2025 ESG Reporting Survey of Hong Kong Listed Companies

Contents

01 **Background and Methodology of the Study** 2

02 **Details of the Study** 5

- 2.1 Overview 6
- 2.2 Climate-related disclosure 10
- 2.3 Management and disclosure of environmental information 17
- 2.4 Management and disclosure of social information 22

03 **Our focuses of this year** 31

- 3.1 Case study 1: Active implementation of new climate regulations with initial successes 32
- 3.2 Case study 2: Business integration and constructing ESG management system 40
- 3.3 Case study 3: Navigating ESG trends and charting new courses for global expansion 46

04 **Summary and Outlook** 52

05 **Appendix** 54

- Citation List
- Authors

01

Background and Methodology of the Study

Background and Methodology

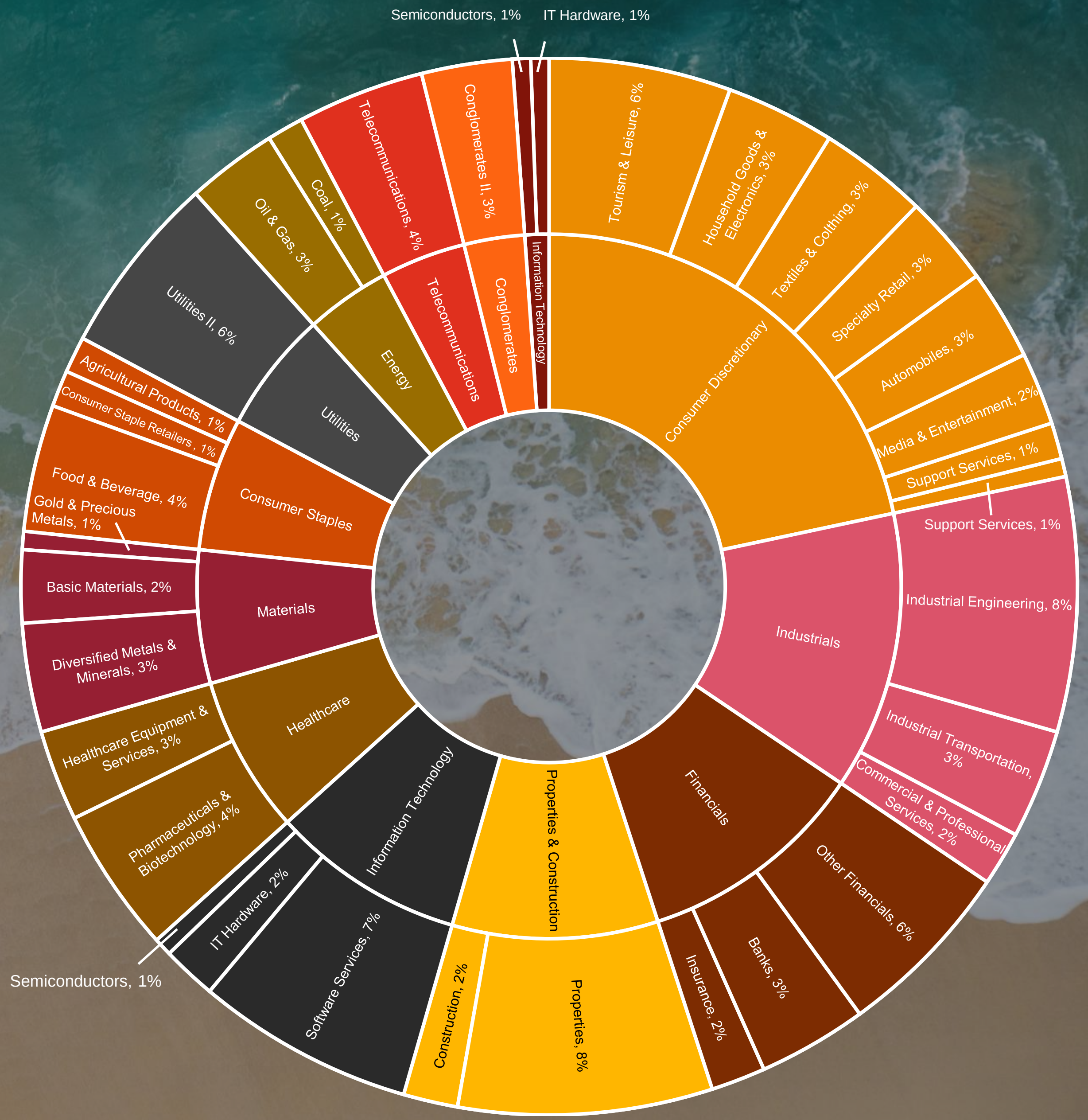
Since the launch of the *Environmental, Social and Governance Reporting Guide (“the ESG Reporting Guide”)* in 2013, the Hong Kong Exchanges and Clearing Limited (“HKEX”) has continuously refined its ESG framework to promote high-quality disclosures and advance sustainability practices among listed companies. ESG reporting in Hong Kong has become increasingly comprehensive and mature, with regulatory requirements evolving toward greater rigor. In April 2024, HKEX released the *Consultation Conclusions on Enhancement of Climate-Related Disclosures* under the ESG Framework, revising the *ESG Reporting Guide* and renaming it the *Environmental, Social and Governance Reporting Code* (“*ESG Code*”) to reflect its mandatory nature. The revised *ESG Code* will take effect for financial years beginning on or after January 1, 2025.

Drawing on the *ESG Code* and the *Implementation Guidance For Climate Disclosures*, PwC conducted an in-depth analysis of ESG reports published by Hong Kong-listed companies for the 2024 fiscal year. Using the Hang Seng Industry Classification System, companies were selected across 12 primary industry categories. This marks the ninth consecutive year of our ESG research initiative.

The study evaluates ESG disclosures across the following dimensions:

- Overall ESG performance and reporting maturity
- Climate-related disclosures
- Environmental management and transparency
- Social governance and stakeholder engagement

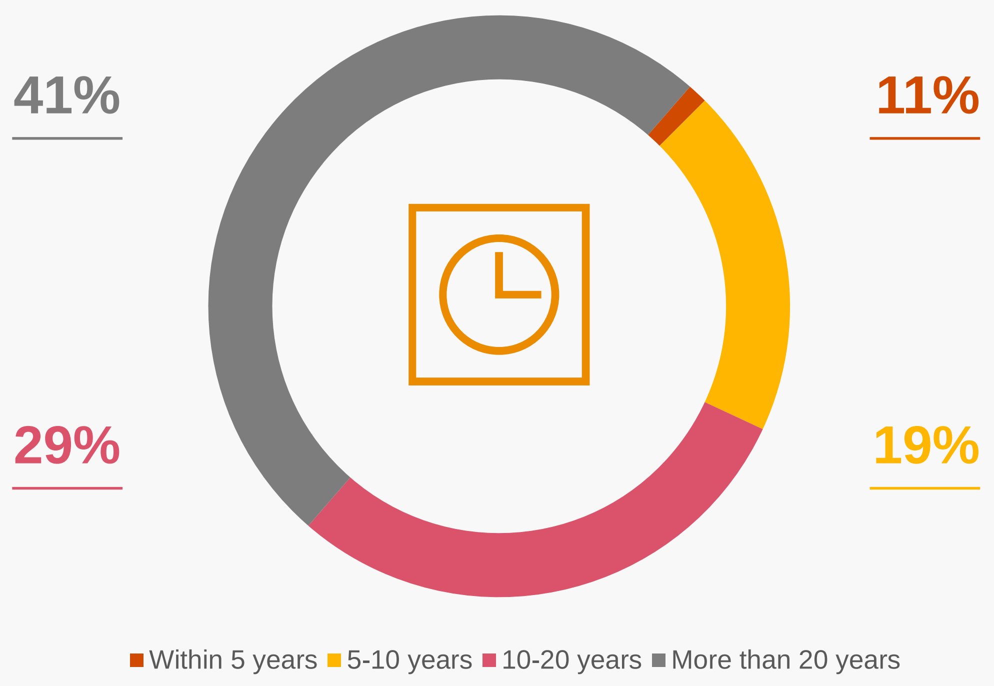
All analyses in this study are based on weighted random sampling, designed to reflect the industry and market capitalization distribution of Hong Kong-listed companies. However, sampling errors may exist between the estimated sample and the actual population, potentially leading to deviations in research findings. As a result, the conclusions may not fully represent the specific practices or performance of individual companies.



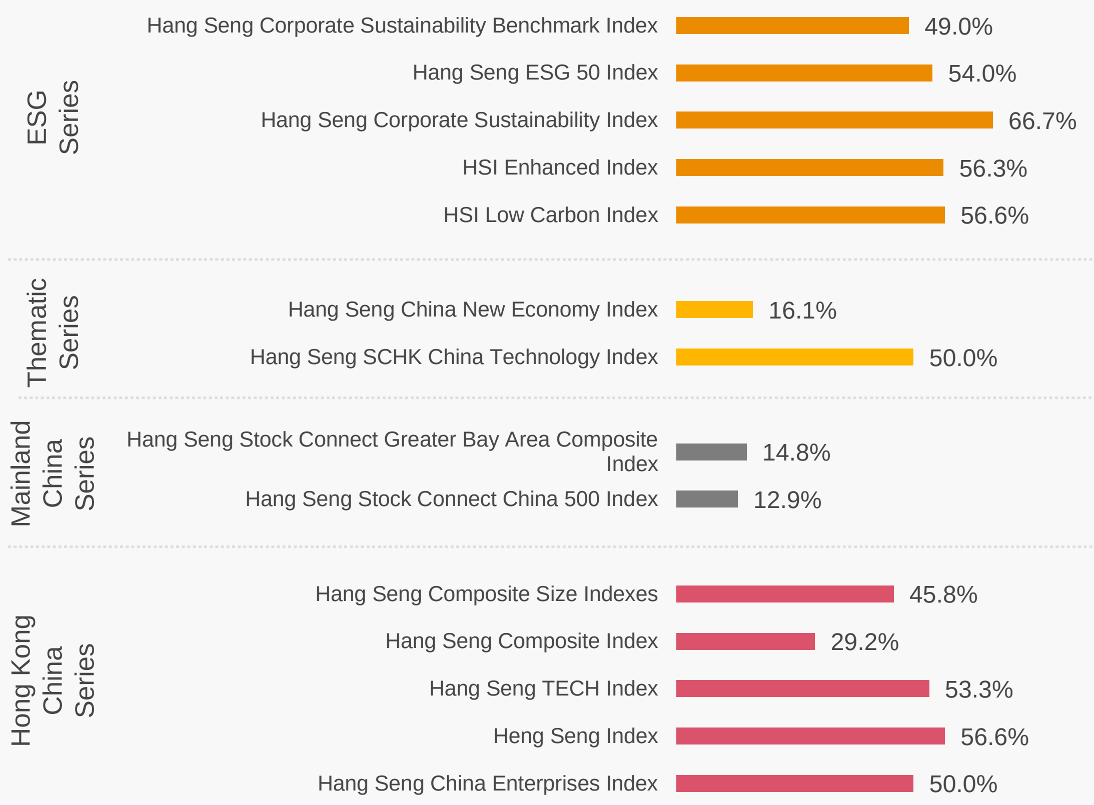
Sample distribution of listed companies surveyed

The listing time of the sample companies in this survey and the distribution of Hang Seng Index constituent stocks are are as follows:

Distribution of time of listing of sampled companies



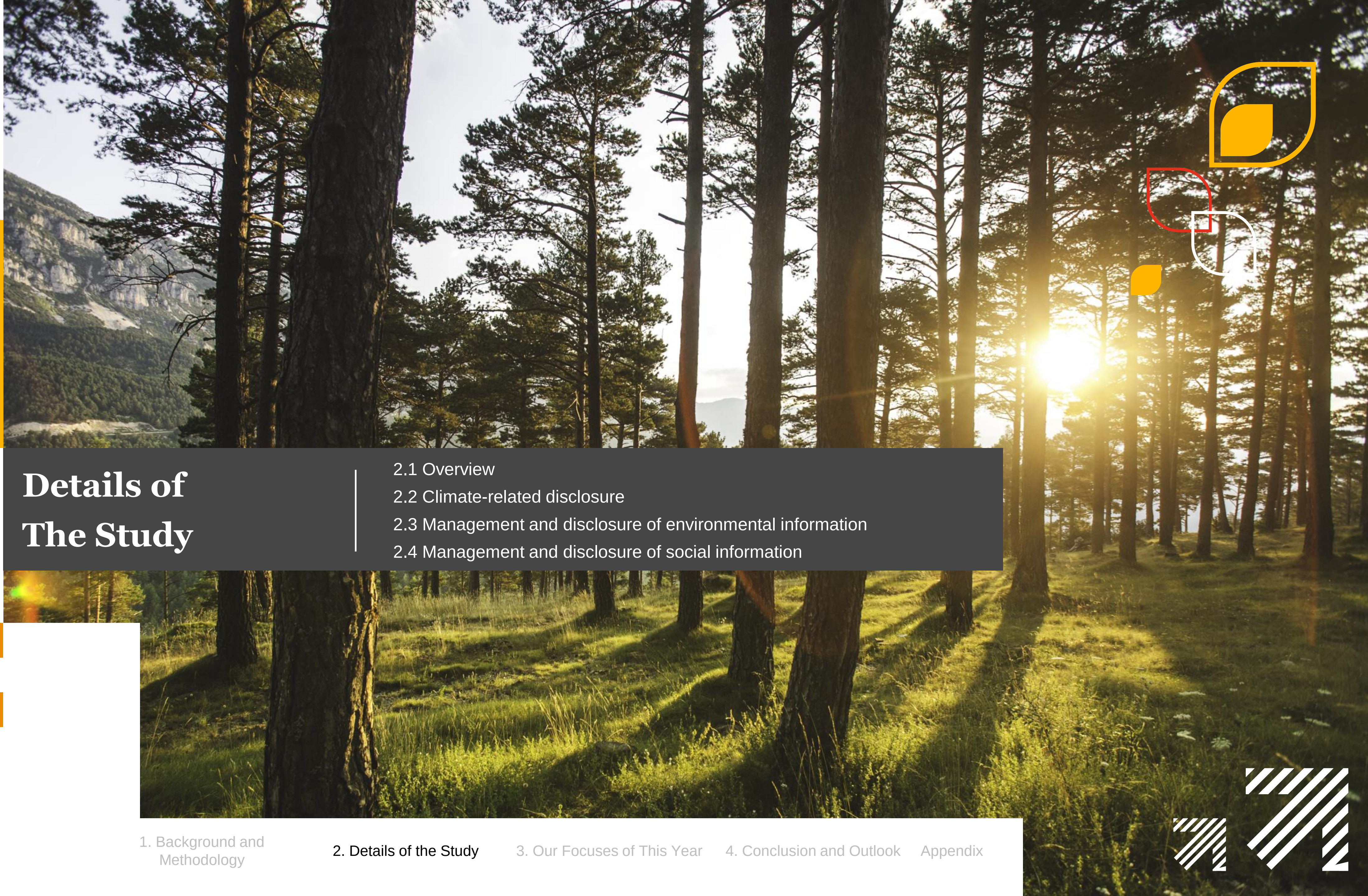
Proportion of HSI constituent stocks selected for this study



02

Details of The Study

2.1 Overview
2.2 Climate-related disclosure
2.3 Management and disclosure of environmental information
2.4 Management and disclosure of social information



Overview: Format for disclosure

Hong Kong-listed companies have reached new heights in ESG disclosure, with the completeness and richness of disclosed content increasing year by year. Listed companies adhere to *the ESG Code*, with most compiling independent ESG reports tailored to their specific circumstances and industry characteristics. These reports present qualitative and quantitative ESG information differentiated by the importance of the issues, demonstrating their deep understanding and high regard for ESG issues.

