



Table of Contents

Executive Summary	3
GBA ESG Regional Index	-
Policy	1
Environment	1:
Economic and Social Development	1!
Corporate Governance	1
Green and Sustainable Finance	19
GBA ESG Industry Sub-indices	23
Case Study: Financials	20
Case Study: Healthcare	3
GBA ESG Sub-indices by Company Size	3!
Overall Performance of the GBA ESG Sub-indices by Company Size	3
ESG Performance of the Large Companies	39
Environmental Performance of Large Companies	4
Social Performance of Large Companies	43
Governance Performance of Large Companies	4!
ESG Performance of SMEs	4
Environmental Performance of SMEs	49
Social Performance of SMEs	5
Governance Performance of SMEs	53
Appendices	5!
Glossary	5!
References	56
Table of Indicators	5
Disclaimer	59
Copyright Statement	59
About HSBC	60
About CECEPEC	60

Executive Summary





This report is the annual update of the HSBC GBA ESG Index (the Index), which analyses the ESG and sustainable development performance of the Guangdong-Hong Kong-Macao Bay Area (GBA) in 2023.

1



The GBA ESG Regional Index reached a new high of

127.29 in **Q4 202**3

a year-on-year increase of **6%**, mainly due to significant improvements in the area of policy, which was up **46%** compared with **Q4 2022**.

Corporate governance also recorded a 4% year-on-year increase, primarily because of the increase in ESG disclosure as a result of the evolving regulatory situation across the GBA. Our study shows that the ESG disclosure rateⁱ of GBA's listed companiesⁱⁱ was 73%, up from 71% a year ago, led by Hong Kong whose ESG disclosure rate has been consistently above 90% for four consecutive years. It is worth noting that of the listed companies in all GBA cities, those in Huizhou showed the biggest improvement in ESG disclosure rate, rising to almost 50% from 0% in FY2019.

However, the GBA experienced fluctuations in green and sustainable finance in 2023, in line with the overall national trend, performing better in Q2 and Q4 due to improvements in the GSSS bondⁱⁱⁱ market and ESG mutual fund launches.

2



In 2023, policymakers within the GBA rolled out a number of policies to promote the region's high-quality development. Green and low-carbon development and technology and innovation were the two key policy focuses in the GBA last year to drive high-quality sustainable growth.

To achieve dual carbon goals, last year governments at the regional and city levels in GBA increased their support for the development of critical sectors, such as energy storage and new energy vehicles (NEVs). Our study also found that the environmental management of GBA companies improved in 2023, with 32% of GBA companies submitting the CDP climate change questionnaire compared with 28% of companies in China overall. Furthermore, the number of companies in the GBA setting carbon emission reduction targets or making commitments via the Science Based Targets initiative (SBTi)^{iv} doubled in 2023.

The GBA ramped up its efforts to become an international technology and innovation centre by increasing its financial support, in the form of loans and expenditure on research and development (R&D), to sci-tech sectors. Our study found that in 2023 Guangdong Province was ranked first nationwide in terms of total R&D expenditure, with a year-on-year increase rate of 10.2%, and fourth nationwide in terms of R&D intensity.

3



The GBA's sustainable debt market grew in 2023 with a year-on-year increase of 21%, reaching a new annual high of RMB200 billion, while the sustainable investing market was less active, in line with the national trend.

Governments within the GBA, especially the Hong Kong SAR government, were the most significant source of GSSS bonds, accounting for 57% of total issuance, followed by the financials sector. Hong Kong, Guangzhou and Shenzhen maintained their leadership in the sustainable debt market, accounting for 98% of total GSSS bond issuance.

There were fewer new signatories to the UN Principles for Responsible Investment (PRI)^v and fewer new launches of ESG mutual funds within the GBA in 2023 compared with previous years, also in line with national trends. While the majority of new PRI signatories are located in Hong Kong, most of the newly launched ESG mutual funds were by Shenzhen-based fund management companies, accounting for over 50% of the new ESG funds.

4



Of the eight sectors studied, energy, consumer discretionary, and healthcare had the most significant improvements in 2023 with year-on-year increases of 38%%, 20%% and 128% in Q4, respectively, primarily due to an increase in the number of industrial policies to support their ESG and sustainable development.

This report looks in detail at the ESG performance of the financials and healthcare sectors in the GBA. It discusses how banks, insurance and financial leasing firms in the GBA leverage GSSS bonds to support the decarbonisation or sustainable business development of GBA companies. It also looks at a variety of social factors impacting access to healthcare and analyses how the GBA may improve such access to meet the increasing demand for healthcare products and services.

The average value of the GBA ESG Industry Sub-indices also increased to a record high of

185.31 in **Q4 2023**with a year-on-year increase rate of

5



According to the most up-to-date information available^{vi}, both large-sized companies and SMEs in the GBA have improved in overall ESG performance over the past year. Moreover, the gap between large and SME-listed companies in ESG performance has been narrowing, especially in environmental and social areas.

As indicated by the GBA ESG Sub-indices by company size, the GBA ESG Sub-indices for Large Companies increased to 214; a 7% year-on-year increase. Large companies achieved their best performance in social areas with big improvements in supply chain data disclosure and risk management. The value of the GBA ESG Sub-indices for SMEs also improved, the index reaching a high of 135; up 17% year-on-year. This was due in equal measure to improvements in environmental, social and governance areas.

While large companies continued to perform better than SMEs, the gap between both groups has been narrowing in terms of overall performance and in three key areas, i.e., environmental, social, and external assurance. This indicates both an improved awareness and an increase in the practical steps taken by SMEs to tackle the most pressing ESG issues. However, the gaps have widened in the areas of governance, and green and sustainable finance, indicating that SMEs require additional resources, including tailored or innovative tools and solutions in sustainable finance, to accelerate their progress.

 ϵ

i ESG disclosure rate = the number of GBA's listed companies disclosed their ESG, corporate social responsibility(CSR), sustainability or other non-financial reports / the total number of GBA's listed companies

ii Unless otherwise specified, "companies in the GBA" or "GBA companies" refer to listed companies registered or primarily operating in the GBA.

iii GSSS bonds include green bonds, social bonds, sustainability bonds and sustainability-linked bonds. GSSS bonds issued by issuers in the GBA or any specific GBA city in this report refer to both onshore and onshore GSSS bonds issued by entities registered or primarily operating in the GBA or any specific GBA city.

iv The SBTi is a partnership between CDP, the United Nations Global Compact, World Resources Institute (WRI), and the World Wide Fund for Nature (WWF). The SBTi defines and promotes best practices in science-based target setting. Offering a range of target-setting resources and guidance, the SBTi independently assesses and approves companies' targets in line with its strict criteria.

v PRI is an international organisation that works to promote the incorporation of environmental, social, and corporate governance factors into investment decision-making.

vi The GBA ESG Sub-indices by Company Size analyses the ESG performance of 470 sample GBA companies in 2022, based on the companies' 2022 ESG, CSR, sustainability or other non-financial reports released in 2023, and other public sources.





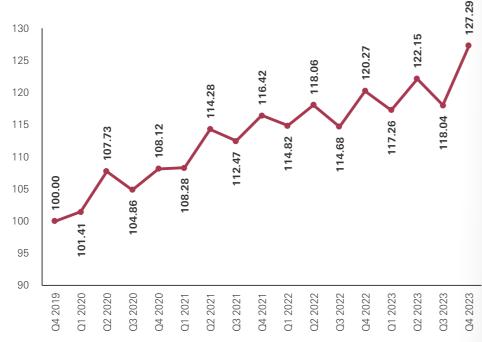
The GBA ESG Regional Index increased in value in 2023 reaching a new high of

127.29

a year-on-year increase of

6%



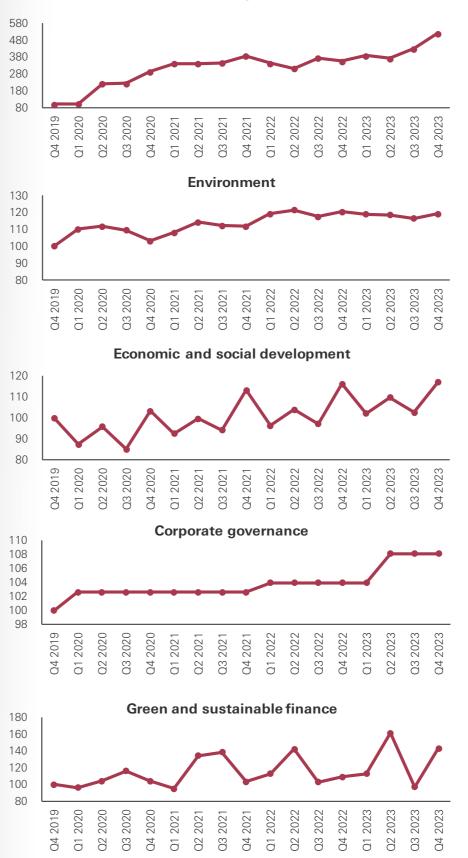


Source: China's official statistical database, public disclosure of listed companies, public information from relevant third-party databases, other public sources, CECEPEC



Figure 2. Breakdown of the GBA's performance in the five areas

Policy



Note: The values are normalised. The base values were 100.00 for Q4 2019 (base period).

Source: China's official statistical database, public disclosures of listed companies, other public sources,
CECEPEC



The GBA saw a significant improvement in 2023 in the areas of policy, economic and social development, and corporate governance. Specifically, the GBA has experienced continuous increases in the area of policy since Q2 2023, with a record year-on-year increase of 46% in Q4 2023. The constant improvement is clear evidence of stronger policy support for the GBA's ESG and sustainable development. The highest value in each quarter of 2023 was in the area of economic and social development. Economic recovery and increasing investment in innovation were the primary causes of this improvement. Our study also observed a significant improvement in corporate governance, driven by the increase in ESG disclosure.

The GBA was relatively stable in 2023 with regard to the environment. However, the GBA experienced fluctuations in green and sustainable finance in 2023, performing better in Q2 and Q4 due to improvements in the GSSS bond market and ESG mutual funds.





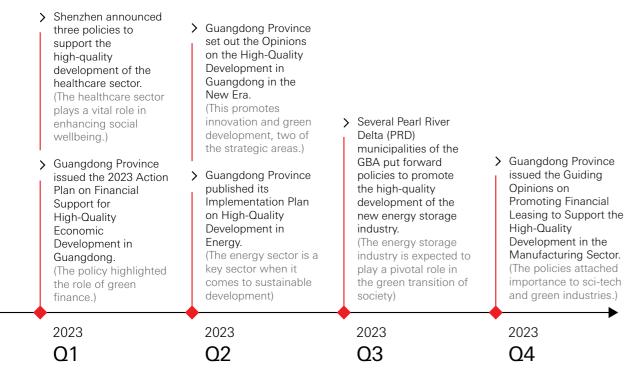
Policy

High-quality development was one of the country's priorities in 2023. Legislators within the GBA set out a number of policies to support high-quality development in many spheres including the economy, society and the environment. Two of the main areas that policymakers within the GBA focused on in 2023 were green and low-carbon development, and innovation. These are key drivers of the highquality growth of society and important sectors such

as manufacturing. In the Environmental, Economic and Social Development sections, we elaborate on the policies put forward in 2023 related to these two areas.

The figure below shows the policies set out during the year to support high-quality development in sustainability-related areas.

Figure 3. Key policies to support high-quality development within the GBA



Note: As well as looking at public policy within the GBA our study also researched legislative initiatives, by Guangdong Province and the Chinese Central government, which impact the GBA

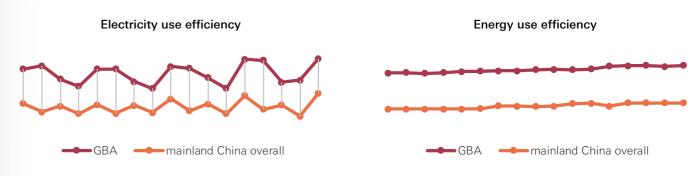
Environment

The GBA continued to promote environmental sustainability in 2023 by setting out new policies, applying advanced techniques, and leveraging carbon trading, among other initiatives.

Our study found that the GBA performed better in electricity and energy efficiency than the national

average, as can be seen in Figure 4. According to the latest official data, energy consumption per unit of GDP in Guangdong Province decreased year-on-year by 2.6% in 2022, while in mainland China, the level remained unchanged from 2021 to 2022.

Figure 4. The GBA's performance in two environmental second-level indicators



Source: China's official statistical database, CECEPEC

Accelerating the

Energy Storage.

Development of New

Governments within the GBA regard the dual carbon goals as a key area of focus and in 2023 put forward a number of policies to encourage key market players to ramp up their efforts to achieve these goals.

Specifically, in February 2023, Guangdong Province released the Carbon Peaking Implementation Plan, and the PRD municipalities of the GBA published implementation plans to further promote carbon reduction within the cities. Our study also observed that in 2023 policymakers placed greater emphasis on key industries, such as energy storage, NEVs, and hydrogen, and issued detailed proposals to promote these industries.

In our previous report dated April 2023, we analysed the automotive industry within the GBA. We found that the governments within the GBA continued to provide subsidies and other supports to promote the development of NEVs in the region. As a leading region in clean and renewable energy, the GBA has actively built a clean energy system and upgraded the energy structure. Our report dated October 2023 took a detailed look at the various solutions adopted by the GBA to promote energy storage and green hydrogen.

Figure 5. Some of the key environment-related policies within the GBA

High-quality

Energy Storage

Development of New



> Macao announced a Policy Address which included a

proposal to increase the proportion of NEVs in public buses to 70% in 2024

> Foshan issued a proposal to Promote the Development of an NEV Industrial Park.

