

Take China Vanke Co., Ltd as an Example to Study the Reversal of Financial Difficulties and Sustainable Development of Real Estate Enterprises under ESG Strategy

Canhua Hong*

School of Business, Shanghai University of International Business and Economics, Shanghai, China

**Corresponding Author*

Abstract: This paper aims to explore how financially distressed real estate enterprises can achieve turnaround and sustainable development through the implementation of ESG (Environmental, Social, and Governance) strategies, using Vanke Enterprise Co., Ltd. as a case study. The purpose of the paper is to assess the effectiveness of ESG practices in reversing financial distress and enhancing long-term sustainability in the real estate sector. The methodology employed involves a comprehensive literature review, a detailed case study of Vanke, and a combination of qualitative and quantitative analysis to evaluate the impact of ESG initiatives on Vanke's financial performance, market valuation, and overall sustainability. The main findings reveal that ESG practices have a positive influence on financially distressed real estate enterprises, contributing to improved financial performance, enhanced market reputation, and reduced financing costs. This study underscores the importance of integrating ESG principles into corporate strategies for real estate enterprises facing financial challenges, offering practical insights and policy recommendations for similar firms and industry stakeholders.

Keywords: ESG Strategy; Financial Distress; Real Estate Enterprises; Turnaround; Sustainable Development; Vanke Enterprise Co., Ltd.; Case Study; Financial Performance; Market Valuation

1. Introduction

In the context of global economic integration and the growing emphasis on sustainable development, Corporate Social Responsibility (CSR) and ESG (Environmental, Social, and Governance) criteria have emerged as pivotal metrics for evaluating corporate performance.

This paper focuses on the critical issue of how financially distressed real estate enterprises can leverage ESG strategies to reverse their financial downturns and achieve sustainable development, using Vanke Co., Ltd. as a case study. Against the backdrop of heightened market volatility and regulatory pressures, the real estate sector, a cornerstone of national economies, faces significant challenges. By examining Vanke's ESG initiatives, this paper aims to elucidate the mechanisms through which ESG practices can enhance corporate financial health, market valuation, and long-term viability. The subsequent sections of this paper will delve into the theoretical underpinnings of ESG, analyze Vanke's specific ESG measures and outcomes, propose strategic enhancements for distressed real estate firms, and offer policy recommendations to facilitate broader ESG adoption in the industry.

2. Literature Review and Theoretical Basis

The ESG (Environmental, Social, and Governance) concept emerged gradually from the late 20th to the early 21st century and was officially introduced by the United Nations Global Compact in 2004 (Global Compact & Swiss, 2004) [13]. It aims to integrate environmental, social, and governance factors into the core framework of corporate analysis and investment decisions. This concept aligns with the global focus on sustainable development and environmental protection. Its significance is profound, not only promoting the sustainable development of the global economy but also helping companies enhance their long-term competitiveness and brand value, meeting investors' demands for sustainability and social responsibility, and improving corporate risk management. Moreover, the impact of the ESG concept is extensive and far-reaching, prompting companies to adjust

their strategic directions, strengthen information disclosure, improve overall performance, and guide investors to consider ESG performance as a key factor in investment decisions and risk management, thereby promoting the standardization of capital markets and the sustainable development of industries. More importantly, the ESG concept has had a positive social impact on environmental protection, the fulfillment of social responsibilities, and good governance, providing strong support for achieving global sustainable development goals.

2.1 Overview of Global and Local Studies on ESG and Its Links to Corporate Performance and Sustainable Development

2.1.1 Foreign research

Since the introduction of ESG (Environmental, Social, and Governance) concepts, they have become a focal point in both academic and business circles globally. Foreign scholars have conducted extensive and in-depth research on the relationship between ESG and corporate performance, as well as sustainable development. Early studies primarily focused on the direct impact of environmental performance (E) on financial performance. Friede et al. (2015) found through a comprehensive analysis of over 2,000 empirical studies worldwide that there is a significant positive correlation between a company's ESG performance and its financial performance, particularly that improvements in environmental performance can directly enhance a company's profitability.

