

# ***The Interaction Between Greenwashing and Chinese ESG Investors: Analyzing from the Perspectives of Credibility and Investment Decision-making***

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**Abstract:** Environmental, Social, and Governance (ESG) investing involves considering environmental, social, and governance factors to make socially responsible investment decisions that align with ethical and sustainable values. The widespread adoption of ESG has stimulated academic research in this field, primarily focusing on North America and Europe. However, in the current development of ESG investment in China, "greenwashing" has attracted widespread attention and awaits effective resolution. Greenwashing is the deceptive practice of conveying a false impression or exaggerating a company's commitment to environmental and social responsibility to appear more environmentally friendly than it is. Therefore, this study employs a literature analysis approach to study the interaction between greenwashing and Chinese ESG investors. The primary finding indicates that diverse forms of greenwashing by companies can influence investors' decisions and ESG ratings. This study outlines three key resolution strategies: centralized environmental monitoring policies, companies streamlining management and financial costs, and institutional investors conducting on-site inspections.

**Keywords:** greenwashing, ESG, Investors, Credibility, Investment Decision-making

## **1. Introduction**

The concept of ESG originated in 2004 when Kofi Annan, the former Secretary-General of the United Nations, initiated a discussion on fostering ethical investment practices. The widespread adoption of ESG subsequently stimulated academic research in the field, primarily focusing on North America and Europe. In the current development of ESG investment in China, "greenwashing" has become a widespread concern and an unresolved issue. Consequently, this study aims to analyze the impact of greenwashing problems from an investor's perspective and express potential solutions. In addition, this paper intends to employ a literature analysis approach to explore the interaction between greenwashing and Chinese ESG investors.

The significance of this study lies in enhancing investor awareness and promoting market transparency. On one hand, studying the impact of greenwashing behavior on ESG investors can increase investors' awareness of sustainability and social responsibility. By exposing the presence and effects of greenwashing, investors can more vigilantly and cautiously assess a company's ESG reputation, thereby making wiser investment decisions. On the other hand, research on the impact of

greenwashing behavior on ESG investors can drive market transparency and standardization. By revealing the negative consequences of greenwashing behavior, regulatory bodies, and market participants can prioritize and strengthen the regulation and standardization of ESG information disclosure, thereby enhancing market transparency and reliability.

Furthermore, this study reveals that greenwashing by companies and investor behavior and sentiment mutually influence each other. The exposure of corporate greenwashing may cause a decrease in investor trust in the company, thereby affecting their investment decisions. Simultaneously, the attitudes and behaviors of investors may also have a feedback effect on the greenwashing behavior of the company, creating a dynamic relationship of mutual influence. This finding holds significant theoretical and practical implications.

From a theoretical perspective, a deeper understanding of the mutual influence between corporate greenwashing and investor dynamics can provide new research perspectives for behavioral finance corporate governance theory and enrich the theoretical framework in related fields. Moreover, it offers valuable insights for further exploring the role of investor behavior and market sentiment in corporate green practices. Recognizing the mutual interaction between corporate greenwashing and investors helps companies comprehensively understand and address investor expectations and concerns. Actively adopting transparent and responsible business practices to establish and maintain a positive corporate reputation is more likely to earn the trust and support of investors.

## 2. Methodology

This paper commences with a comprehensive literature collection utilizing search engine queries and citation chain tracking methods. Subsequently, a selection is made based on the research subject, keywords, publication years, and journals. In the literature search, articles were filtered with a publication year within the past decade, and the search criteria included titles or keywords containing "greenwashing," "investors," and "ESG." Additionally, the research required the use of data originating from China. The publication years mainly focus on 2022-2023, and the chosen journals belong to economics and finance, such as Energy Economics and Finance Research Letters. A total of 34 articles were retrieved, and 9 were identified as relevant literature. The selected articles were categorized into three groups based on their main content: an introduction to corporate greenwashing, the interaction between Chinese ESG investors and corporate greenwashing, and suggestions for countermeasures from various perspectives (e.g., government and media). This classification provides a logical and sequential structure for the paper's organization. Finally, the content of the selected articles is thoroughly analyzed, categorized, and summarized, leading to the following research findings.

## 3. Discussion

### 3.1. Definition and Forms of Greenwashing Behavior

Greenwashing is a co-creation of an external accusation toward an organization about presenting a misleading green message [1]. From this, it can be observed that "greenwashing" is a deceptive marketing tactic, referring to instances where companies or their products outwardly claim to contribute to the environment, such as supporting environmental protection or participating in low-carbon initiatives. Still, their actual actions are inconsistent with their statements. In China, with the vigorous promotion of green policies like "carbon neutrality" and the introduction of dual carbon goals, many companies focus on low-carbon environmental protection. However, in recent years, some companies, to enhance their image in the eyes of consumers, have frequently engaged in the phenomenon of "greenwashing." Such behavior may entail risks, such as a potential decrease in credibility once exposed, which could harm the company's reputation. Greenwashing in ESG

disclosures is mainly carried out by companies through "talk more and work less" and "tone management."