Note: As well as looking at public policy within the GBA, our study also researched legislative initiatives, by Guangdong Province and the Chinese Central government, which impact the GBA



It should be noted that in 2023 other market players in the GBA, such as companies, institutions and schools, collaborated closely with governments to achieve the dual carbon goals.

Case Study:

Collaboration on hydrogen energy in the GBA

Of all the clean energies, hydrogen has been identified as the one with most potential in the GBA. China is the world's largest producer of hydrogen, with an annual output exceeding 30 million tonnes, and the GBA is one of three leading regions with regard to the hydrogen energy industry.1 It is worth noting that most of China's hydrogen production is grey hydrogen^{vii}, whereas the GBA focuses on green hydrogenvi

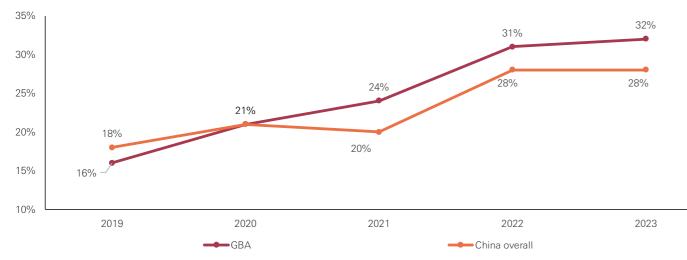
On December 2023, the second Hydrogen Energy Industry Conference, guided by the Guangzhou Municipal People's Government and the Development and Reform Commission of Guangdong Province, was held in Guangzhou, bringing together nearly 500 experts, scholars, and entrepreneurs from the hydrogen and energy storage industries nationwide to collectively explore innovative pathways for Guangzhou's hydrogen and new energy storage industries. The first domestically produced hydrogen fuel cell vehicle was unveiled during the event, and the first section of the Beijing-Guangzhou-Hong Kong and Macau Expressway

(Guangzhou-Shaoguan-Ganzhou) interprovincial hydrogen freeway corridor was launched.2

Our study shows that GBA companies have improved their environmental management and have set ambitious carbon reduction targets using more scientific methods. According to our data, an increasing number of GBA companies were required by investors or customers to fill in the CDP climate change questionnaire. In fact, 44 GBA companies did so in 2023 for the first time ever. Approximately 32% of companies invited to do so completed climate change questionnaires, a slight increase on the 2022 figure. As seen in Figure 6, the disclosure rates of GBA companies were higher than the national level for the past three years.

According to the most up-to-date information available from the CDP climate change questionnaire, companies within the GBA improved significantly in 2022, showing a heightened appreciation of sustainability and climate-related issues. Our report dated July 2023 analysed the results of the 2022 CDP climate change questionnaire, as it pertains to the GBA. We will continue to monitor the results for 2023 and detailed analysis of the GBA's performance will be included in the quarterly reports for 2024.

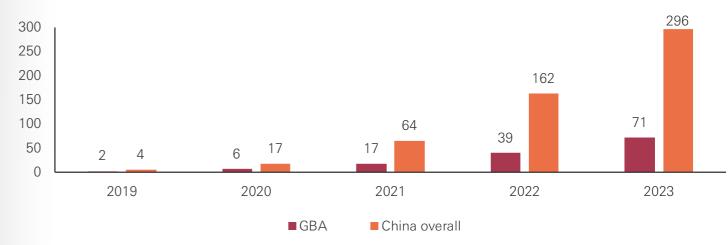
Figure 6. Disclosure rate of the CDP climate change questionnaire, GBA vs. China overall



Note: The data for China covers companies in mainland China, Hong Kong, and Taiwan. Disclosure rate of the CDP climate change questionnaires = no. of companies that submitted the CDP climate change questionnaire / no. of companies invited to disclose via CDP climate change questionnaire

In 2023, 71 GBA companies (24% of the national total) set their first carbon emission reduction targets or made commitments via SBTi, nearly double the 2022 figure. According to our data, 48% of the 71 GBA companies were from Hong Kong, demonstrating their leadership in setting ambitious and scientific carbon emission reduction targets.

Figure 7. Number of companies that set their first carbon emission reduction targets or made commitments via SBTi



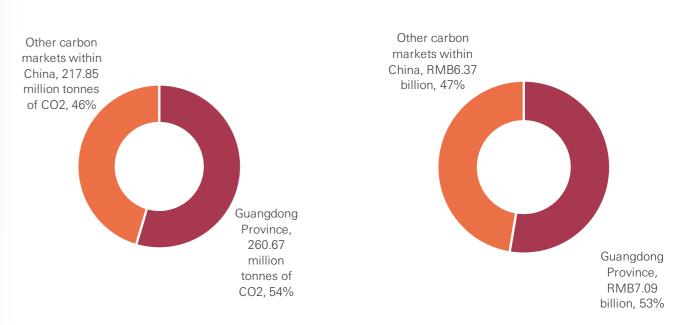
Source: SBTi. CECEPEC

The GBA has also leveraged carbon trading to reduce carbon emissions and incentivise low-carbon practices **among industries.** As mentioned in the previous report dated October 2023, Guangdong province's carbon emissions market is the leader nationwide and there are plans to systematically

expand the carbon emissions market. Figure 8 shows that carbon markets within Guangdong Province accounted for over 50% of both the total national trading volume and the total value of transactions as of the end of 2023.

Figure 8. National carbon emission market and the Guangdong Province carbon market





Note: The data for Guangdong Province is the sum total of the Guangdong Emissions Allowance traded on the Guangzhou Emissions Exchange and the Shenzhen Emissions Allowance traded on the Shenzhen Emissions Rights Exchange. The national carbon emission market data is the sum of data for eight pilot local markets, including Beijing, Tianjin, Shanghai, Chongqing, Hubei, Guangzhou, Shenzhen and Fujian. Source: Wind, CECEPEC

vii Grey hydrogen is that produced from methane with corresponding CO2 emissions (Source).

viii Green hydrogen is produced by electricity from intermittent renewables (Source)



Economic and Social Development

Economic recovery and development are the priorities in the post-pandemic era. In 2023, policymakers within the GBA set out a number of policies to stimulate consumption and make resources and funds available for regional sci-tech innovations.

Sci-tech innovation is a critical sustainability issue and the focus of Goal 9 of the United Nations Sustainable Development (UNSDG).

Our study found that, in 2023 and in accordance with national guidelines, policymakers within the GBA attached greater importance to sustainable (i.e., green) consumption. However, for 2024, the top priority for the national economy is sci-tech innovation. As an international centre of technology and innovation, the GBA has seen rapid growth in R&D expenditure (Figure 9) and is increasing its efforts to develop an innovation-driven economy. The Global Innovation Index 2023 ranked the Guangzhou Shenzhen Hong Kong science and technology cluster second in the world for four consecutive years.³

Figure 9. Rapid growth in R&D expenditure within the Guangdong Province and Hong Kong

Guangdong Province (In 2022)

Total R&D expenditure

- Over RMB440 billion (Year-on-year increase rate of 10.2%)
- Ranked **first** in the nation

R&D intensity

- 3.42% (raised by 0.21 percent compared with 2021)
- Ranked fourth in the nation

High-tech manufacturing sector Total R&D expenditure

Over RMB180 billion (over 40% of the total R&D expenditure of Guangdong Province)

Top cities

Total R&D expenditure exceeding RMB10 billion

Shenzhen, Guangzhou, Dongguan, Foshan, Huizhou, Zhuhai, Zhongshan (All are GBA cities)

R&D intensity exceeding 3%

• Shenzhen, Dongguan, Huizhou, Guangzhou (All are GBA cities)

Hong Kong (In 2022)

Total R&D expenditure

Over HKD30 billion (Year-on-year increase rate of 8%)

R&D intensity

• 1.07% (an increase of 0.10 percent compared with 2021)

Note: R&D intensity is R&D expenditure as a percentage of GDP Source: Official data (Source 1, Source 2, Source 3)

In 2023, especially in the second half of the year, policymakers within the GBA set out various policies to advance technological innovation within new industries.



Figure 10. Some of key economic- and social- policies within the GBA

- > Guangzhou published the Measures to Promote the Development of Sci-tech Innovation of Entities and the High-quality Development of High-tech Enterprises.
- The State Council set out a plan for the Shenzhen park of the Hetao Shenzhen-Hong Kong Science and Technology Innovation Cooperation Zone.

2023

August

- > Guangzhou issued Measures to Support Increasingly the Finance of Technological Enterprises.
- Shenzhen put forward Opinions on Financial Support for Technological Innovation.
- > Hong Kong announced a Policy Address which included a proposal to promote Al and new industrilisation.

October

- > Guangdong Province issued Opinions on Accelerating the Construction of Innovative Leading Areas for the General Al Industry.
- Guangdong Province published Measures to Further Boost and Expand Consumption, highlighting NEVs, green home appliances, etc.

November

Note: As well as looking at public policy within the GBA, our study also looked at legislative initiatives, by Guangdong Province and the Chinese Central government, which impact the GBA.

Source: Public sources

In accordance with policy guidelines, governmental bodies and other market players have implemented multiple measures, for example, building innovation systems and providing increased financial support, to promote innovation and accelerate the development of a modern industrial system.

The Hetao Shenzhen-Hong Kong Innovation and Technology Co-operation Zone (Co-operation Zone) is an important milestone in co-operation in the fields of innovation and technology within the GBA.

Sci-tech innovation enterprises, especially those from the newgeneration information technology industry, pharmaceuticals and biotechnology, artificial intelligence(Al), etc., will be a focus in accordance with government guidelines.

With regard to financial support, policymakers have encouraged financial institutions to facilitate the provision of loans to sci-tech corporations and promote sci-tech insurance. The table below shows that financial institutions have actively responded to the government's guidelines, greatly enhancing financial support for sci-tech companies.

Figure 11. Loans issued by financial institutions to support sci-tech manufacturing sectors and enterprises

	Types of loan	Outstanding Loans (year-on-year increase)
	Mid-and long-term loans to the advanced manufacturing sector	41%
Guangdong Province	Mid-and long-term loans to the high-tech manufacturing sector	39%
(As of Q3 2023)	Loans to high-tech enterprises	24%
	Loans to sci-tech SMEs	25%
Shenzhen	Loans to sci-tech SMEs	31%
(As of August 2023)	Loans to high-tech enterprises	31%

Source: Guangdong Financial Supervisory Authority (Source), Other public source (Source)

In October 2023, the Hong Kong government announced that it would set up a HKD10 billion New Industrialisation Acceleration Scheme to promote the downstream development of new industrialisation. Under the scheme, the government will provide financial assistance for enterprises in the fields of life and health technologies, Al and data science, advanced manufacturing, and new energy technologies. Specifically, the government will support the setting-up of new production facilities on a one (Government) to two (company) matching basis, subject to a funding ceiling of HKD200 million. ⁴

With the help of public policy and financial support, there has been an acceleration in industrial transition and upgrading. In the first three quarters of 2023, the added value of the advanced manufacturing sector recorded a year-on-year increase of 4.5% in Guangdong while the added value of the high-tech manufacturing sector increased by 1.3%, year-on-year.⁵



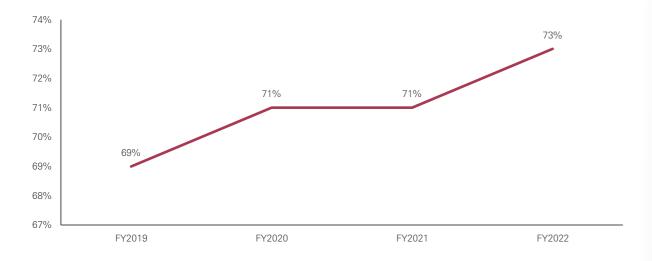
Corporate Governance

The evolving regulatory environment has prompted companies in the GBA to be more proactive with regard to the disclosure of their ESG information. According to our study, ESG disclosure rate among listed companies in the GBA increased from 69% in FY2019 to 73% in FY2022.

Our study showed that listed companies in Hong Kong had the highest ESG disclosure rate, above 90% for four consecutive years. It is worth noting that, except for Hong Kong which has maintained a consistently

high disclosure rate, almost all GBA cities experienced significant improvement over the period in question. Specifically, the ESG disclosure rate of listed companies in Macao increased from 68% to approximately 92% in FY2022, the second highest rate in the GBA. Huizhou had the most significant improvement in ESG disclosure rate among all GBA cities over the period, going from 0% in FY2019 to nearly 50% in FY2022.

Figure 12. ESG disclosure rate within the GBA



Note: In Q2 2023, we conducted a study on more than 2,000 listed companies in the GBA to see if they had published ESG and other related non-financial reports for FY2022.

