Global Academic Frontiers, Vol. 3, Issue 2, 2025, pp. 225-256 Print ISSN 2995-5688 Online ISSN 2995-570X
DOI: https://doi.org/10.5281/zenodo.15583449

The Evolution and Future Trajectory of ESG Information Disclosure in China: Building a Harmonized Disclosure System in the Context of Global Integration

CUI XIAOTIAN [1*]

[1] HENAN MUDU LAW FIRM
*Corresponding author Email:thxwu17@163.com
Received 6 April 2025; Accepted 6 May 2025; Published 3 June 2025

Abstract: This paper examines the evolution and future trajectory of Environmental, Social, and Governance (ESG) information disclosure in China within the context of global integration. As sustainability reporting gains prominence worldwide, China has made significant strides in developing a comprehensive ESG disclosure framework that balances international standards with domestic priorities. Through analysis of recent policy developments, academic research, and industry practices, this study tracks China's journey from initial voluntary environmental reporting to its current structured approach with mandatory disclosure requirements for many listed companies. The research identifies key challenges in China's ESG disclosure system, including data quality concerns, implementation capacity constraints, and the need to harmonize local standards with global frameworks. The paper also examines China's efforts toward global integration, particularly its relationship with International Sustainability Standards Board (ISSB) standards and initiatives under the Belt and Road framework. Looking ahead, China's ESG disclosure system is poised for full implementation by 2030, with increasing focus on digital transformation, expanded mandatory requirements, and enhanced global alignment. The findings provide valuable insights for policymakers, companies, investors, and researchers interested in China's sustainable development and its growing influence on global ESG standards.

Keywords: ESG disclosure; sustainability reporting; global integration; ISSB standards; double materiality

I. Introduction

A. Research Background

The concept of Environmental, Social, and Governance (ESG) disclosure has transitioned from a niche concern to a mainstream business imperative globally. Investors, regulators, consumers, and other stakeholders increasingly demand transparency in how companies manage ESG-related issues, recognizing that these factors can materially affect a company's performance and long-term value (KPMG, 2024). In this context, China's approach to ESG disclosure has gained significant attention, particularly as the country strengthens its commitment to sustainable development through initiatives like its dual carbon goals—carbon peaking by 2030 and carbon neutrality by 2060 (Guo & Zhu, 2023).

China, as the world's second-largest economy and a critical hub for global supply chains, has historically focused on embedding environmental laws into its regulatory framework. However, until recently, Western economies have typically led in implementing broader ESG-related requirements for organizations (LRQA, 2024). China's introduction of formal ESG disclosure requirements marks a watershed moment in the nation's—and potentially the world's — approach to sustainable capitalism, particularly as these requirements increasingly align with global standards while maintaining distinctive Chinese characteristics.

B. Research Significance

The study of China's ESG disclosure system holds particular significance for several reasons. First, China's economic scale and global influence mean that its ESG disclosure practices can have far-reaching implications for international markets and sustainability efforts. As Chinese companies expand globally and foreign companies operate within China, the alignment between Chinese and international ESG standards becomes increasingly important for market participants (China Business Briefing, 2024).

Second, China's unique governance model presents both challenges and opportunities for ESG implementation. The country's top-down regulatory approach allows for rapid deployment of new requirements across its economy, while its distinctive institutional context shapes how international standards are adopted and adapted (Tang & Li, 2023). Understanding these dynamics is essential for assessing the evolution and effectiveness of China's ESG disclosure system.

Third, as global sustainability reporting frameworks continue to develop and consolidate, China's role in shaping these standards, particularly in relation to the International Sustainability Standards Board (ISSB), will be crucial for future harmonization efforts. China's balance between international alignment and addressing domestic priorities offers valuable insights for other emerging economies navigating similar challenges (Financial Stability Board, 2024).

C. Research Objectives and Questions

This paper aims to comprehensively analyze the evolution and future trajectory of ESG information disclosure in China, with particular focus on the development of a harmonized disclosure system in the context of global integration. Specifically, the research objectives include:

1. Tracing the historical development of ESG disclosure in China, from initial environmental reporting requirements to the current comprehensive framework

2. Examining the current regulatory architecture and implementation mechanisms for ESG disclosure in China

3. Analyzing key challenges in China's ESG disclosure system and their implications for companies, investors, and policymakers

4. Assessing China's efforts toward global integration of ESG standards, particularly in relation to ISSB frameworks

5. Projecting the future trajectory of China's ESG disclosure system and offering recommendations for its enhancement

To achieve these objectives, the research addresses the following key questions:

1. How has China's ESG disclosure system evolved over time, and what factors have driven this evolution?

2. What are the distinctive features of China's current ESG disclosure framework, and how do they compare with international standards?

3. What challenges does China face in implementing and improving its ESG disclosure system?

4. How is China balancing alignment with global standards while addressing domestic priorities?

5. What is the likely future trajectory of China's ESG disclosure system, and what recommendations can be offered for its improvement?

D. Research Structure

This paper is organized into nine main sections. Following this introduction, Section 2 reviews the relevant literature on ESG disclosure, covering theoretical foundations, global standards and frameworks, research trends in China, and the relationship between ESG disclosure and business performance. Section 3 outlines the research methodology, explaining the analytical approach, data sources, and framework used.

Section 4 traces the historical development of ESG disclosure in China across four stages, from early voluntary initiatives to the current comprehensive regulatory framework. Section 5 examines China's current ESG disclosure system in detail, analyzing its regulatory architecture, stock exchange requirements, sector-specific regulations, and approach to materiality.

Section 6 identifies key challenges in China's ESG disclosure system, including data quality issues, implementation constraints, the balance between local and global standards, and problems of ESG decoupling. Section 7 assesses China's efforts toward global integration, focusing on alignment with ISSB standards, international cooperation initiatives, and ESG implications of the Belt and Road Initiative.

Section 8 projects the future trajectory of China's ESG disclosure system and offers recommendations for policy and research. Finally, Section 9 concludes the paper with a summary of key findings and their theoretical and practical implications.

II. Literature Review

A. Theoretical Foundations of ESG Disclosure

ESG disclosure refers to the practice of companies reporting information about their environmental impacts, social performance, and governance structures to stakeholders. This practice is underpinned by several theoretical frameworks that help explain its evolution and significance. Three theories are particularly relevant to understanding ESG disclosure in the Chinese context: stakeholder theory, legitimacy theory, and institutional theory.

Stakeholder theory, developed by Freeman (1984), posits that companies should consider the interests of all parties affected by their operations, not just shareholders. This theory suggests that ESG disclosure serves as a mechanism for companies to communicate with and address the concerns of diverse stakeholders, including employees, customers, communities, and regulators (Donaldson & Preston, 1995). In China's context, the stakeholder perspective is particularly relevant given the government's role as both regulator and significant market participant through state-owned enterprises (SOEs) (Tang & Li, 2023).

Legitimacy theory argues that organizations seek to ensure their operations are perceived as legitimate by operating within the bounds of what society considers socially acceptable (Suchman, 1995). From this perspective, ESG disclosure can be seen as a strategy for companies to demonstrate compliance with social norms and expectations regarding environmental protection, social responsibility, and ethical governance. As China emphasizes "ecological civilization" and "common prosperity" as national priorities, legitimacy theory helps explain why Chinese companies are increasingly motivated to disclose their ESG activities (China Law Society, 2024).

Institutional theory emphasizes how organizational behaviors are shaped by institutional pressures, including regulatory requirements, normative expectations, and cultural influences (DiMaggio & Powell, 1983). This theory is particularly relevant for understanding ESG disclosure in China, where the institutional environment is characterized by strong governmental influence, rapidly evolving regulations, and distinct cultural values. Tang and Li (2023) argue that China's top-down approach to ESG has created a unique institutional context that differs from Western market-driven approaches, resulting in distinctive disclosure practices.

These theoretical frameworks help explain why ESG disclosure has gained prominence globally and how it manifests in China's specific context. While stakeholder theory emphasizes the communicative function of disclosure, legitimacy theory highlights its role in maintaining social approval, and institutional theory explains how China's distinctive governance model shapes ESG practices in ways that may diverge from Western approaches.

B. Global ESG Disclosure Standards and Frameworks

The global landscape of ESG disclosure is characterized by a proliferation of standards and frameworks, each with different focuses, reporting requirements, and approaches to materiality. Major international standards include the Global Reporting Initiative (GRI), the Task Force on Climate-Related Financial Disclosures (TCFD), the Sustainability Accounting Standards Board (SASB), and most recently, the International Sustainability Standards Board (ISSB) standards (ISSB, 2023).

The ISSB, established in 2021 at COP26, represents the most significant effort to date to create a globally accepted baseline for sustainability disclosure. In June 2023, the ISSB released its inaugural standards: IFRS S1 (General Requirements for Disclosure of Sustainability-related Financial Information) and IFRS S2 (Climate-related Disclosures) (ISSB, 2023). These standards take an "enterprise value" approach to materiality, focusing on sustainability information that affects a company's financial performance and valuation, rather than its broader impacts on society and the environment.

This approach contrasts with the "double materiality" concept adopted in the European Union's Corporate Sustainability Reporting Directive (CSRD), which requires companies to report both on how sustainability issues affect their financial performance and how their activities impact people and the environment (Barnes & Thornburg, 2024). This distinction in materiality approaches represents one of the key tensions in global ESG disclosure harmonization efforts.

Regional variations in ESG disclosure requirements further complicate the global landscape. The EU's CSRD represents one of the most comprehensive mandatory reporting systems, while the United States has taken a more limited approach with the SEC's climate disclosure rules currently facing legal challenges. In Asia, different jurisdictions are at varying stages of implementation, with Japan, South Korea, Hong Kong, and Singapore moving toward mandatory requirements, often aligned with ISSB standards (Latham & Watkins, 2023).

The Financial Stability Board (FSB), which oversees the TCFD, has highlighted the progress toward global alignment, noting that 19 of 24 FSB member jurisdictions have published regulatory files, guidelines, or roadmaps relating to climate-related disclosures, with 17 of these jurisdictions proposing requirements based on both ISSB and TCFD frameworks (FSB, 2024). However, challenges remain in addressing the needs of small and medium-sized enterprises and companies in emerging economies.

As China develops its ESG disclosure system, it must navigate this complex global landscape, balancing alignment with international standards while addressing its specific economic, social, and environmental priorities. China's approach to this balance will be a key factor in the future development of global ESG disclosure standards.

C. Evolution of ESG Disclosure Research in China

Research on ESG disclosure in China has evolved significantly over the past two decades, reflecting the country's changing regulatory environment and growing awareness of sustainability issues. Tang and Li (2023) provide a comprehensive review of this evolution, noting that under China's top-down framework, ESG practices have grown substantially across three dimensions: ESG disclosure, ESG rating, and ESG investing.

Early research on ESG disclosure in China focused primarily on environmental reporting, reflecting the initial regulatory emphasis on pollution control and environmental protection (Long et al., 2022). These studies typically examined compliance with environmental disclosure requirements, particularly for heavy polluting industries, and assessed the quality and extent of voluntary environmental reporting.

As China's regulatory framework expanded to encompass broader social and governance aspects, research focus shifted to more comprehensive ESG disclosure. Studies began to analyze the factors influencing ESG disclosure practices, including firm characteristics, ownership structure, industry sector, and institutional pressures (Yuan et al., 2022). Particular attention has been paid to the role of state ownership, with several studies finding that state-owned enterprises (SOEs) tend to have higher levels of ESG disclosure than their private counterparts (Lin et al., 2024).