As research continues to deepen, scholars have begun to focus on the role of social performance (S) and governance performance (G) in enhancing a company's long-term value. Hampl & Dagmar Vágnerová Linnertová (2024) found through empirical studies that ESG composite scores not only affect a company's cost of capital but also positively impact its market value. Companies with outstanding non-financial performance tend to achieve higher market valuations.

In recent years, foreign scholars have further expanded the scope of ESG research, exploring the varying impacts of ESG in different industries and market environments. Rao & Juma (2024) examined how ESG performance affects a company's long-term risk-adjusted returns, finding that companies with strong ESG performance show greater resilience during market volatility. As global attention to climate

change deepens, environmental performance has become increasingly significant within the ESG framework. Scholars are now focusing on how companies can achieve a win-win in environmental and financial performance through green technology innovation and energy conservation measures.

2.1.2 Domestic research

Research on ESG in China started relatively late, but in recent years, with the country's heightened focus on sustainable development, related studies have rapidly increased. Chinese scholars, drawing on foreign research and considering China's unique conditions and corporate characteristics, have conducted in-depth explorations into the relationship between ESG, corporate performance, and sustainable development. Chen & Zhang (2024) analyzed the impact of ESG performance on corporate value, based on the heterogeneity of enterprises. They found that non-state-owned enterprises, non-polluting enterprises, and smaller-scale enterprises benefit more significantly from improvements in ESG performance. This finding provides valuable insights for different types of enterprises in China to develop their ESG strategies. As research has progressed, domestic scholars have begun to focus on the comprehensive impact of overall ESG performance on corporate sustainability. Shi et al. (2023) used case studies to analyze the application of ESG principles in real estate value assessment. He found that real estate companies actively practicing ESG not only achieve significant environmental performance but also enhance their market competitiveness and sustainable development capabilities by improving social and governance performance. Additionally, Chinese scholars have explored the internal and external factors influencing corporate ESG performance from perspectives such as policy and market environments, providing theoretical support for the formulation of effective ESG strategies.

2.2 The Core Elements of ESG Concept and Its Application in Real Estate Enterprises

2.2.1 Core elements of the ESG concept

The ESG concept is built on three core dimensions: Environment, Society, and Governance, which together form the foundation for sustainable corporate development. The environmental dimension emphasizes reducing negative environmental impacts during

production and operations, promoting green and low-carbon practices, and achieving a balance between economic and environmental benefits through the adoption of environmental technologies, energy conservation, and emission reduction measures. The social dimension requires companies to actively fulfill their social responsibilities by focusing on employee welfare, community development, and consumer rights protection. By fostering harmonious labor relations and engaging in public welfare activities, companies can enhance their social image and brand value. The governance dimension focuses on improving internal governance structures and enhancing governance levels through measures such as establishing a robust board system, strengthening internal controls, and increasing transparency in information disclosure, ensuring that corporate decisions are both scientific and compliant.

2.2.2 The application status of ESG concept in real estate enterprises

In recent years, as the country has placed greater emphasis on green and sustainable development, real estate companies have actively embraced ESG principles, integrating them into their strategic planning and daily operations. In terms of environmental impact, these companies have reduced their environmental footprint by promoting green buildings and implementing energy-saving and emission-reduction measures. For instance, Vanke Group, a leading player in China's real estate sector, has been actively advancing the development of green buildings. By using eco-friendly materials and energy-efficient technologies, Vanke has reduced building energy consumption and carbon emissions, thereby enhancing the environmental performance of its projects. Additionally, Vanke emphasizes protecting the ecological environment during project development, promoting green construction practices and sustainable development (Bai & Hou, 2014).

In terms of social responsibility, real estate companies actively fulfill their duties by focusing on employee welfare and community development. For example, Vanke Group has enhanced its social image and brand value by participating in rural revitalization projects and promoting art for public benefit, thereby giving back to society (Indradewa & Riyanto, 2024). Moreover, these companies also emphasize collaboration and communication with suppliers, customers, and other stakeholders to collectively

promote the sustainable development of the industry.