Source: Public sources, CECEPEC

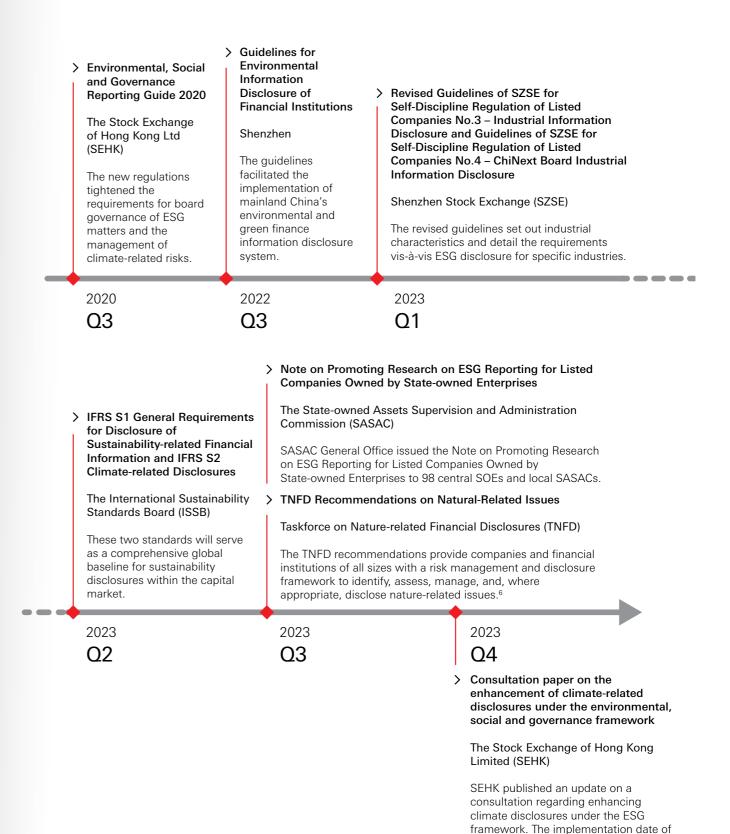
The evolving regulatory environment has prompted companies in the GBA to be more proactive with regard to the disclosure of their ESG information.

In recent years, regulatory bodies and international organisations have continued to tighten ESG disclosure requirements, especially with regard to climate-related issues. For instance, the International Sustainability Standards Board (ISSB) published two standards on sustainability disclosures in Q2 2023 to assist companies to effectively manage and disclose climate-related issues. In April 2023, the Stock Exchange of Hong Kong (SEHK) released a consultation paper setting out more stringent climate-related disclosure by listed companies, with a proposed implementation date of 1 January 2024. However, SEHK finally postponed the implementation date to 1 January 2025, thereby allowing issuers more time to familiarise themselves with the new climate-related disclosure requirements

and giving them a buffer period to establish an achievable improvement plan.

Governments in mainland China have also continued to improve the ESG disclosure system. In Q3 2023, the State-owned Assets Supervision and Administration Commission (SASAC) issued the ESG reporting disclosure guidelines to assist listed companies majority-owned by central state-owned enterprises (SOEs) in achieving integration with ESG international standards and concepts while complying with the regulatory requirements of the China Securities Regulatory Commission. Shenzhen is the leader in ESG information disclosure guidelines in mainland China and in Q1 2023 imposed stricter requirements on listed companies from specific industries.

Figure 13. Critical international, national and regional guidelines published since 2020



the Listing Rule amendments has been

postponed to 1 January 2025 to allow issuers more time to familiarise

disclosure requirements.

themselves with the new climate-related

Source: Public sources



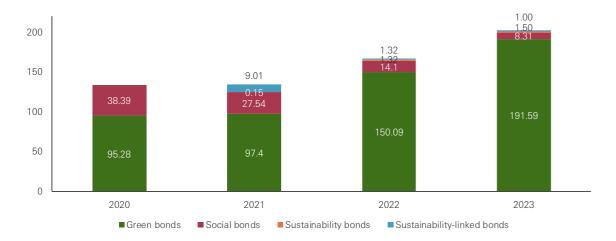
Green and Sustainable Finance



The sustainable finance market in the GBA has grown continuously over the period studied. However, the sustainable investment market was less active in 2023 than in previous years.

The volume of GSSS bonds issued by the GBA has increased yearly over the period in question, reaching a new high in 2023. As can been seen in Figure 14, the GBA issued over RMB200 billion of GSSS bonds in 2023, a 21% increase year-on-year. The green bond market has been more active than the social, sustainability and sustainability-linked bonds markets for the past four years. According to our data, the volume of green bonds issued by the GBA's issuers accounted for the largest proportion of the total issuance volume of GSSS bonds, with figures of 71%, 73%, 90% and 95% from 2020 to 2023, respectively.

Figure 14. Issuance volume of GSSS bonds within the GBA (RMB billions)



Note: GSSS bonds issued within the GBA refer to both onshore and offshore GSSS bonds issued by entities registered or primarily operating within Source: Wind, CECEPEC

In 2023, governments within the GBA were the most significant source of GSSS bonds, followed by the financials sector. Hong Kong, Guangzhou and Shenzhen led the GSSS bond market, accounting for 98% of the total issuance volume within the region. Our study found that governments within the GBA increased their support for the sustainable debt market in 2023. As shown in Figure 15, government issued bonds accounted for approximately 57% (RMB116.23 billion) of the issuance volume of GSSS bonds in 2023. Specifically, the Hong Kong government was the main contributor, with several large green issuances. Governments within the GBA also issued social bonds to support social projects. For example, in August 2023, the Shenzhen government issued RMB2 billion worth of social bonds to support areas such as education, healthcare, etc.7

The financials and industrials sectors have also been active in the GSSS bond market, with an annual

issuance volume of RMB37.09 billion and RMB21.61 billion, respectively. In the GBA ESG Industry Subindices section below we analyse the GSSS bonds issued by the financials sector in detail.

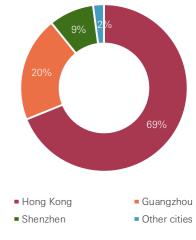
Hong Kong, Guangzhou, and Shenzhen maintained their leadership in the GSSS bond market. In 2023, the volume of GSSS bonds issued by these three cities accounted for around 98% of the GBA's total volume, reaching RMB198.20 billion, the largest volume over the past four years.

Macao was increasingly active in supporting the local green bond market. Specifically, in August 2023, Guangdong's provincial government issued its first offshore green bonds to the value of RMB2 billion in Macao to support the wastewater treatment projects in the GBA.8

Figure 15. GSSS bonds issuers by government and sectors within the GBA in 2023

Government Financials Others Real estate

Figure 16. GSSS bonds issuers by the GBA cities in 2023



Source: Wind, CECEPEC

Note: GSSS bonds issued by a specific city refer to both onshore and offshore GSSS bonds issued by entities registered or primarily operating within the city Source: Wind, CECEPEC

Figure 17. Large GSSS bonds issued by the Hong Kong government in 2023

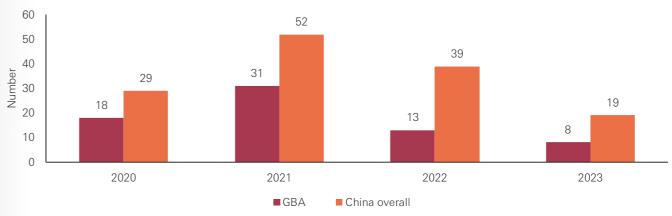
Date	Size	Туре	
January 2023	USD5.75 billion	Green bonds in dollars, euros and offshore yuan	The issuance was the largest ESG bond issuance in Asia at the time.
June 2023	USD6 billion	Green bonds	The issuance volume surpassed the issuance in January 2023.
October 2023	HKD20 billion	Retail green bonds	The retail green bonds were well received by the public. The final issuance amount exceeded the target issuance size of HKD15 billion.

Source: Hong Kong Monetary Authority

The sustainable investment market within the GBA was less active in 2023 than in 2021 and 2022, in line with the national market. Our study found that the number of new signatories to PRI within China, including the GBA, has

declined over the past two years. In 2023, there were eight new GBA investment managers or asset owners (accounting for 42% of the total national number) who were signatories to the PRI, seven of whom are located in Hong Kong.

Figure 18. New signatories to the PRI in China overall and within the GBA



Note: New signatories in China or within the GBA refer to new signatories registered or primarily operating in China or within the GBA. The data covers investment Source: UN PRI, CECEPEC

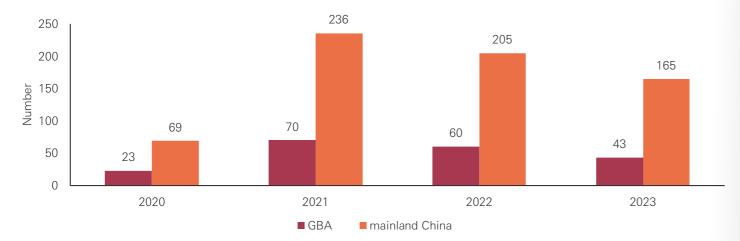
Our study saw fewer launches of new ESG mutual funds within mainland China during the year and a similar trend across the GBA. As can been seen in Figure 20, fund management companies based in Shenzhen were more active in launching ESG mutual funds than those in other GBA cities over the past four years. In 2023, fund management companies from

Shenzhen launched over 50% of the newly established ESG mutual funds within the GBA. We also looked in detail at the investment strategies of the ESG mutual funds launched by PRD cities (as shown in Figure 21). Of the 40 new ESG mutual funds launched by PRD cities in 2023, 16 were pure ESG funds, and over 50% were environmental themed funds.

Types of ESG mutual funds in mainland China9

- Pure ESG mutual fund: Incorporate ALL three dimensions, i.e., environmental, social and governance, into their investment strategies.
- Environmental themed fund, Social themed fund, Corporate governance themed fund: Incorporate ONE of the three dimensions, i.e., environmental, social and governance, into their investment strategies.

Figure 19. ESG mutual funds newly launched by fund management companies in mainland China and within the GBA



Source: Wind, CECEPEC

21

Figure 20. ESG mutual funds newly launched by GBA fund management companies

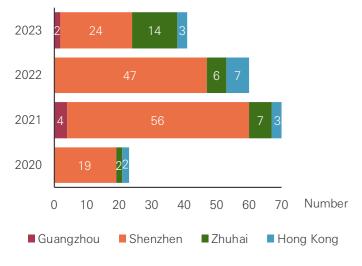
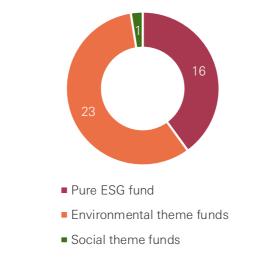


Figure 21. Types of ESG mutual funds newly launched by PRD cities' fund management companies in 2023



Source: Wind, CECEPEC Source: Wind, CECEPEC

Policymakers and other market players have continued to perfect the regional sustainable finance ecosystem and strengthen collaboration within the GBA. The figure below shows some of the key actions and activities within the GBA in 2023.



the High-Quality Development of

the GBA.

on its ongoing development

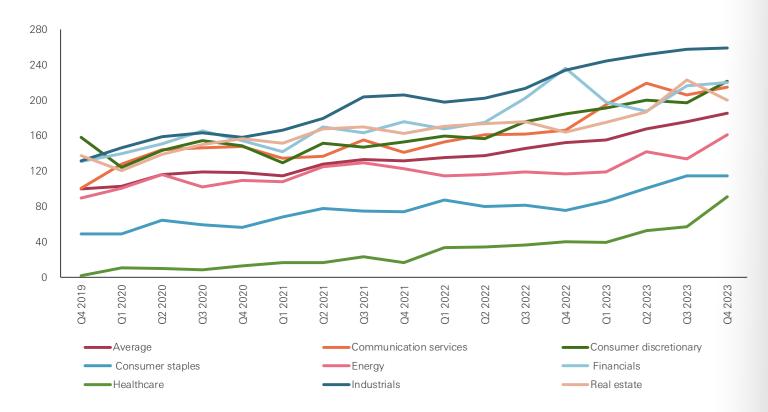
and application.

GBA ESG Industry Sub-indices



GBA ESG Industry Sub-indices

Figure 22. Relative ESG performance evolution of the eight sectors



Note: The average value of the GBA ESG Industry Sub-indices was set at 100.00 for Q4 2019 (base period), as a benchmark with which to compare each key sector's individual ESG performances as well as their average performance.

Source: China's official statistical database, public sources, CECEPEC

Our study found that, in 2023, the average value of the GBA ESG Industry Sub-indices increased continuously reaching a record high of 185.31 in Q4 which constituted a year-on-year increase of 22%. As per Figure 22, all sectors, except financials, experienced overall growth in 2023. It is worth noting that the energy, consumer discretionary, and healthcare sectors had the most significant improvements in 2023, primarily driven by increasing policy support for these sectors' ESG and sustainable development. The financials sector experienced a decline compared with the second half year of 2022 mainly due to a decrease in the issuance of GSSS bonds.

Case Study: Financials

The financials sector plays a leading role in the transition towards a sustainable economy.

According to the government's official data, the added value of the financials sector accounted for 10% of the GDP of Guangdong Province in 2023 (as of Q3 2023). 10 In Hong Kong, the corresponding figure was 20% which means that, in recent years, it has become the largest economic sector within the city. 11 Figure 23 shows that the financials sector within the GBA grew in terms of ESG and sustainable development over the period in question. Our study found that increasing policy

support over the past two years has encouraged the financials sector to invest in the transition and in sustainability. At the same time, our data shows that the financials sector was extremely active in the green and sustainable debt market. A sharp improvement in the second half year of 2022 may be primarily attributed to significant increases in the volume of GSSS bonds issued by the sector.

Figure 23. GBA ESG Sub-index - Financials







Governments play an essential role in encouraging financial institutions to invest in ESG and sustainable fields through policy support. Specifically, they do this by providing subsidies and defining focused investment areas and sustainable financial products.