Recent research has increasingly emphasized the unique characteristics of ESG disclosure in China compared to Western contexts. Tang and Li (2023) identify two distinctive features of Chinese ESG research: first, its focus on China's unique institutional context, including the role of government, state ownership, and political connections; and second, the dominance of quantitative research methods, particularly in examining the relationship between ESG disclosure and financial performance.

Emerging research areas include the impact of digital transformation on ESG disclosure practices. Liu et al. (2023) examine how digital technologies can help reduce the gap between reported and actual ESG performance (ESG decoupling) by improving information processing capabilities and reducing information asymmetry. Studies have also begun to explore the relationship between ESG disclosure and other business variables, such as audit fees (Lan et al., 2024) and financing constraints (Chen et al., 2022).

Despite these advances, significant research gaps remain. Tang and Li (2023) suggest that future research should investigate ESG standards development in China and the impact of traditional Chinese ethics, modernization, and internationalization on ESG practices. They also note the need for more qualitative research to complement the predominant quantitative approaches and for more studies on the effectiveness of China's top-down ESG governance model compared to market-driven approaches in Western countries.

D. Relationship Between ESG Disclosure and Business Performance

The relationship between ESG disclosure and business performance has been a central focus of ESG research globally, with studies examining both financial and non-financial performance outcomes. This research has particular relevance for China as companies and policymakers assess the business case for enhanced ESG transparency.

Research on the financial impacts of ESG disclosure in China has produced mixed results, reflecting the complexity of this relationship and its dependence on various contextual factors. Li et al. (2023) investigate the impact of ESG on financial performance among A-share listed companies in China, finding a generally positive relationship moderated by digital transformation. Their results suggest that companies with higher ESG ratings outperform their peers financially, but this effect is strongest for firms that have embraced digital technologies.

Market valuation effects of ESG disclosure have also been examined. Cong et al. (2023) find that ESG investment in China is associated with positive market reactions, particularly for companies demonstrating genuine commitment to carbon reduction rather than mere symbolic disclosure. Luo (2022) explores the relationship between ESG disclosure, liquidity, and stock returns, finding that improved ESG information can enhance market liquidity by reducing information asymmetry.

Beyond financial outcomes, studies have examined the relationship between ESG disclosure and environmental performance. Research indicates that enhanced disclosure requirements can drive improvements in actual environmental practices, though this relationship is complex and influenced by factors such as regulatory enforcement, market pressure, and company characteristics (Long et al., 2022). Importantly, some studies have identified the risk of "ESG decoupling"—a gap between reported and actual ESG performance—particularly when disclosure is driven primarily by external pressures rather than internal commitment (Liu et al., 2023).

The role of ESG disclosure in attracting investment has gained particular attention in the Chinese context. Su Gang of China Pacific Insurance Group notes that improved disclosure by Chinese companies helps enhance corporate governance and competitiveness, making firms more attractive to both domestic and international investors (PRI, 2024). This perspective aligns with global research suggesting that high-quality ESG disclosure can reduce financing costs by mitigating information asymmetry and signaling effective risk management.

Several studies have specifically examined the impact of different disclosure motives on outcomes. Abbas et al. (2024) investigate ESG disclosure motives for environmentally sensitive industries, finding that disclosure driven by internal commitment tends to lead to more substantial performance improvements than disclosure motivated solely by regulatory compliance or external pressure.

Overall, while the evidence suggests a generally positive relationship between ESG disclosure and various performance outcomes in China, this relationship is complex and contingent on factors including disclosure quality, company characteristics, industry sector, and broader institutional context. This complexity underscores the need for continued research as China's ESG disclosure system evolves.

III. Methodology

A. Research Approach

This study adopts a qualitative research approach focusing on document analysis and content review to examine the evolution and future trajectory of ESG information disclosure in China. This approach is appropriate given the paper's objectives of tracing historical developments, analyzing current frameworks, identifying challenges, assessing global integration efforts, and projecting future trajectories—all of which require in-depth interpretation of policy documents, regulatory frameworks, academic literature, and industry reports.

The research follows a descriptive-analytical methodology that allows for both chronological tracking of developments and critical analysis of current practices and future directions. This approach enables the study to capture the dynamic nature of China's ESG disclosure system, which continues to evolve in response to both domestic priorities and global trends. The analysis is guided by the theoretical frameworks discussed in the literature review, particularly stakeholder theory, legitimacy theory, and institutional theory, which provide conceptual lenses for interpreting China's distinctive approach to ESG disclosure.

While quantitative studies have dominated ESG research in China (Tang & Li, 2023), this qualitative approach complements existing literature by providing a comprehensive overview and analysis that contextualizes empirical findings within broader regulatory and institutional developments. The approach also aligns with calls for more qualitative research to enhance understanding of China's unique ESG landscape (Tang & Li, 2023).

B. Data Sources

This study draws on a diverse range of data sources to ensure comprehensive coverage and triangulation of information. Primary sources include official policy documents, regulatory guidelines, and stock exchange requirements issued by Chinese authorities. Key documents analyzed include:

1. The Basic Standards for Corporate Sustainability Disclosure released by the Ministry of Finance in December 2024

2. Guidelines on Corporate Sustainability-related Disclosure issued by the Shanghai, Shenzhen, and Beijing Stock Exchanges in May 2024

3. Guiding Opinions on Further Strengthening Financial Support for Green and Low-Carbon Development released by the People's Bank of China in March 2024

4. ESG Reporting Requirements for Listed Companies issued by the China Securities Regulatory Commission in February 2024

Secondary sources include academic literature, industry reports, and analyses by international organizations. The literature review synthesizes findings from peer-reviewed journal articles, focusing on recent publications (2020-2025) to ensure relevance to current developments. Industry perspectives are drawn from reports by organizations such as KPMG, SynTao Green Finance, BSR, and LRQA. International context is provided through documents from organizations including the ISSB, Financial Stability Board, and IOSCO.

The selection of sources prioritized recency, relevance, and authoritativeness. Given the rapidly evolving nature of ESG disclosure in China, particular emphasis was placed on sources from 2023-2025 to capture the latest developments. To ensure relevance, sources were selected based on their focus on ESG disclosure in China, particularly in relation to global integration. Authoritativeness was ensured by prioritizing peer-reviewed academic publications, official regulatory documents, and reports from recognized organizations with expertise in the field.

One limitation of the data sources is the potential for publication bias, particularly in government and industry documents that may emphasize positive developments while minimizing challenges. To mitigate this, the study includes sources from diverse perspectives, including academic research that takes a more critical approach to evaluating disclosure practices. Another limitation is the reliance on publicly available documents, which may not capture internal decision-making processes or informal practices. This limitation is acknowledged in the analysis, which focuses on formal systems while recognizing that implementation may vary.

C. Analytical Framework

This study employs a multi-dimensional analytical framework to organize and evaluate findings about China's ESG disclosure system. The framework consists of four interconnected dimensions: chronological development, regulatory structure, implementation challenges, and global integration. This approach enables comprehensive analysis of both the evolutionary trajectory and current state of China's ESG disclosure system.

The chronological dimension traces the development of ESG disclosure in China across four stages: early stage (2003-2015), growth stage (2016-2020), acceleration stage (2021-2023), and current stage (2024-present). This temporal analysis helps identify key inflection points, policy shifts, and driving factors in the evolution of China's approach.

The regulatory structure dimension examines the current architecture of China's ESG disclosure system, analyzing the roles of different regulatory bodies, the hierarchy of disclosure requirements, enforcement mechanisms, and specific obligations for different types of companies. This structural analysis provides insights into the comprehensiveness, coherence, and effectiveness of China's current approach.

The implementation challenges dimension identifies and analyzes key obstacles to effective ESG disclosure in China, including data quality issues, capacity constraints, conflicts between local and global standards, and the risk of ESG decoupling. This critical analysis helps assess the practical effectiveness of formal regulations and identify areas for improvement.

The global integration dimension examines China's efforts to align its ESG disclosure system with international standards, particularly the ISSB framework, while maintaining distinctive Chinese characteristics. This comparative analysis considers both points of convergence and divergence between Chinese and global approaches, and assesses the implications for international harmonization efforts.

For evaluating China's progress in ESG disclosure harmonization, the framework employs several criteria, including:

1. Comprehensiveness: The extent to which China's system covers all relevant ESG aspects
2. Comparability: The degree to which Chinese disclosures can be compared with those from other jurisdictions
3. Materiality: The approach to determining what information is significant enough to warrant disclosure
4. Implementation capacity: The ability of companies and regulators to effectively implement disclosure requirements
5. Global alignment: The compatibility of Chinese standards with international frameworks

These criteria guide the analysis throughout the paper, particularly in assessing current practices and formulating recommendations for future development.

IV.Historical Development of ESG Disclosure in China

A. Early Stage (2003-2015)

China's journey toward formalized ESG disclosure began in the early 2000s, primarily focused on environmental aspects rather than comprehensive ESG reporting. The State Environmental Protection Administration (later elevated to the Ministry of Environmental Protection) issued China's first policy on environmental information disclosure—the Announcement on Corporate Environmental Information Disclosure—in 2003, which encouraged and supported enterprises to voluntarily disclose environment-related information (Dora Hu, 2024). This initial step reflected growing awareness of environmental challenges within China's rapidly industrializing economy.

The early regulatory approach was primarily voluntary, with limited mandatory requirements focused on companies with significant environmental impacts. In 2007, the State Environmental Protection Administration issued the Measures on Open Environmental Information, which established the first mandatory disclosure requirements for companies whose pollutant emissions exceeded local, regional, or national standards (China Law Society, 2024). This marked an important shift from purely voluntary disclosure to a mixed system with mandatory elements for high-impact industries.

State-owned enterprises (SOEs) played a pivotal role as early adopters of environmental and social reporting in China. In 2008, the State-owned Assets Supervision and Administration Commission (SASAC) published a directive titled "Instructions on Central Enterprises to Disclose Their Social Responsibilities Information," which encouraged central enterprises to issue Corporate Social Responsibility (CSR) reports (Zhang & Chu, 2024). This directive reflected the government's intention to use SOEs as models for promoting responsible business practices.

Financial markets also began to incorporate sustainability considerations during this period. In 2008, the Shanghai Stock Exchange (SSE) and China Securities Index Co., Ltd. issued the SSE Social Responsibility index, representing an early effort to integrate ESG factors into investment decisions (Zhang & Chu, 2024). That same year, AEGON-Industrial Fund Management Co. Ltd. became a sustainable investment pioneer in China by offering the first socially responsible investment retail fund (Long et al., 2022).

However, these early initiatives faced significant limitations. The absence of standardized reporting formats and comprehensive guidelines led to inconsistent and often superficial disclosure practices. Companies frequently failed to provide information critical to stakeholders, instead focusing on positive achievements with limited discussion of challenges or negative impacts (Long et al., 2022). The voluntary nature of most requirements meant that adoption was uneven across industries and regions.

Despite these limitations, the early stage established important foundations for China's ESG disclosure system. It introduced the concept of corporate transparency on environmental and social issues, began to build regulatory frameworks, and initiated market mechanisms to reward responsible practices. These developments laid the groundwork for more comprehensive approaches in subsequent periods as China's economic priorities evolved to place greater emphasis on sustainable development.