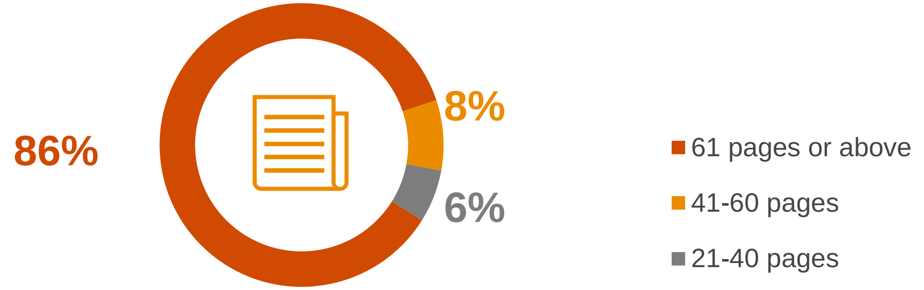
Data analysis and interpretation

The survey results show that among the sample enterprises,

83% of the samples disclosed stand-alone ESG reports

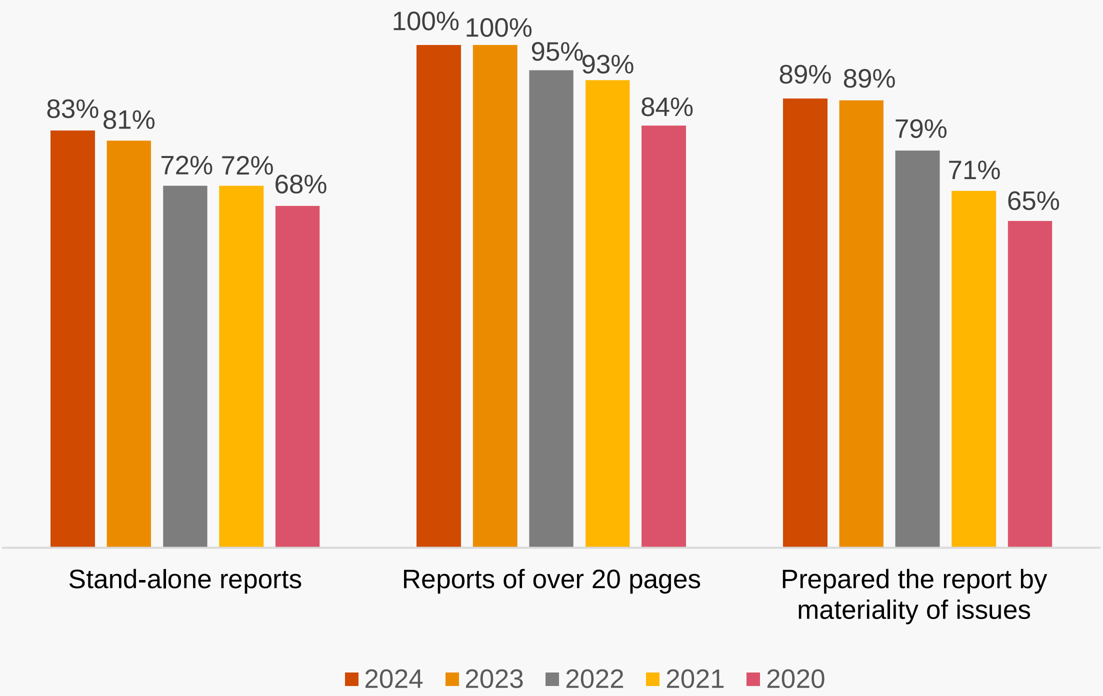
86% of the sample reports were longer than 60 pages, **8%** were between 41 and 60 pages, and **6%** were between 21 and 40 pages

The detailed data composition of reports exceeding 20 pages



Nearly **90%** of sample companies prepare reports by materiality of the ESG issues

Report disclosure formats



Overview: Reporting standards

The ESG reporting standards chosen by Hong Kong listed companies are diversified and international. In addition to following the Hong Kong Stock Exchange's *ESG Code*, many companies also refer to international standards such as the *GRI Sustainability Reporting Standard* (“*GRI Standards*”) and the Task Force on Climate-related Financial Disclosures framework (“TCFD[1] framework”) to prepare ESG reports based on their business characteristics, industry characteristics, and the requirements of the company's location.

Data analysis and interpretation

The proportion of listed companies in Hong Kong applying reporting standards other than the *ESG Code* has increased year by year, with **75%** of the sample companies referring to other reporting standards, including:

- **70%** adopted the *GRI Standards*, **61%** adopted TCFD framework
- **22%** adopted International Sustainability Standards Board (“ISSB”) standards to further promote the interoperability of ESG information with financial information

75% of the sample companies referred to other reporting standards, with the adoption rate of each standard being

GRI Standards	70%
TCFD framework	61%
ISSB Standards	22%
SASB Standards	16%
Chinese Corporate Social Responsibility Report Preparation Guide (CASS-CSR4.0/CASS-ESG5.0/CASS-ESG6.0)	9%
ISO 26000: Guidance on Social responsibility (2010)	7%

1. On July 10, 2023, the IFRS Foundation publicly announced on its official website that the ISSB will take over the TCFD's oversight of the progress of climate-related disclosures from 2024

Overview: ESG governance

Good ESG governance is the cornerstone of a company's sustainable development. In recent years, Hong Kong listed companies have shown significant progress and deepening in the practice and improvement of ESG governance. Many companies have upgraded ESG oversight to the board level and established dedicated ESG committees and working groups based on their ESG risk profiles to effectively promote the implementation of corporate ESG strategies.

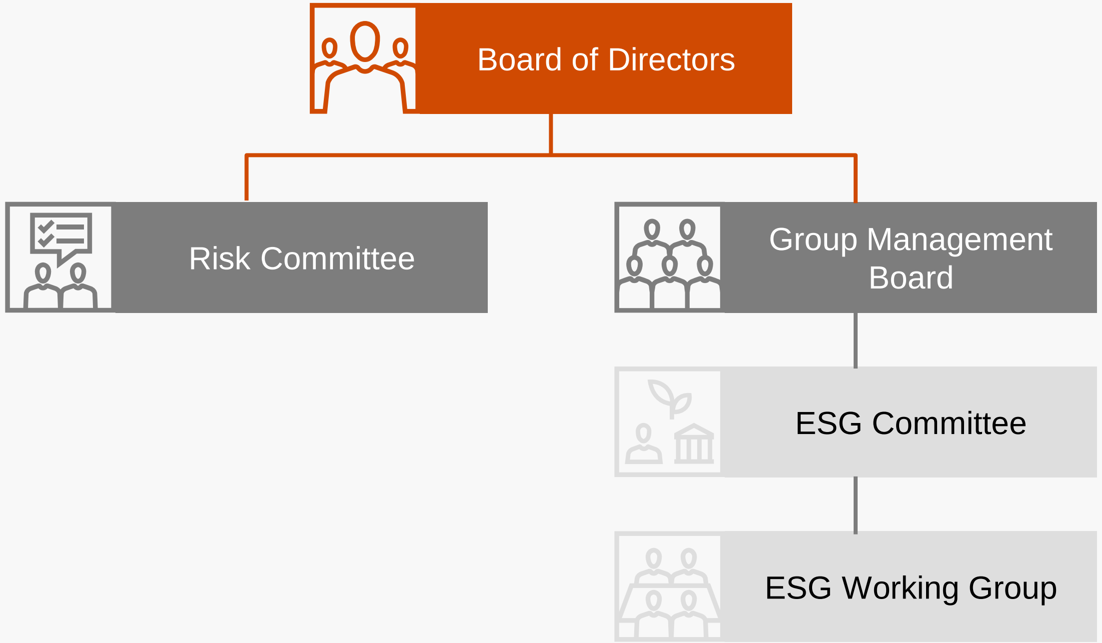
Data analysis and interpretation

The survey results show that among the sample enterprises:

- **74%** **have established ESG committees**
- **99%** **disclosed the board's oversight of ESG matters**
- **88%** **disclosed the board's ESG management policy and strategy,**
- **86%** **disclosed how the board reviews ESG-related goals**

- It is recommended that listed companies should establish a detailed ESG goal formulation and review process, including target demonstration and formulation, data collection and verification, historical comparison and baseline setting, progress evaluation, etc., to ensure the scientific and traceable nature of the goals
- It is recommended that listed companies should establish a clear ESG management workflow, list ESG governance responsibilities and reporting relationships, and form a process-oriented and normalized management model to improve the efficiency of ESG work management and the accuracy of information

The board of directors of listed companies should establish an ESG governance structure according to their own circumstances, and the examples of ESG governance structures are as follows:



Source: HKEX's *Making inroads into good Corporate Governance and ESG management*

Overview: Report assurance or independent verification

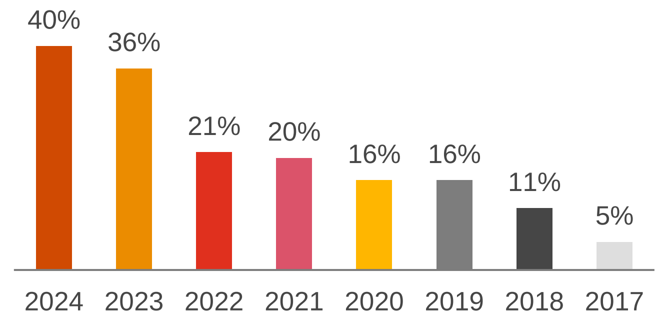
The quality and credibility of ESG information disclosure are crucial for users. The EU *Corporate Sustainability Reporting Directive* (“*CSRD*”) has introduced mandatory assurance requirements for sustainability reporting for applicable companies. Global ESG reporting standards, such as the *GRI Standards*, also encourage companies to conduct independent assurance and disclose assurance results in ESG reporting. The ISSB's *IFRS S1 - General Requirements for Disclosure of Sustainability-related Financial Information* (“*IFRS S1*”) requires companies to explain third-party assurance of ESG disclosure indicators. At the same time, to enhance the transparency and reliability of information, the Hong Kong Stock Exchange also encourages listed companies to conduct independent verification of ESG reports. Listed companies should consider conducting independent third-party assurance or independent verification of ESG reports in a timely manner to respond to international standards and enhance corporate influence.

Data analysis and interpretation

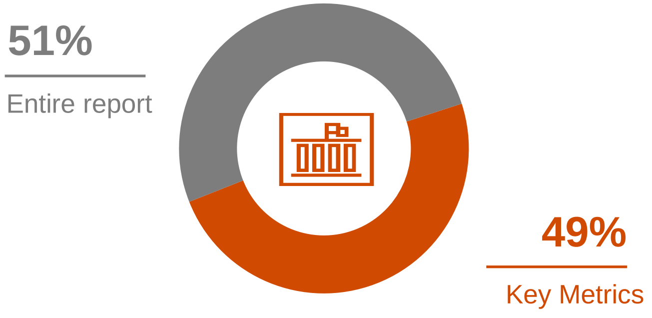
The survey results show that report assurance or independent verification has become a common trend:

- **40%** sample reports are third-party certified or independently verified
- Among the companies that conducted third-party assurance or independent verification, **51%** chose to conduct assurance or independent verification for the entire report, while the remaining samples only conducted assurance or independent verification for key indicators in the report.

Report assurance or independent verification ratio



Scope of report assurance or independent verification



- Assurance or independent verification can significantly improve the credibility and recognition of ESG information disclosure. Global ESG reporting standards (such as *GRI Standards*) encourage companies to conduct assurance or independent verification and disclose the results of assurance or independent verification in ESG reports. It is recommended that listed companies consider conducting third-party assurance or independent verification of ESG reports in a timely manner to respond to international standards.

Climate-related disclosure

On January 1, 2025, the *ESG Code* officially came into effect. The new *Climate-related Disclosures requirements* ("Part D") are amended to make it mandatory for all listed issuers to disclose Scope 1 and Scope 2 greenhouse gas emissions for financial years beginning on or after 1 January 2025, and all Main Board listed issuers are required to report on new climate requirements beyond Scope 1 and Scope 2 on a "comply-or-explain" basis. The new climate regulations are based on the ISSB climate standards, focusing on the four pillars of governance, strategy, risk management, indicators and targets, aiming to improve the transparency and consistency of climate information disclosure of listed companies and put forward higher requirements for companies' climate management capabilities.

Governance

- Information on the governance bodies or individuals responsible for overseeing climate-related risks and opportunities;
- Management's role in the governance processes, controls, and procedures used to monitor, manage, and oversee climate-related risks and opportunities;
- How climate-related considerations are incorporated into remuneration policies, or appropriate disclaimers are provided.

Risk Management

- The issuer's processes and policies for identifying, assessing, and monitoring climate-related risks;
- The issuer's processes for identifying, assessing, and monitoring climate-related opportunities;
- How and to what extent the processes for identifying, assessing, prioritizing, and monitoring climate-related risks and opportunities are integrated into the issuer's overall risk management process.

Strategy

Addressing the impacts of significant climate-related risks and opportunities:

- ✓ Climate-related risks and opportunities
- ✓ Business model and value chain
- ✓ Strategy and decision-making
- ✓ Financial position, performance, and cash flows
- ✓ Climate resilience

Metrics and Targets

Indicators and targets used to measure, monitor and manage significant climate-related risks and opportunities, and how performance will be assessed (including progress towards achieving set targets):

- ✓ Greenhouse gas emissions
- ✓ Climate-related transition risks, physical risks and opportunities, and capital deployment
- ✓ Internal carbon pricing
- ✓ Climate-related targets

Climate-related disclosure (cont'd)

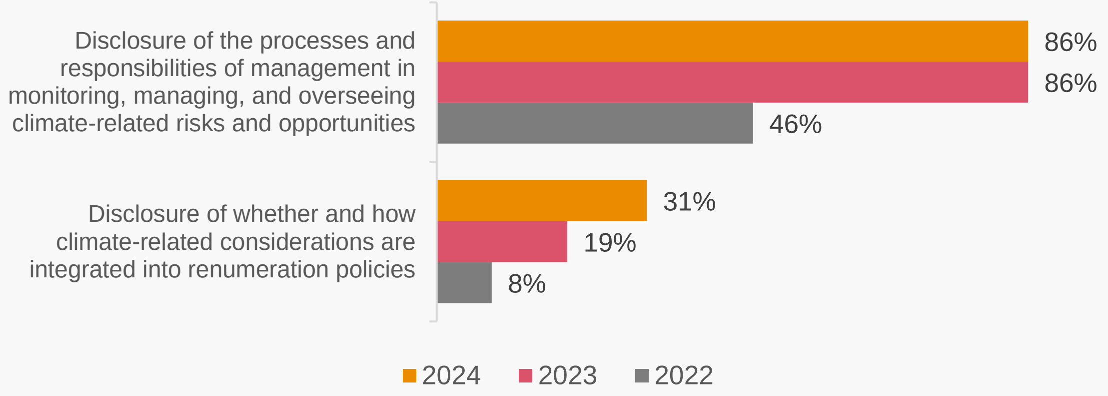
PwC conducted a survey of sample companies' 2024 ESG reports based on the *ESG Code*, aiming to assess the overall level of climate disclosure among listed companies and any gaps with regulatory requirements. The survey results show that listed companies' climate disclosure continues to improve. Most companies have established climate governance structures and procedures for identifying, assessing, and managing climate risks and opportunities, clearly defining their impact on their business models and value chains, and actively disclose core metrics such as Scope 1 and Scope 2 emissions. However, significant room for improvement remains in areas such as linking climate performance with compensation, scenario analysis, financial impact assessment and quantification, and Scope 3 emissions. With the gradual implementation of regulatory requirements, listed companies urgently need to enhance their climate governance capabilities, strengthen strategic foresight, and enhance the integrity of their disclosures to better align with regulatory standards and effectively align with international norms.

Looking at the climate disclosure requirements in the *ESG Code*, the sample companies' disclosure rates for various indicators vary widely, indicating that most companies still view them as compliance tasks rather than proactive strategic management tools.

Climate-related disclosure: Governance

Proportion of companies disclosing climate-related governance content

The survey results show that among the sample enterprises,



The detailed analysis results of the disclosure of climate governance-related items in 2024 are as follows:

Disclosure of governance body(s) responsible for oversight of climate-related risks and opportunities	87%
Disclosure of how the governance body(s) oversees the setting of, and monitors progress towards, targets related to climate-related risks and opportunities	75%
Disclosure of how governance body(s) takes into account climate-related risks and opportunities when overseeing the issuer's strategy, major transactions, etc.	73%
Disclosure of how and how often governance body(s) is informed about climate-related risks and opportunities	68%
Disclosure of the governance body(s)'s strategy for determining its skills and competency levels for overseeing climate-related risks and opportunities	51%

Data analysis and interpretation

The survey results show,

86% sample companies have clearly disclosed the roles, responsibilities and processes of governance bodies and management in overseeing climate-related risks and opportunities

68% sample companies disclosed how and how often their governance bodies monitor climate-related risks and opportunities, indicating a mature disclosure quality.

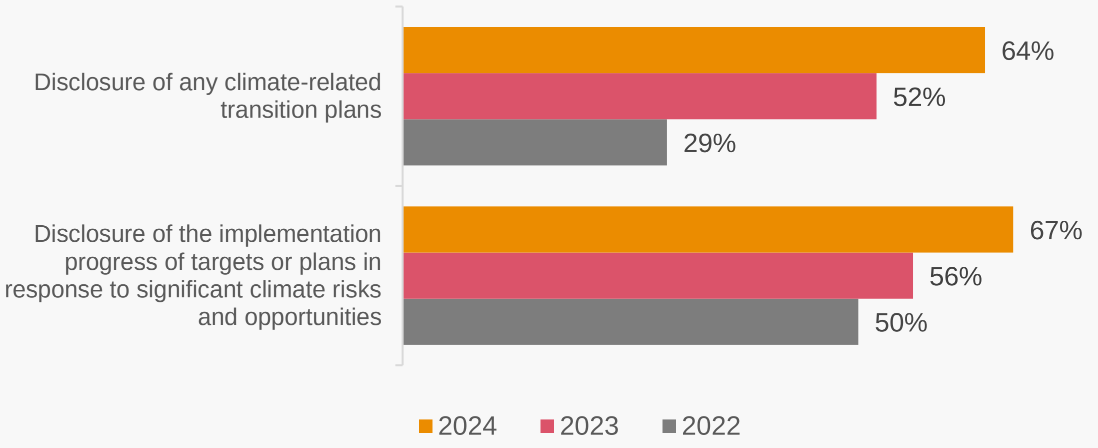
The proportion of companies incorporating climate-related performance indicators into their remuneration policies has **increased** (with over 40% of large-cap companies disclosing this), but overall it is still in its early stages.

