

Promotion and application of circular economy models

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Abstract: *Circular economy is a sustainable economic model that emerged in the context of limited resources and increasingly prominent environmental problems. The traditional economic model leads to the rapid consumption of resources and the production of a large amount of waste, and the application of the circular economy model is particularly important in this context. In this paper, we systematically review the research results on the theoretical basis, implementation strategy and effect evaluation of circular economy models; through case studies, we study in-depth the implemented circular economy models, including their design, implementation process and effect evaluation, in order to gain practical experience and inspiration; and finally, we put forward the challenges and perspectives of circular economy models.*

Keywords: *circular economy model, resource utilization, environmentally friendly*

1. Introduction

1.1. Background and importance of the study

The circular economy is an economic model for sustainable development that has emerged against the background of limited resources and increasingly prominent environmental problems. The traditional linear economic model is based on the principle of "extract, make, use and discard", which has led to a great deal of wastage of resources and damage to the environment^[1]. In order to solve these serious problems, circular economy proposes a new economic model that minimizes resource consumption and environmental pollution through recycling, reuse and remanufacturing. However, although the concept of circular economy has been widely advocated, the specific methods and effects of implementation still face many challenges that need to be thoroughly studied and explored.

The study of circular economy modeling has important economic, environmental and social significance. Firstly, the implementation of circular economy can promote the effective utilization and saving of resources, thus reducing production costs, improving product competitiveness and promoting economic development. Secondly, circular economy can reduce waste emissions and resource consumption, which can help improve environmental quality and ecosystem health. In addition, circular economy can create employment opportunities and promote sustainable economic and social development. Therefore, the study of circular economy modeling is of great significance in solving the current global resource scarcity and environmental problems.

The background and importance of studying the circular economy model lies in understanding the principles and applications of this economic model in depth, finding practical methods and strategies to promote the implementation and development of the circular economy, and contributing to sustainable development.

1.2. Purpose and research questions

The purpose of this thesis is to explore the principles, applications and implementation strategies of the circular economy model, as well as to assess its contribution to sustainable development. Through the study of circular economy modeling, it aims to provide concrete theoretical basis and practical experience to promote the implementation and development of circular economy, and to provide effective solutions to the problems of resource waste and environmental pollution. This thesis will explore the following research questions:

- ① What is the definition and basic principle of the circular economy model?

② What are the different types of circular economy models available and what are their principles and characteristics?

③ What are the implementation strategies and methods of circular economy models? In addition, what are the supporting measures and implementation methods at the policy level, enterprise level and social participation?

④ What are the implementation processes, effects and potential problems in each of the existing case studies of circular economy models?

⑤ What are the challenges faced in the implementation of circular economy models? What are the barriers in terms of policy, technology, economy and culture?

⑥ What are the future trends and prospects of circular economy modeling?

By answering these research questions, this thesis will analyze and discuss the concepts, principles and applications of circular economy models in depth, provide guidance and suggestions for the implementation of circular economy models, and provide directions for the development of future research and practice.

1.3. Research methodology and framework

This thesis will adopt a comprehensive research method, including literature review and case analysis. First, systematically sort out the research results on the theoretical basis, implementation strategy and effect assessment of circular economy models. Secondly, through case studies, in-depth research will be conducted on implemented circular economy models, including their design, implementation process and effect evaluation, in order to obtain practical experience and inspiration.

The research framework of this thesis will be divided into the following parts:

① Concepts and Principles of Circular Economy Models: by elaborating the definition and basic principles of circular economy models, the research object and research scope will be clarified.

② Types and Characteristics of Circular Economy Models: Classify and describe different types of circular economy models, analyze their implementation process and characteristics, and provide a basis for subsequent research.

③ Implementation strategies and methods of circular economy models: to explore the implementation strategies and methods of circular economy models, including support measures and implementation methods at the policy level, enterprise level and social participation.

④ Case studies on circular economy models: Through case studies on implemented circular economy models, analyze the implementation process, effects and potential problems of each case, and summarize practical experiences and inspirations.

⑤ Challenges and Development of Circular Economy Models: analyze the challenges faced during the implementation of circular economy models, including policy, technological, economic and cultural barriers, and explore the future development trends and prospects of circular economy models.

⑥ Conclusions and Recommendations: Based on the comprehensive analysis, conclusions and recommendations on the implementation and development of the circular economy model are presented to provide relevant policy and practice recommendations for the government, enterprises and the society.

