

ESG DISCLOSURE STANDARDS IN HONG KONG: EVOLUTION, STATUS, AND OPTIMIZATION IN THE SUPER-CONNECTOR CONTEXT

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Abstract: As a bridge connecting Mainland China with international capital markets, Hong Kong's evolution of ESG disclosure standards exhibits distinct local characteristics. Starting from Hong Kong's strategic positioning as a super-connector and super value-adder, this paper reviews the development of Hong Kong's ESG standards—from voluntary disclosure to comprehensive alignment with the International Sustainability Standards Board (ISSB) standards and phased mandatory disclosure. It analyzes the key differences between Hong Kong's framework and the Global Reporting Initiative (GRI), the EU's Corporate Sustainability Reporting Directive (CSRD), and Mainland China's standards, as well as the impact on cross-border enterprises. The study finds that Hong Kong has made significant progress in both institutional and regulatory aspects of ESG disclosure, with the ESG report publication rate increasing annually. Standardized ESG disclosure has contributed to the healthy development of Hong Kong's financial market. However, there remains considerable room for improvement in enhancing the completeness of disclosed information, mitigating greenwashing risks, and reducing compliance costs. Future optimization may focus on refining the standard system, promoting third-party assurance, and strengthening regulatory coordination.

Keywords: ESG information disclosure; Hong Kong capital market; ISSB standards; Standards alignment; Institutional evolution

1 INTRODUCTION

In the global context of addressing climate change, ESG information disclosure has evolved from an early voluntary corporate practice into a prominent issue emphasized by regulators and investors. International organizations are also actively refining their respective ESG disclosure standards. Since 2023, the International Sustainability Standards Board (ISSB) has issued the IFRS S1 and IFRS S2 standards, the European Union's Corporate Sustainability Reporting Directive (CSRD) has officially taken effect, and mainland China is rapidly advancing the development of an ESG standard system with Chinese characteristics. The global ESG standard framework is thus entering a new phase of development. Hong Kong is the world's third-largest financial center, with its IPO fundraising consistently ranking among the top globally for many years. It serves as a primary platform for Mainland Chinese enterprises seeking overseas listing and financing. Among the approximately 2,700 issuers listed on The Stock Exchange of Hong Kong (HKEX), about 57% are from Mainland China, accounting for approximately 80% of the total market capitalization [1]. In addition to local Hong Kong and Mainland Chinese companies, a significant number of firms from the United Kingdom, the United States, Singapore, Japan, Australia, and other countries are also listed in Hong Kong. The diverse structure of listed companies and investment entities presents more complex challenges for Hong Kong's ESG regulatory system. On one hand, Hong Kong needs to closely follow internationally accepted disclosure standards to maintain its competitiveness as a global capital allocation hub. On the other hand, it must also fully consider the realities of local economic development and the operations of listed companies in Hong Kong, balancing policy differences between Hong Kong and major economies to avoid imposing excessive ESG compliance costs on cross-border enterprises. Based on this, starting from Hong Kong's strategic positioning, this study provides an analysis of the evolution of Hong Kong's ESG information disclosure standards and their differences compared with the Global Reporting Initiative (GRI) standards, the EU's CSRD, and Mainland China's standards. On the basis of revealing the current status and issues of ESG information disclosure in the Hong Kong market, the study proposes strategic recommendations for continuous optimization and improvement from both institutional and implementation perspectives.

2 THE STRUCTURAL NEXUS BETWEEN HONG KONG'S STRATEGIC POSITIONING AND ITS ESG DISCLOSURE REGIME

2.1 Policy Framework Design amidst Strategic Transformation

Since Hong Kong's return to China, its status as a global financial, shipping, and trade center has been further consolidated, and it has become the world's largest offshore Renminbi business hub. However, in recent years, due to factors such as global economic cycle adjustments, rising uncertainty in the external environment, and the emergence of other regional financial centers, Hong Kong has faced increasing internal and external challenges and pressures. To

achieve sustainable development, the Hong Kong Special Administrative Region Government has closely aligned with national and Guangdong-Hong Kong-Macao Greater Bay Area development plans, upgrading Hong Kong's role as a super-connector between the Mainland China and the world to a super value-adder, and proposing ambitious goals to establish an international innovation and technology center and a regional green finance hub. Technological innovation and green finance are becoming new growth drivers for Hong Kong, while ESG, as a practical tool for achieving sustainable development goals, serves as one of the key levers for Hong Kong to realize these strategic breakthroughs.

To this end, the Hong Kong Special Administrative Region Government has established a cross-departmental "Green and Sustainable Finance Cross-Agency Steering Group" (CASG) to rapidly advance relevant policy frameworks. In terms of top-level design, Hong Kong released the "Hong Kong's Climate Action Plan 2050" in October 2021 [2], setting targets to halve carbon emissions by 2035 compared to 2005 levels and achieve carbon neutrality by 2050. In December 2024, it issued the "Roadmap on sustainability disclosure in Hong Kong," requiring large Publicly Accountable Entities (PAEs) to fully adopt the ISSB's ESG disclosure standards by 2028 [3].

In the realm of green finance, the Hong Kong Monetary Authority (HKMA) released the "Hong Kong Taxonomy for Sustainable Finance" in May 2024 [4]. This taxonomy integrates the China-EU "Common Ground Taxonomy" (CGT) and is compatible with relevant standards from Mainland China and ASEAN, thereby reducing the compliance costs for cross-border green investment and financing and directing capital toward credible green and transition finance sectors. In October 2024, the HKMA issued the "Sustainable Finance Action Agenda [5]," requiring the banking sector to achieve net-zero emissions in its own operations by 2030 and net-zero emissions in its financing activities by 2050, while also promoting ESG investments within the Exchange Fund.