Financial institutions within the Guangdong Province have proactively responded to green and sustainable financial policies launched by the government. In mainland China's bank-dominated financial system, green credit is undoubtedly the most critical component of green

credit is undoubtedly the most critical component of green finance. The financial institution is one of the most important participants within the green credit ecosystem. Since 2007, policymakers within mainland China have continuously improved the green credit policy system. For instance, mainland China issued the Guiding Catalogue for the Green

Industry (2019) in 2019, which sets out a detailed list of six recognised green industries. This policy offers clear guidance for financial institutions to provide green credit services to enterprises from these recognised industries. Mainland China also launched innovative monetary policies to guide the capital flow of financial institutions. As noted in our report dated April 2023, the People's Bank of China (PBOC) announced that it would continue to leverage the carbon-reduction credit facility.

Innovative Practice

Monetary Policy Tool to Support Financial Institutions to Develop Green and Sustainable Business



In 2021, PBOC launched a new monetary policy tool to support carbon emission reduction projects through cheap lending to financial institutions.

Cabon-reduction credit facility

The aim of this new tool is to encourage financial institutions to increase the availability of social capital to promote the low-carbon transition of key industries. It also seeks to support the development of clean energy, energy saving and carbon emissions reduction technologies, etc. Under this innovative scheme, eligible financial institutions will provide carbon emissions reduction loans to enterprises. The PBOC will subsequently provide 60% of the loans to these commercial lenders for one year at an interest of 1.75%.¹²

Achievements of financial institutions within Guangdong Province

Guangdong Provine actively leveraged the facility launched by PBOC to promote the region's green and low-carbon industries. According to the latest public data, as of the end of 2022, financial institutions in Guangdong Province issued RMB64.2 billion in carbon emission reduction loans, ranking first in mainland China. This will benefit 266 enterprises and lead to a reduction of 11.42 million tonnes of CO2 emissions.¹³

As mentioned in our previous report dated October 2023, the development of offshore wind power is key for the GBA in its pursuit of sustainable energy sources and is essential for the region's energy transition. The carbon-reduction credit facility is a useful tool for the energy transition of the GBA. As of June 2023, financial institutions within Guangdong Province issued RMB27.79 billion in carbon emission reduction loans to support offshore wind power projects.¹⁴

In addition to green credit, in recent years policymakers within China have highlighted the importance of green insurance. Shenzhen is the leader with regard to legislation on ESG and sustainability. In 2021, Shenzhen published Environmental Pollution Compulsory Liability Insuranceix Implementation Measures to promote green insurance and simultaneously eliminate environmental risks and their impact on society. Macao launched a natural catastrophe property insurance scheme in 2020 to promote green insurance, which is discussed in greater detail below.

The financials sector in Hong Kong is a leader in the field of green and sustainable finance. This is undoubtedly reinforced by Hong Kong's position as an international financial centre.

The Hong Kong Government launched a new scheme benefiting bond issuers and loan borrowers, facilitating the green and sustainable business of the financials sector. The HKMA also continues to promote and administer the Green and Sustainable Finance Scheme launched in 2021. The Scheme provides subsidies for eligible bond issuers and loan borrowers to cover their expenses on bond issuance and external review services and, at the same time, attracts related professional service providers, including financial institutions, to expand their green and sustainable business.

Financial institutions are one of the most active issuers in the GSSS bonds market. Our study found that, over the past two years, the GBA financials sector issued a greater volume of GSSS bonds as compared with 2020 and 2021. Our study also shows that the banking and financial leasing sub-sectors are the largest contributors. As can be seen in Figure 24, the financials sector had its largest issuance volume of GSSS bonds in 2022, due primarily to two green bonds issued by two banks headquartered in Shenzhen.

Our study found that green bonds were the most common type of GSSS bonds in the financials sector. Proceeds of the financials sector's green bonds were typically used to support eligible projects listed in the Green Bond Endorsed Projects Catalogue (2021 Edition). Certain leading financial institutions began to align their selection criteria for green projects with international taxonomies, such as the Common Ground Taxonomy. With regard to the social bonds issued by the GBA's financials sector, the proceeds were primarily allocated to mitigate COVID-19-related issues. Additionally, it is worth noting that sustainability-linked bonds are another tool used by the financials sector. For instance, a bank located in Hong Kong issued two sustainability-linked bonds in 2021, setting the sustainability performance targets for its green loans business. Another notable case is that of a Hong Kong finance company which issued a sustainability-linked bond in 2023 to support the sustainable development of its enterprise group, which focuses on the energy business.

Figure 24. Issuance volume of GSSS bonds by the financials sector within the GBA

Year	Green bonds (RMB billions)	Social bonds (RMB billions)	Sustainability bonds (RMB billions)	Sustainability- linked bonds (RMB billions)	GSSS bonds (RMB billions)	Percentage of total issuance volume within the GBA
2023	36.48	0.11	0.00	0.50	37.09	18%
2022	62.81	4.00	0.00	0	66.81	40%
2021	9.19	6.00	0.15	7.42	22.76	17%
2020	6.42	6.80	0.00	0	13.22	10%

Note: Two banks headquartered in Shenzhen issued large green bonds in 2022, respectively, with a total worth of RMB30 billion, accounting for around 50% of the GBA's total issuance volume in the year.

Source: Wind, CECEPEC

ix Compulsory pollution liability insurance refers to the compulsory insurance that takes the compensation liability that enterprises, institutions and other producers and business operators should bear for damages caused by environmental pollution as the subject matter of insurance (Source).

The financials sector within the GBA has proactively embedded ESG and sustainable factors in its businesses, thereby accelerating the sustainable transformation of other sectors and of society as a whole.

This report looks closely at several financial sub-sectors and analyses their green and sustainable practices.

1 Banking sub-sector

In addition to serving corporate clients, banks in the GBA have introduced innovative financial products, such as green mortgages and green credit cards, to encourage green and sustainable consumption. Acting as a bridge between consumers and enterprises, banks within the GBA are keen to allocate capital towards fostering public support for low-carbon living.

Case Study:

Our study observed that some GBA banks offer mobile App users the ability to calculate carbon emissions in various daily travel scenarios. By transforming individual low-carbon behaviour into public welfare incentive points, these banks aim to guide environmental and low-carbon lifestyles, promoting sustainable development at the consumer level.

Some leading banks in Hong Kong have introduced Green Mortgage Plans aimed at fostering green living in Hong Kong. These plans encourage customers to invest in properties within sustainably designed and constructed buildings. Typically, eligible buildings are required to have valid Gold or Platinum ratings under the BEAM Plus New Buildings (NB) / Existing Buildings (EB) scheme, which is officially recognised and certified by the Hong Kong Green Building Council (HKGBC).



2 Insurance sub-sector

Leading insurance companies within the GBA have established an internal green or sustainable insurance framework in line with international principles. Some GBA insurance companies are signatories to the Principles for Sustainable Insurance (PSI) initiated by the United Nations Environment Programme Finance Initiative (UNEP FI). These companies have advanced green and sustainable businesses

under their green or sustainable insurance frameworks aligned with the abovementioned principles. The integration of ESG factors into the insurance business model is now common practice in leading companies. It is interesting to note that a number of innovative sustainable insurance products have emerged in the market.

Case Study:

A leading Shenzhen company has incorporated ESG factors into its product development, design, and evaluation. For instance, ESG risk factors, such as climate risks and emerging social risks, are considered during the actuarial and pricing process. Furthermore, the company has stopped underwriting new engineering insurance policies for overseas coal and thermal power businesses.¹⁵

With regard to sustainable insurance products, catastrophe insurance is relatively common within the GBA being as it is a coastal region exposed to catastrophic risks. It is worth noting that Macao launched a natural catastrophe property insurance scheme in 2019 and optimised the program annually to help local SMEs address extreme weather risks. Under the Scheme, premium subsidies are provided to eligible SME applicants for property damage caused by typhoons

and storm surges. Another case is that of a leading Shenzhen insurance company which underwrote a catastrophe insurance project for the Emergency Management Bureau of Shenzhen in 2022. During that same year, catastrophe insurance in Shenzhen helped ten thousand people.¹⁵

An increasing number of sustainable insurance products focussing on environmental protection have been launched by GBA companies. Some are themed around ocean carbon sinks, offering support for the post-disaster rescue of marine biological carbon sink resources, ecosystem protection and restoration.

3 Financial leasing sub-sector

The financial leasing industry is a key driver of economic development as it provides companies with financing solutions. Within the context of this study, the financial leasing subsector promotes eco-friendly practices and sustainable development by providing other sectors with tangible green and low-carbon assets, i.e., green leasing. Financial leasing companies within the GBA have upgraded their assets and have been expanding investment in key sectors, such as clean energy industries, green transportation, and so on.

With regard to green and sustainable financing, green securitisationxi is increasingly used by the financial leasing subsector. Our data shows that financial leasing companies were the main issuers of green asset-backed securities (green ABS) within the GBA with an issuance volume of RMB3.36 billion and RMB6.65 billion in 2021 and 2022, respectively.

Case Study:

A leading financial leasing company in Shenzhen, the first listed financial leasing company in mainland China, is strongly focussed on the sustainable transformation of its holding assets. For example, the company has transformed its existing ships into energy-saving ones and designs newly built ships in such a way as to reduce greenhouse gas emissions and meet the requirements of the International Maritime Organisation (IMO)xii. In addition, the company has sped up the development of new energy vehicles (NEVs) in Shenzhen. As of the end of 2022, the company has supported the renewal of 4,451 new energy buses in Shenzhen, accounting for one-third of the city's total new energy vehicles.16

One of the leading companies in GBA has actively leveraged green ABS to support the green industry. According to our data, in 2022, this company successfully issued green ABS with a value of RMB5 billion, accounting for 74% of the total volume of the green ABS issued by GBA financial leasing companies. The underlying assets of its ABS included sectors such as clean energy, sewage treatment, and NEVs.17

- Catastrophe insurance protects businesses and residences against natural disasters such as earthquakes, floods, and hurricanes, and against human-
- A securitisation can be defined as green when the underlying cash flows relate to low-carbon assets or where the proceeds from the deal are earmarked to invest in low-carbon assets (Source).
- IMO is the United Nations specialised agency with responsibility for the safety and security of shipping and the prevention of marine and atmospheric pollution by ships (Source). As noted in our previous report dated July 2023, IMO has launched a new set of rules to reduce carbon emissions from ocean

Case Study:

Healthcare

Unsurprisingly, the healthcare sector within the GBA attaches great importance to ESG aiming as it does to benefit the well-being of the people and the region as a whole.

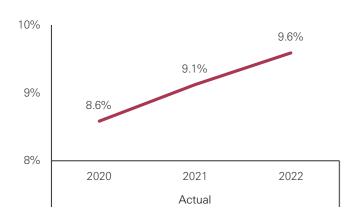
Healthcare has experienced rapid growth in recent years. The GBA has witnessed the ageing of its population. According to the official data, the proportion of elderly people, i.e., over 65 years, is roughly 10%, 21% and 13% in Guangdong Province, Hong Kong and Macao, respectively. 18 19 20 An ageing population

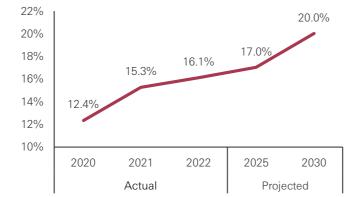
and the residual effects of the pandemic have driven the demand for high-quality healthcare services. Encouragingly. as an innovation hub, the GBA is perfectly placed to promote innovation in healthcare technology. Those factors have helped spur the development of healthcare within the GBA.

Figure 25. Aging trends in Guangdong Province, Hong Kong and Macao

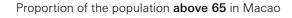
Proportion of the population above 65 in Guangdong Province

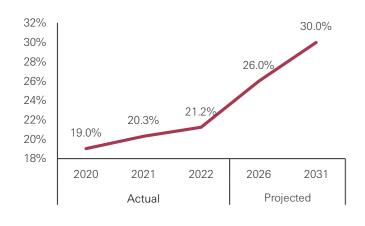
Proportion of the population above 60 in Guangdong Province

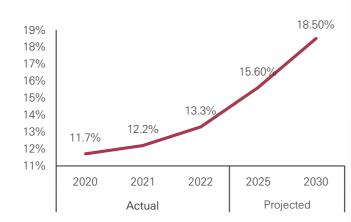




Proportion of the population above 65 in Hong Kong





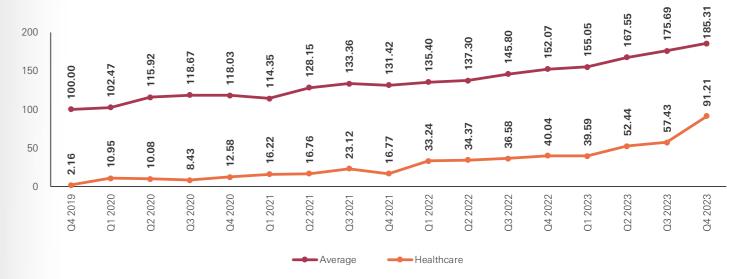


Note: A region is regarded as having an "ageing society" if the share of people aged 60 years or more is over 10% of the total population or the share of people aged 65 years or more is over 7% (Source). The World Health Organisation goes on to state that a population with people aged 65 or over accounting for 7% of the total population is an "ageing society",14% an "aged society", and 21% a "super-aged society". Source: China's official statistical database, public sources

Healthcare involves various social issues, such as product safety and quality, access to healthcare, and human capital and development. This report focuses on access to healthcare and analyses how the GBA works at improving access to

healthcare within the context of increasing demand for healthcare products and services. The report also looks at the evolution of the GBA's healthcare sector towards green and low carbon over the four-year period of the study.

Figure 26. GBA ESG Sub-index - Healthcare



Note: The line chart shows the ESG performance evolution of the healthcare sector. The average value of the GBA ESG Industry Sub-indices was set at 100.00 for Q4 2019 (base period).