Furthermore, a more in-depth analysis indicates that financial pressures may contribute to greenwashing practices in ESG disclosures [2]. However, this study provides a novel perspective. Firms may use greenwashing in ESG disclosures to mitigate the reputational damage caused by financial report comment letters.

In recent years, a highly notable case that has garnered attention is the series of greenwashing incidents by China National Petroleum Corporation that led to market reactions. On July 16, 2010, a flash explosion occurred in the China National Petroleum Corporation's Dalian bonded oil depot to the Dalian Xin'gang oil pipeline, igniting crude oil within the pipeline. This incident led to the leakage of tens of thousands of tons of crude oil into the sea, marking the most significant oil spill accident in China's offshore history. Following the accident, China National Petroleum Corporation repeatedly skipped government press conferences, choosing a silent approach to media response. In the context of this greenwashing event, the Cumulative Abnormal Returns (CAR) values during the window period showed a noticeable response to China National Petroleum Corporation's deliberate concealment and vague handling of the accident. This confirms the market's adverse reaction to greenwashing behavior.

On August 29, 2013, the Ministry of Environmental Protection criticized China National Petroleum Corporation for failing to meet annual emission reduction standards. In the assessment results of the "2012 annual assessment of the total emissions reduction of major pollutants in provinces, autonomous regions, municipalities directly under the central government, and eight central enterprises," the company was singled out and subjected to administrative penalties, including the suspension of environmental impact assessments for new, modified, and expanded refining projects, except for those related to oil upgrading and energy conservation. This penalty and exposure were the most severe in history, demonstrating the determination of the new government to address pollution. Hence, the market response to this greenwashing event was robust.

In August 2015, China National Petroleum Corporation's Yunnan Petrochemical Co., Ltd. illegally expanded its refining project capacity by 10 million tons per year without obtaining reapproval from the Ministry of Environmental Protection. This serious violation of environmental laws resulted in a two hundred thousand yuan fine imposed by the Ministry of Environmental Protection. In the third greenwashing incident, the Ministry of Environmental Protection imposed a relatively lenient penalty, and the incident did not attract widespread media coverage. On the other hand, the release of the "China National Petroleum Green Development Report," which sharply contrasts with the greenwashing behavior, did not coincide with the exposure time of the greenwashing incident. This discrepancy increased the difficulty of identifying the greenwashing behavior, leading to a less significant market response.

### **3.2. Interact between Greenwashing and ESG Investors**

As ESG disclosures are publicly oriented toward the market, "greenwashing" can somewhat disrupt investors' judgment and choices regarding companies. For instance, greenwashing may mislead investors through deceptive information, leading them to believe that a company excels in environmental performance, leading to change in their investment decisions. If investors are misled, it can result in inaccurate investment decisions, reducing their returns. Once a company's greenwashing practices are exposed, it may face reputation risks. Holding a company's stocks that contradict environmental principles may attract social attention and criticism, potentially damaging the company's reputation, especially among investors who prioritize social responsibility and sustainable development. The following sections of this paper will provide a detailed analysis of the

impact of this phenomenon on investors, considering both decision-making and reputation assessment by combining insights from the literature.

### **3.2.1. Influence of Greenwashing Behavior on Investor Decision-Making**

ESG greenwashing can trigger investor sentiment, leading to stock mispricing [3]. Additionally, the collective ESG greenwashing value among peer companies positively affects the equity mispricing of the central company. This dissemination of misleading information poses a challenge for investors, shaping their assessment of the company's value and influencing subsequent investment choices. Whether revealed before or after disclosure, the company risks losing the trust of numerous investors, potentially causing fluctuations in Chinese ESG investors' sentiment and impacting subsequent investment decisions. Consequently, the disclosed greenwashing information can induce stock price volatility, diverting equity prices from their actual value and prompting investors to make flawed investment decisions.

