

## **Research on the Investment Performance of Corporate Green Finance under the Dual Carbon Targets**

### **-- Taking China Energy Conservation and Environmental Protection Company as an Example**

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#### **Abstract**

The report of the Twentieth Party Congress emphasized the importance of promoting the clean, low-carbon and efficient use of energy in order to achieve the dual-carbon goal. In order to accelerate the formation of industrial structures, modes of production, lifestyles and spatial patterns that conserve resources and protect the environment, green and low-carbon transformation has become an important task. Solving ecological and environmental problems is crucial to human health, survival and sustainable development. Therefore, there is an urgent need for countries around the world to find green development solutions that balance economic and environmental issues. China attaches great importance to the issue of climate change and actively participates in global climate governance. China is committed to striving to reach peak carbon emissions by 2030 and to achieve carbon neutrality by 2060. Guided by the dual-carbon target strategy, China is entering a high-quality development phase of low-carbon economic transformation. In this context, green finance has become an important tool to support the development of green and low-carbon projects and prevent environmental and climate financial risks. It is of great significance to study the role and mechanism of green financial bond issuance in boosting the realization of the dual-carbon goal, as well as the corporate performance it brings. This project will take the issuance of green financial bonds by enterprises as an entry point to study its role, mechanism and corporate performance in boosting the realization of dual-carbon goals. In the theoretical part, we put forward the basic research hypothesis that green finance contributes to the realization of the dual-carbon goal. Taking into account the practice situation of green finance in China and the existing theoretical research foundation, we will propose the research direction of green financial bond issuance in helping to realize the dual-carbon goal through the study of existing literature. In the case study section, we select China Energy Conservation and Environmental Protection Group Co., Ltd. as the research object, combine the research hypotheses proposed in the theoretical section, and analyze the investment direction of the funds raised by the company's issuance of green bonds to study the path of how green finance can help promote the realization of the dual-carbon goal.

#### **Keywords**

Green Bonds; Dual Carbon Targets; China Energy Conservation and Environmental Protection Company.

## 1. Introduction

In recent years, as climate change has become increasingly severe, the promotion of green finance on a global scale has become an important issue of common concern for all countries. Against the background of the dual-carbon target proposed by the Chinese government, green finance is of great significance in promoting the sustainable development of enterprises and realizing low-carbon transformation. Therefore, an in-depth study of the investment performance of enterprises issuing green bonds under the dual-carbon target is of great value in understanding the effect of green finance in practice and providing guidance for future decision-making.

Taking China Energy Conservation and Environmental Protection Corporation (CECEPC) as an example, this paper aims to explore the investment performance of this enterprise in promoting the realization of the dual-carbon goal by issuing green bonds. As a leading energy-saving and environmental protection enterprise, China Energy Conservation and Environmental Protection Corporation (CECEPC) deserves an in-depth study of its investment and practical experience in the fields of low-carbon technologies and clean energy. Through a case study of its green bond program, we will assess the impact of these investments on the company's sustainability, environmental benefits, and financial performance.

Through this in-depth project, we will provide research and policy recommendations on green finance investments for corporations, policymakers, and investors. It is hoped that the results of this paper will promote more enterprises to actively participate in the field of green finance and jointly contribute to the realization of the dual-carbon goal and the building of a sustainable future.

## 2. Background and Significance of the Project Study

### 2.1. Background of the Study

As a major contributor to global economic development and carbon dioxide emissions, China plays a crucial role in promoting global green and low-carbon development. Whether China can take effective environmental and climate governance measures will play a decisive role in the process and effectiveness of global green and low-carbon development. At present, the global ecological environment is deteriorating and the problem of climate change is further aggravated, and responding to these challenges has become an urgent task for all countries.

Green finance, as a new governance model that combines economic and environmental benefits, is increasingly being emphasized, applied and promoted, and has become a powerful signal for countries to actively participate in green and low-carbon transformation. China's performance in this regard is particularly outstanding.