Source: China's official statistical database, Wind, public sources, public disclosures of listed companies, CECEPEC

Figure 27. Healthcare sector's performance with regard to climate action



Note: The values are normalised. The closer the value of the Y-axis to 10, the better the performance of the pillars. Source: China's official statistical database, Wind, public sources, public disclosures of listed companies, CECEPEC

Our study found that the healthcare sector has a low starting point in ESG and lagged behind the other key sectors during the period in question. However, it is still worth noting that the ESG performance of the healthcare sector has gradually improved since 2019 and shown increasing activeness in managing climate-related issues (as shown in Figures 26 and 27).

According to our study, 26 healthcare companies within the GBA were invited to submit the CDP's climate change guestionnaires in 2023; four of them were first requested in the year. Figure 5 shows that healthcare companies within the GBA have started to respond to stakeholders' concerns on climate-related issues via CDP climate change questionnaires in 2021 and have experienced a remarkable improvement since 2022. Our study also observed that healthcare companies who submitted climate change questionnaires scored C or above in the last three years. These companies have realised and evaluated their operations' environmental impact, and some have implemented efficient mitigation measures.

Figure 28. Disclosure status of the GBA healthcare sector vis-à-vis the CDP climate change questionnaire

	2020	2021	2022	2023
Disclosure rate	0	5%	22%	27%

Note: Disclosure rate = no. of companies disclosed/no. of companies invited to disclose via CDP's climate change questionnaire Source: CDP, CECEPEC

Our study observed that the healthcare sector within the GBA is increasingly interested in environmental issues and actively works at promoting green manufacturing and operations. Leading companies from the healthcare equipment and service sub-sector have started to develop green products by

incorporating green and sustainability concepts into product manufacturing. With regard to the pharmaceutical sub-sector, some companies have increased investment in green factories to mitigate environmental impact during the pharmaceutical production process.

Case Study:

- A Shenzhen company engaged in the R&D, manufacture, marketing and service of medical devices is exploring and supporting the "circular economy". The company is committed to promoting the use of durable consumables and renewable materials for product manufacturing. It is also committed to producing energy-efficient and resource-saving products. For example, the company launched wash-free vials to reduce both consumption of purified water and wastewater discharge.²¹
- A pharmaceutical company headquartered in Hong Kong actively promotes the construction of green factories and renewable energy projects. The company has installed photovoltaic power generation projects in several production plants.²²

Access to healthcare which is defined as "the timely use of personal health services to achieve the best health outcomes" is one of the most pressing ESG issues for the healthcare sector. Our study found that governments, companies, and medical institutions within the GBA are committed to improving access to healthcare within the region and beyond.

Governments within the Guangdong Province have continuously formulated healthcare-related policies to facilitate the entry of vulnerable groups into the healthcare system. One of the key components of access to healthcare is improving the coverage of healthcare services. In 2023, Guangdong Province published the "Medical Assistance Measures" to safeguard the fundamental healthcare rights of disadvantaged groups, including impoverished people and orphans, and improve medical assistance. Specifically, the medical assistance fund will cover the eligible medical expenses borne by individuals, except for those covered by medical insurance.²³

Municipal governments within Guangdong Province, such as Jiangmen and Zhuhai, have recently introduced assistance measures at city level. These measures include providing pharmaceutical assistance to poor individuals and medical aid to households affected by illness, disability, disasters, or accidents.

Hong Kong is actively developing telemedicine services to improve healthcare coverage and timeliness as well as alleviate the strain on medical resources. Telemedicine enables patients to access healthcare services remotely using digital information and communication technologies.

Hong Kong's Hospital Authority launched a one-stop mobile platform, "HA GO", allowing patients to connect with clinic staff at home through the mobile application for teleconsultations during their patient journey. Furthermore, the COVID-19 pandemic unleashed a growing demand for telemedicine services. Hong Kong's Hospital Authority has expanded the scope of remote medical consultations to include patients requiring follow-up visits. From mid-February 2022 to the end of January 2023, the designated clinics and teleconsultation services provided over 511,600 consultations.²⁴ Meanwhile, an increasing number of private medical institutions in Hong Kong are introducing their own telemedicine services.

GBA healthcare companies have undertaken various initiatives to improve healthcare accessibility by, for example, developing drugs for rare diseases, organising educational programs for healthcare professionals, and conducting public awareness campaigns.

Rare diseases pose a significant challenge due to their low prevalence and limited clinical cases. As such, pharmaceutical companies often lack the motivation to invest in the research and development of drugs for rare diseases. However, certain leading GBA companies have been proactive in this area and have invested significantly in R&D, clinical trials and regulatory approval for rare disease drugs.

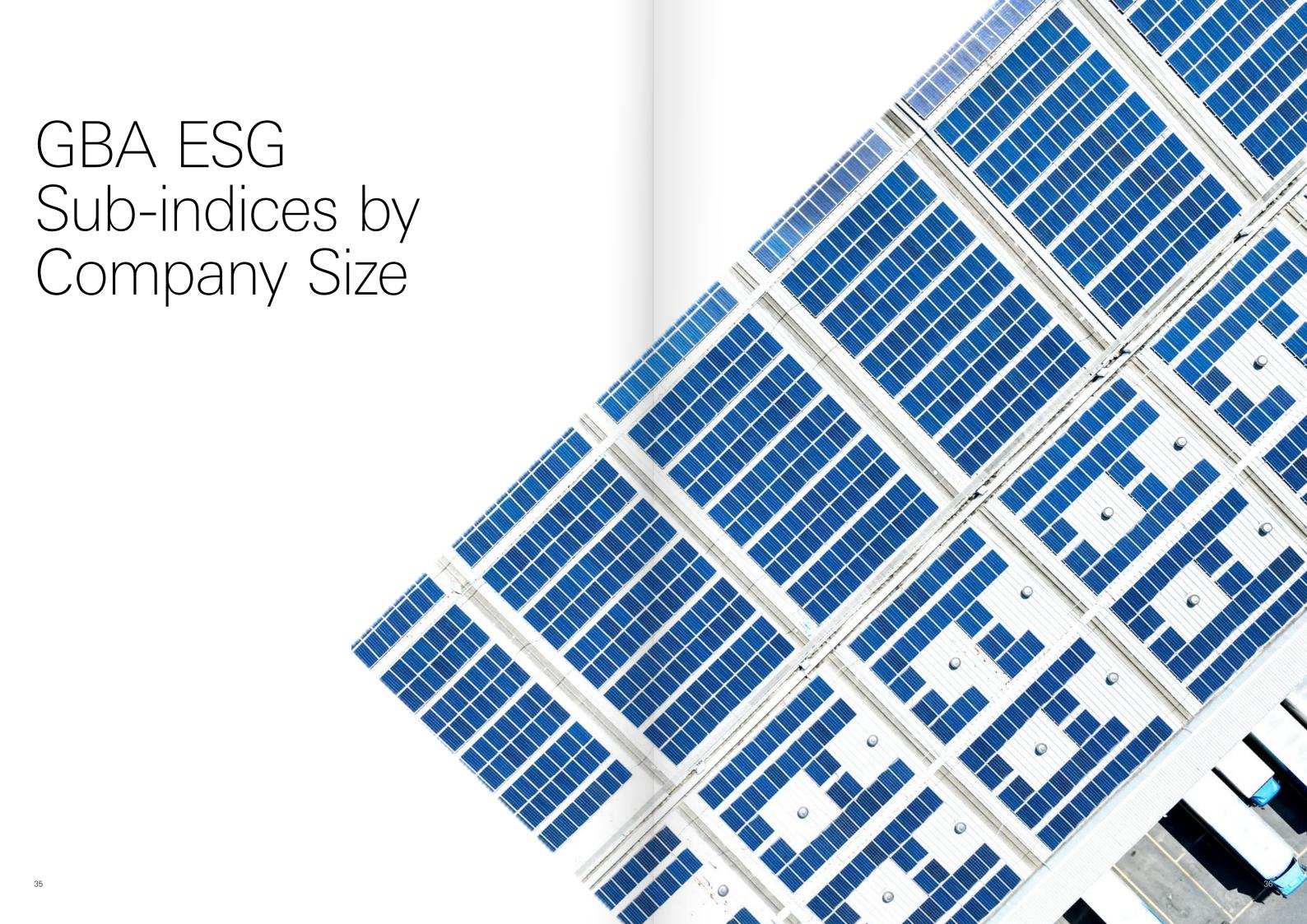
Assembling a group of capable, qualified healthcare professionals is another critical step towards improving access to healthcare. We noted that GBA companies focus not only on strengthening the professional capacity of their workforce but

also in sharing their experience in specific areas of interest with overseas organisations. Moreover, GBA healthcare companies have committed themselves to improving access to healthcare

in districts with insufficient medical resources by launching activities such as the provision of free medical treatment and medical devices.

Case Study:

A leading GBA healthcare company specialising in the treatment of liver disease has provided academic exchange platforms and training opportunities for scholars and doctors from medical schools and institutions in Uzbekistan since 2018. This Chinese company has pioneered a series of technologies and shared both these and its experience in the diagnosis and treatment of clinical liver disease via offline seminars and online training.²²



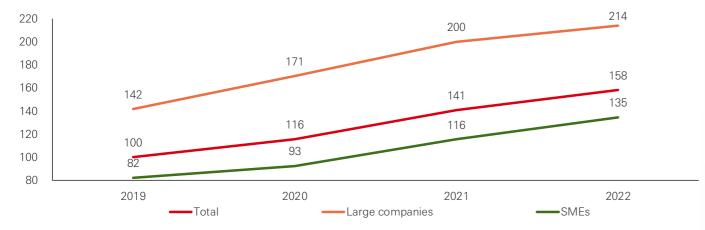


The GBA ESG Sub-indices by company size track the annual ESG performance of companies within the GBA. Specifically, this report looks at the ESG performance of a sample of 470 GBA-based companies in 2022 by analysing their performance^{xiii} with regard to various ESG indicators under five pillars, i.e., environmental, social, governance, green and sustainable finance, and external assurance.



Overall Performance of the GBA ESG Sub-indices by Company Size

Figure 29. GBA ESG Sub-indices – large companies vs. SMEs



Note: The red line represents the average ESG performance of 470 companies in the sample, the numbers being the index values for that year. The base value of the red line was set at 100.00 for Q4 2019 (base period).

Source: Public disclosures of listed companies, other public sources, CECEPEC

The overall ESG performance of the GBA companies continued to improve in 2022. From the above graph, we see that in 2022 the GBA ESG Sub-indices for Large Companies

reached 214, with a year-on-year increase of 7%. At the same time, the GBA ESG Sub-indices for SMEs increased at a faster rate, with a year-on-year increase of 17%.

Figure 30. ESG performance of large companies and SMEs in the five pillars

	Year	Overall ESG performance	Environmental	Social	Governance	Green and Sustainable Finance	External Assurance
	2019	41.44	37.94	57.65	30.94	0.00	22.14
Large	2020	49.88	46.85	66.28	40.14	3.57	25.00
companies	2021	58.56	56.73	73.65	49.70	0.00	29.29
	2022	62.61	60.66	75.44	58.39	7.14	27.86
	2019	24.08	29.21	25.56	19.68	0.00	1.21
ONE	2020	27.10	31.78	29.03	23.54	0.00	1.52
SMEs -	2021	33.80	36.24	35.95	35.19	0.00	1.21
	2022	39.38	41.17	42.06	42.29	0.30	2.12
Gaps -	2019	17.37	8.73	32.09	11.26	0.00	20.93
between large	2020	22.78	15.06	37.24	16.59	3.57	23.48
companies	2021	24.76	20.49	37.70	14.50	0.00	28.07
and SMEs	2022	23.23	19.49	33.38	16.10	6.84	25.74

Note: The range of scores is from 0 to 100. The closer the score is to 100, the better the performance. Source: Public disclosures of listed companies, other public sources, CECEPEC

When assessing the ESG performance, we scored each ESG indicator under five pillars for all of the companies within the sample. The above table shows the scores for large companies and SMEs, specifically the overall performance and the individual values under each of the five pillars. As per the table, large companies and SMEs achieved higher scores in overall ESG performance and in most pillars in 2022 than in the preceding three years. The one exception was external assurance in which large companies experienced a minor decrease due to an adjustment in the number of large companies included in the samplexiv.

Another noteworthy observation is that, although large companies continue to achieve higher scores than SMEs in overall ESG performance and the five pillars, the gaps became smaller in 2022, in overall performance and three pillars, i.e., environmental, social, and external assurance, indicating that SMEs have started to catch up. With respect to the two remaining pillars in which the gaps increased, SMEs require additional external resources and improved management capability to catch up.

Our study also observed that companies listed in Hong Kong performed better than those listed in other markets, which implies that mandatory ESG disclosure improved the ESG performance of listed companies.

Both large companies and SMEs experienced significant improvement in greenhouse gas-(GHG-)related indicators and ESG risk management. Specifically, in the context of dual carbon goals, both groups were more active in disclosing GHG emissions data and setting reduction targets. At the same time, both groups attached greater importance to ESG risk management. However, our study found that SMEs continue to lag behind large companies in acquiring advanced ESG risk management tools due to a lack of awareness and external resources. The following sections look in detail at the ESG performance of the two groups.