Through the above research methodology and framework, this thesis will comprehensively and deeply study the circular economy model, exploring its effects and potentials, as well as the directions and strategies for future development from both theoretical and practical perspectives.

2. Concepts and principles of a circular economy

2.1. Definition and basic concepts of circular economy

A circular economy is an economic model that aims to reduce resource consumption and waste generation. It emphasizes the integration of resource use and waste generation into a cyclical system, and the recycling and sustainable use of resources through their recovery, reuse and reproduction.

Some of the basic concepts of circular economy are as follows.

Resource Recycling: A circular economy is committed to maximizing the recycling of resources and reducing their waste and consumption. It encourages the extension of the life and value of resources through recycling, reuse and reproduction, and the reduction of emissions and depletion of resources.

Closed-loop system: The circular economy integrates production, consumption and waste disposal into a closed-loop system, emphasizing the complete cycle of a product's life cycle. Waste and emissions are regarded as raw materials for reuse and reproduction of resources, thus realizing circular flow and effective utilization of resources.

Transformational Innovation: The circular economy encourages the improvement of resource utilization efficiency through innovative product design, production processes and service models. It advocates a shift from a linear to a circular economic model to optimize and transform the value chain.

Collaboration: The circular economy requires collaboration among various stakeholders, including governments, businesses, non-profit organizations and consumers. By sharing information, resources and technology, the circular economy model can be effectively implemented and promoted.

Environmentally friendly: A circular economy focuses on harmonizing economic growth with environmental protection. It reduces pressure on the environment by reducing resource consumption and waste emissions, realizing a win-win situation for both economic and ecological benefits.

2.2. Principles and fundamentals of a circular economy

Principle of resource closure: The circular economy pursues the realization of closed-loop recycling of resources, i.e., the use of wastes and emissions as raw materials for the reuse of resources and reproduction. Through recycling and reuse, waste is transformed into new resources, realizing the circular flow and maximum utilization of resources^[2].

Principle of circular design: Circular economy focuses on the consideration of the whole life cycle of products, emphasizing the reuse and reproduction of waste at the product design and production stage. By optimizing product design and adopting renewable materials and detachable components, product life and value can be extended and resource consumption and waste generation can be reduced.

Principle of value chain synergy: The circular economy emphasizes synergy and cooperation among various links, including the supply chain, product design, production, distribution and waste management. By sharing information, resources and technology, the optimization and synergy of each link can be achieved, promoting the implementation and expansion of the circular economy model.

Circular Innovation Principle: The circular economy encourages innovative technologies, business models and financial mechanisms to improve resource utilization efficiency and reduce environmental impacts. It promotes the transformation and innovation of the circular economy model by promoting the R&D and application of green technologies, developing the circular economy industry chain, and strengthening the support of regulatory and incentive policies.

Principle of eco-efficiency: Circular economy pursues the coordination of economic development and environmental protection. By reducing resource consumption and waste emissions, it reduces the pressure on the environment and realizes a win-win situation for both economic and ecological benefits. Circular economy can reduce the over-exploitation of natural resources and the emission of pollutants, and enhance the stability and sustainable development of the ecosystem.

These principles and fundamentals provide guidance and advocacy for the implementation of the circular economy model, aiming to realize the effective use of resources and sustainable development of the environment, and to contribute to sustainable economic growth and sustainable development of society.

3. Classification and theoretical foundations of circular economy models

3.1. Different types of circular economy models

Circular economy models can be classified into various types based on different characteristics and application areas. The following are a few common circular economy models^[3].

Raw material recycling model: This model focuses on reducing resource consumption and waste

generation by recycling and reusing discarded raw materials. For example, recycling of resources is achieved by recovering materials such as waste metals, plastics, paper, etc. and reprocessing them into new products.

Energy recycling model: This model focuses on the recycling of energy resources, including the reduction of energy waste and carbon emissions through the use of renewable energy, energy recycling and energy storage technologies.

Agricultural recycling model: This model focuses on the circular economy in the agricultural sector in order to minimize the consumption of energy and water resources in the agricultural production process, and to convert agricultural waste into agricultural fertilizers or other valued products through effective means of waste treatment.

Urban Circular Economy Model: This model is dedicated to the recycling of urban resources and waste management, including the separation, recycling and reuse of waste, and the efficient use of urban energy to promote the sustainable development of cities.