Under the overall planning of the "1+N" policy system of the dual-carbon target, all industries and sectors have assumed the responsibility and obligation to promote the green and low-carbon transformation and development of the economy. Along with the proposal and implementation of the dual-carbon strategic objectives, China's green financial system has also been undergoing corresponding adjustments, amendments, supplements, improvements and innovations, so as to better provide financial services for the real economy and promote the realization of the dual-carbon objectives. This process has enriched and improved the perspective and content of research on green finance.

### 2.2. Introduction to Corporate and Green Bonds

China Energy Conservation and Environmental Protection Group Limited is a Chinese state-owned enterprise headquartered in Beijing. Founded in 2005, the company is one of China's key players and promoters in the field of energy saving and environmental protection. As a

comprehensive energy-saving and environmental protection enterprise, China Energy Conservation and Environmental Protection Group Co., Ltd. is committed to providing customers with comprehensive solutions covering a wide range of fields, including industry, buildings, transportation and energy. By introducing and innovating advanced technologies, promoting and applying energy-saving and environmental protection equipment and processes, the company provides sustainable energy-saving and environmental protection solutions for various industries, realizing the efficient use of resources and reducing the impact on the environment. It has extensive project experience at home and abroad, and cooperates with government agencies, research institutes, universities and other parties to strengthen technological innovation and talent training. The company actively responds to national energy-saving and emission reduction policies and environmental protection requirements, and endeavors to promote China's green low-carbon transformation and sustainable development.

China Energy Conservation and Environmental Protection Group Limited is the only centralized enterprise in China that focuses on energy conservation, emission reduction and environmental protection. Over the past five years, the company has issued a number of green bonds, including G16 Energy Conservation, G19 Sun, G19 Haixing and G19 Sichuan Railway. Funds raised from these bonds have been used for a number of green projects such as clean energy, pollution prevention and clean transportation. China Energy Conservation and Environmental Protection Group (CECEPG) has accumulated rich experience in green bond issuance. Among them, G16 Energy Conservation is the first green corporate bond in China that has passed the double green certification and has the headquarters of a centralized enterprise as the issuer, and it marks an important step for centralized enterprises in the field of green bonds. Therefore, this study chooses G16 Energy Conservation, the first green bond issued by China Energy Conservation and Environmental Protection Group (CECEPG), as the research object. By analyzing this project, we provide a theoretical foundation for more subsequent case studies on how green finance can help realize the dual-carbon goal. This will contribute to an in-depth understanding of the role and effects of green finance in promoting sustainable development.

G16 Energy Conservation is a green bond with double green certification, featuring long maturity, low risk and high liquidity, which meets the investment needs of investors as well as the green demand. Taking China Energy Conservation's first issuance of green bonds as a case study, this project analyzes China Energy Conservation's experience in supporting green projects such as wind power generation, solar power generation and sewage renovation, and provides a new way of thinking for domestic green enterprises, especially state-owned environmental protection enterprises, to change their business concepts, optimize their product structures, and use green bonds to carry out direct financing in order to reduce their financial risks under the new situation, so as to promote the enterprises to realize green transformation.

## **2.3. Research Significance**

### **2.3.1. Theoretical Significance**

Analyzed from a theoretical point of view, this project focuses on the study of green finance and the realization of the dual-carbon goal, closely following the dynamics of the development of current affairs in Chinese society and the forefront of financial and economic academic research. The project explores and improves the hot topics and emerging theories, which not only expands the research field of green finance, but also helps to construct, enrich and improve the green finance theoretical system with Chinese characteristics. This research program is of great significance in promoting the development of green finance practices and can play a leading role in China's response to climate change and sustainable development.

Green finance has attracted much attention from financial practitioners and policy makers at home and abroad, and is of great significance at the practical level. Therefore, it is necessary to expand and improve its theoretical research content in order to make it more instructive and forward-looking. Taking the construction of ecological civilization and the dual-carbon goal under China's high-quality development stage as the macro-reality background, this project analyzes and researches the role mechanisms and paths of China's green finance in boosting the realization of the dual-carbon goal, starting from the relationship between green finance and the dual-carbon goal.