In terms of market disclosure, the HKEX issued the "Guidance on Climate Disclosures [6]" in 2021, followed by the "Guidance on Enhanced Climate Disclosures under the ESG Framework" and the "Environmental, Social and Governance Reporting Code" in 2024 [7]. These measures successively introduced and adopted the Task Force on Climate-related Financial Disclosures (TCFD) climate disclosure standards and the ISSB standards (IFRS S1/S2), achieving substantive alignment with mainstream international ESG disclosure frameworks.

2.2 Synergy Between ESG Disclosure Standards and Green Finance Strategy

ESG disclosure standards constitute an institutional foundation for Hong Kong's development as a regional green finance hub. Previously, multiple ESG disclosure standards have long operated in parallel internationally, with significant differences in their disclosure content, scope, and specific requirements, and regulatory bodies across various jurisdictions have not reached a consensus on a unified standard [8]. As a key component of ESG, climate-related information also faces substantial room for improvement in terms of disclosure standardization and data quality, due to reasons such as fragmented standards, high accounting complexity, elevated disclosure costs, insufficient mandatory requirements, and inadequate oversight. By swiftly adopting the highest standards of the TCFD and ISSB, and becoming one of the first jurisdictions globally to align its local sustainable disclosure standards with the ISSB framework, Hong Kong effectively reduces cross-border compliance costs and mitigates concerns over greenwashing. This move undoubtedly serves as a significant positive factor in attracting the inflow of global green capital.

Meanwhile, Hong Kong has established high-standard ESG disclosure rules and implemented them widely. This not only accelerates local sustainable development but also, through ESG regulation in capital markets and the radiating effect of ESG investment, builds the capacity to export green finance standards to Asia and beyond. For example, the latest revised "Hong Kong Taxonomy for Sustainable Finance (Phase 2A)" (effective January 2026) for the first time incorporates transition activities and transition measures into transition finance, and adds climate adaptation and resilience to its environmental objectives [9]. This addresses the urgent needs of emerging economies in transition and adaptation, propelling Hong Kong's shift from a financing and trading centre to a regional hub for sustainable finance standards and product innovation [10], while also advancing Hong Kong's progress toward the role of a super value-adder.

3 THE EVOLUTION OF HONG KONG'S ESG DISCLOSURE STANDARDS

Hong Kong's ESG disclosure framework has evolved from voluntary to mandatory, progressing through four key phases.

Initial Stage (2012–2015): Voluntary Disclosure and Principle-Based Guidance. In 2012, the HKEX introduced the then still-uncommon ESG concept globally by issuing the "Environmental, Social and Governance Reporting Guide [11]," aiming primarily to cultivate the market and provide a buffer period for market participants to learn and adapt. Accordingly, the Guide only required listed companies to comply on a voluntary basis and allowed selective disclosure of ESG information. However, HKEX's review of listed companies' ESG reports showed that under the voluntary principle, only 38% of Hong Kong-listed companies disclosed all 11 aspects stipulated in the Guide in 2016, and merely 57% conducted a materiality assessment [12]. This suggests that guidance-based regimes lacking mandatory constraints were still insufficient to effectively drive changes in market behavior.

Transitional Phase (2015–2019): Introduction of the Semi-Mandatory Model. In 2015, the HKEX revised its "Environmental, Social, and Governance Reporting Guide," introducing the "comply or explain" principle, which shifted ESG disclosure requirements from purely voluntary guidance to a semi-mandatory model. For environmental and social aspects, companies could choose not to disclose relevant indicators but were required to explain the reasons

in their reports; governance aspects began to be subject to mandatory disclosure. In 2019, the HKEX further revised the guide, upgrading disclosure requirements for key ESG issues to mandatory disclosure across the board and requiring boards of directors to issue statements explicitly assuming oversight responsibility for ESG matters. This compelled companies to enhance their focus on ESG information disclosure and integrate ESG governance into the core of corporate governance. During this phase, although ESG disclosure requirements were raised, the overall level remained relatively low. In 2019, in a ranking by Corporate Knights covering 47 global stock exchanges, the HKEX's ESG disclosure level ranked only 27th, lagging behind major developed countries as well as Asian nations such as Thailand, Malaysia, and Singapore [13].

Strengthening Phase (2020-2024): Alignment and Localization of the ISSB Framework. In response to the growing trend of international investors demanding enhanced comparability and authenticity of information across different markets, the HKEX specifically introduced the "Guidance on Climate Disclosures" in 2021, requiring the disclosure of Scope 1 and Scope 2 greenhouse gas emissions [6], and mandating the implementation of the TCFD four-pillar framework (Governance, Strategy, Risk Management, Metrics and Targets) starting from 2025. Since 2024, the internationalization of Hong Kong's ESG disclosure system has further accelerated. The Hong Kong SAR Government set a timeline in the "Roadmap on sustainability disclosure in Hong Kong" for large public interest entities to fully adopt ISSB standards by 2028 [3]; the Hong Kong Institute of Certified Public Accountants concurrently launched the HKFRS Disclosure Standards (HKFRS S1/S2) [14], providing a technical basis for the localized implementation of ISSB standards; the HKEX replaced the 2012 "Environmental, Social and Governance Reporting Guide" with the "Environmental, Social and Governance Reporting Code," fully incorporating ISSB standards. The further strengthening of regulatory policies has also promoted the continuous improvement in the quality of ESG disclosures by Hong Kong-listed companies [15].

Comprehensive Mandatory Phase (Starting from 2025): The Dawn of the ISSB Era. Starting from fiscal years commencing on or after January 1, 2025, all Hong Kong-listed companies are required to mandatorily disclose ESG reports as well as Scope 1 and Scope 2 greenhouse gas emissions. From January 1, 2026, issuers of the Hang Seng LargeCap Index will be mandatorily required to comply with comprehensive climate disclosures based on the ISSB IFRS S2 standards, including Scope 3 greenhouse gas emissions.

