



2023 ESG Reporting Study for Hong Kong Listed Companies





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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, Hong Kong Exchanges and Clearing Limited (HKEX) has continuously reviewed its ESG reporting framework and rules, which facilitate high-quality ESG disclosure by issuers and promote ESG and sustainability commitments of listed companies. Entering the 10th year of the implementation of the ESG Reporting Guide, the ESG information disclosure of Hong Kong listed companies has entered a new stage, becoming more and more comprehensive and mature. The HKEX ESG rules and guidelines have also evolved to become more stringent and sound. In April 2023, HKEX released a consultation paper on Enhancement of Climate-related Disclosures Under the Environmental, Social and Governance Framework to facilitate the preparation of listed companies for climate disclosure requirements based on the International Sustainability Standards Board (ISSB) climate disclosure standards.

As of 30 June 2023, there were 2,604 companies listed on HKEX, of which 1,930 companies, or 74%, had published ESG reports on HKEX. Based on the ESG Reporting Guide, the Guidance on Climate Disclosures, the latest consultation paper on climate disclosures and other ESG-related papers of HKEX, PwC conducted a study on ESG reports published by Hong Kong listed companies in 2022 and selected a total of 300 Hong Kong listed companies from various industries according to the 12 industries of the Hang Seng Industry Classification System for this in-depth study. This is the seventh consecutive year that we have conducted the study.

This study analyses the samples from the following dimensions:

- Overall disclosure of ESG reporting
- Mandatory disclosure requirements
- Management and disclosure of environmental information
- Management and disclosure of social information
- Disclosure maturity of each ESG issue

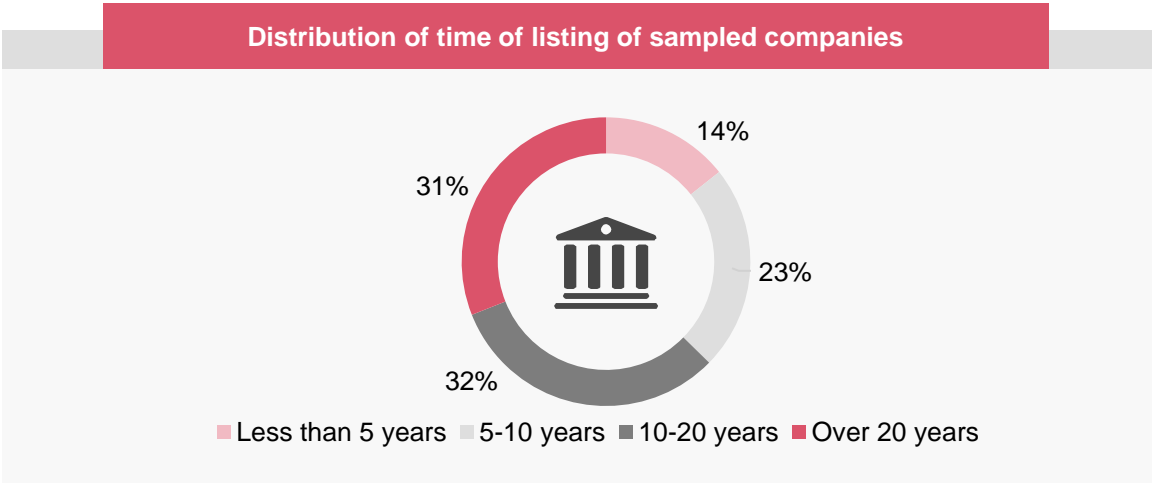
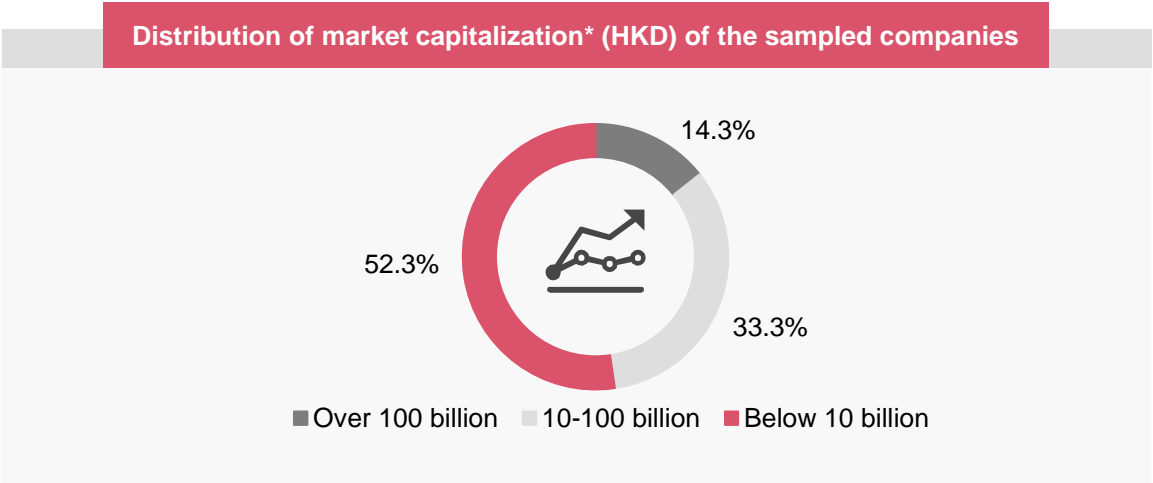
Research limitations: All analyses are based on weighted random samples reflecting the industry and market capitalisation distribution of Hong Kong listed companies, etc. Due to the possible sampling error of the estimated actual population, the research findings may not perfectly reflect the actual performance of individual companies in their ESG reporting.



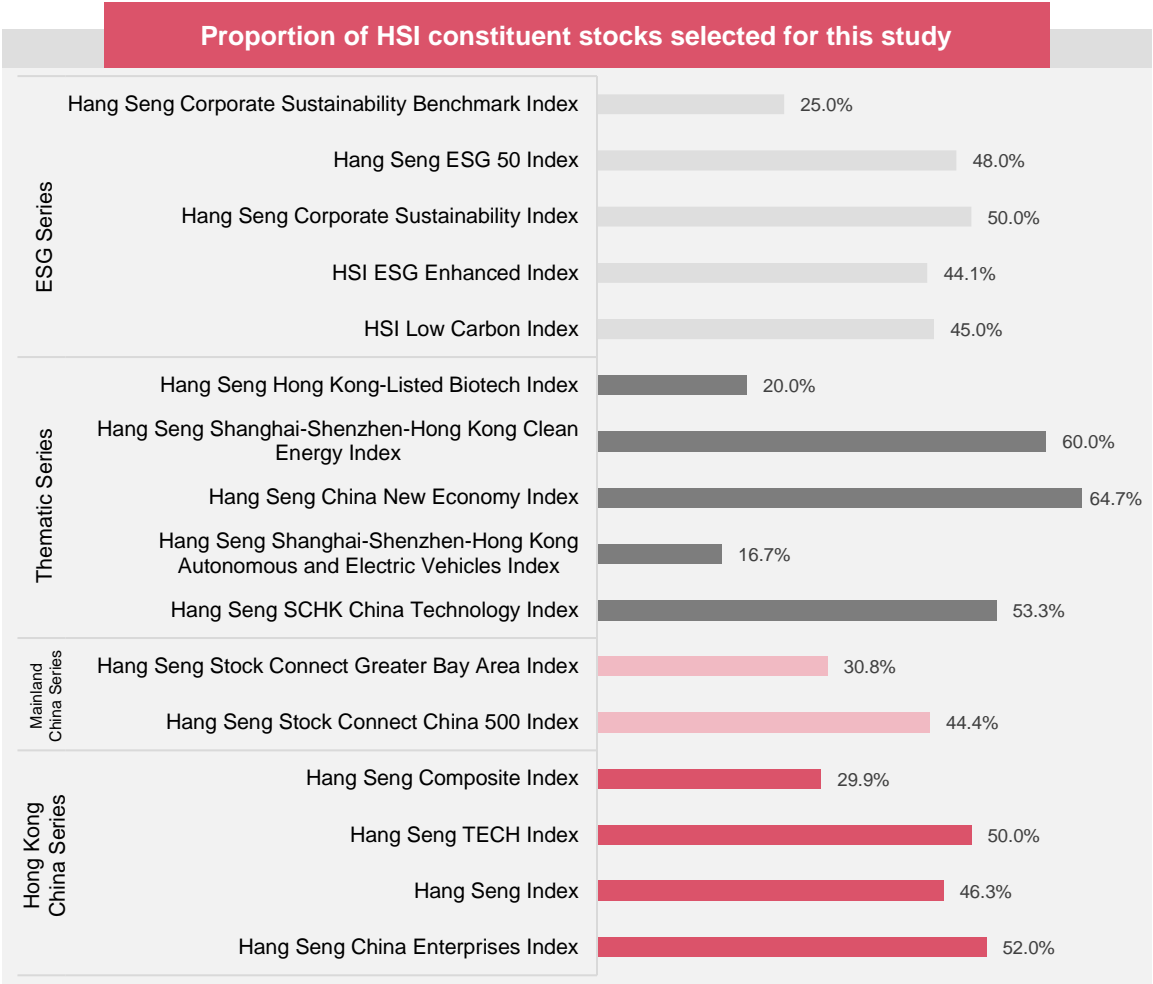
Industry distribution of sampled companies
(by Hang Seng Industry Classification System)

Sample distribution of listed companies surveyed

The distributions of the companies studied in terms of market capitalisation, time of listing and HSI constituents are as follows:



*The market capitalisation of the sample companies is based on market data as of December 31, 2022



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Our focus of this year:

- 2.1 Case study 1: As ESG disclosures are getting mature, companies keep strengthening and optimising ESG management
- 2.2 Case study 2: Introducing new compliance requirements for systematic disclosures of climate-related information
- 2.3 Case study 3: Integrating ESG management into supply chain to stay ahead

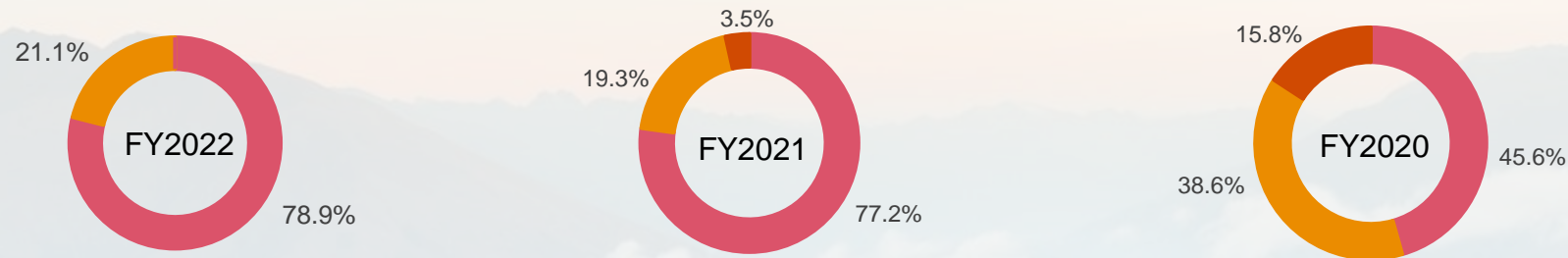
Case study 1: As ESG disclosures are getting mature, companies keep strengthening and optimising ESG management

In December 2019, HKEX published the Consultation Conclusions: the Review of the Environmental, Social and Governance (ESG) Reporting Guide and Related Listing Rules (ESG Consultation Conclusions). It sets out “mandatory disclosure” requirements for listed companies, covering governance structure, reporting principles and scope, extends the scope of “disclose or explain” requirement beyond solely environmental issues to encompass social issues as well, and strengthens the requirement for reporting the board’s governance over ESG matters and climate risks. In 2021, HKEX issued documents such as the Guidance on Climate Disclosures and the Corporate Governance Guide for Boards and Directors to encourage and assist listed companies to report in accordance with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), and require them to incorporate ESG-related risks into their risk management assessments.

ESG disclosures of Hong Kong listed companies have matured

Entering the second year of the implementation of the ESG Reporting Guide 2021, the quality of ESG disclosure of Hong Kong listed companies has shown a trend of comprehensive optimization and overall improvement as driven by increasingly stringent guidelines. With a solid foundation in general disclosure of environmental and social issues, listed companies have made good progress in more aspects such as governance, goal setting and practice of ESG matters by the board of directors. The overall disclosure ratio has increased year by year, and the disclosure of ESG issues has evolved to the “moderately-disclosed” and “well-disclosed” categories.

Trends in the disclosure of ESG issues from FY2020 to FY2022



Features of different types

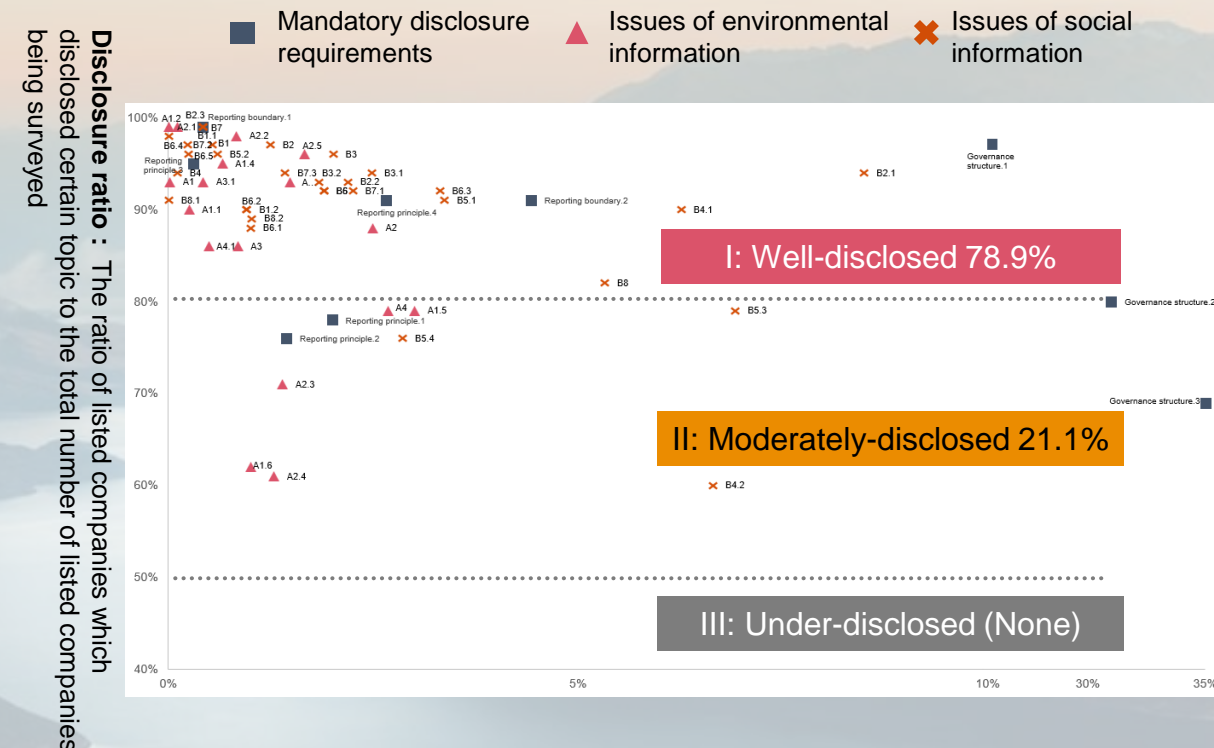
- **Well-disclosed: disclosure ratio > 80%.** As these issues are relating to daily operations and the difficulty of disclosure is low, most companies have already met the compliance requirements and entered the stage of optimised management. In addition, mandatory disclosure on the supervision of ESG-related matters is also in the mature category.
- **Moderately-disclosed: disclosure ratio between 50% and 80%.** Most of these issues are emerging areas of attention, such as climate change policy/environmental objectives/supply chain ESG management. Their disclosures have been increasing in the past two years, indicating that listed companies have started to manage these issues effectively.
- **Under-disclosed: disclosure ratio < 50%.** As the ESG Reporting Guide 2021 introduced new mandatory requirements, some issues such as ESG management processes and organisational structures, were inadequately disclosed at the initial stage. With increasing importance attached to ESG governance by listed companies, the disclosure ratio of all issues has exceeded 50%, and no disclosure items belong to this category.

ESG disclosures of Hong Kong listed companies have matured (continued)

According to the survey results, in terms of the degree of disclosure, the proportion of all issues covered by the ESG Reporting Guide that is disclosed in the ESG reports of sampled companies has reached more than 50%, and the level of disclosure completeness of listed companies' ESG reports has been increasing. In terms of year-on-year growth, the disclosure ratio of listed companies on issues such as supervision of ESG-related matters, ESG governance policies and strategies, and review progress according to ESG-related objectives shows a rapid growth trend, indicating that listed companies' ESG disclosure has exceeded the basic requirements of compliance, moving towards higher-dimensional ESG management goals, more systematic ESG governance, more in-depth ESG management and better ESG performance.

Disclosure maturity: Disclosure maturity by ESG issues and YoY growth

Category	Disclosure Status
I: Well-disclosed	<ul style="list-style-type: none"> High level (Over 80%) Mandatory requirements (5/9) Environmental issues (12/17) Social issues (28/31)
II: Moderately-disclosed	<ul style="list-style-type: none"> Medium level (between 50% and 80%) Mandatory requirements (4/9) Environmental issues (5/17) Social issues (3/31)
III: Under-disclosed	<ul style="list-style-type: none"> Low level (less than 50%) None



YoY growth: Year-on-year growth in number of listed companies which disclosed certain topic compared with last year

I: Well-disclosed category

Environmental or social issues that have been covered in the process of business operations, such as environmental and natural resource policies, employment policies, supply chain management policies, anti-corruption policies and other related quantitative indicators have been well-disclosed. Listed companies have started to optimise the management of those issues by considering the materiality of ESG issues to the company's business strategy and activities. This drives differentiation of ESG management and disclosures among listed companies, which will therefore become a key focus for the companies to in preparing high-quality ESG reports.