In the academic world, the issue of green finance in China has received widespread attention, and a large number of empirical papers and theoretical works on related topics have emerged. However, there are shortcomings such as copying Western theoretical paradigms and lack of consideration of China's unique policy and institutional context. Therefore, this project hopes to study the role and influence of the project direction of the funds raised by financial institutions issuing green financial bonds on the realization of the dual-carbon goal from a new perspective through the case study of China Energy Conservation and Environmental Protection Group Co. At the same time, it will be better integrated with the existing research in order to identify new issues in green finance practice and provide new ideas for green finance theoretical research.

### **2.3.2. Relevance**

From a practical point of view, the project is based on the actual context of the rapid development of green finance in China and the overall shift of the economy and society towards low carbon. With the concept of high-quality development, the project takes the strategic deployment of the dual-carbon target as its guide and focuses on the impact of green finance on the realization of the dual-carbon target. The findings of this project will be of practical reference in promoting the high-quality development of green finance in China and in realizing the green and low-carbon goals in the new development pattern. This research project will provide useful suggestions for policy formulation and implementation in related areas, and promote China's sustainable development in the field of green finance.

Green finance in China is still under continuous development and improvement. In practice, the design of various policies, institutions and market mechanisms are facing major tests. The introduction of peak carbon and carbon neutral targets is both an opportunity and a challenge, and is particularly important for the growing field of green finance. How to enable green finance to follow the strategic orientation of the dual-carbon goals and make structural adjustments and optimizations is a major practical issue facing China's financial system. The research content of this project will provide theoretical references for improving the design of green finance policies and help promote the development of the green financial system during the strategic period of dual-carbon targets.

Peak Carbon and Carbon Neutral Targets are the strategic positioning of China's ecological civilization construction in the stage of high-quality development. This strategy aims to promote the transition of the economy from "high carbon" to "low carbon" and ultimately achieve "zero carbon" development. The feasibility, reliability, and contribution of green finance programs are important considerations in the strategic layout of the financial sector to help achieve the dual-carbon goal. The findings and conclusions of this project provide empirical evidence and theoretical support to support the realization of the dual-carbon goal through green finance. At the same time, this project also puts forward policy recommendations to explore how to release green finance policy dividends and play the role of green finance market incentives, which are of great practical significance for improving the capacity and quality of green financial services to serve the dual-carbon goal.

### **3. Analysis of China Energy Conservation and Environmental Protection Group's Motivation to Issue Green Bonds--Based on SWOT Analysis Approach**

#### **3.1. Opportunities for China Energy Conservation and Environmental Protection Group to Issue Green Bonds**

In recent years, the global demand for environmental protection and sustainable development has been increasing. With the growing prominence of the global climate change issue, countries have increased their investment in and support for the energy-saving and environmental protection industry. The Chinese government has also put forward the goal of building an ecological civilization and green development, promoting the rapid development of the energy-saving and environmental protection industry. At the same time, domestic and foreign investors are increasingly recognizing green bonds, and more and more funds are pouring into the green bond market. Against this background, the issuance of green bonds by China Energy Conservation and Environmental Protection Group can make full use of the market opportunity to attract more financial support and investment and realize the strategic objectives of the enterprise.

#### **3.2. China Energy Conservation and Environmental Protection Group Issues Green Bonds to Address Challenges**

Although the green bond market is developing rapidly, it still faces a number of challenges. First, there are certain differences in the definition and certification standards of green bonds, which require compliance with relevant national and regional standards in the issuance process. Second, the screening and evaluation of green bond projects require professional technical support and a team of experts with a large workload. In addition, the green bond market is highly competitive, and China Energy Conservation and Environmental Protection Group (CECEPG) needs to compete with other enterprises for more financial support.

#### **3.3. Advantages of China Energy Conservation and Environmental Protection Group Issuing Green Bonds**

China Energy Conservation and Environmental Protection Group (CECEPG) has rich experience and technological advantages in the field of energy conservation and environmental protection. It has a professional research and development team that can provide high-quality green projects and ensure the sustainability and environmental benefits of the projects. In addition, China Energy Conservation and Environmental Protection Group has a high reputation and visibility in the industry, which can attract more investors to participate in green bond issuance. At the same time, the company can also leverage the support of relevant government policies to reduce financing costs and increase the attractiveness of the bonds.