Industrial Park Circular Economy Model: This model realizes the recycling of material resources and energy saving in industrial parks through cross-enterprise collaboration and resource sharing. This model realizes the optimal utilization of resources through the synergistic effect of industry chain breaking and recycling.

The above are just some common types of circular economy models, in fact, circular economy can also be combined with the characteristics and needs of different fields to form more specific and targeted models. The design and implementation of circular economy models need to be customized according to specific environmental, resource and technological conditions in order to achieve the best economic and environmental benefits.

3.2. Principles and applications of commonly used circular economy models

① Linear Model

Principle: The linear model is the traditional economic model, also known as the "purchase-production-consumption-waste" model, in which resources are used to produce a product, which is then consumed and becomes waste. This model focuses primarily on production and consumption and ignores the finite nature of resources and the disposal of waste.

Applications: Linear models are often used in traditional economic systems where consumption of resources and emission of waste are considered as by-products of economic growth. However, with the increasing scarcity of resources and environmental problems, linear models are no longer adapted to the needs of sustainable development.

② Closed loop model:

Principle: The closed loop model is a typical circular economy model that emphasizes the recycling of resources and the reuse of waste. The model realizes recycling of resources and reduction of waste emissions by recovering and reprocessing wastes and transforming them into new products or raw materials.

Applications: The Closed Loop Model is applicable to a variety of industries and sectors, including the recycling of raw materials, the reprocessing of wastes, and the recovery and utilization of energy. This model promotes the maximization of resource utilization and minimization of waste emission, which helps to reduce resource waste and environmental pollution.

③ Open cycle model:

Principle: The open-cycle model emphasizes the circular flow of resources and synergy between different industries and regions. In this model, resources and wastes can be migrated and transformed through supply chain cooperation, industrial park sharing and cross-border cooperation.

Application: The open cycle model can be applied in industrial parks, urban economy and regional economy. Through the collaborative use of resources and circular flow, the overall resource utilization efficiency can be improved, environmental pollution can be reduced, and sustainable economic development can be promoted.

These circular economy models can be used in combination in practice and adapted and customized

to the characteristics of different industries and regions. Their common objectives are to promote resource recycling, reduce waste generation, improve resource efficiency and achieve sustainable economic development^[4].

4. Case study on circular economy modelling

4.1. In-depth analysis of economic modelling cases

①Sweden's circular economy model

Sweden has been known for its advanced model for promoting sustainable development and circular economy. Sweden's circular economy model recycles resources and reduces waste emissions through innovation and policy measures^[5].

The Swedish government has introduced a range of incentives to encourage businesses and individuals to adopt sustainable practices. For example, for the development and application of recycling and waste reuse technologies, the Government provides financial support and tax breaks. In addition, the Government has established a circular economy advisory body to provide advice and support to businesses and individuals. Sweden's circular economy model has been successful in a number of areas. For example, they have taken measures to upgrade equipment and improve production processes in the energy sector to reduce energy consumption and carbon emissions. They have also encouraged waste separation and recycling to maximize the use of waste resources. In addition, they have promoted the development of renewable energy and electric transportation to reduce dependence on limited resources.

②The Netherlands' model of circular economy in agriculture

The Netherlands is a large agricultural country and they have adopted a series of measures and innovations to realize a circular economy in agriculture. They are committed to reducing the waste and environmental pollution generated by agriculture and increasing the efficient use of agricultural resources.

The Dutch model of circular economy in agriculture includes several aspects. First, they encourage farmers to adopt ecological agriculture and organic farming to reduce the use of pesticides and chemical fertilizers. They also encourage farmers to adopt precision farming techniques, such as remote sensing and smart irrigation, to increase the efficiency of agricultural production. The Dutch government also promotes the effective treatment and utilization of agricultural waste. They encourage farmers to convert waste into organic fertilizers while promoting the recycling of agricultural by-products. In addition, they support scientific research and technological innovation in agriculture to further reduce resource consumption and environmental pollution.

These two cases provide practices of circular economy modeling in different fields, and they have both achieved remarkable results. By analyzing these models in depth, the application of circular economy in different industries can be explored and key success factors and challenges can be understood.

4.2. Evaluation cases

①Sweden's Circular Economy Model

Implementation process

In Sweden, the process of promoting a circular economy is a long-term endeavor and a process of continuous improvement. The government has developed a range of regulations and policies to encourage businesses and individuals to adopt sustainable development and circular economy practices. The government has established specialized institutions and advisory bodies in the field of circular economy to provide support and guidance to businesses and individuals. In addition, the government provides financial support and tax breaks to facilitate circular economy projects.