Hong Kong's ESG standards have adopted a full convergence approach in aligning with international norms, achieving rapid regulatory harmonization within a relatively short timeframe. This effectively reduces information communication costs for global investors and ensures the competitiveness of the Hong Kong market in global green asset pricing and trading. While integrating international standards, Hong Kong has also fully considered the practical circumstances of market participants, implementing differentiated, phased arrangements for companies of varying scales and significance to minimize market disruption during the regulatory transition. Data shows that the ESG report publication rate for Hong Kong-listed companies increased from 89.23% in 2018 to 96.1% in 2025, remaining consistently above 96% over the past five years [16], which fully demonstrates the robustness and effectiveness of the aforementioned implementation pathway.

4 INTERNATIONAL COMPARISON OF HONG KONG ESG DISCLOSURE STANDARDS

From a global perspective, the ESG disclosure standards of a country or region must not only align with local sustainable development strategies, climate and environmental governance, industrial policies, and other requirements, but also consider the competitive needs of outward foreign direct investment and inward foreign direct investment under complex international circumstances. Particularly for enterprises already listed in Hong Kong or seeking listing there, or for multinational corporations with global supply chains, a study of the differences between Hong Kong's ESG disclosure standards and mainstream international standards, as well as mainland China's standards, holds practical significance. Given that the United States has not yet established nationwide unified regulations on greenhouse gas emission information disclosure, and the U.S. Securities and Exchange Commission's 2024 "Final Rules on Enhancement and Standardization of Climate-Related Disclosures for Investors" remains tied up in litigation and cannot be implemented—coupled with the lack of consensus on ESG between the U.S. federal government and state governments—this article will not conduct a comparative analysis of U.S. ESG policies for the time being.

4.1 Shifting from GRI Standards to Hong Kong Standards

The GRI Standards are among the world's earliest and most influential frameworks for sustainability information disclosure, launched in 1997 by the Global Reporting Initiative. According to the OECD's "Global Corporate Sustainability Report 2025" more than half (6,548) of the 12,900 listed companies disclosing sustainability information in 2024 adopted the GRI Standards [17]. The KPMG 2024 Survey of Sustainability Reporting indicates that three-quarters of the top 250 companies by revenue in the Fortune Global 500 used the GRI Standards [18].

The ISSB standards introduced in Hong Kong originate from outside the GRI framework. After the International Financial Reporting Standards Foundation established the ISSB in 2021, it successively merged several international organizations—including the Sustainability Accounting Standards Board (SASB), the International Integrated Reporting Council (IIRC), the Climate Disclosure Standards Board (CDSB), and TCFD—through various means, integrating the climate and ESG disclosure standards developed by these bodies. The IFRS S1 "General Requirements for Disclosure of Sustainability-related Financial Information" and IFRS S2 "Climate-related Disclosures," issued by the ISSB in June

2023, have received formal endorsement and strong recommendation from the International Organization of Securities Commissions (IOSCO) [19]. As of September 2024, 30 jurisdictions (representing nearly 57% of global GDP) had taken steps to adopt or otherwise apply the ISSB standards [20].

Prior to Hong Kong's mandatory implementation of disclosure requirements based on ISSB standards in 2025, a substantial number of listed companies had already been disclosing ESG reports. According to a PwC survey sampling Hong Kong-listed companies, 52.5% of the sampled companies referenced the GRI standards when preparing their ESG reports for the 2024 fiscal year [21]. These companies will need to promptly adapt to the updated and more stringent requirements of the ISSB standards.

Firstly, the most fundamental underlying logic differs. The GRI Standards adopt the principle of Impact Materiality, targeting a broad range of stakeholders, and require disclosure of actual or potential significant impacts on the economy, environment, and people, without deprioritizing them due to a lack of financial materiality. In contrast, the Hong Kong Standards and the ISSB Standards follow the principle of Financial Materiality, serving the decision-making needs of capital market investors, with a finance-oriented approach that primarily focuses on the current and anticipated effects of climate-related risks and opportunities on the enterprise's financial position, financial performance, and cash flows.

Secondly, there is a difference in the requirements for climate scenario analysis. The GRI Standards primarily mandate qualitative descriptions of climate risks and do not compel the quantification of scenario analysis results into financial data. In contrast, the Hong Kong Standards not only require qualitative analysis but also necessitate a gradual transition to the use of climate-financial transmission models for quantitative analysis, assessing the specific financial impacts on financial statements under different scenarios.

Third, the reporting frameworks differ. GRI adopts a modular structure, where companies select corresponding topic standards for disclosure based on their assessment of material issues. In contrast, the Hong Kong reporting framework is divided into general requirements and climate-related disclosure requirements, which correspond to IFRS S1 and IFRS S2 from ISSB, respectively. Notably, the climate-related disclosures mandate the reporting of Scope 1 and Scope 2 greenhouse gas emissions data, and for large-cap issuers, Scope 3 emissions must also be disclosed. Both the content and requirements of these disclosures are more stringent.

Fourth, there are differences in governance responsibilities and assurance requirements. The Hong Kong standards require the board of directors to assume full responsibility for climate-related disclosures and have outlined a phased timeline for mandatory assurance in the "Roadmap on sustainability disclosure in Hong Kong [3]," with the standards intended to align with financial auditing. In contrast, the corresponding requirements under the GRI standards are significantly more lenient.

Although GRI and IFRS are actively working to enhance the alignment of their respective standard frameworks—for instance, signing a memorandum of understanding in 2022, jointly issuing the Interoperability Guide, and developing a shared digital tagging system based on XBRL (eXtensible Business Reporting Language) to promote compatibility between the two systems—Hong Kong listed companies that previously adopted GRI standards will still need to incur certain costs to complete the transition from GRI to ISSB as soon as possible.