#### **3.4. Disadvantages of China Energy Conservation and Environmental Protection Group Issuing Green Bonds**

China Energy Conservation and Environmental Protection Group may still have certain limitations in terms of business scope and scale. Due to the complexity and high technical requirements of the energy conservation and environmental protection industry, the Company may face technical bottlenecks and market risks. In addition, the issuance of green bonds requires the Company to have a certain level of financial strength and credit rating, and the Company may need to bear higher financing costs.

## 4. Conclusion and Policy Recommendations

### 4.1. Conclusion

The issuance of green bonds by China Energy Conservation and Environmental Protection Group (CECEPG) is an important initiative to promote the realization of the dual-carbon target. Through the issuance of green bonds, China Energy Conservation and Environmental Protection Group can attract more financial support and investment, and increase its investment in renewable energy, energy-saving technologies and cleaner production. This will promote breakthroughs in reducing energy consumption and emissions, reducing greenhouse gas emissions and improving energy efficiency, and promote the company's transformation into a low-carbon, green and sustainable enterprise.

The issuance of green bonds can also help China Energy Conservation and Environmental Protection Group realize the alignment with government strategies. The Chinese government has proposed a dual-carbon target, committed to achieving peak carbon emissions and carbon neutrality. As a leading enterprise in the field of energy saving and environmental protection, the issuance of green bonds by China Energy Conservation and Environmental Protection Group can not only obtain policy support from the government, but also promote the development of green economy together with the government and play a demonstrative and leading role in realizing the dual-carbon goal.

In conclusion, the issuance of green bonds by China Energy Conservation and Environmental Protection Group (CECEPG) is an effective way to promote the realization of the dual-carbon goal, which is not only conducive to the sustainable development of the enterprise, but also in line with the national environmental protection policy. Through the issuance of green bonds, China Energy Conservation and Environmental Protection Group will further promote its own transformation to low carbon and green, and contribute to the environmental protection and sustainable development of China and the world.

### 4.2. Policy Recommendations

#### 4.2.1. Formulate Policies to Support and Encourage the Issuance of Green Bonds

The Government should increase its support for the green bond market, encourage enterprises to issue green bonds through incentives such as tax concessions and financial subsidies, and strengthen the certification and supervision of green bond projects to ensure that the funds are truly utilized in the field of environmental protection.

#### 4.2.2. Strengthening the Assessment and Certification Mechanism for Green Bond Projects

Establishing a sound assessment and certification mechanism for green bond projects, clarifying the standards and guidelines for green bond projects, and providing professional technical support, so as to ensure the authenticity and environmental benefits of green bond projects and enhance investor confidence.

#### 4.2.3. Playing the Role of Financial Institutions

Financial institutions should actively participate in the green bond market, provide diversified financial products and services, provide financing support for the issuance of green bonds by enterprises, and strengthen the risk assessment of green bond projects, so as to promote the construction of a sustainable financial system.

#### 4.2.4. Improving the Transparency and Information Disclosure of the Green Bond Market

Strengthening the regulation of the green bond market, standardizing the information disclosure requirements, ensuring that the relevant information is disclosed in a true, accurate

and timely manner, and improving the transparency of the green bond market to facilitate decision-making by investors.

#### 4.2.5. Strengthening International Cooperation and Exchanges

Actively participate in the formulation and promotion of international green bond issuance standards, strengthen cooperation and exchanges with other countries and international organizations, draw on advanced international experience, and enhance the international influence and competitiveness of China's green bond market.

The implementation of the above policy recommendations can further facilitate the issuance of green bonds by China Energy Conservation and Environmental Protection Group to promote the realization of the dual-carbon goal. The joint efforts of the Government, financial institutions and enterprises will greatly promote the development of the green bond market and the realization of sustainable development.

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