

The Necessity for Developing a Mandatory Environmental Information Disclosure System for ESG in China: From the Perspective of Corporate Compliance

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Abstract: This paper explores the necessity of establishing a mandatory environmental information disclosure system in China. As global pressures for climate change and environmental protection increase, governments worldwide are enhancing requirements for non-financial corporate disclosures. China, as the world's second-largest economy, is improving its ESG (Environmental, Social, and Governance) disclosure regulatory framework to promote corporate compliance and sustainable development. However, the current scope of environmental information disclosure in China is limited and its effectiveness is minimal. This paper argues that comprehensive mandatory environmental disclosure is crucial for enhancing corporate transparency and investor confidence. It also helps prevent greenwashing and carbon washing practices, reducing legal and reputational risks for companies. To achieve effective environmental information disclosure, the paper suggests developing standardized disclosure guidelines, establishing compliance incentive systems, and fostering a corporate culture of green compliance, thus promoting ecological civilization construction in China.

Keywords: Mandatory environmental disclosure, ESG, Corporate transparency, Corporate compliance, Compliance incentive, Greenwashing.

1. Introduction

Environmental, Social, and Governance (ESG) disclosure has emerged as a critical topic in global corporate governance and sustainable development. Amid growing pressures on global climate change and environmental preservation, governments and regulatory bodies worldwide are increasingly mandating non-financial disclosures from enterprises, with some countries implementing mandatory ESG disclosure policies [1]. As the world's second-largest economy, China is refining its regulatory framework for ESG environmental disclosures, aligning corporate compliance with sustainable development objectives.

It is undeniable that China has achieved notable progress in advancing mandatory environmental disclosures, yet current regulations restrict disclosure primarily to specific entities. In practice, only a few listed companies and bond issuers comply with these requirements, representing merely the tip of the iceberg in terms of China's environmental disclosures. Should mandatory environmental disclosure apply to all listed companies? Is comprehensive enforcement necessary? And if a comprehensive mandatory environmental disclosure system is established, how to construct an incentive system to counterbalance the negative impacts of mandatory regulations, thereby enhancing regulatory outcomes?

Currently, there is ongoing debate among scholars about whether ESG information disclosure should be mandatory. Some scholars argue that mandatory ESG information disclosure has drawbacks, suggesting that such regulations may not necessarily enhance the quality and level of disclosure. Atan et al. (2016) noted that under pressure from stakeholders, voluntary disclosure can achieve a high level of disclosure [2]. Cyrus Aghamolla et al. (2023) found through

modeling that mandatory ESG disclosure can lead to overinvestment and resource waste, whereas voluntary systems may be more efficient in investment [3]. Some Chinese scholars also advocate relying more on market mechanisms and voluntary corporate disclosures for environmental information, rather than exclusive reliance on legal mandates [4]. However, the majority of scholars support mandatory ESG information disclosure, asserting that it enhances company transparency, thereby boosting investor confidence and company performance [5, 6]. Scholars who oppose mandatory ESG disclosure generally view ESG as an integrated whole in considering mandatory disclosure, overlooking the independence and precedence of each dimension within ESG disclosure. This paper maintains that mandatory environmental information disclosure is particularly urgent and significant within the ESG framework.

Consequently, this paper seeks to substantiate the necessity and justification for mandatory environmental information disclosure. The study will examine how mandatory environmental disclosure serves as a crucial mechanism for ensuring corporate accountability and fostering transparency. Additionally, employing a corporate compliance-oriented approach, this paper will suggest strategies to refine China's current mandatory environmental disclosure system, thereby enhancing its effectiveness.

2. China's Mandatory Environmental Information Disclosure: Present State and Challenges

The Ministry of Ecology and Environment (MEE) issued the "Reform Plan for the Law-based Disclosure System of Environmental Information" the "Measures for the Administration of the Law-based Disclosure of

Environmental Information by Enterprises" (MDEI), and the "Format Guidelines for the Law-based Disclosure of Environmental Information by Enterprises" in 2021. These documents systematically regulate the subjects, content, and forms of enterprise environmental information disclosure, and include environmental information within the scope of mandatory disclosure for enterprises. Although the scope of entities required to disclose has significantly broadened, few listed companies and bond-issuing enterprises actually meet the criteria for inclusion in the disclosure lists. For instance, in the 2022 lists of legally disclosed environmental information from seven cities including Wuhan and Chongqing, less than 3% of the listed companies and bond-issuing enterprises comply with the MDEI guidelines and are included [7]. According to the "Evaluation Report on Environmental Responsibility Information Disclosure of Chinese Listed Companies (2022)", of the 5078 listed companies on China's Shanghai and Shenzhen stock markets, 1675 have effectively disclosed environmental information, representing 32.99% and less than one-third of the total [8]. Hence, while China has achieved progress in mandatory environmental information disclosure, the effectiveness of the disclosures has not significantly improved. This article examines two primary factors contributing to these constraints.