4.2 The Difficult Balance Between Hong Kong Standards and the EU CSRD

The European Union is the world's earliest region to mandate corporate ESG disclosure through legislation. As far back as 2014, the EU issued the Non-Financial Reporting Directive (NFRD), requiring large companies with over 500 employees to disclose non-financial information. In December 2022, the EU formally enacted the CSRD to replace the NFRD. It mandates that qualifying large companies, all companies listed on EU-regulated markets, and even non-EU companies with business activities in the EU must disclose according to the highly rigorous and detailed European Sustainability Reporting Standards (ESRS). The coverage expands sharply from about 11,000 large companies under the NFRD to approximately 50,000 companies, to be implemented in phases from 2024 to 2029. The EU CSRD is currently the world's leading ESG disclosure regulation. A comparison between the CSRD and Hong Kong's ESG disclosure standards reveals significant divergences and considerable difficulty in alignment.

Firstly, in terms of regulatory philosophy. The EU has established a unified, EU-wide sustainability reporting standard covering both EU and non-EU enterprises through legislation, planning to elevate ESG information to a status as important as statutory financial information. This reflects an intention to dominate the discourse on global green governance through regulatory advantage and to build a climate club centered on the EU [22]. In contrast, Hong Kong's ESG regime does not have extraterritorial jurisdiction and generally focuses more on aligning with the internationally accepted ISSB standards through market-oriented approaches, which is more conducive to gradual adaptation by enterprises.

Second, regarding core principles. The EU CSRD mandates adherence to the dual materiality principle, requiring disclosure of both the financial impact of sustainability matters on the enterprise and the material impact of the enterprise's activities on the environment and society. In contrast, Hong Kong's ESG standards remain guided primarily by the financial materiality principle, with the disclosure focus centered on how ESG risks and opportunities affect the enterprise's own value. This implies that enterprises cannot meet both sets of requirements simply by translating reports, but must establish two distinct mechanisms for data collection, assessment, and reporting, significantly driving up compliance costs.

Third, regarding value chain disclosure requirements. The EU ESRS mandates that companies must disclose all significant environmental and social impacts from their upstream (suppliers, raw material extraction) and downstream

(product distribution, use, waste treatment) activities, along with Scope 1, Scope 2, and Scope 3 emission data. The mandatory disclosure scope is directly extended to all of a company's suppliers. In contrast, the Hong Kong standards only encourage the disclosure of ESG information from upstream and downstream enterprises in the value chain, significantly reducing the difficulty of compliance.

Fourth, regarding data format and assurance requirements. The EU CSRD mandates that ESG reports must be in XHTML format with digital tagging, undergo mandatory third-party assurance, and achieve "reasonable assurance" levels in phases, thereby granting ESG information equivalent validity to financial statements. In contrast, Hong Kong has no such requirements.

Of course, the EU's aggressive ESG regulations inevitably encounter various obstacles during implementation. Under the dual pressures of economic downturn and shifting political environments, additional ESG compliance costs may undermine the international competitiveness of EU-based companies [23]. In response to strong calls from various stakeholders, the EU proposed the Omnibus Package in February 2025, aiming to significantly revise the CSRD series of regulations. The revisions include narrowing the scope of application, simplifying reporting requirements, postponing implementation timelines, and relaxing supply chain disclosure rules. According to the latest CSRD, Hong Kong-listed companies operating in the EU—with annual net turnover exceeding €450 million and maintaining a large subsidiary or branch within the EU—must comply with both Hong Kong ESG standards and the EU CSRD. Additionally, Hong Kong-listed companies with EU supply chains or markets are required, as part of the value chain of CSRD reporting entities, to undergo due diligence and assume corresponding disclosure obligations. Although the IFRS Foundation and the European Financial Reporting Advisory Group (EFRAG) jointly issued the "ESRS-ISSB Standards Interoperability Guide" in May 2024, achieving a degree of compatibility, the structural differences between Hong Kong standards and the EU CSRD remain a significant regulatory challenge for Hong Kong-listed companies expanding overseas.

4.3 Concurrent Advancement of Hong Kong Standards and Mainland China Standards

In September 2020, China first formally announced its dual carbon goals (carbon peak by 2030 and carbon neutrality by 2060) at the UN General Assembly, marking the beginning of an accelerated development phase for ESG policies. In December 2024, China's Ministry of Finance, jointly with nine other ministries and commissions, officially released the "Basic Standard for Corporate Sustainability Disclosure (Trial) [24]." The first specific standard, "Corporate Sustainability Disclosure Standard No.1 – Climate (Trial) [25]," was issued in December 2025. It is expected that by 2030, a sustainability disclosure standards system comprising general standards, specific standards, and industry-specific guidelines will be largely established. Regarding listed company regulation, in April 2024, the Shanghai, Shenzhen, and Beijing Stock Exchanges simultaneously released the "Self-Regulatory Supervision Guidelines for Listed Companies—Sustainability Development Reports (Trial) [26-28]." Starting from 2025, the "Guidelines for the Preparation of Sustainability Reports by Listed Companies" have been successively issued, including "No. 1: General Requirements and Disclosure Framework," "No. 2: Climate Change Response," "No. 3: Pollutant Emissions," "No. 4: Energy Utilization," and "No. 5: Water Resource Utilization."