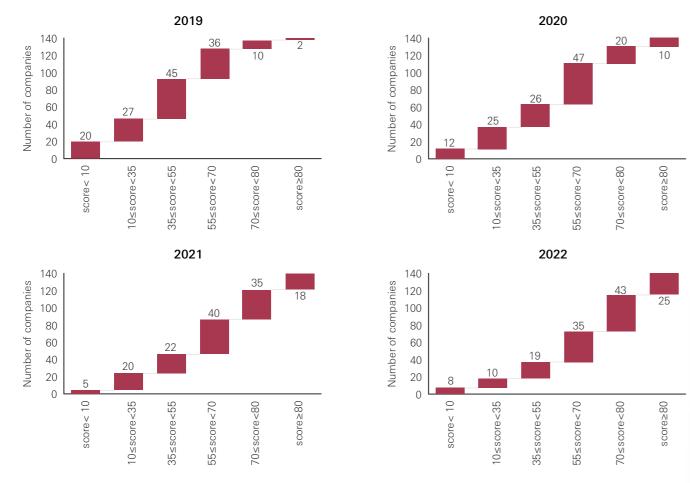
 $\mathbf{37}$

xiii We evaluated the companies' performance in most ESG indicators based on their 2022 ESG, corporate social responsibility(CSR), sustainability or other non-financial reports. With regard to three indicators, i.e., board gender diversity, board independence and issuance of GSSS bonds, we assessed the companies' performance based on their 2022 annual reports and other public sources.

xiv The samples of large companies are adjusted annually according to the index methodology

ESG Performance of the Large Companies

Figure 31. Score distribution of large companies in overall ESG performance



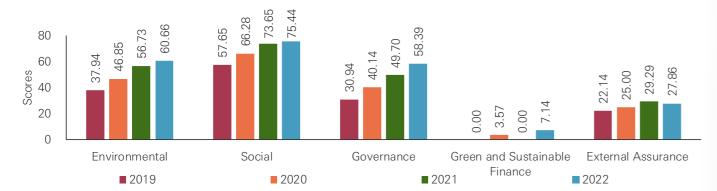
Note: The range of scores is from 0 to 100. The closer the score is to 100, the better the performance. The value of the Y-axis represents the number of companies achieving the corresponding scores.

Source: Public disclosures of listed companies, other public sources, CECEPEC

Our study showed that in 2022 there was a continued increase in the number of large companies achieving high scores and a decrease in the number of companies achieving low scores. In 2022, the number of large companies achieving scores of higher than 70 points increased to 68, representing 49% of the 140 large companies sampled. At the same time, the proportion of companies with scores of less than 55 points dropped from 66% in 2019 to 27% in 2022.

Furthermore, our study found that large companies listed in Hong Kong performed better than those listed in mainland China and other markets. Around 70% of Hong Konglisted companies achieved scores of 70 or above, while the corresponding figure for companies listed in mainland China was 21%.

Figure 32. Scores of large companies in five pillars



Note: The range of scores is from 0 to 100. The closer the score is to 100, the better the performance. Source: Public disclosures of listed companies, other public sources, CECEPEC

As can be seen in the figure above, large companies have performed better in social issues year-on-year over the past four years. As noted in our report dated December 2022, most large companies, especially state-owned enterprises, have a growing appreciation of the importance of corporate social responsibility. It is also worth noting that the governance pillar experienced a significant improvement in 2022, indicating that large companies are attaching greater importance to their overall ESG governance. The sections below provide detailed analyses of the performance of large companies under the environmental, social, and governance pillars.

With regard to green and sustainable finance, ten large companies within our sample issued GSSS bonds in 2022,

double the number for 2019. We found that, except for one large company which issued social bonds, the rest issued green bonds to support their green business development in projects such as clean energy generation, clean transportation, and green buildings.

There was a slight decrease in external assurance. As previously mentioned, we adjusted the samples of large companies for the 2022 assessment in line with the index methodology, which inevitably gave rise to fluctuations in the scores. The table below shows that the proportion of large companies obtaining ESG assurance was approximately 30% in both 2021 and 2022.

Figure 33. The performance of large companies in the external assurance pillar

	2019	2020	2021	2022
Number of large companies obtaining ESG assurance for their ESG disclosure	31	35	41	39
Proportion of large companies obtaining ESG assurance for their ESG disclosure	22%	25%	29%	28%

Note: Proportion of large companies obtaining ESG assurance for their ESG disclosure = Number of large companies obtaining ESG assurance for their ESG disclosure/140 sample large companies

Source: Public disclosures of listed companies, CECEPEC

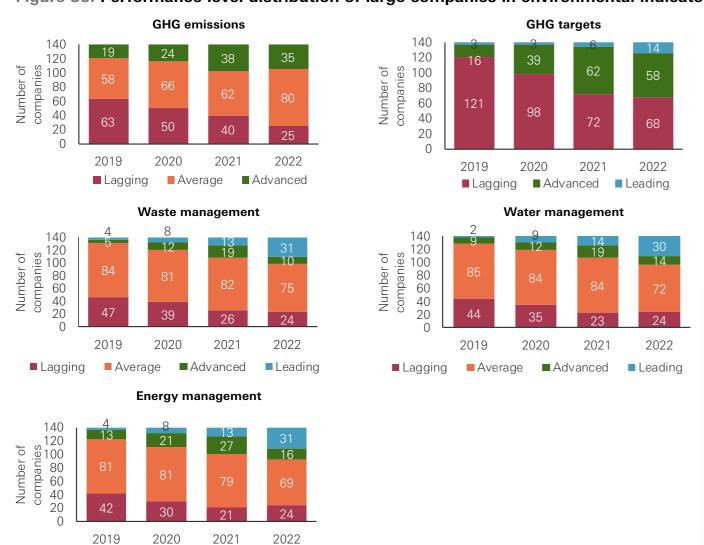
Environmental Performance of Large Companies

Figure 34. Scores of large companies in environmental indicators



Note: The range of scores is from 0 to 100. The closer the score is to 100, the better the performance. Source: Public disclosures of listed companies, CECEPEC

Figure 35. Performance level distribution of large companies in environmental indicators



Note: Companies' performance in ESG indicators was assessed in four levels, i.e., lagging, average, advanced and leading. Source: Public disclosures of listed companies, CECEPEC

Leading

■ Average ■ Advanced

Lagging

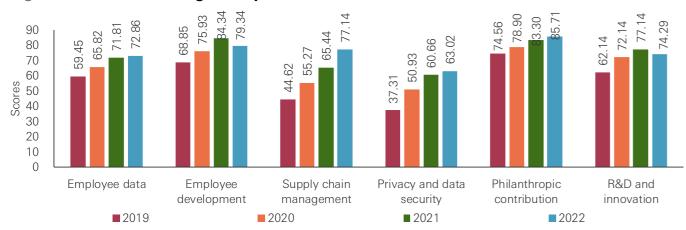
An increasing number of large companies disclosed their GHG emissions data via ESG or other non-financial reports. At the same time, large companies were more ambitious in setting GHG emissions targets. As can be seen in Figure 34, large companies experienced the most significant improvement in GHG emissions followed by GHG targets. Our study found that over 80% of large companies disclosed their GHG emissions data in 2022. Also, 25% disclosed the emissions data of GHG scope 3, i.e., the corporate value chain's emissions, in 2021 and 2022. With regard to GHG targets, we observed that although the number of large companies setting quantitative GHG targets remained relatively stable (68 in 2021, 72 in 2022), large companies are increasingly ambitious in their target setting. Specifically, 14 large companies set science-based targets (SBTs) approved by

the SBTi in 2022, while the corresponding figure for 2021 was six and just three in both 2020 and 2019.

Large companies were more active in setting long-term quantitative targets to improve the management and performance of waste, water, and energy generators. As per Figure 34, three indicators, i.e., waste management, water management, and energy management, all improved slightly and all three were at almost the same level in 2022. Our study observed that over 20% of large companies set long-term quantitative targets and annually reviewed their progress with regard to the three indicators mentioned. This shows that large companies are increasingly proactive and strategic in their planning

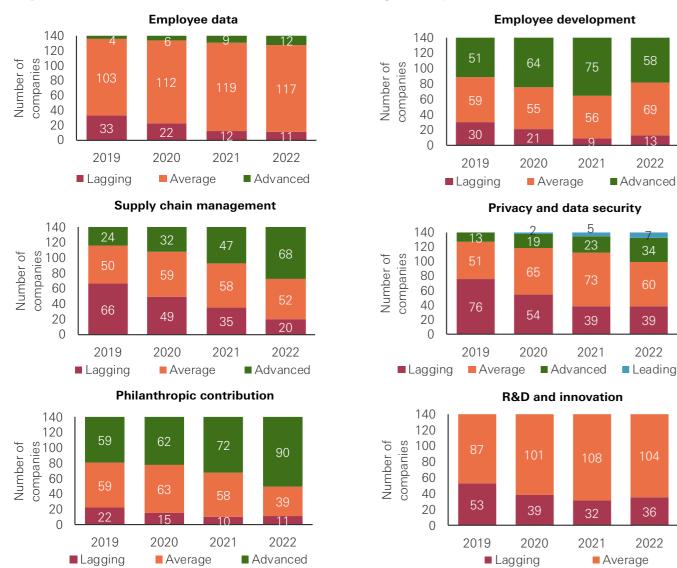
Social Performance of Large Companies

Figure 36. Scores of large companies in social indicators



Note: The range of scores is from 0 to 100. The closer the score is to 100, the better the performance. Source: Public disclosures of listed companies. CFCFPFC

Figure 37. Performance level distribution of large companies in social indicators



Note: Companies' performance in ESG indicators was assessed in four levels, i.e., lagging, average, advanced and leading Source: Public disclosures of listed companies, CECEPEC

Large companies improved in most social indicators and performed best in employment development and philanthropic contribution. According to Figure 36, large companies achieved the highest score in philanthropic contribution, followed by employee development. Our study found that an increasing number of large companies participated in philanthropic activities, for example, by establishing community engagement policies. We noted that the number of large companies providing training programs covering all workforce decreased in 2022, which was the main reason for the slight decline in employee development.

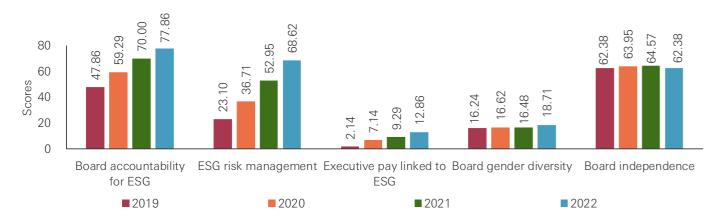
There were significant improvements in the disclosure of supplier data and in managing ESG-related issues within the supply chain. As can be seen in Figure 36, in 2022, supply chain management improved by 73% compared to 2019 and by 18% compared to 2021. Our data shows that an increasing number of companies included ESG factors in their supply chain management.

Actions carried out by large companies within the GBA to incorporate ESG in their supply chain management include:

- Establishment of an internal Green Procurement Policy by making reference to relevant standards, such as ISO 20400:2017 Sustainable Procurement Guidelines.
- Incorporation of ESG factors into the supplier valuation system.
- Tracking the consumption and environmental impact of supplies and materials. The data is used to evaluate and adjust the company's sustainable procurement.
- Regularly conducting workshops for suppliers to improve their safety and environmental awareness and capability.

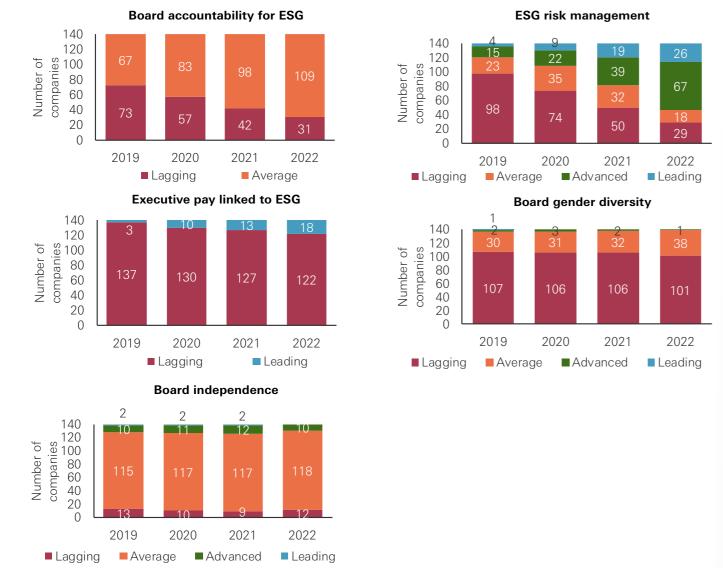
Governance Performance of Large Companies

Figure 38. Scores of large companies in governance indicators



Note: The range of scores is from 0 to 100. The closer the score is to 100, the better the performance. Source: Public disclosures of listed companies, other public sources, CECEPEC

Figure 39. Performance level distribution of large companies in governance indicators



Note: Companies' performance in ESG indicators was assessed in four levels, i.e., lagging, average, advanced and leading Source: Public disclosures of listed companies, other public sources, CECEPEC

Our study found that nearly 80% of large companies established ESG governance structures with board-level oversight in 2022. The corresponding figure in 2019 was 48%. A well-established ESG governance structure with board-level oversight is essential for a company's journey towards ESG and sustainability transformation. As per Figure 38, large companies experienced year-on-year improvement in board accountability for ESG; this being the highest scoring of the five governance indicators in 2021 and 2022.