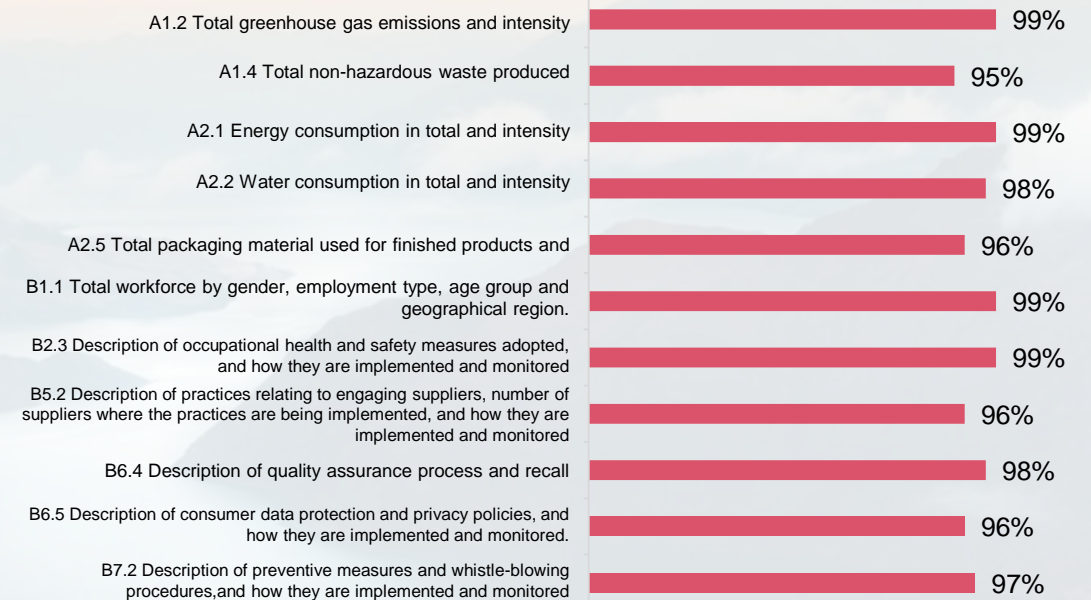
Policy: In addition to climate change policies, the vast majority of companies disclosed the various types of ESG policies required by the ESG Reporting Guide

Disclosure of ESG policies



KPIs: The disclosure of most environmental and social KPIs has also matured, with more than 90% of them disclosed

Disclosure of KPIs



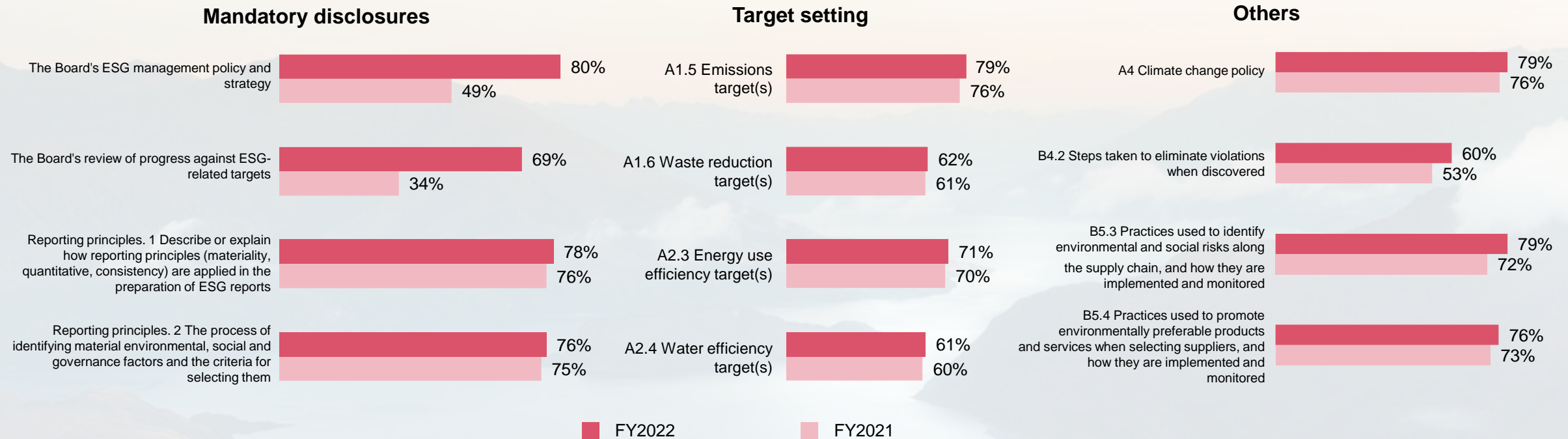
Disclosure ratio less than 80%

disclosure ratio greater than 80%

II: Moderately-disclosed category

In recent years, sustainability has placed significant emphasis on climate change policy, environmental target setting, and supply chain ESG management. Their level of disclosure falls under the “moderately-disclosed” category. The survey shows that listed companies have gradually incorporated these issues into their management, strengthened relevant ESG management and practices, and disclosed them in ESG reports.

In addition, as listed companies increasingly prioritise ESG matters, there has been a substantial rise in the disclosure ratio of ESG management policies and strategies of the Board and monitoring of progress towards ESG-related targets, indicating that listed companies are making institutional arrangements for ESG matters at the governance level in accordance with the reporting guide of HKEX.



Examples of ESG disclosure for Hong Kong listed companies

Well-disclosed: China National Building Material Company Limited (CNBM) identified emission types and provided detailed disclosure on respective emission data

CNBM



ESG awards/ratings

- S&P Global ESG Scores: 40/100
- Central SOEs ESG Pioneer 50 Index (2022) by the State-owned Assets Supervision and Administration Commission of the State Council
- Institutional Investor's Asia Executive Team Awards: No. 1 of the Most Socially Responsible Companies in the Basic Materials Sector



About the company

China National Building Material Company Limited, listed on the Stock Exchange of Hong Kong Ltd. in March 2006 and reorganised with the former China National Materials Company Limited in May 2018, is the core industry platform and flagship listed company of China National Building Material Group Co., Ltd. which is a large-scale central enterprise of building materials. Now, CNBM have seven A-share listed companies with more than 150,000 employees, becoming the world's No. 1 in business fields such as cement, commercial concrete, gypsum board, glass fiber, wind turbine blades and cement engineering technical services.

A1.1 The types of emissions and respective emissions data

"The new materials segment actively carries out various environmental protection technology research and process technology transformation, continuously breaks through lower emission levels of air pollutants and water pollutants, leading the industry in the continuous progress of environmental protection level.

- BNBM carries out projects such as speeding up and reducing consumption in production lines, switching to energy-saving motors, and intelligent transformation of production lines to improve energy saving and consumption in production lines, and by 2022, 57% of gypsum board production lines achieved "near-zero" emissions of soot, sulfur dioxide and nitrogen oxides.
- The membrane material company has upgraded the volatile organic compounds waste gas treatment facilities and installed a waste gas detection platform. The total emission of volatile organic compounds has been reduced by about 27%, and the emission concentration is as low as 0.5 mg/m³, far below the industry standard (80 mg/m³), reaching the advanced level of the industry
- In 2022, China Jushi's tonnes of yarn sewage discharge decreased by 5% year-on-year, and the discharge concentration of chemical oxygen demand was lower than 80% of the national discharge standard.

— Environment, Social and Governance (ESG) Report 2022 of China National Building Material Company Limited

Green production

Adhering to the core concept of "Smart Use of Resources to Serve the Industrial Construction", the Group is committed to reducing wastewater discharge and exhaust gas emissions. By carrying out peer benchmarking and comprehensive benchmarking among enterprises within the industry, the Group optimizes the key indicators of each production process, and actively leads the industry in energy conservation, production optimization and self-disciplined emission reduction. The subsidiaries of the Group have also formulated relevant environmental targets based on their own production conditions and development plans, with reference to the relevant national and local laws and regulations and the Group's internal management rules to strive to promote green and sustainable development.



Environmental data

Key performance indicators	Unit	2022	2021
Total emission of nitrogen oxides (NO _x) ¹	(tonnes)	81,470	111,452
Total emission of sulfur dioxide (SO ₂)	(tonnes)	6,488	9,596
Emissions of industrial particulate matter	(tonnes)	9,835	14,328
Total emission of volatile organic compounds (VOCs)	(tonnes)	49	87
Amount of chemical oxygen demand (COD)	(tonnes)	605	1,020
Proportion of companies meeting noise level standards	%	100	100
Direct greenhouse gas emissions (Scope 1)	(million tonnes)	216.67	250.66
Indirect greenhouse gas emissions (Scope 2)	(million tonnes)	14.07	15.30
Total greenhouse gas emissions ²	(million tonnes)	230.74	265.96
Greenhouse gas emissions from basic building materials business	(million tonnes)	222.02	256.28
Greenhouse gas emissions from new materials business ³	(million tonnes)	8.11	7.18
Greenhouse gas emissions from engineering services	(million tonnes)	0.61	2.50

Source: Environment, Social and Governance (ESG) Report 2022 of China National Building Material Company Limited, the official website of CNBM

Examples of ESG disclosure for Hong Kong listed companies

Moderately-disclosed: Towngas Smart Energy Company Limited introduced the principle of "double materiality" and comprehensively assessed the influence of ESG issues on the environment, society and the Group's financial performance

Towngas Smart Energy Company Limited



ESG awards/ratings

- MSCI ESG Ratings: A
- S&P Global ESG Scores: 68/100
- Hang Seng Indexes Sustainability Rating: AA



About the company

Towngas Smart Energy Company Limited, listed on the Main Board of the Stock Exchange of Hong Kong, is a specialised gas investment and management group focused on the sales and operations of piped gas in Chinese Mainland. Meanwhile, Towngas Smart Energy Company Limited has been engaging in the business of smart energy system, including renewable energy generation, digitalized energy management services and carbon management services in Chinese Mainland.

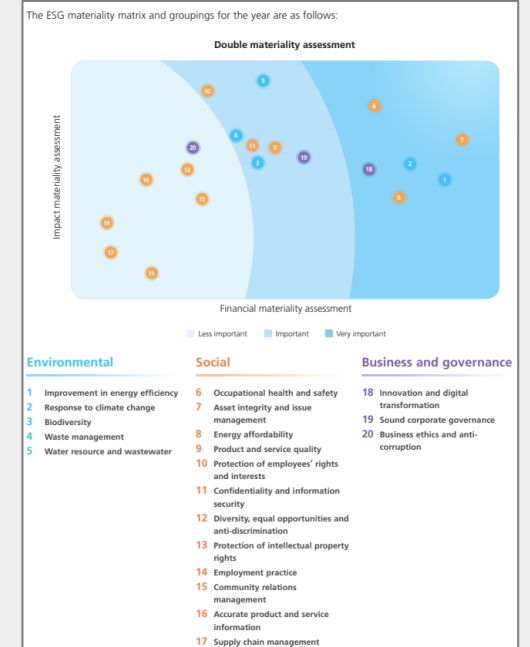
The principal shareholder of Towngas Smart Energy Company Limited is Hong Kong and China Gas Company Limited.

Reporting principle1 — Materiality

"The Group introduced during the year the double materiality principle for the first time in the assessment of material issues. Guided by the draft double materiality methodology published by the European Financial Reporting Advisory Group (EFRAG), we comprehensively assessed the impacts of each ESG issue on the environment, society and the Group's financial performance from two dimensions: impact materiality and financial materiality..."

- Questionnaire Survey: Based on the principle of double materiality, we designed two questionnaires, impact materiality assessment and financial materiality assessment. The most relevant internal and external stakeholders, such as the management and employees of the Group and business partners, were invited to participate in the survey...
- Impact Materiality Assessment: In impact materiality assessment, we took into account the possibility and severity of positive and negative impact to comprehensively assess the impact of ESG issues on the environment and society...
- Financial Materiality Assessment: In the financial materiality assessment, we conducted in-depth analysis on the impacts of various ESG issues on the Group's short-term financial performance from the perspective of 6 capitals developed by the International Integrated Reporting Committee (IIRC), namely financial capital, manufactured capital, intellectual capital, human capital, social and relationship capital, and natural capital..."

— Environmental, Social and Governance Report 2022 of Towngas Smart Energy Company Limited



Source: Environmental, Social and Governance Report 2022 of Towngas Smart Energy Company Limited, the Official Website of Towngas Smart Energy

Examples of ESG disclosure for Hong Kong listed companies

Moderately-disclosed: ESR Group Limited disclosed the Board's review of progress against ESG related targets

ESR Group Limited



ESG awards/ratings

- 2022 MSCI ESG Rating: A
- 2022 Morningstar's Sustainalytics ESG Risk Ratings: "Low Risk"
- 2022 GRESB Real Estate Assessment: 37 listed REITs and private funds participated and retained top rankings including 1 Global and 4 Regional Sector Leaders recognitions



About the company

ESR is APAC's largest real asset manager powered by the New Economy and the third largest listed real estate investment manager globally. With US\$150 billion in total assets under management, our fully integrated development and investment management platform extends across key APAC markets, including China, Japan, South Korea, Australia, Singapore, India, New Zealand, and Southeast Asia, representing over 95% of GDP in APAC, and includes an expanding presence in Europe and the U.S. We provide a diverse range of real asset investment solutions and New Economy real estate development opportunities across our private funds business, which allow capital partners and customers to capitalise on the most significant secular trends in APAC. ESR is the largest sponsor and manager of REITs in APAC with a total AUM of approximately US\$46 billion.

Governance Structure: how the board reviews progress made against ESG-related goals and targets with an explanation of how they relate to the issuer's businesses.

The Board of Directors provides the overall stewardship and strategic direction on sustainability management. The Board reviews progress made against ESG related targets from the ESG 2025 Roadmap disclosed in this report and receives regular ESG updates during board meetings. Working closely with the Group Leadership team and led by the ESG Committee, material ESG issues are regularly reviewed and considered in the strategy formulation by the Board and senior management at the quarterly Board meetings and other ad-hoc meetings as and when required.

Understanding perspectives from our key stakeholders is critical to aligning our ESG efforts with their expectations. We conducted an updated assessment of our material ESG factors to reflect the evolving trends and market practices. ESR participates regularly in globally recognised benchmarks and ratings which provide valuable feedback on ESG performance compared to industry peers.

Our report complies with relevant provisions from HKEX Main Board Listing Rule 13.91, ESG Reporting Guide and the GRI Standards from the Global Reporting Institute. ESR commissioned Hong Kong Quality Assurance Agency (HKQAA) to conduct an independent limited assurance of Environmental, Social Data and Solar Power Generation datasets as indicated in the ESG data summary and the ESG performance against the ESG 2025 Roadmap targets as disclosed within this report.

— Environmental, Social and Governance Report 2022 of ESR Group Limited

ESG Pillar	2025 Targets & Status	Status
Human Centric	<p>Human Centric</p> <p>The first Pillar of our ESG Framework, Human Centric focuses on the social aspect of our operations, covering areas relating to both our internal and external stakeholders.</p> <p>Human Centric</p> <p>Human Centric</p> <p>Human Centric</p>	<p>Human Centric</p> <p>Human Centric</p> <p>Human Centric</p> <p>Human Centric</p>
Property Portfolio	<p>Property Portfolio</p> <p>The second Pillar of our ESG Framework, Property Portfolio focuses on the environmental and climate aspects of our operations, covering areas relating to both our internal and external stakeholders.</p> <p>Property Portfolio</p> <p>Property Portfolio</p> <p>Property Portfolio</p>	<p>Property Portfolio</p> <p>Property Portfolio</p> <p>Property Portfolio</p> <p>Property Portfolio</p>
Corporate Performance	<p>Corporate Performance</p> <p>The third Pillar of our ESG Framework, Corporate Performance focuses on the corporate performance of our business, in the areas of corporate governance, risk management, responsible investment and disclosure and reporting.</p> <p>Corporate Performance</p> <p>Corporate Performance</p> <p>Corporate Performance</p>	<p>Corporate Performance</p> <p>Corporate Performance</p> <p>Corporate Performance</p> <p>Corporate Performance</p>

Source: Environmental, Social and Governance Report 2022 of ESR Group Limited, the Official Website of ESR Group Limited

Case Study 2: Introducing new compliance requirements for systematic disclosures of climate-related information



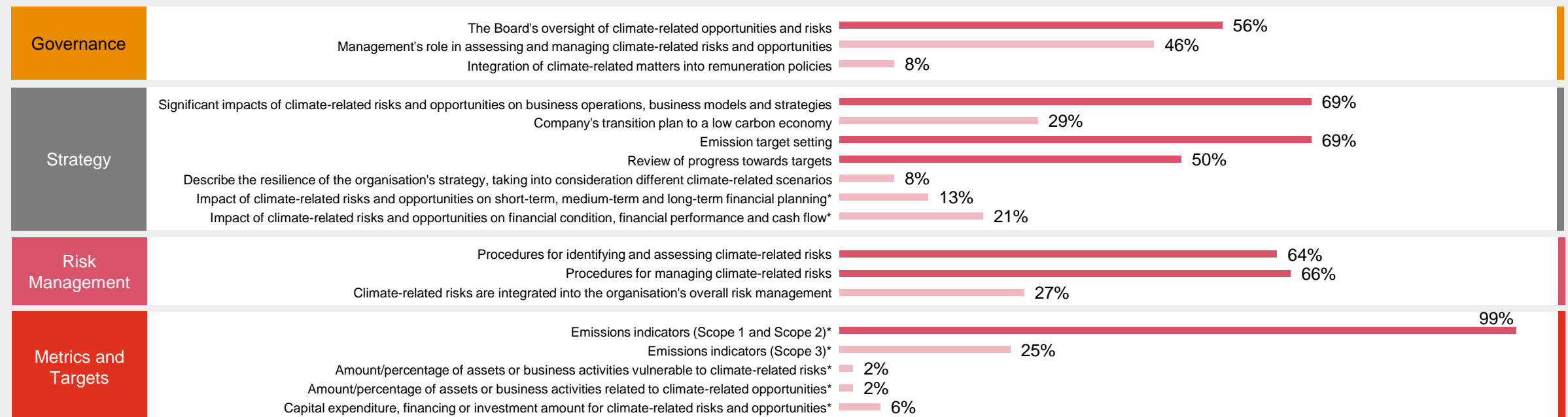
Climate change and sustainability issues have become a common challenge for humanity. On 14 April 2023, HKEX published the Consultation Paper seeking feedback from the market. It proposed to mandate all listed issuers to include climate-related disclosures in their ESG reports and introduce new climate-related disclosure requirements aligned with the ISSB Climate Standard in the new Part D of Appendix 27 to the Listing Rules. The climate-related disclosure requirements proposed by HKEX covers the four core pillars of governance, strategy, risk management and metrics and targets, and provides detailed requirements for climate information disclosure.



Current status of climate-related disclosures

PwC has conducted a forward-looking study on climate-related disclosures in the fiscal year 2022 ESG reports of sampled companies, focusing on the recommendations and requirements of the Consultation Paper. The study aims to provide an preliminary analysis of the current gaps between the ESG disclosures of listed companies and the standards required by the Consultation Paper, so that companies can identify areas for improvement and better prepare for upcoming requirements. The result shows that most of the sample companies have already disclosed in their reports the Scope 1 and Scope 2 GHG emissions and other climate-related metrics mentioned in HKEX's current ESG reporting guide. However, there still remains a significant disparity in the disclosure of additional metrics outlined in the consultation paper, including Scope 3 emissions data and transition plans towards a low-carbon economy. It is foreseeable that with the improvement of ESG reporting guides, which covers climate-related disclosures, the disclosure and management of ESG reports by listed companies will also be enhanced. This will likely lead to higher-quality ESG reports and climate-related disclosures.

