

Research on the Public Policy System of Promoting Circular Economy in China

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Abstract: Based on the latest advances in China's circular economy theory research and the current political development situation, this paper describes the theoretical research on building a circular economy political system and the enlightenment and reference of foreign circular economy political systems to China. In addition, this paper explores the circular economy policy system from multiple perspectives and comprehensively analyzes the progress of China's circular economy policy.

1. Introduction

The circular economy is an economic development model that follows the principle of "reducing resource consumption, optimizing reuse, and realizing resource utilization" and adopts various effective measures to minimize environmental costs and resource consumption. It will realize the organic unity of economic, environmental, and social benefits. The development of the circular economy is the inherent requirement of changing economic growth mode and the inevitable choice of China's economic and socially sustainable development. The development of the circular economy is essential to achieve a sustainable development strategy and building a resource-saving and environment-friendly society.

2. The Connotation of Circular Economy and Its Relationship with Related Concepts

So far, there have been many researches on the definition of circular economy, more or less involving the concept of circular economy. The research shows that the connotation of the circular economy mainly involves the interaction between humans and nature, technical mode, and economic form. However, for the economic phenomenon of circular economy, the literature from the economics perspective is rare. Currently, there are significant differences in the understanding of the circular economy in Chinese academic circles. The definition of circular economy is not yet clear. However, in China, people have formed a broad consensus on the substance of "resources-products-renewable resources" involved in material feedback. The circular economy is a new economic model based on sustainable development theory, ecological principle, system theory, information science, and control theory. Implementing a circular economy is essential to rationally plan economic activities and realize the sustainable development of the ecological economy on the premise of following the laws of ecology and economy. Between enterprises and industries, materials, energy, and information are interrelated and shared, showing a close relationship.

To promote the development of the circular economy, China has issued environmental protection laws, regulations, and standards and also issued a series of preferential policies to restrict and encourage enterprises to carry out resource conservation and three wastes (waste gas, waste water, and waste residues) utilization. At the same time, clean production has been actively advocated since 1993. Now, the state further promotes the circular economy. In many local government documents, the objectives and requirements for building circular cities or industrial parks have been clearly defined. In fact, these are China's continuous exploration and practice to achieve sustainable development. China has the primary conditions to develop a circular economy. In the future, a circular economy will realize the sustainable development of China's social economy.

3. Problems in the Development of Circular Economy

3.1 Lack of Cognition

People do not fully realize the far-reaching significance of promoting the circular economy. A circular economy requires that enterprises' production, consumption, and waste disposal should be coordinated with the environment rather than simply pursuing economic benefits or profit maximization. First, we need to deeply recognize China's severe resource and environmental situation and the urgency and importance of developing a circular economy, which we must strengthen. For making plans in some places, the development of a circular economy and pollution control are opposed to one size fits all, or the economic benefits are valued, and the environmental benefits are ignored. Second, our cognition and attention need to be improved because of the interaction and internal contradictions between economic development and the environment. In fact, regardless of cost, any waste is likely to be converted into valuable raw materials; that is to say, "waste into raw materials" needs to be invested. Currently, in promoting a circular economy, the state needs more scientific and systematic theoretical guidance and a policy system. The relationship between some industrial chains is uncertain. For example, mad cow disease is closely related to improperly raised protein cattle. Therefore, it is an urgent problem to explore the inner meaning, theoretical basis, and essential characteristics of the circular economy development model [1].

3.2 Lack of Overall Planning and Macro Guidance

At present, China is still in its infancy in promoting the development of a circular economy and has yet to formulate a comprehensive plan and promotion plan. Moreover, the guidance for developing a circular economy remains to be strengthened. The theoretical research on sustainable development is not deep and systematic. Even some people think that the circular economy is to treat abandoned items as waste, which needs to be corrected and consistent with national conditions. Due to the need for a comprehensive statistical and accounting system for resource utilization, developing indicators that comprehensively reflect the resource productivity of the circular economy is facing enormous challenges. Therefore, the government must start from the source and establish a scientific and practical evaluation index system of the circular economy. In promoting the development model of circular economy, it is urgent to do overall planning for resource conservation and comprehensive utilization and environmental protection industry to establish a complete system.

3.3 Imperfect Legal System

The country has not yet established a legal system to develop a circular economy. There is room for improvement in the quality of current legislation. Currently, circular economy laws and regulations mainly involve administrative and departmental regulations. There are some problems in the development of the circular economy in China, such as over-general provisions and lack of operability, which need further clarification and improvement. Many existing normative documents are too abstract, difficult to operate, and have low practicality. In addition, there are deficiencies in the coordination and supporting measures between the relevant laws; there needs to be more mandatory standards and technical regulations, which must be addressed. The existing environmental protection laws are mainly based on administrative management. In addition, there are no special provisions for environmental law enforcement and supervision [2].

3.4 Lack of Effective Incentive Policy System

An essential basis for promoting resource recovery and recycling is to develop a circular economy, which requires establishing an extended producer responsibility system, the classification and recycling of renewable resources, and a cost mechanism for recycling waste materials that are difficult to recycle. These areas are market failures and need government macro-control and policy encouragement. Developed countries have formed a government-led recycling system by formulating laws and industrial policies. However, China has not established a set of practical incentive policies and recycling mechanisms and lacks a cost control mechanism. The operational capacity of the policy is not yet complete, the relationship with relevant legal regulations is not tight, the implementation

cost is high, and there is a lack of sufficient basis for implementation.