In terms of governance, real estate companies continuously refine their governance structures and enhance governance standards. For instance, Vanke Group has improved its governance efficiency and transparency by optimizing its equity structure and strengthening internal controls. Additionally, these companies emphasize the standardization and transparency of information disclosure, ensuring timely and accurate reporting of ESG-related information to investors and the public, thereby enhancing their credibility and market recognition.

However, despite some progress in ESG practices, real estate companies still face numerous challenges. Some companies lack sufficient and transparent ESG information disclosure; others lack systematic and long-term planning for their ESG practices (Stubbs & Rogers, 2013). Moreover, as the government tightens regulations on the real estate sector, companies are under greater pressure in financing and sales. Balancing ESG practices with economic benefits has become a critical issue for these companies. Therefore, real estate companies need to further enhance the application and practice of ESG concepts, promote the standardization and normalization of ESG information disclosure, and improve the systematic and long-term nature of their ESG practices to achieve a win-win situation for both economic and social benefits.

3. Case Analysis of Vanke Group's ESG Practice

3.1 The Basic Situation of Vanke Group and Its Financial Difficulties

Vanke Group, as a leading enterprise in China's real estate industry, has gradually developed into a comprehensive enterprise group with business covering multiple fields such as real estate development, property services, rental housing, commercial development and operation, education, logistics and warehousing services, hotels and resorts, and food since its establishment in 1984. With its acute market insight and stable business strategies, Vanke not only holds a pivotal position in the domestic market but has also been listed on the Fortune Global 500 for consecutive years, demonstrating its strong comprehensive strength and brand influence (Carota, 2025).

However, with the continuous tightening of regulatory policies in the real estate industry and changes in the macroeconomic environment, Vanke Group is also facing unprecedented financial difficulties. In terms of finance, Vanke Group has been under considerable pressure on its capital chain in recent years. On the one hand, due to the continuous implementation of the "houses are for living in, not for speculation" policy, the measures such as "purchase restrictions", "sale restrictions" and "price caps" introduced by local governments have greatly curbed the rapid increase in housing prices, resulting in a slowdown in the sales and cash recovery speed of real estate enterprises like Vanke and an increase in the difficulty of capital recovery. On the other hand, the strengthening of financial policy control has further narrowed the financing channels for real estate enterprises, increased financing costs, and led to a continuous rise in the asset-liability ratio. Vanke Group's asset-liability ratio has long been higher than the industry average. The single financing channel makes the enterprise particularly vulnerable when facing market fluctuations and policy adjustments.

Specifically, Vanke Group's inventory overstock problem is becoming increasingly serious (Zeng, 2023). A large number of completed properties cannot be sold in a timely manner, resulting in an increase in the cost of capital occupation and a weakening of liquidity. Meanwhile, although the accounts receivable turnover rate of the enterprise has increased, the inventory turnover rate has continued to decline, indicating poor sales and operation conditions and further intensifying operational risks. In addition, Vanke Group has an unreasonable capital structure, with an unbalanced proportion of current liabilities and non-current liabilities. Its financing channels are limited, mainly relying on bank loans and bond financing. This highly leveraged business model is highly likely to trigger debt repayment risks when the market environment is unfavorable.

In terms of profitability, Vanke Group is also facing severe challenges. Although enterprises have optimized their capital structure through diversified financing channels, the gradual decline in the return on total assets indicates that the returns on enterprises' funds are relatively low and their capital profitability is weakening (Chen, 2023). Meanwhile, the fluctuations in the net profit margin on sales also reflect that

enterprises still need to make efforts in cost control and the improvement of profitability.

To sum up, while Vanke Group is developing rapidly, it is also confronted with multiple financial predicaments such as inventory overstock, unreasonable capital structure, limited financing channels and declining profitability. These predicaments not only test Vanke Group's financial management and risk control capabilities, but also pose severe challenges to its future sustainable development.