B. Growth Stage (2016-2020)

The growth stage from 2016 to 2020 marked a significant expansion in China's approach to ESG disclosure, characterized by the formalization of green finance initiatives, enhanced stock exchange requirements, and greater attention to international standards. This period coincided with China's increasing commitment to environmental protection and sustainable development, reflected in its endorsement of the Paris Climate Agreement in 2016 and its growing emphasis on "ecological civilization" as a national policy priority.

A pivotal development during this period was the introduction of green finance guidelines. In 2016, seven ministries and commissions jointly issued the "Guidelines for Establishing the Green Financial System," representing China's first comprehensive policy framework for supporting environmentally sustainable investment (PBOC, 2024). This document emphasized information disclosure as a crucial component of green finance, calling for standardized environmental information disclosure by financial institutions and enterprises.

According to data from the People's Bank of China (PBOC), this initial guidance for establishing the green financial system led to remarkable growth, with China's green loans and green bonds both expanding at an average rate of over 20% in the seven years following 2016 (Guo & Zhu, 2023). This growth supported China's rise in sectors such as solar energy, wind power, electric vehicles, and battery technology.

Stock exchanges took increasingly proactive roles in promoting ESG disclosure during this period. The Shanghai and Shenzhen stock exchanges enhanced their guidelines for listed companies, introducing more specific environmental and social disclosure expectations. By 2020, companies listed on these exchanges were encouraged to publish annual ESG or CSR reports, though most requirements remained voluntary (China Business Briefing, 2024).

Industry-specific disclosure regulations also expanded during this period, particularly for environmentally sensitive sectors. In 2015, China's Environmental Protection Law (EPL) came into effect, significantly strengthening requirements for environmental disclosure. As noted by Long et al. (2022), local governments subsequently gave unprecedented attention to environmental issues brought by companies, substantially strengthening environmental regulation enforcement in terms of government responsibility, corporate compliance, public participation, and environmental information disclosure.

This growth stage also saw increased alignment with international standards. By 2015, approximately 30% of CSR reports in China followed international reporting standards such as the Global Reporting Initiative (GRI) Guidelines and the UN Global Compact principles (Long et al., 2022). This trend reflected both growing awareness of global best practices and Chinese companies' increasing integration into global markets and supply chains.

Despite these advances, challenges remained. Disclosure practices continued to vary significantly in quality and comprehensiveness, with many companies taking a compliance-oriented approach rather than viewing disclosure as a strategic tool for managing ESG risks and opportunities. The focus remained primarily on environmental aspects, with less attention to social and governance dimensions. Nevertheless, this period established important frameworks and practices that would accelerate in subsequent years as China's commitment to sustainable development deepened.

C. Acceleration Stage (2021-2023)

The period from 2021 to 2023 witnessed a dramatic acceleration in the development of China's ESG disclosure system, driven by the country's commitment to ambitious carbon neutrality goals, increased regulatory attention, and growing investor interest in sustainable finance. This acceleration stage marked China's transition from primarily voluntary disclosure initiatives to a more structured and comprehensive approach with expanding mandatory elements.

A defining catalyst for this acceleration was China's announcement in 2020 of its dual carbon goals: reaching peak carbon emissions by 2030 and achieving carbon neutrality by 2060. These ambitious targets triggered a cascade of policy developments aimed at redirecting China's economy toward a more sustainable trajectory. As Guo and Zhu (2023) note, China subsequently released a plethora of policies to guide the economy toward these goals, with green finance and enhanced disclosure requirements playing central roles in this transition.

During this period, mandatory disclosure requirements significantly expanded. In December 2021, the Ministry of Ecology and Environment issued the "Measures for the Administration of Legal Disclosure of Enterprise Environmental Information," which came into effect in February 2022 (China Law Society, 2024). These measures established more extensive mandatory environmental disclosure requirements for companies, particularly those in high-impact industries.

The emphasis on ESG disclosure also broadened beyond environmental aspects to encompass more comprehensive coverage of social and governance dimensions. This expansion reflected growing recognition that sustainability encompasses not only environmental protection but also social responsibility and effective governance structures. The trend was particularly evident in emerging ESG rating systems, which took more holistic approaches to evaluating company performance across all three dimensions (SynTao Green Finance, 2023).

ESG investing experienced remarkable growth during this period. According to SynTao Green Finance, by the end of Q3 2023, ESG investments in China reached a record RMB 33.06 trillion (approximately US$4.56 trillion), representing a 34.4% increase from 2022 (China Business Briefing, 2024). The range of ESG-related financial products also expanded significantly, with data from Wind indicating that from 2019 to 2023, the number of pure ESG funds in China grew from 16 to 135, while ESG stock indices increased from 66 to 370 (China Business Briefing, 2024).

This period also saw increased attention to ESG disclosure at the conceptual level, with the term "ESG" first appearing in a central government-level document in December 2023. The State Council's "Opinions on Comprehensively Promoting the Construction of a Beautiful China" explicitly called for exploring the evaluation of environmental, social, and governance performance, signaling high-level endorsement of the ESG concept (Dora Hu, 2024).

Toward the end of this acceleration stage, China began to lay the groundwork for more systematic alignment with international standards. In 2023, China embarked on the process of developing national sustainability disclosure standards that would balance global compatibility with Chinese characteristics. This initiative reflected growing recognition of the need for harmonization in an increasingly interconnected global financial system while preserving space for China's distinctive development priorities and institutional context.

D. Current Stage (2024-Present)

The current stage of ESG disclosure development in China, beginning in 2024, represents the most significant advancement to date, characterized by comprehensive standardization efforts, formalized mandatory requirements, and explicit efforts toward international alignment. This period has been dubbed the "Year for Disclosure" in China due to the simultaneous introduction of several groundbreaking policy instruments setting the country on a path for increased mandatory and voluntary sustainability information disclosure (Guo & Zhu, 2023).

A landmark development in this stage was the introduction of the Basic Standards for Corporate Sustainability Disclosure by the Ministry of Finance (MOF) in December 2024, in collaboration with nine other departments. This document established overarching ESG disclosure objectives, principles, and requirements for consistent reporting across China (China Business Briefing, 2024). The Basic Standards marked the beginning of MOF's plan to issue both the general standard for corporate sustainability disclosure (based on IFRS S1) and the climate-related disclosure standard (based on IFRS S2) by 2027, laying the foundation for building a national sustainability disclosure system by 2030 (Guo & Zhu, 2023).

In February 2024, under the auspices of the China Securities Regulatory Commission (CSRC), China's three stock exchanges—Shanghai, Shenzhen, and Beijing—issued new ESG reporting guidelines with far-reaching implications. These guidelines mandated companies of the SSE 180, STAR 50, SZSE 100, and ChiNext indexes, along with companies listed both domestically and overseas, to disclose their ESG data by 2026. Other companies were encouraged to publish ESG reports on a voluntary basis (Guo & Zhu, 2023). This approach represents a significant expansion of mandatory disclosure requirements while maintaining flexibility for smaller companies and those in less environmentally intensive sectors.

The current regulatory framework adopts a "double materiality" approach, requiring companies to report on both the financial impact of ESG factors on their business and the broader social and environmental impacts of their operations (China Business Briefing, 2024). This approach differs from the ISSB's enterprise value focus and aligns more closely with the European Union's concept of double materiality, reflecting China's emphasis on both financial sustainability and broader societal impacts.

The current stage has also seen intensified focus on green finance as a crucial enabler of China's sustainability transition. In March 2024, the People's Bank of China (PBOC) and six other ministries issued the "Guiding Opinions on Further Strengthening Financial Support for Green and Low-Carbon Development," calling for the full development of financial infrastructure, policies and standards, risk management practices, products and markets, and information disclosure (Guo & Zhu, 2023). This document reflects China's ambition to become the world's leader in all aspects of sustainable finance over the next five to ten years.

By April 2024, the impact of these initiatives was already becoming apparent, with 1,938 A-share listed companies having published ESG reports according to China Galaxies Securities. Leading sectors in ESG disclosure include banking, non-bank finance, steel, mining, and public utilities, with centrally administered state-owned enterprises showing the highest disclosure rate at 80% (China Business Briefing, 2024).

The current stage represents a critical transition from primarily voluntary and fragmented approaches to a comprehensive, standardized, and increasingly mandatory system aligned with global best practices while maintaining distinctive Chinese characteristics. This transition establishes the framework for China's ESG disclosure system to reach full implementation by 2030, with profound implications for both domestic sustainable development and global ESG harmonization efforts.

V. Current ESG Disclosure Framework in China

A. Regulatory Architecture

China's current ESG disclosure system operates within a complex regulatory architecture characterized by multiple authorities with overlapping yet distinct responsibilities. This multi-tiered structure reflects China's governance approach, which combines central coordination with sectoral and regional implementation mechanisms.

At the highest level, the Ministry of Finance (MOF) serves as the principal authority for setting overarching sustainability disclosure standards. Through its December 2024 Basic Standards for Corporate Sustainability Disclosure, developed in collaboration with nine other departments, the MOF has established the fundamental framework that guides all other ESG disclosure requirements in China (China Business Briefing, 2024). This document outlines general provisions, disclosure objectives and principles, information quality requirements, disclosure elements, and implementation guidelines that form the foundation of China's national disclosure system.

The China Securities Regulatory Commission (CSRC) plays a crucial role in translating these general standards into specific requirements for publicly listed companies. The CSRC works in close coordination with China's three major stock exchanges — Shanghai, Shenzhen, and Beijing — to develop and implement disclosure guidelines for listed entities (Guo & Zhu, 2023). While the CSRC provides regulatory oversight, the stock exchanges themselves issue detailed implementation guidance and monitor compliance among their listed companies.

In the financial sector, the People's Bank of China (PBOC) has emerged as a key driver of ESG disclosure through its green finance initiatives. The PBOC's March 2024 "Guiding Opinions on Further Strengthening Financial Support for Green and Low-Carbon Development," issued jointly with six other ministries, established specific disclosure expectations for financial institutions and the companies they finance (Guo & Zhu, 2023). This document reflects the PBOC's growing influence in shaping sustainability reporting standards as part of its broader mandate to support China's green transition.

Sector-specific regulation is provided by various ministries and commissions based on their respective domains. The Ministry of Ecology and Environment oversees environmental disclosure requirements, particularly for heavily polluting industries. The Ministry of Human Resources and Social Security addresses labor-related disclosure aspects, while the State-owned Assets Supervision and Administration Commission (SASAC) sets expectations for state-owned enterprises (China Law Society, 2024).

This regulatory architecture operates in a hierarchical manner, with national-level standards providing the overarching framework, sector-specific regulations addressing industry particularities, and stock exchange requirements offering detailed implementation guidance for listed companies. This structure allows for both comprehensive coverage and tailored approaches for different types of organizations, though it also creates potential for complexity and occasional inconsistency.

Enforcement mechanisms within this architecture vary by regulatory authority and company type. For listed companies, the stock exchanges serve as primary enforcers, with the ability to require rectification, issue warnings, or implement more serious sanctions for non-compliance. The CSRC can impose administrative penalties for serious disclosure violations. For state-owned enterprises, SASAC has significant enforcement authority, integrating ESG performance into its evaluation systems for SOE management (China Law Society, 2024).

This complex regulatory architecture demonstrates China's commitment to developing a comprehensive ESG disclosure system. However, it also presents challenges related to coordination, consistency, and clarity that will need to be addressed as the system continues to evolve toward full implementation by 2030.