Based on the climate-related disclosure requirements mentioned in the Consultation Paper, the sampled listed companies have different disclosure ratios for each metrics.



*Refer to the metrics with transition requirements. For details, please refer to HKEX's Consultation Paper on Enhancement of Climate-related Disclosures Under the Environmental, Social and Governance Framework.

Climate-related disclosure: Strategy

Guidance interpretation

In addition to the existing regulations, the Consultation Paper proposes more detailed disclosure requirements in four aspects, namely, climate-related risks and opportunities, transition plans, climate resilience and financial effects of climate-related risks and opportunities. The aim is to encourage issuers to comprehensively disclose the actual or potential impact of climate-related risks and opportunities on their business, strategies, and financial planning, so that investors and stakeholders can assess risks, monitor the progress of transition plans, and thus effectively allocate capital and make decisions.



Data analysis and interpretation

According to the study:

69% of the samples disclosed the significant climate-related risks and opportunities and their impacts. Among them:

67% and **61%** of the samples disclosed physical risks and transition risks, respectively

69% of the samples set qualitative or quantitative emission targets, and 50% of the samples reviewed the progress towards the targets

29% of the samples developed transition plans towards low-carbon economy

8% of the samples considered different climate scenarios to assess the climate resilience of the company

- Most of the samples have recognized the importance of climate change issues. They have identified climate-related risks and opportunities that impact their business, strategies and financial planning, including transition risks and transformation risks, and have established corresponding qualitative or quantitative emission targets. A small number of the samples have disclosed transformation plans to address identified risks.
- A small number of samples have conducted climate scenario analysis to assess their climate resilience and have disclosed the current and expected impacts of related risks and opportunities on their financial performance.

Climate-related disclosure: Governance

Guidance interpretation

In addition to the existing regulations, the Consultation Paper emphasises the leadership role of the board in addressing climate-related risks and opportunities. It highlights that the board should include climate-related risks and opportunities in their discussions on ESG matters and incorporate sustainable development into their strategic planning to enhance the effectiveness of management actions.



Data analysis and interpretation

According to the study:

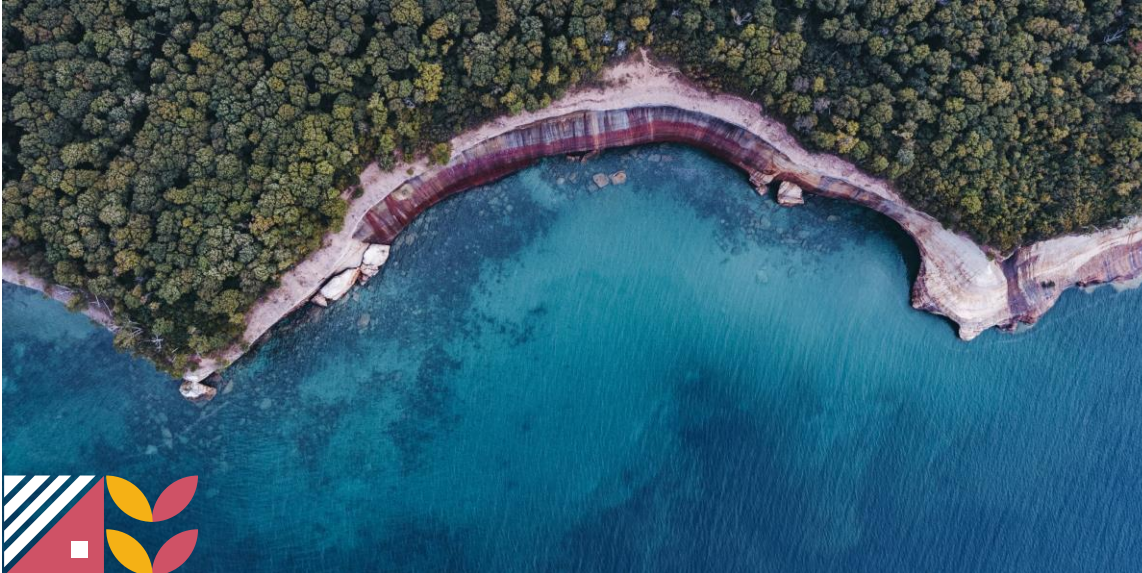
- 56%** of the samples disclosed the board's oversight responsibilities for climate-related risks and opportunities
- 46%** of the samples disclosed the assessment and management of climate-related risks and opportunities by the management
- 8%** of the samples incorporated climate-related KPIs into their remuneration policies

- HKEX requires listed companies to disclose the role of the board/committees and senior management on climate change issues.
- Listed companies should make it a responsibility for the board to discuss climate change issues, establish a sound organization and management structure, have the board oversee the assessment of climate-related risks and opportunities in the company's strategies, decision-making and risk management policies, and oversee the setting of climate-related targets and regularly review the progress.
- The board or management should consider enhancing the management of climate-related risks and opportunities, such as incorporating climate-related KPIs into remuneration policies.

Climate-related disclosure: Risk management

Guidance interpretation

On the basis of existing regulations, the Consultation Paper focuses on encouraging issuers to identify significant climate-related risks and the anticipated impacts of the risks on their operations, so that investors and stakeholders can understand how issuers identify, assess and address climate-related risks that may have a significant impact on their business and whether sufficient procedures have been implemented to identify, assess and manage climate-related risks.



Data analysis and interpretation

According to the study:

64% of the samples disclosed the process for identifying and assessing climate-related risks and opportunities

66% of the samples disclosed the procedures for managing climate-related risks and opportunities

27% of the samples integrated climate-related risk management into the overall enterprise risk management process

- More than half of the sampled companies explicitly disclosed the processes employed to identify and assess climate-related risks and opportunities.
- A small number of sample companies not only disclosed how they monitor and manage climate-related risks, but also proactively integrated them into the company's risk management processes.

Climate-related disclosure: Metrics and targets

Guidance interpretation

The Consultation Paper added new disclosure requirements for climate-related metrics and targets, including greenhouse gas emissions, risks and opportunities, and remuneration policies, aiming to help investors and stakeholders assess a company's carbon footprint, understand the climate-related risks and potential financial vulnerabilities, and gain insights into the company's strategies for mitigating or adapting to these risks.



Data analysis and interpretation

99% of the samples disclosed Scope 1 and Scope 2 emissions

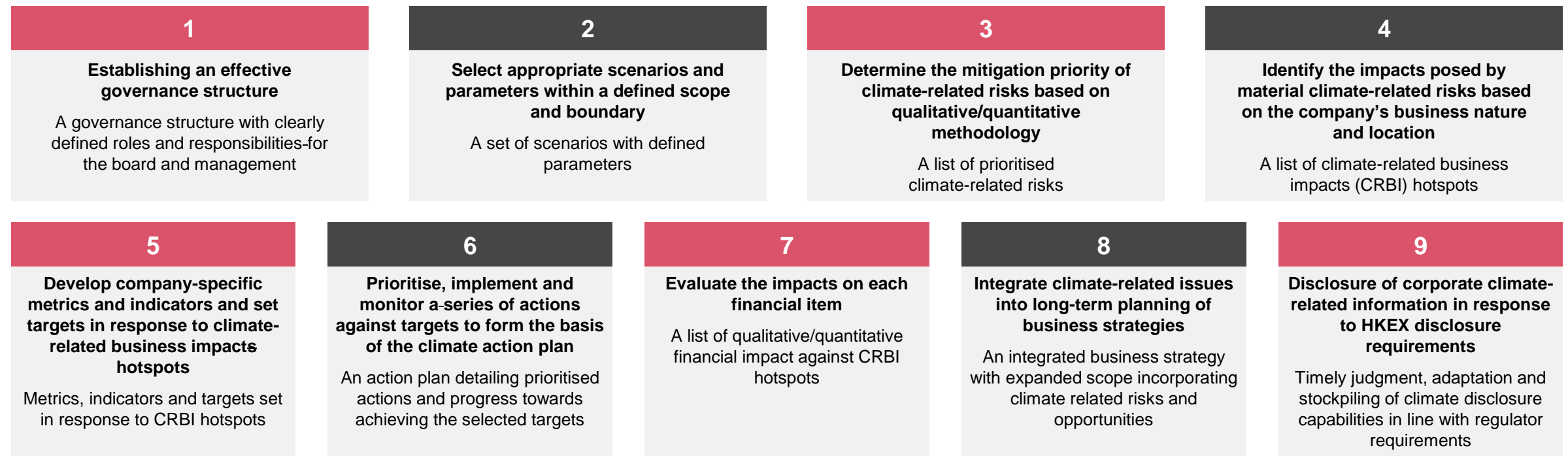
25% of the samples disclosed Scope 3 emissions

2% of the samples disclosed the amount/percentage of assets or business activities vulnerable to climate-related risks, **2%** of the samples disclosed the amount/percentage of assets or business activities exposed to climate-related opportunities, and **6%** of the samples disclosed the amount of capital expenditure, financing, or investment allocated to climate-related risks and opportunities

- Compared with HKEX's existing ESG Reporting Guide, the Consultation Paper added disclosure requirements for Scope 3 emissions, which set higher standards for the management of GHG emissions across the entire value chain of listed companies. A small number of sampled companies disclosed the data of Scope 3 emissions.
- Listed companies should accurately and comprehensively identify the sources and scenarios of the GHG emissions and disclose Scope 1, Scope 2 and Scope 3 emissions in line with their responsibility boundaries.
- Listed companies should further identify company assets and business activities vulnerable to climate change, strengthen the management of climate-related indicators and establish a data base for climate information disclosure in order to properly assess and mitigate the financial impacts of climate change.

Recommendations for climate-related disclosures

PwC advises issuers to familiarise themselves with the guide and related transitional plans in advance, gain a thorough understanding of the key points of disclosure required by HKEX and ISSB, and follow the strategic steps below to meet the regulatory requirements and market expectations as well as to prepare for the challenges of complying with the disclosure requirements.



Resource: HKEX Guidance on Climate Disclosures, PwC On the Brink: Shedding Light on the Hong Kong Stock Exchange's Consultation Paper on Enhancing Climate Disclosure under the Environmental, Social and Governance Framework



Examples of ESG disclosure for Hong Kong listed companies

Climate-related governance: The board of Fosun International Limited has effectively implemented carbon neutral management across the Group in line with its approach to monitoring and managing climate-related opportunities and risks



Fosun International Limited



ESG awards/ratings

- MSCI ESG Ratings: AA
- Hang Seng Indexes Sustainability Rating: AA-
- Constituent of Hang Seng Corporate Sustainability Index (HSSUS)
- Constituent of FTSE4Good Index Series



About the company

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 that promotes health, happiness, and wealth for one billion families. In 2007, Fosun International Limited was listed on the main board of the Hong Kong Stock Exchange (Stock Code: 00656.HK), total assets of the Group amounted to RMB834.9 billion. Fosun International received an MSCI ESG rating of AA and it is the only conglomerate in Greater China with such rating.

Management's role in assessing and managing climate-related risks and opportunities

"...Carbon Neutrality Governance: In order to further push forward the "2050 Carbon Neutrality Goal" of Fosun, the Group has established a Carbon Neutrality Committee and a Carbon Neutrality Working Group, with carbon neutrality led and progressed by the EHSQ Department. The Carbon Neutrality Committee, composed of directors of the Group and directors of member companies, is responsible for supervising and promoting the overall carbon neutrality strategy, and regulating and monitoring climate-related risks and opportunities. The Carbon Neutrality Working Group, led by senior management of the Company's key departments involving carbon neutrality, is responsible for implementing and driving carbon neutrality tasks, and regularly reporting achievements to the Carbon Neutrality Committee. Performance Incentives for Climate Management: We have added the indicator of "carbon neutrality management" to the ESG management performance appraisal mechanism of responsible persons of each business segment of the Group, with the aim of further assessing the achievement rate of carbon-neutral projects of their managing operating entities, promoting further implementation and enforcement of carbon-neutral management across the Group."

— TCFD Report 2022 of Fosun International Limited



Source: TCFD Report 2022 of Fosun International Limited, ESG Report 2022 of Fosun International Limited, the Official Website of Fosun International Limited

Examples of ESG disclosure for Hong Kong listed companies

Emission target setting: Mengniu Group set climate-related GHG emission targets and formulated corresponding strategies for carbon emission reduction

China Mengniu Dairy Company Limited



ESG awards/ratings

- MSCI ESG Ratings: A
- Top 1 in the SASAC Central Enterprise ESG Pioneer 50 Index (2022)
- The 17th People's Corporate Social Responsibility Award for Green Development, and China Charity Award



About the company

China Mengniu Dairy Company Limited is a leading dairy company, ranking among the top seven dairy companies in the world. Founded in 1999 and headquartered in Hohhot, Inner Mongolia Autonomous Region, China, Mengniu was listed in Hong Kong, China in 2004 and was a constituent of the Hang Seng Index and the Hang Seng China Enterprises Index. The company was reelected as a constituent of the Hang Seng Corporate Sustainability Index in 2022.

Disclosure of any climate-related targets set by the issuer to respond to climate-related risks and opportunities and any GHG emission targets required by local laws and regulations

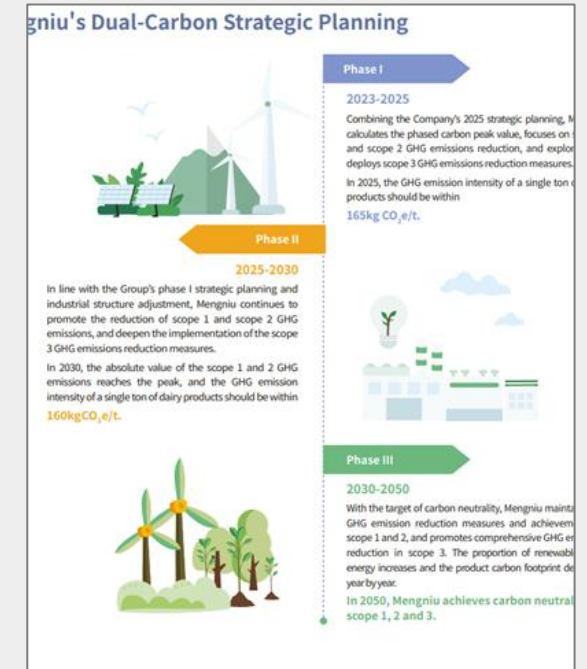
"Mengniu has established a climate change response strategy. We have set carbon reduction targets, planned and fulfilled key carbon reduction pathways. At the scope 1 and scope 2 aspects, we actively carry out our own carbon emission management, practice emission reduction, energy conservation, and renewable energy utilisation projects. In terms of scope 3, we carry out value chain collaboration on carbon reduction. We collaborate with partners to implement carbon reduction practices, and reduce product carbon footprints. At the same time, we carry out climate change scenario recognition, climate change risk and opportunity analysis, and climate impact evaluation on the Company in terms of operation and finance..."

Phase I (2023-2025): In 2025, the GHG emission intensity of a single ton of dairy products should be within 165kgCO₂e/t;

Phase II (2025-2030): In 2030, the absolute value of the scope 1 and 2 GHG emissions reaches the peak, and the GHG emission intensity of a single ton of dairy products should be within 160kgCO₂e/t;

Phase III (2030-2050): In 2050, Mengniu achieves carbon neutrality in scope 1, 2 and 3."

— Sustainability Report 2022 of China Mengniu Dairy Company Limited



Source: Sustainability Report 2022 of China Mengniu Dairy Company Limited, Mengniu Official Website

Examples of ESG disclosure for Hong Kong listed companies

Climate-related disclosure: Guangdong Investment Limited implemented a systematic approach to climate-related risk management, including identifying climate-related risks and opportunities and developing countermeasures at its sub-business segments

Guangdong Investment Limited



ESG awards/ratings

- MSCI ESG Ratings: BBB
- Guangdong-Hong Kong-Macao Greater Bay Area SOEs ESG Index
- 2022 Wind ESG Best Practice Award (H Shares)



About the company

As a comprehensive company listed on the Main Board of HKEX, Guangdong Investment Limited operates six major business segments, including water resources, property investment and development, energy projects, department store operations, road and bridge construction and hotel operation and management.

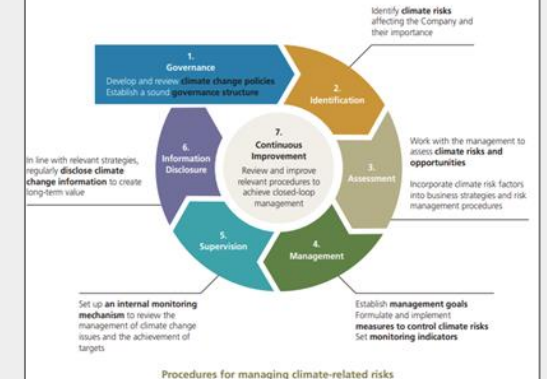
Climate-related information — systematic disclosure of the process of managing climate-related risks

"In response to the 14th Five-Year Plan of China and the national goals to peak carbon dioxide emissions and achieve carbon neutrality, the Company has developed the Climate Change Policy of Guangdong Investment Limited to specify the management approach of the Group and various business segments on climate change issues. This policy sets out our strategy and commitments to addressing climate change, which provides guidelines for subsidiaries and suppliers to incorporate climate change, energy conservation and emissions reduction and other considerations into each phase of their business operating cycle, including but not limited to project investment, design, development and operation. Based on this, we can strengthen climate change management and mitigate the impact of climate change on business, environment and society. We conduct our business in full compliance with policies and regulatory requirements. Each business segment has formulated respective business development and performance improvement plans in response to the market demand for green and low-carbon products and services and continues to improve performance through innovation and technological upgrading so as to achieve sustainable and low-carbon operations. The Company continuously identifies, assesses and manages climate-related physical and transition risks to integrate the risks to its operation. We have established a system designed for risk assessment and management and specified procedures to identify, assess, respond to, monitor and update climate risks, so as to ensure effective closed-loop management.

— Environmental, Social and Governance Report 2022 of Guangdong Investment Limited

CLIMATE CHANGE RISK AND OPPORTUNITY IDENTIFICATION, ANALYSIS AND MANAGEMENT

The Company continuously identifies, assesses and manages climate-related physical and transition risks, integrates the risks into its operation. We have established a system designed for risk assessment and management and specified procedures to identify, assess, respond to, monitor and update climate risks, so as to ensure effective closed-loop management.



The Company fully considers the potential long-term impacts of climate change on the macro market environment, key stakeholders, facilities and business development. Based on the study of policies and regulations, background research, peer benchmarking and historical data, we systematically identify the climate-related risks and opportunities that GDI faces to analyse the impacts on the operations of business segments. The scope of analysis includes extreme, acute and chronic climate phenomena caused by climate change, as well as changes in policy, technology and market.