3.2 The Specific Measures and Achievements of Vanke Group in ESG Practices

As a leading enterprise in China's real estate industry, Vanke Group actively practices the ESG (environmental, social and governance) concept under the background of sustainable development becoming a global consensus. Through a series of specific measures, the company has promoted the overall improvement of the enterprise in environmental, social and governance aspects, and achieved remarkable results.

In terms of environmental sustainability, Vanke Group is dedicated to promoting green and low-carbon transformation. Since the establishment of the Vanke Building Research Center in 1999, Vanke has focused on researching and promoting green and sustainable development in the residential sector (Liu & Ying, 2009). By the end of 2023, all new projects by Vanke met the national green building evaluation standards, with an additional 19.6366 million square meters of area meeting these standards. Among these, 10.5461 million square meters of area met high-level green building standards, including national two-star and three-star green buildings and LEED certification. Vanke not only strictly adheres to green standards in new projects but also actively promotes green renovations of existing projects. For example, the carbon reduction project at the Dameisha Carbon Neutrality Experimental Park achieved significant results through optimized architectural design and energy utilization. Additionally, Vanke collaborates with institutions like the German Passive House Institute to develop ultra-low energy consumption building system solutions. These solutions enhance building insulation and heat recovery systems, significantly reducing energy consumption. Moreover, Vanke installs photovoltaic power generation equipment on

mall roofs and parking lots, increasing the proportion of green energy use, and actively explores building-integrated photovoltaic (BIPV) technology to improve energy efficiency. In waste management, Vanke has been exploring the path of 'zero waste' since 2005. Through the Vanke Public Welfare Foundation, Vanke collaborates with the government, non-profit organizations, and businesses to promote new technologies and methods for managing household waste in urban and rural communities. For example, Wuyuan Cloud, which provides property services to nearly 4,000 residential areas nationwide, actively promotes the construction of 'green ecological communities' and conducts activities such as waste sorting and recycling in zero-waste communities.

In terms of social responsibility, Vanke Group actively fulfills its social obligations to promote social harmony. Adhering to the 'Three Good Homes' philosophy, Vanke is dedicated to providing high-quality living environments (Gao et al., 2021). Through continuous product innovation and service improvements, such as introducing smart home technology, Vanke enhances the safety, comfort, and environmental performance of its homes, earning widespread recognition from customers. Additionally, Vanke actively engages in community development and public welfare activities through platforms like the Vanke Public Welfare Foundation, investing in areas such as educational support, disaster relief, and poverty alleviation. For example, the Vanke Public Welfare Foundation supports social organizations in urban residential areas by promoting waste sorting and reduction, benefiting over 160,000 urban households. Moreover, Vanke organizes health and fitness activities to promote a healthy lifestyle and enhance community cohesion. In terms of employee benefits and career development, Vanke focuses on providing fair compensation and performance incentives and broad career opportunities. Through the 'Learn Happy' online mobile learning platform and other channels, Vanke offers rich learning resources to help employees enhance their skills and capabilities. Additionally, Vanke has established a general training system at headquarters and a distributed training system across various BGs and BUs, focusing on professionalization and specialization, to create a '3+1' training management system that helps employees achieve personal value. In supply chain

management, Vanke regards suppliers as key partners, treating them with integrity and dedication. The company is committed to collaborating with all stakeholders to build a sustainable supply chain. Based on the 'Supplier Management Measures,' Vanke ensures the interests of suppliers are fully protected while setting requirements for compliance, environmental protection, and necessary quality management (Prajogo et al., 2012). These standards are applied throughout the supplier selection, admission, and evaluation processes. Additionally, Vanke implements a series of green supply chain ESG initiatives through its construction platform, continuously enhancing the impact of Vanke's corporate green value chain.