B. Stock Exchange Requirements

China's stock exchanges have emerged as pivotal actors in advancing ESG disclosure, establishing increasingly specific and stringent requirements for listed companies. The Shanghai Stock Exchange (SSE), Shenzhen Stock Exchange (SZSE), and Beijing Stock Exchange (BSE) each play distinctive roles in this ecosystem, reflecting their different market positions and the types of companies they host.

In February 2024, under CSRC guidance, these three exchanges issued coordinated Guidelines on Corporate Sustainability-related Disclosure, marking a significant advancement in standardizing ESG reporting across Chinese capital markets (KPMG, 2024). These guidelines established mandatory disclosure requirements for companies listed on specific indices, including the SSE 180 Index, STAR 50 Index, SZSE 100 Index, and ChiNext Index, as well as companies dual-listed on Chinese and international stock exchanges. Companies outside these categories are encouraged to disclose sustainability information voluntarily (KPMG, 2024).

The first mandatory disclosure under these guidelines is due by April 30, 2026, providing companies with a transition period to develop appropriate systems and capabilities (KPMG, 2024). This phased implementation approach reflects recognition of the challenges associated with comprehensive ESG reporting and the need for companies to build capacity gradually.

The content requirements under these guidelines are comprehensive, covering four core areas: governance, strategy, risk management, and metrics and targets (LRQA, 2024). In the environmental domain, companies must report on carbon emissions, energy consumption, water management, waste disposal, and compliance with environmental regulations. Social responsibility reporting encompasses labor practices, human rights issues, community engagement, and consumer protection. Governance reporting includes structural policies, anti-corruption measures, board diversity, and executive compensation (KPMG, 2024).

The Shanghai Stock Exchange has taken a particularly proactive approach, setting a goal for all export-oriented state-owned enterprises listed on its exchange to publish ESG reports by 2027 (China Business Briefing, 2024). This ambitious target reflects Shanghai's position as China's premier financial center and its aspiration to align with international best practices in sustainable finance.

The Shenzhen Stock Exchange, with its focus on innovation and technology companies, has tailored its approach to emphasize disclosure related to research and development, intellectual property, and human capital—areas of particular relevance to its listed entities. The ChiNext board, China's equivalent to NASDAQ, has specific requirements for innovative companies, particularly regarding their environmental impacts and governance structures (KPMG, 2024).

The Beijing Stock Exchange, which primarily focuses on small and medium-sized enterprises (SMEs), has adopted a voluntary disclosure policy in recognition of the developmental stage and limited disclosure capacity of many of its listed companies. SMEs are encouraged to voluntarily report their ESG practices, establishing benchmarks for sustainable development appropriate to their scale and resources (KPMG, 2024).

All three exchanges emphasize alignment with international standards while maintaining China's distinctive characteristics. Their guidelines draw from frameworks such as the Global Reporting Initiative (GRI), the International Sustainability Standards Board (ISSB), and the Task Force on Climate-Related Financial Disclosures (TCFD), adapted to China's specific context (Business & Sustainable Research Network, 2024).

These stock exchange requirements represent a critical mechanism for translating China's national sustainability disclosure standards into operational practices for listed companies. By establishing clear expectations, implementation timelines, and reporting frameworks, they provide concrete guidance that is driving the rapid expansion of ESG disclosure across China's capital markets.

C. Sector-Specific Disclosure Regulations

China's ESG disclosure framework includes targeted regulations for specific sectors, reflecting recognition that different industries face distinct sustainability challenges and have varying impacts on the environment and society. These sector-specific approaches provide more detailed guidance while accommodating the unique characteristics of different industries.

Heavy polluting industries face the most stringent disclosure requirements, reflecting their significant environmental impacts. The Ministry of Ecology and Environment's "Measures for the Administration of Legal Disclosure of Enterprise Environmental Information," which took effect in February 2022, established mandatory disclosure obligations for 16 heavily polluting industries, including thermal power, steel, cement, and electrolysis aluminum (Long et al., 2022). Companies in these sectors must publish annual environmental information reports detailing emissions of pollutants and other environmental aspects, with significantly more comprehensive requirements than those applied to other industries.

This differentiated approach is evident in empirical research findings. Long et al. (2022) found that companies listed under heavily polluting industries are more likely to disclose ESG reports due to environmental regulatory pressure. Their study of A-share heavily polluting firms in the Shanghai and Shenzhen stock markets from 2015 to 2019 revealed that media attention and state ownership significantly influence the quality and extent of environmental disclosure, with particularly strong effects for non-financial environmental information.

The financial sector has emerged as another priority area for specialized ESG disclosure requirements. Financial institutions play a crucial role in supporting China's green transition through their lending and investment decisions. The People's Bank of China has issued several guidelines specifically addressing sustainability disclosure by banks, insurers, and other financial institutions (PBOC, 2024). These guidelines emphasize disclosure of climate-related risks, green lending practices, and the environmental impacts of investment portfolios.

State-owned enterprises (SOEs) are subject to additional disclosure expectations reflecting their dual roles as commercial entities and instruments of state policy. The State-owned Assets Supervision and Administration Commission (SASAC) issued the Work Program for Improving the Quality of Listed Companies Held by Central Enterprises, which mandated ESG reporting by central enterprise holding companies with a target of full coverage by 2023 (Lin et al., 2024). As a result, SOEs have significantly higher disclosure rates than private companies, with centrally administered SOEs achieving an 80% disclosure rate by early 2024 (China Business Briefing, 2024).

Energy companies face particularly detailed disclosure requirements related to carbon emissions, renewable energy transition plans, and environmental protection measures. The National Energy Administration has issued specific guidance for energy sector companies, requiring disclosure of greenhouse gas emissions, energy efficiency metrics, and strategies for transitioning to cleaner energy sources (China Law Society, 2024).

Mining and extractive industries must provide comprehensive information about their environmental impacts, land reclamation efforts, and community relations. These requirements reflect the substantial environmental and social footprints of mining operations and the heightened stakeholder scrutiny they face (China Law Society, 2024).

These sector-specific approaches demonstrate China's nuanced understanding of the varying sustainability challenges across different industries. By tailoring disclosure requirements to sector characteristics, China's ESG framework balances comprehensive coverage with practical relevance, enhancing the usefulness of disclosed information for investors, regulators, and other stakeholders.

D. Double Materiality Approach

China's ESG disclosure framework has distinctively adopted a double materiality approach, requiring companies to report on both how sustainability issues affect their financial performance and how their operations impact society and the environment. This approach differs from the enterprise value focus of the ISSB standards and aligns more closely with the European Union's CSRD, reflecting China's emphasis on balancing economic development with broader societal and environmental considerations.

The concept of double materiality is explicitly incorporated into China's Basic Standards for Corporate Sustainability Disclosure, which recognize that sustainability information can be material from two perspectives: impact materiality and financial materiality (Guo & Zhu, 2023). Impact materiality considers a company's significant actual or potential impacts on the economy, environment, and society, including impacts on human rights. Financial materiality addresses sustainability-related risks and opportunities that could reasonably be expected to affect the company's future cash flows, access to finance, cost of capital, and value over time.

This dual lens reflects China's policy priorities, which emphasize the concept of "ecological civilization" and the harmony between economic development and environmental protection. By requiring companies to consider both financial implications and broader impacts, China's approach encourages more comprehensive sustainability strategies that address the full range of stakeholder concerns rather than focusing narrowly on investor interests (Business & Sustainable Research Network, 2024).

In practical implementation, China's double materiality approach manifests in several ways. The stock exchange guidelines require companies to identify and disclose material ESG issues through a systematic process that considers both financial significance and stakeholder concerns (KPMG, 2024). Companies must explain their materiality assessment methodology and the criteria used to determine which issues warrant disclosure, with the expectation that this process will include engagement with diverse stakeholders.

For environmentally sensitive industries, the double materiality approach places particular emphasis on ecological impacts regardless of their immediate financial implications. Companies in sectors such as mining, chemicals, and heavy manufacturing must provide detailed disclosures about their environmental footprints, pollution prevention measures, and contributions to ecological protection, even when these issues may not have significant short-term financial consequences (Abbas et al., 2024).

The double materiality concept also extends to social dimensions, with companies expected to disclose information about their impacts on employees, communities, and broader society. This includes reporting on labor practices, community engagement, product safety, and contributions to common prosperity initiatives, reflecting

China's growing emphasis on social responsibility as a component of sustainable development (China Law Society, 2024).

While China's double materiality approach offers a more comprehensive view of corporate sustainability performance than a purely financial materiality focus, it also presents implementation challenges. Companies must develop robust processes for identifying and assessing impacts across multiple dimensions, requiring significant expertise and resources. The subjective nature of impact materiality assessments can lead to inconsistency across companies, complicating comparability for investors and other stakeholders (Zhang & Chu, 2024).

China's adoption of double materiality also has implications for global harmonization efforts. While it creates some divergence from the ISSB's enterprise value approach, it aligns China more closely with the European Union's sustainability reporting direction. This positioning potentially enables China to play a bridging role in international discussions about materiality concepts, contributing to the development of more integrated global standards that balance financial and impact considerations (Barnes & Thornburg, 2024).

VI. Challenges in China's ESG Disclosure System

A. Data Quality and Verification Issues

Despite significant advances in China's ESG disclosure framework, data quality and verification remain persistent challenges that affect the reliability and usefulness of sustainability reporting. These issues span several dimensions, including consistency, comparability, accuracy, and third-party verification.

Inconsistency and incomparability problems are particularly prevalent, as highlighted by Lin et al. (2024) in their study of ESG disclosure performance among Chinese listed companies. Their research found considerable variation in disclosure approaches, with companies using different metrics, methodologies, and reporting formats even within the same industry. This heterogeneity makes it difficult for investors and other stakeholders to compare performance across companies or track progress over time.

The problem is compounded by the historical absence of standardized calculation methodologies for key ESG indicators. While recent regulatory developments, including the Basic Standards for Corporate Sustainability Disclosure, have begun to address this issue, implementation remains uneven. Su Gang of China Pacific Insurance Group notes that unified calculation and disclosure standards will continue to improve the quality of ESG information, promoting a healthier capital market (PRI, 2024). However, this harmonization process is still in its early stages.

Limited third-party assurance represents another significant challenge. Unlike financial reporting, which requires independent auditing, ESG disclosure in China generally lacks mandatory external verification requirements. Lan et al. (2024) examined the relationship between ESG information disclosure and audit fees, finding that the absence of standardized verification mechanisms creates uncertainty about the reliability of reported information. Their research suggests that higher-quality ESG disclosure correlates with lower audit risk premiums, indicating that verification challenges affect multiple aspects of corporate reporting.

"Greenwashing" concerns have emerged as ESG disclosure has become more widespread. Yu et al. (2020) studied greenwashing in environmental, social, and governance disclosures, finding instances where companies presented misleading or overly positive portrayals of their sustainability performance. This phenomenon undermines trust in ESG reporting and reduces its effectiveness as a tool for decision-making by investors and other stakeholders.

The verification challenge is particularly acute for complex ESG metrics such as Scope 3 greenhouse gas emissions, which involve supply chain data that companies may have limited ability to verify independently. Similar challenges exist for social impact measurements and governance effectiveness assessments, which often rely on qualitative indicators that are inherently difficult to verify objectively (Zhang & Chu, 2024).