China's mainland ESG standards draw heavily from the ISSB standards and adopt the TCFD four-pillar framework, while closely aligning with China's national development strategies. The disclosure topics not only cover traditional climate and environmental issues but also introduce topics with Chinese characteristics, such as rural revitalization, innovation-driven development, protection of small and medium-sized enterprises, supply chain security, and the building of a Beautiful China. Unlike the Hong Kong standards and ISSB standards, mainland China applies a stricter dual materiality principle. However, in climate-related disclosures, due to the relatively weak foundation of climate information domestically, the mainland standards do not mandatorily require disclosure of Scope 3 greenhouse gas emissions data, nor do they mandate specific greenhouse gas measurement methodologies or scenario analysis. Furthermore, the disclosure timeline in mainland China is more gradual: only companies included in the SSE 180 Index, STAR 50 Index, SZSE 100 Index, ChiNext Index, as well as companies listed both domestically and overseas (approximately 460 companies) are required as the first batch of mandatory disclosers to publish their inaugural sustainability reports for the 2025 fiscal year no later than April 30, 2026. Listed companies outside the mandatory scope are encouraged to disclose voluntarily.

Overall, Hong Kong's ESG standards and Mainland China's standards both fall under the ISSB framework, sharing considerable convergence in structure and key content. Although Hong Kong's requirements for climate-related disclosures are significantly higher than those in the Mainland, A+H share listed companies—which must comply with both sets of standards—are predominantly large or leading enterprises in sectors such as finance, energy, transportation, telecommunications, and infrastructure. These companies generally already possess a solid foundation in ESG disclosure and have relatively ample resources to dedicate to reporting. Consequently, they can adopt a "comply with the higher standard" approach to prepare a single ESG report that satisfies the regulatory requirements of both jurisdictions.

5 CURRENT STATUS AND ISSUES OF ESG INFORMATION DISCLOSURE IN THE HONG KONG MARKET

Currently, ESG information disclosure among Hong Kong-listed companies has achieved leapfrog development. The

ESG report release rate remains high, while the standardization of disclosure content and disclosure quality have steadily improved. ESG information disclosure has become a routine task and proactive practice for the majority of Hong Kong-listed companies, contributing in multiple ways to the healthy development of Hong Kong's financial market.

Firstly, ESG reporting disclosure rules also serve as best practice guidelines for corporate sustainable development. The Hong Kong Special Administrative Region government has issued documents mandating corporate compliance with ESG regulations, and by introducing market and public oversight through information disclosure, it encourages enterprises to improve their management in environmental, social, and governance aspects while meeting various disclosure requirements. This gradually transforms external pressure into internal motivation, achieving multi-level win-win outcomes for the government, society, and businesses.

Secondly, it reduces information asymmetry between investors and listed companies. ESG reports with standardized formats, comprehensive content, and credible data can fully present multi-dimensional information beyond financial statements, revealing a company's future sustainable development capabilities, potential risks, and long-term growth drivers. Establishing a unified, mandatory ESG information disclosure system aligned with mainstream international standards also ensures comparability of ESG reports across different companies, industries, and countries, facilitating the continuous inflow of global capital into the Hong Kong market.

Third, supporting a virtuous cycle between ESG disclosure quality and profit growth. High-quality ESG information disclosure can alleviate lenders' and investors' concerns about future uncertainties of enterprises, improve ESG rating outcomes, and facilitate the integration of ESG factors into loan or investment decision-making systems. Multiple empirical studies indicate a significant negative correlation between the quality of ESG disclosure and debt financing costs [29]. Meanwhile, standardized and transparent ESG information enhances the reliability and credibility of corporate financial reports, thereby granting a "green premium" in capital markets and reducing capital costs [30]. The resulting improvement in profitability from cost reduction, in turn, motivates enterprises to allocate more resources to ESG management, creating a mutually reinforcing development pattern.

Fourth, promoting the rapid development of green finance. Following the introduction of the Hong Kong Sustainable Finance Taxonomy, the issuance of green bonds and sustainable bonds in Hong Kong has continued to grow. In 2024, the total amount of green and sustainable debt (including bonds and loans) issued in Hong Kong exceeded USD 84 billion. Among these, approximately USD 43 billion of Asian international green and sustainable bonds were issued in Hong Kong, maintaining the top position in the Asian market for seven consecutive years since 2018 [31]. In terms of product innovation, transition finance instruments such as sustainability-linked bonds, transition bonds, and ESG-linked loans have been launched; multiple digital green bond issuances have been conducted, including a multi-currency digital green bond equivalent to approximately HKD 10 billion issued in November 2025, which is the largest sovereign digital green bond in the world [32].

However, further research reveals that the ESG information disclosure of Hong Kong listed companies still faces the following issues.

5.1 Heterogeneity in Disclosure Quality and Issues of Completeness

According to PwC China's 2025 survey on ESG reports of Hong Kong-listed companies for the fiscal year 2024 [21], 83% of the sampled companies prepared standalone ESG reports, a further increase from 68% in 2020, with significant improvements in the completeness of information and the standardization of report structure. Regarding third-party assurance, 40% of the reports underwent third-party assurance or independent verification, up from 16% in 2020, indicating continuous enhancement in information transparency and credibility. In terms of climate-related disclosures, Scope 1 and Scope 2 emissions are mandatory disclosures after 2025, and 99% of companies had already disclosed them in the 2024 fiscal year. However, in areas not yet mandated and subject to the "comply or explain" principle, disclosure rates remain relatively low. For example, due to the difficulty in data collection, the disclosure rate for Scope 3 emissions is 41%; the disclosure rate for incorporating climate performance indicators into remuneration policies is 31%; the disclosure rate for conducting climate scenario analysis is 59%; while quantitative disclosure of climate-related financial impacts is still in its early stages. The disclosure rate for the indicator "capital expenditure, financing, or investment directed toward climate-related risks and opportunities" is only 17%, and the rates for both "amount/percentage of assets or business activities vulnerable to climate-related risks" and "amount/percentage of assets and business activities aligned with climate-related opportunities" are merely 12%.