In terms of governance, Vanke Group has improved its governance structure and enhanced governance levels (Jiang & Kim, 2024). The board of directors is diverse, comprising members from various genders, backgrounds, and experiences, with 73% being non-executive and independent non-executive directors. The board adheres to relevant laws and regulations, actively participates in the company's ESG governance, and has established an ESG committee to clarify responsibilities and promote sustainable development initiatives within the company. Regarding business ethics management, Vanke has formulated and released the 'Vanke Group Business Ethics Guidelines' and the 'Vanke Group Reporting Policy.' Each year, key business groups or units undergo internal business ethics reviews, ensuring that all business lines and subsidiaries are covered by 100% reviews every three years. All employees can consult on anti-fraud policies or personal conduct compliance through emails, the official website, and the official account, with a protection mechanism for whistleblowers. Vanke has established a comprehensive risk management system, consisting of business departments, functional departments, and internal supervision departments, forming the 'three lines of defense' for risk management. Regular compliance audits and inspections are conducted, including comprehensive and special audits, and internal control checks are carried out in key risk areas such as marketing, strictly handling violations of red line behaviors with a high-pressure stance. Additionally, Vanke follows the Financial Disclosures Initiative (TCFD) framework for climate change-related

financial disclosures, conducting climate change risk analyses, clarifying the climate change risk list, and enhancing the effectiveness of climate risk management (David & Giordano-Spring, 2021). In terms of information disclosure and transparency, Vanke Group places a high emphasis on these principles. The company regularly publishes annual reports and sustainability reports, detailing its performance and commitments in environmental, social, and governance areas. Through various channels, Vanke communicates with stakeholders to ensure the timely, accurate, and comprehensive dissemination of information. The company actively responds to the expectations and requirements of stakeholders, continuously enhancing its transparency and credibility.

Vanke Group has achieved significant success in its ESG practices. In environmental terms, the proportion of green building area is increasing, energy consumption is significantly reduced, the use of renewable energy is gradually increasing, and the level of waste resource utilization is continuously improving. Socially, Vanke has gained widespread recognition and support from customers, employees, suppliers, and the community by providing high-quality products and services, supporting community development and public welfare activities, focusing on employee welfare and career development, and enhancing supply chain management. In governance, Vanke has improved its governance efficiency and risk management capabilities through measures such as optimizing governance structures, strengthening business ethics, establishing a comprehensive risk management system, and enhancing information disclosure and transparency. These achievements not only contribute to the stable operation and sustainable development of Vanke Group but also enhance the company's social reputation and brand image (Brahmi et al., 2025).

3.3 Evaluate the Mechanism of ESG Practice in Reversing the Predicament of Vanke Group.

Amidst the challenges of industry regulation, financial strain, and market changes, ESG (Environmental, Social, and Governance) practices have become a key mechanism for Vanke Group to overcome these difficulties and achieve sustainable development.

In terms of environmental impact, Vanke Group

has effectively addressed the market pressures caused by industry regulations by actively promoting green buildings and sustainable development strategies. As the country places greater emphasis on green and low-carbon development, green buildings have become a new trend in the real estate market. By fully implementing green building standards in new projects, Vanke Group not only meets policy requirements but also enhances the market competitiveness of its projects. The application of green buildings reduces energy consumption and carbon emissions, improves energy efficiency and environmental performance, and attracts more environmentally conscious and sustainability-focused consumers. This shift in market positioning helps Vanke maintain stable sales performance during industry regulation, alleviating financial pressure. Additionally, Vanke's proactive efforts in renewable energy and waste management have further reduced operating costs and improved resource utilization efficiency, laying a solid foundation for the company's long-term development.

In terms of social impact, Vanke Group has enhanced its social influence and brand reputation through measures such as fulfilling social responsibilities, focusing on employee welfare and career development, and strengthening supply chain management. In response to changes in the market environment, Vanke Group adheres to the 'three good residences' philosophy, offering high-quality products and services that meet consumers' aspirations for a better life. This customer-centric business philosophy has helped Vanke stand out in the competitive market, earning widespread recognition from customers (Jarryd Daymond et al., 2024). Additionally, Vanke actively engages in community development and public welfare activities, supporting education, poverty alleviation, and environmental protection, thereby giving back to society and establishing a positive corporate image. In terms of employee benefits and career development, Vanke focuses on the professional growth and well-being of its employees, providing fair compensation and performance incentives as well as broad career opportunities, which boosts employee enthusiasm and creativity. Moreover, Vanke strengthens cooperation and mutual benefit with suppliers, building a sustainable supply chain that promotes green development across the

entire industry chain. These ESG practices not only enhance Vanke's social responsibility but also boost the company's brand value and market competitiveness, providing strong support for overcoming challenges.