Regulatory efforts to address these data quality issues include the information quality requirements outlined in the Basic Standards for Corporate Sustainability Disclosure, which emphasize that sustainability-related financial information should be complete, neutral, accurate, verifiable, timely, and understandable (KPMG, 2024). However, translating these principles into practice requires significant investment in data collection systems, verification processes, and reporting capabilities that many companies are still developing.

Technological solutions are increasingly being explored to enhance data quality. Liu et al. (2023) found that digital transformation can significantly alleviate ESG decoupling by improving information processing capabilities and reducing information asymmetry. Digital technologies, including blockchain for data verification, artificial intelligence for consistent analysis, and automated reporting systems, offer potential pathways to improve the reliability and comparability of ESG information.

Addressing these data quality and verification challenges will be essential for China's ESG disclosure system to achieve its full potential. As the system matures, greater emphasis on standardized methodologies, independent verification, and technological solutions will be needed to ensure that sustainability reporting provides reliable, comparable, and decision-useful information to all stakeholders.

B. Implementation Capacity Constraints

The implementation of China's increasingly comprehensive ESG disclosure requirements faces significant capacity constraints across various dimensions, including resource limitations, technical expertise shortages, and digital transformation challenges. These constraints affect different types of companies to varying degrees, with smaller firms and those in less developed regions facing particularly acute challenges.

Resource limitations for smaller firms present a fundamental implementation barrier. As KPMG (2024) notes, smaller enterprises, particularly SMEs, often lack the financial, human, and technical resources needed for thorough ESG reporting. These resource constraints become more pronounced as disclosure requirements grow more complex, requiring sophisticated data collection systems, analytical capabilities, and reporting processes. Recognizing this challenge, China's disclosure framework adopts a differentiated approach, with mandatory requirements initially focused on larger listed companies while smaller firms are encouraged to report voluntarily.

Technical expertise shortages represent another significant constraint. ESG disclosure requires specialized knowledge across multiple domains, including environmental science, social impact assessment, governance best practices, and reporting methodologies. Many Chinese companies, particularly those new to sustainability reporting, lack personnel with these skills (Business & Sustainable Research Network, 2024). The shortage is especially acute for specific technical capabilities such as carbon accounting, biodiversity impact assessment, and social responsibility measurement.

The pace of regulatory evolution has created additional implementation challenges. As China rapidly develops its ESG disclosure system, companies must continuously adapt to new requirements and expectations. This regulatory dynamism, while driving progress, creates a moving target that complicates implementation planning and capacity building (China Law Society, 2024). Companies must develop not only current reporting capabilities but also the flexibility to evolve as standards continue to change.

Digital transformation requirements add another layer of complexity. As Liu et al. (2023) emphasize, digital technologies play a crucial role in effective ESG implementation by enhancing data collection, processing, and reporting capabilities. Their research demonstrates that digital transformation can significantly reduce ESG decoupling by improving information processing ability and relieving information asymmetry. However, achieving this digital transformation requires substantial investment and expertise that many companies are still developing.

Implementation capacity varies significantly across industries and regions. Companies in environmentally sensitive sectors like energy, chemicals, and manufacturing have generally developed more advanced environmental reporting capabilities in response to longstanding regulatory pressure (Long et al., 2022). Similarly, financial institutions have built greater capacity for ESG assessment due to their role in green finance initiatives. Companies in less regulated sectors often lag in developing comparable capabilities.

Geographic disparities also affect implementation capacity. Companies based in first-tier cities and more developed coastal regions typically have greater access to sustainability expertise, technology resources, and supporting services than those in less developed inland areas (China Law Society, 2024). These regional disparities create uneven implementation that may undermine the comparability and comprehensiveness of China's overall ESG disclosure system.

Addressing these implementation capacity constraints requires coordinated efforts from regulators, industry associations, educational institutions, and companies themselves. Regulatory approaches that provide phased implementation timelines, clear guidance, and scaled requirements based on company size and sector can help manage capacity limitations. Industry collaborations to develop shared resources, tools, and best practices can support more efficient capacity building. Educational programs focused on developing ESG expertise will be crucial for addressing technical knowledge shortages over the longer term.

C. Balancing Local and Global Standards

A central challenge in China's ESG disclosure system is achieving an effective balance between alignment with international standards and addressing China's specific national priorities and institutional context. This balance is crucial for ensuring both global comparability and local relevance of ESG disclosures.

China's approach to international alignment is evolving rapidly. While the country has not formally adopted the ISSB standards, market participants have noted that these standards are likely to serve as an important benchmark for China's ESG disclosure standards (Latham & Watkins, 2023). China's Basic Standards for Corporate Sustainability Disclosure follows the International Sustainability Standards Board (ISSB)'s disclosure framework, requiring companies to disclose information related to governance, strategy, risk and opportunity management, and indicators and targets (Guo & Zhu, 2023).

However, China has made important adaptations to international frameworks to reflect its specific circumstances. Most notably, unlike the ISSB Standard's financial materiality focus, China's guidelines follow the principle of double materiality, assessing both ESG impacts on a firm's financials and the firm's impacts on ESG outcomes (Guo & Zhu, 2023). This approach aligns more closely with the European Union's CSRD than with the ISSB's enterprise value orientation, reflecting China's emphasis on balanced development that considers both economic and broader societal factors.

Cultural and institutional barriers present significant challenges for harmonization efforts. China's distinctive governance model, with its emphasis on state guidance and the role of state-owned enterprises, creates a different institutional context for ESG disclosure than the market-driven approaches prevalent in Western economies (Tang & Li, 2023). Similarly, traditional Chinese concepts such as "harmony between humans and nature" and "common prosperity" influence how sustainability is conceptualized and prioritized in ways that may differ from Western frameworks.

China-specific material issues must be addressed in any effective ESG disclosure system for the country. As Business & Sustainable Research Network (2024) emphasizes, companies operating in China must consider specific material issues such as environmental protection priorities outlined in Five-Year Plans, common prosperity initiatives addressing income inequality, and contributions to national development strategies. International standards may not fully capture these priorities, necessitating adaptations to the Chinese context.

The challenge of balancing global and local considerations is particularly relevant for Chinese companies with international operations and foreign companies operating in China. These organizations must navigate multiple disclosure regimes with potentially conflicting requirements, creating compliance complexity and reporting burdens (China Law Society, 2024). For Chinese companies listing overseas, this challenge is especially acute, as they must satisfy both domestic regulators and international market expectations.

Despite these challenges, China's ESG disclosure system is increasingly finding a middle path that combines international alignment with Chinese characteristics. The Basic Standards for Corporate Sustainability Disclosure represents a significant step in this direction, establishing a framework that draws on global best practices while maintaining flexibility to address China's specific circumstances (China Business Briefing, 2024).

Looking ahead, China's approach to balancing local and global standards will likely continue to evolve. The country's growing influence in international financial markets and global sustainability discussions positions it to potentially shape future iterations of international standards, perhaps contributing to greater recognition of diverse perspectives and priorities in global ESG frameworks (Barnes & Thornburg, 2024).

D. ESG Disclosure Decoupling

ESG disclosure decoupling — the gap between reported ESG performance and actual operational practices — represents a significant challenge for China's sustainability reporting system. This phenomenon undermines the reliability and effectiveness of ESG disclosure as a tool for stakeholder decision-making and sustainable development advancement.

Liu et al. (2023) provide important insights into this issue in their study of corporate digital transformation and ESG decoupling in China. They define ESG decoupling as the divergence between a company's public ESG commitments and disclosures and its substantive implementation of those commitments. Their research identifies several factors contributing to this decoupling, including information asymmetry, external pressure without internal commitment, and the challenges of monitoring and verifying ESG performance.

The extent of ESG decoupling varies across different dimensions of sustainability reporting. Environmental claims are often more readily verifiable through quantitative metrics such as emissions data, energy consumption, and waste generation, though even these can be subject to measurement inconsistencies and selective reporting (Long et al., 2022). Social and governance dimensions typically involve more qualitative assessments that are inherently more difficult to verify, creating greater potential for decoupling between reports and reality.

External pressure without corresponding internal commitment represents a key driver of ESG decoupling. Abbas et al. (2024) examine ESG disclosure motives for environmentally sensitive industries, finding that disclosure driven primarily by regulatory compliance or reputation management without genuine organizational commitment tends to result in greater decoupling. This "ceremonial adoption" of ESG practices leads to reporting that may satisfy formal requirements but fails to drive substantive operational changes.

Information asymmetry between companies and their stakeholders facilitates ESG decoupling by making it difficult for external parties to verify claims independently. Lan et al. (2024) note that this asymmetry affects the relationship between ESG disclosure and audit fees, as auditors must factor in the uncertainty associated with unverified sustainability claims. The absence of standardized verification mechanisms exacerbates this problem, allowing significant discretion in how companies present their ESG performance.

Media and analyst scrutiny can help mitigate ESG decoupling by increasing transparency and accountability. Long et al. (2022) found that media attention plays a significant role in improving the quality of environmental information disclosure by heavily polluting firms in China. Their research demonstrates that external monitoring mechanisms can reduce the gap between reported and actual performance by increasing reputational costs for misleading disclosure.

Digital transformation offers promising solutions to the decoupling challenge. Liu et al. (2023) demonstrate that digital transformation can significantly alleviate ESG decoupling through two primary mechanisms: improving information processing ability and relieving information asymmetry. Technologies such as big data analytics, Internet of Things sensors, and blockchain verification systems enable more accurate, comprehensive, and transparent ESG performance tracking, reducing opportunities for selective or misleading disclosure.

Regulatory approaches to addressing ESG decoupling include more specific disclosure requirements, enhanced verification mechanisms, and stronger enforcement against misleading claims. China's Basic Standards for Corporate Sustainability Disclosure emphasizes the importance of information quality, requiring that sustainability-related financial information be complete, neutral, accurate, and verifiable (KPMG, 2024). However, translating these principles into effective practice requires ongoing regulatory evolution and enforcement capacity building.

As China's ESG disclosure system continues to mature, addressing the decoupling challenge will be essential for ensuring that sustainability reporting drives genuine improvement in corporate practices rather than merely creating a façade of responsibility. Combining regulatory requirements, stakeholder scrutiny, technological solutions, and organizational commitment will be necessary to narrow the gap between ESG reporting and reality.

VII. Global Integration Efforts

A. Alignment with ISSB Standards

China's approach to aligning with the International Sustainability Standards Board (ISSB) standards represents a critical aspect of its global integration efforts in ESG disclosure. While China has not formally adopted the ISSB standards in their entirety, it has taken significant steps to harmonize its disclosure framework with these global benchmarks while maintaining flexibility to address domestic priorities.

The ISSB, established at COP26 in 2021, released its inaugural standards in June 2023: IFRS S1 (General Requirements for Disclosure of Sustainability-related Financial Information) and IFRS S2 (Climate-related Disclosures) (ISSB, 2023). These standards were subsequently endorsed by the International Organization of Securities Commissions (IOSCO), which called on its 130 financial market members, including China, to consider ways to adopt, apply, or otherwise be informed by these standards (Barnes & Thornburg, 2024).

China's response to the ISSB standards has been measured and strategic. Rather than adopting them directly, China has developed its own Basic Standards for Corporate Sustainability Disclosure that follows the ISSB's disclosure framework while incorporating distinctive Chinese characteristics (Guo & Zhu, 2023). The Basic Standards require companies to disclose information related to the same four core areas as the ISSB standards: governance, strategy, risk management, and metrics and targets (LRQA, 2024).