Source: Environmental, Social and Governance Report 2022 of Guangdong Investment Limited, the Official Website of Guangdong Investment Limited

Examples of ESG disclosure for Hong Kong listed companies

Metrics and Targets: The Hong Kong and China Gas Company Limited conducted a climate-related scenario analysis and assessed climate-related financial impacts

The Hong Kong and China Gas Company Limited



ESG awards/ratings

- Dow Jones Sustainability Asia Pacific Index 2022
- MSCI ESG Ratings: A
- HKICPA Best Corporate Governance and ESG Awards 2022 - ESG Awards (Hang Seng Index Category)



About the company

Towngas, also known as The Hong Kong and China Gas Company Limited, is Hong Kong's first public utilities company founded in 1862. With a strong foundation built on trust, Towngas supplies town gas and offers a comprehensive range of gas applications. We are also proactively expanding low-carbon businesses such as smart energy, urban waste utilisation and energy efficiency, to provide customers with sustainable energy solutions. As part of our commitment, we aim to be a leading clean and smart energy supplier and actively supporting the goal of achieving carbon neutrality through technology and innovation in Hong Kong, on the Chinese mainland, and beyond.

Metrics and Targets: Metrics and Targets-emission indicators and climate-related financial indicator of amount of assets or business activities vulnerable to climate-related risks

"In alignment with the TCFD recommendations, we conducted a comprehensive climate scenario analysis and evaluated the potential financial impacts of climate change. This analysis helps us to factor in climate-related impacts when making business decisions."

— Environmental, Social and Governance Report 2022 of The Hong Kong and China Gas Company Limited



Climate-Related Financial Disclosures

The table below shows the financial impacts of potential risks under scenarios with the most significant negative effect on the Group's business in 2050.

	Risk	Scenario	Type of Impact	Financial Impact (HK\$ million)		
				<500	500-1,500	>1,500
1.5°C scenario	Transition	Policy and Legal	EBITDA ¹			•
		Market	EBITDA ¹			•
		Technology	Expenditure	•		
		Reputation	Expenditure	•		
4°C scenario	Physical	Acute	Expenditure		•	
		Chronic	EBITDA ¹	•		

¹ For gas, water and related businesses in Hong Kong and the Chinese mainland

Source: Environmental, Social and Governance Report 2022 of The Hong Kong and China Gas Company Limited, the Official Website of The Hong Kong and China Gas Company Limited

Case Study 3: Integrating ESG management into supply chain to stay ahead

According to PwC's 26th Annual Global CEO Survey China Report, 52% of CEOs from the Chinese Mainland and Hong Kong anticipate a significant impact on their supply chain due to climate risk in the next 12 months. As ESG risks in the supply chain are surging, supply chain sustainability has been placed in the spotlight. HKEX's ESG Reporting Guide offers a guidance for supply chain ESG management by requiring listed companies to disclose their practices in this regard, with emphasis placed on green procurement and supply chain ESG risks identification. In face of stricter regulations and intensified climate risks, the enhancement of the supply chain ESG risk identification mechanism and the management of the ESG impacts of supply chain will not only contribute to listed companies' ESG compliance, but also to their long-term sustainability and organisational resilience.

Current status of supply chain ESG management and disclosure

Guidance interpretation

Supply chain is an important part of enterprises' sustainable operation and successful transition to low-carbon economy. In the ESG Reporting Guide, HKEX requires companies to describe in their ESG reports how they identify environmental and social risks in supply chain and their practices to promote green procurement, urging companies to practice supply chain ESG management for sustainability.



Data analysis and interpretation

According to the study:

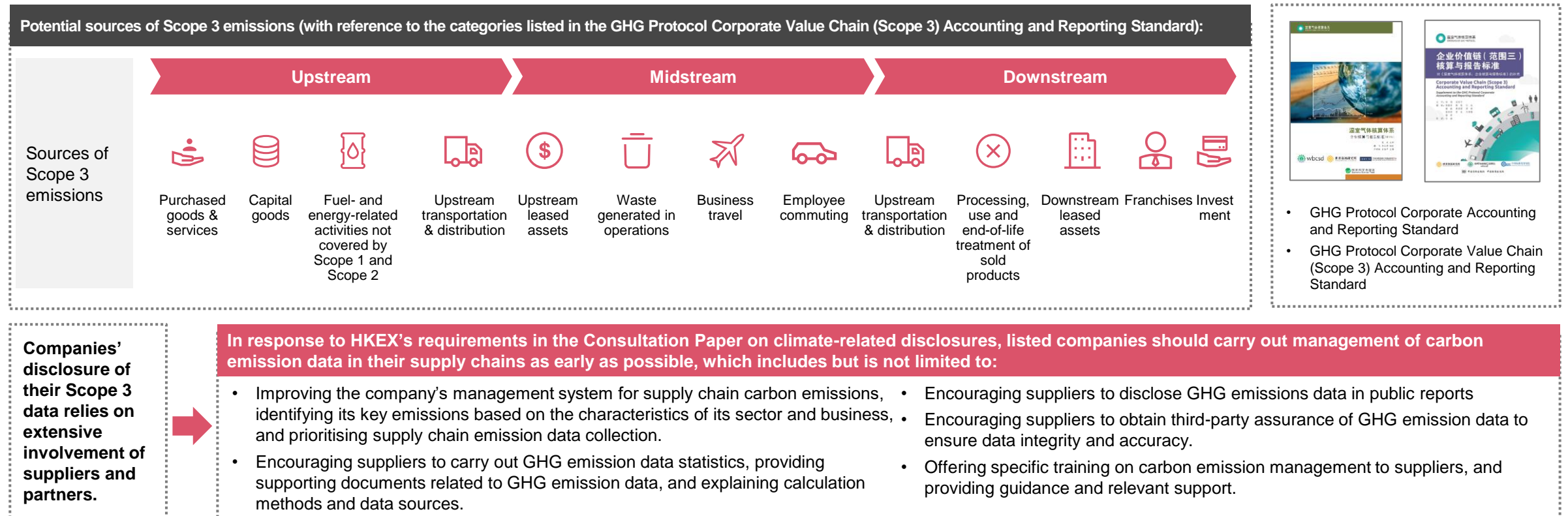
79% of the sampled companies have disclosed the description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.

76% of the sampled companies have disclosed the description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.

- HKEX requires listed companies to disclose their practices used to identify environmental and social risks in their supply chains, some sampled companies disclosed general practices for implementation and monitoring.
- HKEX requires listed companies to disclose practices for promoting green procurement. While some sampled companies disclosed their considerations for procurement, there is room for further improvement to provide detailed information about their green procurement practices.

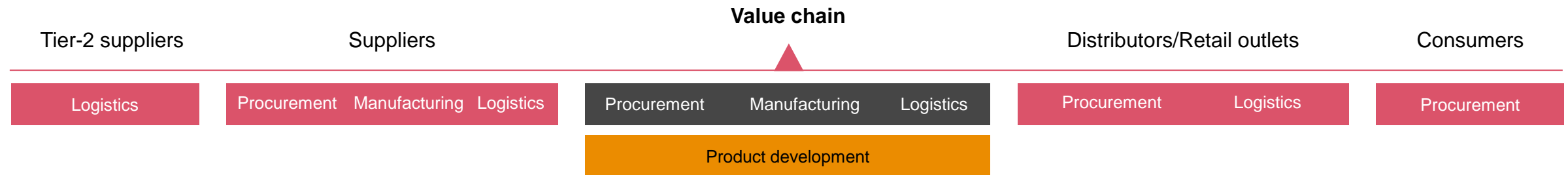
Management of supply chain carbon emission data

HKEX has added metrics of Scope 3 GHG emissions in its Consultation Paper on climate-related disclosures, and required that the disclosure categories of Scope 3 emissions be consistent with the GHG Protocol. According to the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard, Scope 3 emissions fall within 15 categories that cover the carbon footprint in the whole life cycle of products. This requires companies to not only improve their own carbon data management but also attach more attention to and take early action on the management of supply chain carbon emission data.



Strengthening supply chain ESG management

We recommend that companies manage the environmental, social and governance (ESG) impacts of their supply chains through the supplier network, so as to promote the sustainability of value chains for long-term value creation.



Key measures for building a sustainable value chain:

	Product development	Procurement	Manufacturing	Logistics	Return/Recycle
Environment	Multi-purpose designs and recyclable designs	Sustainable procurement of raw materials	Clean production processes and technologies	Simple or recyclable packaging materials Higher fuel efficiency	Efficient recycle or return channels
Society	Consideration of populations in underdeveloped regions	Investment in infrastructure facilities to improve procurement efficiency	Training for management personnel and staff of suppliers to reduce non-compliance and costs	Working with small businesses and selling in niche markets	Reuse products for populations in underdeveloped regions
Economy	Supporting capacity-building, job creation and economic development	Local procurement to enhance supply chain resilience and reduce costs	Building manufacturing clusters to increase supply chain efficiency	Expanding and sharing the local market	Working with product disassemblers and recyclers
Ethics	Protecting intellectual property	Prioritising ethically sound suppliers and distributors	Mitigating the risk of counterfeiting	Prioritising ethically sound transport service providers	Ethical handling of waste

Examples of ESG disclosure for Hong Kong listed companies

Supply chain ESG management: Hengan International Group proactively identifies and manages supply chain ESG risks

Hengan International Group Company Limited



ESG awards/ratings

- MSCI ESG Rating: BBB
- Constituent of FTSE4Good Index Series
- Hang Seng Indexes Sustainability Rating: A-
- “2022 Forbes China Top 50 Sustainable Development Industrial Enterprises”



About the company

Hengan, established in 1985, is a well-known domestic manufacturer of packaged tissue paper and women and children hygiene products. Hengan was successfully listed on the Stock Exchange of Hong Kong on 8 December 1998. Hengan adheres to the spirit of “Integrity, Diligence, Innovation and Dedication”, and takes “Growing with you for a better life” as mission, and endeavors to become international top-tier supplier of daily products through ongoing innovations and provision of premium products and services.

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

“Hengan International Group requires suppliers to provide the following information, documents and records, including factory status, quality policy and objectives, organisational structure and personnel allocation, production process, hardware facilities, customer composition, enterprise qualification, quality management system, production process management, traceability process and recall management, fire control management and pest control and prevention, chemicals and waste management. The Group will carry out assessment upon quality management, environmental and social risk (involving anti-discrimination, occupational health and safety, business ethics, compliance employment, etc.), technology R&D and service management, etc. Hengan International Group promotes a stable and sustainable supply chain, conducts regular ESG risk assessment and on-site audit of raw and auxiliary material suppliers, and continuously follows up on suppliers assessed with high ESG risk. In addition, the Group also makes comprehensive and multi-aspect assessment of suppliers with reference to the results of third-party environmental and social responsibility audits. During the supplier on-site evaluation jointly carried out by the Quality Management Department and the Procurement Platform, the Group incorporates environmental and social factors into the evaluation indicators, and mainly identifies the sustainable development risks of suppliers from the following aspects.”

— Hengan International Group Company Limited 2022 Environmental, Social and Governance Report

Supplier approval criteria mainly include:

- ✓ Environment, safety and quality standards: certificate of environmental impact assessment, certificate of work safety standardisation, pollutant discharge permit, fire safety permit, ISO 9001, ISO 9002, ISO 14001, SA 8000, ISO 45001, UL, VDE, EMC, CCEE, CE, etc.;
- ✓ Special qualifications required by special business: printing business license required by prints, relevant construction class qualification certificate required by civil engineering and construction, pressure vessel class certificate required by pressure vessels, explosion-proof qualification required by explosion-proof business, and firefighting qualification required by firefighting industry;
- ✓ Agent, trader or service provider must provide relevant distribution authorisation certificate, and manufacturers' qualification certificate for production and operation, production or business scope and main products and commodity catalogue;
- ✓ Documents that prove chemicals are toxic-free.

Supplier sustainable development management

The Group promotes a stable and sustainable supply chain, conducts regular ESG risk assessment and on-site audit of raw and auxiliary material suppliers, and continuously follows up on suppliers assessed with high ESG risk. In addition, the Group also makes comprehensive and multi-aspect assessment of suppliers with reference to the results of third-party environmental and social responsibility audits. During the supplier on-site evaluation jointly carried out by the Quality Management Department and the Procurement Platform, the Group incorporates environmental and social factors into the evaluation indicators, and mainly identifies the sustainable development risks of suppliers from the following aspects:

- ✓ Whether suppliers' internal regulations meet the requirements of relevant laws and regulations;
- ✓ Whether suppliers have passed environmental management system certification and whether any environmental pollution incidents have occurred to suppliers in the past three years, etc.;
- ✓ Suppliers' environmental and sanitary status, including environmental emergency plans, mosquito control, pollution source control, waste management, workshop/warehousing environment management, etc.;
- ✓ Suppliers' protection of employees' rights and interests (whether suppliers have passed occupational health and safety management system certification, office environment safety, whether incidents such as gender discrimination or child labour occurred to suppliers, fire training and drills, factory risk prevention, health check and job training, etc.);
- ✓ Suppliers' raw and auxiliary material source management and sub-supplier management, etc.;
- ✓ Whether suppliers' relevant products are evaluated by a third-party testing agency.

The Group regards replaceable suppliers with high amount of procurement and supplying key raw materials as key suppliers. In 2022, the Group carried out ESG on-site audit on 31 key suppliers and required 5 of them to take remediation measures. Among them, 3 suppliers improved their ESG performance after rectification.

Source: 2022 Environmental, Social and Governance Report of Hengan International Group Company Limited, the Official Website of Hengan International Group Company Limited

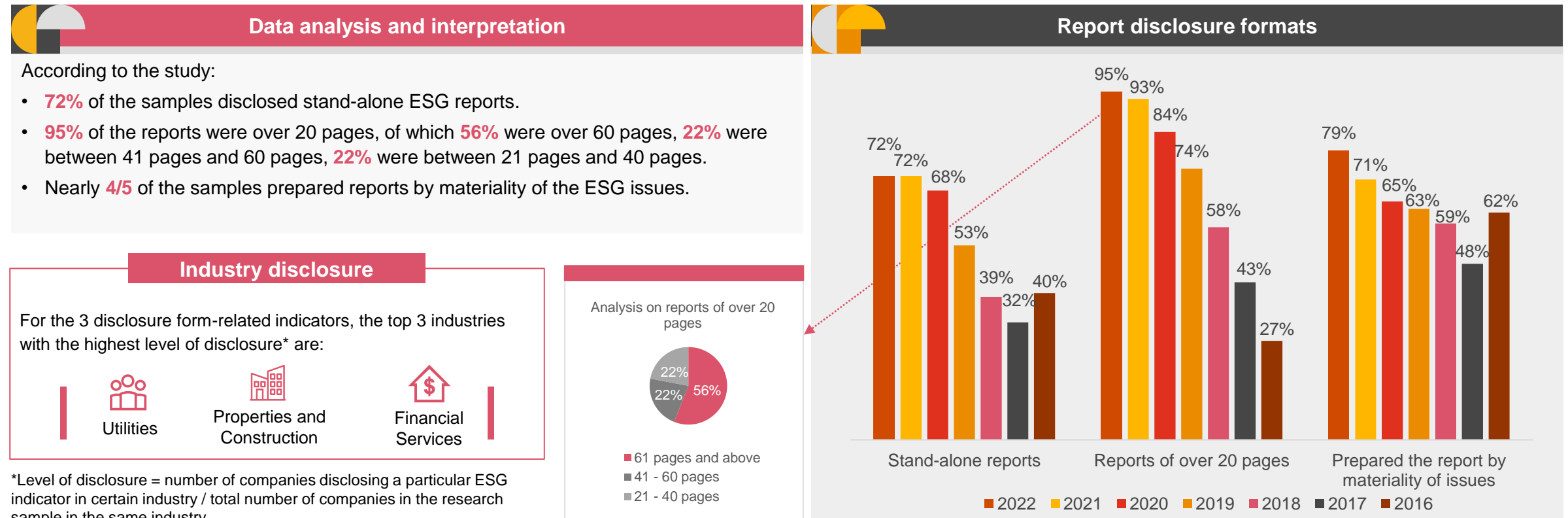
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Details of the study

- 3.1 Overview
- 3.2 Mandatory disclosure requirements
- 3.3 Management and disclosure of environmental information
- 3.4 Management and disclosure of social information

Overview: Format for disclosure

With the increasing understanding and growing importance attached to ESG information disclosure among Hong Kong listed companies, the level of ESG reports disclosure has reached new heights, with steadily rising comprehensiveness and coverage reached over the years. Most listed companies prepare independent reports on industry-specific and company-specific key issues, based on their respective operations and in compliance with the HKEX ESG Reporting Guide. Companies disclose qualitative and quantitative information in a differentiated manner, effectively addressing the ESG concerns of stakeholders with high-quality information.



Overview: Reporting standards

Hong Kong listed companies have a more diversified selection of ESG reporting standards. In addition to complying with the requirements of the ESG Reporting Guide, an increasing number of companies have incorporated other relevant reporting standards when preparing ESG reports. Companies consider business characteristics, industry priorities and local jurisdictions to meet the demands of various stakeholders regarding corporate non-financial information.

Data analysis and interpretation

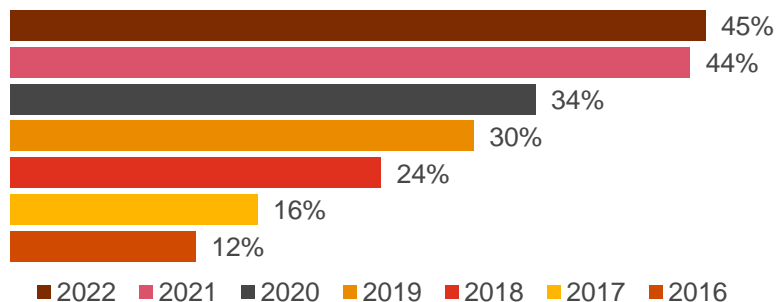
The proportion of Hong Kong listed companies following reporting standards in addition to the ESG Reporting Guide has been increasing over the years. **45%** of the samples referred to other reporting standards, among which

- The adoption rate of the Global Reporting Initiative (“GRI”) standards reached **87%**. **37%** of the samples declared use of TCFD framework. Among the top 9 reporting standards by adoption rates, 4 are China’s ESG standards.
- The selection of reporting standards by sampled companies reflects industry characteristics, indicating the increasing sophistication of China’s ESG disclosure system with industry-specific features.
- It is worth noting that some companies stated in their reports that they have used the methodologies of ESG rating agencies such as MSCI, proactively addressing investors’ concerns through ESG reporting.