In governance, Vanke improves corporate governance efficiency and risk management by refining its governance structure, strengthening business ethics, and establishing a comprehensive risk management system. In the face of industry regulation and market changes, Vanke emphasizes the diversity and independence of its board of directors, introducing several independent directors with rich experience and expertise, which enhances the board's decision-making and oversight capabilities. Additionally, Vanke has established a comprehensive risk management system to effectively identify, assess, and control potential market, credit, and environmental risks. In terms of business ethics, Vanke adheres to integrity in its operations and strictly complies with laws, regulations, and ethical standards, earning the trust and respect of the market. Additionally, Vanke emphasizes transparency and information disclosure, regularly publishing annual reports and sustainability reports to comprehensively showcase the company's operational status and ESG practices to investors and the public. These ESG practices not only enhance Vanke Group's governance efficiency and risk management but also strengthen investor confidence and support, providing a solid governance foundation for overcoming challenges. ESG practices have played a crucial role in Vanke Group's turnaround. By implementing green building and sustainable development strategies, fulfilling social responsibilities, and caring for employees, as well as improving governance structures and risk management, Vanke Group has effectively addressed the challenges posed by industry regulation and market changes, achieving steady growth despite the difficulties.

In implementing the ESG philosophy, Vanke Group has positioned green buildings as a critical component of its strategic layout. Through a series of coordinated and far-reaching mechanisms, these green buildings have had a significant and positive impact on financial metrics. From an operational standpoint, the design and implementation of green buildings adhere to the principles of energy conservation, emission reduction, and efficient resource utilization(Ohueri et al., 2022). This not only

aligns with the national policy direction for the green transformation of the real estate industry but also brings tangible economic benefits to the company in actual operations. Specifically, Vanke has adopted energy-saving technologies in green buildings, such as ground-source heat pump systems, rainwater recycling systems, and high-efficiency air conditioning and lighting equipment, which have significantly reduced the building's energy consumption(Ahmadi et al., 2017). The introduction of these technologies has enabled Vanke to significantly reduce its reliance on traditional energy sources during operations, thereby lowering operational costs such as electricity and water fees. In the long term, this cost savings have not only increased the profit margins of Vanke projects but also enhanced its market competitiveness, laying a solid financial foundation for the company's sustainable development. More importantly, green buildings have opened the door for Vanke Group to attract green investments, which has a more profound impact on improving financial metrics. As global attention to climate change and sustainable development grows, green investment has become a key trend in the capital market. By actively promoting green building projects, Vanke Group has demonstrated its leadership and foresight in the field of sustainable development, earning widespread attention and recognition from both domestic and international green investors. These investors not only value Vanke's environmental philosophy and social responsibility but also recognize the long-term economic potential and stable returns of green building projects(Zhang, 2024). As a result, they are willing to offer more favorable financing terms for Vanke's green building projects, such as lower interest rates, longer loan periods, and more flexible repayment options. This reduction in financing costs not only optimizes Vanke's capital structure but also significantly enhances its financing efficiency, enabling it to secure funds at a lower cost and support more green building projects and other sustainable initiatives. Furthermore, the increased brand value and market recognition from green buildings have given Vanke Group more leverage in the financing market. Enhanced investor and financial institution confidence has made it easier for Vanke to secure funding, sometimes even with more favorable terms. This improved financing environment not only reduces Vanke's financing

costs but also increases its financing flexibility and efficiency, providing robust financial support for the company's rapid growth.