5.2 Concerns over Data Veracity and the Risk of Greenwashing

Greenwashing refers to corporate practices such as data manipulation, selective disclosure, exaggeration of environmental contributions, or concealment of negative environmental information, which artificially enhance ESG performance to obtain green premiums through improper means. The phenomenon of greenwashing is widespread globally; even large multinational corporations like Volkswagen, BP, General Electric, H&M, Zara, Nestlé, and Coca-Cola have been involved in greenwashing scandals [33], warranting strong vigilance in the Hong Kong market. Currently, Hong Kong only mandates the disclosure of Scope 1 and Scope 2 climate-related emissions data, while other information follows a "comply or explain" approach, creating systemic room for evasive practices and selective disclosure. Additionally, Hong Kong's ESG disclosure standards contain substantial textual descriptions and

unstructured information, lack mandatory third-party assurance for ESG report quality, and feature unclear penalties from regulatory authorities [34], making greenwashing activities more difficult to detect.

5.3 The Burden of Compliance Costs and Their Adverse Impact on Disclosure Practices

ESG disclosure is more than just compiling a report. To meet regulatory requirements for ESG disclosure, companies need to carry out ongoing data collection, establish a reporting management system that includes information systems, basic IT knowledge, specialized software, and professional personnel, and may need to engage external consultants and independent assurance providers. The costs of these one-time or ongoing investments are management expenses that companies should consider immediately. As Hong Kong's ESG disclosure requirements continue to rise—especially with the introduction of the TCFD and ISSB frameworks and their gradual mandatory implementation—costs for companies have surged in areas such as greenhouse gas emissions (particularly Scope 3 data collection and accounting) and climate scenario analysis. Although currently only large enterprises are required to disclose Scope 3 emissions data, many small and medium-sized enterprises, as suppliers to large companies, are also compelled to invest resources in data collection and reporting. Beyond foreseeable costs, companies must also face uncertainties arising from non-compliance with ESG disclosure rules, such as damage to market reputation, financing obstacles, or regulatory penalties, all of which add further burden to already pressured operations. This is especially true for companies in high-emission sectors, those listed simultaneously in mainland China and Hong Kong, or those operating in the European Union, where compliance costs are even higher. All of the above may force some Hong Kong-listed companies to delay disclosure plans or lower the quality of their disclosures.

6 OPTIMIZATION PATHWAYS AND STRATEGIC RECOMMENDATIONS

ESG disclosure standards are not merely technical specifications; from framework design and content requirements to scope of application and implementation plans, they are intrinsically linked to local economic development strategies, environmental and industrial policies, and even the global competitive landscape. The ESG information disclosure standards currently established in Hong Kong, based on the ISSB framework, align with the city's role as a super connector and super value-adder between Mainland China and international markets. However, this positioning also means that Hong Kong must consider and balance more numerous and complex factors when advancing alignment with both international standards and those of Mainland China. Looking ahead, to better attract international capital and optimize the financing environment for multinational enterprises, Hong Kong will need to continue its efforts in the following areas:

6.1 Regarding Specific Industry Disclosure Standards

GRI plans to develop 40 industry standards, of which 4 have been released; SASB had issued 77 industry standards before its incorporation into the ISSB; the mainland China disclosure system has also clearly stated that it will formulate application guidelines for 9 key industries. However, Hong Kong currently implements a unified disclosure framework for all industries and has not yet fully considered the differences in carbon emissions across sectors, nor the key disclosure content and targeted requirements for each industry. This approach may be due to Hong Kong following the ISSB standards, for which there are currently no plans to introduce specific industry standards. Nevertheless, Hong Kong could still encourage enterprises to refer to SASB's industry standards for disclosure to enhance the quality of information disclosure.

6.2 Regarding Differentiated Disclosure Requirements

Hong Kong adopts an implementation path from voluntary to mandatory disclosure. Apart from climate-related information, which sets varying disclosure requirements based on company size, the disclosure requirements for other information are largely uniform for all enterprises. Given that companies of different scales have differing profitability and cost-bearing capacities, a one-size-fits-all approach may lead to de facto inequity. In this regard, the European Financial Reporting Advisory Group has introduced a simplified version of ESG information disclosure tailored for small and medium-sized enterprises (SMEs). It is recommended that Hong Kong draw lessons from the EU's approach by establishing a tiered disclosure mechanism that imposes differentiated requirements on companies across various industries and scales. For instance, appropriately simplified measures could be applied to SMEs with limited resources, including reducing the number of disclosure indicators, streamlining non-critical disclosure content, and providing dedicated subsidy funds. This would encourage SMEs to proactively adapt to ESG compliance requirements and gradually integrate sustainable development into their long-term objectives.

6.3 Information Standardization

Hong Kong needs to establish a unified ESG data platform, standardize carbon emission data calculation and accounting methods, provide standardized reporting templates, centrally disclose ESG and climate-related information of all listed companies, and open data interfaces to investors and rating agencies. All ESG reports should be made available simultaneously in XHTML or XBRL (eXtensible Business Reporting Language) format, with digital tagging

to enable automated analysis by machine reading.

6.4 Third-Party Assurance

In 2024, 9% of Hong Kong-listed issuers and 70% of large-cap issuers obtained independent assurance on their ESG information [35]. It is anticipated that the number of companies voluntarily seeking third-party independent assurance for ESG information will further increase after the mandatory climate-related disclosure requirements take effect in 2026. Currently, there are multiple international assurance standards related to ESG, such as ISSA 5000, ISAE 3000, and ISAE 3410 issued by the International Auditing and Assurance Standards Board (IAASB); AA1000AS developed by AccountAbility (UK); and ISO 14064-3 established by the International Organization for Standardization (ISO). Among these, ISSA 5000 has gained support from the International Organization of Securities Commissions (IOSCO) and has been adopted by the EU CSRD and Mainland China's "Sustainability Assurance Engagement Standard No. 6101—Basic Standard (Trial)". In the future, Hong Kong could also require third-party assurance providers to apply the ISSA 5000 standard to enhance the comparability, credibility, and recognition of ESG information disclosure.