2.1. Strict Restrictions on Disclosure Entities

Different types of disclosure obligors adopt differentiated disclosure models, undermining the overall quality and effectiveness of environmental, social, and governance (ESG) information disclosure by listed companies. The criteria for mandatory disclosure of carbon information in China are stringent, and the scope of disclosure entities defined by enterprise types is too narrow, encompassing only enterprises with serious environmental violations. Enterprises issuing independent reports and disclosures in the form of greenhouse gas emission reports, however, are limited to key emitters with greenhouse gas emissions exceeding 26,000 tons of carbon dioxide equivalent, setting an excessively high threshold. Other companies primarily engage in voluntary disclosure, often leading to issues such as too few mandatory disclosure entities and a formality in voluntary disclosures. Additionally, regulatory bodies have inconsistent provisions regarding the entities and methods of environmental information disclosure, lacking unified coordination. The Ministry of Finance, Ministry of Ecology and Environment, State-owned Assets Supervision and Administration Commission, People's Bank of China, and the China Securities Regulatory Commission each set different requirements for ESG information disclosure without a unified standard [9]. The scope of disclosure entities stipulated in the Measures for the Administration of Legal Disclosure of Enterprise Environmental Information is narrow, primarily targeting key polluting units and enterprises with significant environmental violations. The CSRC regulations restrict key polluting units to listed companies, resulting in incomplete disclosure of critical environmental information.

2.2. Economic Attributes of Enterprises

Companies have long been viewed as key participants in economic activities, with the primary objective of maximizing shareholder value, exhibiting distinct economic attributes. Shareholders hold equity based on their capital

contributions, and the company's operational activities should be designed to serve shareholder interests [10]. Theoretically, "shareholder primacy" is regarded as the most effective operational principle, as maximizing shareholder interests also maximizes corporate profits. Consequently, if a company cannot achieve returns exceeding the cost of disclosure, it lacks the incentive for ESG information disclosure [11]. In particular, small and medium-sized enterprises may be inclined to engage in superficial disclosure due to excessively high disclosure costs [12]. Additionally, since voluntary disclosure lacks mandatory legal and regulatory requirements, companies often selectively disclose favorable information while neglecting negative aspects [13].

3. Necessity: Comprehensively Compulsory Environmental Information Disclosure of Listed Companies

The environmental responsibility information disclosure index for 2022 is about 40.57 points, which is 1.7% higher than that of 2021. The progress of environmental information disclosure in China is not obvious, and the problems of differentiated disclosure models and the lack of uniform standards for environmental information disclosure by regulatory authorities are particularly prominent. Therefore, this article believes that the mandatory disclosure system for environmental information should be applied to all listed companies to meet the needs of promoting high-quality development in the era. This article will demonstrate the necessity of comprehensive mandatory environmental information disclosure for listed companies from the perspective of ESG deconstruction and corporate compliance.

3.1. Deconstructing ESG

In the framework of corporate sustainable development, the three dimensions of environmental, social, and governance (ESG) information disclosure play different but complementary roles. From a semantic perspective, the order of E (environment) as the first word in ESG is not accidental, emphasizing to some extent the central position of the environment in corporate sustainable development and social responsibility. Environmental protection is an important component of corporate social responsibility, as environmental issues such as climate change, resource depletion, and pollution directly affect the Earth's ecosystem and human quality of life. Therefore, environmental issues have priority in sustainable development and investment decisions. In contrast, although "social" and "governance" are important, they are more related to human behavior and organizational structure, which are logically based on environmental sustainability.

From a logical perspective, ESG can also be deconstructed, and the priority of environmental information disclosure can be demonstrated through the concepts of proposition and causality. In the ESG framework, the environment is a fundamental proposition, because without a good environmental foundation, social development and governance structures cannot operate normally. For example, environmental degradation can directly lead to public health problems, affecting social stability and increasing the complexity and cost of governance [14]. In addition, health problems caused by environmental pollution, social conflicts caused by resource shortages, and governance challenges

brought about by climate change are all typical causal relationships. A good environment is a prerequisite for effective governance and social well-being [15].

