



HONG KONG MONETARY AUTHORITY
香港金融管理局

Sustainability Report 2023



Contents

| | |
|----|--|
| 2 | Chief Executive's Message |
| 6 | Priorities for 2024 and Beyond |
| 8 | Sustainability Governance |
| 11 | Building a Climate-resilient Financial System |
| 20 | Enhancing the Green and Sustainable Finance Ecosystem |
| 29 | Responsible Investment |
| 44 | Sustainable HKMA |
| 80 | Abbreviations |
| 82 | Verification Statement |



Chief Executive's Message

The need to scale up and accelerate climate action is more urgent than ever. We are nearly mid-way through the critical decade, a decade where we will need to cut global emissions by over 40% if we hope to limit global warming to 1.5°C. Yet greenhouse gas emissions are hitting new highs. The latest climate science tells us that we are “already at the outer limits of possibility for 1.5°C” with a “rapidly closing window of opportunity”. It is clear that we have already been experiencing the impact of a 1.1°C warmer world, with extreme weather events like record-breaking heat waves and droughts, heavy floods and severe storms taking place more frequently and becoming more intense around the world. Closer to home, Hong Kong experienced a ferocious super typhoon, followed by a prolonged record-breaking rainstorm last September. Despite our excellent infrastructure and rapid recovery responses, the impact was devastating, with widespread flooding, traffic disruptions and extensive road damage. All of these serve as a stark reminder of the urgent need for ambitious and resolute actions.

The stakes are especially high in Asia. Asia is facing a steep transition pathway, with a challenging balance between economic development and sustainability. We need credible transition strategies that strike a right balance between climate actions versus economic growth and social inclusion. But it will not be easy. The region produces over half of the world's emissions as a result of its rapid economic and population growth. It is also highly vulnerable to rising sea levels and extreme weather events in view of the high population density and geography. The high degree of diversity in economic development in the region also means that the transition will bring new opportunities for some but daunting challenges on how to finance the transition for others. Significant investment is required, with market estimates of over US\$3 trillion in annual investment over the next three decades in the region. As an international financial centre, Hong Kong has the capacity and responsibility to harness the power of finance to support the transition efforts of the broader region.

At the HKMA, we have been devoting significant efforts to the sustainability agenda, leveraging our roles as a bank supervisor, market facilitator and responsible investor. As you navigate through the subsequent chapters of the report, you will be able to read more about our specific measures and initiatives undertaken throughout the year. Meanwhile, we have established the Green and Sustainability Steering Committee (GSSC) last year to strengthen our internal governance structure and better coordinate our sustainability work across different functional areas. More details about the GSSC can be found in the new *Sustainability Governance* chapter.



Chief Executive's Message

Strengthening banks' climate resilience and supporting banks' financing of the transition

Banks in Hong Kong play a central role in supporting Asia's transition to net zero. Apart from our conventional role of a banking supervisor to ensure banks manage climate risks properly through our day-to-day supervisory activities, we also take on the role of an enabler to support the banking industry in financing the transition. One example is the development of a green classification framework to help banks and other financial institutions identify environmentally sustainable activities, so as to facilitate alignment of business decisions with global climate goals. We released a prototype of the framework in May to gather feedback, and are fine-tuning the framework based on the consultation feedback collected. Amid the increasing calls for more high-quality, globally-comparable sustainability disclosures, together with other fellow regulators, we are also working on a clear roadmap for Hong Kong to adopt the International Sustainability Standards Board (ISSB)'s standards, a comprehensive global baseline for sustainability reporting launched in June.

Our role as an enabler is not confined to setting frameworks and rules. We also endeavour to address the pain points faced by the industry. Recognising that banks have difficulties in conducting physical risk assessment due to data issues, the HKMA will soon be launching a cloud-based physical risk assessment platform that will enable banks to assess the impact of physical hazards on residential and commercial buildings in Hong Kong under different climate scenarios through a simple address input, thereby facilitating banks' climate risk management.

Enhancing the green and sustainable finance ecosystem

As Asia's leading international financial centre and sustainable finance hub, Hong Kong has been channelling international investments to sustainable projects in Asia to support the region's transition. More than one-third of the region's international green and sustainable bond issuances were arranged in Hong Kong in recent years, well ahead of other jurisdictions. Of particular note are the municipal government of Shenzhen and provincial government of Hainan, which had their third and second issuances of green and sustainable bonds in Hong Kong respectively in 2023, reaffirming Hong Kong's important role as a green gateway connecting the Mainland with the rest of the world.

Hong Kong's vibrant sustainable bond activities are in part a result of the demonstrative effect of the Government Green Bond Programme. Since 2019, the HKMA has assisted the Government in issuing around US\$25 billion worth of green bonds targeting both institutional and retail investors. We took the opportunity of each issuance to innovate and expand the suite of green bond features in terms of currencies, tenors and distribution channels, laying the foundation for other public and private sector issuers in the region to follow. We issued the world's largest government retail green bond in 2022, followed by the world's first tokenised government green bond in February 2023. In February 2024, we completed a second tokenised green bond offering in four major currencies in digitally native format, making it the world's first multi-currency digital green bond.



Chief Executive's Message

Meanwhile, we have also been taking active steps to enhance the vibrancy and competitiveness of Hong Kong's sustainable finance ecosystem. These include efforts in the areas of capacity building, data enhancement, green fintech, and transition finance. Notably, on talent, we rolled out a new module on Green and Sustainable Finance under the Enhanced Competency Framework in 2023 to provide a structured programme for banking practitioners to enhance their knowledge and expertise in green and sustainable finance. Another important area is transition finance, which is needed to provide funding for decarbonisation of high-emitting and hard-to-abate industries while avoiding disruptive financial exclusion of those industries. To support its credible development, the HKMA will broaden development of the local green classification framework to cover transition activities. We will also expand the scope of the Green and Sustainable Finance Grant Scheme, which provides subsidies for eligible bond issuers and loan borrowers, to cover transition bonds and loans so as to encourage corporates in the region to raise transition financing in Hong Kong. More generally, we are also fostering dialogue with relevant stakeholders to leverage public-private collaboration and blended finance to crowd in the private sector and mobilise financing for sustainable projects that would otherwise be less bankable. Some of the initiatives require cross-sectoral efforts and are co-ordinated through the Green and Sustainable Finance Cross-Agency Steering Group co-chaired by the HKMA and the Securities and Futures Commission.

Regional collaboration is also crucial. Other than our longstanding partnership with the International Finance Corporation on the Alliance for Green Commercial Banks, the Infrastructure Financing Facilitation Office of the HKMA joined in 2023 the Capacity-building Alliance of Sustainable Investment and Green Investment and Finance Partnership as inaugural members. The Glasgow Financial Alliance for Net Zero also announced its plan to establish a Hong Kong Chapter. Through these partnerships, we aim to promote capacity building and knowledge sharing, and in turn, support the channelling of capital to sustainable projects in the region and beyond. To spur new business development and knowledge exchange, the HKMA also helped organise Hong Kong's first Green Week earlier this year, bringing together over 1,600 participants, including top decision makers in global business and finance from nearly 30 jurisdictions, to discuss solutions and incubate new partnerships for scaling up climate financing in the region.



Mr Eddie Yue, Chief Executive, speaks at the Climate Business Forum: Asia Pacific, the anchor event of the Hong Kong Green Week

Chief Executive's Message

Investing responsibly

We also lead by example as a responsible investor. As the manager of Hong Kong's official reserves and a major global asset owner, we have spearheaded investments in green and sustainable assets since 2015 and have been growing our Exchange Fund's portfolio of ESG and green assets across both public and private markets. Building upon our target of achieving net zero emissions by 2050 for the Investment Portfolio of the Exchange Fund, last year we introduced a new active global public equities mandate that focused on sustainability and climate transition themes, and extended the application of bespoke low carbon equity indices to another public market portfolio. The performance of green, social and sustainability bonds, which the HKMA prioritises for investment, has surpassed the investment benchmark, exemplifying the notion that one can do well alongside doing good. In the private market, we continued to seize green related investment opportunities and committed as an anchor investor in two dedicated Asia-centric transition investment funds.

As at the end of 2022, the weighted average carbon intensity, or WACI, of the Exchange Fund's public equities portfolios, reduced by 6% compared to 2021 and 46% compared to the 2017 level, and has been persistently lower than that of the broader market.

Moving forward as a sustainable organisation

Within the HKMA, we continue to improve ourselves as a sustainable organisation, structuring our aspirations around the three pillars of Environment, People and Social Responsibility.

More specifically, in our low-carbon transition journey, we have been building our climate resilience by measuring our environmental performance and implementing various internal initiatives, ranging from emissions reduction, energy efficiency to waste management, with the ultimate aim of fulfilling our net-zero pledge by 2050. Plans are now in place to completely eliminate Scope 1 emissions in the near future, and we are also making good progress towards our interim 2030 Scope 2 emissions reduction targets.

Apart from our green targets, we also strive to promote the health and well-being of our staff, as we understand the need to attract and retain the best talent to deliver the important functions of the HKMA. Furthermore, we have, through partnering with our stakeholders, worked on advancing financial inclusion, raising financial literacy and enhancing public awareness of financial scams to play our part in fostering a caring society.

Embracing a more sustainable future

The climate challenge is huge, and urgent. As economies around the world move toward a more sustainable future, seismic change is expected regarding how we finance economic activities and how we allocate capital. This brings unprecedented risks as well as opportunities. As the world's leading sustainable finance hub, Hong Kong has the responsibility to spearhead actions to meet such challenges, and is in the best position to capture the opportunities. Here at the HKMA, we will ramp up our proactive efforts to support the industry in financing the transition, to lead by example as a responsible investor and sustainable organisation, and to work together with like-minded peers collaboratively in support of this important global agenda of our generation.



Eddie Yue
Chief Executive



Priorities for 2024 and Beyond

Climate change risks and other sustainability concerns are global in nature. In 2024, the HKMA will continue to seek to play a leading role, through our policies and our own operations, in ensuring the financial sector in Hong Kong, and the HKMA itself, are resilient to the risks from climate change and are supportive of the transition to a more sustainable economy. By actively participating in international and regional forums, the HKMA also looks to contribute to the formulation of green and sustainable finance policies and standards regionally and globally.

Building a climate-resilient banking sector

As a banking supervisor, the HKMA will work to further strengthen the climate resilience and risk management capabilities of the banking sector. Specifically, our key priority areas on the agenda are:

- ▶ To conduct a new round of thematic examinations on banks' climate risk management practices and a new series of consultative sessions, as part of the review of banks' progress in implementing the supervisory requirements on climate risk management;
- ▶ To continue the work in incorporating climate considerations into the HKMA's Supervisory Review Process;
- ▶ To complete the second round of the sector-wide climate risk stress test, provide guidance to participating banks throughout the exercise, and share with the industry observations and lessons learnt from the exercise;
- ▶ To enhance sustainability disclosures, including working with local authorities to align relevant requirements with the global baseline of the International Sustainability Standards Board's standards, as well as preparing to adopt the Basel Committee on Banking Supervision's Pillar 3¹ framework on climate-related financial risks; and

- ▶ To share with the industry guidance on best practices on transition planning.

To foster healthy growth of banks' green and sustainable investment product offerings, the HKMA will continue to keep abreast of local and international market and regulatory developments, and engage with the industry to ensure that proper selling processes are adopted.

In addition, the HKMA also serves as an enabler to enhance the green finance ecosystem and support banks' financing of the transition. We will issue the local taxonomy soon and continue our efforts by expanding its coverage to include more activities, such as transition activities. Meanwhile, we will also continue to explore the use of technological solutions that may assist banks in identifying, measuring and monitoring climate risk exposures. One example is the cloud-based platform which we will be launching soon to facilitate banks' physical risk assessment. To enhance capacity building, we will also develop the Professional Level of the Enhanced Competency Framework on Green and Sustainable Finance in 2024.

Enhancing the green and sustainable finance ecosystem

Hong Kong is well-positioned as a regional and international sustainable finance hub. To advance this role, the HKMA is supporting the Government in implementing the 2023 – 24 Budget initiative to expand the scope of the Government Green Bond Programme to cover sustainable finance projects with a view to deepening the development of the local green and sustainable bond market, in addition to attracting more green financing activities including transition finance to Hong Kong through the Green and Sustainable Finance Grant Scheme. We will also continue to encourage more governments, institutions and corporates to raise green funding through Hong Kong, and explore potential synergies between green finance and technology. In parallel, we will continue to help implement the Government-funded Pilot Green and Sustainable Finance Capacity Building Support Scheme to expand Hong Kong's green finance talent pool.