Effectiveness

Sweden's circular economy model has achieved significant results in a number of areas. For example, in the energy sector, Sweden has succeeded in reducing carbon emissions by promoting renewable energy and reducing energy consumption. They have also effectively reduced waste emissions by improving waste segregation and recycling systems. The Swedish Government has also encouraged enterprises to convert waste into resources, promoting waste reuse and recycling. The implementation of the circular economy model has improved resource efficiency and environmental sustainability in several ways.

Potential problems

Despite the remarkable results of the circular economy model in Sweden, there are still some potential problems. One such issue is cost. Promoting a circular economy requires significant investment in capital and resources, including technology upgrades and infrastructure development. This may put financial pressure on some enterprises and organizations.

Another issue is the uncertainty of market demand. A circular economy relies on the recycling and reuse of resources, but if there is insufficient market demand for recycled products, this may lead to problems of resource accumulation and disposal. Therefore, in order to keep the circular economy sustainable, it is necessary to mobilize the support of market demand and consumer awareness.

②The Dutch model of a circular economy in agriculture

Implementation Process

The Dutch model of circular economy in agriculture is realized through policy and technological innovation. The government has developed a series of regulations and measures to encourage farmers to adopt sustainable agricultural practices, such as organic farming and precision farming techniques. The government also provides financial support and technical guidance to help farmers improve their agricultural production management.

Effectiveness

The Dutch model of circular economy in agriculture has achieved remarkable results. By promoting organic farming and the efficient use of agricultural resources, the Netherlands has successfully reduced the use of chemical fertilizers and pesticides and improved the quality and safety of agricultural products. They had also encouraged farmers to convert agricultural waste into organic fertilizers, improving soil quality and crop productivity. The Dutch model of a circular economy in agriculture has also helped reduce environmental pollution and water waste. By adopting precision farming techniques, Dutch farmers are able to use water efficiently and reduce emissions from polluters.

Potential Problems

Despite the remarkable results of the Dutch circular economy model for agriculture, there are still some potential problems. One such issue is the challenge of technology transfer. While a number of agricultural innovations and technologies have been applied in the Netherlands, there may be some challenges in transferring these technologies to other countries and regions. Differences in the agricultural environment, resource availability and farmers' awareness in different regions may lead to difficulties in technology transfer.

Another issue is the challenge of social acceptance. Promoting a circular economy in agriculture requires the joint efforts of farmers, governments and consumers. Therefore, there is a need to increase social awareness and acceptance of sustainable agriculture, as well as to strengthen policy support and financial investment.

The circular economy models of Sweden and the Netherlands have achieved remarkable results in promoting sustainable development. However, in response to the issues of cost and market demand, as well as the challenges of technology transfer and social acceptance, further research and efforts are needed to promote the implementation and development of the circular economy.

5. Strategies and methods of implementation of the circular economy model

5.1. Implementation strategies and support measures at the policy level

At the policy level, the implementation of a circular economy model requires the development of a series of strategies and support measures to promote sustainable development and resource recycling^[6].

Regulation and policy formulation: The government can formulate relevant regulations and policies to promote the practice of circular economy. For example, the government can require enterprises to segregate and recycle waste in order to reduce waste emissions. The government can also formulate regulations to require enterprises to consider recyclability and reusability at the product design stage.

Economic incentives: Governments can provide economic incentives to encourage businesses and individuals to adopt circular economy models. For example, the government can provide tax breaks or incentives to encourage businesses to recycle resources and reuse waste. In addition, governments can

provide loans and subsidies to support circular economy projects.

Market and Procurement Policies: Governments can promote sustainable procurement and green supply chain management to facilitate the practice of circular economy. The government can provide market demand and economic support to enterprises through procurement of renewable products and resource recycling services.

Technology innovation and R&D support: Governments can invest in circular economy technology innovation and R&D to promote the development and diffusion of innovative solutions. Governments can provide financial support, research collaboration and knowledge sharing to accelerate the application and diffusion of technologies.

Education and publicity: The government can raise public awareness and consciousness of the circular economy through education and publicity campaigns. The government can launch publicity campaigns to introduce the concept, advantages and practical examples of circular economy to enterprises and individuals. In addition, the government can enhance training in the education system and education on resource recycling.

