a good social image, win market recognition and consumer confidence, thus Improve market competitiveness, and ultimately access to higher economic efficiency and achieve sustainable development of enterprises. Third, the development of low-carbon economy itself will help enterprises to enhance their competitive advantage, to seize market opportunities.

Eco-industrial park to promote the development of low-carbon economy is mainly reflected in four aspects. First, through the upstream and downstream enterprises in the industry chain of low-carbon technology, knowledge transfer, the use of energy cascades between enterprises can reduce the energy consumption of products in order to achieve low-carbon production; Second,

through different enterprises by-product exchange, Third, through technical cooperation and integrated management, enterprises can effectively reduce the cost of research and development of low-carbon energy-saving technologies; Fourth, the eco-industrial park economies of scale and economies of scale conducive to the improvement of the scope of economic development, The park's energy structure, improve the proportion of clean energy use.

4. Recycling - Low Carbon Economic Development Policy Recommendations

Cycle development and low-carbon development are the inherent requirements of building an ecological civilization, are to achieve Chinese economic sustainable development of the important strategic and technical means, the two complement each other. The coordinated development of the two is the economic development model of Chinese economic transformation and climate change, and the path of sustainable development with Chinese characteristics is conducive to enhancing the comprehensive competitiveness, scientific development and realizing our development goals. Adhere to the basic national policy of resource conservation and environmental protection, resource-saving and environment-friendly society as the carrier, as soon as possible to study the development of national recycling - low carbon economy coordinated development strategy to strengthen the socio-economic development of resource output and carbon intensity Indicators constrain, guide and lead the government, enterprises, residents of the action direction and behavior. Specifically, the cycle of Chinese characteristics - low carbon road strategic orientation should include the following aspects: First, in the framework of sustainable development, the concept of recycling and low-carbon development as a resource-saving and environment-friendly society and Innovation-oriented countries, and integrate them into the concrete practice of sustainable industrialization and sustainable urbanization, and integrate related objectives into various plans and policies. Second, we must balance the short-term and long-term goals of economic development and climate protection, adopt a progressive path that is in line with national conditions and in line with the trend of world development, handle the strategic opportunities to realize the transition of heavy chemical industry stage and low carbon transformation, Fully consider the carbon emission reduction, energy security, environmental protection, synergies, reduce emission reduction costs. Thirdly, it is necessary to strengthen inter-sectoral and inter-regional synergies to attract the broad participation of all stakeholders and to bring into play the enthusiasm of all sectors of society, in particular through new modes of international cooperation and institutional innovation, and jointly promote the mode of production, consumption patterns and global resources. Asset allocation. Fourth, actively participate in the international climate system negotiations and the formulation of low-carbon rules for Chinese industrialization process for greater development.

Chinese development of circular economy low-carbon economy in which the economic environment and the United Kingdom, the United States and other developed countries are completely different. Chinese low-carbon development is the primary problem facing how to deal with the current low-carbon orientation and the current economic and social development of the relationship between. The law of economic development shows that the same size of the total economy, the same level of technology, industrial structure is different from the consumption of fossil fuels on the large gap between the corresponding carbon emissions may be far. In the three industries, the energy intensity of the secondary industry is much higher than the primary industry and tertiary industry. The next 20 years, China is basically completed the industrialization of the medium-term tasks and into the post-industrial transformation of the transitional period, to machinery, steel, petrochemical as the core of the heavy chemical industry group and to "live" for the characteristics of the automotive industry, real estate development Will continue to be a vital factor in furthering growth. Therefore, the key to speeding up structural adjustment lies in the development of both circular economy and low-carbon economy, with industrial restructuring as the focus, vigorously develop modern service industry and low-carbon agriculture.

5. Conclusion

Since Chinese recycling economy and the development of low-carbon economy is still in its infancy, the relevant data is still very small, so this paper in the circular economy and low-carbon economic development, quantitative analysis, can only select a data more readily available Simple indicators - the degree of circular economy development and low-carbon economic development - to measure the level of circular economy development and low-carbon economic development, which is obviously not comprehensive enough. In order to evaluate the level of development of circular economy and the development of low-carbon economy and measure the promotion of various measures for recycling economy and low-carbon economy, it is necessary to establish a circular economy database and a low-carbon economic database. Information for policy-making is to provide a reference. At the same time, all sectors and sectors in various regions have not yet considered the development of circular economy and the development of low-carbon economy, so the relevant case is relatively small, this paper only provides Baosteel case, the industrial park, regional recycling economy and low-carbon economy The case has yet to be investigated. Future research directions on the one hand to enrich the circular economy and low-carbon economic evaluation index system to make it more objective to reflect the actual level of development, while more case studies to validate the view of this article, and proposed more targeted and Feasibility of policy recommendations.

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