Priorities for 2024 and Beyond

As co-chair of the Green and Sustainable Finance Cross-Agency Steering Group (CASG), we continue to work in close collaboration with other agencies to co-ordinate cross-sectoral policies and efforts in promoting the development of green and sustainable finance in Hong Kong. In particular, the CASG will focus on three main areas of work in 2024, including sustainability disclosures, technology adoption and transition finance.

In another priority, through the Alliance for Green Commercial Banks, the HKMA and the International Finance Corporation will continue to jointly launch targeted initiatives in the Asia region, including undertaking green finance research, providing unique market insights, tailoring capacity building and training support, and providing practical guidance to help banks develop their own roadmaps to mainstream green finance. We will also endeavour to deepen our partnerships with the Glasgow Financial Alliance for Net Zero, the Capacity-building Alliance of Sustainable Investment and the Green Investment and Finance Partnership in 2024.

Investing responsibly

As a responsible investor, the HKMA is committed to achieving net-zero emissions for the Investment Portfolio of the Exchange Fund by 2050. We will continue to strengthen the sustainability profile of the Exchange Fund's investments through our three-pronged responsible investment approach, ensuring portfolio resilience as we progress along the net-zero journey. Recognising the need for transitioning the entire economy in meeting the Paris Agreement goals, we are refining our net zero strategy to put particular emphasis on assets that can deliver positive climate outcomes in the real world, while taking into account the investment objectives of the Exchange Fund.

Moving forward as a sustainable organisation

As an environmentally-friendly organisation, the HKMA's decarbonisation strategy will continue to evolve, so as to reflect latest market, regulatory, technological and other climate-related developments. As a further step to strengthening the HKMA's climate resilience and risk preparedness, we will explore the feasibility of applying technological solutions to assess the impact of physical risks on our office premises. In addition, we will continue to actively engage our staff in our sustainability journey, including awareness campaigns to promote sustainable habits and optimising office processes and practices. Besides, the HKMA will continue to maintain consistent, efficient and sustainable procurement practices, including evaluation of suppliers' ESG practices during selection and contract renewal.

Building on the green data centre accreditation in 2023, the HKMA is committed to upholding the specified certification standards. Specifically, in the regular data centre facility upgrades, while keeping up with the latest technological developments, we will also integrate green designs and practices. Meanwhile, we will continue to reduce electronic waste through technology adoption and convergence, in addition to actively modernising our internal systems to enhance efficiencies and minimise potential risks.

Finally, in the social focus areas, the HKMA will promote more community work opportunities for our colleagues in addition to working with the industry to advance financial inclusion and financial literacy, and promote awareness of financial scams in different segments of the community.



Sustainability Governance

Climate change is affecting all aspects of life and everyone can contribute towards mitigating its impact. The HKMA plays its part in enabling and catalysing the transition to net zero in Hong Kong and the region, through its multiple roles as a central banking institution, a banking supervisor, a market facilitator, a responsible investor, and a sustainable organisation. A robust sustainability governance structure is in place to guide the development of relevant HKMA strategies and policies, oversee the execution of relevant initiatives, and ensure that sustainability considerations are integrated into the HKMA's own operations and practices.



Sustainability Governance

To achieve its commitment to good corporate governance, the HKMA puts in place a robust sustainability governance structure with clear lines of accountability and transparency on all sustainability-related matters. The governance structure ensures the effective integration of sustainability considerations into the HKMA's strategic planning and decision-making processes; and that an effective mechanism is in place for monitoring and evaluating the progress and outcomes of sustainability initiatives.



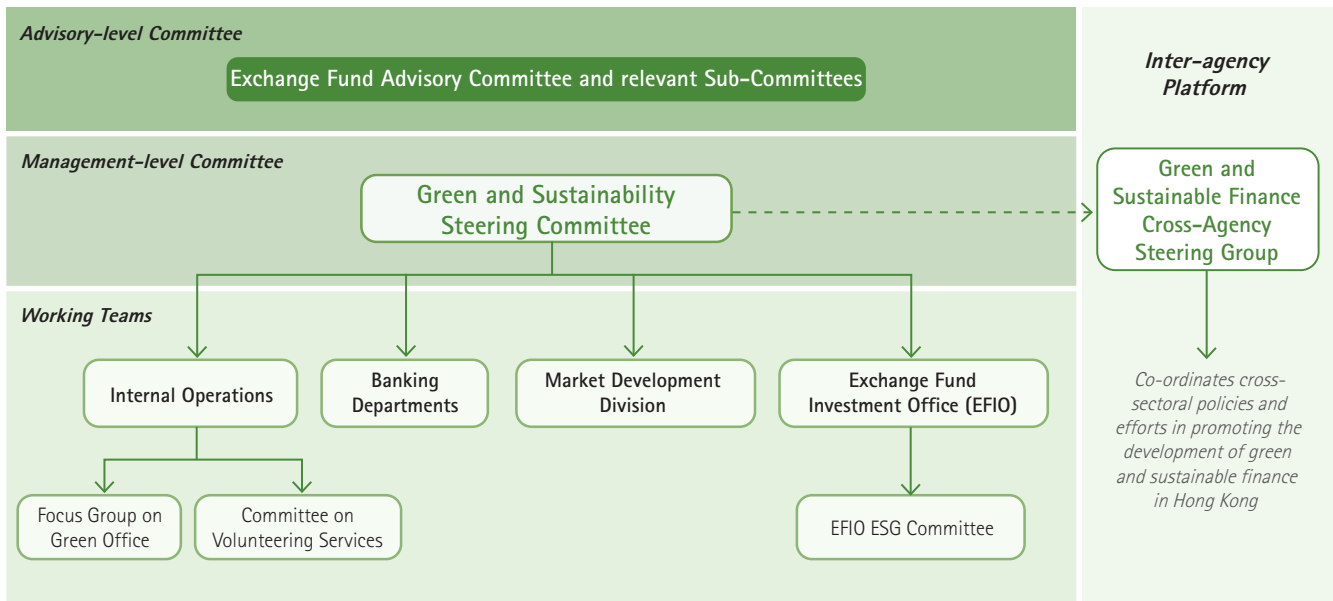
HKMA's Sustainability Governance Structure

The HKMA's sustainability governance structure comprises:

- ▶ The Exchange Fund Advisory Committee and relevant Sub-Committees which monitor and make recommendations on the HKMA's work, including the HKMA's sustainability-related initiatives;
- ▶ The Green and Sustainability Steering Committee (GSSC), chaired by the Chief Executive of the HKMA, which steers overall environmental, social and governance (ESG) strategies and policies within the HKMA at the management level;
- ▶ On responsible investment, the Exchange Fund Investment Office (EFIO) ESG Committee which co-ordinates and oversees ESG-related efforts within the EFIO; and
- ▶ For other functional areas, relevant teams and working groups which plan and execute sustainability initiatives on the banking and market development fronts, plus the HKMA's own operations.

On a cross-sector level, the Green and Sustainable Finance Cross-Agency Steering Group (CASG), co-initiated by the HKMA and the Securities and Futures Commission (SFC), co-ordinates the efforts of financial regulators, Government agencies, industry stakeholders and other stakeholders in accelerating the growth of green and sustainable finance in Hong Kong.

Sustainability Governance



Green and Sustainability Steering Committee

Purpose of the GSSC

As the range of the HKMA's sustainability initiatives has grown significantly in scope over the last few years, the GSSC was established in October as a new and central platform to provide direction and to better co-ordinate all sustainability work across the different functional areas of the HKMA¹.

Terms of Reference

- ▶ Guidance on the development of strategies, policies and plans on ESG-related matters across the four functional areas: banking, market development, Exchange Fund investments and internal operations;
- ▶ Oversight on the implementation of ESG-related plans across the HKMA's various functions;
- ▶ Evaluation on the performance and effectiveness of the HKMA in achieving its ESG goals or targets; and
- ▶ Oversight on the external communication strategies.

Committee composition

The GSSC is chaired by the Chief Executive of the HKMA, with the three Deputy Chief Executives serving as standing members. Executive Directors from key functions relating to green and sustainability matters would be invited as attending officers to report on key achievements and forward-looking plans of their work at the GSSC meetings. The GSSC meets regularly and is supported by relevant working teams in the HKMA, including the banking departments, the Corporate Services Department, the External Department and the EFIO.

Green and Sustainable Finance Cross-Agency Steering Group

In addition to formulating and implementing its own sustainability initiatives, the HKMA co-initiated with the SFC to form the CASG² in May 2020. As an inter-agency platform, the CASG provides strategic direction and co-ordinates cross-sectoral management of climate and environmental risks facing the financial sector to bolster Hong Kong's position as a leading green and sustainable finance hub in Asia and globally.

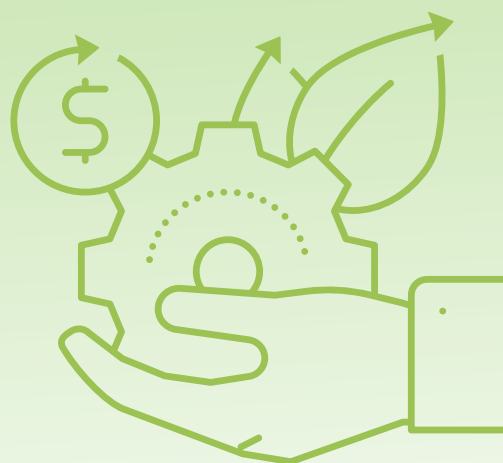
Refer to the *Enhancing the Green and Sustainable Finance Ecosystem* chapter for more details on the work of the CASG.

¹ The GSSC took over the Corporate Social Responsibility and Sustainability Committee which focused specifically on sustainability initiatives related to the HKMA's own operations.

² Other members of CASG are the Financial Services and the Treasury Bureau, the Environment and Ecology Bureau, Hong Kong Exchanges and Clearing Limited, the Insurance Authority, the Mandatory Provident Fund Schemes Authority and the Accounting and Financial Reporting Council.

Building a Climate-resilient Financial System

Climate change presents a significant source of risk to the financial system. The HKMA has been prioritising its efforts in strengthening Hong Kong's financial system to build a greener and more sustainable future, contributing to Hong Kong's climate goal and global agenda on sustainability.



Building a Climate-resilient Financial System

Banking supervisor

Banks, through their day-to-day activities, are exposed to the impact of different sustainability and climate-related issues. To continue to play their important role in the financial system and channel more capital to green and sustainable activities, it is crucial for banks to proactively manage climate risks.

As a banking supervisor, the HKMA focuses on building banks' resilience against climate risks and climate risk management capabilities, and accelerating their efforts in supporting the transition to a low-carbon economy.

Building climate resilience and supporting transition

Formulating policy to enhance resilience of the banking sector

The HKMA has been working on different policy measures to enhance resilience of the sector against climate risks. In August, the HKMA issued a circular on planning for the net-zero transition, which set out high-level principles to assist banks in maintaining safety and soundness in the transition to a net-zero economy. Following the issuance of the circular, we conducted a survey of selected banks in the fourth quarter to understand their practices in transition planning. Based on the survey results, we will share with the industry observations and guidance on best practices on transition planning and organise seminars or workshops to facilitate experience sharing.

On disclosure requirements, having regard to the latest international developments including the publication of the International Financial Reporting Standards (IFRS) Sustainability Disclosure Standards in June, and the consultation on a Pillar 3 disclosure framework for climate-related financial risks, launched by the Basel Committee on Banking Supervision (Basel Committee) in November, the HKMA is stepping up its efforts to enhance its framework for sustainability-related disclosures for banks in Hong Kong. Specifically, it has been working with relevant local authorities and stakeholders on a comprehensive Hong Kong roadmap on adopting the IFRS Sustainability Disclosure Standards.

Enhancing the supervision of climate risk management

During the year, the HKMA strengthened its supervision of banks' climate risk management and provided advice to banks to further enhance their climate resilience and climate risk management capabilities.

Building a Climate-resilient Financial System

Implementation of the two-year plan to embed climate risk considerations in the supervisory process

The HKMA has made significant progress in executing its two-year plan to embed climate risk considerations into banking supervision. Climate risk management is now included as a standing agenda item of prudential meetings with bank management. Bank supervisors also used the enhanced CAMEL rating framework¹, which now incorporates climate risk considerations, to assess banks' risk profiles and risk management systems.

As part of the implementation of the two-year plan on embedding climate risk considerations into the banking supervisory processes, the HKMA has revised the "greenness" assessment framework to focus on banks' practices in transition planning. The HKMA has also been reviewing the Supervisory Review Process conducted for evaluating and monitoring the capital adequacy of a bank and determining its Pillar 2 capital requirement, to incentivise banks to enhance their risk management framework to address climate risks.