- Listed companies are advised to continuously refine their competency assessment strategies for personnel within climate-related governance bodies to ensure they possess the professional skills to oversee and manage climate risks and opportunities.
- Listed companies are also advised to actively embed climate governance responsibilities into internal incentive mechanisms to further enhance the board's and management's awareness of climate risks and opportunities.

Climate-related disclosure: Strategy

Percentage of companies disclosing climate-related strategies

The survey results show that among the sample enterprises,



The results of the 2024 disclosure analysis of climate strategy-related items are as follows:

Disclosure of identified significant climate-related risks and opportunities in the short, medium or long term	87%
Disclosure of the current and anticipated effects of climate-related risks and opportunities on the issuer's business model and value chain	82%
Disclosure of current and future resources invested in addressing climate-related risks and opportunities	64%
Disclosure of the definitions of short-term, medium-term, and long-term, and their impact on planning horizons used by the issuer for strategic decision-making	58%

Data analysis and interpretation

The survey results show,

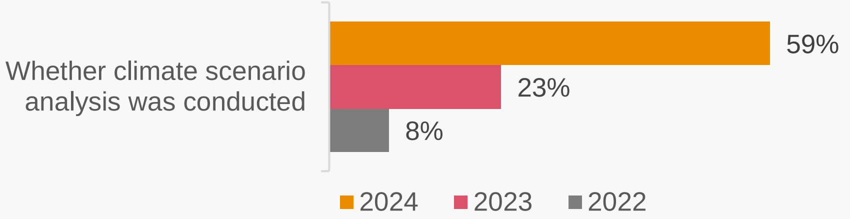
87% of sample companies have identified and disclosed their significant short-, medium-, and long-term climate risks and opportunities, as well as their current and anticipated impacts on their business models and value chains. Overall disclosure coverage is high. The proportion of companies disclosing low-carbon transition plans and target implementation progress **increased** by **12%** and **11%**, respectively, compared to last year, demonstrating that companies are actively implementing their climate strategies through path planning and progress tracking.

- Listed companies are advised to optimize the monitoring and effectiveness evaluation of climate-related resource investments, and enhance the effectiveness of climate strategy execution, oversight, and management.
- Listed companies are also advised to clarify the criteria for short-term, medium-term, and long-term categorization, further clarifying the potential impact of climate risks and opportunities on business and strategic planning over different timeframes.

Climate-related disclosure: Strategy (continued)

Percentage of companies disclosing climate-related strategies

The survey results show that among the sample enterprises,



The results of the 2024 disclosure analysis of climate strategy-related items are as follows:

Disclosure of the significant areas of uncertainty considered in the issuer's assessment of its climate resilience	34%
Disclosure of the capacity to adjust, or adapt its strategy and business model to climate change over the short, medium or long term	47%
Disclosure of the implications of the climate scenario analysis for strategy and business model	64%
Disclosure of the impact of climate-related risks and opportunities on the company's financial position, financial performance, and cash flows during the reporting period	42%
Disclosure of the impact of climate-related risks and opportunities on financial performance and cash flows in the short, medium, and long term	37%

Data analysis and interpretation

The survey results show that

42% of sample companies described the impact of their climate-related risks and opportunities on their financial position, financial performance, and cash flow during the reporting period.

37% of sample companies described the impact of their climate-related risk and opportunity strategies on their financial performance and cash flow in the short, medium, and long term.

Although the proportion of companies using climate scenario analysis to assess their climate resilience has **increased**, it remains relatively low overall.

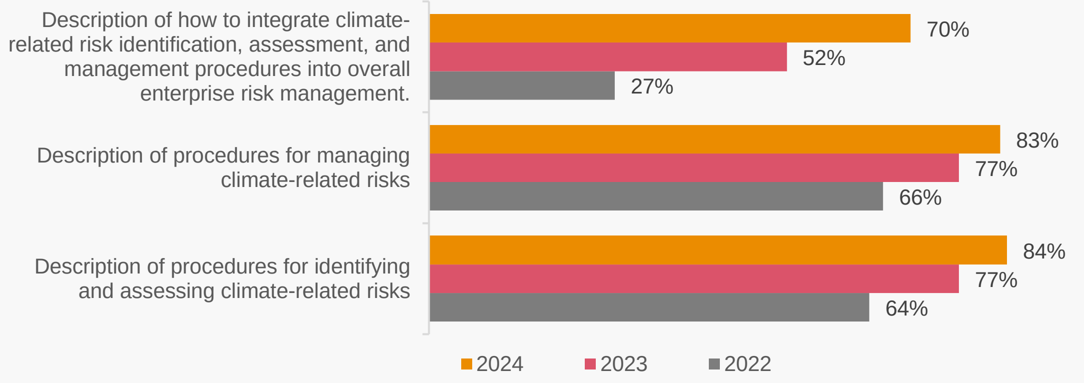
A small number of companies further clarified the significant uncertainties considered in their assessments and explained their ability to adjust their business models and strategies based on climate developments.

- It is recommended that listed companies actively carry out climate scenario analysis based on their own business characteristics to identify potential impacts under the most adverse scenarios and improve their resilience to climate risks.
- It is recommended that listed companies strengthen the quantitative analysis of the financial impact of climate-related risks and opportunities to further enhance information transparency and investor confidence.

Climate-related disclosure: Risk management

Percentage of companies disclosing climate-related risk management information

The survey results show that among the sample enterprises,



The results of the 2024 disclosure analysis of climate risk management related items are as follows:

Disclosure of how climate-related risks are monitored	82%
Disclosure of whether and how climate-related risks are prioritized relative to other types of risks	51%
Disclosure of how the nature, likelihood and magnitude of the effects the relevant risks are assessed	59%
Disclosure of whether and how climate-related scenario analysis was used to inform identification of climate-related risks	59%
Disclose the information about data sources and the scope of operations covered in the processes	58%

Data analysis and interpretation

The survey results show that

70% of the sample companies have incorporated climate-related risks into their risk management systems

83% of the sample companies have clear processes for identifying, assessing and managing climate-related risks

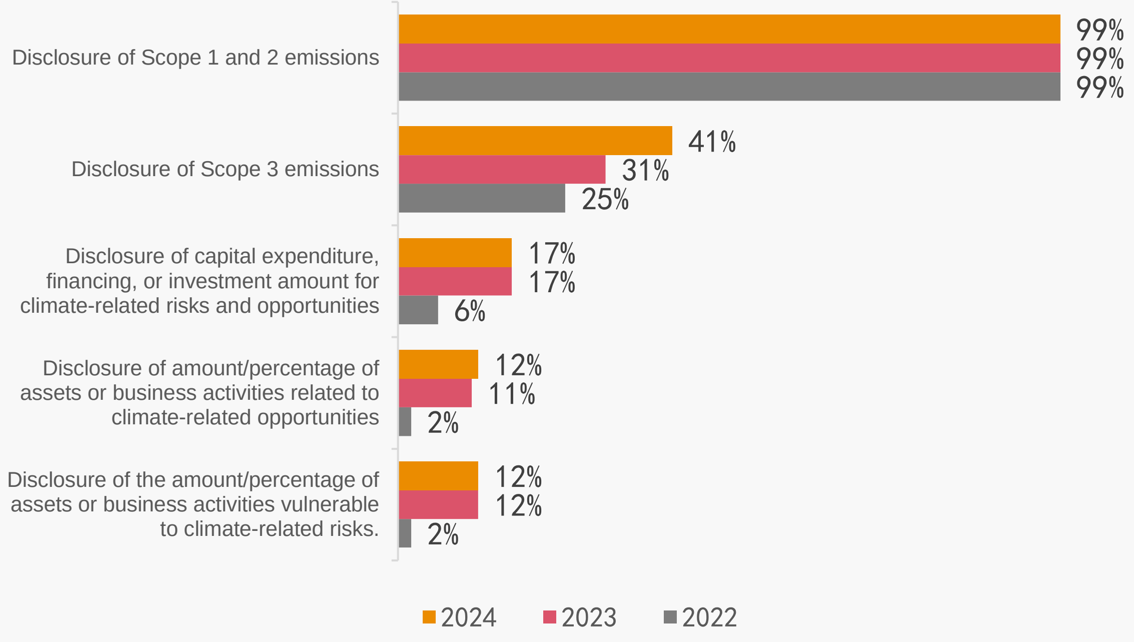
59% of the sample companies have conducted climate scenario analysis to identify climate-related risks and opportunities, and **78%** of large-cap companies have conducted climate scenario analysis. However, there is still room for improvement in the depth of climate-related risk management, such as clarifying the nature, magnitude, likelihood, risk ranking, and scope of risk impact

- It is recommended that listed companies integrate ESG risks, including climate-related risks, into their risk management systems to correctly identify, fully assess, manage and monitor key risks. The board of directors and management need to fully understand the characteristics of climate risks in order to understand the impact of climate risks and conduct risk assessments in risk assessment.
- It is recommended that listed companies carry out scenario analysis of multi-climate scenarios as soon as possible to further identify and assess the climate-related risks and opportunities faced by enterprises.
- It is recommended that listed companies further clarify the nature, likelihood, extent and scope of climate-related risks and opportunities, and take appropriate measures to monitor the progress of relevant risks and opportunities management to deepen the management of climate-related risks and opportunities.

Climate-related disclosure: Indicators and targets

Percentage of companies disclosing climate-related indicators and targets

The survey results show that among the sample enterprises,



The detailed analysis results of the disclosure of climate indicators and targets in 2024 are as follows:

Disclosure of climate-related target setting	75%
Disclosure of the indicators set to monitor progress towards the goals	75%

Data analysis and interpretation

The survey results show that,

99% of the sample companies have disclosed Scope 1 and Scope 2 greenhouse gas emissions

41% of the sample companies have disclosed Scope 3 greenhouse gas emissions, and, **65%** of large-cap sample companies have disclosed Scope 3

75% of the companies in the sample have set climate-related targets and set indicators to monitor progress towards them

Only 12% of the sample companies disclosed the amount of capital expenditure, financing or investment in response to climate-related risks and opportunities, and **17%** of the sample companies disclosed the amount and proportion of assets or business activities related to climate-related risks and opportunities

- It is recommended that listed companies formulate climate-related targets and assessment indicators as soon as possible, and clarify the details of the path to achieve climate goals (including the base year, coverage, and short- and medium-term targets of climate targets).
- It is recommended that listed companies identify the financial impact of climate-related risks and opportunities as soon as possible, identify assets and business activities that are vulnerable to climate risks and opportunities, and quantify relevant financial impact indicators, clarify the financial impact of the current reporting period and the expected financial impact to meet compliance requirements.

Management and disclosure of environmental information

No.	Disclosure Requirement
A1	**Emissions**
A1.1	The types of emissions and respective emissions data
A1.3	Total hazardous waste produced and intensity
A1.4	Total non-hazardous waste produced and intensity
A1.5	Emission targets
A1.6	Waste reduction targets
A2	**Use of Resources**
A2.1	Energy consumption in total and intensity
A2.2	Water consumption in total and intensity
A2.3	Energy use efficiency target
A2.4	Water efficiency target
A2.5	Total packaging material used for finished products and intensity
A3	**The Environment and Natural Resources**
A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them

Our analysis of sample companies revealed the following:

- The disclosure rate for key indicators in the areas of A1 emissions and A2 resource use exceeded 95%, demonstrating good overall compliance and disclosure completeness.
- Over 80% of sample companies disclosed environmental targets, with increases in both qualitative and quantitative targets for emissions, waste reduction, energy consumption, and water efficiency.
- Disclosure rates for each detailed environmental indicator continued to rise, but the rates for qualitative and quantitative targets were uneven, with room for improvement in the disclosure of detailed data on density, unit output, and itemized data.

Management and disclosure of environmental information

A1: Emissions

A1

96% of the samples disclosed A1 information on their policies regarding emissions of waste gas and greenhouse gases, discharges to water and land, generation of hazardous and non-hazardous wastes, etc., as well as information on compliance with relevant **laws and regulations that have a significant impact on the issuer.**

Proportion of companies disclosing key performance indicator data

A1.1 The types of emissions and respective emissions data

A1.3 Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility)

A1.4 Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility)

Data analysis and interpretation

The survey results show that,

99% of the sample companies disclosed A1.1 the types of emissions and related emission data.

98% of the sample enterprises disclosed A1.3 hazardous waste data, and **73%** disclosed hazardous waste intensity data

96% of the Sample companies disclosed A1.4 non-hazardous waste data, and **76%** disclosed non-hazardous waste intensity data

- The disclosure rate of aggregate data is high. Listed companies are advised to continuously improve the disclosure of disaggregated data, such as density, unit output, and breakdowns by sub-business, plant, or product, to more accurately reflect management effectiveness and industry benchmarking.
- While maintaining a high disclosure rate, listed companies are advised to focus on data quality and traceability. ESG data collection systems can be developed to promote the digitization and automated collection and management of ESG data, reducing human intervention and errors.

Management and disclosure of environmental information

A2: Use of Resources

A2

94% of the samples have disclosed A2 policies on efficient use of resources (including energy, water and other raw materials).

Proportion of companies disclosing key performance indicator data

A2.1 Total direct and/or indirect energy (e.g., electricity, gas, or oil) consumption by type (in thousands of kilowatt-hours) and density (e.g., per unit of production, per facility)

A2.2 Total water consumption and density (e.g. per unit of production, per facility)

A2.5 Total amount of packaging materials used in finished products (in tons) and (if applicable) per production unit

Data analysis and interpretation

The survey results show that among the sample companies:

99% of sample companies disclosed A2.1 energy consumption data, **87%** discloses energy consumption intensity

99% of sample companies disclosed A2.2 water consumption data, **93%** of sample companies disclosed water use intensity

99% of sample companies disclosed A2.5 packaging material data

- It is recommended that listed companies continue to deepen the management and analysis of environmental performance data, promote the transition from "data disclosure" to "management improvement", and use data to drive the continuous optimization of resource efficiency.

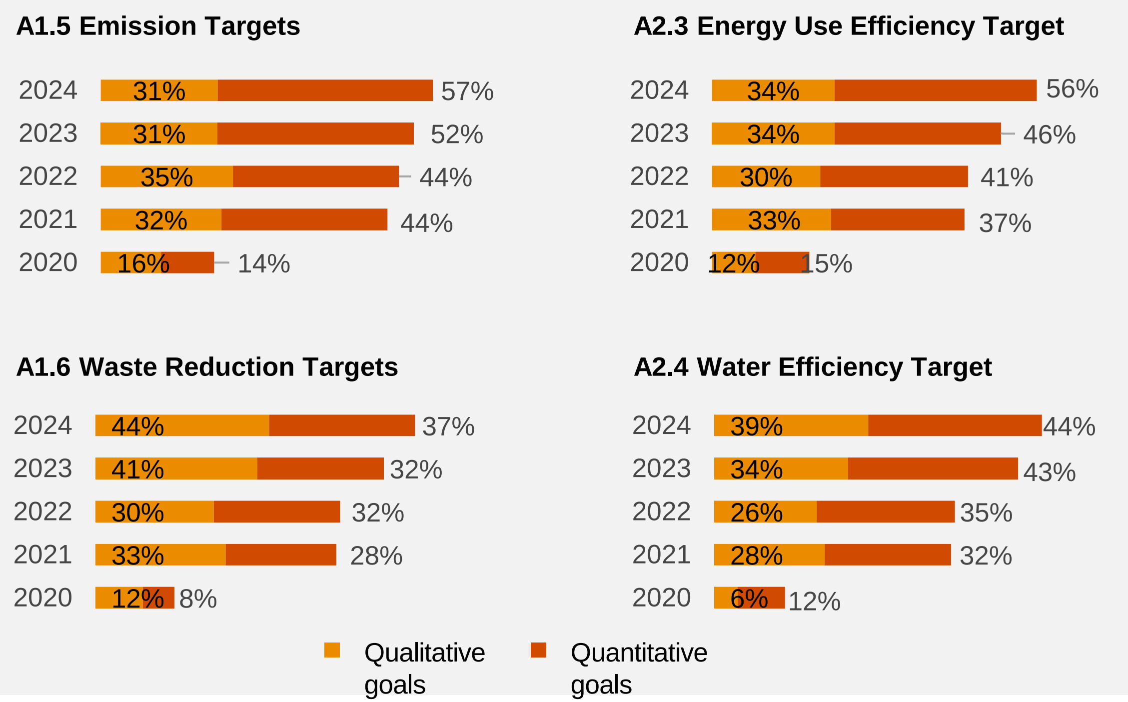
Management and disclosure of environmental information

Environmental goals

Environment Goal

The *ESG Code* has revised the disclosure provisions of four KPIs, A1.5, A1.6, A2.3 and A2.4, requiring listed companies to set and disclose targets in four areas: emissions, waste reduction, energy consumption and water efficiency.