In summary, by implementing ESG practices like green buildings, Vanke Group has directly reduced operating costs, enhanced profitability, and significantly improved its financial metrics through mechanisms such as attracting green investments, optimizing financing costs, and enhancing brand value. This causal relationship clearly demonstrates the close link between ESG practices and corporate financial performance, offering strong support and assurance for Vanke Group's financial transformation and sustainable development in challenging times.

4. Strategies and Suggestions for Improving ESG Practices

4.1 Strategies to Improve ESG Practices for Real Estate Enterprises with Financial Difficulties

For real estate enterprises facing financial difficulties, enhancing ESG (Environmental, Social, and Governance) practices is not only a strategic move towards sustainable development but also a crucial pathway to overcome current challenges and regain market confidence.

4.1.1 Enhancing environmental stewardship through green transformation

Real estate enterprises grappling with financial constraints can initiate a green transformation as a cornerstone of their ESG improvement strategy. This involves a comprehensive review of existing projects to identify opportunities for energy efficiency upgrades, such as retrofitting buildings with smart energy management systems, installing solar panels, and optimizing HVAC systems. By adopting green building standards like LEED or BREEAM, enterprises can not only reduce operational costs but also enhance the marketability of their properties, appealing to a growing segment of eco-conscious investors and tenants (Chung et al., 2024). Moreover, investing in sustainable land use planning and biodiversity conservation within and around projects can further bolster the environmental credentials of the enterprise, positioning it as a leader in sustainable real estate development.

4.1.2 Fostering social responsibility through community engagement and stakeholder collaboration

Social responsibility is another critical area

where financially strapped real estate enterprises can make significant strides in improving their ESG performance. Engaging with local communities through initiatives such as affordable housing projects, educational sponsorships, and infrastructure development can build positive relationships and enhance the enterprise's social license to operate. Collaborating with NGOs, government agencies, and other stakeholders on social impact projects can also provide access to funding, expertise, and resources that might otherwise be out of reach (Hoque et al., 2020). Additionally, prioritizing employee welfare through fair labor practices, health and safety programs, and career development opportunities can boost morale and productivity, contributing to a more resilient and motivated workforce.

4.1.3 Strengthening governance structures for transparency and accountability

Effective governance is essential for real estate enterprises seeking to improve their ESG practices, especially when facing financial difficulties. Establishing a robust governance framework that includes clear roles and responsibilities, independent oversight, and transparent decision-making processes can enhance stakeholder trust and confidence. This involves appointing diverse and qualified board members, implementing rigorous risk management and compliance programs, and ensuring regular and comprehensive disclosure of ESG-related information. By demonstrating a commitment to transparency and accountability, enterprises can attract investors who value good governance practices and are more likely to support the enterprise through challenging times.

4.1.4 Leveraging technology for ESG data management and reporting

In the digital age, leveraging technology to streamline ESG data management and reporting can significantly enhance the efficiency and effectiveness of ESG practices for real estate enterprises. Implementing advanced data analytics tools can help enterprises track and measure their ESG performance in real-time, identify areas for improvement, and set achievable targets. Additionally, utilizing blockchain technology for supply chain transparency can ensure that materials and services are sourced ethically and sustainably, further strengthening the enterprise's ESG credentials. By automating reporting processes and ensuring data accuracy, enterprises can save

time and resources while providing stakeholders with reliable and up-to-date ESG information.

4.1.5 Cultivating a culture of innovation and continuous improvement

Finally, cultivating a culture of innovation and continuous improvement is vital for real estate enterprises aiming to enhance their ESG practices amidst financial challenges. Encouraging employees to think creatively about sustainable solutions, investing in research and development of new ESG-focused technologies and practices, and fostering a learning organization that embraces change can drive ongoing improvements in ESG performance. By staying abreast of the latest trends and best practices in the ESG field, enterprises can position themselves as industry leaders and attract investors who are looking for long-term value creation through sustainable business practices. This culture of innovation and continuous improvement will not only help enterprises overcome current financial difficulties but also lay the foundation for future success in an increasingly ESG-conscious market.