Key action points in 2023 under the two-year plan



Included climate risk management as a standing item of prudential meetings with banks' management



Revised the HKMA's "greenness" assessment framework to focus on banks' transition planning practices



Launched a round of thematic examinations on banks' climate-related risk governance



Used the enhanced CAMEL rating framework to assess banks' risk profiles and risk management systems



Enhanced the Climate Risk Stress Test and launched as part of the regular supervisory stress tests to more comprehensively assess banks' resilience and climate risk capabilities



Keeping the capital framework under review

¹ CAMEL is an internationally recognised framework for assessing the **C**apital adequacy, **A**sset quality, **M**anagement, **E**arnings and **L**iquidity of banks. It can help identify banks whose weaknesses in financial condition, compliance with laws and regulations, risk management systems and overall operating soundness require special supervisory attention.

Building a Climate-resilient Financial System

Thematic examinations on banks' climate-related risk governance

The HKMA began a round of thematic examinations focused on climate-related risk governance in the second quarter, after the end of the 12-month implementation period for achieving compliance with the Supervisory Policy Manual (SPM) module GS-1 on "Climate Risk Management". The scope of the thematic examinations covers four major areas, namely climate-related risk governance structure, oversight of climate strategy, oversight of climate-related risk management, and organisational culture, awareness and communications.

Climate risk stress test

The HKMA has made a number of enhancements to the climate risk stress test (CRST) framework, including the introduction of a new five-year scenario to assess how simultaneous economic and climate-related shocks may affect banks. With these enhancements, the second round of the CRST was launched in June as part of the HKMA's regular supervisory stress tests to comprehensively assess banks' resilience and further strengthen their climate risk management capabilities. Forty-four banks participated in the exercise, representing an increase of more than 60% over the inaugural pilot exercise conducted in 2021. The HKMA also organised a CRST discussion forum in November with more than 300 banking practitioners taking part in the event. The industry's collective understanding of climate risk measurement was deepened through experience sharing amongst the participating banks.

Consultative sessions on the implementation of the HKMA's supervisory expectations on climate risk management

The HKMA also conducted a series of consultative sessions to review banks' progress in implementing the HKMA's SPM module GS-1 on "Climate Risk Management". The HKMA held meetings with bank management to discuss their work on climate risk management and the common challenges faced by the industry, and reviewed information shared by them and other publicly available information to assess their progress. Targeted feedback was provided to banks on a bilateral basis to encourage and support the banks as they continue to strengthen their climate risk management capabilities in accordance with the HKMA's supervisory expectations.

Thematic review of banks' selling of green and sustainable investment products

With the rising global awareness of climate change and commitment to tackle the issue, the HKMA noted increasing demand for green and sustainable investment products, and some banks have offered such products to meet customer demand. In light of this, the HKMA completed a thematic review on banks' selling of green and sustainable investment products and issued a circular in November, setting out its expected standards and sharing good practices observed. This circular covered areas such as product due diligence, disclosure, governance and controls, staff training and book-building activities, with a view to mitigating potential greenwashing risk and strengthening investor's confidence, thereby supporting healthy development of such investment activities. The HKMA will keep in view the latest trends and market developments going forward.



> 345,000

customers



> 6,300

green and sustainable investment products



> HK\$ 163 billion market value

(Position as of 31 March 2023 based on the HKMA's Survey on Sale of Green and Sustainable Investment Products)

Building a Climate-resilient Financial System

Applying technology in managing risks and enabling sustainable practices

The HKMA seeks to promote the use of technology in green and sustainable banking. For instance, technology can improve data availability and risk analysis to build up banks' capacity for managing climate risks. The HKMA will soon launch a beta version of a cloud-based platform that facilitates banks' assessment of the impact of physical risks on residential and commercial buildings in Hong Kong under different climate scenarios. In addition, the HKMA has continued its collaboration with other central banks and supervisors to explore how technological solutions can be deployed to assist with physical risk assessments.

On the other hand, the HKMA also promotes sustainable anti-money laundering (AML) practices to reduce compliance-related resource consumption through the use of advanced analytics and artificial intelligence.

In 2023, the HKMA enhanced the sustainable AML-related data submission practices for banks by adopting a web-based Common Submission Platform that fully automated the financial crime risk data collection process.

In September, the HKMA launched a Green Fintech Competition to seek market-ready solutions that can help the banking sector address challenges in the areas of (i) net-zero transition or transition planning; (ii) climate risk management; (iii) green and sustainable finance; and (iv) sustainability or climate-related disclosure and reporting. More than 85 submissions from around 70 companies were received.

In December, the HKMA held a Green and Sustainable Banking Conference to provide a platform for the banking sector and the technology sector to discuss the role of low-carbon technology and green fintech in the net-zero transition in Hong Kong and the Mainland. The results of the Green Fintech Competition were announced at the same event. The event brought together around 400 participants from banks, technology firms, regulatory authorities and the academia.



Mr Arthur Yuen, Deputy Chief Executive, delivers opening remarks at the Green and Sustainable Banking Conference



Mr Donald Chen, Executive Director (Banking Policy) (front row, centre), presents the awards to the winners of the Green Fintech Competition at the Green and Sustainable Banking Conference

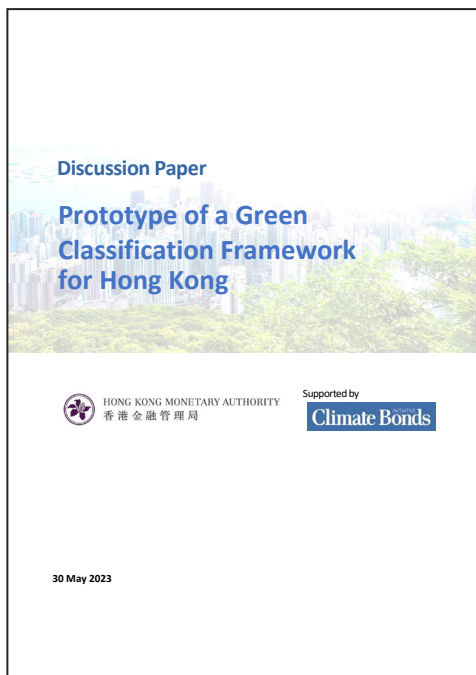
Building a Climate-resilient Financial System

Developing a green classification framework to facilitate green finance flows

To increase transparency across financial markets and enable consistent decision-making on green and sustainable finance, the HKMA has been working, with consultancy support, to develop a local green classification framework. In May, the HKMA published a discussion paper on “Prototype of a Green Classification Framework for Hong Kong” to seek feedback from stakeholders on the development and application of taxonomy. Based on the consultation feedback, the prototype framework is being fine-tuned and areas for additional work are being identified for the next phase of framework development.

Supporting sustainability in AML and enforcement

The HKMA contributes to the work of the Financial Action Task Force, which recognises environmental crimes as predicate offences for money laundering. This is an area attracting increasing regulatory attention in light of the interconnection between AML and environmental, social and governance (ESG).



Discussion Paper on “Prototype of a Green Classification Framework for Hong Kong” published in May

Building a Climate-resilient Financial System

Financial and Monetary Stability

Cognisant of the potential risks that climate change may pose to the financial system, the HKMA incorporates a broader range of climate-related considerations and scenarios into its analysis of financial risks and research studies to enhance its ongoing surveillance efforts.

Integrating climate-related risks into financial stability monitoring

The HKMA takes into account climate change in its ongoing monitoring of financial stability risks, and incorporates analyses of climate-related risks in various financial stability reports. Through its active participation in the workstream on Scenario Design and Analysis under the Network of Central Banks and Supervisors for Greening the Financial System (NGFS), the HKMA contributes to further enriching climate scenarios for central banks and supervisors in understanding the macroeconomic and financial impacts of climate change. As a member of the Financial Stability Board (FSB) Transition Plans Working Group, the HKMA has contributed to the analysis of how transition planning by financial and non-financial firms interacts with financial stability, which allows policymakers to gather a forward-looking, dynamic perspective on climate-related financial risks.

On the research front, the HKMA has conducted a number of applied research projects that look into the implications

of climate change and the broader ESG issues for the financial sector and the economy. Topics studied include the exposures of the banking sector and investment funds to climate-related risks², ESG fund flows³, the impact of climate change on housing prices⁴, and the ripple effect of corporates' ESG performance along the global supply chain⁵.

The findings from these research projects enhance our understanding of the impacts of climate change and ESG issues on financial stability, and thereby inform the development of relevant policies. Locally, these studies support the HKMA's ongoing monitoring and assessment of financial stability impacts of climate risks. Outside the HKMA, these findings have also been shared with a wide range of stakeholders via various channels, including international initiatives on climate-related issues and HKMA's Research Memorandums.

Embedding sustainability considerations in the Liquidity Facilities Framework

The HKMA's Liquidity Facilities Framework serves as a collateral-based backstop source providing timely liquidity support to banks in case of need. The HKMA has embedded sustainability considerations in evaluating eligible collaterals under this framework, in line with NGFS recommendations.

² Leung, Ying, Wong and Wan (2023) "Climate risk exposure of Hong Kong-domiciled investment funds: An assessment using portfolio holdings data", *HKMA Research Memorandum 2023/08* (<https://www.hkma.gov.hk/media/eng/publication-and-research/research/research-memorandums/2023/RM08-2023.pdf>); Leung, Ying, Wong and Wan (2024) "An assessment of the exposure of Asia-Pacific investment funds to climate-related risks", *HKMA Research Memorandum 2024/01* (<https://www.hkma.gov.hk/media/eng/publication-and-research/research/research-memorandums/2024/RM01-2024.pdf>).

³ Wang, Chan and Xiao (2023) "ESG fund flows under shocks: Are they more resilient against macro-financial shocks?", *HKMA Research Memorandum 2023/06* (<https://www.hkma.gov.hk/media/eng/publication-and-research/research/research-memorandums/2023/RM06-2023.pdf>).

⁴ Wong, Ka and Ng (2023) "The impact of climate change on Hong Kong housing prices: an initial analysis", *HKMA Research Memorandum 2023/05* (<https://www.hkma.gov.hk/media/eng/publication-and-research/research/research-memorandums/2023/RM05-2023.pdf>).

⁵ Wong and Yip (2024) "Examining the ripple effect of corporates' ESG performance along the global supply chain", *HKMA Research Memorandum*, forthcoming.

Building a Climate-resilient Financial System

International collaboration

The HKMA plays an active role in international and regional discussions about tackling climate risk and mainstreaming sustainable finance. Through such participation, the HKMA contributes to international and regional policy dialogues in addressing climate change and its impact on financial stability, while gaining insights on strengthening the climate resilience of Hong Kong's financial system.

| | | |
|---|---|---|
| <p>Central Banks and Supervisors Network for Greening the Financial System (NGFS)</p> |  | <p>The HKMA is a member of the NGFS, which aims to share best practices and contribute to the development of climate and nature-related risk management in the financial sector, and to mobilise mainstream finance to support the transition towards a sustainable economy. The HKMA participates in NGFS workstreams and task forces relating to supervision, scenario design and analysis, net zero for central banks, and nature-related risks.</p> |
| <p>Basel Committee on Banking Supervision (Basel Committee)</p> |  | <p>The HKMA participates in the Basel Committee's Task Force on Climate-related Financial Risks, which pursues a holistic approach to address climate-related financial risks to the global banking system, with its work across all three pillars of regulation, supervision and disclosure.</p> |
| <p>Bank for International Settlements (BIS)</p> |  | <p>The HKMA participates in the BIS Innovation Network, which explores technological solutions that help banks identify, measure and monitor their exposures to climate risks.</p> <p>The HKMA is also a member of the BIS Asian Climate Network, through which Asian central banks' experts exchange views, share progress and disseminate knowledge about climate policy and environmental sustainability.</p> |
| <p>International Platform on Sustainable Finance (IPSF)</p> |  | <p>Jointly with the SFC, the HKMA represents Hong Kong in the IPSF, which has introduced the Common Ground Taxonomy, and has been working to promote transition finance.</p> |
| <p>Financial Stability Board (FSB)</p> |  | <p>The HKMA actively participates in the work of the FSB on climate risk management, including promoting climate-related disclosures and reviewing regulatory and supervisory approaches to addressing climate risk.</p> <p>The HKMA is a member of the FSB's Climate Vulnerabilities and Data Working Group, which is tasked to analyse and develop tools for monitoring climate-related vulnerabilities at cross-sector and cross-jurisdictional levels. The HKMA also participates in the FSB's Transition Plans Working Group, which aims to develop conceptual understanding on the relevance of transition plans and planning by financial and non-financial firms for financial stability.</p> |

Building a Climate-resilient Financial System

Executives' Meeting of East Asia-Pacific Central Banks (EMEAP)



The HKMA is a member of EMEAP, which focuses on sustainable finance as one of its strategic priorities. The HKMA is the Champion of the Interest Group on Sustainable Finance of EMEAP's Working Group on Banking Supervision, and leads studies that aim to promote information sharing on various aspects of climate risk management, such as green classifications, climate risk stress testing, climate-related data gaps and transition to a low-carbon economy.