Proportion of companies disclosing key performance indicator data



Data analysis and interpretation

The survey results show that among the sample enterprises:

88% of the sample companies disclosed A1.5 emission targets, **31%** disclosed qualitative targets, and **57%** disclosed quantitative targets

81% of the sample enterprises disclosed A1.6 waste reduction targets, **44%** disclosed qualitative targets, and **37%** disclosed quantitative targets

90% of the sample enterprises disclosed A2.3 energy use targets, **34%** disclosed qualitative targets, and **56%** disclosed quantitative targets

83% disclosed A2.4 water conservation targets, **39%** disclosed qualitative targets, and **44%** disclosed quantitative targets

- Listed companies are advised to disclose progress on environmental goals and the path to achieving them, thereby improving the implementation and effectiveness evaluation of environmental goal management and shifting goal management from "formal compliance" to "substantive management."
- Listed companies are advised to prioritize the use of quantifiable and traceable environmental goals (such as carbon intensity, energy density, and waste reduction rates), and to adopt internationally recognized science-based emission reduction target standards such as the SBTi.
- When disclosing environmental goals and related performance indicators, listed companies are advised to simultaneously disclose the measurement method, boundaries, key data definitions, and key assumptions to enhance data comparability, transparency, and credibility. 。

Management and disclosure of environmental information

A3: Environment and Natural Resources

A3

96% of the samples disclosed A3 **policies** to minimize the issuer's significant impacts on the environment and natural resources.

Proportion of companies disclosing key performance indicator data

A3.1 Description of the significant impacts of business activities on the environment and natural resources and the actions taken to manage them

Data interpretation and recommendations

The survey results show that among the sample enterprises:

99% disclosed the significant impact of A3.1 the significant impacts of business activities on the environment and natural resources and the actions taken to manage them

- It is recommended that listed companies further identify and disclose the types of business activities that have a significant impact on the environment and natural resources and their impact paths based on industry characteristics and operating models, and clarify the corresponding management objectives, measures and implementation results.

Management and disclosure of social information

No.	Project Content	No.	Project Content
B1	**Employment policies and laws and regulations**	B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored
B1.1	Total workforce	B5.4	Practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored
B1.2	Employee turnover rate	**B6**	**Product responsibility policies and regulations**
B2	**Health and safety policies and regulations**	B6.1	Percentage of recalls for safety and health reasons
B2.1	Work-related fatalities	B6.2	Number of products and service-related complaints received and how they were handled
B2.2	Lost days due to work injury	B6.3	Practices to protect intellectual property rights.
B2.3	Occupational health and safety measures, implementation and monitoring	B6.4	Description of quality assurance process and recall procedures.
B3	**Development and training policy**	B6.5	Consumer data protection and privacy policies, and how they are implemented and monitored
B3.1	Percentage of employees trained	**B7**	**Anti-corruption policies and regulations**
B3.2	Average training hours completed per employee	B7.1	Number and outcome of legal cases for corrupt practices
B4	**Labour standards policies and regulations**	B7.2	Preventive measures and whistle blowing procedures, and how they implementation and monitoring
B4.1	Measures to avoid child and forced labour	B7.3	Anti-corruption training
B4.2	Steps taken to eliminate violations of labour standards	**B8**	**Community Investment policy**
B5	**Supply chain management policy**	B8.1	Focus areas of contribution
B5.1	Number of suppliers by geographical region	B8.2	Resources contributed (e.g. money or time) to the focus area.
B5.2	Supplier engagement practices, number of suppliers for which the practices are implemented, and their implementation and monitoring methods		

Our analysis of the survey sample found that:

- Disclosure rates for B1 Employment, B2 Health and Safety, and B3 Development and Training among listed companies approached or exceeded 96%. Management policies and key data are relatively mature, and disclosure rates are steadily increasing.
- Disclosure rates for key indicators in most social areas increased significantly compared to 2020, particularly for B7 Anti-Corruption and B5 Supply Chain Management. However, areas involving corrective and responsive measures still require more detailed disclosure. For example, B4.2, "Description of steps taken to address violations upon discovery," had a disclosure rate of only 78%.
- Disclosure rates for B8 Community Investment among listed companies were relatively low, with only 82% of the sample disclosing policies related to community engagement. This issue remains a weak point in the social area.

Management and disclosure of social information

B1: Employment

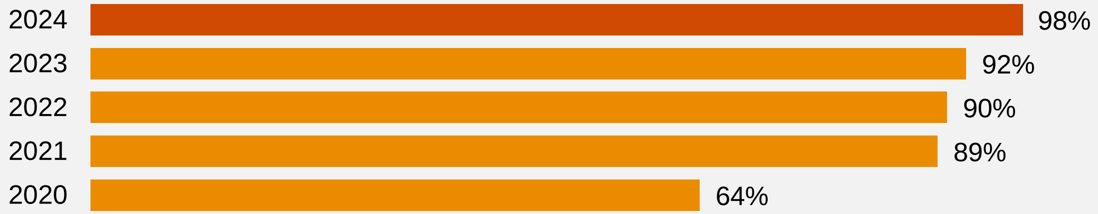
B1

98% of the samples disclosed information on compensation and dismissal, recruitment and promotion, working hours, holidays, equal opportunities, diversity **policies and compliance with relevant laws and regulations that have a significant impact on the issuer**

Proportion of companies disclosing key performance indicator data

B1.1 Total workforce by gender, employment type (e.g., full-time or part-time), age group, and region

B1.2 Employee turnover rate by gender, age group and region



Data analysis and interpretation

The survey results show that among the sample companies:

100% disclosed B1.1 total workforce by gender, employment type, age group and region

98% disclosed B1.2 employee turnover rate by gender, age group and region

- The disclosure of employment indicators is relatively complete. It is recommended that listed companies can identify management improvement space through horizontal and vertical comparison of relevant indicators to implement targeted human resources management measures, ensure employment compliance, and promote a more diverse, equal and inclusive employment environment and culture.

Management and disclosure of social information

B2: Health and Safety

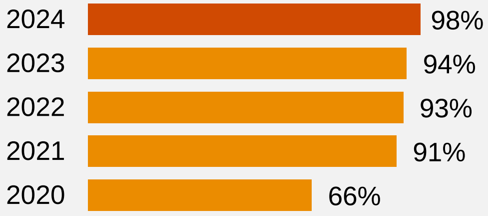
B2

97% of **the samples disclosed information** on policies for providing a safe working environment and protecting employees from occupational hazards, as well as compliance with **relevant laws and regulations that have a significant impact on the issuer。**

Proportion of companies disclosing key performance indicator data

B2.1 Number and rate of work-related fatalities occurred in each of the past three years including the reporting year

B2.2 Lost days due to work injury



B2.3 Description of occupational health and safety measures adopted, and how they are implemented and monitored

Data analysis and interpretation

The survey results show that among the sample companies:

99% disclosed B2.1 the number and ratio of work-related deaths in each of the past three years

98% disclosed B2.2 number of lost days due to work injury

99% disclosed B2.3 description of occupational health and safety measures adopted, and how they are implemented and monitored

- The disclosure of health and safety indicators is relatively complete. Listed companies are advised to further analyse the causes of these data, regularly review occupational health and safety measures and related implementation and monitoring methods, identify weaknesses in occupational health and safety management, and develop targeted improvement measures.
- Listed companies are also advised to pay attention to international occupational health and safety standards (such as ISO 45001) and gradually enhance the internationalization of their occupational health and safety management.

Management and disclosure of social information

B3: Development and Training

B3

96% of the sample disclosed policies on improving employees' knowledge and skills to perform their job duties.

Proportion of companies disclosing key performance indicator data

B3.1 The percentage of employees trained by gender and employee category

B3.2 The average training hours completed per employee by gender and employee category

Data analysis and interpretation

The survey results show that among the sample companies:

99% disclosed B3.1 the percentage of employees trained by gender and employment category

100% disclosed B3.2 the average training hours completed per employee by gender and employee category

- Disclosure of development and training indicators is relatively complete. Listed companies are advised to focus on the alignment of training content with their business direction, ensuring targeted investment of training resources to enhance employee professional skills and overall quality, thereby better supporting the achievement of corporate strategic goals.
- Listed companies can incorporate ESG concepts into their employee training systems, systematically implementing training courses covering core ESG topics to enhance employee awareness and expertise in ESG management.

Management and disclosure of social information

B4: Labor Standards

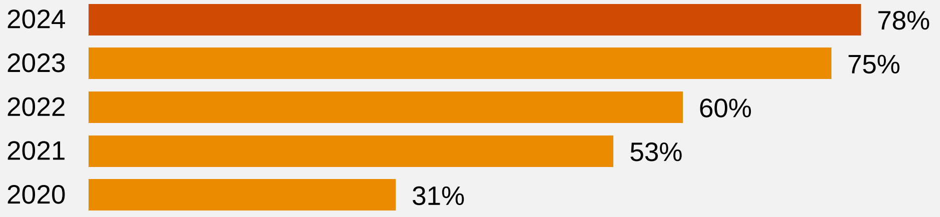
B4

97% of the sample disclosed information on **policies** to prevent child labour or forced labour and compliance with **relevant laws and regulations that have a significant impact on the issuer.**

Proportion of companies disclosing key performance indicator data

B4.1 Description of measures to review employment practices to avoid child and forced labor

B4.2 Description of steps taken to eliminate such practices when discovered



Data analysis and interpretation

The survey results show that among the sample companies:

97% disclosed B4.1 description of measures to review employment practices to avoid child and forced labour;

78% disclosed B4.2 description of steps taken to eliminate such practices when discovered

- Listed companies generally prioritize avoiding child and forced labour during recruitment, demonstrating their commitment to complying with basic human rights and labour laws.
- For listed companies that fail to disclose steps to address violations, we recommend establishing comprehensive compliance mechanisms, clarifying the specific procedures for handling violations when they are discovered, and incorporating this information into corporate disclosures to enhance transparency.

Management and disclosure of social information

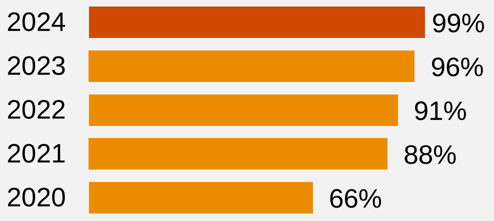
B5: Supply chain management

B5

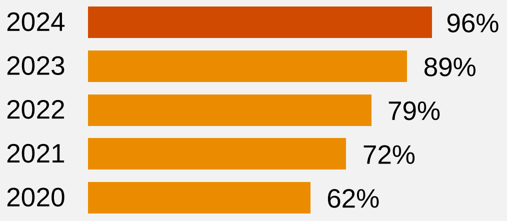
98% of the sample have disclosed policies on managing environmental and social risks in their supply chains.

Proportion of companies disclosing key performance indicator data

B5.1 Number of suppliers by geographical region

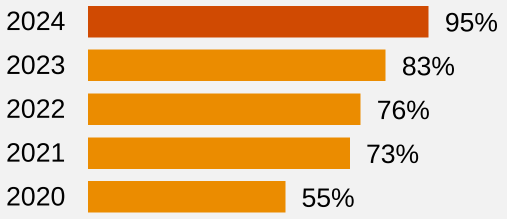


B5.3 Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored



B5.2 Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored

B5.4 Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored



Data analysis and interpretation

The survey results show that among the sample companies:

99% disclosed B5.1 number of suppliers by region.

99% disclosed B5.2: description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented and how they are implemented and monitored

96% disclosed B5.3 description of practices used to identify environmental and social risks along the supply chain and how they are implemented and monitored

95% disclosed B5.4 description of practices used to promote environmentally preferable products and services when selecting suppliers and how they are implemented and monitored

- The completeness of supply chain management disclosure has increased annually, indicating that listed companies are increasingly prioritizing environmental and social risk management within their supply chains. However, there is still room for improvement in detailed implementation and comprehensive management. We recommend that listed companies further strengthen risk identification and management mechanisms, refine the disclosure of supply chain ESG risk management processes, and enhance supply chain sustainability.

Management and disclosure of social information

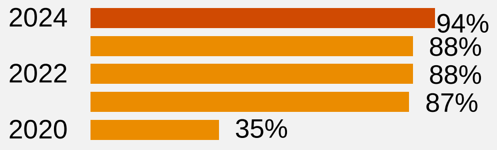
B6: Product Liability

B6

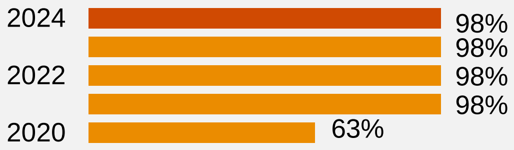
96% of the samples disclosed information on their **policies** on health and safety, advertising, labelling and privacy matters of products and services provided, as well as methods of redress, and on compliance with relevant **laws and regulations** that have a significant impact on the issuer.

Proportion of companies disclosing key performance indicator data

B6.1 Percentage of total products sold or shipped that were subject to recalls for safety and health reasons



B6.4 Description of quality assurance process and recall procedures



B6.2 Number of products and service related complaints received and how they are dealt with

B6.5 Description of consumer data protection and privacy policies, and how they are implemented and monitored

B6.3 Description of practices relating to observing and protecting intellectual property rights

Data analysis and interpretation

The survey results show that among the sample companies:

94% disclosed B6.1 percentage of total products sold or shipped subject to recalls for safety and health reasons. This KPI is not applicable to certain listed companies with different business characteristics

97% disclosed B6.2 number of products and service related complaints received and how they are dealt with

97% description of practices relating to observing and protecting Intellectual property rights

98% disclosed B6.4 description of quality assurance process and recall procedures. This KPI, like KPI 6.1, is subject to industry limitation

98% disclosed B6.5 description of consumer data protection and privacy policies and how they are implemented and monitored

- Listed companies are advised to further enhance the depth and completeness of their disclosures on product liability-related issues, particularly in areas such as product quality incident identification criteria, recall rates, complaint response processes, and implementation status, to improve transparency and stakeholder trust.
- For industries where the applicability of this indicator varies significantly, additional industry explanations or disclosure of alternative indicators may be considered to enhance the accuracy and reference value of data disclosure.

Management and disclosure of social information

B7: Anti-corruption

B7

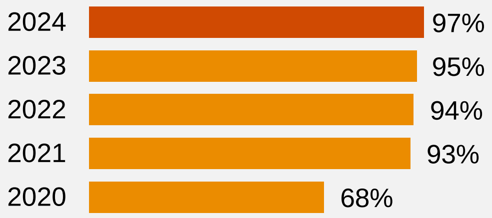
99% of the samples disclosed information on **policies** to prevent bribery, extortion, fraud and money laundering, and on **compliance with laws and regulations that have a significant impact on the issuer**.

Proportion of companies disclosing key performance indicator data

B7.1 Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.

B7.2 Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored

B7.3 Description of anti-corruption training provided to directors and staff



Data analysis and interpretation

The survey results show that among the sample companies:

97% disclosed B7.1 number of concluded legal cases regarding corrupt practices and the outcomes of the cases

99% disclosed B7.2 description of preventive measures and whistle-blowing procedures and how they are implemented and monitored

97% of the sampled companies have disclosed B7.3 description of anticorruption training provided to directors and staff

- When disclosing their anti-corruption compliance systems and preventive measures, listed companies are advised not only to cover the status of their systems but also to strengthen the quantitative disclosure of implementation results, such as the number of internal reports handled, the completion rate of investigations, and the results of handling violations, to enhance corporate governance transparency.
- Listed companies are also advised to disclose detailed information such as the coverage rate of anti-corruption training, average training hours per person, and participation in key positions, to more effectively measure the effectiveness of anti-corruption training initiatives.

Management and disclosure of social information

B8: Community Investment

B8

82% of the sample disclosed policies on community engagement to understand the needs of the communities in which they operate and to ensure that their business activities take community interests into account.

Proportion of companies disclosing key performance indicator data

B8.1 Focus areas of contribution (e.g. education, environmental concerns, labor needs, health, culture, sport).

B8.2 Resources contributed (e.g. money or time) to the focus area.