45% of sampled companies referred to other reporting standards, among which**

GRI Standards	87%
TCFD Framework	37%
SSE guidelines	22%
Chinese Corporate Social Responsibility Report Preparation Guide (CASS-CSR4.0/CASS-ESG5.0)	17%
SASB Standards	13%
ISO 26000: 2010 - Guidance on Social Responsibility	8%
Methodologies of ESG rating agencies such as MSCI	7%
Guidelines of Shenzhen Stock Exchange for the Regulated Operation of Listed Companies by Shenzhen Stock Exchange (SZSE)	4%
Guidance on Social Responsibility (GB/T 36000-2015)	3%

Adoption rate of other reporting standards



*GRI: Global Reporting Initiative

**The sampled listed companies refer to several standards, therefore the adoption rate aggregates to over 100%

Industry	Industry specific guidelines	Released by
Energy	Sustainability Reporting Guidance for the Oil and Gas Industry	International Petroleum Industry Environmental Conservation Association (IPIECA)
Utilities	Guidelines for Central Enterprises to Fulfil Social Responsibilities	State-owned Assets Supervision and Administration Commission of the State Council
Financial Services	Guidelines on Corporate Social Responsibility of Chinese Banking and Financial Institutions Opinions on Strengthening the Social Responsibility of Banking Financial Institutions and Guiding Opinions on the Insurance Sector's Implementation of Social Responsibility	China Banking Association China Banking and Insurance Regulatory Commission
Properties and Construction	Guidelines on Social Responsibility of Real Estate Enterprises in Guangdong Province	Guangdong Real Estate Association
Information Technology	The Electronic Industry Citizenship Coalition (EICC) Code of Conduct	Electronic Industry Citizenship Coalition
Industries	Guidelines on the Social Responsibility for Industries of China 2.0 (GSRI-CHINA 2.0)	China Federation of Industrial Economics
Consumer Discretionary	Guidelines on the Corporate Social Responsibility Management for China Stores & E-Commerce Platforms	China Chain Store & Franchise Association

Overview: Organisation structure

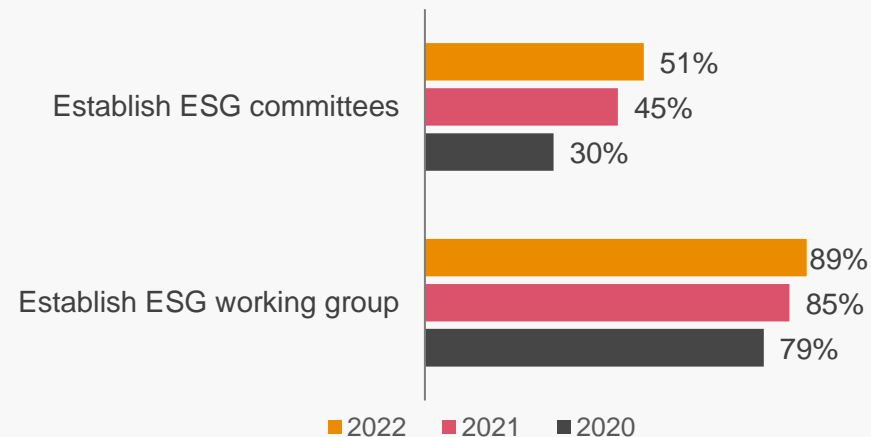
An increasing number of Hong Kong listed companies have elevated the oversight of ESG matters to the Board-level, and have established ESG committees and ESG working groups according to their specific ESG risks. This progressive enhancement of ESG governance structures reflects the growing emphasis placed by Hong Kong listed companies on ESG matters when implementing ESG strategies and driving sustainable values.

Data analysis and interpretation

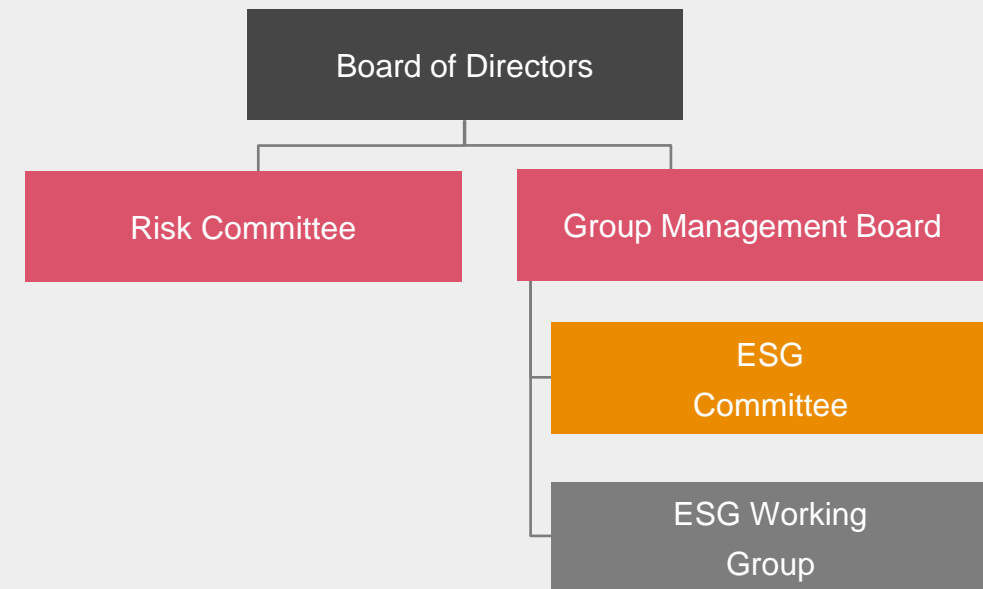
According to the study,

- **51%** of the samples have established ESG committees.
- **89%** of the samples have established ESG working groups.

Organisation structure



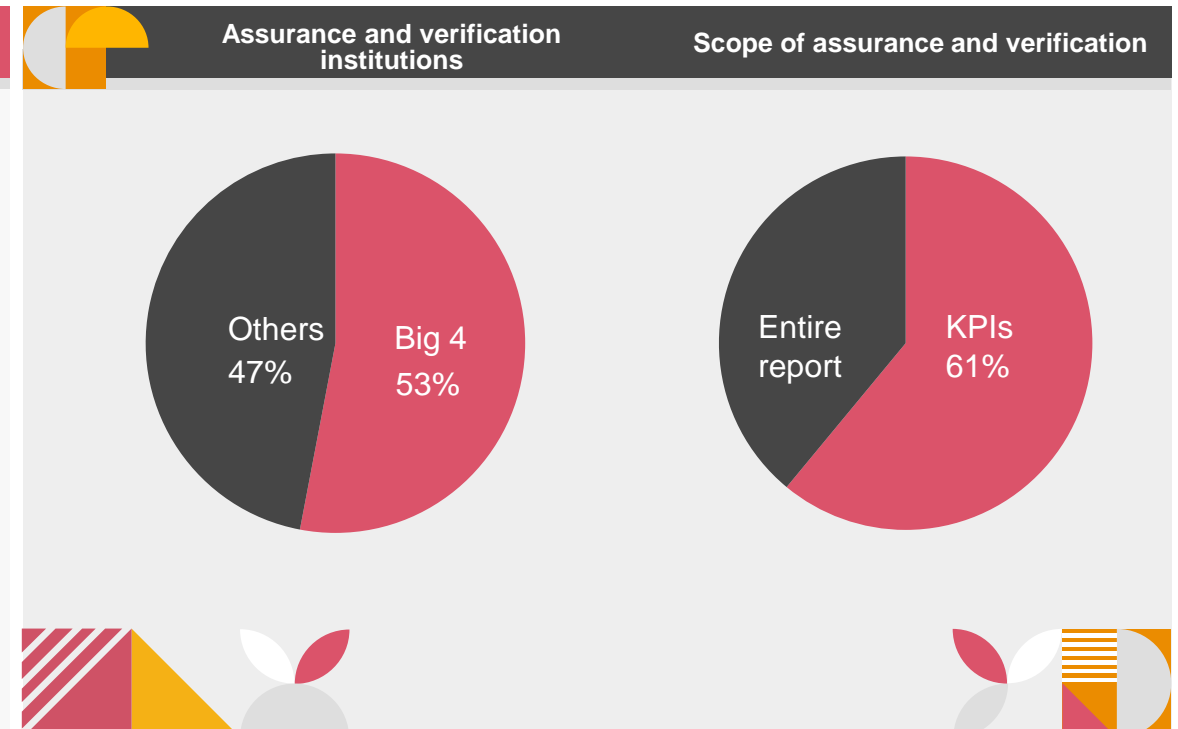
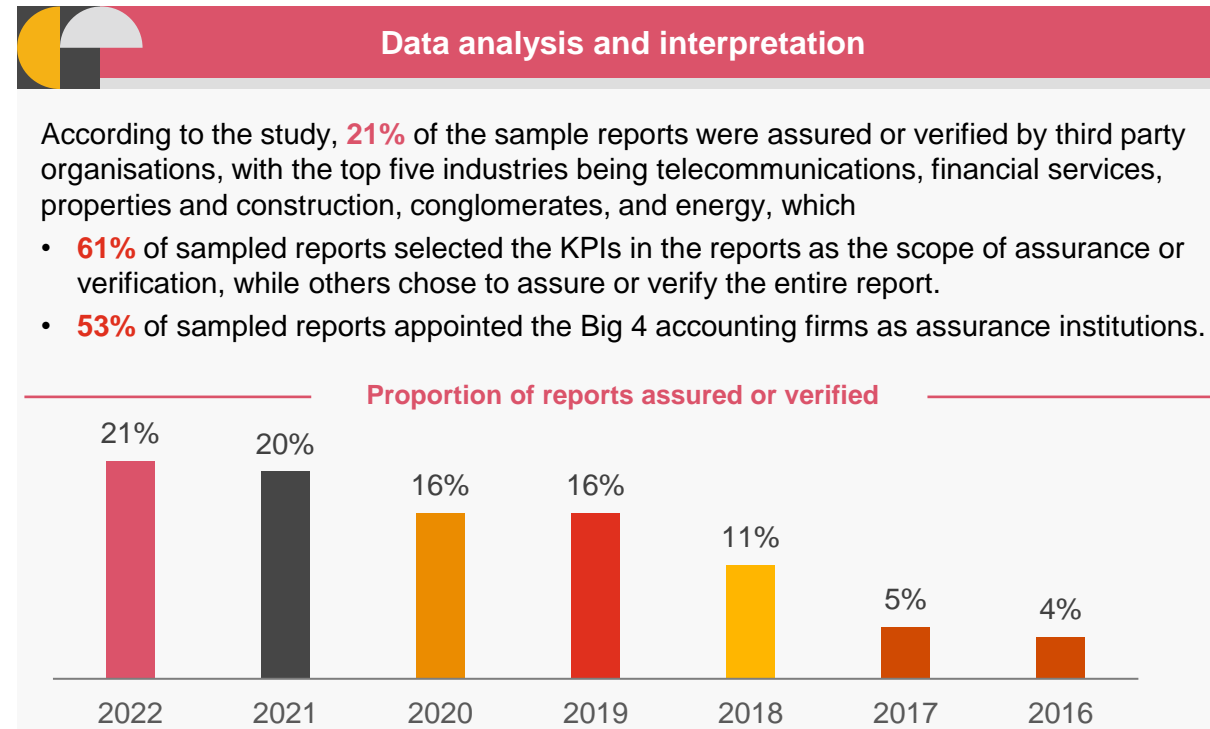
The board of directors of a listed company can establish an ESG governance structure suitable to its own business. The typical ESG governance structure is as follows:



Source: Making Inroads into Good Corporate Governance and ESG Management

Overview: Reporting assurance

The information quality and credibility of ESG data and reports have received unprecedented attention. The Corporate Sustainability Reporting Directive (CSRD) issued by EU requires in-scope companies to provide limited assurance on sustainability reports, HKEX encourages listed companies to obtain independent assurance on ESG reports, Global ESG reporting standards such as Sustainability Reporting Standards issued by GRI encourages companies to obtain independent assurance and disclose the results in their ESG reports, and IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information issued by the ISSB requires companies to state the third-party assurance of ESG disclosure indicators. Listed companies should consider obtaining independent third-party assurance on ESG reports to enhance the credibility of ESG information disclosure.



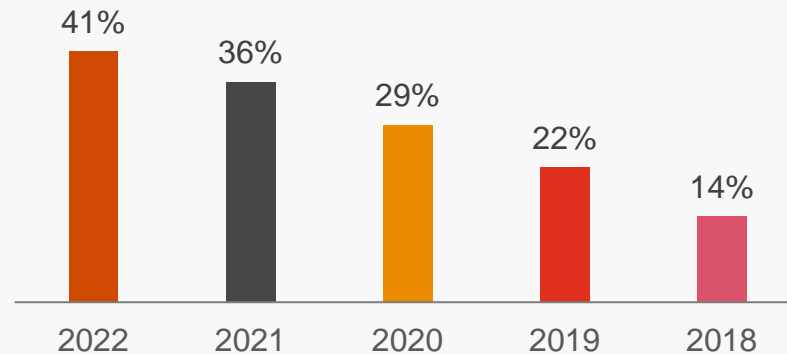
Overview: Response to UN SDGs

Data analysis and interpretation

More and more ESG reports have referred to UN SDGs over the past years. According to the study,

- **41%** of listed companies have responded to SDGs in their ESG reports, among which around **39%** have identified key SDGs and have set their targets and KPIs.

Proportion of ESG reports responding to UN SDGs



An increasing number of Hong Kong listed companies are addressing the 17 UN SDGs in their ESG reports. They have identified key SDGs and set relevant targets and KPIs based on their business characteristics, and have integrated UN SDGs with their actual ESG practice to formulate, guide, communicate and report on their ESG strategies, targets and ESG activities.

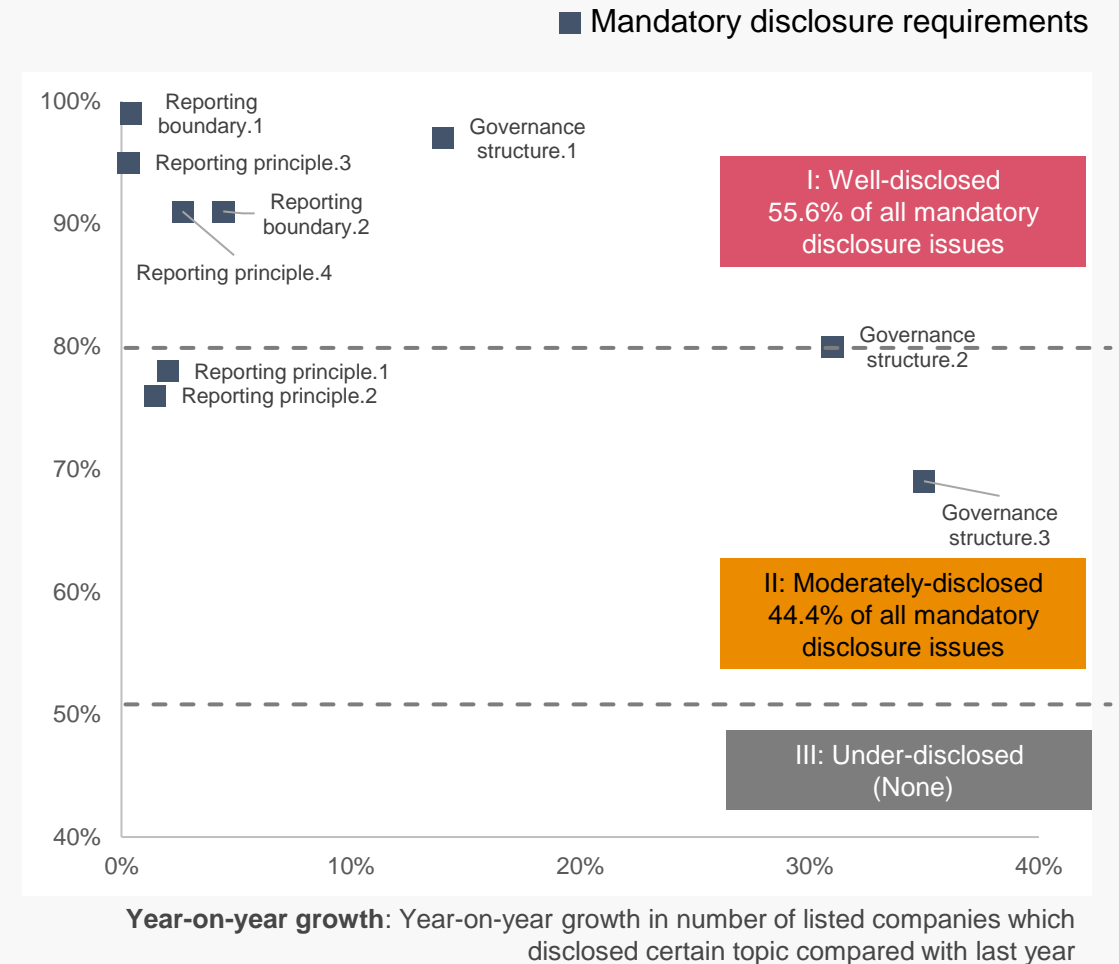


Source: The United Nations

Mandatory disclosure requirements

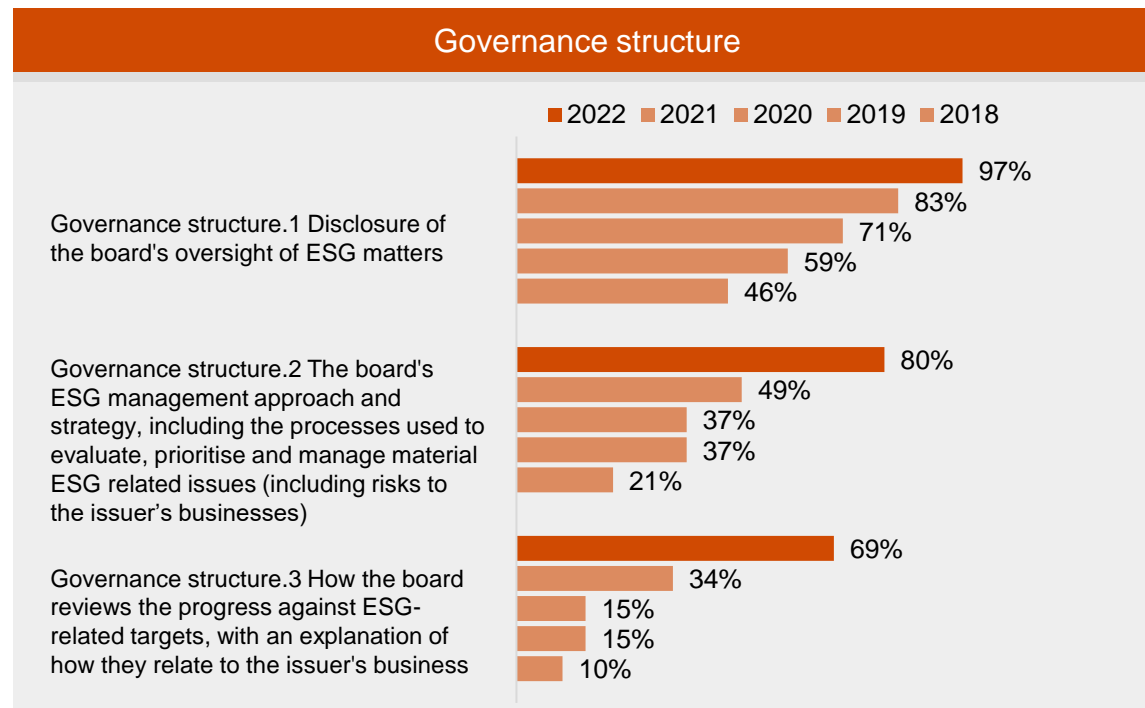
No.	Content
Governance structure.1	Disclosure of the board's oversight of ESG matters
Governance structure.2	The board's ESG management approach and strategy, including the processes used to evaluate, prioritise and manage material ESG related matters (including risks to the issuer's businesses)
Governance structure.3	How the board reviews the progress against ESG-related targets, with an explanation of how they relate to the issuer's business
Reporting principle.1	Description or explanation of the application of the reporting principles (materiality, quantitative, consistency) in preparation of ESG reports
Reporting principle.2	The process to identify and the criteria for the selection of material ESG factors
Reporting principle.3	Description of significant stakeholders identified and the process of the issuer's stakeholder engagement
Reporting principle.4	The results of the issuer's stakeholder engagement
Reporting boundary.1	Explanation of the reporting boundary of the ESG report
Reporting boundary.2	Description of the process used to identify which entities or businesses are incorporated in the report

Disclosure ratio: The ratio of listed companies which disclosed certain topic to the total number of listed companies being surveyed



Mandatory disclosure requirements: Governance structure

The board of a listed company has overall responsibility for the company's ESG management, strategy and reporting. The board needs to supervise the assessment of the company's environmental and social impacts, understand the potential impacts of ESG-related matters on the business model and associated risks, evaluate significant ESG-related matters, develop an ESG strategy that is conducive to the company's long-term development, set ESG management targets with guiding significance, supervise the implementation of various ESG policies, and regularly review the progress towards the targets. Additionally, in accordance with the requirements of the consultation paper issued by HKEX, listed companies shall timely disclose how climate-related considerations are factored into remuneration policy, and further improve the internal management mechanisms to achieve sustainability objectives.