6.5 International and Regional Regulatory Coordination

Hong Kong should actively participate in the formulation of international standards, representing the local market in negotiations with the European Union, the United States, and the GRI organization on the mutual recognition of equivalence in ESG information disclosure standards, striving for global recognition of Hong Kong's disclosure framework based on the ISSB by major economies. Simultaneously, establish a regular coordination mechanism with regulatory authorities in Mainland China, aligning at the operational level in areas such as climate information sharing, carbon emission accounting methodologies, and materiality assessments, to narrow the differences in regulatory standards between the two regions.

7 CONCLUSION

To consolidate its status as a global financial center and establish a regional green finance hub, Hong Kong has accomplished a leap—within just over a decade—from introducing a voluntary ESG disclosure system to fully aligning with the ISSB standards and implementing phased mandatory disclosures. The quality of information disclosure has gradually improved, and market recognition has continued to rise. Overall, Hong Kong's ESG standards are converging with the internationally prevalent ISSB framework, are stricter than those in mainland China, and also differ from EU standards. As a result, Hong Kong's cross-border enterprises face dual or even multiple ESG compliance pressures. Hong Kong regulators should further benchmark against international mainstream and leading practices, refine technical and operational guidance in light of local corporate realities, strengthen supervision over the quality of disclosures, and advance the authenticity, completeness, consistency, and comparability of ESG information disclosure. This study is primarily based on the analysis of policy documents and publicly available information; it has not yet conducted field research or case validation on the ESG disclosure practices of Hong Kong listed companies. Future research could track the actual outcomes following the formal implementation of Hong Kong's ESG standards from 2026 to 2028, and employ empirical methods to explore the mechanisms through which ESG disclosure quality affects corporate performance, financing costs, and stock price performance.

COMPETING INTERESTS

The author has no relevant financial or non-financial interests to disclose.

REFERENCES

- [1] Hong Kong Trade Development Council. Financial Services Industry in Hong Kong. Hong Kong, 2025. <https://research.hktdc.com/tc/article/MzEzOTI4MDY3>.
- [2] Environment Bureau, HKSAR. Hong Kong's Climate Action Plan 2050. Hong Kong, 2021. <https://www.info.gov.hk/gia/general/202110/08/P2021100800588.htm?fontSize=1>.
- [3] Financial Services and the Treasury Bureau, HKSAR. Roadmap on sustainability disclosure in Hong Kong. Hong Kong, 2024. https://www.fstb.gov.hk/fsb/en/publication/report/docs/FSTB_Roadmap2024_eBooklet_EN.pdf.
- [4] Hong Kong Monetary Authority. Hong Kong Taxonomy for Sustainable Finance. Hong Kong, 2024. <https://brdr.hkma.gov.hk/chi/doc-ldg/docId/getPdf/20240503-3-TC/20240503-3-TC.pdf>.
- [5] Hong Kong Monetary Authority. Sustainable Finance Action Agenda. Hong Kong, 2024. <https://www.hkma.gov.hk/media/eng/doc/key-information/press-release/2024/20241021e4a1.pdf>.
- [6] The Stock Exchange of Hong Kong. Guidance on Climate Disclosures. Hong Kong, 2021. https://www.hkex.com.hk/News/Regulatory-Announcements/2021/211105news?sc_lang=en.
- [7] The Stock Exchange of Hong Kong. Environmental, Social and Governance Reporting Code. Hong Kong, 2024. https://en-rules.hkex.com.hk/sites/default/files/net_file_store/HKEX4476_3841_VER36624.pdf.