These policy-level implementation strategies and support measures can be coordinated and collaborated among different levels of government and relevant stakeholders. Through policy-level support and promotion, important guidance and impetus can be provided for the implementation of circular economy models.

5.2. Methods and strategies for implementing the circular economy at the enterprise level

Enterprises can adopt the following methods and strategies in implementing a circular economy.

Product design and innovation: Emphasize the recyclability and reusability of product design. Reduce resource consumption and waste emissions by considering the life cycle of products, selecting sustainable materials, and designing product structures that are easy to disassemble and recycle.

Waste Management and Recycling: Improve waste management and recycling systems to ensure maximum disposal of waste. Waste can be converted into resources by establishing efficient waste segregation and recycling systems. Companies can work with waste management companies to ensure proper treatment and reuse of waste.

Optimization of production processes: Optimize production processes to reduce the use of resources and energy, and reduce waste and emissions. Adopt advanced production technologies and manufacturing methods to achieve efficient use of resources and energy savings.

Circular supply chain management: Work with suppliers and partners to establish a circular supply chain. Ensure sustainable procurement and reuse of raw materials, optimize logistics and transportation systems, and reduce carbon emissions and resource consumption.

Product remanufacturing and circular economy services: Provide product remanufacturing and circular economy services to extend product life and reduce resource consumption. Provide customers with high-quality renewable products and services by recycling and reusing parts.

Consumer education and cooperation: Work with consumers to increase their knowledge and awareness of the circular economy. Provide consumer education and training to encourage them to choose renewable products and services and promote sustainable consumption.

Metrics and Reporting: Establish metrics and reporting mechanisms to track enterprises' circular economy practices and effectiveness. Through regular reporting and evaluation, assess the circular economy performance of enterprises and identify room and opportunities for improvement.

By implementing these methods and strategies, enterprises can effectively practice circular economy, reduce resource consumption and environmental impacts, and promote sustainable development. At the same time, the implementation of circular economy can also bring economic benefits to enterprises and improve their competitiveness and corporate image^[7].

5.3. Importance and methods of social participation and sharing

Social participation and sharing play a crucial role in the implementation of the circular economy model. Social participation can promote public awareness and understanding of the circular economy and form a broad consensus, as well as effectively gather social forces to promote the practice of the

circular economy. The following are the importance and methods of social participation and sharing.

Importance

People's opinions and feedback: Social participation can provide governments and enterprises with people's opinions and feedback, helping them to better understand the public's expectations and needs for a circular economy. Doing so can help develop policies and measures that are more responsive to the interests and needs of society.

Knowledge and expertise: Social participation can draw on the knowledge and expertise of the public and the community to provide valuable inputs and suggestions for the development and implementation of circular economy models. Knowledge sharing and innovation can be fostered through activities such as conducting social research and organizing seminars and workshops.

Resources and support: Social participation can mobilize social resources and support by providing financial, technical and human resources to promote the implementation of circular economy projects. For example, social organizations and civic groups can provide financial support and volunteer participation to strengthen social quantitative support.

Methods

Education and publicity: Enhance public awareness and understanding of the circular economy through educational activities and publicity efforts. Publicity events, exhibitions and salons can be organized, and media and social platforms can be used to disseminate the concept and practice of circular economy.

Community engagement: Establish demonstration projects on circular economy through liaison and cooperation with the community. Projects on waste recycling and reuse, as well as the promotion of circular economy lifestyles and purchasing choices, can be implemented through collaboration with the community.

Stakeholder Dialogue: Emphasize communication and dialogue with stakeholders such as government, business, and NGOs. Organize meetings, seminars and workshops with multi-party participation to collect views and suggestions from all parties to forge consensus and cooperation.

Social assessment and monitoring: Establish a social assessment and monitoring mechanism to track the social benefits and impacts of circular economy projects. Through surveys, interviews and evaluation reports, we can understand the public's views and evaluations of the circular economy projects, so as to adjust and improve our work in a timely manner.

The importance of social participation and sharing lies in the cohesion of social forces to realize the comprehensive development and sustainability of the circular economy model. Through extensive social participation and sharing, it can ensure that the concept and practice of circular economy are in line with the values and needs of the society, and bring more opportunities and well-being for socio-economic development.

Challenges and perspectives of circular economy modelling

5.4. Challenges: policy, technical, economic and cultural barriers

The implementation of circular economy models faces challenges and barriers from a number of perspectives: policy, technological, economic and cultural^[8].