Classification of this issue in the maturity model

I: Well-disclosed

Governance structure.1

II: Moderately-disclosed

Governance structure.2
Governance structure.3

III: Under-disclosed

Industry disclosure

As for the 3 governance structure related indicators,

- Top 3 industries with the highest level of disclosure:



financial services



energy



conglomerates

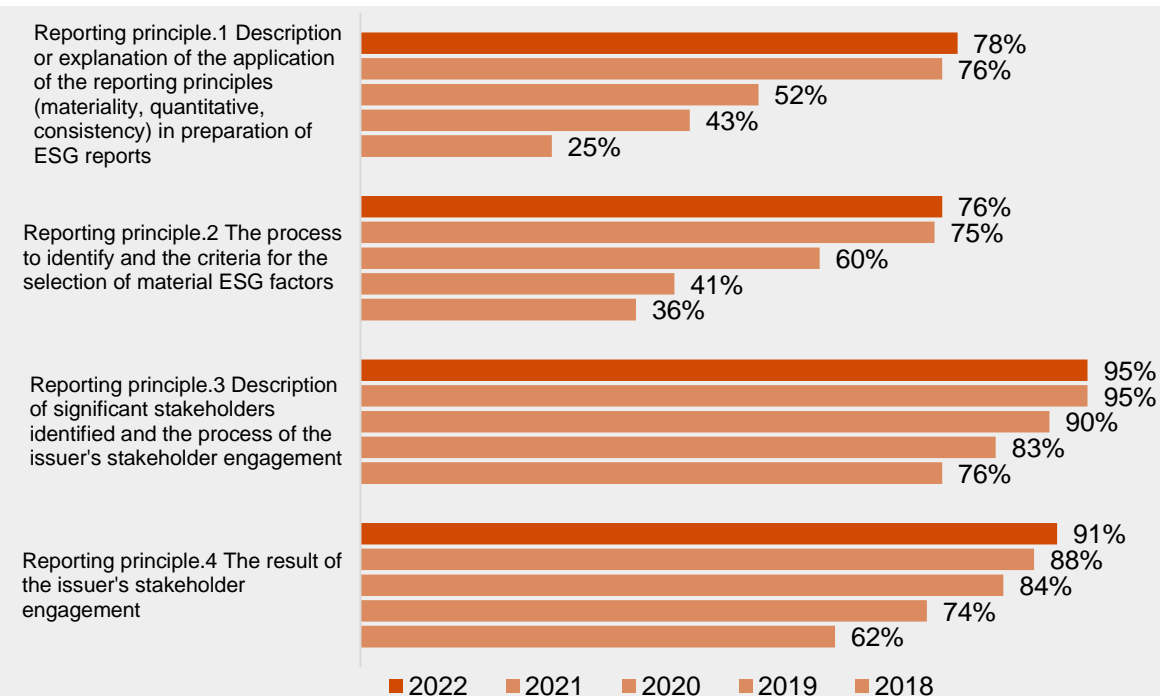
Data analysis and interpretation

There is still room for improvement in the disclosure of indicators related to governance structure. According to the study,

- 97%** of the samples have disclosed the board's oversight of ESG matters.
- 80%** of the samples have disclosed the board's ESG management approach and strategy.
- 69%** of the samples have disclosed the board's concern about ESG-related targets.

Mandatory disclosure requirements: Reporting boundary

Listed companies should base their ESG reporting and decision-making on the principles of "materiality", "quantitative", "balance" and "consistency" to ensure the relevance, reliability and timeliness of disclosure. Listed companies should conduct a materiality assessment to identify "material" issues, or adopt the CSRD's "double materiality" principle which considers both "financial materiality" and "impact materiality" in managing and disclosing ESG matters. For the routine practice of ESG information collection and management, listed companies should adhere to the "quantitative" principle to make accurate statistics and records of ESG data, while complying with the "consistency" principle to maintain data continuity and comparability.



Classification of this issue in the maturity model

I: Well-disclosed

Reporting principle.3
Reporting principle.4

II: Moderately-disclosed

Reporting principle.1
Reporting principle.2

III: Under-disclosed

Industry disclosure

As for the 4 reporting principles related indicators,

- Top 3 industries with the highest level of disclosure:



utilities



healthcare



consumer
staples

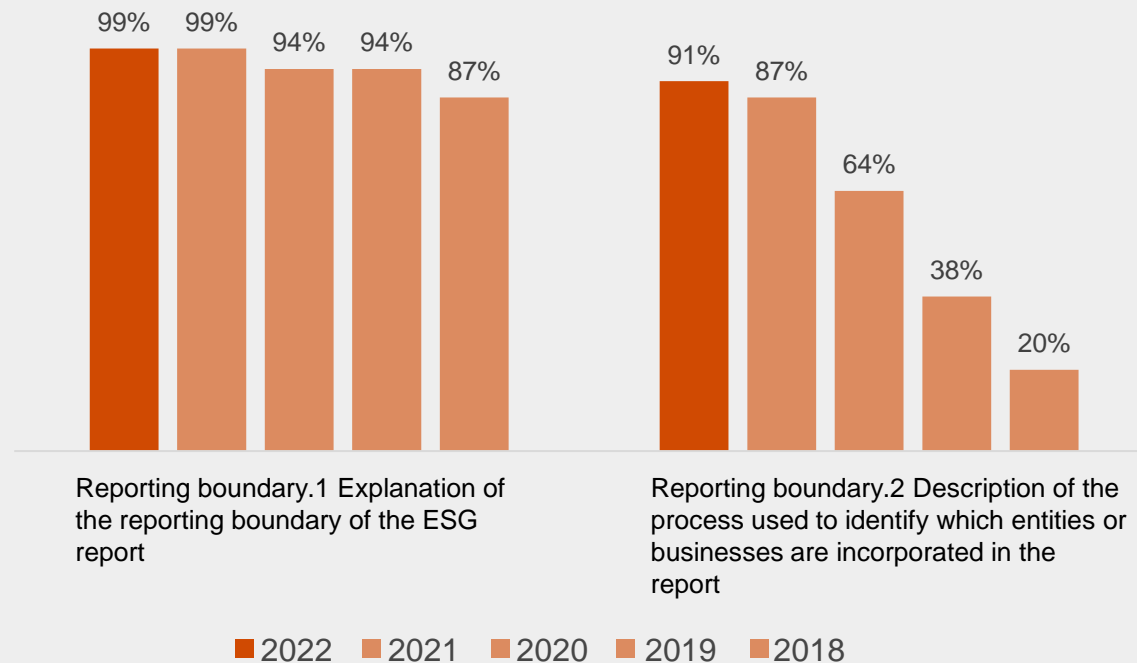
Data analysis and interpretation

According to the study ,

- 78%** of the sampled companies have explained how the reporting principles are applied in ESG reports.
- 76%** of the sampled companies have disclosed the process to identify and the criteria for the selection of material ESG factors.
- 95%** of the sampled companies have disclosed the description of significant stakeholders identified and the process of the issuer's stakeholder engagement.
- 91%** of the sampled companies have disclosed the results of the issuer's stakeholder engagement.

Mandatory disclosure requirements: Reporting boundary

Listed companies should establish criteria for determining the scope of ESG reporting and clarify the reporting boundary. They should also decide which entities or operations are to be incorporated in the ESG report and explain the rationale for reporting boundary based on their business characteristics, financial impact, risk level and the stakeholders' concerns. The disclosure scope of the ESG report should include corporate organisations with "material" impacts and clear explanations should be made therein in case there are different disclosure scopes and statistical standards for different ESG aspects.



Classification of this issue in the maturity model

I: Well-disclosed

II: Moderately-disclosed

III: Under-disclosed

Reporting boundary.1
Reporting boundary.2

Data analysis and interpretation

In view of the reporting boundary with good disclosure, the study conducted in 2022 shows that,

- **99%** of the sampled companies have disclosed the reporting boundary of the ESG report.
- **91%** of the sampled companies have disclosed the process to identify which entities or businesses are incorporated in the report.

Mandatory disclosure requirements: Reflection on this section

The analysis of the sampled ESG reports for 2022 indicates that:

- Listed companies made relatively satisfactory disclosures with respect to the description of significant stakeholders identified, the process and results of the issuer's stakeholder engagement and the reporting boundary, with the disclosure ratio of each issue exceeding 90%.
- The disclosure ratios of issues, including the board's oversight of ESG matters, management approaches and strategies and how the board reviews the progress against ESG-related targets, have significantly increased compared to previous years, and there is still room for improvement.
- A small number of companies have disclosed the role of management in managing climate-related risks and opportunities. However, they have not disclosed in detail how the board oversees climate-related risk management, strategy, objectives and other matters.

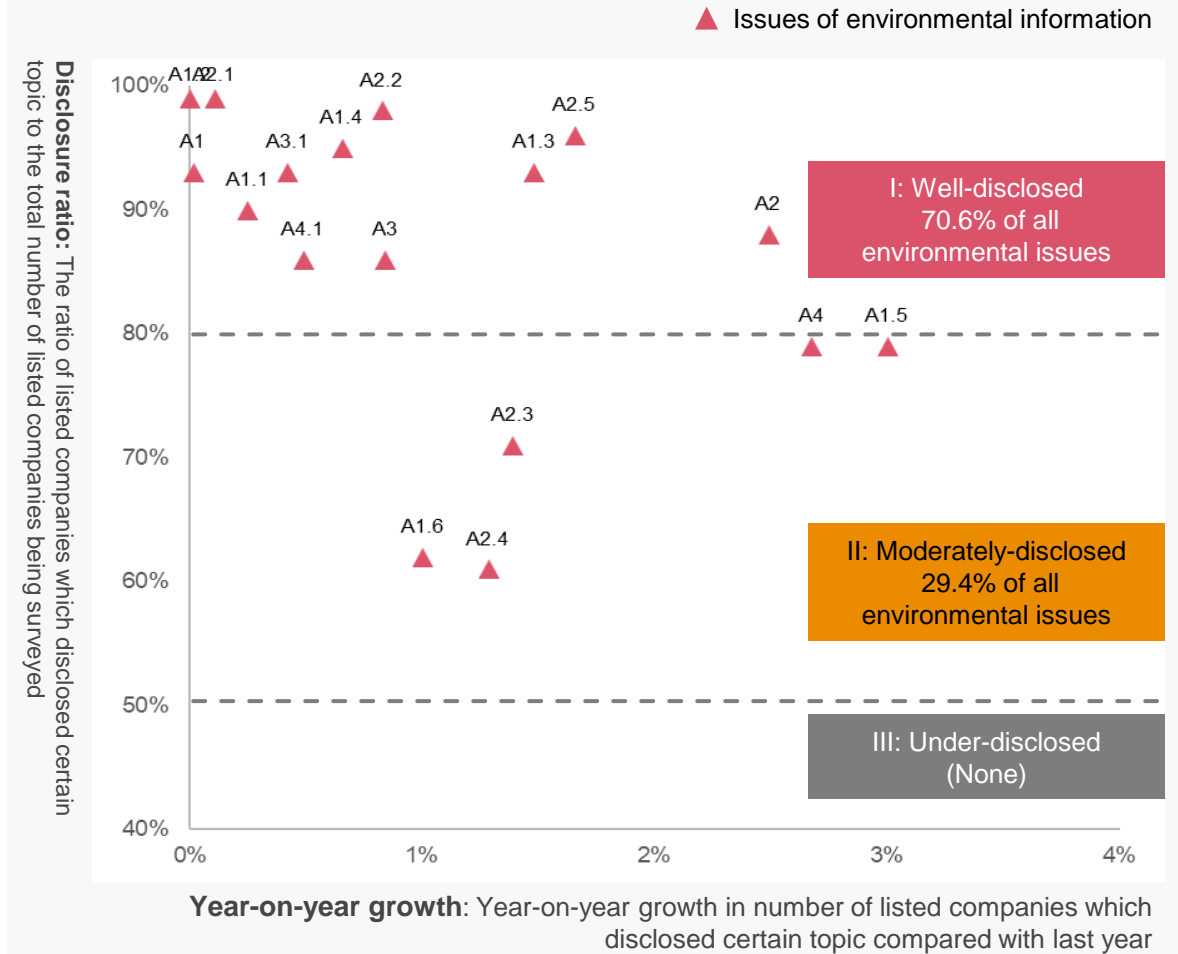
As for the issues classified as II moderately-disclosed, we put forward the following recommendations:

- As for the moderately-disclosed issues (such as how the board reviews the progress against ESG-related targets, with an explanation of how they relate to the issuer's business, description or explanation of the application of the reporting principles in preparation of ESG reports, the process to identify and the criteria for the selection of material ESG factors),
 - Listed companies should refine the process and methods for reviewing ESG-related targets. This should cover aspects including the evaluation mechanism for the targets' progress, the process for collecting and verifying indicator data, the retrospective checking mechanism of historical data, and the identification methodology of baseline for targets.
 - Management of listed companies should regularly prepare the latest updates and analysis on ESG progress for the board to discuss, including the assessment of progress against the targets, and industry benchmarking of the targets.
 - Listed companies should provide the review results of their ESG-related targets, especially those set on different time frames. For well-progressed targets, further information should be provided to assess the continuity of the positive trend in the future. For targets that have not been progressing as expected, listed companies should disclose the reasons, as well as the board's assessment and discussion of measures taken or any adjustment made to achieve the targets.
 - Listed companies should emphasize the importance of board's focus on climate matters and encourage management and relevant personnel to incorporate climate-related factors into risk management and business strategic planning. Additionally, listed companies should disclose the board's oversight of climate-related risk management, strategies, targets, etc. This should include how climate-related considerations are factored into remuneration policy, so as to further strengthen the data foundation and management framework for climate information disclosure.



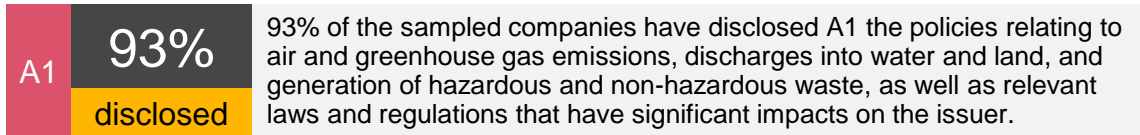
Management and disclosure of environmental information

No.	Content
A1	Emission policies and regulations
A1.1	The types of emissions and respective emissions data
A1.2	Greenhouse gas emissions and intensity
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	Policies on the efficient use of resources
A2.1	Energy consumption in total and intensity
A2.2	Water consumption in total and intensity
A2.3	Energy use efficiency targets
A2.4	Water efficiency targets
A2.5	Total packaging material used for finished products and intensity
A3	Policies on 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
A4	Climate change policy
A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them



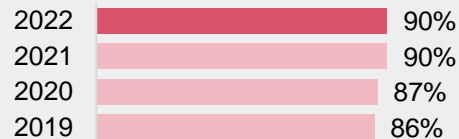
Management and disclosure of environmental information

A1: Emissions

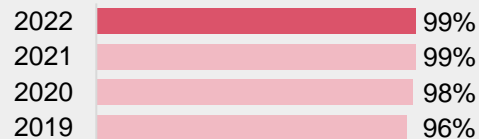


Disclosure of KPIs

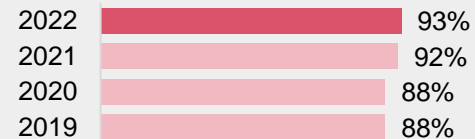
A1.1 The types of emissions and respective emissions data



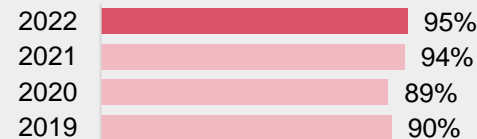
A1.2 Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility)*



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)



*For KPI A1.2, the data includes sampled companies that only disclose total greenhouse gas emissions and do not distinguish between direct and indirect emissions

Classification of this issue in the maturity model

I: Well-disclosed

II: Moderately-disclosed

III: Under-disclosed

A1 A1.1
A1.2 A1.3 A1.4

Data analysis and interpretation

According to the study,

- **90%** of the sampled companies have disclosed A1.1 the types of emissions and respective emissions data.
- **99%*** of the sampled companies have disclosed A1.2 greenhouse gas data, of which **25%** of the sampled issuers have disclosed the data of Scope 3 on the basis of Scope 1 and Scope 2, involving outsourced goods and services, business travel, and waste generated from operations, with most of the disclosed items concentrated in the upstream of the value chain.
- **93%** and **60%** of the sampled companies have disclosed A1.3 hazardous waste data and the data of hazardous waste intensity, respectively.
- **95%** and **71%** of the sampled companies have disclosed A1.4 non-hazardous waste data and the data of non-hazardous waste intensity, respectively.