The HKMA also chairs EMEAP's Working Group on Financial Markets, which promotes investment in green bonds through the Asian Bond Fund initiative.

International forums on climate-related issues



The HKMA participates in a climate research initiative under the International Banking Research Network, which has been analysing the impact of climate-related risks on bank lending at cross-sector and cross-jurisdiction level. The HKMA also contributes to international discussion about climate-related issues at other international forums, including the NGFS Expert Network Research day-ahead workshop in the Green Finance Research Advances conference, and the 15th Annual Workshop of the Asian Research Network co-hosted by the BIS and the Monetary Authority of Singapore.

Enhancing the Green and Sustainable Finance Ecosystem

To solidify Hong Kong's position as a leading regional green and sustainable finance hub, the HKMA has been stepping up its efforts in promoting market awareness and participation, providing the necessary infrastructure and catalysts, and supporting international initiatives and alignment with global standards.



Enhancing the Green and Sustainable Finance Ecosystem

Enriching the green and sustainable finance ecosystem

Throughout the year, the HKMA has been working closely with local and international partners to grow and enrich the ecosystem to promote further development of green and sustainable finance in Hong Kong.

FIGURE 1



Enhancing the Green and Sustainable Finance Ecosystem

Green and Sustainable Finance Cross-Agency Steering Group: a champion of green and sustainable finance market developments

The Green and Sustainable Finance Cross-Agency Steering Group (CASG)¹, which is co-chaired by the HKMA and the Securities and Futures Commission (SFC), co-ordinates the management of climate and environmental risks to the financial sector, accelerates the growth of green and sustainable finance in Hong Kong and supports the Government's climate strategies.

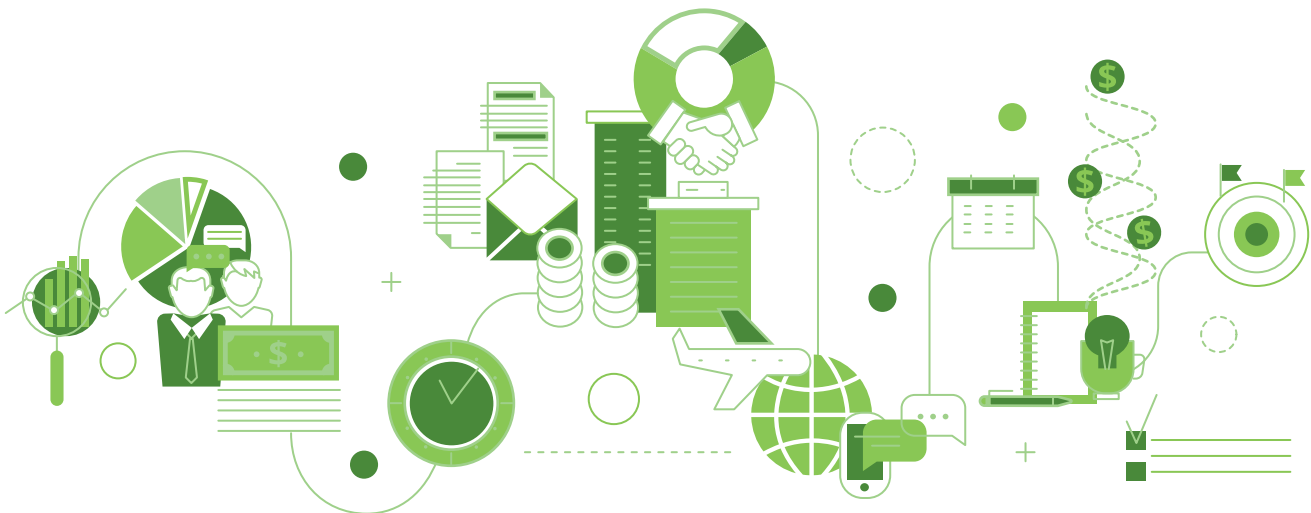
The CASG has been making good progress since its establishment. In January 2024, the CASG announced the key initiatives to support Hong Kong in capitalising sustainable finance opportunities, with focus areas of work including sustainability disclosures, ecosystem enhancement, transition finance and green fintech. In particular, a working group on sustainability disclosures was established to develop a Hong Kong roadmap on adopting the IFRS Sustainability Disclosure Standards. The roadmap will comprise four key areas –

sustainability reporting, assurance, data and technology, and capacity building. In addition, a workstream on transition finance was formed to explore ways to support financial institutions and corporates in their transition planning and reporting.

The CASG has also stepped up efforts to enrich the sustainable finance ecosystem through cross-sector capacity building and data enhancement. Notably, on data, we have continued to promote the utilisation of the Climate and Environmental Risk Questionnaire for Non-listed Companies² launched by the CASG in collaboration with the CDP in 2022. The CASG will continue to keep abreast of the latest developments in the green and sustainable finance sector and enhance Hong Kong's role as a regional and global green and sustainable finance hub.



More information about the CASG can be found on its webpage



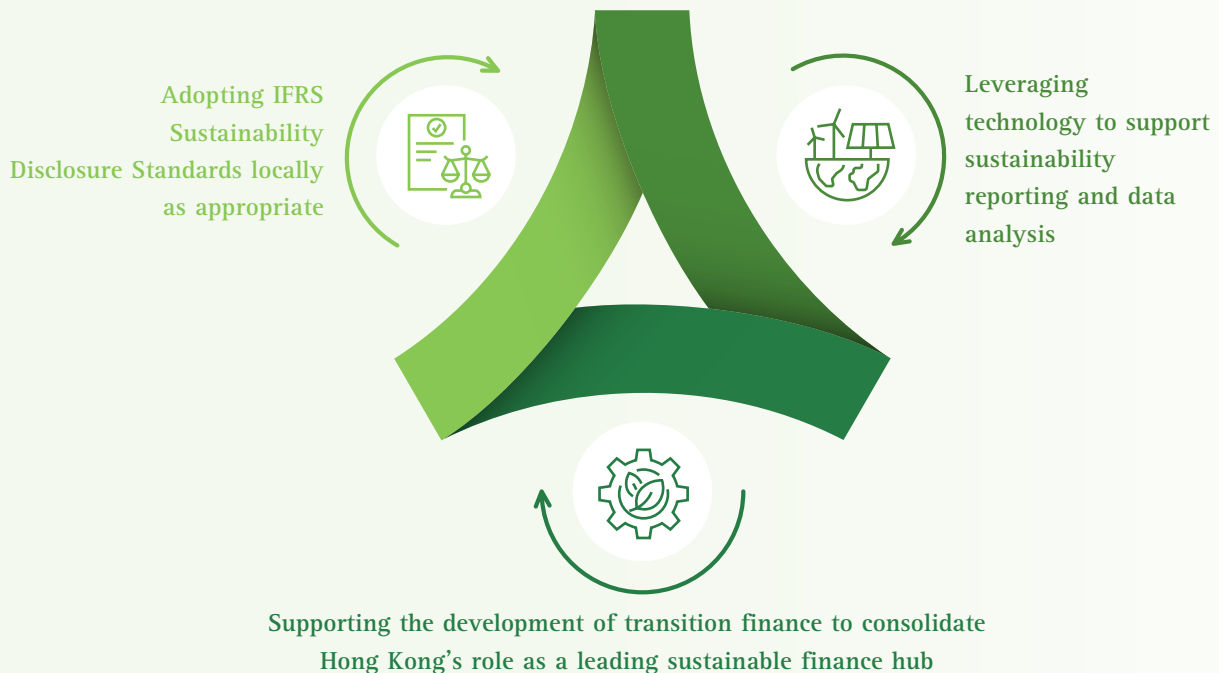
¹ Co-initiated by the HKMA and the SFC, the CASG was established in May 2020. The other CASG members include the Financial Services and the Treasury Bureau, the Environment and Ecology Bureau, Hong Kong Exchanges and Clearing Limited, the Insurance Authority, the Mandatory Provident Fund Schemes Authority and the Accounting and Financial Reporting Council.

² This Questionnaire was jointly developed by the Steering Group and CDP, an international non-profit organisation that runs the global environmental disclosure system for companies to aid corporates' sustainability reporting processes and raise their sustainability visibility to lenders, investors and supply chain clients so to better access sustainability financing. It will also facilitate financial institutions' collection and assessment of company-level data for risk assessment and relevant business decisions. Further details can be found here: <https://www.sustainablefinance.org.hk/en/data-technology/casg-non-listed-company-questionnaire-on-climate-and-environmental-risk>

Enhancing the Green and Sustainable Finance Ecosystem

FIGURE 2 The CASG's key initiatives for 2024

In January 2024, the CASG announced three new key initiatives to capture financing and investment opportunities from the Asia-Pacific region's low carbon transition.



Subsidy scheme

To support capacity building for the industry, the Centre for Green and Sustainable Finance under the CASG administers the Government-funded Pilot Green and Sustainable Finance Capacity Building Support Scheme, which provides subsidies to practitioners, graduates and students to obtain green and sustainable finance-related training. As of December 2023, 46 international and local programmes have been registered as eligible training programmes under the Scheme, and over 560 reimbursement applications have been approved.

The HKMA also launched the Core Level of the new module on Green and Sustainable Finance under the Enhanced Competency Framework (ECF-GSF) for Banking Practitioners. The ECF-GSF aims to facilitate talent development and enhance the overall level of professional competencies of banking practitioners.

In 2024, the HKMA will continue to work with the banking industry to develop the Professional Level of the ECF-GSF to meet the rapidly growing demand for experienced green and sustainable finance practitioners.

Enhancing the Green and Sustainable Finance Ecosystem

Seminars and thematic workshops

To help financial institutions and corporates, especially small and medium-sized enterprises (SMEs), gain a better understanding of major climate and sustainability-related topics, including climate risk management, sustainability reporting, greenhouse gas emission calculation, and transition planning, the HKMA collaborated with relevant Government bureaux and departments, and global partners like CDP, Glasgow Financial Alliance for Net Zero (GFANZ)³, and Partnership for Carbon Accounting Financials (PCAF)⁴ to organise a series of seminars and thematic workshops throughout the year, attracting participants from both the financial services and corporate sectors.



Mr Darryl Chan, Deputy Chief Executive (fourth from right), and Mr Kenneth Hui, Executive Director (External), then Head (Market Development) (second from left), at a joint seminar on sustainability reporting co-organised by the CASG and CDP in March

Internship opportunities

For students, subsequent to the launch of the Sustainable Finance Internship Initiative in 2022, training sessions were conducted in January and February 2023 for interns and university undergraduates to deepen their understanding of sustainable finance.

Use of technology

Recognising the potential of technology in closing the climate-related data gaps and improving data quality, the HKMA is working to enhance data accessibility and quality to enable informed decision-making and effective climate actions.

In February 2024, the CASG launched a series of enhancements to its website to offer a one-stop green and sustainable finance information hub for financial institutions, corporates and the general public. Key enhancements include an e-Portal for sustainability disclosure, greenhouse gas emissions calculation and estimation tools, and more centralised data and resources with user-friendly browsing and search functions.

During the Hong Kong Green Week, the CASG also organised the session themed “Green Fintech: Catalyst for Scaling Sustainable Finance” in conjunction with Cyberport and Invest Hong Kong, to showcase leading green innovation solutions and Hong Kong’s strengths in green technology.



³ GFANZ is a global coalition of eight independent net-zero financial alliances whose members have committed to support the transition to net zero by 2050 and help achieve the objectives of the Paris Agreement.

⁴ PCAF is a global partnership of financial institutions that work together to develop and implement a harmonised approach to assess and disclose the greenhouse gas emissions associated with their loans and investments.

Enhancing the Green and Sustainable Finance Ecosystem

Hong Kong Green Week – Finance Stream

The Hong Kong Green Week – Finance Stream took place between 26 February – 1 March 2024. More than 1,600 participants from close to 30 jurisdictions attended the various sustainability-themed events. The attendees represented financial institutions, corporates, central banks, international organisations, government agencies, academia, consulting firms, among others.