4. Establish and Perfect the Policy Mechanism of China's Circular Economy

4.1 Investment Policy

Currently, the Chinese government's financial investment in developing a circular economy is low, and the design of the financial subsidy system is not reasonable. Developed countries have formed a government-led recycling system by formulating sound laws and industrial policies. During the "10th Five-Year Plan" period, Chinese investment in environmental protection had not yet reached the level of developed countries in the 1970s. To ensure the rational allocation of wastewater funds, the financial and environmental protection departments at all levels need to increase capital investment in pollution prevention and control projects that meet the needs of enterprises to promote the development of a circular economy. Governments should actively cooperate with relevant departments to carry out relevant work and create an environment conducive to the development of the circular economy. In implementing fiscal policy, it is necessary to base on national conditions, adhere to the principle of "focusing on key points and concentrating financial resources", and prioritize allocating funds to support the development of a circular economy to regions and industries with comparative advantages. Large financial institutions should provide financial support to key projects to promote the development of the circular economy. Set up special loans in the environmental protection industry. Public services, such as pollution control, waste recycling, research and development of reuse technologies, should be supported by financial subsidies and medium and long-term loans with low-interest rates [3].

4.2 Tax Policy

Currently, the Chinese government does not have a systematic set of environmental protection tax policies in the process of promoting the circular economy. And the absence of a special environmental protection tax has led to imperfections in the regulation of ecological and environmental taxes. A green tax system is imperative in today's increasingly resource and energy-constrained world. In order to protect the environment, the government should take more active measures, such as increasing the collection of environmental protection taxes, which include but are not limited to various taxes such as pollution taxes, raw material taxes, resource taxes, and product taxes. And withdraw from the fuel tax and improve the consumption tax system to meet the current economic situation. At the same time, a system of laws and regulations related to environmental protection should be developed and implemented as soon as possible. Strengthen the role of resource and consumption tax in environmental protection to promote sustainable development and introduce new taxes such as environmental protection and resource tax to increase environmental tax revenue. Optimize the tax incentives for the comprehensive utilization of resources, adjust and improve the tax policies that help promote the recycling of renewable resources, and accelerate the establishment of a charging system for the recycling and treatment of bulk waste resources. Encourage enterprises to use advanced technology to recycle waste materials and harmless waste disposal. Enterprises should enjoy tax incentives and government subsidies to reduce their losses or small profits when recycling used and waste items and harmless treatment of pollutants.

4.3 Price Policy

At present, the Chinese government does not have a systematic set of environmental tax policies that will promote the circular economy. It is true that in developed Western countries, pricing policy and circular economy are closely related. Because China has historically had a planned economic system, its price structure has been irrational for a long time. Establishing a green tax system in today's increasingly resource- and energy-constrained world is imperative. The distorted price structure, with high prices for commodities, low prices for raw materials, and no prices for resources, leads to inefficient and wasteful use. This is not only conducive to developing a circular economy but also hinders improving the market economic system. In order to promote the development of a circular

economy, the government should adjust the price of resources, environment, and commodities for the items and amount of financial subsidies and use price leverage to promote the prosperity of the circular economy. On that basis, it is necessary to continue to improve the current price management system so that the market mechanism plays a decisive role. The government needs to adjust the price relationship between resource products and end products to optimize resource prices and gradually establish a pricing system that can reflect the supply and demand of resource products. Improve the system of paid use of resources and implement the system of resource value compensation. In order to promote rational development, economical use, efficient utilization, and effective protection of resources, the price policies of water, heat, electricity, and natural gas should be adjusted effectively. Then further improve the resource tax system and increase the proportion of paid resource occupation. Support establishing an open market to facilitate the rational circulation and utilization of various resources. By optimizing the allocation of resources, the overall quality of the entire nation will be improved, and China's ability to compete in the international arena will be enhanced. To effectively promote the use of scarce resources by establishing a market mechanism that clarifies the ownership of the resources and brings them into the market like other goods to ensure that their prices accurately reflect their full social costs.

4.4 Charging Policies

Currently, China's environmental protection charging policy is unreasonable, leading to insufficient investment in recycling and waste treatment, hindering the further development of the circular economy. This is because, in Western developed countries, there is a close relationship between price policy and circular economy. To this end, the government should increase charges for sewage discharge, water pollution, air pollution, industrial waste, urban domestic waste, and noise pollution to protect environmental quality and human health. We should actively explore ways to collect mineral resource compensation fees based on the number of resources and further expand the collection scope of water resources fees. It is appropriate to raise the levy standard, particularly the priority to raise the urban sewage treatment fee standard simultaneously with the full levy of municipal domestic waste disposal fees. The current environmental taxation policy should be reformed, pollution treatment costs should be included in the environmental protection tax, the "fee-based taxation" system should be implemented, and the emission rights trading system should be gradually abolished. Based on optimizing existing fees and funding channels, establishing and improving compensation mechanisms for the ecological restoration of enterprises should be actively explored to promote the sustainable development of the ecological environment. Therefore, it is suggested that the state should formulate relevant rules or regulations to clarify the responsibility of enterprises for ecological restoration. In addition, implementing the government's policy of prioritizing the procurement of green products is vital in promoting and guiding the development of the circular economy.

5. Conclusion

Although China has achieved a certain foundation in the field of circular economy, there are still some practical difficulties and obstacles in promoting the development of circular economy. Therefore, an in-depth study is needed to provide specific ideas, programs, and institutional safeguards for formulating laws, regulations, and policy measures to promote the development of the circular economy.

References

- [1] Zhang Jiaoyu, Longfeng, Ge Chazhong, Duan Xianming. The Progress of Circular Economy Practice and Proposals[J]. Environmental Protection, 2021,49(05):29-33.
- [2] Chen Qide. Continue to promote circular economy——Lei Huanli, President of Covestro China, talks about the company's development strategy [J]. Shanghai Chemical Industry, 2020,45(06):69-70.

[3] Yu X. Coal mining and environmental development in southwest China[J]. Environmental Development, 2017, 21: 77-86.