Industry disclosure

As for indicators related to A1 emissions,

- Top 3 industries with the highest level of disclosure:



automotive



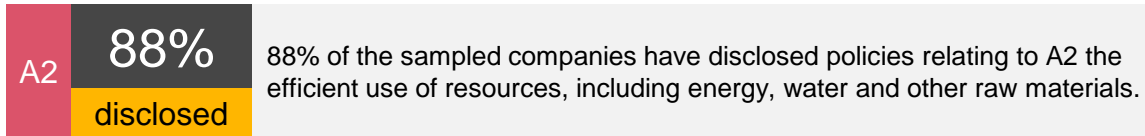
industrial
transportation



IT equipment

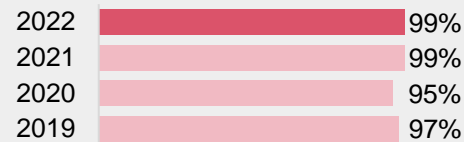
Management and disclosure of environmental information

A2: Use of resources

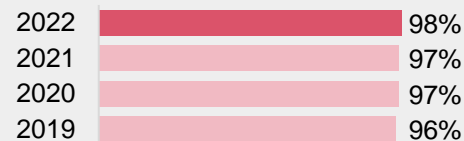


Disclosure of KPIs

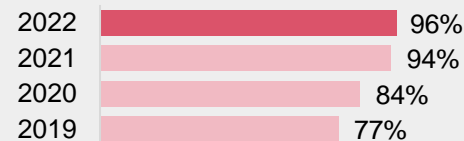
A2.1 Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility)



A2.2 Water consumption in total and intensity (e.g. per unit of production volume, per facility)



A2.5 Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced*



*For KPI A2.5, the data in FY2022 excludes samples from industries where these KPIs do not apply and the data of previous years is not altered retrospectively

Classification of this issue in the maturity model

I: Well-disclosed

II: Moderately-disclosed

III: Under-disclosed

A2 A2.1
A2.2 A2.5

Data analysis and interpretation

According to the study,

- **99%** and **86%** of the sampled companies have disclosed A2.1 energy consumption data and energy consumption intensity, respectively.
- **98%** and **88%** of the sampled companies have disclosed A2.2 water consumption data and water consumption intensity, respectively.
- **96%*** of the sampled companies have disclosed A2.5 packaging material data.

Industry disclosure

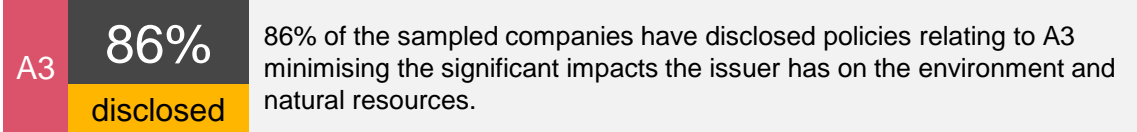
As for indicators related to A2 use of resources,

- Top 3 industries with the highest level of disclosure:



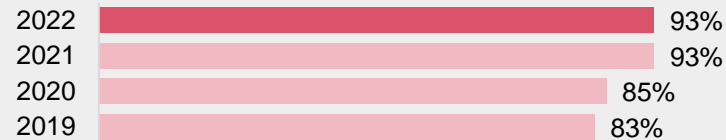
Management and disclosure of environmental information

A3: The environment and natural resources



Disclosure of KPIs

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



Classification of this issue in the maturity model

I: Well-disclosed

II: Moderately-disclosed

III: Under-disclosed

A3
A3.1

Data analysis and interpretation

According to the study,

- **93%** of the sampled companies have disclosed A3.1 the significant impacts of business activities on the environment and natural resources and the actions taken to manage them.

Industry disclosure

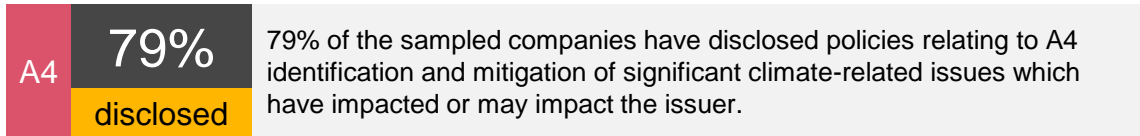
As for indicators related to A3 the environment and natural resources,

- Top 3 industries with the highest level of disclosure:



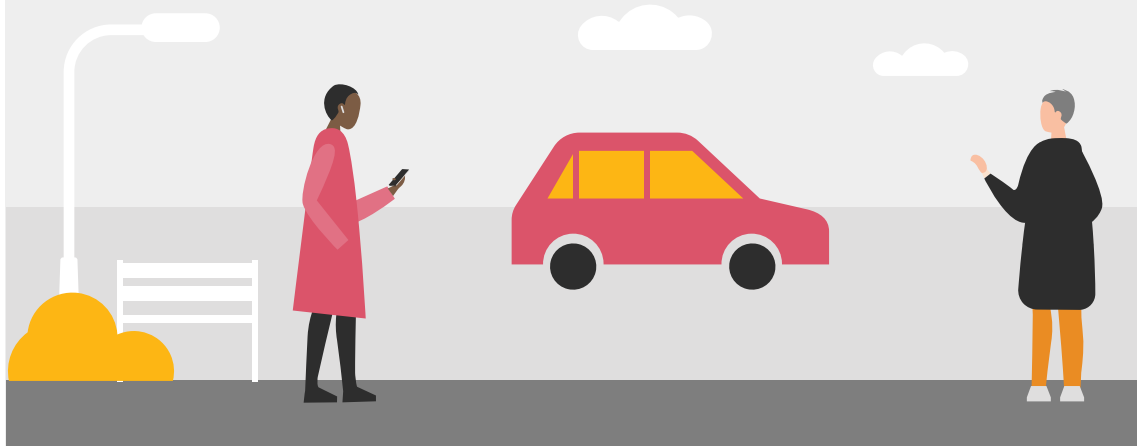
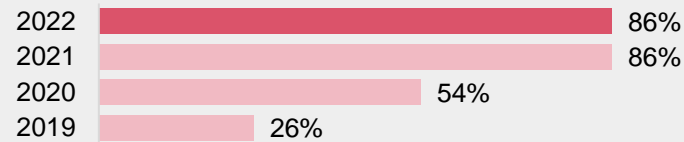
Management and disclosure of environmental information

A4: Climate change



Disclosure of KPIs

A4.1 Description of the significant climate-related issues which have impacted or may impact the issuer, and the actions taken to manage them



Classification of this issue in the maturity model

I: Well-disclosed

A4.1

II: Moderately-disclosed

A4

III: Under-disclosed

Data analysis and interpretation

According to the study,

- **86%** of the sampled companies have disclosed A4.1 significant climate-related issues and the actions taken to manage them, and the level of disclosure has been significantly improved.
- Some companies have begun to disclose climate change-related information in accordance with the Task Force on Climate-Related Financial Disclosure (TCFD) framework.
 - The average disclosure ratios of governance, strategy, risk management and metrics and targets are **51%**, **28%**, **52%** and **61%**, respectively.

Industry disclosure

As for indicators related to A4 climate change,

- Top 3 industries with the highest level of disclosure:



Management and disclosure of environmental information

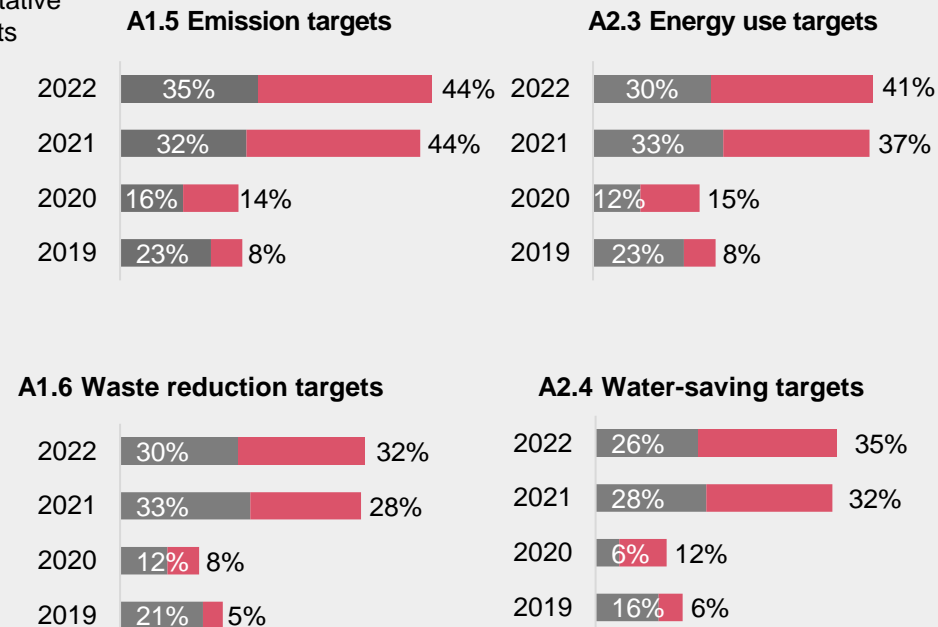
Environmental targets

Environmental targets

In 2019, the New Rules revised the disclosure provisions of four KPIs, i.e., A1.5, A1.6, A2.3 and A2.4, requiring listed companies to formulate and disclose targets for emissions, waste reduction, energy consumption and water efficiency.

Disclosure of KPIs

- Quantitative targets
- Qualitative targets



Classification of this issue in the maturity model

I: Well-disclosed

II: Moderately-disclosed

III: Under-disclosed

A1.5 A1.6
A2.3 A2.4

Data analysis and interpretation

According to the study,

- 79%**, **35%** and **44%** of the sampled companies have disclosed A1.5 emission targets, qualitative targets and quantitative targets, respectively.
- 62%**, **30%** and **32%** of the sampled companies have disclosed A1.6 waste reduction targets, qualitative targets and quantitative targets, respectively.
- 71%**, **30%** and **41%** of the sampled companies have disclosed A2.3 energy use targets, qualitative targets and quantitative targets, respectively.
- 61%**, **26%** and **35%** of the sampled companies have disclosed A2.4 water-saving targets, qualitative targets and quantitative targets, respectively.

Industry disclosure

As for quantitative environmental targets,

- Top 3 industries with the highest level of disclosure:


textiles and apparel


household appliances and supplies


automotive

Reflection on this section

The analysis of the sampled ESG reports for 2022 indicates that:

- Listed companies made relatively satisfactory disclosures with respect to A1 emissions, A2 use of resources and A3 the environment and natural resources, with the disclosure ratio of each issue reaching 85%.
- Over 2/3 of listed companies have disclosed environmental targets, with a slight increase in the disclosure ratio of quantitative environmental targets, and there is still room for improvement.
- 25% of listed companies have disclosed greenhouse gas Scope 3 emissions data in their ESG reports, with disclosures mainly focusing on the upstream value chain.
- Some listed companies have disclosed climate change information in their ESG reports, the disclosure extent of governance, strategy, risk management, metrics and targets varies.

We put forward the following suggestions in regard to II moderately-disclosed issues of environmental information:

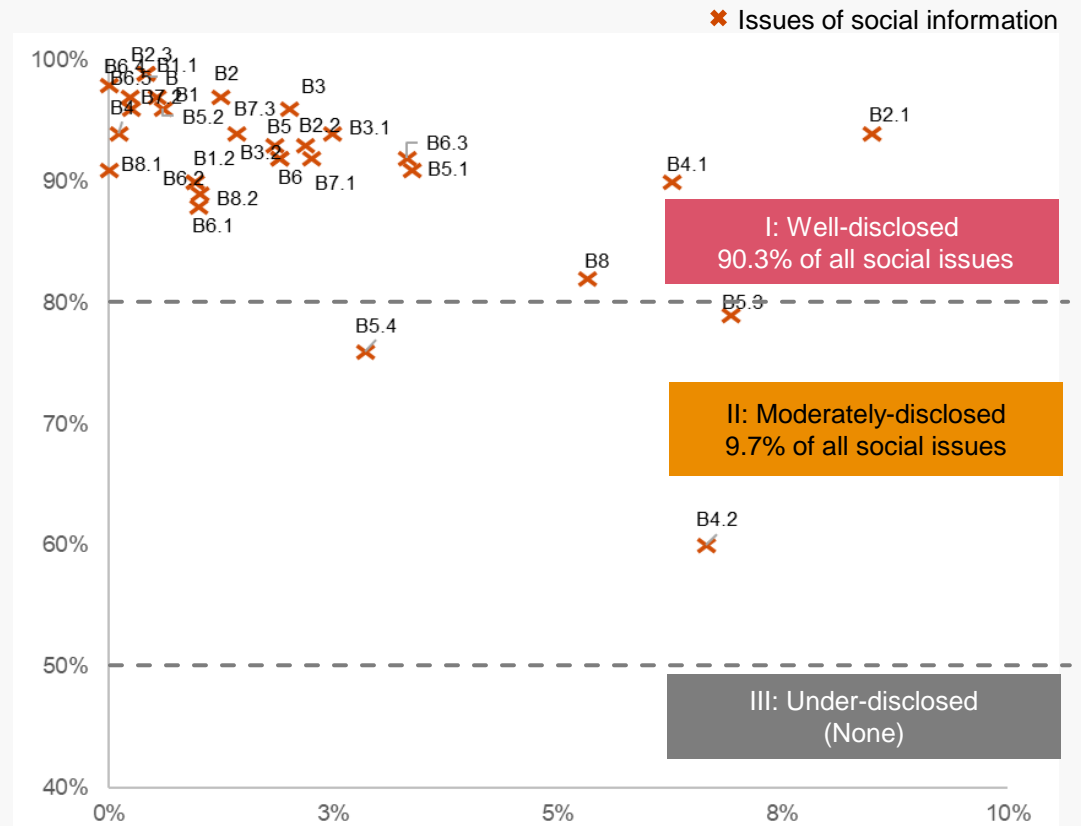
- As for the environmental targets such as A1.5, A1.6, A2.3, A2.4 emissions and energy consumption,
 - Listed companies should continue to enhance the accuracy, completeness and consistency of the disclosure of environmental performance indicators, increase the disclosure ratio of quantitative targets in a planned and orderly manner, and regularly review the progress against environmental targets.
- As for A4 policies for addressing climate change,
 - Listed companies should start preparing for the relevant requirements of HKEX for climate information disclosure*, develop the capacity for disclosing climate-related information as soon as possible.
 - Listed companies should accelerate the establishment of greenhouse gas emissions data (Scope 1, Scope 2 and Scope 3) management systems, organise and enhance the disclosure of Scope 3 downstream value chain emission data, and effectively address climate-related quantitative indicators and target disclosure requirements.
 - Listed companies should further enhance their abilities to analyse climate resilience, including climate scenario analysis, effectively identify factors that influence climate-related risks, and improve the level of climate-related risk management.

*Enhancement of Climate-related Disclosure Under Environmental, Social and Governance Framework, HKEX

Management and disclosure of social information

No.	Content	No.	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 recall for safety and health reasons
B2.1	Work-related fatalities	B6.2	Number of products and services related complaints 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	Quality assurance and recall procedures
B3	Development and training policy	B6.5	Consumer data protection and privacy policies, and their implementation and monitoring
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 their 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 contribution areas
B5.1	Number of suppliers by geographical region	B8.2	Resources contributed to the focus area
B5.2	Supplier engagement practices, number of suppliers for which the practices are implemented, and their implementation a monitoring methods		

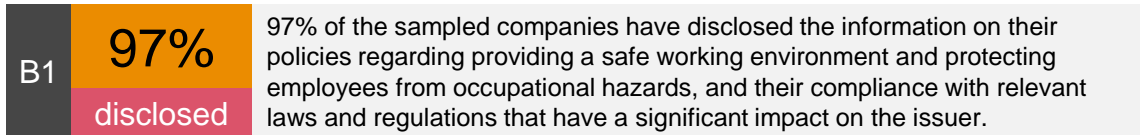
Disclosure ratio: The ratio of listed companies which disclosed certain topic to the total number of listed companies being surveyed



Year-on-year growth: Year-on-year growth in number of listed companies which disclosed certain topic compared with last year

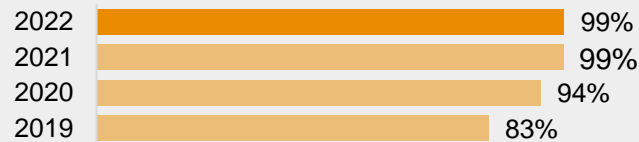
Management and disclosure of social information

B1: Employment

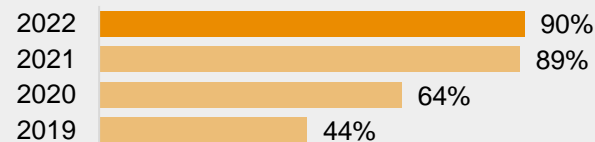


Disclosure of KPIs

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



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



Classification of this issue in the maturity model

I: Well-disclosed

II: Moderately-disclosed

III: Under-disclosed

B1 B1.1 B1.2

Data analysis and interpretation

According to the study,

- **99%** of the sampled companies have disclosed B1.1 total workforce by gender, employment type, age group and geographical region.
- **90%** of the sampled companies have disclosed B1.2 employee turnover rate by gender, age group and geographical region.

Industry disclosure

As for KPI B1 employment,

- Top 3 industries with the highest level of disclosure:



industrial
transportation



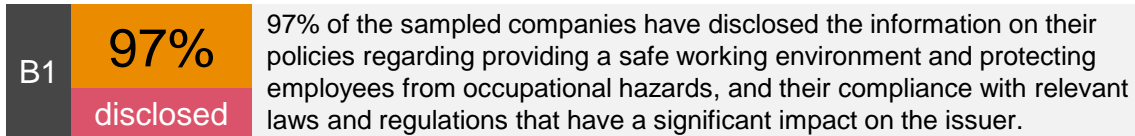
household
appliances and
supplies



software
services

Management and disclosure of social information

B2: Health and safety

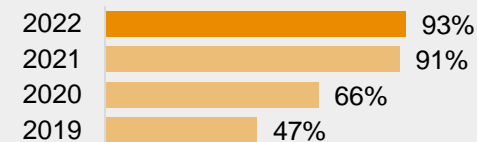


Disclosure of KPIs

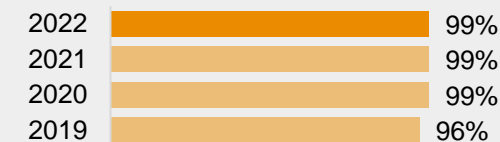
B2.1 Number and rate of work-related fatalities occurred in each of the past three years including the reporting year



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



Classification of this issue in the maturity model

I: Well-disclosed

II: Moderately-disclosed

III: Under-disclosed

B2 B2.1
B2.2 B2.3

Data analysis and interpretation

According to the study,

- **94%** of the sampled companies have disclosed B2.1 number and rate of work-related fatalities occurred in each of the past three years.
- **93%** of the sampled companies have disclosed B2.2 lost days due to work Injury.
- **99%** of the sampled companies have disclosed B2.3 description of occupational health and safety measures adopted, and how they are implemented and monitored.