This approach allows China to benefit from the ISSB's work in developing globally accepted disclosure practices while maintaining autonomy in determining how these practices are implemented in the Chinese context. By following the ISSB framework while making adaptations, China positions itself to achieve sufficient international comparability without surrendering policy flexibility.

The most significant divergence between China's approach and the ISSB standards relates to materiality. While the ISSB primarily takes a financial materiality perspective, focusing on sustainability information that affects enterprise value, China's guidelines follow the principle of double materiality, which assesses both ESG impacts on a firm's financials and the firm's impacts on ESG outcomes (Guo & Zhu, 2023). This difference reflects China's broader conception of corporate responsibility, which emphasizes contributions to social and environmental objectives alongside financial performance.

China's alignment timeline also differs from some other major economies. The Ministry of Finance has outlined a plan to issue both the general standard for corporate sustainability disclosure (based on IFRS S1) and the climate-related disclosure standard (based on IFRS S2) by 2027, with the goal of building a national sustainability disclosure system by 2030 (Guo & Zhu, 2023). This measured pace contrasts with more rapid adoption in jurisdictions such as the UK, Canada, and Hong Kong, but provides companies with a longer transition period to develop necessary capabilities.

The differences in China's approach highlight the challenges of achieving global harmonization while respecting national priorities and institutional contexts. However, the substantial overlap between China's framework and the ISSB standards suggests a genuine commitment to international alignment rather than a purely parallel approach. This balance positions China to potentially influence the evolution of global standards through its distinctive implementation experience, particularly regarding double materiality and the integration of national development priorities into sustainability reporting.

As global ESG disclosure continues to evolve, China's relationship with the ISSB standards will likely deepen. The Financial Stability Board has emphasized the importance of addressing the challenges faced by companies in emerging economies in implementing ISSB disclosure standards (FSB, 2024). As China navigates these challenges in its own implementation process, its experience could provide valuable insights for other emerging economies seeking to balance international alignment with domestic priorities.

B. International Cooperation Initiatives

China's engagement with international cooperation initiatives forms an important component of its approach to ESG disclosure harmonization. Through participation in global forums, bilateral relationships, and multilateral institutions, China is both contributing to and learning from international sustainability reporting developments.

China has demonstrated increasing engagement with key international organizations involved in sustainability standard-setting. While not formally adopting the ISSB standards, China participates in ISSB consultations and has representatives involved in its governance structure (FSB, 2024). This engagement allows China to contribute its perspective to the development of global standards while staying informed about international best practices.

The Financial Stability Board's work on climate-related financial disclosure represents another important forum for international cooperation. The FSB's Progress Report notes that 19 of its 24 member jurisdictions, including China, have published regulatory files, guidelines, or roadmaps relating to climate-related disclosures (FSB, 2024). China's participation in this work supports greater alignment in approaches to climate risk disclosure, a particularly critical area given the global nature of climate change challenges.

Bilateral harmonization efforts have also intensified, particularly with key trading and investment partners. Cooperation between Chinese and European authorities on sustainability disclosure has grown as both regions implement comprehensive ESG reporting frameworks. While their approaches differ in some respects — with Europe's CSRD generally considered more prescriptive than China's current requirements — there are efforts to identify areas of comparability and potential interoperability (Barnes & Thornburg, 2024).

The International Platform on Sustainable Finance, launched in 2019, provides another forum for China's international cooperation on ESG disclosure. This platform brings together policymakers from major economies to exchange information and promote best practices in sustainable finance, including disclosure requirements. China's active participation reflects its recognition that international coordination is essential for addressing global sustainability challenges effectively (Latham & Watkins, 2023).

Regional cooperation initiatives in Asia provide additional avenues for China's international engagement. Collaborative efforts with countries such as Japan, South Korea, and Singapore on sustainability reporting standards allow for the exchange of experiences and approaches that reflect Asian economic and social contexts (Latham & Watkins, 2023). These regional initiatives complement global cooperation and may help develop approaches that better address the specific challenges faced by Asian companies and markets.

China's role in developing international standards is evolving from primarily adopting external frameworks to actively contributing Chinese perspectives. As Tang and Li (2023) note, China's unique institutional context and top-down approach to ESG governance offer distinctive insights that can enrich international discussions. China's experience with implementing double materiality, integrating national development priorities into reporting frameworks, and addressing implementation challenges in a developing economy context provides valuable lessons for the global community.

Looking forward, China's international cooperation efforts will likely intensify as its domestic ESG disclosure system matures. The country's growing economic influence and increasingly sophisticated approach to sustainability reporting position it to play a more prominent role in shaping global standards. This evolution could contribute to more inclusive international frameworks that better accommodate diverse economic, social, and governance models while maintaining sufficient comparability for global market participants.

C. Belt and Road Initiative ESG Implications

The Belt and Road Initiative (BRI), China's ambitious global infrastructure development strategy, has significant implications for ESG disclosure practices both within China and internationally. As Chinese companies invest in projects across more than 140 countries, the sustainability impacts of these investments have attracted increasing attention from host governments, international organizations, civil society, and investors.

ESG disclosure for overseas investments under the BRI presents unique challenges and opportunities. Chinese companies operating abroad must navigate complex cross-border reporting requirements while managing diverse environmental, social, and governance risks in host countries with varying regulatory frameworks and sustainability priorities (China Law Society, 2024). The quality and comprehensiveness of ESG disclosure for these international operations can significantly affect project acceptance, financing costs, and long-term success.

China has taken important steps to enhance the sustainability of BRI investments through improved disclosure frameworks. In 2017, the Chinese government released the "Guidance on Promoting Green Belt and Road," which emphasized the importance of environmental information disclosure for overseas projects (Guo & Zhu, 2023). This was followed by more specific guidelines from various ministries and regulatory bodies addressing environmental impact assessments, community engagement, and governance transparency for international investments.

The extraterritorial application of Chinese ESG standards represents an evolving aspect of BRI implementation. Increasingly, Chinese regulators expect companies to apply domestic sustainability principles and disclosure practices to their overseas operations, creating a form of regulatory export that can influence ESG practices in host countries (Business & Sustainable Research Network, 2024). This trend is particularly evident for Chinese state-owned enterprises and financial institutions, which are expected to demonstrate leadership in sustainable development regardless of where they operate.

Green BRI development has emerged as a strategic priority, with enhanced disclosure playing a central role. The "Belt and Road Ecological and Environmental Cooperation Plan" emphasizes transparency and information sharing as key enablers of sustainable development along BRI routes (China Law Society, 2024). This focus on green development reflects both increasing international expectations and China's recognition that long-term project success depends on environmental and social sustainability.

Financial institutions play a crucial role in promoting ESG disclosure for BRI projects. Chinese policy banks and commercial lenders increasingly require sustainability-related information from project developers as part of their financing decisions (PBOC, 2024). These requirements create strong incentives for improved ESG disclosure and performance, particularly for large infrastructure projects that depend on Chinese financing.

The impact of China's domestic ESG disclosure evolution on BRI projects is becoming increasingly apparent. As Chinese companies develop more sophisticated sustainability reporting capabilities in response to domestic requirements, these capabilities often transfer to their international operations (China Business Briefing, 2024). This spillover effect can enhance transparency and sustainability performance across the BRI, contributing to China's goal of building a "Green Silk Road."

Challenges remain in achieving consistent ESG disclosure across diverse BRI projects. The wide variation in host country regulatory requirements, capacity limitations of local partners, data collection difficulties in remote areas, and complex supply chains all complicate efforts to implement comprehensive disclosure practices (China Law Society, 2024). Addressing these challenges requires both consistent application of Chinese standards and flexibility to accommodate local contexts.

Looking ahead, the relationship between China's ESG disclosure system and the BRI will likely continue to deepen. As China's domestic disclosure requirements become more comprehensive and aligned with international standards, expectations for BRI project disclosure will likely increase correspondingly. This evolution has the potential to significantly enhance the sustainability of BRI investments while contributing to the global harmonization of ESG disclosure practices.

VIII. Future Trajectory and Recommendations

A. Projected Evolution (2025-2030)

China's ESG disclosure system is poised for significant evolution between 2025 and 2030, with a clear trajectory toward a more comprehensive, standardized, and internationally aligned framework.

The Ministry of Finance's plan to establish a national sustainability disclosure system by 2030 provides a clear roadmap for this evolution. This plan includes issuing both the general standard for corporate sustainability disclosure (based on IFRS S1) and the climate-related disclosure standard (based on IFRS S2) by 2027, creating the foundation for full implementation by 2030 (Guo & Zhu, 2023). This measured yet ambitious timeline allows for gradual capacity building while maintaining clear momentum toward comprehensive implementation.

Mandatory disclosure requirements will expand significantly during this period. Beginning with the first mandatory disclosures for companies listed on major indices in April 2026, the scope of mandatory requirements is likely to gradually encompass a broader range of companies (KPMG, 2024). This expansion will likely follow a phased approach, with requirements extending from listed to non-listed companies, from large to smaller enterprises, from qualitative to more quantitative requirements, and from optional to mandatory disclosure for an increasing number of ESG elements (PRI, 2024).

The integration of digital technologies will accelerate, transforming how companies collect, process, and report ESG information. Liu et al. (2023) demonstrate that digital transformation can significantly improve ESG disclosure quality by enhancing information processing capabilities and reducing information asymmetry. Technologies including artificial intelligence, blockchain verification, Internet of Things sensors, and automated reporting platforms will become increasingly central to effective ESG implementation. The Beijing Municipal Commission of Development and Reform's Action Plan explicitly emphasizes the role of digital technology in advancing ESG practices (China Business Briefing, 2024).

International alignment efforts will intensify as China's system matures. While maintaining its distinctive characteristics, including the double materiality approach, China's disclosure framework will likely achieve greater interoperability with international standards, particularly the ISSB framework (Barnes & Thornburg, 2024). This alignment will facilitate both Chinese companies' access to global capital markets and international investors' participation in China's growing ESG investment landscape.

Sector-specific disclosure frameworks will become more sophisticated, with tailored requirements for industries with distinct sustainability impacts and challenges. The financial sector will see particularly significant developments as green finance continues to expand, with enhanced disclosure requirements for climate-related financial risks and opportunities (PBOC, 2024). Heavy industries will face increasingly detailed and quantitative disclosure expectations regarding environmental impacts and transition plans.

Verification and assurance mechanisms will strengthen substantially. As the importance of ESG information for investment and regulatory decisions grows, so too will demands for reliable verification. Independent third-party assurance of sustainability disclosures will become more common and eventually expected for larger companies, enhancing the credibility and usefulness of reported information (XBRL International, 2024).

Data standardization and digital reporting formats will advance significantly. The adoption of structured and machine-readable formats like XBRL for sustainability disclosures could play a crucial role in enhancing the quality and usability of such information (XBRL International, 2024). Standardized taxonomies and digital reporting protocols will improve comparability and facilitate more sophisticated analysis of sustainability performance.

The integration of ESG considerations into broader corporate governance and strategy will deepen. Rather than treating ESG disclosure as a standalone reporting exercise, companies will increasingly embed sustainability considerations into core decision-making processes, risk management frameworks, and long-term strategy development (Business & Sustainable Research Network, 2024). This integration will enhance the strategic value of disclosure while improving its alignment with actual business operations.

By 2030, China aims to have established a comprehensive, internationally aligned yet distinctively Chinese ESG disclosure system that supports both its domestic sustainable development goals and its growing integration with global capital markets. This system will combine mandatory requirements with voluntary best practices, standardized frameworks with sector-specific guidance, and international alignment with Chinese characteristics. While challenges will inevitably arise during this evolution, the clear policy direction and growing market momentum suggest that China's ESG disclosure system will continue to advance rapidly in sophistication and influence.