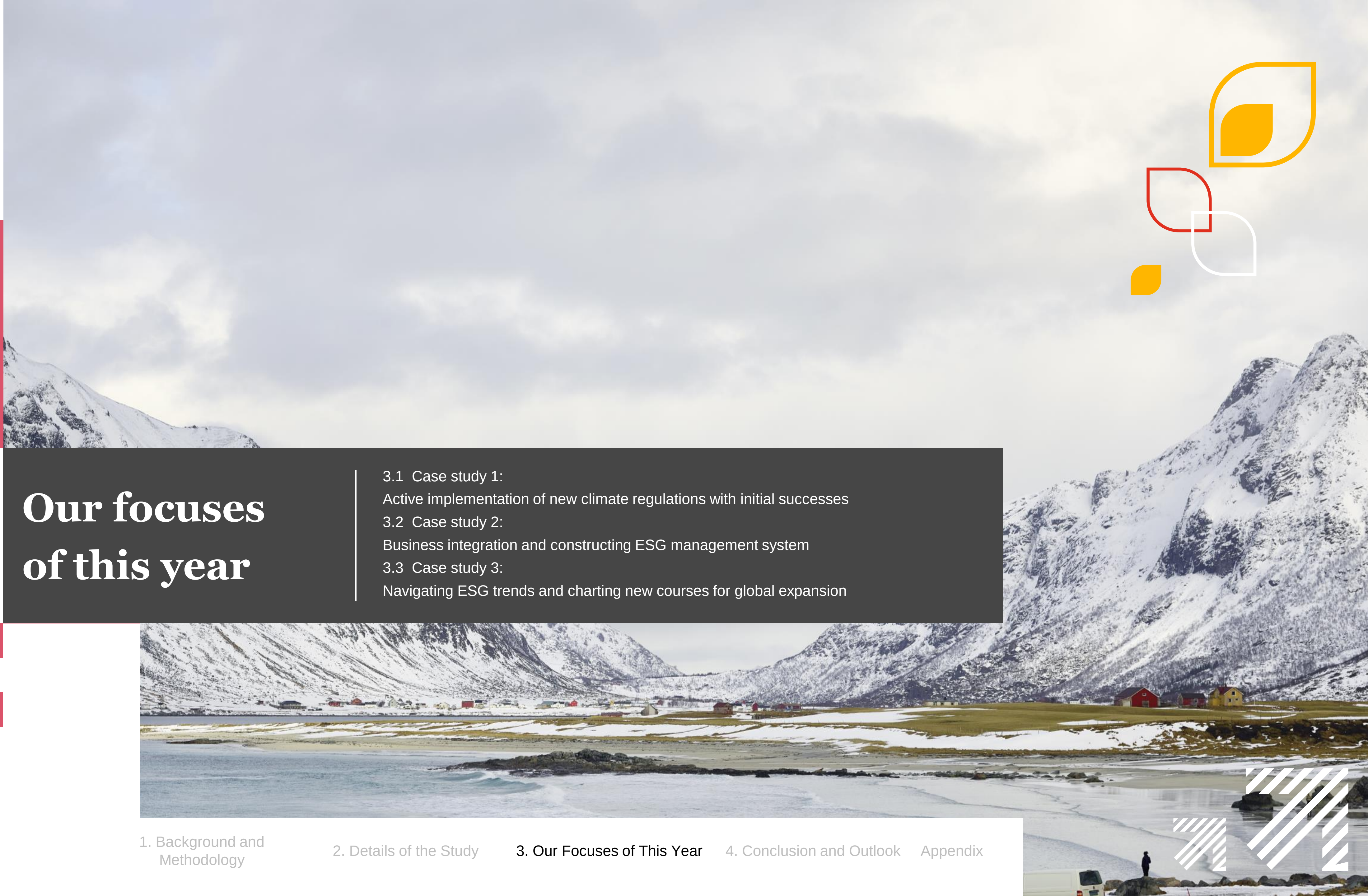
Data analysis and interpretation

The survey results show that among the sample companies:

98% disclosed B8.1 focus areas of contribution

97% disclosed B8.2 resources contributed to the focus area

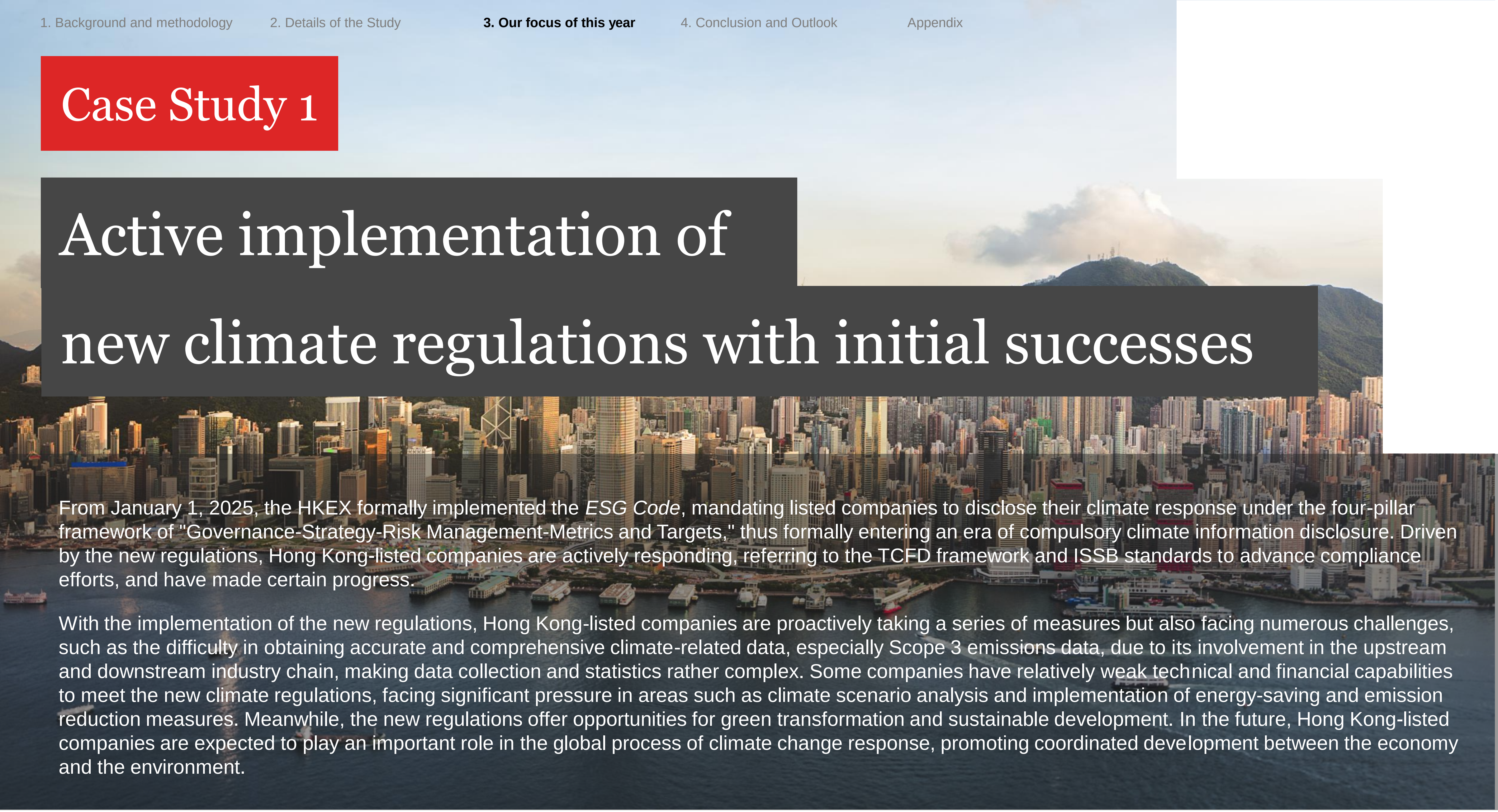
- Listed companies are advised to disclose more details about project objectives and impact evaluations in their community investment initiatives. They should also explain the methods and processes for aligning their business characteristics with community needs, thereby enhancing the substantiveness and relevance of disclosed information.
- For listed companies that have not yet disclosed, it is recommended to strengthen social responsibility management, clarify the scope of their contributions, and review resource inputs. They should also promptly disclose additional information to enhance corporate transparency and social image.



03

Our focuses of this year

3.1 Case study 1:
Active implementation of new climate regulations with initial successes
3.2 Case study 2:
Business integration and constructing ESG management system
3.3 Case study 3:
Navigating ESG trends and charting new courses for global expansion



Case Study 1

Active implementation of new climate regulations with initial successes

From January 1, 2025, the HKEX formally implemented the *ESG Code*, mandating listed companies to disclose their climate response under the four-pillar framework of "Governance-Strategy-Risk Management-Metrics and Targets," thus formally entering an era of compulsory climate information disclosure. Driven by the new regulations, Hong Kong-listed companies are actively responding, referring to the TCFD framework and ISSB standards to advance compliance efforts, and have made certain progress.

With the implementation of the new regulations, Hong Kong-listed companies are proactively taking a series of measures but also facing numerous challenges, such as the difficulty in obtaining accurate and comprehensive climate-related data, especially Scope 3 emissions data, due to its involvement in the upstream and downstream industry chain, making data collection and statistics rather complex. Some companies have relatively weak technical and financial capabilities to meet the new climate regulations, facing significant pressure in areas such as climate scenario analysis and implementation of energy-saving and emission reduction measures. Meanwhile, the new regulations offer opportunities for green transformation and sustainable development. In the future, Hong Kong-listed companies are expected to play an important role in the global process of climate change response, promoting coordinated development between the economy and the environment.

Listed companies have taken actions to address new climate regulations and have made promising strides

With the rollout of the HKEX's mandatory climate disclosure requirements, most Hong Kong–listed companies have completed their first round of disclosures. Under HKEX's phased implementation, for financial years beginning on or after January 1, 2025, all listed issuers must disclose Scope 1 and Scope 2 greenhouse gas emissions; for financial years beginning on or after January 1, 2026, LargeCap issuers must make disclosures under the New Climate Requirements, while non-LargeCap issuers may adopt a "Comply or explain" transition. This flexibility has encouraged companies to allocate resources according to their size, respond to the new climate rules in a differentiated manner, and achieve tangible progress.

Governance

In terms of governance, Hong Kong-listed companies have improved their management and disclosure practices compared to the previous year, specifically through strengthening board functions and enhancing professional capabilities. Survey results show that **86%** of sample companies have disclosed the board's and management's oversight and management responsibilities for climate-related risks and opportunities.

Furthermore, **board members** actively participate in relevant discussions and decision-making, ensuring alignment between corporate strategy and climate goals. **Management** discloses its assessment and management of climate risks and opportunities and provides strong support for board decision-making through the establishment of dedicated working groups or executive committees.

Strategy

In terms of strategy, **82%** of sample companies have disclosed the impact of climate change risks and opportunities on their business models and value chains, including physical and transition risks. They have pledged to actively promote green development and continuously optimize production processes to address these risks and opportunities. Fifty-nine percent of sample companies have conducted climate scenario analysis, and **42%** have analysed the impact of climate risks and opportunities on their current financial position, financial performance, and cash flow, optimized their asset structures, and disclosed plans to address stranded assets.

Risk Management

In terms of risk management, companies operate professional risk assessment tools and methods, combining industry data and historical experience to quantify potential climate risks. **70%** of sample companies have integrated climate risk management into their overall risk management processes, establishing dedicated identification, assessment, and prioritization processes, and companies will also meet the requirement of the *Corporate Governance Code*[2] with this practice. Furthermore, these companies have established **cross-departmental risk response coordination mechanisms** and are actively deploying data system upgrades to coordinate functional efforts to address climate change risks and opportunities.

Indicators and goals

Regarding indicators and targets, **most companies** have established a data foundation for managing and disclosing Scope 1 and Scope 2 emissions, enabling regular collection, statistics, and analysis of emissions data. **41%** of sample companies have taken the lead in disclosing Scope 3 carbon emissions data and are engaged in communication and collaboration with numerous suppliers and partners across the upstream and downstream supply chains. Disclosure of climate-related targets has significantly increased, with **75%** of sample companies setting and monitoring progress toward targets and providing actionable plans or commitments.

2. Under the newly revised HKEX's *Corporate Governance Code*, Part 1 — Mandatory Disclosure Requirements, section H. Risk Management and Internal Control, paragraph (c) requires issuers to disclose details of the review of the effectiveness of its and its subsidiaries' risk management and internal control systems, including "any significant changes during the reporting period in (i) the issuer's assessment of risks (including ESG risks) and (ii) the risk management and internal control systems."

Listed companies in Hong Kong need to further strengthen their internal capabilities to better respond to new climate regulations

In the era of mandatory climate disclosures, listed companies in Hong Kong must not only meet compliance requirements, but also continuously enhance their governance structures, deeply explore climate-related risks and opportunities, proactively prepare response strategies and contingency plans, and improve data quality. These efforts will help drive both corporate and industry-wide green transformation and sustainable development.

Enhance governance

At the board and dedicated ESG committee level, clearly **define roles and responsibilities in climate management** to provide structural assurance for listed companies' climate governance.

Appoint **professionals** with appropriate skills and competences to oversee and manage climate-related risks and opportunities. Specifically, consider adding board members with ESG expertise and providing regular ESG-focused training[3] to the board.

Establish clear mechanisms for **supervising, monitoring, and reviewing** progress toward targets related to material climate risks and opportunities, and consider integrating relevant performance metrics **into the company's remuneration policies.**

Deepen assessment

Take a multi-dimensional approach to **identifying and assessing climate-related risks and opportunities by defining risk types, time horizons, and affected business segments**.

Develop models to progressively deepen the evaluation of both current and anticipated impacts of **climate-related risks and opportunities**.

Explore the use of climate scenarios to **simulate business resilience under varying conditions** and proactively prepare response strategies.

Strengthen management

Integrate climate risks **into the overall enterprise risk management system and establish an early warning mechanism**. Utilize tools such as risk matrices to quantify, categorize, and prioritize risks, thereby identifying key areas for management focus.

Establish **a climate risk early warning system** by implementing monitoring indicators and defining clear contingency plans.

Smart digital synergy

Gradually build **data management systems and quality control mechanisms** to upgrade climate-related data disclosure from manual collection and analysis to **system-based collaboration and intelligent analytics**. This will enhance data quality, ensure traceability and comparability, and lay a solid foundation for third-party verification.

Collaborate across the supply chain to **explore workflows and methodologies for Scope 3 emissions accounting**. By developing assessment models and clarifying the underlying data, progressively advance Scope 3 emissions tracking. Based on the findings, **define emission reduction pathways** and regularly monitor progress toward reduction targets.

3. The newly revised HKEX's *Corporate Governance Code* also emphasises that ESG matters are among the mandatory training topics for directors of listed issuers.

Case studies of ESG reporting disclosure by Hong Kong listed companies

China Overseas Land & Investment: Guided by the company's strategy, it deeply integrates ESG concepts across its entire value chain, actively responds to climate change through green and low-carbon building innovations, and promotes the industry's low-carbon transformation and high-quality development.

China Overseas Land & Investment

Company Profile

China Overseas Land & Investment Limited (stock code: 0688.HK, referred to as "COLI") is a leading global integrated real estate service provider and a subsidiary of China State Construction Engineering Corporation (CSCEC). With operations in over 80 cities in mainland China, Hong Kong and Macau, and extending to countries and regions such as the United Kingdom and Singapore, China Overseas Land & Investment is renowned for its full industry chain integration capabilities (development, operations, design, property management, etc.), making it the largest office building developer and operator in mainland China.

Led by its "4 Excellences" strategy, COLI deeply integrates ESG across its entire business chain

Strategic Planning for Dual-Carbon Goals: China Overseas Land & Investment (COLI) has established the Carbon Peak and Carbon Neutrality Working Group, led by the CEO, to drive its green transformation. This team systematically formulates dual-carbon targets and annual breakdown indicators, coordinates action plans, budgeting, and execution oversight, and regularly publishes carbon reports to advance the company's low-carbon transition.

Release of the *Responding to Climate Change White Paper*: In alignment with the TCFD framework, COLI's White Paper provides a comprehensive disclosure of climate governance, strategy, risk management, and targets and metrics. It introduces a robust "three lines of defence" risk control mechanism, leveraging scenario analysis to accurately identify physical and transition risks. Mitigation, control, transfer, and adaptation strategies are outlined to strengthen corporate climate responsibility and resilience.

Zero-Carbon Building Flagships: COLI has delivered several landmark zero-carbon projects.

- Shenzhen China Overseas Building: China's first 5A-grade zero-carbon high-rise office tower.
- The Shenzhen Arcadia Bay Kindergartner Net-Zero Carbon Building Project: A pioneering zero-energy consumption kindergarten.
- Beijing China Overseas Finance Centre: The city's first large-scale zero-carbon commercial office complex, recognized as a demonstration project under China's 14th Five-Year National Key R&D Programme.

Carbon Neutrality White Paper

Responding to Climate Change White Paper

Zero-carbon high-rise office tower (Shenzhen China Overseas Building)

Zero carbon kindergarten (Shenzhen Arcadia Bay Kindergarten）

Source: COLI's *Responding to Climate Change White Paper, Carbon Neutrality White Paper, 2024 Environmental, Social and Governance (ESG) Report*

ESG report disclosure cases of Hong Kong listed companies

Towngas: Quantify financial impact based on climate scenario analysis and formulate a strategic path for low-carbon transformation

Towngas

Company Profile

The Hong Kong and China Gas Company Limited (stock code: 0003.HK, referred to as "Towngas"), founded in 1862, is Hong Kong's oldest public utility and one of the city's largest energy suppliers, with world-class corporate management and operations. Over the years, Towngas has kept pace with the times and grown alongside Hong Kong — from initially supplying town gas to light street lamps to today providing safe and reliable energy solutions to the wider public and across all industries, leading its peers in the Greater China energy sector. In recent years, the company has also vigorously developed clean energy solutions spanning sea, land and air, including hydrogen, green methanol and sustainable aviation fuel, in pursuit of carbon neutrality.