There were significant improvements in both ESG risk management and executive pay linked to ESG. Our data shows that nearly 80% of large companies conducted internal identification and assessment of ESG risks in 2022. Furthermore, an increasing number of large companies have begun to conduct scenario analysis for climate-related risk management in line with the TCFDxv; the number is rising from four in 2019 to 26 in 2022. Our study also found that Hong Kong-listed companies performed much better than other companies in ESG risk management. Over 90% of Hong Kong-listed companies conducted and disclosed their management of ESG risk. However, 40% of companies listed in mainland China are yet to implement or disclose any such measures. The rapid improvement in ESG risk management may primarily be attributed to heightened regulatory requirements.

As mentioned in the GBA ESG Regional Index section, the GBA, especially Hong Kong, has tightened up the disclosure requirements on climate-related issues, while climate risk management is one of the issues that is currently most in focus

Our study found that the practice of linking ESG performance to management salary is not yet widespread within the GBA. However, it is still worth noting that the proportion of large companies linking ESG performance to management salary increased from 9% in 2021 to 13% in 2022.

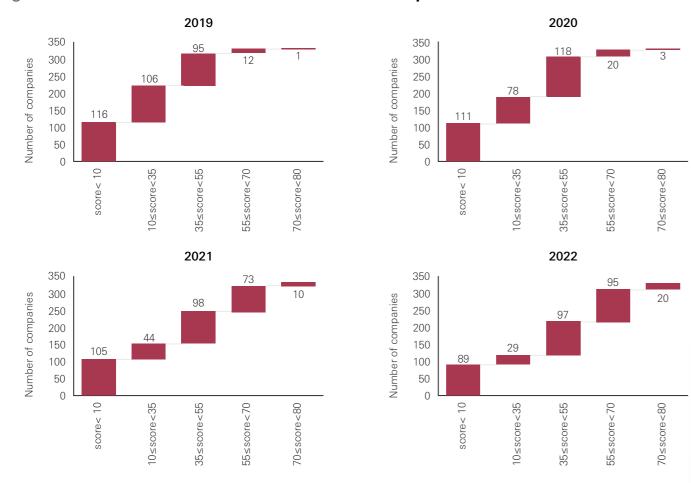
Our study also assessed companies' performance with regard to two board-related indicators, i.e., board gender diversity and board independence. Gender-diverse boards reflect a company's commitment to inclusivity and fairness. Appointing more independent boards generally results in a broader range of third-party advice and expertise. Dur data shows that the average percentage of females on the boards of large companies remained relatively unchanged at around 14% from 2019 to 2022. This was lower than the global level of 20%. Meanwhile, the average score for board independence for large companies was approximately 38% for the period in question.

45 4ϵ

xv TCFD recommendations, on climate-related financial disclosures, is a globally-recognised framework and is widely adaptable and applicable to organisations across sectors and jurisdictions. It guides organisations and companies to identify, manage and disclose climate-related risks and opportunities The recommendations are structured around four thematic areas that represent core elements of how organisations operate: governance, strategy, risk management and metrics and targets.

ESG Performance of SMEs

Figure 40. Score distribution of SMEs in overall ESG performance



Note: The range of scores is from 0 to 100. The closer the score is to 100, the better the performance. The value of the Y-axis represents the number of companies achieving the corresponding scores.

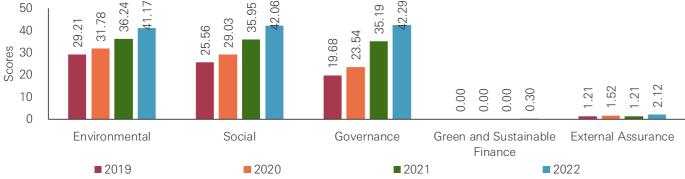
Source: Public disclosures of listed companies, other public sources, CECEPEC

SMEs are placing increasing importance on ESG disclosure and have demonstrated a significant improvement in ESG performance. Our study found that those SMEs who achieved scores of less than 10 points did so because of undisclosed ESG and other non-financial reports. The number of sample SMEs that did not disclose ESG and other non-financial reports decreased from 102 in 2021 to 88 in 2022, indicating an increasing awareness among SMEs of the necessity for ESG disclosure. Another observation is that there was a notable increase in the number of SMEs achieving scores of over 55,

rising from 13 in 2019 to 115 in 2022.

From the perspective of listed markets, our study observed similar findings for both large companies and SMEs, namely Hong Kong-listed SMEs performed better than SMEs listed elsewhere. Specifically, 70% of Hong Kong-listed SMEs achieved scores of between 35 and 70, while only 13% of SMEs listed in mainland China achieved similar results. Furthermore, over 70% of SMEs listed in mainland China scored less than 10 points.

Figure 41. Scores of SMEs in five pillars



Note: The range of scores is from 0 to 100. The closer the score is to 100, the better the performance. Source: Public disclosures of listed companies, other public sources, CECEPEC

SMEs improved in all ESG pillars in 2022 and achieved a balanced performance across the three main pillars, namely environmental, social and governance. Our study found that SMEs experienced the biggest improvement in these three pillars, with a year-on-year increase of 20%. The improvement in ESG risk management contributed significantly to the rise in the governance scores. The sections below further analyse the performance of SMEs under the environmental, social and governance pillars.

Figure 41 shows that SMEs began leveraging GSSS bonds to support their sustainable development. Our data found that one of the sample SMEs issued a green bond to finance its green projects in 2022. The proportion of SMEs obtaining external assurance increased slightly in 2022, though the figure was still relatively low. Only seven SMEs, i.e., 2% of the sample SMEs, obtained external assurance for their ESG disclosure in 2022.

Figure 42. The performance of SMEs in the external assurance pillar

	2019	2020	2021	2022
Number of SMEs obtaining ESG assurance for their ESG disclosure	4	5	4	7
Proportion of SMEs obtaining ESG assurance for their ESG disclosure	1.2%	1.5%	1.2%	2.1%

Note: Proportion of SMEs obtaining ESG assurance for their ESG disclosure = Number of SMEs obtaining ESG assurance for their ESG disclosure/330 sample SMEs Source: Public disclosures of listed companies, CECEPEC

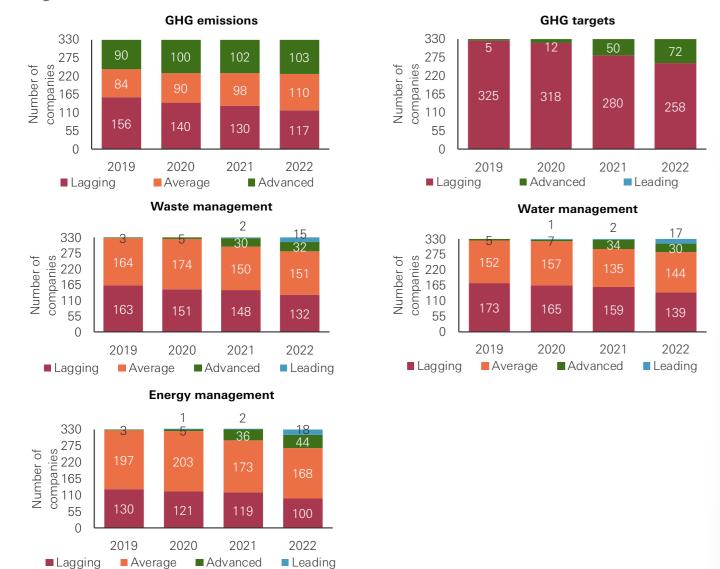
Environmental Performance of SMEs

Figure 43. Scores of SMEs in environmental indicators



Note: The range of scores is from 0 to 100. The closer the score is to 100, the better the performance. Source: Public disclosures of listed companies, CECEPEC

Figure 44. Performance level distribution of SMEs in environmental indicators



Note: Companies' performance in ESG indicators was assessed in four levels, i.e., lagging, average, advanced and leading. Source: Public disclosures of listed companies, CECEPEC

SMEs performed better in 2022 in the disclosure of GHG emissions and setting environmental targets. As can be seen in Figure 43, of the five environmental indicators SMEs achieved the highest scores in GHG emissions for the past four years, with a slight improvement in 2022. It is worth noting that the number of SMEs disclosing GHG emissions data increased steadily over the period studied.

Our data shows that an increasing number of SMEs set quantitative environmental targets and made disclosures via their ESG and other non-financial reports. The proportion of SMEs setting GHG quantitative targets rose from 2% in 2019 to 22% in 2022. However, no SME set scienced-based targets (SBTs) approved by SBTi. With regard to the other three indicators, SMEs have gradually improved in the disclosure of waste, water and energy-related data. Our study also found that the proportion of SMEs setting quantitative targets in waste, water and energy issues increased notably in 2021 and 2022, as per Figure 45.

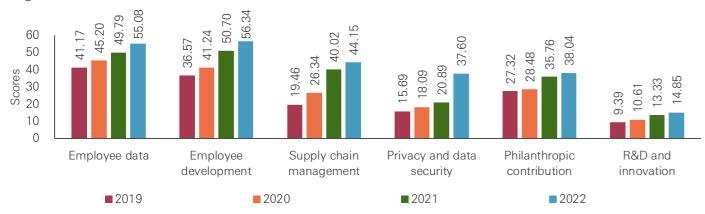
Figure 45. Proportion of SMEs setting quantitative targets in waste, water and energy

	2019	2020	2021	2022
Proportion of SMEs setting quantitative targets in waste	1%	3%	10%	14%
Proportion of SMEs setting quantitative targets in water	2%	2%	11%	14%
Proportion of SMEs setting quantitative targets in energy	1%	2%	12%	19%

Note: Proportion of SMEs setting quantitative targets in the specific issue = Number of SMEs setting quantitative targets in that issue/330 sample SMEs Source: Public disclosures of listed companies, CECEPEC

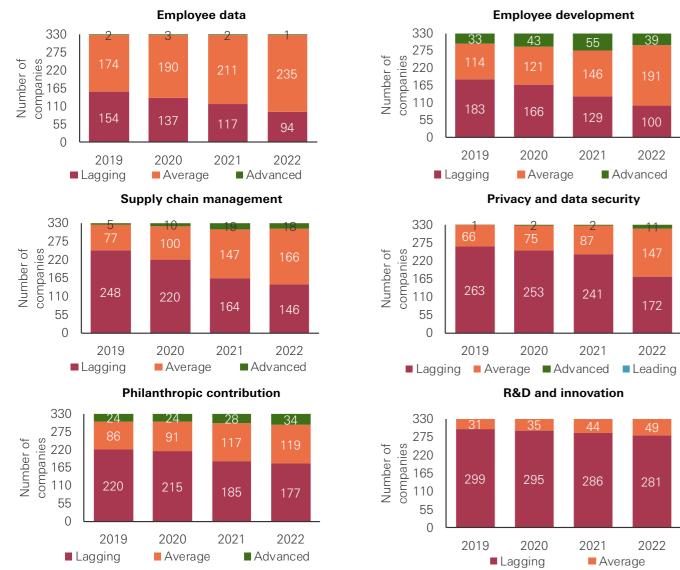
Social Performance of SMEs

Figure 46. Scores of SMEs in social indicators



Note: The range of scores is from 0 to 100. The closer the score is to 100, the better the performance. Source: Public disclosures of listed companies, CECEPEC

Figure 47. Performance level distribution of SMEs in social indicators



Note: Companies' performance in ESG indicators was assessed in four levels, i.e., lagging, average, advanced and leading. Source: Public disclosures of listed companies, CECEPEC

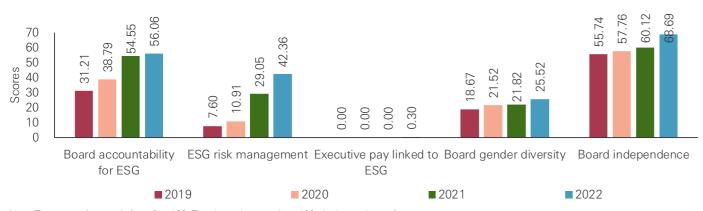
Within SMEs the scores of all social indicators have continuously improved over the period in question, the highest scores being in relation to employees and the supply chain. Specifically, Figure 18 shows that for the period 2019 to 2022 the three indicators with the highest scores are employee data, employee development and supply chain management. This clearly indicates that SMEs have consistently paid most attention to their direct stakeholders. Our study found that over 70% of SMEs in the sample disclosed employee-related data in 2022. The proportion of

sample SMEs reporting on supplier data via ESG and other non-financial reports rose from 25% in 2019 to 56% in 2022.

It is important to note that SMEs are increasingly aware of privacy and data security. Our study found that an increasing number of SMEs have established internal policies to manage privacy and data security concerns, and some have actively undergone external audit and certification for their privacy and data management systems.