B. Policy Recommendations

Based on the analysis of China's current ESG disclosure system and projected future trajectory, several policy recommendations emerge for enhancing the effectiveness, efficiency, and impact of sustainability reporting in China.

To enhance data quality and verification, policymakers should establish a robust independent assurance framework for ESG disclosures. This framework should include accreditation standards for third-party verifiers, specific verification requirements for material sustainability information, and clear guidelines for assurance reporting (XBRL International, 2024). Initially, mandatory verification could focus on environmental data for high-impact industries and gradually expand to broader ESG disclosures and additional sectors. Digital verification technologies, including blockchain and automated data validation, should be encouraged through regulatory incentives and technical standards.

For building implementation capacity, a comprehensive support system for companies developing ESG disclosure capabilities is essential. This system should include sector-specific implementation guidelines, technical assistance programs for smaller companies, and educational resources to develop expertise (Business & Sustainable Research Network, 2024). Industry associations should be encouraged to develop shared tools, methodologies, and best practices that reduce implementation costs for individual companies. Regulatory approaches should incorporate appropriate phase-in periods and simplified requirements for smaller entities to allow for gradual capacity building while maintaining momentum toward comprehensive disclosure.

To improve international standard alignment, China should continue developing its disclosure framework in dialogue with international initiatives, particularly the ISSB. While maintaining distinctive Chinese characteristics where appropriate, policymakers should identify and eliminate unnecessary divergences that complicate global comparability (Barnes & Thornburg, 2024). Formal mapping between Chinese standards and international frameworks would help companies and investors understand equivalencies and differences. Active participation in international standard-setting discussions would allow China to both share its distinctive perspectives and learn from global best practices.

For advancing digital transformation of ESG reporting, a coordinated approach to technology adoption is needed. Regulatory bodies should develop standardized digital taxonomies for sustainability reporting that enable machine-readable disclosures and automated data processing (XBRL International, 2024). Technology demonstration projects could showcase innovative approaches to data collection, verification, and reporting. Capacity-building programs specifically focused on digital ESG capabilities would help address existing technology gaps, particularly for smaller companies and those in less developed regions.

To strengthen the connection between disclosure and performance, policymakers should develop clear mechanisms for translating improved transparency into tangible sustainability improvements. These mechanisms could include preferential financing for companies demonstrating strong ESG performance, procurement advantages for sustainability leaders, and regulatory incentives tied to verified ESG outcomes (PBOC, 2024). Addressing "ESG decoupling" requires policies that reward substantive performance rather than merely sophisticated reporting, potentially including consequences for misleading disclosures or persistent gaps between commitments and actions.

For enhancing stakeholder engagement in the disclosure process, regulatory guidance should emphasize the importance of structured stakeholder input in determining materiality and shaping disclosure content (Zhang & Chu, 2024). Companies should be encouraged to develop formal processes for incorporating diverse perspectives into their ESG reporting, including employees, communities, civil society organizations, and other affected groups. This engagement would improve the relevance and usefulness of disclosed information while strengthening corporate accountability.

To improve coordination among regulatory authorities, a formal mechanism for aligning ESG disclosure requirements across different ministries, commissions, and stock exchanges would enhance policy coherence and reduce compliance complexity. This coordination mechanism could harmonize timelines, terminology, metrics, and reporting formats while respecting the distinctive mandates of different regulatory bodies (China Law Society, 2024). A unified digital platform for ESG disclosure submission could simplify compliance for companies subject to multiple reporting requirements.

These policy recommendations aim to address the key challenges identified in China's current ESG disclosure system while supporting its continued evolution toward a comprehensive, effective, and internationally aligned framework. By enhancing data quality, building implementation capacity, improving international alignment, advancing digital transformation, strengthening the disclosure-performance connection, enhancing stakeholder engagement, and improving regulatory coordination, China can develop a world-class ESG disclosure system that serves both domestic sustainable development goals and global harmonization efforts.

C. Research Directions

As China's ESG disclosure system continues to evolve, several priority areas for future research emerge that could provide valuable insights for policymakers, companies, investors, and other stakeholders.

The effectiveness of China's distinctive regulatory approach to ESG disclosure warrants systematic evaluation. Tang and Li (2023) highlight China's top-down framework as a unique feature of its ESG landscape, distinguishing it from more market-driven Western approaches. Future research should assess the strengths and limitations of this approach compared to alternatives, examining questions such as: Does China's model accelerate adoption more effectively than voluntary frameworks? Does it lead to more standardized and comparable disclosures? Does it successfully balance compliance with innovation? Such research could provide important insights for other emerging economies considering different regulatory pathways.

The integration of traditional Chinese cultural and philosophical concepts into contemporary ESG frameworks represents another promising research direction. Tang and Li (2023) suggest investigating the impact of traditional Chinese ethics on ESG practices. Concepts such as "ecological civilization," "common prosperity," and "harmony between humans and nature" reflect distinctive Chinese perspectives on sustainability that may enrich global ESG thinking. Research examining how these concepts manifest in disclosure practices and corporate strategies could contribute to more culturally diverse and inclusive approaches to sustainability reporting worldwide.

The relationship between digital transformation and ESG disclosure effectiveness deserves deeper investigation. Liu et al. (2023) demonstrate that digital transformation can significantly reduce ESG decoupling, but many questions remain about optimal technological approaches, implementation challenges, and potential unintended consequences. Research could explore which digital technologies most effectively enhance different aspects of ESG disclosure, how companies at various stages of technological development can leverage digital tools, and what governance mechanisms are needed to ensure that digitalization enhances rather than undermines disclosure quality and reliability.

The double materiality approach adopted by China warrants rigorous empirical examination. Research could investigate how companies implement double materiality assessments in practice, which stakeholders influence these assessments, and how the resulting disclosures compare with those based on financial materiality alone. Comparative studies of double materiality implementation in China and the European Union could provide insights into how different institutional contexts shape this concept's application and effectiveness.

Sector-specific research focused on industries with distinctive sustainability challenges would enhance understanding of disclosure dynamics in different contexts. For heavily polluting industries, research could examine how environmental disclosure requirements affect operational practices and investment decisions (Long et al., 2022). For financial institutions, studies could investigate the relationship between ESG disclosure and lending or investment practices (PBOC, 2024). For companies in global supply chains, research could explore how Chinese ESG disclosure requirements influence international business relationships and cross-border sustainability practices.

The impact of ESG disclosure on various performance outcomes in the Chinese context requires further investigation. While Li et al. (2023) found a positive relationship between ESG and financial performance moderated by digital transformation, many questions remain about the mechanisms through which disclosure affects different types of performance and how these relationships vary across company types, industries, and time periods. Longitudinal studies tracking disclosure quality and various performance metrics could provide more definitive evidence on these relationships.

Methodological innovation in ESG research represents another priority area. Tang and Li (2023) note the dominance of quantitative approaches in Chinese ESG research and suggest the need for more qualitative studies to provide deeper contextual understanding. Mixed-methods research combining quantitative analysis with qualitative insights could offer more nuanced perspectives on disclosure practices and their impacts. Novel approaches such as text mining of disclosure documents, network analysis of stakeholder relationships, and experimental studies of investor responses to different disclosure formats could generate valuable new insights.

International comparative research examining similarities and differences between China's ESG disclosure system and those in other major economies would enhance understanding of global harmonization challenges and opportunities. Studies could investigate points of convergence and divergence between Chinese and international standards, identify best practices that transcend national boundaries, and explore how different systems influence each other through cross-border investment, trade, and regulatory dialogue.

These research directions would contribute to a more comprehensive and nuanced understanding of China's evolving ESG disclosure system, its distinctive characteristics, and its relationship to global sustainability reporting trends. By pursuing these lines of inquiry, researchers can generate valuable knowledge for improving disclosure practices, enhancing their impact on sustainable development, and facilitating greater global harmonization while respecting diverse national contexts.

IIV.Conclusion

A. Summary of Key Findings

This comprehensive analysis of China's ESG disclosure system reveals a rapidly evolving landscape characterized by increasing standardization, expanding mandatory requirements, and growing alignment with international practices while maintaining distinctive Chinese characteristics. The journey from initial voluntary environmental reporting to today's comprehensive framework reflects China's deepening commitment to sustainable development and its recognition of ESG disclosure as a crucial mechanism for directing capital toward sustainability goals.

The historical development of ESG disclosure in China has progressed through four distinct stages: an early stage (2003-2015) focused primarily on voluntary environmental reporting, a growth stage (2016-2020) marked by the formalization of green finance initiatives and enhanced stock exchange requirements, an acceleration stage (2021-2023) triggered by China's ambitious carbon neutrality goals, and the current stage (2024-present) featuring comprehensive standardization efforts and expanded mandatory requirements. This evolution demonstrates China's increasingly systematic approach to sustainability reporting.

China's current ESG disclosure framework features a complex regulatory architecture with multiple authorities, including the Ministry of Finance as the principal standard-setter, the China Securities Regulatory Commission and stock exchanges overseeing listed company requirements, and various ministries providing sector-specific regulations. This multi-tiered structure enables comprehensive coverage while allowing for tailored approaches to different types of organizations, though it also creates potential for complexity and occasional inconsistency.

Adistinctive feature of China's approach is its adoption of double materiality, requiring companies to report on both how sustainability issues affect their financial performance and how their operations impact society and the environment. This approach differs from the enterprise value focus of the ISSB standards and aligns more closely with the European Union's CSRD, reflecting China's emphasis on balancing economic development with broader societal and environmental considerations.

Despite significant advances, China's ESG disclosure system faces several persistent challenges. Data quality and verification issues undermine the reliability and usefulness of reported information. Implementation capacity constraints, particularly for smaller firms and those in less developed regions, complicate compliance with increasingly sophisticated requirements. Balancing alignment with international standards while addressing China's specific priorities creates tensions that must be carefully managed. The risk of ESG decoupling—the gap between reported and actual performance—threatens the credibility and effectiveness of the entire system.

China's efforts toward global integration have accelerated in recent years, particularly in relation to the ISSB standards. While not formally adopting these standards, China has developed its Basic Standards for Corporate Sustainability Disclosure following the ISSB's framework while incorporating distinctive Chinese characteristics. This balanced approach enables sufficient international comparability while preserving policy flexibility to address domestic priorities.

Looking ahead, China's ESG disclosure system is projected to continue evolving toward full implementation by 2030. This evolution will likely include expanded mandatory requirements, enhanced verification mechanisms, greater digital integration, and improved international alignment, though challenges in implementation capacity and data quality will persist. Addressing these challenges will require coordinated efforts from regulators, companies, investors, and other stakeholders.

The findings of this analysis underscore the significance of China's ESG disclosure journey not only for its domestic sustainable development goals but also for global sustainability reporting harmonization efforts. As the world's second-largest economy and a major force in global markets, China's approach to ESG disclosure will inevitably influence international practices, potentially contributing to more inclusive global standards that accommodate diverse economic, social, and governance models while maintaining sufficient comparability for effective capital allocation.

BTheoretical and Practical Implications

The evolution and current state of China's ESG disclosure system carry significant theoretical and practical implications for understanding sustainability reporting in diverse institutional contexts and for advancing effective disclosure practices globally.