Conduct climate scenario analysis and quantify climate-related financial impacts, and clarify carbon reduction goals and development paths

Towngas actively refers to the *Recommendations of the Task Force on Climate-related Financial Disclosures* ("TCFD recommendations") and the requirements of *ISSB S2 (Climate-related Disclosure)* to explore the path of climate transformation. The company uses the RCP scenario analysis model to conduct physical risk assessments on more than 300 assets. In addition, Towngas also quantifies the most significant financial impact of climate change risks on gas-related businesses in 2050 based on different scenarios .

To ensure the goal of achieving carbon neutrality by 2050 or earlier, Towngas has set a target of reducing greenhouse gas emissions from operations by 10% in 2025 compared to 2020. By developing coal-to-gas, photovoltaic power generation and energy efficiency improvement projects in 2024 , it has achieveda reduction of more than 8 million tons of carbon dioxide equivalent. At the same time, the company has established an internal carbon pricing mechanism to internalize external costs and has carried out SBTi preparations.

In terms of low-carbon financing, Towngas continues to expand its business scope, mainly investing in green projects such as energy efficiency improvement, construction and operation of renewable energy facilities, and solid waste and biomass utilization, actively supporting the development of the green economy.

Identifying, Assessing, and Managing Climate-related Risks

To evaluate the potential impacts of climate change on our assets, businesses and value chain, we conduct comprehensive climate risk assessments using various climate models and scenarios analyses. This helps us account for a wide range of potential impacts and uncertainties and prepare for future climate-related risks. To ensure comprehensive strategic planning and informed decision making for the future, we regularly review and update our assessments, strategies and scenario analysis to address emerging climate-related risks and opportunities in different time horizons. We also maintain open communication with stakeholders and explore strategies for strengthening our resilience against transition and physical climate-related risks. For more details, please refer to the Guide and sections below.

Physical Risks

Physical risks associated with climate change impacts can be broadly classified as acute (e.g., floods, droughts) and chronic (e.g., sea-level rise, temperature increases). In order to evaluate the impacts of physical risks present in our assets, three Representative Concentration Pathways (RCP) scenarios (RCP 2.6 · RCP 4.5 · RCP 8.5) were used. These scenarios ranged from limiting the global average temperature of 1.5°C to align with The Paris Agreement (RCP 2.6) to managing the challenges of a drastic increase in average temperature of 4°C (RCP 8.5).

In 2021, we conducted a deep physical risk assessment for our Tai Po Gas Production Plant and an asset level assessment of 100 major assets on the Chinese mainland. To extend the assessment coverage across the Chinese mainland, we included new projects and conducted physical risk assessments of over 300 assets in 2023-2024. Focusing on chronic risks, we used a climate model to identify climate-sensitive/vulnerable assets, i.e. assets most exposed to extreme impacts such as extreme temperature, rainfall and water stress.

In 2024, we continued to visit assets on the mainland China to conduct physical risk assessments, aiming to gain a deeper understanding of their vulnerabilities and resilience to major disasters, and to ensure that effective systems are in place to withstand various climate stresses. To strengthen the management of climate-related physical risks, we have developed a climate change risk assessment checklist for gas facilities. For facilities with higher risk levels, we will conduct further analysis and assessment. We also held ESG and climate change trainings for managerial employees to show them climate impact projections for the assets, as well as to equip them with the knowledge required to tackle climate hazards in the future.

Financial Impact Assessment

Beyond identifying and analysing the kinds of climate change impact, we have thoroughly quantified its financial implications, helping us develop targeted response measures to actively address the climate crisis.

Pathway	Risk		Scenario Pathway	Impact Type	Financial Impact (HK$ million) <500	500-1,500	>1,500
4 ℃ Scenario	Physical	Acute	RCP 8.5	Expenditure		✓	
		Chronic		EBITDA[9]	✓		
1.5 ℃ Scenario	Transition	Policy and Legal	Net Zero 2050	EBITDA[9]			✓
		Market		EBITDA[9]			✓
		Technology		Expenditure	✓		
		Reputation		Expenditure	✓		

Source: *The Hong Kong and China Gas Company Limited Environmental, Social and Governance (ESG) Report 2024*

ESG report disclosure cases of Hong Kong listed companies

SF Holding: Deepen climate governance and systematically assess climate-related risks and opportunities

SF Holding

Company Profile

SF Holding Co., Ltd. (SZSE: 002352, HKEX: 6936, referred to as "SF") was established in Shunde, Guangdong Province in 1993, headquartered in Shenzhen, China. Through years of development, SF has become the largest integrated logistics service provider in China and Asia and the fourth largest in the world. SF's business has expanded to cover timeliness express delivery, economy express, freight, cold chain, pharmaceuticals, intra-city on-demand delivery, international express, international freight and freight forwarding, and supply chain, to provide customers with domestic and international end-to-end one-stop integrated logistics services.

Deepen climate governance, assess the resilience of climate risks and opportunities, and integrate climate risks into enterprise risk management processes

Climate governance structure: SF has established a strategy committee of the board of directors to oversee and manage sustainable development matters, including climate change, incorporating climate risks and opportunities into the company's strategic planning, and formulating corresponding management measures.

Systematic assessment of climate risks and opportunities: SF has assessed physical risks, transition risks, and value chain impacts and their extents based on different warming scenarios in the United Nations Intergovernmental Panel on Climate Change ("IPCC") Sixth Assessment Report, as well as the Stated Policies Scenario and Net-Zero Emissions by 2050 Scenario by the International Energy Agency ("IEA") . In addition, SF has also identified new opportunities brought about by energy structure adjustment, market demand evolution and technological innovation under the low-carbon transition.

Risk Management Process: SF integrates climate change risks into the corporate risk management framework to ensure that climate-related risks are effectively identified, managed, and disclosed. SF regularly conducts discussions and analysis on climate change-related issues, supervises and follows up on the handling of climate-related risks, thereby enhancing its ability to respond to climate risks.

Carbon reduction targets lead industry practice: SF released the industry's first *Carbon Target White Paper*, promising to achieve a 55% increase in its own carbon efficiency by 2030 compared to 2021, and a 70% reduction in the carbon footprint of each parcel compared to 2021. At the same time, SF also submitted a commitment to set greenhouse gas emission reduction targets based on the 1.5-degree pathway to the Science Based Targets initiative (SBTi), demonstrating the company's determination and commitment.

Source: *SF Holding 2024 Sustainability Report*, SF official website

ESG report disclosure cases of Hong Kong listed companies

CMOC: Formulate carbon neutrality strategic planning, carry out climate risk management, and comprehensively assess the potential impact of climate-related risks and opportunities on the business

CMOC

Company Profile

CMOC Group Limited (stock code: 603993. SH, 03993.HK, hereinafter referred to as "CMOC") is a public holding company headquartered in China, mainly engaged in the mining, processing and trading of base and rare metals. With its main business presence in Asia, Africa, South America, and Europe, the company is one of the world's largest producers of copper, cobalt, molybdenum, tungsten and niobium. It is also a major producer of phosphatic fertilizers in Brazil and ranks among the world's leading metals merchants through CMOC's wholly-owned subsidiary IXM.

Formulate carbon neutrality strategic plans and carry out climate risk management

CMOC is fully aware of the far-reaching impact of climate change on the global environment and society. In 2023, the company released the *CMOC Carbon Neutral Roadmap and Action Plan*, taking the carbon neutrality route as the core strategy to promote the group's emission reduction actions and strengthen operational resilience and climate response capabilities. In 2024, the company carried out relevant work in accordance with the TCFD recommendations to systematically identify, assess and analyze climate change risks and opportunities, and formulate response plans. In 2025, the company updated the physical risk assessments for all mining sites using the latest climate data from external databases, and conducted a quantitative analysis of key climate-related risks and opportunities to assess their potential financial impact on the company.

"In January 2025, the company conducted a comprehensive assessment of physical risks for our six major mining assets situated in China, Brazil, and the DRC. Using 2020 as the base year, we performed simulations to estimate the physical risk exposure of our mining assets in the medium to long term, under both the high emissions scenario (SSP5-8.5) and low emissions scenario (SSP1-2.6). We then applied asset value weightings to each of our mining assets to assess the Group's overall exposure to physical risks."

Distribution of Major Physical Risks by Country

Risk type	2020	2030		2050	
	Baseline	SSP1–2.6	SSP5–8.5	SSP1–2.6	SSP5–8.5
Rainfall flood	•Brazil	•Brazil	•Brazil	•Brazil	•Brazil
	•China	•China	•China	•China	•China
Landslide	•Brazil	•Brazil	•Brazil	•Brazil	•Brazil
	•China	•China	•China	•China	•China
Wildfire	•DRC	•DRC	•DRC	•DRC	•DRC
	•Brazil	•Brazil	•Brazil	•Brazil	•Brazil
	•China	•China	•China	•China	•China
Extreme heat	•DRC	•DRC	•DRC	•DRC	•DRC
	•Brazil	•Brazil	•Brazil	•Brazil	•Brazil
	•China	•China	•China	•China	•China
Drought	•DRC	•DRC	•DRC	•DRC	•DRC
	•Brazil	•Brazil	•Brazil	•Brazil	•Brazil
	•China	•China	•China	•China	•China

Risk impact: Extremely low Low Medium High Extremely high

Risk type	Trend analysis	Risk impact
• Rainfall flood • Landslides	Due to local topography, some of CMOC's mining sites in Brazil and China currently face low risks from Rainfall flood (specifically our Cubatão chemical plant in Brazil and the Sandaozhuang Molybdenum and Tungsten mine in China) and landslides (specifically our Cubatão chemical plant in Brazil and the Sandaozhuang Molybdenum and Tungsten mine in China). Based on the calculations in our model, the anticipated impact of these risks is expected to rise in the medium to long term, especially under high–emission scenarios. However, it consistently remains within the low–risk category.	If Rainfall flood or landslides occur, they could have diverse consequences for our production operations and local communities, such as: •Endangering the health and safety of employees and local residents •Causing damage to facilities and equipment •Escalating management costs for tasks like facility maintenance, wastewater treatment, and landslide monitoring •Operational interruptions.
• Wildfire • Extreme heat	Currently the main physical risks faced by CMOC are related to extreme heat and wildfires and we expect that these will persist in the future. The anticipated impact of these risks is expected to rise in the medium to long term, particularly under high–emission scenarios. Nevertheless, the overall risk level consistently remains within the medium range.	The escalating frequency and severity of extreme weather events, such as global heatwaves, and associated disasters like wildfires, could pose diverse threats to our operations, including: •Endangering the health and safety of employees and local residents •Causing damage to facilities and equipment •Escalating management costs for tasks like facility maintenance and firefighting management •Operational interruptions.
• Drought	At present, mines in the DRC, Brazil and China are all exposed to drought risk, Based on the calculations in our model, the risk level will consistently remain low in the medium to long term.	As a mining company, we rely heavily on resources such as water and electricity. Diminishing rainfall caused by worsening global drought conditions may present considerable challenges for both our production processes and community relations, including: •Increases in community conflict •Aggravation of fugitive road dust •Scarcity of process water •Power shortages and higher electricity prices •Operational interruptions.

Source: *CMOC Group Limited 2024 Environmental, Social and Governance (ESG) Report,* CMOC official website

ESG report disclosure cases of Hong Kong listed companies

SenseTime: Formulate a carbon neutrality strategic plan, identify and respond to climate-related risks and opportunities through scenario analysis and financial quantification

SenseTime

Company Profile

SenseTime Group Co., Ltd. (stock code: 0020. HK, hereinafter referred to as "SenseTime") is an artificial intelligence software company founded in October 2014, always adhering to the mission of "adhering to originality, let AI lead human progress", committed to continuing to lead the cutting-edge research of artificial intelligence, and creating a more expansive and inclusive artificial intelligence software platform. SenseTime was successfully listed on the main board of the Hong Kong Stock Exchange in 2021, ranking first in China's computer vision market share for eight consecutive years with its excellent technical strength, and was selected into the "2025 Forbes China Artificial Intelligence Technology Enterprises Top 50" in May 2025.

Identification and response to climate-related risks and opportunities through scenario analysis and financial quantification

Based on full consideration of the impacts of the external factors such as policies and laws, technology, market, reputation and natural factors, as well as our business characteristics and industry research results, SenseTime identified a total of 13 climate-related risks and opportunities, including 5 transition risks, 4 physical risks, and 4 climate-related opportunities. Based on four dimensions: time frame, influenced component in the value chain, degree of impact, and probability of occurrence, SenseTime categorized climate risks and opportunities into high, medium, and low levels, and created an importance matrix of climate risks and opportunities. As shown in the matrix, SenseTime has identified 2 medium-level climate risks, and 11 low-level climate risks and opportunities.

SenseTime conducted scenario analysis and financial impact analysis for transition risks and physical risks to assess the potential impact of climate risks and opportunities on business, strategy and finance in both qualitative and quantitative dimensions to test and enhance climate resilience.

SenseTime continues to optimize and upgrade the commitments related to addressing climate change and is committed to the overall control of greenhouse gas emissions, including quantitative target setting and progress tracking. SenseTime has set the strategic goal of “planning to achieve carbon peak emissions by 2025, striving to achieve operational carbon neutrality by 2030, and achieving net zero emissions by 2050” in 2021, and planned the carbon neutrality and reduction pathways.

To drive steady progress towards SenseTime’s strategic plan for carbon neutrality, SenseTime has set PUE targets for data centers and actively adopted effective measures to reduce the PUE.

Source: *SenseTime 2024 Sustainability Report*

Categories		Climate risks	Time frame	Influenced component in value chain	Potential financial impacts	Responses
Transition risks	Policy and legal risk	Stricter regulatory requirements on energy efficiency	Short term, medium term, and long term	Operations	· Energy efficiency improvement may lead to increased spending on projects for energy efficiency retrofits · R&D of energy efficient equipment models or technologies, as well as related operation and maintenance, may result in increased operating costs	· Implement measures such as green data center construction and building energy efficiency retrofits · Explore the coordinated management of computing power and electricity integration, so as to improve efficiency through precise energy use and demand response based on the changing trend of computing power · Promote photovoltaic and energy storage projects
	Market risk	Energy price volatility	Short term, medium term, and long term	Operations	· Purchasing energy at a rising price to meet operational needs may result in increased energy costs for the Company · Additional purchases of higher-priced renewable energy sources to meet the Company's carbon neutrality goal will result in higher operating expenses	· Adopt an energy-saving and efficient operation model · Promote photovoltaic and energy storage projects

SenseTime’s Data Center PUE Targets

Target Year	2025	2030	2050
Targets	1.28	1.20	1.10

Case Study 2

Business integration and constructing ESG management system

As the importance of ESG issues becomes increasingly prominent, enterprises need to establish a scientific, effective and enforceable ESG management system to truly improve their ESG performance. The lack of systematic management will lead to fragmented and formalized ESG practices of enterprises, making it difficult to respond to the expectations of capital markets and various stakeholders for environmental, social and governance performance. Enterprises should establish a clear governance structure, clear division of responsibilities, and measurable goal systems, which will help integrate ESG requirements into daily business processes and decision-making mechanisms to achieve the implementation of sustainable development strategies. By closely integrating ESG management systems with corporate operations, enterprises can not only effectively identify and respond to environmental and social risks, but also seize the opportunities of green transformation and enhance their long-term competitiveness and value creation capabilities.

The enterprise ESG management system that is deeply integrated with business operations helps enterprises improve management energy efficiency

Having a well-developed ESG management system is more favored by stakeholders

As ESG concepts have increasingly attracted the attention of various stakeholders, ESG management has changed from a "plus item" to a "mandatory question". In the face of increasingly stringent global regulatory requirements, consumer preference for sustainable products, and investors' pursuit of long-term value, establishing a sound ESG management system is becoming the key to maintaining competitiveness. True ESG management is not a simple report disclosure, but requires deep integration of ESG concepts into corporate strategy and daily operations. Leading ESG management companies have built ESG strategic planning in line with business development, clarified ESG management goals and assessment indicators, established a scientific governance structure, and established and continuously optimized ESG management index systems in line with the current status of corporate management, so as to further manage corporate ESG work in a closed loop.

By establishing an ESG management system, enterprises can not only effectively respond to policy and regulatory changes and meet customer expectations, but also seize new opportunities brought about by climate change and green transformation, and achieve dual improvement of economic benefits and social value.

Data analysis and interpretation

The survey results show that

67% **of companies have formulated ESG strategies, and** **63%** **have formulated programmatic ESG management systems**

88% **of companies have set ESG targets for issues other than climate change, and** **84%** **have disclosed their progress towards them**

83% **of enterprises have established ESG risk management mechanisms, but only 39% of enterprises have included ESG management effectiveness in the executive compensation appraisal mechanism**

- In the survey sample, most companies only set ESG management goals in the environmental area, and only 61% of companies have disclosed that they have set management goals covering various areas of environmental, social and governance (such as resource utilization, labor management, information security and privacy protection, etc.), and most companies still have room to work on ESG goals in the social and governance areas.
- In the survey sample, only 24% of enterprises are building or have built digital ESG systems to further improve ESG management efficiency. In terms of applying digital ESG systems, most enterprises still have significant room for improvement.