Policy barriers: There is a lack of a clear and coherent policy framework for the circular economy, and the policy system is not well developed, specific and targeted. Insufficient government regulations and policy support for the circular economy, as well as a lack of incentives and constraints, may lead to inactive or unsustainable practice of the circular economy by enterprises.

Technological barriers: The implementation of the circular economy model requires the support of advanced technologies and equipment, including waste classification and recycling technologies, remanufacturing technologies, resource recovery and utilization technologies, and so on. However, certain key technologies are still at the R&D and testing stage, with limited technological maturity and commercialization, and high investment costs, limiting the promotion and application of circular economy.

Economic barriers: The circular economy model requires companies to shift their focus from a linear to a circular economy model, which requires certain investment and operating costs. This can be

challenging for businesses, leading some to hesitate or worry about insufficient economic returns. For investors in circular economy models, the balance between risk and reward is also a key consideration.

Cultural barriers: A circular economy model requires a shift from the traditional "buy-use-throw-away" consumption model to a "buy-use-recycle-reuse" model. This requires a fundamental shift in consumer awareness and behavior. Some consumers may lack awareness of the circular economy or have doubts about the reliability and quality of recycled and reused products, limiting the promotion and acceptance of the circular economy model.

To address these challenges and barriers, concerted efforts by governments, businesses and society are needed:

Governments can formulate clear and incentivized circular economy policies to promote the implementation of the circular economy. Governments can provide incentives such as financial support, tax breaks, and subsidies for technology research and development to promote technological innovation and investment.

Enterprises can improve their technology and equipment for the circular economy by actively seeking technological cooperation and innovation. Meanwhile, enterprises' investment and efforts in the entire product life cycle, including improvement and optimization in product design, supply chain management, and waste treatment, are important initiatives to promote the implementation of the circular economy model.

Society can raise public awareness and consciousness of the circular economy through publicity and education. At the same time, the public can also consider choosing renewable and recyclable products when consuming to support and promote the development of the circular economy model.

In summary, solving the challenges and obstacles facing the circular economy model requires the efforts of all parties to form a trinity of government, enterprise and society. Only through synergistic cooperation and joint promotion of the circular economy can sustainable resource utilization and environmental protection be achieved.

5.5. Look ahead

The future of circular economy modeling holds great promise and potential.

Technological innovation and digital transformation: As technology continues to advance, circular economy models will benefit from advanced technology and digital transformation. For example, technologies such as the Internet of Things (IoT), big data analytics and artificial intelligence can enable fine-grained management and optimization of resources, and improve resource efficiency and waste reuse.

Closed-loop supply chain and ecosystem cooperation: The implementation of the circular economy requires the establishment of a closed-loop supply chain to realize the recycling and reuse of waste. In the future, cooperation among all links in the supply chain will be further strengthened, including the selection of raw materials, improvement of product design, and coordination of waste recovery and recycling. At the same time, cooperation among enterprises, industries and regions will be further deepened to promote the development of circular economy models.

Financial and investment support: In the future, the circular economy model will attract more attention and support from financial institutions and investors. Financial institutions can provide support in terms of capital, insurance and financing to promote the landing and development of circular economy projects. At the same time, investors will pay more attention to the environmental protection and sustainable operation of enterprises, promoting the transformation and application of the circular economy model.

Transformation of cultural and consumer attitudes: The implementation of the circular economy model requires a transformation of social culture and consumer attitudes. In the future, as public awareness of environmental protection and sustainable development increases, more consumers will begin to adopt a circular economy approach and mindset in favor of renewable and recyclable products and services. This will further drive business transformation and manufacturers to change their product designs to achieve more environmentally friendly and sustainable production and consumption practices.

Policy support and international cooperation: Government support and promotion of circular economy modeling is crucial. In the future, governments will further improve the regulatory and policy

framework for the circular economy and provide incentives and policy support to promote the circular economy. Meanwhile, international cooperation will also become an important direction for the development of circular economy modeling, where countries can share experiences and cooperate to address global resource and environmental challenges.

Overall, the future development prospect of circular economy model is very broad. Through technological innovation, supply chain cooperation, financial support, cultural change and policy promotion, the circular economy model will play a greater role in resource utilization and environmental protection and achieve sustainable economic development. At the same time, the implementation of the circular economy model will also create more employment opportunities and economic benefits for the society, and provide better protection for people's life and future!

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