Industry disclosure

As for KPI B2 health and safety,

- Top 3 industries with the highest level of disclosure:



industrial transportation



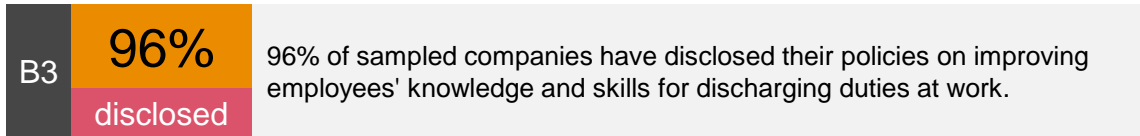
industrial support



automotive

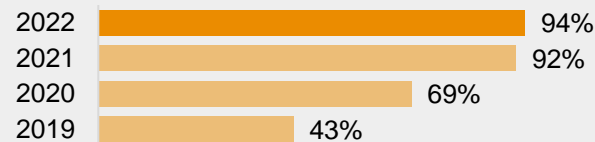
Management and disclosure of social information

B3: Development and training

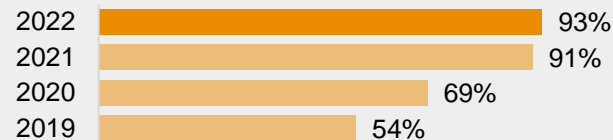


Disclosure of KPIs

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



Classification of this issue in the maturity model

I: Well-disclosed

II: Moderately-disclosed

III: Under-disclosed

B3 B3.1 B3.2

Data analysis and interpretation

According to the study, the disclosure ratio of the KPI related to development and training has witnessed a significant increase,

- **94%** of the sample companies have disclosed B3.1 the percentage of employees trained by gender and employment category.
- **93%** of the sample companies have disclosed B3.2 the average training hours completed per employee by gender and employee category.

Industry disclosure

As for KPI B3 development and training,

- Top 3 industries with the highest level of disclosure:

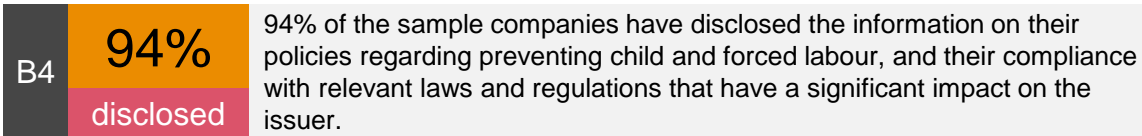
properties

textiles and apparel

industrial support

Management and disclosure of social information

B4: Labour standards

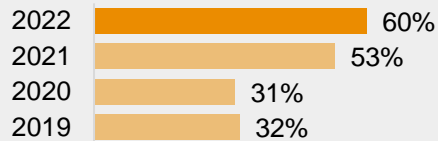


Disclosure of KPIs

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



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



Classification of this issue in the maturity model

I: Well-disclosed

B4 B4.1

II: Moderately-disclosed

B4.2

III: Under-disclosed

Data analysis and interpretation

According to the study,

- **90%** of the sampled companies have disclosed B4.1 description of measures to review employment practices to avoid child and forced labour.
- **60%** of the sampled companies have disclosed B4.2 description of steps taken to eliminate such practices when discovered.

Industry disclosure

As for KPI B4 Labour standards,

- Top 3 industries with the highest level of disclosure:



automotive



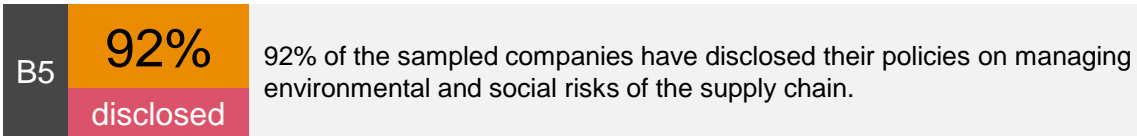
IT equipment



industrial engineering

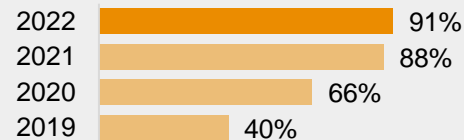
Management and disclosure of social information

B5: Supply chain management

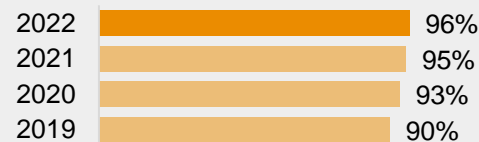


Disclosure of KPIs

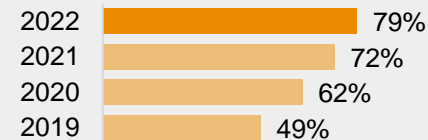
B5.1 Number of suppliers by geographical region



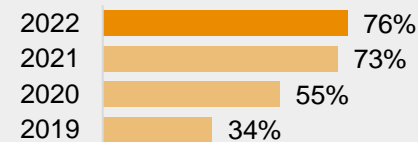
B5.2 Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored



B5.3 Description of practices used to identify environmental and social risks along the supply chain, 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



Classification of this issue in the maturity model

I: Well-disclosed

B5 B5.1 B5.2

II: Moderately-disclosed

B5.3 B5.4

III: Under-disclosed

Data analysis and interpretation

According to the study,

- **91%** of the sampled companies have disclosed B5.1 number of suppliers by geographical region.
- **96%** of the sampled companies have 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.
- **79%** of the sampled companies have disclosed B5.3 description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.
- **76%** of the sampled companies have disclosed B5.4 description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.

Industry disclosure

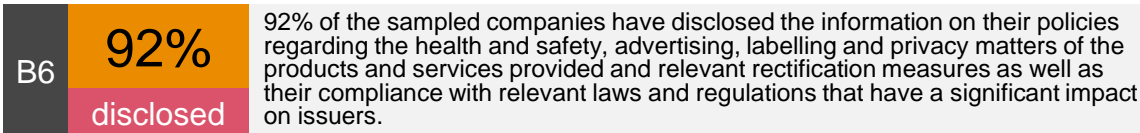
As for KPI B5 supply chain management,

- Top 3 industries with the highest level of disclosure:



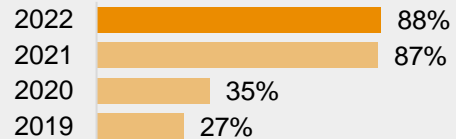
Management and disclosure of social information

B6: Product responsibility

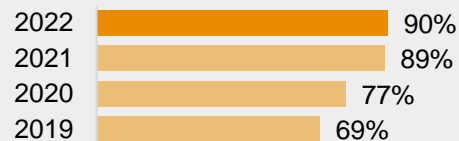


Disclosure of KPIs

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



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



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



B6.4 Description of quality assurance process and recall procedures*



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



*For KPI B6.1 and B6.4, the data in FY2022 excludes samples from industries where these KPIs do not apply and the data of previous years is not altered retrospectively

Classification of this issue in the maturity model

I: Well-disclosed

II: Moderately-disclosed

III: Under-disclosed

B6 B6.1 B6.2
B6.3 B6.4 B6.5

Data analysis and interpretation

According to the study,

- **88%*** of the sample companies have 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.
- **90%** of the sample companies have disclosed B6.2 number of products and service related complaints received and how they are dealt with.
- **92%** of the sample companies have disclosed B6.3 description of practices relating to observing and protecting Intellectual property rights.
- **98%*** of the sample companies have disclosed B6.4 description of quality assurance process and recall procedures. This KPI, like KPI 6.1, is subject to industry limitation.
- **96%** of the sample companies have disclosed B6.5 description of consumer data protection and privacy policies, how they are implemented and monitored.

Industry disclosure

As for KPI B6 product responsibility,

- Top 3 industries with the highest level of disclosure:



automotive



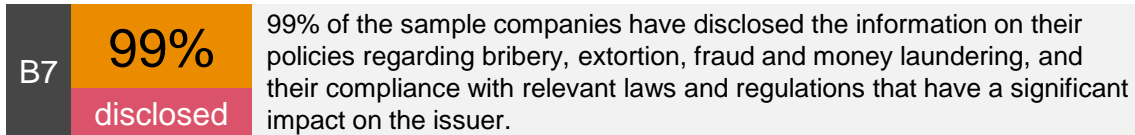
industrial support



textiles and apparel

Management and disclosure of social information

B7: Anti-corruption

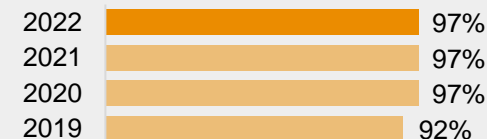


Disclosure of KPIs

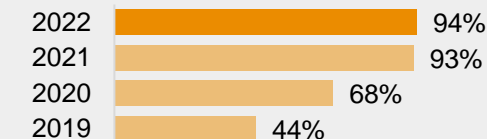
B7.1 Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases



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



Classification of this issue in the maturity model

I: Well-disclosed

II: Moderately-disclosed

III: Under-disclosed

B7 B7.1
B7.2 B7.3

Data analysis and interpretation

According to the study,

- **92%** of the sample companies have disclosed B7.1 number of concluded legal cases regarding corrupt practices and the outcomes of the cases.
- **97%** of the sample companies have disclosed B7.2 description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.
- **94%** of the sample companies have disclosed B7.3 description of anti-corruption training provided to directors and staff. B7.3 is a new KPI, and the disclosure ratio has witnessed significant growth in recent years.

Industry disclosure

As for KPI B7 anti-corruption,

- Top 3 industries with the highest level of disclosure:



industrial
transportation



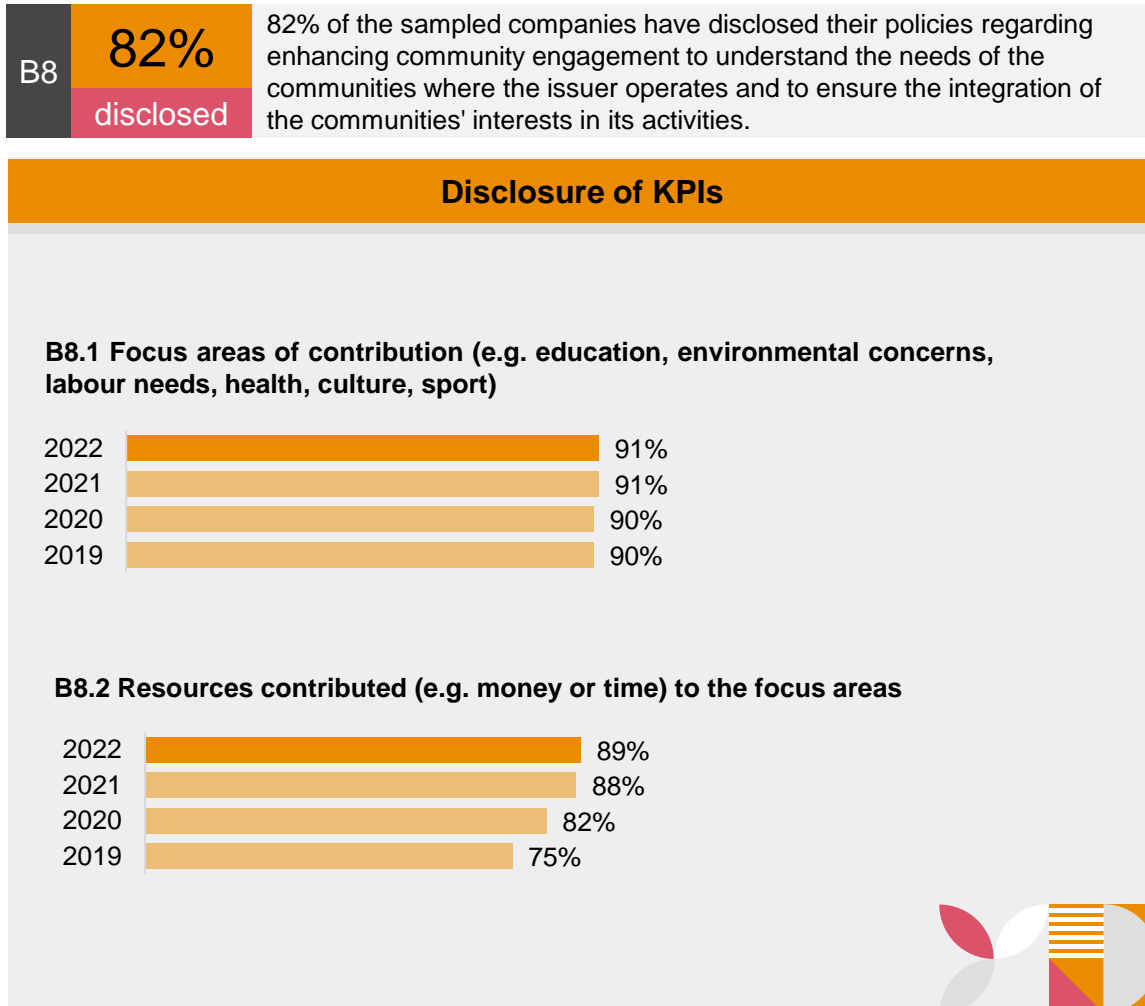
utilities



tourism and
leisure facilities

Management and disclosure of social information

B8: Community investment



Classification of this issue in the maturity model

I: Well-disclosed

II: Moderately-disclosed

III: Under-disclosed

B8 B8.1 B8.2

Data analysis and interpretation

According to the study,

- **91%** of the sampled companies have disclosed B8.1 focus areas of contribution.
- **89%** of the sampled companies have disclosed B8.2 resources contributed to the focus area.

Industry disclosure

As for KPI B8 community investment,

- Top 3 industries with the highest level of disclosure:



construction



automotive



textiles and apparel

Reflection on this section

The analysis of the sampled ESG reports for 2022 indicates that:

- Listed companies made relatively satisfactory disclosures with respect to B1 employment, B2 health and safety, B3 development and training and B7 anti-corruption, with the disclosure ratio of each issue exceeding 90%.
- Listed companies' disclosures on KPIs related to labour standards such as prevention of child labour and forced labour are more complete than those of previous years, with the disclosure ratio increasing by more than 5%, and there is still room for improvement.
- Listed companies' disclosures on routine management KPIs such as the geographical distribution and engaging practices of suppliers are relatively satisfactory, with the disclosure ratio of each issue exceeding 90%. However, the disclosure ratios of KPIs such as the risk identification of environmental and social risks in the supply chain and the encouragement of suppliers to use more environmentally friendly products and services are less than 80%, which still needs to be improved.

We put forward the following suggestions in regard to II moderately-disclosed issues related to social performance:

- As for B4.2 steps taken to eliminate violations of labour standards,
 - Although many listed companies do not have such violations, it is recommended that companies establish systems and management mechanisms to prevent child labour and forced labour in advance, and further disclose specific initiatives to avoid violations.
- As for B5.3 description of practices used to identify environmental and social risks along the supply chain and B5.4 description of practices used to promote environmentally preferable products and services,
 - Listed companies should improve the ESG management mechanism in the supply chain, further define the management team structure and clarify the management functions.
 - Listed companies should formulate ESG risk identification and management processes in the supply chain as soon as possible, to effectively evaluate the impact of relevant risks on the company's operations and disclose in detail the management initiatives taken or planned to address the relevant risks.
 - Listed companies should enhance the disclosure of material information regarding green procurement in their supplier selection standards.
 - Listed companies should establish complete regulatory mechanisms for ESG risks and green procurement in the supply chain to ensure the effectiveness of internal policies and related processes.

An aerial photograph of a city skyline, likely Bangkok, featuring numerous high-rise buildings and a prominent skyscraper under construction. A semi-transparent banner is overlaid across the middle of the image, containing the number '4' on the left and the text 'Conclusion and outlook' in the center. The banner is decorated with geometric shapes: a pink square with a white number '4', a yellow triangle, a grey square with a pink circle, and a pink rectangle with a grid of white dots.

4

Conclusion and outlook

Conclusion and outlook

Four recommendations for the ESG management of Hong Kong listed companies

Recommendation 1

Deepen ESG management on core issues



- Keep abreast of changes in ESG regulatory requirements, find out gaps in management and disclosure, and identify blind spots or weaknesses in internal management, achieving systematic and robust ESG governance
- Enhance ESG management systems, refine processes and internal controls, incorporate ESG risks into the risk management framework, and regularly monitor and review the progress of the objectives, etc., to facilitate the effective operation of ESG management
- Continue to optimise the internal reporting mechanism, and obtain third-party assurance of ESG data disclosures to strengthen the quality and credibility of ESG reporting

Recommendation 2

Take prompt action in climate-related disclosures



- Adopt a scientific carbon accounting system to ensure the accuracy and completeness of GHG emission data
- Identify and assess climate-related risks and opportunities, purposively enhance climate resilience analysis capabilities (including climate scenario analysis), and incorporate climate-related risks into the risk management framework
- Implement applicable low-carbon strategies, set and disclose quantitative carbon reduction targets, and formulate and adopt targeted carbon reduction strategies and action paths

Recommendation 3

Build a more resilient and sustainable supply chain



- Place more emphasis on supply chain ESG risks, and gradually define the processes and mechanisms for the identification, assessment, supervision and response of supply chain ESG risks
- Strengthen the management and supervision of key environmental and social impacts in supply chain, and improve the accuracy and reliability of the environmental and social information management in supply chain
- Accelerate the management of supply chain carbon emission data, and explore the establishment of a carbon footprint system for the whole life cycle of products

Recommendation 4

Embrace ESG digital transformation



- Streamline the data collection process with digital tools, strengthen the capabilities for ESG information management and disclosure, and improve the efficiency of ESG report preparation
- Manage carbon emissions data through digital systems, adopt a globally standardized framework for measuring and managing greenhouse gas emissions, and respond to stakeholder requests for carbon footprint data
- Effectively use ESG digital systems for data analysis, follow up the changes and trends in metrics, and provide strong support for ESG management decision-making

Resource: PwC Green Symbiosis, New Strategies: Building a Sound Corporate ESG Management System

An aerial photograph of a wide, multi-lane city street, likely Central Park Drive in New York City, viewed from above. The street is flanked by a dense, lush green forest. In the distance, a city skyline is visible through a light haze. A semi-transparent white horizontal bar is overlaid across the middle of the image, containing the word "Appendices" in a black serif font. The bar is decorated with colorful geometric patterns on its left and right sides.

Appendices

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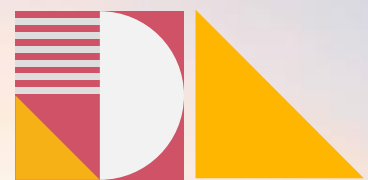
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