Build a resilient ESG management system at all levels

In recent years, Hong Kong listed companies have continued to deepen the construction of ESG management systems, promoting the transformation of ESG governance from "compliance disclosure" to "strategic integration". According to the survey, leading companies in various industries are deeply integrating ESG with their core business through three core initiatives, including: 1) improving the governance structure and clarifying the multi-level responsibilities of the board of directors, management, and various departments; 2) Incorporate ESG goals into the entire performance appraisal and risk management process; 3) Strengthen cross-departmental collaboration mechanisms. Through these practices, companies have effectively embedded ESG requirements into daily management and strategic decision-making to enhance sustainable management capabilities and practical results.

It is recommended that enterprises systematically improve the efficiency of ESG management by improving the governance structure, refining management objectives, integrating business processes, and strengthening the linkage between data and performance

Establish a clear governance structure

Deep senior involvement: The board of directors should be deeply involved in the formulation of ESG strategies and clarify its leadership responsibilities for ESG affairs. Set up a dedicated ESG committee or leadership group, with senior executives in key positions, to ensure that ESG-related matters have sufficient voice at the corporate decision-making level.

Clear division of responsibilities: Clarify the division of responsibilities of each department in the ESG system, such as the legal or internal audit department responsible for compliance review, EHS and the implementation of environmental indicators by the production department, etc., to avoid management loopholes caused by ambiguous responsibilities.

Formulate effective management policies and goals

The policy should be forward-looking: When formulating ESG management policies, it should closely follow the development trend of the industry and pay attention to the best ESG practices in the industry. Through regular communication and research, understand the expectations and demands of relevant parties on ESG; At the same time, it benchmarks international ESG standards and conforms to the trend of the times.

Goals should be quantifiable and measurable: Quantifiable and measurable goals can provide a clear basis for ESG management. Enterprises can set short-, medium-, and long-term goals in stages to ensure that the goals at each stage are progressive and effectively connected with the company's strategic goals.

Deeply integrated into core business processes and decision-making mechanisms

Establish a cross-departmental collaboration mechanism: Establish a cross-departmental regular communication meeting system to promote information sharing and collaborative actions between departments. Set up a cross-departmental ESG project team to carry out special promotion for major projects.

Establish an evaluation mechanism: Establish an ESG evaluation mechanism in core business links such as product design, production and operation, and marketing to identify potential ESG risks and opportunities for improvement.

ESG requirements are embedded in the process: ESG management requirements are integrated into the company's internal processes and systems to ensure that ESG concepts run through all aspects of the company's daily operations.

Strengthen data management and performance appraisal

Data collection and management: Establish a comprehensive ESG data collection system and clarify the scope, channels, and frequency of data collection. Utilize digital tools and technologies to improve data management efficiency and accuracy, and ensure data security and confidentiality.

Performance appraisal and incentives: 1) Establish an ESG performance indicator system, decompose goals into specific performance indicators, and regularly evaluate the ESG performance of each department, business unit and individual.

2) Incorporate ESG performance into the overall performance appraisal system, link it with employee compensation and rewards, and encourage employees to actively participate in ESG management practices.

ESG report disclosure cases of Hong Kong listed companies

Hengan International: The company has established a four-level ESG governance structure and built a "GROWTH" ESG strategy around six pillars

Hengan International

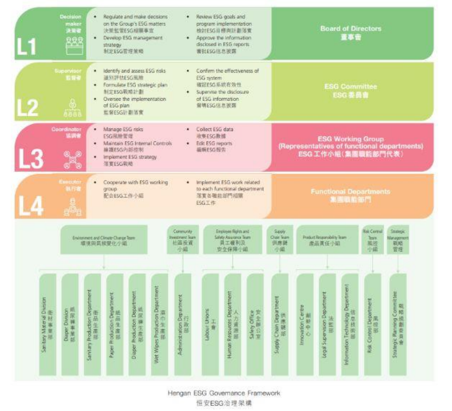
Company Profile

Hengan International Group Co., Ltd. (stock code: 1044. HK, hereinafter referred to as "Hengan International") was founded in 1985 and is a well-known manufacturer of household paper and maternal and child hygiene products in China. On December 8, 1998, Hengan International was listed on the Hong Kong Stock Exchange; On June 7, 2011, Hengan International was included in the constituent stocks of the Hong Kong Hang Seng Index.

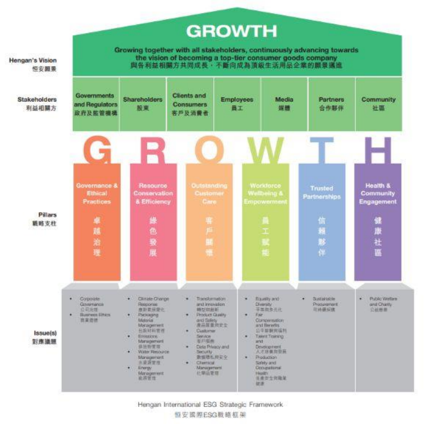
ESG strategy and governance structure construction

In 2023, Hengan International officially established the ESG Committee and established a four-level ESG governance structure, including the board of directors, ESG committee, ESG working group and relevant functional departments, which are responsible for decision-making, supervision, coordination and execution of ESG matters, and are committed to integrating ESG concepts into all aspects of corporate operation and management.

In 2024, on the basis of past sustainable development actions, Hengan International will dig deep into the industry's sustainable development trends, analyze potential risks and opportunities, and carry out in-depth communication with stakeholders, sorting out the company's six most important sustainability issues and strategic pillars, namely Governance & Ethical Practices, Resource Conservation & Efficiency, Outstanding Customer Care, Workforce Wellbeing & Empowerment, Trusted Partnerships, and Health & Community Engagement, and then clarified the sustainable development strategy of "GROWTH" to achieve the deep integration of ESG concepts and operation management.



Hengan ESG Governance Framework



Hengan International ESG Strategic Framework

Source: *Hengan International 2024 ESG Report*

ESG report disclosure cases of Hong Kong listed companies

Link REIT: Leveraging the integrated GRC[4] framework to enhance ESG governance and risk management to ensure consistent decision-making and long-term value maintenance

Link REIT Real Estate Fund

Company Profile

Link Real Estate Investment Trust (stock code: 0823.HK, referred to as “Link REIT”) is currently the largest real estate investment trust in Asia based on multiple indicators, including asset value. Link REIT is managed by Link Asset Management Limited (“Link”), a leading, independent and integrated real estate investor and manager focused on the Asia-Pacific market. As of March 31 , 2025 , Link REIT holds a property portfolio worth HK$ 226 billion, covering retail, carpark, office and logistics properties, with assets distributed in Hong Kong, Mainland China, Australia, Singapore and the United Kingdom.

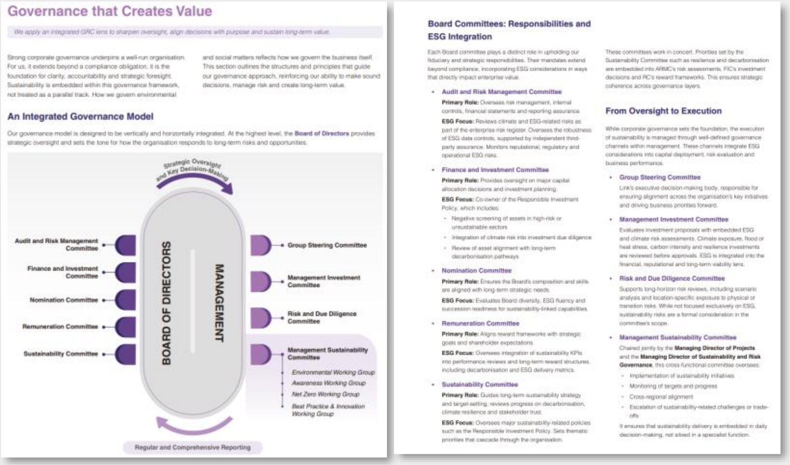
Use the integrated GRC framework to improve supervision efficiency

Link REIT uses an integrated GRC framework to improve supervision effectiveness, ensure that decisions are consistent with goals, and maintain long-term value. It has built a comprehensive ESG and sustainable development management structure and system. The Board of Directors' Sustainable Development Committee guides the formulation of long-term sustainable development strategies and goals, and reviews the progress of carbon reduction, climate resilience and stakeholder trust. The Management Sustainable Development Committee is co-chaired by the Project Managing Director and the Managing Director of Sustainability and Risk Governance. This cross-functional committee is responsible for overseeing:

- Implementation of sustainable development projects
- Monitoring of goals and progress
- Consistency of strategies across regions
- Reporting and handling of sustainability-related challenges or trade-offs

Link REIT has set up four dedicated working groups, focusing on the environment, publicity and attention, net zero carbon emissions, best practices and innovation, etc., to transform sustainable development strategies into specific measures. At the same time, the company has established an ESG reward mechanism, 20% of the long-term management rewards are linked to carbon reduction, and short-term ESG key performance indicators are set according to departmental responsibilities.

The company fully integrates ESG into enterprise risk management. Its Risk and Due Diligence Committee is responsible for long-term and short-term risk assessments, including scenario analysis and physical transformation risk assessments at specific locations, ensuring that sustainable development risks are formally included in its responsibilities. In addition, ESG has been integrated into the risk assessment process, with ESG factors such as climate risk and carbon intensity considered in capital allocation, risk assessment, and business performance management.



Source: *Link REIT Sustainability Report 2024/2025*

4. GRC, Governance, Risk and Compliance

ESG report disclosure cases of Hong Kong listed companies

Livzon Pharma: Promote the internal management system and specific ESG action layout from the top to bottom from the board of directors and the highest level

Livzon Pharmaceuticals

Company Profile

Livzon Pharmaceutical Group Co., Ltd. (stock code: 1513.HK, hereinafter referred to as "Livzon Pharmaceutical"), is a comprehensive pharmaceutical group company integrating R&D, production and sales of pharmaceutical products. The company continues to pay attention to new molecules and cutting-edge technologies in the field of global new drug research and development, based on clinical value, differentiated and forward-looking layout of innovative drugs and complex preparations with high barriers, focusing on digestive tract, assisted reproduction, psychiatry, tumor immunity and other fields, forming a complete product cluster and a differentiated product pipeline covering the whole cycle of R&D.

Top-down management system

The company has established a top-down ESG goal management mechanism, and the members of the working group under the ESG committee include the president, vice president, and heads of various functional departments, business units, and secondary enterprises to ensure that the management covers all business modules. At the same time, substantive issues that have a significant impact on the company are set as key performance appraisal indicators, included in KPI management, and relevant indicators are clearly linked to business or functional departments, and refined to individual performance appraisals, and management results are regularly assessed and disclosed. Through the transmission of clear management requirements step by step, tasks are implemented into the responsibilities of employees at all levels to promote the realization of ESG management goals.

ESG governance level	Members	Duties
ESG Committee	It is chaired by the Chairman and consists of an executive director and three independent non-executive directors	Develop and review the ESG vision, goals, strategies, and management guidelines, inspect the ESG management structure and performance, and be accountable to the Board.
Team leader and deputy leader of the ESG Working Team	Team leader: president of the Company Deputy leaders: all vice presidents, chief medical officer, secretary to the Board, dean of the research institute, general manager of API business department, and all assistants to the president	Responsible for the daily management of ESG, regularly review the progress of the Group's ESG work and key ESG data, and report to the ESG committee.
Members of the ESG Working Team	Heads of the Company's functional departments, business units and subsidiaries	Implement specific ESG tasks as directed by the ESG Working Team leader and deputy leaders.

Source: *Livzon Pharmaceutical 2024 Environmental, Social, and Governance (ESG) Report*

Case Study 3

Navigating ESG trends and charting new courses for global expansion

In the context of deep adjustment and integration of the global economy, "going overseas" has become a key strategy for Chinese enterprises, and Chinese enterprises have seized new market opportunities and enhanced their international competitiveness by going overseas. At the same time, global trade rules are accelerating the green transformation, and the importance of ESG concepts in the international market is becoming more and more prominent. Many overseas markets have passed legislation to incorporate ESG into their regulatory frameworks. Take the EU's *CSRD* which requires EU companies, including subsidiaries of eligible non-EU companies in the EU, to disclose their environmental and social impacts, enhancing transparency and accountability on ESG issues. On the one hand, the tightening of ESG international standards has raised the market entry threshold and increased the institutional cost of enterprises; On the other hand, it also brings a competitive advantage to companies that are leading in the field of ESG.

In this context, ESG is gradually becoming an indispensable and important consideration for enterprises in international market competition. For Chinese overseas enterprises, grasping the ESG "weather vane" is not only necessary to meet compliance requirements, but also the key to coping with risks, enhancing brand value, and achieving long-term development. If enterprises can take the initiative to connect with international ESG standards, they can not only break through green trade barriers, but also transform the concept of sustainable development into a lasting market competitive advantage from the dimensions of policies, standards and technologies, thereby opening up new channels for going overseas.

The international ESG information disclosure standard system is developing rapidly

Data analysis and interpretation

The survey results show that among the sample enterprises,

61% **disclose ESG reports with reference to the *GRI Standards***

40% **claim to use the TCFD framework**

22% **disclose ESG reports with reference to ISSB standards**

- In recent years, the international community's ESG compliance regulatory requirements have developed rapidly, and various countries (regions) have successively introduced clearer sustainability information disclosure guidelines to continuously clarify and strengthen ESG management and disclosure requirements for listed companies.
- With the introduction of the final version of the *IFRS S1* and *IFRS S2 Accompanying Guidance on Climate-related Disclosures*, HKEX has developed and published the new *ESG Code* with reference to this global benchmark and incorporated the reporting principles under the ISSB standards (as applicable to or related to climate disclosures) into the implementation guidelines.

International ESG supervision and information disclosure system

International framework	Taskforce on Climate-related Financial Disclosures ("TCFD")	Taskforce on Nature-related Financial Disclosures ("TNFD")		
International report standard	*GRI Sustainability Reporting Standards*	ISSB *IFRS Sustainability Disclosure Standards*	SASB *Sustainability Accounting Standards*	
Market supervision requirements	EU *Corporate Sustainability Reporting Directive*	HKEX *ESG Code*	*Guidelines for Sustainability Reporting of Listed Companies on the Shanghai and Shenzhen North Stock Exchanges*	Other ……

ESG management has become a trend in the global value chain

In the context of ESG transformation in overseas industrial chains, ESG management in the value chain has rapidly extended around green and low-carbon, labor rights, risk management and other issues. Overseas enterprises need to quickly establish management mechanisms to promote ESG construction in their own and upstream supply chains to meet the requirements of downstream customers and achieve sustainable expansion in overseas markets.

Environment

Carbon border adjustment mechanism

The EU **imposes taxes on carbon emissions** from some imported goods to address the risk of "carbon leakage" by EU companies moving carbon-intensive production to countries with less stringent climate policies.

Product carbon footprint

With the rapid development of green products and green trade and the increasing international attention to global warming, developed countries are establishing **international green trade barriers** based on product life cycle assessment and carbon footprint.

Circular economy

The European Council passed the new *Batteries Act*, which **regulates the entire life cycle of batteries** and promotes the life extension and reuse of batteries, which is considered one of the important measures to promote the circular economy.

Society

Labor rights

Enterprises should fully consider and respect **the local cultural background, work habits and cultural environment**, have a deep understanding of and comply with the labor regulations of various countries, and ensure that the company's employment practices are consistent with local laws and social standards.

Data security

The EU's *General Data Protection Regulation* ("*GDPR*") imposes strict conditions on the collection and **processing of EU resident data and the cross-border transfer of data**, and businesses that violate the GDPR can face hefty fines.

Supply chain transparency

Regulations such as *CSRD* require enterprises to open up the supply chain ESG data chain, cover supply chain transparency to **multi-level suppliers**, including raw materials, processing, logistics, etc., and **verify the ESG performance of suppliers**.

Governance

Governance structure

A global corporate governance framework takes into account the **legal, cultural, economic, and social differences** of different countries and regions, ensuring that the company extends its management organization and business process system to overseas operations.

Due diligence

The *Corporate Sustainability Due Diligence Directive* ("*CSDDD*") requires companies to establish **risk-based due diligence systems** to identify, prevent, and terminate the actual and potential adverse impacts on **human rights and the environment** from their value chain operations.

ESG risk management

Enterprises need to establish a balanced and diversified decision-making mechanism, design a multi-dimensional risk assessment framework, integrate **ESG risks into the overall risk management of the enterprise**, and improve risk resilience and response capabilities.

Overseas enterprises urgently need to reshape ESG management

In the context of globalization, Chinese companies face complex ESG challenges in the process of going overseas. These challenges not only involve key issues such as data quality and availability, standard applicability, professional capability gaps, and transformation cost pressures, but also require companies to explore ESG practices suitable for their own development stages based on local realities. In the process of meeting the ESG requirements of the Hong Kong Stock Exchange, Hong Kong listed companies can conduct "mock tests" in advance to cope with global regulations and investor due diligence, and systematically establish data management, risk analysis and strategic planning capabilities that meet international standards.