### **3.2.2. Impact of ESG Ratings Assessment on Greenwashing Behavior**

Environmental Rating Disagreement (ERD) increases the likelihood of companies engaging in greenwashing in the future [4]. This is primarily due to agency costs and the lack of transparency in corporate information mechanisms. In this context, ERD is the average uncertainty between environmental or rating agencies in paired ratings. In other words, the challenge faced by rating agencies in accurately assessing a company's environmental rating contributes to the prevalence of greenwashing, and inaccurate institutional judgments also impact investors' assessments of a company's environmental grade. Furthermore, external investors' attention is a deterrent to companies engaging in greenwashing, but positive investor sentiment has the opposite effect. This suggests that investor sentiment also plays a pivotal role in influencing the occurrence of greenwashing. With the identification of the influencing factors behind this phenomenon, targeted measures can be proposed, as detailed below.

## **3.3. Strategies to Address Greenwashing Behavior**

Based on the above analysis, this study asserts that ESG greenwashing has the potential to induce shifts in Chinese ESG investors' sentiment, resulting in stock mispricing. On the contrary, the scrutiny from external investors may deter companies from engaging in greenwashing. Nevertheless, positive investor sentiment can exert the opposite effect. In essence, there exists a dynamic interaction between consumer sentiment and greenwashing. Within this conceptual framework and leveraging insights from pertinent literature, this paper puts targeted strategies in three pivotal domains.

### **3.3.1. Roles and Responsibilities of Regulatory Bodies and Media**

ESG disclosure increases the financial compliance risks for companies and helps alleviate information asymmetry [5]. Moreover, the inhibitory effect of ESG disclosure on financial misconduct is notably more assertive in situations with less stringent regulatory conditions. Therefore, ESG information disclosure can mitigate opacity, enhance information transparency, and curb financial misconduct. Additionally, the impact of centralized environmental monitoring policies can effectively curb greenwashing by strengthening environmental regulation. Simultaneously, the central government should clarify different departments' environmental rights and responsibilities, ensuring consistency among local governments in environmental monitoring and expenditure responsibilities. The government should also enhance accountability mechanisms, refine the

monitoring and evaluation system for ecological quality and corporate environmental behavior, and improve the effectiveness of environmental regulation and governance [6].

Specifically, the government should strengthen ESG-related audit systems and disclosure initiatives. It is essential to align environmental performance and achieving sustainable goals with policy objectives. Regulatory bodies should concentrate on companies involved in rent-seeking behavior related to relevant policies. Technological advancements in ESG disclosure and audit systems can be pivotal in addressing data falsification issues and alleviating misleading practices in financial markets. This approach may effectively address the underlying causes of greenwashing behaviors.[8]

Furthermore, Hu et al. (2023) suggest curbing greenwashing through unified environmental rating standards, enhanced internal supervision, and expanded external oversight. Significant media attention can also restrain corporate greenwashing, and executives' risk preferences positively reinforce this inhibitory effect. These findings offer a new perspective on preventing corporate greenwashing [7].

### **3.3.2.How Companies Can Avoid and Address Greenwashing Behavior**

At the corporate level, financially constrained firms reduce the likelihood of engaging in greenwashing by cutting management and financial costs, thereby promoting green innovation activities [8]. Additionally, business managers need to allocate limited financial resources wisely. Financial constraints act as a driving force behind greenwashing, and their negative impact may persist, posing a potential threat to the enterprise's long-term development. Therefore, strategic and effective financial planning and resource allocation will positively impact the sustainable development of the business.

### **3.3.3.How Investors Can Choose Truly ESG-Committed Companies for Investment**

The study uncovers that companies visited by institutional investors witness a significant enhancement in their ESG performance. Subsequent analysis reveals that institutional investors elevate ESG levels in companies by improving the quality of accounting information, increasing environmental investments, and fostering awareness through media engagement. Notably, this paper affirms that the positive impact of investor site visits on corporate ESG performance is more pronounced in financially constrained firms, those receiving greater government support, and companies situated in high-pollution areas. These findings indicate that institutional investor site visits assume a governance role in shaping corporate ESG activities [9]. Furthermore, on-site visits are one of the methods for investors to select reliable investment projects.

## **4. Conclusion**

In summary, diverse forms of greenwashing by businesses have the potential to influence investors' decisions and environmental ratings. Some investors may be inclined to pay a premium to mitigate greenwashing risks, whereas environmentalists may not share the same perspective. Additionally, there exists an interaction between the sentiment of Chinese ESG investors and the occurrence of greenwashing. This paper concludes by proposing three key strategies: implementing centralized environmental monitoring policies, streamlining corporate management and financial costs, and conducting on-site inspections by institutional investors.

The limitation of this study lies in the exclusive use of qualitative research methods, lacking the concrete data support characteristic of quantitative methods. Thus, for future research, quantitative methods could be employed to compare the manufacturing and service industries to uncover the underlying reasons and mechanisms behind the differences in these sectors.

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