From a theoretical perspective, China's approach to ESG disclosure provides an important case study for examining how sustainability reporting frameworks develop within different institutional environments. The distinctive characteristics of China's system — including its top-down regulatory approach, emphasis on double materiality, and integration of national development priorities — challenge assumptions about the universal applicability of Western sustainability reporting models. This case suggests that effective ESG disclosure systems can take multiple forms shaped by their specific institutional, cultural, and economic contexts.

China's experience also contributes to theoretical debates about the relationship between mandatory regulation and voluntary initiatives in advancing sustainability disclosure. The country's evolution from primarily voluntary reporting to an increasingly mandatory system, with continuing space for voluntary best practices, offers insights into how these approaches can complement rather than contradict each other. This hybrid model suggests that the often-polarized debate between regulatory and market-driven approaches may oversimplify a more complex dynamic in which both play important roles.

The adoption of double materiality in China's disclosure framework has theoretical implications for how materiality is conceptualized in different contexts. By requiring companies to consider both financial impacts and broader societal effects, China's approach challenges the premise that enterprise value should be the primary or sole determinant of what sustainability information warrants disclosure. This perspective enriches theoretical discussions about materiality by highlighting its inherently contextual and value-laden nature.

For stakeholder theory, China's approach offers a distinctive perspective on which stakeholders' interests should shape corporate disclosure and behavior. While Western applications of stakeholder theory often emphasize the interests of diverse non-governmental actors, China's model gives particular weight to national development priorities articulated by government authorities. This variation demonstrates how stakeholder theory can manifest differently across political and economic systems while maintaining its core insight about the importance of considering multiple interests beyond shareholders alone.

From a practical perspective, China's ESG disclosure journey offers valuable lessons for both policymakers and companies navigating sustainability reporting challenges. For regulators in other emerging economies, China's phased implementation approach demonstrates how to balance ambition with pragmatism, gradually expanding mandatory requirements while building capacity and learning from experience. The coordination mechanisms between different regulatory authorities provide models for addressing the inherently cross-cutting nature of sustainability issues.

For companies, China's evolving requirements highlight the importance of developing robust ESG disclosure capabilities as a core business function rather than a peripheral reporting exercise. The growing emphasis on verification, digitalization, and double materiality suggests that companies should invest in comprehensive sustainability data management systems, cultivate diverse expertise spanning environmental, social, and governance dimensions, and integrate ESG considerations into strategic decision-making rather than treating disclosure as merely a compliance activity.

For investors, China's disclosure framework offers both opportunities and challenges in assessing the sustainability performance of Chinese companies. The standardization efforts underway promise more comparable and reliable information, potentially enhancing investment decision-making. However, the distinctive features of China's approach, including its double materiality concept and emphasis on contribution to national development priorities, require investors to develop nuanced understanding of the Chinese context rather than applying evaluation frameworks developed primarily for Western markets.

For global standard-setters, China's distinctive approach to ESG disclosure contributes to the ongoing conversation about how to achieve meaningful international harmonization while respecting diverse national contexts. Rather than pursuing rigid uniformity, China's experience suggests the value of identifying core principles and structures that can be shared across jurisdictions while allowing for adaptation to different economic, social, and governance models. This "harmonization with diversity" approach may offer a more realistic and inclusive path toward global sustainability reporting convergence.

In conclusion, China's ESG disclosure system represents a significant and distinctive contribution to global sustainability reporting practices. By developing an approach that balances international alignment with Chinese characteristics, mandatory requirements with voluntary best practices, and standardization with sector-specific guidance, China offers valuable insights for both theory development and practical implementation of ESG disclosure worldwide. As this system continues to evolve toward full implementation by 2030, its influence on global sustainability reporting harmonization efforts will likely grow, potentially contributing to more inclusive and effective approaches to directing capital toward sustainable development globally.

Data availability statement: All data used in this research are derived from publicly available literature, regulatory documents, and industry reports. Policy documents referenced in this study can be accessed through the official websites of relevant Chinese government departments, including the Ministry of Finance, China Securities Regulatory Commission, Shanghai Stock Exchange, Shenzhen Stock Exchange, and Beijing Stock Exchange. Industry reports and analyses are available through the official channels of the cited organizations. Academic literature can be accessed through relevant scholarly databases. This research did not utilize proprietary datasets requiring special access permissions. For specific data sources referenced in this study, please consult the complete reference list at the end of the paper.

References

[1] Abbas, H., Asim, Z., Ahmed, Z., & Moosa, S. (2024). Environmental social and governance (ESG) disclosure motives for environmentally sensitive industry: an emerging economy perspective. Cogent Business & Management, 11(1), 2322027.
[2] Barnes & Thornburg. (2024). ESG in 2024 and Outlook for 2025 in the US and EU: A Tale of Two Regions. Retrieved from https://btlaw.com/en/insights/alerts/2025/esg-in-2024-and-outlook-for-2025-in-the-us-and-eu-a-tale-of-two-regions
[3] Barnes & Thornburg. (2024). The Beat Goes On – Momentum for ISSB Sustainability Disclosure Standards Surges Worldwide While the U.S. Dithers. Retrieved from https://btlaw.com/en/insights/alerts/2024/momentum-for-issb-sustainability-disclosure-standards-surges-worldwide-while-us-dithers
[4] Business & Sustainable Research Network (BSR). (2024). How Companies Can Navigate China's ESG Reporting Guidelines. Retrieved from https://www.bsr.org/en/blog/how-companies-can-navigate-chinas-esg-reporting-guidelines
[5] Chen, G., Han, J., & Yuan, H. (2022). Urban digital economy development, enterprise innovation, and ESG performance in China. Frontiers in Environmental Science, 10, 955055.
[6] China Business Briefing. (2024). China Releases ESG Reporting Standards for Businesses. Retrieved from https://www.china-briefing.com/news/china-releases-esg-reporting-standards-for-businesses/
[7] China Business Briefing. (2024). China Unveils Basic Standards for Corporate ESG Disclosure. Retrieved from https://www.china-briefing.com/news/china-unveils-basic-standards-for-corporate-sustainability-esg-disclosure/
[8] China Law Society. (2024). The Evolving Legislation and Practice of ESG in China. Retrieved from https://www.legal500.com/guides/hot-topic/the-evolving-legislation-and-practice-of-esg-in-china/
[9] Cong, Y., Zhu, C., Hou, Y., Tian, S., & Cai, X. (2023). Does ESG investment reduce carbon emissions in China? Frontiers in Environmental Science, 10, 977049.
[10] DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. American Sociological Review, 48(2), 147-160.
[11] Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. Academy of Management Review, 20(1), 65-91.
[12] Dora Hu, Grandall Law Firm. (2024). ESG Compliance Updates: China, Philippines, Taiwan Regulations in Focus. Law Asia. Retrieved from https://law.asia/esg-compliance-asia-china-philippines-taiwan/
[13] Financial Stability Board (FSB). (2024). Progress Report on Climate-related Corporate Disclosures. Retrieved from https://insights.issgovernance.com/posts/esg-and-stewardship-regulation/
[14] Freeman, R. E. (1984). Strategic management: A stakeholder approach. Boston: Pitman.
[15] Guo, P., & Zhu, S. (2023). China embarks on a journey of ESG disclosure: 2024 progress and focus for 2025. UNEP Finance Initiative. Retrieved from https://www.unepfi.org/industries/banking/china-embarks-on-a-journey-of-esg-disclosure/
[16] International Organization of Securities Commissions (IOSCO). (2024). Report on Transition Plans Disclosures. Retrieved from https://insights.issgovernance.com/posts/esg-and-stewardship-regulation/
[17] International Sustainability Standards Board (ISSB). (2023). IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information & IFRS S2 Climate-related Disclosures. Retrieved from https://sensiba.com/resources/insights/global-esg-reporting-standards/
[18] KPMG. (2024). China ESG Reporting: Guideline for International Companies. Retrieved from https://china.acclime.com/guides/esg-reporting-guidelines/

[19] Lan, Y., et al. (2024). Exploring the relationship between corporate ESG information disclosure and audit fees: evidence from non-financial A-share listed companies in China. Frontiers in Environmental Science, 11, 1196728.
[20] Latham & Watkins. (2023). Regulatory Updates in Asia ESG — December 2023. Retrieved from https://www.lw.com/en/insights/regulatory-updates-in-asia-esg-december-2023
[21] Li, J., et al. (2023). The impact of ESG on financial performance: the moderating role of digital transformation. Frontiers in Environmental Science, 11, 1256052.
[22] Lin, Z., Zhao, Y., et al. (2024). Sustainable Pathways: ESG Disclosure Performance and Optimization in China. Sustainability, 16(11), 4630.
[23] Liu, G., et al. (2023). Does corporate digital transformation restrain ESG decoupling? Evidence from China. Humanities and Social Sciences Communications, 11(1), 1-14.
[24] Long, F., Chen, Q., Xu, L., Wang, J., & Vasa, L. (2022). Sustainable corporate environmental information disclosure: Evidence for green recovery from polluting firms of China. Frontiers in Environmental Science, 10, 1019499.
[25] LRQA. (2024). China's groundbreaking towards ESG disclosure for global supply chains. Retrieved from https://www.lrqa.com/en-us/insights/articles/china-esg-disclosure-requirements/
[26] Luo, D. (2022). ESG, liquidity, and stock returns. Journal of International Financial Markets, Institutions and Money, 78, 101526.
[27] People's Bank of China (PBOC). (2024). Guiding Opinions on Further Strengthening Financial Support for Green and Low-Carbon Development. Retrieved from https://www.unepfi.org/industries/banking/china-embarks-on-a-journey-of-esg-disclosure/
[28] Principles for Responsible Investment (PRI). (2024). Chinese companies accelerate ESG disclosure: Insights from PRI signatories. Retrieved from https://www.unpri.org/pri-blog/chinese-companies-accelerate-esg-disclosure-insights-from-pri-signatories/12637.article
[29] Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. Academy of Management Review, 20(3), 571-610.
[30] SynTao Green Finance. (2023). China ESG Development Trends Report 2023. Retrieved from https://www.china-briefing.com/news/china-releases-esg-reporting-standards-for-businesses/
[31] Tang, Y., & Li, S. (2023). ESG in China: A review of practice and research, and future research avenues. China Journal of Accounting Studies. Retrieved from https://www.sciencedirect.com/science/article/pii/S1755309123000357
[32] Wong, J., et al. (2023). Application of the Global Reporting Initiative Standards and Sustainability Disclosure Performance: An Analysis of the Largest Chinese Companies Listed in Hong Kong. Accounting, Economics and Law. Retrieved from https://www.degruyter.com/document/doi/10.1515/ael-2022-0082/html?lang=en
[33] XBRL International. (2024). China publishes first sustainability disclosure standard for businesses. Retrieved from https://www.xbrl.org/news/china-publishes-first-sustainability-disclosure-standard-for-businesses/
[34] Yu, E., Luu, B., & Chen, C. (2020). Greenwashing in environmental, social and governance disclosures. Research in International Business and Finance, 52, 101192.
[35] Yuan, X., Li, Z., Xu, J., & Shang, L. (2022). ESG disclosure and corporate financial irregularities-Evidence from Chinese listed firms. Journal of Cleaner Production, 332, 129992.
[36] Zhang, L., & Chu, H. (2024). Emerging trends of environmental social and governance (ESG) disclosure research. Environment, Development and Sustainability. Retrieved from https://www.sciencedirect.com/science/article/pii/S2666791624000253