Main challenges of ESG management for overseas enterprises

Double materiality assessment

- Currently, companies lack understanding of the **assessment dimensions** of impact materiality and financial materiality, making it **difficult to make sound judgments**.
- Chinese companies are introducing a double materiality perspective for the first time, and the assessment process is still immature.

Significant impacts, risks and opportunities

- Lack of clarity about how businesses impact the environment and society, and **how sustainability risks and opportunities impact their identification and assessment processes**
- Sustainability impacts, risks and opportunities are **not fully integrated** into corporate strategies, priorities and decision-making

Value chain information disclosure

- The scope of the report has been expanded to include "direct and indirect business relationships in the upstream and downstream value chains," **increasing reliance on information from non-controlling parties.**
- **Subsidiaries** that only undertake certain functions (such as sales) are also required to disclose value chain information according to the business scope of the entire group.

Data quality and assurance

- A company's sustainability report must obtain **limited level of assurance from a qualified third party.**
- During the report preparation process, companies need to maintain communication with third parties to ensure that the **assurance report is obtained on time.**

Digital transformation

- Many companies lack **systematic ESG data collection and management capabilities**, making it difficult to provide ESG information disclosure that meets international standards.
- In cross-border operations, companies may face conflicts between **ESG data disclosure requirements and data privacy protection regulations.**

ESG report disclosure cases of Hong Kong listed companies

BYD: In its 2024 Sustainability Report, it discloses, for the first time, key ESG data such as carbon reduction goals across value chain and human rights management with reference to the *European Sustainability Reporting Standards (ESRS)*, and has built an ESG strategic framework to systematically promote the implementation of ESG work.

BYD

Company Profile

BYD Co., Ltd. (stock code: 002594. SZ, 1211.HK, hereinafter referred to as "BYD"), headquartered in Shenzhen, Guangdong Province, is a Fortune 500 company listed in Hong Kong and Shenzhen, with business spanning four major industries: automobiles, electronics, new energy, and rail transit. BYD builds comprehensive, zero-emission new energy solutions—from energy generation and storage to application. The company is committed to leveraging technological innovation to fulfill the public's aspirations for a better life and contribute to its goal of "cooling the Earth by 1° C."

Adopting ESRS to enhance ESG disclosure, showcasing BYD's unique practices with a global perspective

Disclosure with reference to the *ESRS* framework requirements (selected examples):

- “Double materiality assessment: "Guided by the SZSE Guidelines and the ESRS, and supported by professional methodology interpretation and advisory services, we established an evaluation process, scoring system, and ranking model to assess both our impacts on the environment and society, as well as the sustainability-related financial risks and opportunities we face.”
- Own labor force: "We have established a labor and human rights management system based on *Social Accountability 8000 (SA 8000)*, and have formulated *Human Rights Policy Statement of BYD Group* and the *Labor Human Rights Protection Policy of BYD*, fully and systematically protecting the legitimate rights and interests of employees. “

Global perspective (selected examples): "BYD Thailand Base actively promotes the implementation of the package material optimization project...... it is expected that the amount of industrial waste generated at the Thailand base will be reduced by about 30% to 60%. This will also make a positive contribution to the sustainable development of Thailand.”

BYD's ESG practice characteristics (selected examples): "BYD takes "Technology Based, Innovation Oriented" as its core development philosophy, and regards innovation as the fundamental driving force for the sustainable development of the enterprise itself and the human society. We are committed to creating a vibrant R&D environment and establishing a fair incentive mechanism, so that every employee can give full play to his or her innovative talents.”

Source: *BYD 2024 Sustainability Report*

ESG report disclosure cases of Hong Kong listed companies

Fosun International: Adopt international standards to build a group-wide ESG management system and promote the integration of sustainable development into global operations

Fosun International

Company Profile

Fosun was founded in 1992. After more than 30 years of development, Fosun has become a global innovation-driven consumer group. Adhering to the mission of creating happier lives for families worldwide, Fosun is committed to creating a global happiness ecosystem fulfilling the needs of families worldwide in health, happiness, and wealth. In 2007, Fosun International Limited was listed on the main board of the Hong Kong Stock Exchange (HKEX Stock code: 00656). As of 31 December 2024, Fosun International's total assets amounted to RMB796.5 billion.

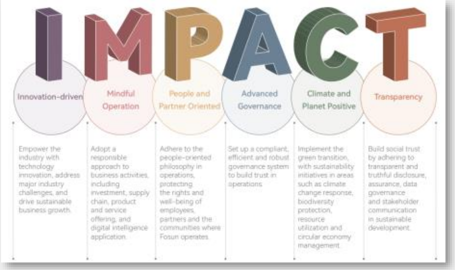
Adopt international standards to build a group-wide ESG management system

Fosun International has formulated the "Create IMPACT" sustainable development strategy, focusing on the six strategic directions of "innovation-driven, mindful operation, people and partner oriented, advanced governance, climate and planet positive, and transparency", and practiced its global commitment to sustainable development.

Fosun International has published the Environmental, Social and Governance Report for nine consecutive years with reference to the *GRI Standards* and mainstream ESG rating requirements. In addition, Fosun International has prepared and independently published the Climate Information Disclosures Report every year since 2022 in line with the *International Financial Reporting Standards (IFRS) S2 Climate-related Disclosures* Requirements and the framework of the TCFD recommendation to assess and analyze the climate-related risks, opportunities and operational resilience faced by companies in the course of global operations, and adopt international standards to establish a climate-related risk management and disclosure paradigm for global member companies.

Fosun International continues to promote the construction of the Group's ESG management system, such as bringing together ESG leaders from member companies, and regularly holding ESG workshops and ESG Culture Week both domestically and overseas to promote cross-cultural and regional ESG communication. In addition, Fosun collaborates with overseas member companies to carry out ESG management and information disclosure, and proactively responds to ESG regulatory requirements, such as BCP complies with ESRS, and refers to the IFRS International Financial Reporting Sustainability Disclosure Standards and the GRI Standard, etc., and will carry out non-financial information disclosure in the form of consolidated annual reports in 2024.

Fosun International actively joins the Global ESG Initiative and has joined the United Nations Global Compact in 2014. In addition, many member companies of Fosun International have signed the United Nations Environment Programme Financial Initiative Principles for Sustainable Insurance and the *United Nations Principles for Responsible Investment*, and member companies such as Paref are also signatories of the United Nations Women's *Women's Empowerment Principles*.



"Create Impact" sustainability strategy

Overseas ESG Workshop Paris

Source: *Fosun International 2024 Environmental, Social and Governance (ESG) Report*

04

Summary and Outlook

Summary and Outlook

Advice on ESG management of Hong Kong listed companies

Recommendation 1: Forward-looking layout to address climate change

Establish a dedicated climate governance structure: Clarify the core responsibilities of the board of directors in climate strategy formulation and major decision approval, and equip professional teams covering climate science, risk management, and other fields to ensure the efficient operation of the structure.

Strengthen climate strategy analysis: Conduct climate scenario analysis to assess the impact of different climate scenarios on the business from multiple dimensions such as supply chain, market demand, and asset value, and formulate response strategies accordingly.

Implement panoramic accounting of carbon emissions: Promote carbon emission accounting in stages, improve the climate information disclosure mechanism in accordance with the requirements of the Hong Kong Stock Exchange, standardize data collection, collation and review processes, and ensure the accuracy and timeliness of disclosed data.

Recommendation 2: Strategic Integration and Building an ESG Foundation

Create an integrated governance structure: Elevate the status of the Sustainability Committee to be as important as key bodies such as the Audit Committee.

Achieve ESG performance management: Incorporate ESG indicators into the annual budget and performance appraisal system of each business unit, and establish a cross-departmental ESG steering group to track the completion of indicators. Promote ESG practices in stages, first focusing on areas with rapid results, then deepening to the entire business process, and finally building an industrial ecosystem.

Strengthen digital construction: Establish a data collection network covering the entire value chain, develop an intelligent analysis platform, and build a risk early warning mechanism to help ESG management be carried out efficiently.

Recommendation 3: Leveraging Opportunities and setting sail for a new journey

Anchor global vision: Benchmark international ESG standards, internalize global common standards into corporate genes, and make ESG practices a "common language" and "pass" for connecting with international capital markets.

Expand brand influence: Use multiple channels to disseminate corporate ESG achievements, actively participate in international ESG exchanges and cooperation, and grasp the latest developments through forums, seminars, and other activities to enhance the voice in the international ESG field.

Internalize cultural value: Strengthen employee ESG training internally, create a good internal ESG culture, and provide strong support for enterprises to expand the market overseas.

Recommendation 4: Planning ahead for disclosure prior to listing in Hong Kong

In recent years, the Hong Kong Stock Exchange has continued to upgrade its recommendation[5] for enterprises to carry out ESG management work at the listing application stage, and the proposed listed company should establish an ESG governance structure and management system as soon as possible, with "compliance as the bottom line and value-oriented", and disclose from governance, strategy, risk management, indicators and goals as the core, so as to ensure that the sustainable development strategy and quantitative goals are clearly presented in the prospectus. While meeting the listing compliance requirements, it comprehensively conveys to investors the company's long-term value creation ability at the environmental, social and governance levels, and enhances investment confidence.

5. In July 2020, the Hong Kong Stock Exchange published the HKEX Guidelines, which require listing applicants to establish relevant mechanisms to meet the corporate governance and ESG requirements of the Hong Kong Stock Exchange in advance. In December 2023, the Hong Kong Stock Exchange published the *Guide to New Listing Applicants*, focusing on ESG disclosure in the dimensions of governance, strategy, risk management, and metrics and objectives.

05

Appendix

Citation List

1. Main Board Listing Rules, Appendix C2 Environmental, Social and Governance Reporting Code, Hong Kong Exchanges and Clearing Limited, https://en-rules.hkex.com.hk/sites/default/files/net_file_store/HKEX4476_3841_VER31171.pdf

2. Enhancement of Climate-related Disclosures under the Environmental, Social and Governance Framework Consultation Conclusions, Hong Kong Exchanges and Clearing Limited, https://www.hkex.com.hk/-/media/HKEX-Market/News/Market-Consultations/2016-Present/April-2023-Climate-related-Disclosures/Conclusions-Apr-2024/cp202304cc.pdf

3. Implementation Guidance for Climate Disclosures under HKEX ESG reporting framework, Hong Kong Exchanges and Clearing Limited, https://www.hkex.com.hk/-/media/HKEX-Market/Listing/Rules-and-Guidance/Environmental-Social-and-Governance/Exchanges-guidance-materials-on-ESG/guidance_enhanced_climate_dis.pdf

4. IFRS S1 — General Requirements for Disclosure of Sustainability-related Financial Information, International Sustainability Standards Board, https://www.ifrs.org/content/dam/ifrs/publications/pdf-standards-issb/english/2023/issued/part-a/issb-2023-a-ifrs-s1-general-requirements-for-disclosure-of-sustainability-related-financial-information.pdf?bypass=on

5. IFRS S2 — Accompanying Guidance on Climate-related Disclosures, International Sustainability Standards Board, https://www.ifrs.org/content/dam/ifrs/publications/pdf-standards-issb/english/2023/issued/part-b/issb-2023-b-ifrs-s2-climate-related-disclosures-accompanying-guidance-part-b.pdf?bypass=on

6. Making inroads into good Corporate Governance and ESG management, Hong Kong Exchanges and Clearing Limited, https://www.hkex.com.hk/-/media/HKEX-Market/Listing/Rules-and-Guidance/Corporate-Governance-Practices/Practitioners_insights.pdf

7. CMOC 2024 Environmental, Social and Governance Report, CMOM Group Limited, https://www.hkexnews.hk/listedco/listconews/sehk/2025/0321/2025032102019.pdf

8. SF Holding 2024 Sustainability Report, S.F. Holding Co., Ltd., https://www1.hkexnews.hk/listedco/listconews/sehk/2025/0328/2025032800972.pdf

9. China Overseas 2024 Environmental Social and Governance Report, China Overseas Land and Investment Ltd., https://www1.hkexnews.hk//listedco/listconews/sehk/2025/0428/2025042801201.pdf

10. China Overseas Carbon Neutrality White Paper, China Overseas Land & Investment Limited, https://www.coli.com.hk/wp-content/uploads/2023/11/20231121_tzh.pdf

11. China Overseas Responding to Climate Change White Paper, China Overseas Land & Investment Limited, https://www.coli.com.hk/wp-content/uploads/2025/03/2025_qhbh.pdf

12.Towngas Environmental, Social and Governance Report 2024, The Hong Kong and China Gas Company Ltd., https://www1.hkexnews.hk/listedco/listconews/sehk/2025/0423/2025042301446.pdf

13. SenseTime 2024 Sustainability Report, SenseTime Group Inc., https://www1.hkexnews.hk/listedco/listconews/sehk/2025/0424/2025042401051.pdf

14. Hengan International Group Co., Ltd. 2024 Environmental, Social and Governance Report, Hengan International Group Co., Ltd., https://www1.hkexnews.hk/listedco/listconews/sehk/2025/0414/2025041401468.pdf

Citation List

15. Livzon 2024 Environmental, Social and Governance Report, Livzon Pharmaceutical Group Inc., https://www1.hkexnews.hk/listedco/listconews/sehk/2025/0423/2025042301592.pdf

16. Link REIT 2024/2025 Sustainability Report, Link Real Estate Investment trust, https://www1.hkexnews.hk/listedco/listconews/sehk/2025/0616/2025061600521.pdf

17. BYD 2024 Sustainability Report, BYD Company Limited, https://www1.hkexnews.hk/listedco/listconews/sehk/2025/0324/2025032401244.pdf

18. Fosun 2024 Environmental, Social and Governance Report, Fosun International Limited https://www1.hkexnews.hk//listedco/listconews/sehk/2025/0425/2025042503397.pdf

19. Recommendations of the Task Force on Climate-related Financial Disclosures, Taskforce on Climate-related Financial Disclosures (TCFD), https://assets.bbhub.io/company/sites/60/2021/10/FINAL-2017-TCFD-Report.pdf

20. Corporate Sustainability Report Directive, Council of the European Union, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32022L2464

21. Global Reporting Initiative, Global Reporting Initiative, https://www.globalreporting.org/how-to-use-the-gri-standards/gri-standards-english-language/

22. SASB Standards Application Guidance， Sustainability Accounting Standards Board, https://www.sasb.org/standards/download/?lang=en-us

23. Appendix C1 Corporate Governance Code, Hong Kong Exchanges and Clearing Limited, https://en-rules.hkex.com.hk/sites/default/files/net_file_store/HKEX4476_3828_VER37460.pdf

24. Exchange Publishes Consultation Paper on Review of Corporate Governance Code and Related Listing Rules, Hong Kong Exchanges and Clearing Limited, https://www.hkex.com.hk/news/regulatory-announcements/2021/2104162news?sc_lang=en

25. Appendix C1 - Corporate Governance Code of Main Board Listing Rules, Hong Kong Exchanges and Clearing Limited, https://en-rules.hkex.com.hk/sites/default/files/net_file_store/HKEX4476_1880_VER37462.pdf

26. Review of Corporate Governance Code and Related Listing Rules, Hong Kong Exchanges and Clearing Limited, https://www.hkex.com.hk/-/media/HKEX-Market/News/Market-Consultations/2016-Present/June-2024-Review-of-CG-Code/Consultation-Paper/cp202406.pdf

27. Continuous Supervision Guidelines for Listed Companies on the Beijing Stock Exchange No. 11 - Sustainability Reporting (Trial), the Beijing Stock Exchange, https://www.bse.cn/cxjg_list/200021393.html

28. Guide for New Listing Applicants, Hong Kong Exchanges and Clearing Limited, https://www.hkex.com.hk/Listing/IPO/e-Learning/Guide-for-New-Listing-Applicants?sc_lang=en

Authors

Kanus Yue

Sustainability Disclosure & Consulting Partner, PwC China
Email: kanus.km.yue@cn.pwc.com
Phone: +852 2289 1989
+86 (755) 8261 8399

Tingcun Han

Sustainability Disclosure & Consulting Partner, PwC China
Email: tingcun.han@cn.pwc.com
Phone: +86 (10) 6533 7307

Cyrus Cheung

Sustainability Disclosure & Consulting Partner, PwC China
Email: cyrus.lk.cheung@hk.pwc.com
Phone: +852 2289 1709

Linda Hu

Sustainability Disclosure & Consulting Partner, PwC China
Email: linda.hu@cn.pwc.com
Phone: +86 (21) 2323 3329

Mary Ren

Sustainability Disclosure & Consulting Partner, PwC China
Email: mary.l.ren@cn.pwc.com
Phone: +86 (10) 6533 5066

Rachel Xiu

Sustainability Disclosure & Consulting Director, PwC China
Email: rachel.xiu@cn.pwc.com
Phone: +86 (755) 8261 8415

Michael Wu

Sustainability Disclosure & Consulting Director, PwC China
Email: michael.sm.wu@cn.pwc.com
Phone: +86 (21) 2323 5875

Inna Wang

Sustainability Disclosure & Consulting Manager, PwC China
Email: inna.wang@cn.pwc.com
Phone: +86 (755) 8261 4277

Thank you

The text is intended to provide general information only and should not be used as a substitute for the advice provided by professional cons