The anchor finance event of the Hong Kong Green Week was the Climate Business Forum: Asia Pacific (CBF), co-hosted by the HKMA and the International Finance Corporation. The CBF attracted more than 400 participants, including top decision makers in global business and finance, to discuss solutions to unlock climate financing in the Asia-Pacific. The two-day event covered a broad range of topics including energy transition, decarbonisation of heavy industries, circular economy, the future of sustainable finance, and new climate technologies in emerging and developing markets in the Asia-Pacific.

Riding on the CBF, institutions from the public and private sector organised more than ten roundtables, seminars, and networking events focusing on themes such as climate finance, carbon markets, electric vehicle supply chain, net-zero transition financing, green classification framework, and financing green development in the Belt and Road region. In addition, the HKMA and the International Monetary Fund co-hosted the Asia Climate Finance Roundtable on 29 February 2024, which explored the key steps to scale up climate finance and the role of central banks and regulators in managing climate risks.

The events above formed part of the HKMA's broader efforts to promote and enrich the green and sustainable ecosystem in Hong Kong, providing a platform for participants to spur new business development, exchange knowledge, and explore new opportunities to meet the Asia-Pacific region's climate financing challenges.



Mr Darryl Chan, Deputy Chief Executive, delivers a keynote speech at the CBF



A panel discussion at the CBF

Enhancing the Green and Sustainable Finance Ecosystem

Alliance for Green Commercial Banks: an initiative supporting regional green and sustainable finance development

The HKMA has also been actively supporting regional green and sustainable finance development. In November 2020, the International Finance Corporation and the HKMA launched the Alliance for Green Commercial Banks⁵ to bring together financial institutions, banking industry associations, research institutions and innovative technology providers in the region to develop a community of green commercial banks.

The Alliance has hosted 22 training and roundtable sessions since March 2021, reaching over 7,300 participants globally across Asia Pacific, Europe, the Middle East, Africa, and the Americas. The Alliance's second thought leadership paper, *Defining An Ambitious Climate Strategy of Green Banking: A Case Study*, prepared in collaboration with the Crédit Agricole CIB, was published in October.

Highlights of 2023

The Alliance and Crédit Agricole CIB jointly launched the thought leadership paper titled *Defining An Ambitious Climate Strategy of Green Banking: A Case Study* in October.



More information about the Alliance and its latest initiatives can be found on its webpage

⁵ The HKMA is the founding member and first regional anchor for the Asia Chapter.

Enhancing the Green and Sustainable Finance Ecosystem

Local and international collaboration: New partnerships in 2023

During the year, the HKMA Infrastructure Investment Facilitation Office joined the newly established Capacity-building Alliance of Sustainable Investment (CASI), as well as the Green Investment and Finance Partnership (GIFP) initiated by the Belt and Road Initiative International Green Development Coalition. The partnership with CASI and GIFP will help promote capacity building and knowledge sharing, and in turn, support the channelling of capital to green and sustainable projects in the Asian region and beyond.

In August 2023, GFANZ announced the establishment of its Hong Kong Chapter, which will help support net-zero efforts of financial institutions both locally and in Mainland China. The HKMA plays an advisory role to assist in GFANZ's efforts.

Green finance solutions: Channelling capital to green the real economy



52.1 US\$ billion

Green and sustainable debt issuance
in Hong Kong (2023)

Green and sustainable bonds

To demonstrate the Government's determination to combat climate change, and the commitment to promoting green finance and developing Hong Kong into a more sustainable and liveable city, the Government Green Bond Programme was launched in 2018. The HKMA assists in implementing green bond issuance under the Programme.

A total of around US\$25 billion equivalent of green bonds, comprising institutional and retail bonds, have been issued so far with the proceeds allocated to over 70 green Government projects, such as green buildings, waste management and resource recovery, energy efficiency and conservation, amongst others.

To enhance the transparency and accountability of the Programme, annual Green Bond Reports have been published, with details on the allocation of the green bond proceeds and expected environmental benefits.

The Government continued with its regular institutional green bond issuances in the 2023-24 financial year, issuing around US\$6 billion equivalent of green bonds in June. The triple-currency issuance covered US dollar, euro and renminbi tranches in multiple tenors, which was well received and attracted a wide spectrum of investors, achieving close to US\$30 billion equivalent in orders. In particular, the renminbi tranches were expanded from a combined RMB10 billion from the January issuance to RMB15 billion, with the additional issuance of a new 10-year renminbi tranche, which helped to extend the Government's renminbi yield curve and continued to enrich offshore renminbi product offerings. The global investors' enthusiasm for the Government's green bonds demonstrated their recognition of Hong Kong's commitment towards green and sustainable development.

In October, the Government issued the second batch of retail green bond, worth HK\$20 billion, to further facilitate market development and promote financial inclusiveness. The issuance offered members of the public an investment opportunity with steady returns so that they can also participate in, and benefit from, green finance development in Hong Kong.

Enhancing the Green and Sustainable Finance Ecosystem

Riding on the success of the inaugural tokenised issuance in February 2023, the HKMA assisted the Government to issue a second tokenised institutional green bond in February 2024. This issuance achieved new breakthroughs in broadening investor participation via existing market infrastructure and streamlining the issuance process by issuing in digitally native format. Also, key green bond documentation including the issuer's Green Bond Framework and relevant third-party review reports is embedded in the digital assets platform, enhancing transparency and accessibility of information. These demonstrate enhanced feasibility for similar future issuances by market participants.



29.9 US\$ billion

Largest arranging hub for Asian international green and sustainable bond issuances (2023)

To provide the industry with credible and handy market information, the HKMA continues to collaborate with the Climate Bonds Initiative and the International Capital Market Association (ICMA) respectively, to release annual reports featuring the Hong Kong and regional green debt markets. According to the ICMA report, Hong Kong continued to be the largest centre for arranging international green and sustainable bond issuances in Asia, with a total issuance volume of US\$29.9 billion in 2023, equivalent to more than one-third of the regional total.

The Shenzhen Municipal People's Government issued its third offshore municipal government bonds in Hong Kong in September. The total issuance of RMB5 billion included RMB2.1 billion of green bond, and RMB2 billion of social responsibility bond. In the same month, the People's Government of Hainan Province also conducted its second issuance of RMB5 billion offshore bonds in Hong Kong, comprising RMB1 billion of blue bond, RMB3 billion of sustainability bond, and RMB1 billion of biodiversity-themed green bond. These issuances reaffirmed Hong Kong's unique role in facilitating green and sustainable capital flows between the Mainland and the rest of the world, and its long-standing status as the premier fund-raising platform in the region.

Green and Sustainable Finance Grant Scheme

The HKMA continues to promote and administer the Government's Green and Sustainable Finance Grant Scheme launched in 2021, and leverages the scheme to encourage related professional service providers, including green advisors and external reviewers, to build or expand their presence in Hong Kong. The Scheme has been well received by the industry. As of end-2023, the Scheme has benefited over 340 green and sustainable debt instruments with a total underlying issuance volume of around US\$100 billion, in support of the issuers' efforts to ensure and demonstrate adherence to relevant international standards.

The Financial Secretary announced in the 2024-25 Budget to extend the Scheme by three years to 2027, and to expand the scope of subsidies to cover transition bonds and loans with a view to encouraging relevant industries in the region to make use of Hong Kong's financing platform as they move towards decarbonisation.

Green and Sustainable Finance Grant Scheme

Launched in May 2021

Subsidised **>340** green and sustainable debt instruments issued in Hong Kong, with underlying volume totalling around **US\$100 billion** (as of end-2023)



Extension announced in 2024-25 Budget

To extend by **3 years** to 2027

To cover **transition bonds and loans**

Responsible Investment

As a major global asset owner and manager, the HKMA plays a pivotal role in fostering green and sustainable finance development, in support of the global climate agenda.

The HKMA has been an early mover in responsible investment. Since 2015, it has been spearheading investments in green and sustainable assets, mandating its external managers to practise active ownership, and integrating environmental, social and governance factors into the management of the Exchange Fund.



Responsible Investment

Overview

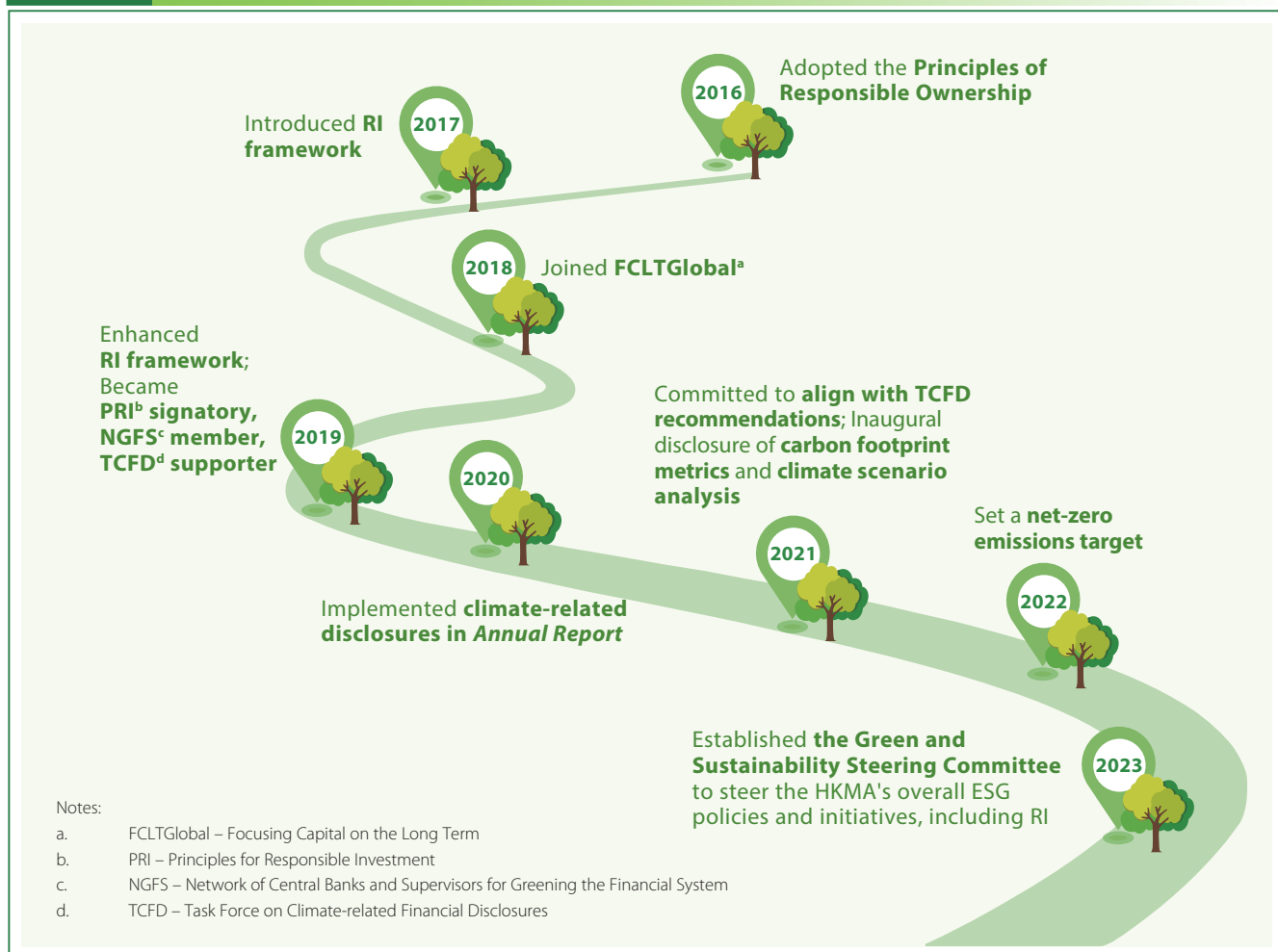
Investing prudently under the principle of “capital preservation first while maintaining long-term growth”,¹ the HKMA believes that giving due attention to environmental, social and governance (ESG) factors can help mitigate the associated risks and unlock the long-term sustainable value of investments.

As one of the first central banks to become a signatory of the Principles for Responsible Investment (PRI) and to set a 2050 net-zero emissions target² for its Investment Portfolio (IP), the HKMA is dedicated to continuously advancing its responsible investment (RI) momentum. It places a strong

emphasis on sustainability, particularly the pressing issue of climate change, with an aim to bolster resilience and enhance long-term risk-adjusted returns of the Exchange Fund.

As a responsible investor, the HKMA takes part in building a robust ecosystem for green and sustainable finance. It works together with like-minded investors, regulators and international organisations to develop industry-wide practices and promote adoption of RI across the financial and central banking sectors. Through its stewardship and collaborative initiatives, the HKMA strives to contribute to a future where finance and sustainability can go hand in hand.