3.2. Corporate Compliance Perspective

Environmental information disclosure is an important part of corporate social responsibility, which can reflect the actual performance of an enterprise in environmental protection and sustainable development. However, in the case of some listed companies or enterprises adopting a voluntary disclosure model, some companies may mislead the public and investors through irregularities such as "Greenwashing". On this basis, not only will the public or investors' right to know be compromised, but the risk of administrative penalties and judicial proceedings by regulatory authorities will also greatly increase.

3.2.1. Greenwashing

Greenwashing refers to the practice of companies misleading the public and investors by exaggerating or falsely promoting environmental protection, making them believe that their products or actions are more environmentally friendly than they actually are [16]. This behavior not only harms the public interest, but also undermines fair competition in the market. Mandatory environmental information disclosure can force companies to provide true and accurate environmental data, thereby reducing the occurrence of Greenwashing [17].

3.2.2. Judicial and Reputational Risk

Under the current global trend of environmental protection, enterprises are facing increasing regulatory pressure and legal requirements. Therefore, if enterprises are negligent or take chances in "greenwashing" and "carbon-washing" behavior, they may trigger "land mines" in corporate compliance, law, and public opinion. Through mandatory disclosure requirements, enterprises can avoid administrative penalties and civil litigation caused by opaque or false disclosure of environmental information. In addition, open and transparent environmental information disclosure can enhance the corporate social responsibility image and enhance public and investor trust, thereby reducing reputation risks.

4. Compliance Path: Optimizing the Mandatory Environmental Information Disclosure System

As previously discussed, establishing a comprehensive mandatory environmental information disclosure system for listed companies is both legitimate and necessary. Such a system can become a powerful institutional tool to promote high-quality development. From the perspective of corporate environmental compliance, this paper proposes corresponding optimization strategies by leveraging the external incentive function and the theoretical advantages of environmental social responsibility. These strategies aim to enhance the effectiveness of corporate environmental information disclosure and advance the modernization of China's ecological civilization governance system and governance capacity.

4.1. Developing Unified Disclosure Format Guidelines

To achieve standardization and consistency in environmental information disclosure, it is particularly

important to develop unified disclosure format guidelines [18]. This not only reduces confusion and uncertainty faced by companies during the disclosure process but also enhances the comparability and transparency of the information [19]. By drawing on the latest international ESG environmental information disclosure standards, such as GRI, SASB, and ISO26000, and aligning with China's "dual carbon" goals, developing unified ESG environmental information disclosure standards is an effective approach [20]. Specifically, the guidelines need to clarify the specific content, indicators, and methods of environmental information disclosure, using a combination of qualitative and quantitative disclosure methods. The guidelines should specify the environmental performance indicators that disclosure subjects need to report, including but not limited to greenhouse gas emissions, water resource usage, and waste management, to ensure the comprehensiveness and accuracy of the information.

4.2. Soft Approaches to Mitigate Passive Effects

If environmental information disclosure is fully mandated, it will inevitably have a deterrent effect on companies, increasing their costs and burdens for passive compliance. Therefore, it is necessary to establish a soft law incentive system based on compliance to balance the negative impacts of mandatory disclosure.

4.2.1. Disclosure exemption

To alleviate the disclosure costs for listed companies, China could consider establishing exemption rules for mandatory ESG environmental information disclosure. Scholars have proposed constructing these exemptions from three perspectives regarding overall ESG disclosure: exempting micro-cap listed companies from disclosure obligations, establishing exemption rules for subsidiary companies, and setting exemption rules for companies listed in multiple jurisdictions [21]. While this article agrees with the latter two points, it holds reservations about the first measure.

Firstly, environmental information within ESG is crucial for society and investors to understand a company's environmental performance. Regardless of the company's size, its operations may impact the environment. In the current context of increasingly severe global climate change, all enterprises should assume their respective environmental responsibilities. Although micro-cap listed companies are relatively small, their cumulative environmental impact cannot be overlooked. Secondly, the fact that a company is listed implies that it has already reached a certain scale and operational capability in the capital market. Compared to ordinary companies, listed companies have more resources and capacity to fulfill environmental information disclosure obligations. Exempting micro-cap listed companies from environmental information disclosure obligations is not only unfair but may also encourage environmental violations and weaken the overall market's sense of environmental responsibility. Therefore, micro-cap listed companies should not be directly exempted from disclosure obligations.