4.2 ESG Implementation Recommendations from the Government and Relevant Agencies

4.2.1 Strengthening esg policy frameworks and regulatory guidance

The government and relevant agencies should play a pivotal role in shaping a robust policy framework that encourages and mandates ESG implementation among real estate enterprises. This involves developing comprehensive ESG guidelines and standards tailored to the real estate sector, outlining clear expectations for environmental performance, social responsibility, and governance practices (Neophytou, 2025). By setting regulatory benchmarks and enforcing compliance, the government can ensure that ESG considerations are integrated into the core operations of real estate businesses, driving sustainable development across the industry.

4.2.2 Incentivizing ESG practices through fiscal and financial measures

To motivate real estate enterprises to embrace ESG principles, the government can introduce a range of fiscal and financial incentives. These may include tax breaks, grants, and low-interest loans for companies that demonstrate exemplary ESG performance, particularly in areas such as energy efficiency, green building certifications, and community engagement. Additionally,

financial regulators can encourage banks and other lenders to incorporate ESG criteria into their credit assessment processes, making it more favorable for ESG-compliant enterprises to access financing (Baldissarro et al., 2024). Such measures would not only alleviate financial burdens for ESG-focused enterprises but also send a strong market signal about the importance of sustainable practices.

4.2.3 Facilitating knowledge sharing and capacity building

The government and relevant agencies should organize workshops, seminars, and training programs aimed at enhancing the ESG capabilities of real estate enterprises. These initiatives can cover a wide range of topics, from understanding ESG frameworks and reporting standards to implementing sustainable building practices and community engagement strategies. By providing a platform for knowledge exchange and best practice sharing, the government can help enterprises overcome barriers to ESG implementation, fostering a culture of continuous improvement and innovation within the industry.

4.2.4 Promoting transparency and accountability through mandatory esg disclosure

To ensure that ESG efforts are not merely superficial but are embedded in the DNA of real estate enterprises, the government should consider introducing mandatory ESG disclosure requirements. This would involve setting clear guidelines on what information must be disclosed, how it should be presented, and the frequency of reporting. By making ESG performance transparent and comparable across enterprises, mandatory disclosure can enhance stakeholder confidence, attract responsible investors, and drive competition based on sustainability credentials. The government can also establish an independent oversight body to monitor compliance and enforce penalties for non-disclosure or misrepresentation.

4.2.5 Fostering collaboration and partnerships for collective impact

Realizing the full potential of ESG in the real estate sector requires collective action and collaboration among various stakeholders. The government and relevant agencies should actively facilitate partnerships between real estate enterprises, NGOs, academic institutions, and community groups. These collaborations can focus on joint research projects, pilot programs for sustainable development, and shared

resources for ESG implementation. By pooling expertise, resources, and influence, stakeholders can address complex ESG challenges more effectively, accelerating the transition towards a more sustainable real estate industry. Additionally, the government can recognize and celebrate successful collaborations through awards and public recognition, further incentivizing stakeholder engagement in ESG initiatives (Zhang & Biryukova, 2025).

5. Conclusion

In conclusion, the assimilation of ESG principles within the real estate sector, particularly for enterprises confronting financial exigencies, signifies a paradigm shift towards sustainable and resilient operational paradigms. By strategically deploying robust ESG frameworks, underpinned by governmental policy directives, fiscal incentives, knowledge dissemination initiatives, and transparency mechanisms, real estate enterprises can not only effectively mitigate risks and bolster their long-term viability but also make substantive contributions to societal welfare and environmental preservation. This discourse has illuminated the transformative potency of ESG in reconfiguring the real estate terrain, underscoring that the embrace of sustainability is no longer a discretionary choice but an imperative for enterprises aspiring to flourish in an ESG-centric global economy. Through the cultivation of collaborative synergies and innovative impetus among stakeholders, we can collectively propel the industry towards a sustainable future, where economic prosperity is intrinsically linked with environmental custodianship and social equity. It is incumbent upon us to seize this juncture to engender a durable, positive legacy within the real estate sector and its broader ecosystem.

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