Figure 1 The Exchange Fund's journey of responsible investment



¹ Refer to the *Reserves Management* chapter of the *Annual Report 2023* for more details.

² Carbon emissions according to the Greenhouse Gas Protocol (<https://ghgprotocol.org/>).

Responsible Investment

Comprehensive and reliable ESG information is central to the integration of sustainability and planning for a credible climate transition towards the net-zero target. In fulfilling its commitments to supporting the Network of Central Banks and Supervisors for Greening the Financial System (NGFS) Glasgow Declaration³ and the Green and Sustainable Finance Cross-Agency Steering Group's strategic plan, the HKMA leads by example to align this chapter on RI of the Exchange Fund with recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

Governance

The Exchange Fund Advisory Committee (EFAC), chaired by the Financial Secretary, endorsed the RI framework and the guiding principle for implementation by the Exchange Fund Investment Office (EFIO) in managing the Exchange Fund. The overarching guiding principle has underpinned an RI approach that dovetails with the investment objectives of the Exchange Fund.

The oversight of ESG and climate-related risks associated with the Exchange Fund's investments is exercised by the EFAC's Investment Sub-Committee (ISC) chaired by the Chief Executive of the HKMA. The ISC reviews the RI framework and risk management approach, and monitors the implementation through reporting by the EFIO's Sustainable Investing (SI) team at each meeting.

As illustrated in Figure 2, the EFIO ESG Committee, chaired by the Chief Strategy Officer (CSO), coordinates and oversees all ESG-related efforts within the EFIO. Initiatives and progress discussed at the quarterly EFIO ESG Committee meetings are reported to the Chief Executive Officer (CEO) of the EFIO.

Furthermore, the Green and Sustainability Steering Committee, chaired by the Chief Executive of the HKMA and attended by the CEO and CSO of the EFIO, convenes semi-annually to provide guidance on the HKMA's ESG policies and initiatives across various functions, including those of the EFIO, in alignment with the HKMA's overall ESG goals.



*The Exchange Fund's
guiding principle of RI:*

*Priority will
generally be given
to ESG investments
if the long-term risk-
adjusted return is
comparable
to other investments.*

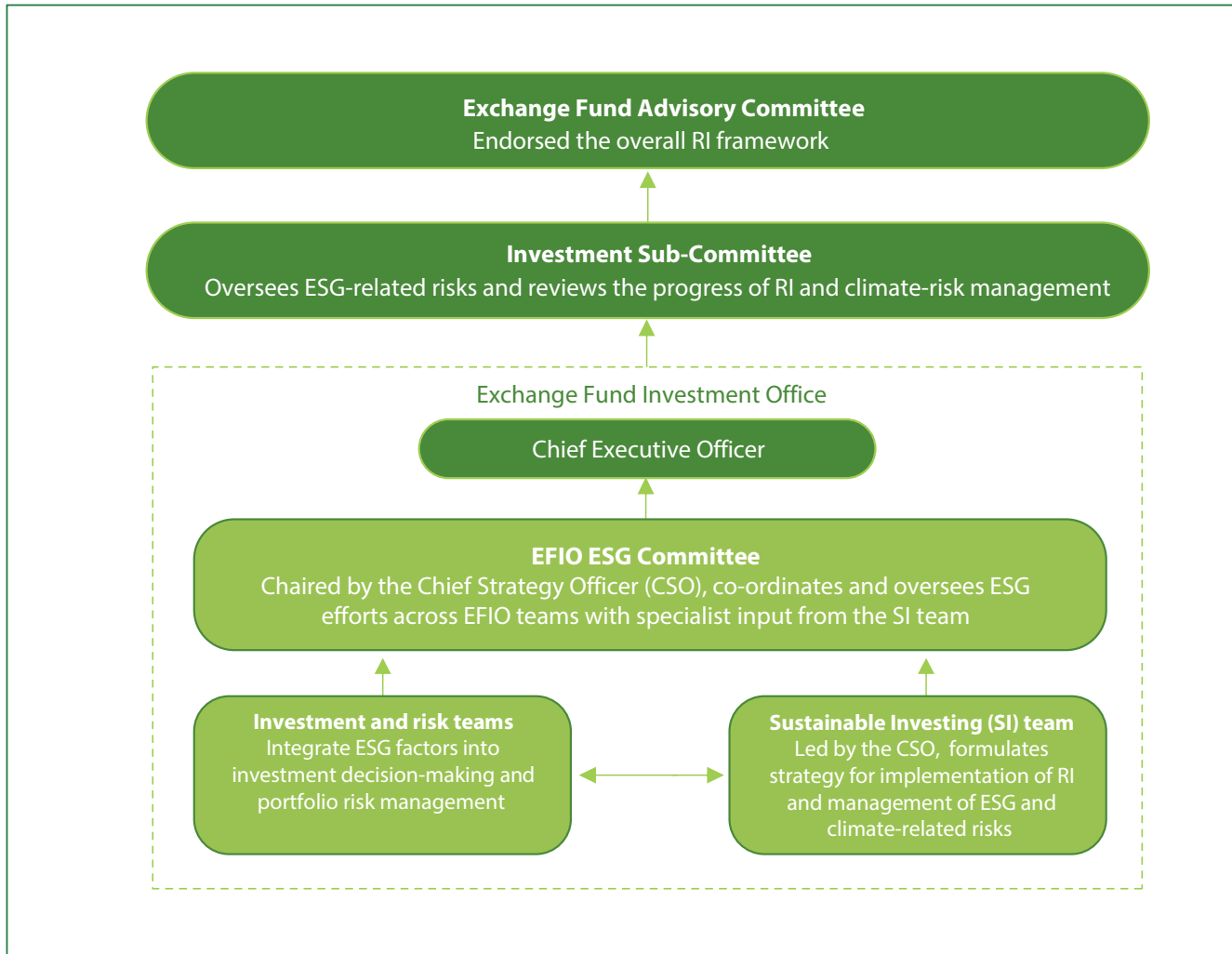


*More details about the HKMA's RI framework are
available on the HKMA website*

³ Made at the 2021 United Nations Climate Change Conference.

Responsible Investment

Figure 2 The governance structure for RI of the EFIO



Strategic repositioning of the Sustainable Investing team

As illustrated by Figure 1, the EFIO embarked on a remarkable RI journey in 2016 with an initial focus on managing ESG risks that could impact the financial performance of the Exchange Fund.

Over the years, as sustainability has rapidly evolved and extended beyond risk considerations to become a key strategic priority of major institutions worldwide, the EFIO has reviewed its approach to RI. July 2023 marked another milestone with the establishment of a new Business Strategy function led by the CSO to coordinate and steer the EFIO's strategic developments. The dedicated team for RI – now the SI team – previously housed under the Risk and Compliance Department was realigned under the Business Strategy function. This strategic repositioning reflects the HKMA's devotion to elevate the RI focus from primarily risk-oriented to a more proactive, forward-thinking stance to address sustainability matters in investments.

Responsible Investment

The SI team works closely with different teams within the EFIO on ESG integration, and assists the EFIO’s senior executives in managing ESG, especially climate-related, risks and opportunities in a broad range of investments:

- ▶ **Public investments** – The Credit, Rules and Compliance Committee, composed of the EFIO’s senior executives, reviews the incorporation of ESG factors into the credit risk model with the SI team’s input, and monitors the ESG profile of fixed income portfolios based on regular reporting by the Risk and Compliance Department. In addition, the SI team participates in the selection, appointment and monitoring of external managers by bringing in an ESG perspective (see *Advocating active ownership* under *Risk management* section on page 40).
- ▶ **Private investments** – The Investment Committee, chaired by the Chief Executive of the HKMA, takes into consideration the assessments of ESG-related issues provided by the private market investment and the risk teams for each prospective investment.

Strategies

The HKMA recognises that the physical and transition risks⁴ from climate change, along with related opportunities, can affect the long-term financial performance and value of the Exchange Fund’s investments.

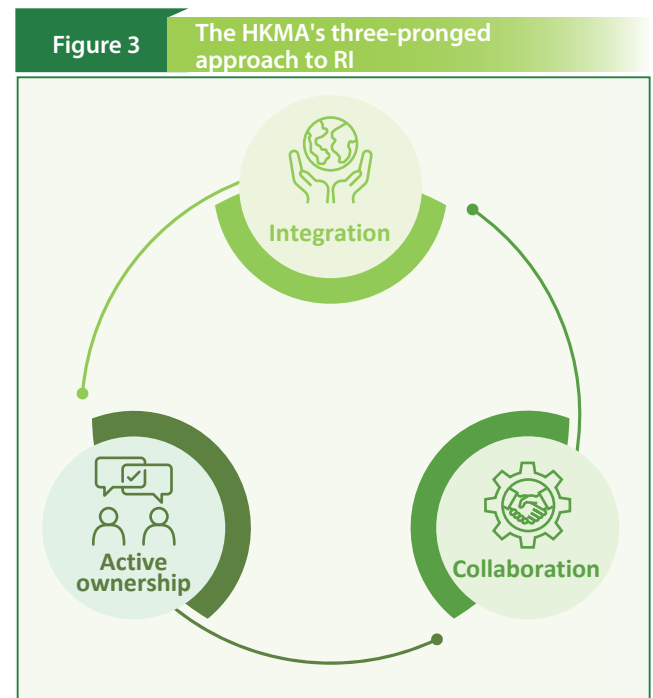
The Emissions Gap Report 2023⁵ by the UN Environment Programme (UNEP) projected a global average temperature rise of 2.5-2.9°C above pre-industrial levels unless jurisdictions worldwide deliver deeper cuts in greenhouse gas (GHG) emissions before 2030. The urgent need for more ambitious policies, technology developments or behavioural changes to address the temperature rise could amplify transition risks

such as diminished asset valuations or stranded asset shocks. Simultaneously, the increasing occurrence and severity of extreme weather events have become evident, posing additional physical risks to investments.

Emphasis on climate change for responsible investment

Believing that investing for a green future dovetails with the investment objectives of the Exchange Fund, the HKMA has placed particular emphasis on climate-related factors for ESG integration. In 2022, the HKMA set a target of achieving net-zero emissions by 2050 for the IP of the Exchange Fund, further demonstrating its commitment to the global climate agenda.

The HKMA continues to step up its ongoing efforts under a three-pronged approach, with a clear focus on decarbonisation and transition. More details will be covered in the ensuing sections.



⁴ Climate risks are widely defined by two dimensions: (i) physical risks, including acute impacts from extreme weather events, causing business disruption and physical damage of assets, and chronic changes of climate patterns that affect operations and productivity; and (ii) transition risks, involving possible abrupt devaluation of assets due to the shift towards a low-carbon economy.

⁵ UNEP, 2023. *Emissions Gap Report 2023: Broken Record – Temperatures hit new highs, yet world fails to cut emissions (again)* (<https://www.unep.org/resources/emissions-gap-report-2023>).

Responsible Investment

To progress towards the net-zero target, the HKMA prioritises proactive engagement instead of exclusion or divestment from its permissible investments.

- ▶ First, maintaining a diversified and resilient portfolio is crucial to achieving the primary investment objectives of the Exchange Fund. Outright exclusion of sectors or industries could shrink the investible universe, potentially impacting investment risks and returns. By taking an inclusive approach, the HKMA can capture opportunities to invest in companies undergoing transition, including those from heavy-emitting industries, which have strong technology and governance to navigate through the evolving global climate trend.
- ▶ Second, addressing climate change requires the transition of core “brown” industries. Excluding and divesting from these industries alone would not solve the carbon emissions problem. Instead, the HKMA supports these industries through strategic capital and active ownership to drive their implementation of sustainable and low-carbon practices, resulting in positive changes both for themselves and the world.

In the light of evolving market developments, the HKMA is refining its net-zero investment strategy to incorporate a holistic approach in pursuing transition outcomes supporting both the Exchange Fund and global net-zero goals, while adhering to its RI guiding principle.