This article suggests that phased implementation of ESG environmental information disclosure requirements could be considered for micro-cap listed companies. For instance, during the initial period (the first two disclosure years), companies could be granted simplified environmental disclosure requirements, with the primary goal of allowing

them time to establish internal ESG management systems and reporting mechanisms. During the transition period (the 3rd to 4th disclosure years), companies should be required to disclose more environmental indicators, gradually enhancing their capability and awareness of ESG environmental information disclosure. Ultimately, in the fifth year, a comprehensive implementation phase should be achieved, requiring companies to fully disclose all relevant environmental information. This approach can effectively reduce compliance pressure on micro-cap listed companies in the early stages while progressively improving their ESG environmental information disclosure capabilities, ensuring comprehensive and transparent environmental information disclosure in the long run.

4.2.2. Compliance incentive system

To establish an incentive system for compliance with environmental information disclosure, companies that proactively, compliantly, and truthfully disclose environmental information should be given certain preferential measures. These can include reducing other environmental penalties, shortening rectification periods, or awarding commendations and honorary titles. Specifically, reducing other environmental penalties can manifest in reduced fines and shortened production suspension periods. For instance, for companies that perform well in environmental compliance, environmental authorities may consider reducing fines for minor environmental violations or shortening the production suspension period, provided that rectification is effective, thereby reducing the economic losses caused by production stoppages. Additionally, these companies can receive preferential treatment and convenience in environmental project approvals and green financial services, further encouraging continuous improvement in environmental compliance. Furthermore, awarding commendations and honorary titles can not only enhance the company's social reputation but also boost its market competitiveness. For example, a "Green Pioneer Enterprise" selection activity can be established, including but not limited to listed companies and other large non-listed enterprises. Companies that comprehensively and truthfully disclose environmental information and actively participate in environmental protection actions can be commended. Such honorary titles can motivate more companies to actively engage in environmental information disclosure and, by setting excellent examples, guide the entire industry towards a greener and more sustainable direction.

4.2.3. Green Compliance Culture

To more comprehensively address the passivity and deterrence of mandatory environmental information disclosure, society and companies must work together to create a "soft law system" of environmental responsibility.

From a societal perspective, a robust public environmental supervision mechanism should be established. Utilizing the power of public supervision can create social pressure for environmental protection, promoting transparency and authenticity in corporate environmental information disclosure. Social norms and public pressure can motivate companies to self-regulate their environmental protection behaviors, fostering a green-first social atmosphere.

From a corporate perspective, an environmental compliance commitment system should be established. For key personnel, key positions, and key nodes, the promotion and training of environmental information disclosure should be strengthened to form a widespread green compliance

culture. Furthermore, companies should require all employees to sign "Green Commitment Letters," regularly submit "Green Performance Reports," and include "Green Reports" in environmental information disclosure every other year to ensure the integrity of the green compliance culture.

5. Conclusion

This study primarily identifies and demonstrates the necessity and legitimacy of mandatory environmental information disclosure among listed companies in China. By thoroughly analyzing the current status and challenges of ESG environmental information disclosure in China, this paper finds that despite some progress, the limited scope of disclosure subjects and lack of unified standards have resulted in poor quality and effectiveness of information disclosure. This paper suggests that comprehensive mandatory environmental information disclosure can enhance corporate transparency and investor confidence, effectively prevent "Greenwashing" and "Carbon washing" behaviors, and reduce legal and reputational risks for companies.

This study fills a gap in the existing literature on the necessity of a mandatory environmental information disclosure system in China, emphasizing the core position of environmental information within the ESG framework. By discussing the importance of mandatory disclosure from the perspective of corporate compliance, it provides unique insights and theoretical support.

To achieve effective environmental information disclosure, this paper recommends developing unified disclosure format guidelines to ensure standardization and comparability of information. Additionally, establishing an environmental information disclosure compliance incentive system with measures such as reducing other environmental penalties and granting honorary titles can motivate companies to proactively comply with disclosure requirements. Society and companies should work together to create a green compliance culture, forming a green-first social atmosphere. Specific measures include improving public environmental supervision mechanisms, promoting corporate self-regulation, and enhancing internal promotion and training on environmental information disclosure.

Although this paper provides detailed theoretical and empirical analyses, it does not cover all relevant influencing factors and details due to space limitations. Furthermore, the discussion is mainly from theoretical and policy perspectives, lacking specific analysis of practical corporate operations. Future research can delve deeper into internal corporate operations to explore practical issues and solutions, and validate the effectiveness of the policy recommendations through more empirical studies.

In conclusion, this study proposes specific recommendations for optimizing the mandatory environmental information disclosure system in China through comprehensive analysis and demonstration, offering significant theoretical and practical value. Establishing and improving the mandatory environmental information disclosure system can effectively enhance the level of environmental information disclosure among Chinese companies, promote sustainable development and ecological civilization construction, and contribute China's wisdom and strength to global environmental protection efforts.

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