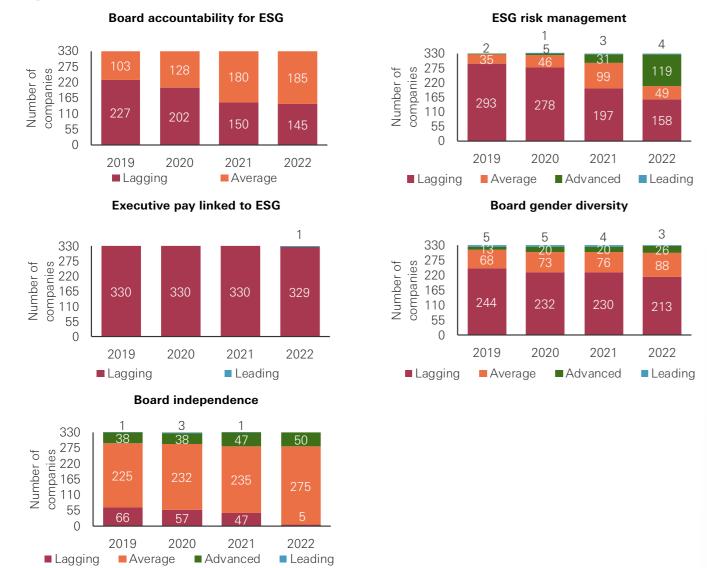
Governance Performance of SMEs

Figure 48. Scores of SMEs in governance indicators



Note: The range of scores is from 0 to 100. The closer the score is to 100, the better the performance. Source: Public disclosures of listed companies, other public sources, CECEPEC

Figure 49. Performance level distribution of SMEs in Governance indicators



Note: Companies' performance in ESG indicators was assessed in four levels, i.e., lagging, average, advanced and leading. Source: Public disclosures of listed companies, other public sources, CECEPEC

Our study found that in 2022 over 50% of SMEs had incorporated ESG risk management as an intrinsic part of their daily operation. As can be seen in Figure 48, ESG risk management improved significantly across all governance indicators in 2022. Specifically, the proportion of SMEs within the sample that adopted mitigation measures for identified ESG risks, increased from 9% in 2021 to 36% in 2022. However, a limited number of SMEs conducted scenario analysis which is a scientific method essential for strategically managing climate risks. It may be true to say that, due to a lack of awareness and limited resources, SMEs continue to lag behind large companies in the use of advanced ESG management tools.

Our data shows that in 2022 one SME began to link executive pay to the company's ESG performance. This was a first for SMEs.

SMEs performed better than large companies in two board-related indicators, i.e., board gender diversity and board independence. Figure 48 shows increases in the scores of both indicators. Our study found that the average percentage of women at board level has steadily increased since 2019 and was 17% in 2022. This was higher than the corresponding figure for large companies. Similarly, board independence increased to 43% in 2022; this figure for SMEs is also higher than the corresponding figure for large companies.

Appendices

Glossary

Term/Acronym/Abbreviation	Interpretation
Al	Artificial intelligence
GBA	Guangdong-Hong Kong-Macao Greater Bay Area
GBA-GFA	GBA Green Finance Alliance
GHG	Greenhouse gas
Green ABS	Green asset-backed securities
GSSS bonds	Green, social, sustainability and sustainability-linked bonds
HKGBC	Hong Kong Green Building Council
HKMA	Hong Kong Monetary Authority
IMO	International Maritime Organisation
ISSB	International Sustainability Standards Board
NEVs	new energy vehicles
PBOC	People's Bank of China
PRD	Pearl River Delta
PRI	Principles for Responsible Investment
PSI	Principles for Sustainable Insurance
R&D	Research and development
SASAC	State-owned Assets Supervision and Administration Commission of the State Council
SBT	Science-based targets
SBTi	Science-Based Targets initiative
SEHK	Stock Exchange of Hong Kong
SOEs	State-owned enterprises
SZSE	Shenzhen Stock Exchange
The Index	HSBC Greater Bay Area ESG Index
TNFD	Taskforce on Nature-related Financial Disclosures
UNEP FI	United Nations Environment Programme Finance Initiative

Note: In alphabetical order

References

- ¹ National Development and Reform Commission (NDRC), People's Republic of China. (2022). 《氢能产业发展中长期规划 (2021-2035 年)》 https://www.ndrc.gov.cn/xxgk/zcfb/ghwb/202203/t20220323_1320038.html
- ² The People's Government of Guangzhou Municipality. (2023). 第二届粤港澳大湾区(广州) 氢能产业大会暨首届广州新型储能产业大会开幕 https://www.gz.gov.cn/zt/qltjygadwqjsxsdzgzlfzdf/mtjj/content/post_9365758.html
- ³ 京报网. (2023). "深圳一香港一广州" 科技集群连续四年位居全球第二位 https://news.bjd.com.cn/2023/12/08/10642332.shtml
- ⁴ The Hong Kong Special Administrative Region of the People's Republic of China. (2023). The Chief Executive's 2023 Policy Address https://www.policyaddress.gov.hk/2023/public/pdf/policy/policy-full_en.pdf
- ⁵ Department of Finance of Guangdong Province. (2023). GDP增长4.5%! 广东最新经济数据有这些亮点 http://czt.gd.gov.cn/czxw/content/post_4272704.html
- ⁶ Taskforce on Nature-related Financial Disclosures. (2023). Recommendations of the Taskforce on Natural-related Financial Disclosures https://tnfd.global/wp-content/uploads/2023/08/Recommendations_of_the_Taskforce_on_Nature-related_Financial_Disclosures_ September_2023.pdf?v=1695118661
- ⁷ Shenzhen Government Online. (2023). 深圳2023年"离岸债"在港发行获超额认购 http://www.sz.gov.cn/cn/xxgk/zfxxgj/zwdt/content/post_10812026.html
- ⁸ Liason Office of The Central People's Government in The Macao S.A.R. (2023). 广东省在澳门成功发行地方政府债券 http://www.zlb.gov.cn/2023-09/01/c_1212262886.htm
- ⁹ Wallstreet. (2023). ESG基金, 资管行业下一个重要阵地 https://wallstreetcn.com/articles/3699341?keyword=%E9%87%91
- 10 STATS.GD.GOV.CN. (2023). 2023年第3季度广东省生产总值 http://stats.gd.gov.cn/jdgnsczz/content/post_4272547.html
- ¹¹ Census and Statistics Department of the Government of the Hong Kong Special Administrative Region. (2023). Table 310-34101: Gross Domestic Product (GDP) by economic activity at current prices https://www.censtatd.gov.hk/en/web_table.html?id=310-34101
- 12 The State Council of The People's Republic of China. (2023). 人民银行推出碳减排支持工具 https://www.gov.cn/xinwen/2021-11/08/content_5649848.htm
- 13 The People's Bank of China Guangzhou Branch. (2023).人民银行广州分行举行2022年广东省金融运行形势新闻发布会 (pbc.gov.cn) http://guangzhou.pbc.gov.cn/guangzhou/129136/4786685/index.html
- 14 Guangdong Financial Supervisory Authority. (2023). 制造业、普惠小徽、绿色贷款增量创新高金融有力支持广东经济企稳向好 http://gdjr.gd.gov.cn/gdjr/jrzx/jryw/content/post_4225468.html
- ¹⁵ Ping An Insurance (Group) Company of China. (2023). Ping An Sustainability Report 2022 https://group.pingan.com/resource/pingan/ESG/Report/pingan-sustainability-report-22.pdf
- 16 China Development Bank Financial Leasing Co.,Ltd. (2023). 2022 ESG report http://www.cdb-leasing.com/English/crs/esgreport/202303/P020230404539692423024.pdf
- ¹⁷ Far East Horizon Limited. (2023). Far East Horizon 2022 ESG Report https://www1.hkexnews.hk/listedco/listconews/sehk/2023/0424/2023042400030.pdf
- ¹⁸ STATS.GD.GOV.CN. (2023). Guangdong Statistical Yearbook 2023 http://tjnj.gdstats.gov.cn:8080/tjnj/2023/directory/03/html/03-04.htm
- ¹⁹ Census and Statistics Department of the Government of the Hong Kong Special Administrative Region. (2023). Table 110-01001: Population by Sex and Age Group
- https://www.censtatd.gov.hk/en/web_table.html?id=110-01001
- ²⁰ Statistics and Census Service of Macao. (2023). Yearbook of Statistics 2022 https://www.dsec.gov.mo/getAttachment/421b3c70-5141-45e6-acbf-2d1531912e1b/SC_AE_PUB_2022_Y.aspx

Table of Indicators

Figure 50. Indicators for regional/cities and industry level

First-level Indicator	Second-level Indicator
	Corporate CDP disclosure performance
	Corporate science-based climate commitments
	Air quality
Environment	Energy use efficiency
Environment	Water use efficiency
	Electricity use efficiency
	Public sector's contribution to environmental protection
	Urban greenness
	Economic development
	Economic contribution of tertiary industry
Economic and Social Development	Employment situation
	Public sector's contribution to education
	Innovation and technological advancement
Corporato Covernance	Activeness of market players
Corporate Governance	Corporate ESG disclosure performance
	Activeness of market players
Green and Sustainable Finance	Investor commitment to sustainable investing
Green and Sustamable Finance	Volume of sustainable debt instruments
	Number of ESG mutual funds
Policy	Policies related to sustainable development in the GBA

Source: CECEPEC

Figure 51. Indicators for company level

First-level Indicator	Second-level Indicator
	Greenhouse gas (GHG) emissions
	GHG targets
Environmental	Waste management
	Water management
	Energy management
	Employee data
	Employee development
	Supply chain management
Social	Privacy and data security
	Philanthropic contribution
	R&D and innovation
	Board accountability for ESG
	ESG risk management
Governance	Executive pay linked to ESG
	Board gender diversity
	Board independence
Green and Sustainable Finance	Issuance of GSSS Bonds
External Assurance	ESG report external assurance

Source: CECEPEC

²¹ Shenzhen Mindray BioMedical Electronics Co., Ltd. (2023). 2022 Sustainability Report https://www.mindray.com/content/dam/xpace/en/investor-relations/2022/mindray-2022-esg-report.pdf

²² Sino Biopharmaceutical Limited. (2023). 2022 ESG Report https://www1.hkexnews.hk/listedco/listconews/sehk/2023/0428/2023042803399.pdf

²³ Healthcare Security Administration of Guangdong Province. (2023). 【图解政策】一图读懂广东省医疗救助办法 http://hsa.gd.gov.cn/zwgk/zcjd/content/post_4250111.html

²⁴ The Hong Kong Trade Development Council. (2023). Biotechnology, Medical & Healthcare Industry in Hong Kong https://research.hktdc.com/en/article/MzEzOTQ1MjMz

²⁵ CFI. Independent Director https://corporatefinanceinstitute.com/resources/career/independent-director/

²⁶ Carey Oven, Dan Konigsburg, Sharon Thorne, Deloitte. (2022). Women in the Boardroom: 2022 Update https://corpgov.law.harvard.edu/2022/03/05/women-in-the-boardroom-2022-update/

Disclaimer

This document has been prepared by CECEP Environmental Consulting Group Limited ("CECEPEC") at the request of The Hongkong and Shanghai Banking Corporation Limited ("HSBC") in accordance with the agreement between CECEPEC and HSBC. This document is based on current public information that CECEP has obtained from publicly available sources, believed to be reliable and has not been independently verified by CECEPEC or HSBC. This document does not represent that historical data and analysis should be taken as an indication or prediction of likely future movements in data, rates or prices. Data, information, views or opinions contained or referred to in this document are subject to change without notice.

The recipients assume all risk of any use of or reliance on this document by them. Neither CECEPEC nor HSBC makes any guarantee, representation or warranty of any kind, express, implied or statutory statement regarding the accuracy, timeliness, completeness or fitness to a particular purpose with respect to this document (including any data, information, views or opinions contained or referred to in the document such as market data and statistical information). To the maximum extent permitted by applicable law, neither CECEPEC nor HSBC shall be liable for any direct, indirect, special, punitive, consequential (including loss of profits) or any other loss whatsoever arising from or in connection with the use of or reliance on this document.

This document has been produced for information and discussion purposes only and does not constitute any offer, recommendation, or solicitation to enter into any transaction or adopt any hedging, trading or investment strategy, nor shall it be construed as investment advice or tailored to the needs of any recipient. Recipient should exercise independent judgement and seek professional advice when appropriate.

There is no standard definition of, measurement criteria or methodology for ESG/Sustainability assessments. HSBC does not conduct its own specific due diligence in relation to the methodology adopted by CECEPEC in respect of the study in this document. ESG/Sustainability assessment is an evolving area and new regulations and measurement criteria may come into effect which may affect how a specific criteria such as a geographical area, industry or business sector is categorised or labelled. A criteria such as geographical location, industry or business sector which is considered to fulfil ESG/sustainable criteria today may not meet those criteria at some point in the future.

This document is not intended for distribution or use by any person in any jurisdiction or country where the distribution or use of this document is restricted and would not be permitted by law or regulation.

Copyright Statement

Copyright © 2024. CECEP Environmental Consulting Group Limited, ALL RIGHTS RESERVED.

The contents available in the document, including text, graphics, images, photographs, logos, trademarks, data, and software ("Contents") are protected by intellectual property-related laws and treaties in the Hong Kong Special Administrative Region and other jurisdictions. The copyright belongs to CECEP Environmental Consulting Group Limited ("CECEPEC"). You may not copy, reproduce, modify, adapt or in any way distribute or translate (in whole or in part) of the Contents without prior written permission of CECEPEC and The Hongkong and Shanghai Banking Corporation Limited ("HSBC"). If a third-party agency wishes to reproduce the document, the source of the document must be indicated. Prior written permission of CECEPEC and HSBC is required for any changes to the Contents.

About HSBC

The Hongkong and Shanghai Banking Corporation Limited is the founding member of the HSBC Group. HSBC serves customers worldwide from offices in 62 countries and territories. With assets of USD3,021 billion at 30 September 2023, HSBC is one of the world's largest banking and financial services organisations.

About CECEPEC

CECEP Environmental Consulting Group Limited is a professional sustainability consulting company established by CECEP. We are headquartered in Hong Kong with branch offices in Beijing, Shenzhen, and Shanghai. Our partners and clients are found throughout Greater China, Europe, and America, covering national governments, industry associations, mainstream financial institutions and nearly 200 well-known enterprises in and out of China. We are committed to providing bespoke solutions to satisfy the specific sustainability needs for various industries, which include sustainability management consulting, green and sustainable finance consulting, climate change and carbon neutrality consulting with implementation solutions, and others.

 59