Pursuing ESG and green investments

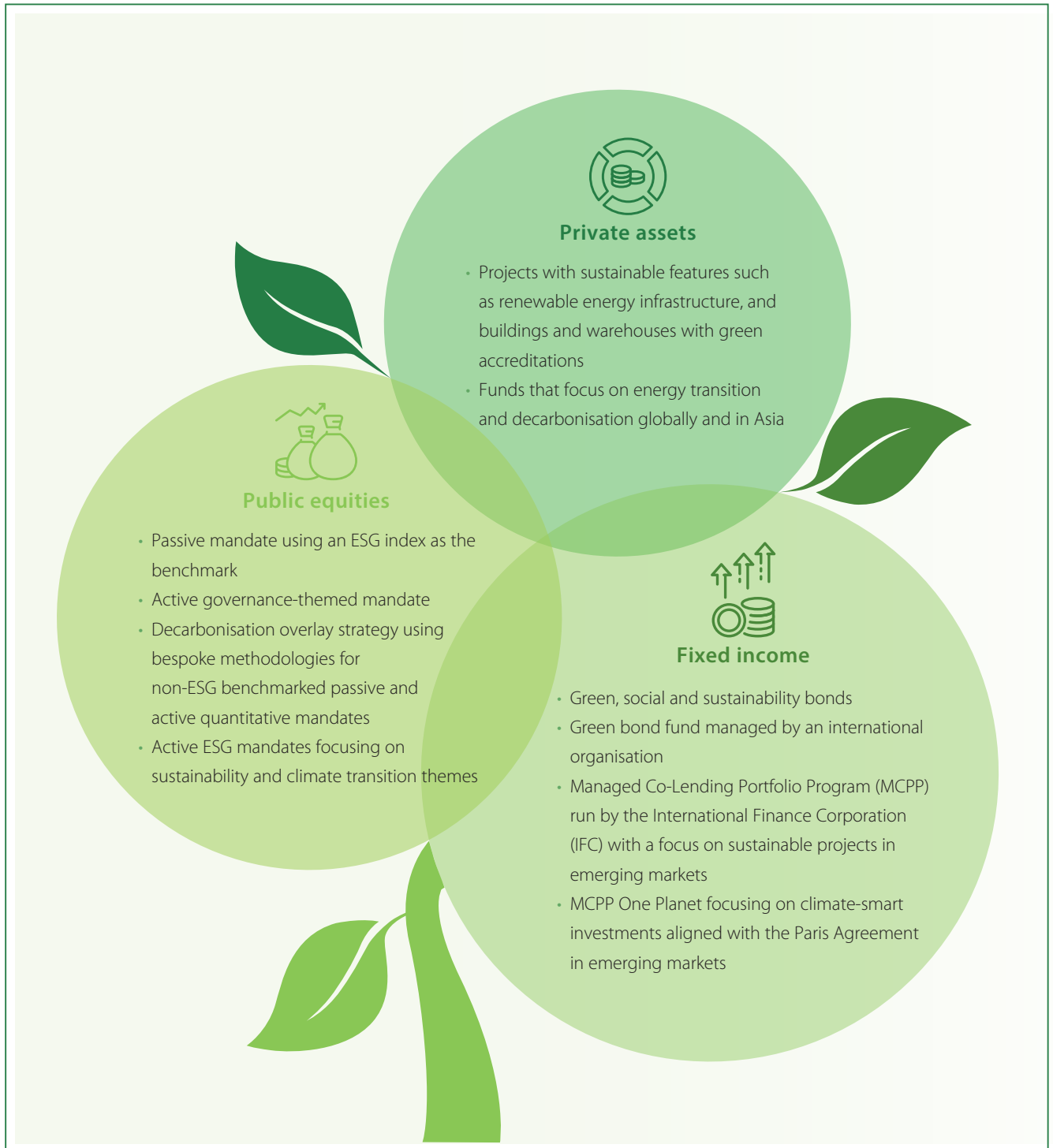
Through integration of ESG factors into investment decisions, the HKMA continues to seek sustainable investments and opportunities that can promote the climate transition while enhancing the long-term portfolio resilience of the Exchange Fund (Figure 4).

The HKMA maintained the positive RI momentum in 2023. For the public market, it launched a new active global public equities mandate managed by external managers, which focused on sustainability and climate transition themes, and extended the application of bespoke low-carbon equity indices to another externally managed portfolio. In addition, the performance of green, social and sustainability bonds, which the HKMA prioritises for investment, surpassed the investment benchmark, exemplifying the notion that one can do well alongside doing good.

In the private market, the HKMA takes proactive steps to construct a resilient Long-Term Growth Portfolio (LTGP). It seizes investment opportunities that are expected to benefit from secular tailwinds in the long run, such as climate and energy transition themes. For instance, the HKMA has anchored two dedicated Asia-centric transition investment funds. These investments also align with the HKMA’s commitment to addressing the climate transition need in Asia.

Responsible Investment

Figure 4 Ongoing initiatives in pursuing ESG investments



Responsible Investment

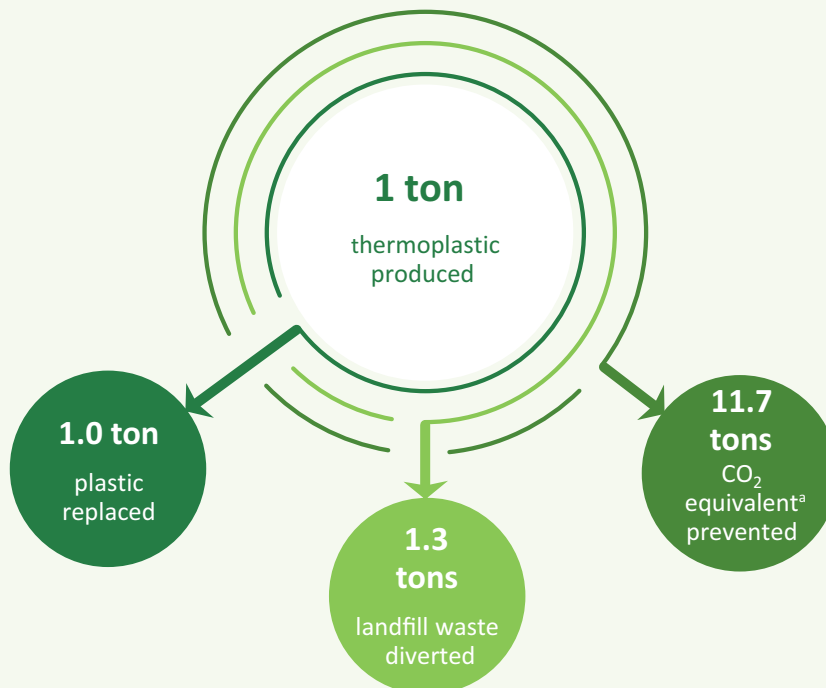
Exercising responsible investment in private market investments

CASE

Circular economy: from unsorted waste to thermoplastic

The HKMA has invested in a company specialising in producing an eco-friendly thermoplastic material from unsorted household waste, including organic materials such as food waste, as well as unrecyclable materials. Unlike conventional chemical recycling systems that rely on energy-intensive high temperatures to produce plastic, the company has pioneered a low-temperature production method powered entirely by its solar array. The plastic material, 100% derived from waste, offers a sustainable and versatile alternative to oil-based resins commonly used in industries ranging from retail to consumer durables. It is also compatible with existing standard manufacturing processes and cutting-edge technologies such as 3D printing.

The company is a steadfast supporter of the circular economy. The diagram below illustrates the positive environmental outcomes achieved by its state-of-the-art plastic production process:



Note a: CO₂ equivalent – carbon dioxide equivalent

Responsible Investment

Supporting sustainability in emerging markets

The MCPP of the IFC is an innovative initiative that combines institutional investor contributions with the IFC's own funds to scale up sustainable financing for private companies in emerging markets.

The HKMA committed two tranches of US\$1 billion each to the MCPP in 2017 and 2019, and further partnered with the IFC in 2021 to create MCPP One Planet – a new global platform for climate-smart investments, and the world's first cross-sectoral portfolio of emerging-market loans aligned with the Paris Agreement.

Through the MCPP programmes, the HKMA has committed to finance 80 sustainable projects in 38 developing countries across 19 sectors, including infrastructure, agribusiness, real estate and manufacturing.

The IFC has collected data about the impact of MCPP financing. According to IFC, the HKMA's loan commitments supported the emerging markets and developing countries on various aspects, from economic transformation to human capital development. Notably, committed projects of the HKMA are projected to achieve annual reductions of approximately 5.6 million tons of CO₂e in GHG emissions. This is equivalent to GHG emissions from an average gasoline-powered passenger vehicle driving 14 billion miles.

Figure 5 Projected average annual impacts of the HKMA's loan commitments in the MCPP since 2020⁶



Generated over
860 gigawatt
hours of
electricity to
170,000
customers



Reached
+135,000
students



Supported
+184,000 jobs



Reduced
5.6 million
tons of CO₂e in
GHG
emissions



Reached
+24,000
farmers

⁶ Development impact data reported by the IFC.

Responsible Investment

Building the ecosystem

The green and sustainable finance ecosystem is the cornerstone of future global sustainability. The HKMA proactively collaborates with like-minded investors and counterparties to promote RI and strengthen the industry's capacity.

In 2023, the HKMA successfully hosted its fifth annual ESG Workshop, which brought together nine private market institutions, including general partners and limited partners, to drive market discussions on incorporation of sustainability considerations in real asset investments.



Mr Howard Lee, CEO of the EFIO, delivers remarks at the HKMA ESG Workshop 2023

Collaborating with international organisations

Internationally, the HKMA remained at the forefront of promoting industry-wide ESG investment standards and practices in 2023:

- ▶ The HKMA actively contributed to FCLTGlobal's research work that aims to identify market-leading practices on decarbonising private equity assets.⁷
- ▶ Demonstrating its commitment to good ESG practices as a dedicated member of the NGFS, the HKMA led a study under the NGFS' workstream of "Net Zero for Central Banks" to review the adoption of sustainable and responsible investment in the central bank community.
- ▶ The HKMA continued to participate in various industry forums, speaking engagements and framework consultations to promote good ESG practices, fostering the development of a sustainable finance ecosystem.



Mr Leong Cheung, CSO of the EFIO, speaks at the Asia Pacific Business Forum 2023

⁷ FCLTGlobal, 2023. *Grey to Green: The Opportunity for Private Equity to Decarbonize Assets* (https://www.fcltglobal.org/wp-content/uploads/Grey_to_Green_FCLTGlobal.pdf).

Responsible Investment

Assessing portfolio climate resilience

The HKMA utilised three scenarios (see Figure 6) developed by an external consultant to assess the resilience of the Exchange Fund's IP under different states of climate change. The analysis presented in the *Sustainability Report 2022* remains relevant, as there have been no substantial updates to the longer-term market assumptions.

Recapitulating the findings, the IP has demonstrated resilience, as evidenced by the minimal impact on returns across all analysed scenarios over the medium to long term. The analysis results further underscored the importance of the HKMA's ongoing RI efforts in mitigating the risks associated with a failed transition scenario, which could be challenging for the IP.

The pace of transition towards a global net-zero is highly uncertain. Methodologies and assumptions for scenario analysis will also evolve as the global economy moves along the transition pathway. The HKMA will keep in view the developments and enhance its assessment to bolster the Exchange Fund's resilience to climate change.

Strengthening internal capacity

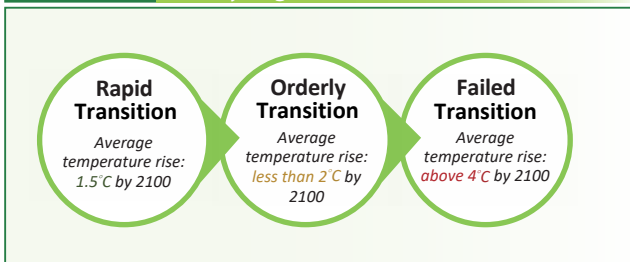
Developing internal capacity is crucial for furthering the HKMA's pursuit of its ESG agenda. The HKMA seeks to enhance its research efforts further and interact with fellow investors, industry-leading experts and international organisations to keep abreast of the latest ESG developments.

Apart from encouraging staff to undertake sustainability-related courses and acquire relevant certifications, during 2023 the HKMA actively participated in conferences organised by esteemed international organisations such as the PRI, the NGFS and fellow central banks. The events provided opportunities for the HKMA to engage with international investors, exchanging insights and best practices on ESG implementation.

To facilitate internal knowledge sharing, ESG news and the market landscape are discussed as a standing agenda item at every EFIO ESG Committee meeting (see *Governance* section above). Furthermore, sustainability and green finance-related topics were frequently featured in the HKMA's internal training programmes, aiming to equip staff members with the necessary knowledge to navigate the complexities of ESG considerations.

Figure 6

Applying a range of scenarios for analysing climate risks



Responsible Investment

Risk management

Integrating ESG factors in credit analysis

To ensure long-term portfolio resilience, climate risk management is an integral part of the HKMA's investment processes for all asset classes. Specifically, ESG factors have been incorporated in the credit risk model for fixed income portfolios of the Exchange Fund since 2017, with regular monitoring of portfolio ESG profiles.