- [8] Yin C, Li C. Research on the path of China's institutional opening-up with regard to standards in synchronous development: Taking the ESG disclosure standards as an example. *Asia-Pacific Economic Review*, 2025(3): 178-192. DOI: 10.16407/j.cnki.1000-6052.2025.03.004.
- [9] Hong Kong Monetary Authority. Hong Kong Taxonomy for Sustainable Finance (Phase 2A). Hong Kong, 2026. <https://brdr.hkma.gov.hk/eng/doc-ldg/docId/20260122-5-EN>.
- [10] Climate Bonds Initiative Beijing Office. Towards transition and adaptation: Interpreting the core revisions and institutional significance of Hong Kong's "Sustainable Finance Taxonomy 2A". Beijing, 2026. <https://mp.weixin.qq.com/s/V4pZkTiQQY4zOoAA3snMDg>.
- [11] The Stock Exchange of Hong Kong. Environmental, Social and Governance Reporting Guide. Hong Kong, 2012. https://www.hkex.com.hk/-/media/HKEX-Market/News/Market-Consultations/2011-to-2015/December-2011-Consultation-Paper/Conclusions/cp201112cc_c.pdf.
- [12] Hong Kong Exchanges and Clearing Limited. Analysis of Environmental, Social and Governance Practice Disclosure in 2016/2017. Hong Kong, 2018. https://www.hkex.com.hk/-/media/HKEX-Market/Listing/Rules-and-Guidance/Environmental-Social-and-Governance/Reports-on-ESGPD/esgreport_2016_2017.pdf.
- [13] Corporate Knights. 2019 Measuring sustainability disclosure: Ranking the world's stock exchanges. Toronto, 2019. https://www.corporateknights.com/wp-content/uploads/2021/08/CK_StockExchangeRanking_2020.pdf.
- [14] Hong Kong Institute of Certified Public Accountants. HKFRS Disclosure Standards. Hong Kong, 2024. <https://www.hkicpa.org.hk/en/Standards-setting/Standards/New-and-major-standards/New-and-Major-Standards/Sustainability-Standards>.
- [15] Choy LY. Hong Kong's changing regulatory approaches to corporate environmental, social, and governance ('ESG') disclosure: An evidence-based assessment. *Journal of Corporate Law Studies*, 2024, 24(1): 137-167. DOI: 10.1080/14735970.2024.2355678.
- [16] Hong Kong Chartered Governance Institute, GoldenBee (Beijing) Management Consulting Co., Ltd. ESG Value Accounting Report of Hong Kong-Listed Companies 2025. Hong Kong, 2026. <https://www.hkcggi.org.hk/thought-leadership/publication-detail/2627>.
- [17] OECD. Global corporate sustainability report 2025. Paris: OECD Publishing, 2025. DOI: 10.1787/bc25ce1e-en.
- [18] KPMG International. The move to mandatory reporting: Survey of sustainability reporting 2024. London: KPMG International, 2024. <https://kpmg.com/cy/en/insights/esg/move-to-mandatory-reporting.html>.
- [19] International Organization of Securities Commissions. IOSCO endorses the ISSB's Sustainability-related Financial Disclosures Standards. Madrid: IOSCO, 2023. <https://www.iosco.org/news/pdf/IOSCONEWS703.pdf>.
- [20] IFRS Foundation. Progress on corporate climate-related disclosures – 2024 report. London: IFRS Foundation, 2024.
- [21] PwC China. 2025 Hong Kong-listed companies environmental, social and governance report survey. Shanghai: PwC China, 2025. <https://www.pwccn.com/zh/services/issues-based/esg/esg-report-2025.html>.
- [22] Markey E. Political and corporate forces shaping the European Union's Corporate Sustainability Reporting Directive and implications on the future of sustainability reporting: Comparative analysis with the Sarbanes-Oxley Act of 2002 [master's thesis]. Baltimore (MD): Johns Hopkins University, 2025. <https://jscholarship.library.jhu.edu/handle/1774.2/70480>.
- [23] Hummel K, Jobst D. An overview of corporate sustainability reporting legislation in the European Union. *Accounting in Europe*, 2024, 21(3): 320-355. DOI: 10.1080/17449480.2024.2312145.
- [24] Ministry of Finance of the People's Republic of China. Basic Standard for Corporate Sustainability Disclosure (Trial). Beijing: Ministry of Finance of the PRC, 2024.
- [25] Ministry of Finance of the People's Republic of China. Corporate Sustainability Disclosure Standard No.1 – Climate (Trial). Beijing: Ministry of Finance of the PRC, 2025. https://kjs.mof.gov.cn/zhengcefabu/202512/t20251225_3980202.htm.
- [26] Shanghai Stock Exchange. Self-Regulatory Supervision Guideline for Listed Companies of Shanghai Stock Exchange No.14 – Sustainability Development Report (Trial). Shanghai: Shanghai Stock Exchange, 2024. https://www.sse.com.cn/lawandrules/sselawrules/stocks/mainipo/c/c_20240412_10753180.shtml.
- [27] Shenzhen Stock Exchange. Self-Regulatory Supervision Guideline for Listed Companies of Shenzhen Stock Exchange No.17 – Sustainability Development Report (Trial). Shenzhen: Shenzhen Stock Exchange, 2024. https://www.szse.cn/lawrules/rule/stock/supervision/currency/t20240412_606839.html.
- [28] Beijing Stock Exchange. Self-Regulatory Supervision Guideline for Listed Companies of Beijing Stock Exchange No.11 – Sustainability Development Report (Trial). Beijing: Beijing Stock Exchange, 2024. https://www.bse.cn/cxjg_list/200025662.html.
- [29] Raimo N, Caragnano A, Zito M, et al. Extending the benefits of ESG disclosure: The effect on the cost of debt financing. *Corporate Social Responsibility and Environmental Management*, 2021, 28(4): 1412-1421. DOI: 10.1002/csr.2134.
- [30] Akin I, Akin M. Mandated ESG disclosure and its effects on earnings quality and cost of capital: Evidence from European stock markets. *Corporate Social Responsibility and Environmental Management*, 2026, 33(2): 2196-2209. DOI: 10.1002/csr.70280.

- [31] Financial Services and the Treasury Bureau, HKSAR. Speech by Secretary for Financial Services and the Treasury Christopher Hui on the latest developments of green and sustainable finance in Hong Kong. Hong Kong, 2025. <https://www.info.gov.hk/gia/general/202509/01/P2025090100235.htm>.
- [32] Hong Kong Monetary Authority. HKSAR Government's third digital green bonds offering. Hong Kong, 2025. <https://www.hkma.gov.hk/eng/news-and-media/press-releases/2025/11/20251111-6/>.
- [33] Zervoudi EK, Moschos N, Christopoulos AG. From the Corporate Social Responsibility (CSR) and the Environmental, Social and Governance (ESG) criteria to the greenwashing phenomenon: A comprehensive literature review about the causes, consequences and solutions of the phenomenon with specific case studies. *Sustainability*, 2025, 17(5): 2222. DOI: 10.3390/su17052222.
- [34] Choy LY. Environmental, social and governance reporting regulation in Hong Kong: Reforms, inadequacies, and proposals. *Capital Markets Law Journal*, 2024, 19(3): 280-297. DOI: 10.1093/cmlj/kmae009.
- [35] Hong Kong Exchanges and Clearing Limited. Annual Review of Issuers' Reports – 2025. Hong Kong, 2025. https://www.hkex.com.hk/-/media/HKEX-Market/Listing/Rules-and-Guidance/Other-Resources/Exchanges-Review-of-Issuers-Annual-Disclosure/ARIR_2025.pdf.