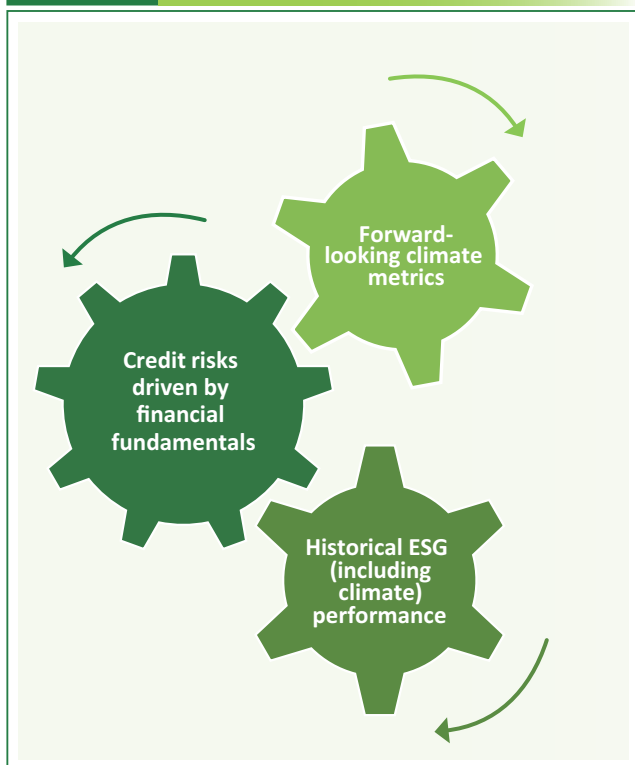
Recognising the multifaceted nature of climate change and the importance of the future transition potential of investment assets, the HKMA has been studying the application of forward-looking metrics to complement historical ESG data for more comprehensive analysis of the risks and opportunities. In 2023, the HKMA refined its credit risk model by incorporating forward-looking climate factors, placing additional emphasis on climate-related commitments and transition plans of counterparties and fixed income issuers.

Advocating active ownership

The HKMA believes in enhancing the long-term sustainable value of investments through stewardship and continuous engagement. It attaches high importance to the ESG and stewardship practices of its suite of external managers, who are entrusted with discharging active ownership responsibilities and exercising shareholder rights on behalf of the HKMA. ESG considerations are integrated into the external manager selection, appointment and monitoring processes to align with the HKMA's commitments.

The HKMA employs a risk-based approach to engage with its external managers, targeting assets and portfolios in the Exchange Fund that are exposed to higher ESG and climate risks. Specifically, the HKMA examines a manager's rationale for investing in companies associated with elevated ESG or climate-related risks, as well as its engagement efforts and voting records concerning these "focus companies".

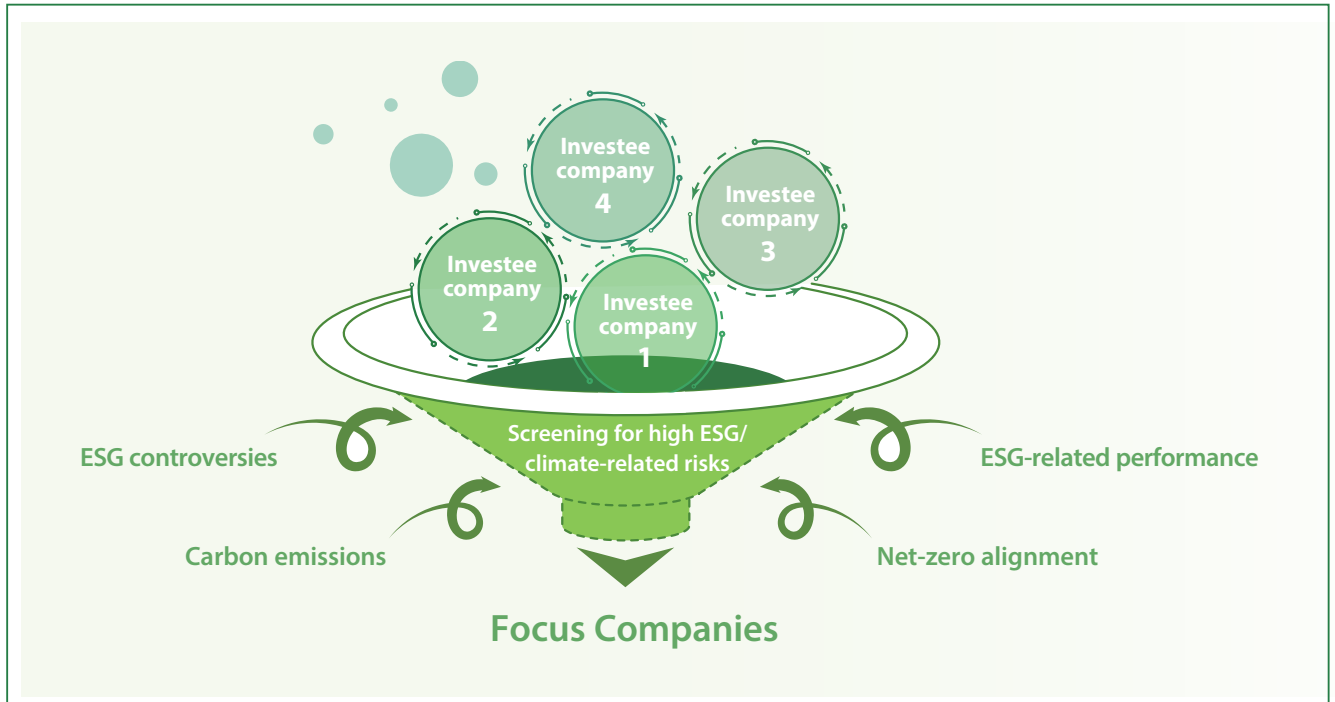
Figure 7 Factors in credit risk analysis



Responsible Investment

Figure 8

Factors for identifying “focus companies” associated with high ESG or climate-related risks



Through its engagement activities, the HKMA discovered that its external managers would invest in companies with substandard ESG ratings if they perceived the potential to enhance company valuation through their influence on improving ESG performance (such as better corporate governance structure and decarbonisation in operations). Divestment would have precluded these impactful engagement actions. In addition to influencing the companies' ESG practices, external managers' engagement efforts also enabled them to obtain proprietary views on the companies' ESG status complementing the outdated ESG data in investment analysis.

Promoting transparency for private investments

The HKMA examines the ESG policies and practices of general partners (GPs) as a mandatory part of its due diligence work for every investment mandate of the LTGP. The assessment is conducted using the HKMA's ESG due diligence questionnaire, which is recognised by the PRI and the Institutional Limited Partners Association as the industry standard⁸. For real estate investments, green accreditation is also a predominant factor in the assessment.

On an ongoing basis, the HKMA incorporates ESG integration clauses in the legal documentation and requires GPs to report ESG information, including climate risk assessment and metrics like carbon emissions of underlying investments, to promote transparency in the private market sector and facilitate its risk monitoring. To further address the current challenge of ESG data availability and quality, the HKMA is exploring initiatives to support the standardisation of ESG data within the private market.

⁸ PRI, *Limited Partners' Private Equity Responsible Investment Due Diligence Questionnaire* (<https://www.unpri.org/download?ac=15124>)

Responsible Investment

Target and metrics

Targeting net-zero emissions

The HKMA has set a target of net-zero emissions by 2050 for the IP of the Exchange Fund. This target marks a significant milestone in the HKMA's RI journey.

Guided by the RI framework and approaches described in the *Strategies* section above, the HKMA continues its steadfast RI efforts, as illustrated in Figure 9, to drive portfolio decarbonisation and transition.

Figure 9 Taking actions to achieve the net-zero target



Measuring carbon emissions

Quantitative measurement is useful for the HKMA's continuous risk monitoring and assessment of measures taken. For climate change, measuring carbon emissions enables the HKMA to understand the climate risk profile of its portfolios, track progress in decarbonisation and identify carbon-intensive areas that require further action.

The HKMA continues to measure the weighted average carbon intensity (WACI),⁹ expressed as tCO₂e¹⁰/US\$ million revenue, for the Exchange Fund's portfolios in line with industry practice. Scope 3 emissions¹¹ are excluded due to the high data uncertainty and lack of a standardised methodology for measurement, rendering them prone to potential double or multiple counting.

Monitoring of emissions from public equities portfolios takes precedence due to the more reliable measurement and disclosure practices in the market. Moreover, based on results of the HKMA's climate scenario analysis, public equities are more susceptible to climate risks compared to other asset classes of the Exchange Fund.

Chart 1 presents the WACI of the Exchange Fund's public equities portfolios from 2017 to 2022, using methodologies and tools developed by an external data provider. Where reported data were not available, the data provider estimated carbon emissions using its proprietary model. The reported and estimated data together covered more than 97% of the asset values of the assessed portfolios.

⁹ WACI is a metric recommended by the TCFD and NGFS. It measures a portfolio's exposure based on Scope 1 and 2 emissions relative to gross revenues of underlying investments, weighted by their relative sizes in the portfolio. Scope 1 emissions refer to direct emissions from sources owned or controlled by an organisation. Scope 2 emissions refer to indirect emissions generated from purchased electricity, steam, heating or cooling consumed by an organisation.

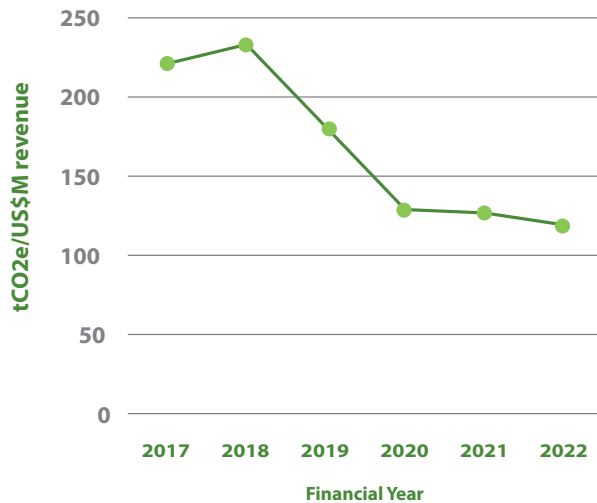
¹⁰ tCO₂e refers to tons of carbon dioxide equivalent.

¹¹ Scope 3 emissions refer to all other indirect emissions that result from the activities of an organisation.

Responsible Investment

Chart 1

WACI of the Exchange Fund's public equities portfolios



Sources: MSCI^a and HKMA calculations.

Note a: Note on use of information on the HKMA website (<https://www.hkma.gov.hk/eng/key-functions/reserves-management/responsible-investment/climate-risk>).

The WACI of the public equities portfolios as at the end of 2022 stood at 119 tCO₂e/US\$ million revenue, representing a reduction of 6% compared to 2021 and an overall 46% reduction compared to the 2017 level. This figure is persistently lower than the market investment benchmark, an indication of the Exchange Fund's lower exposure to carbon-intensive assets when compared to the broader market.

The pathway to net zero is, however, non-linear. The decarbonisation of the Exchange Fund's portfolios is subject to short-term fluctuations influenced by various factors beyond emissions alone, such as changes in the portfolio asset mix and strategies in response to market developments, as well as fluctuations in underlying asset valuations.

It is important to note that the HKMA's net zero philosophy does not rely on simply walking away from heavy emitters, but to support a whole-of-economy transition by engaging with companies and funding solutions that facilitate the transition. Therefore, short-term increases in the WACI may occur before the positive climate outcomes are realised in the longer run.

While the WACI is widely adopted for assessing carbon exposure of investment portfolios, its measurement is based on investee companies' disclosures, which are inherently backward-looking and do not account for companies' future potential for decarbonisation or transition. To complement its portfolio analysis, the HKMA has included several forward-looking metrics for internal monitoring. It is observed that a majority of companies in which the Exchange Fund has invested already have emission reduction targets, and there is a growing trend for them to implement climate transition plans.

As new disclosure standards introduced by jurisdictions and collaborative efforts continue to enhance emissions measurement methodologies as well as data availability and quality, the HKMA will remain vigilant in monitoring these developments in order to explore suitable metrics for further enhancing its climate exposure monitoring and reporting.

Sustainable HKMA

The HKMA aims to be a sustainable organisation through implementing multi-pronged strategies to reduce its environmental footprint, targeting to achieve net-zero emissions by 2050. Apart from environmental sustainability, the HKMA also advocates staff well-being, social responsibility, and financial inclusion and literacy.

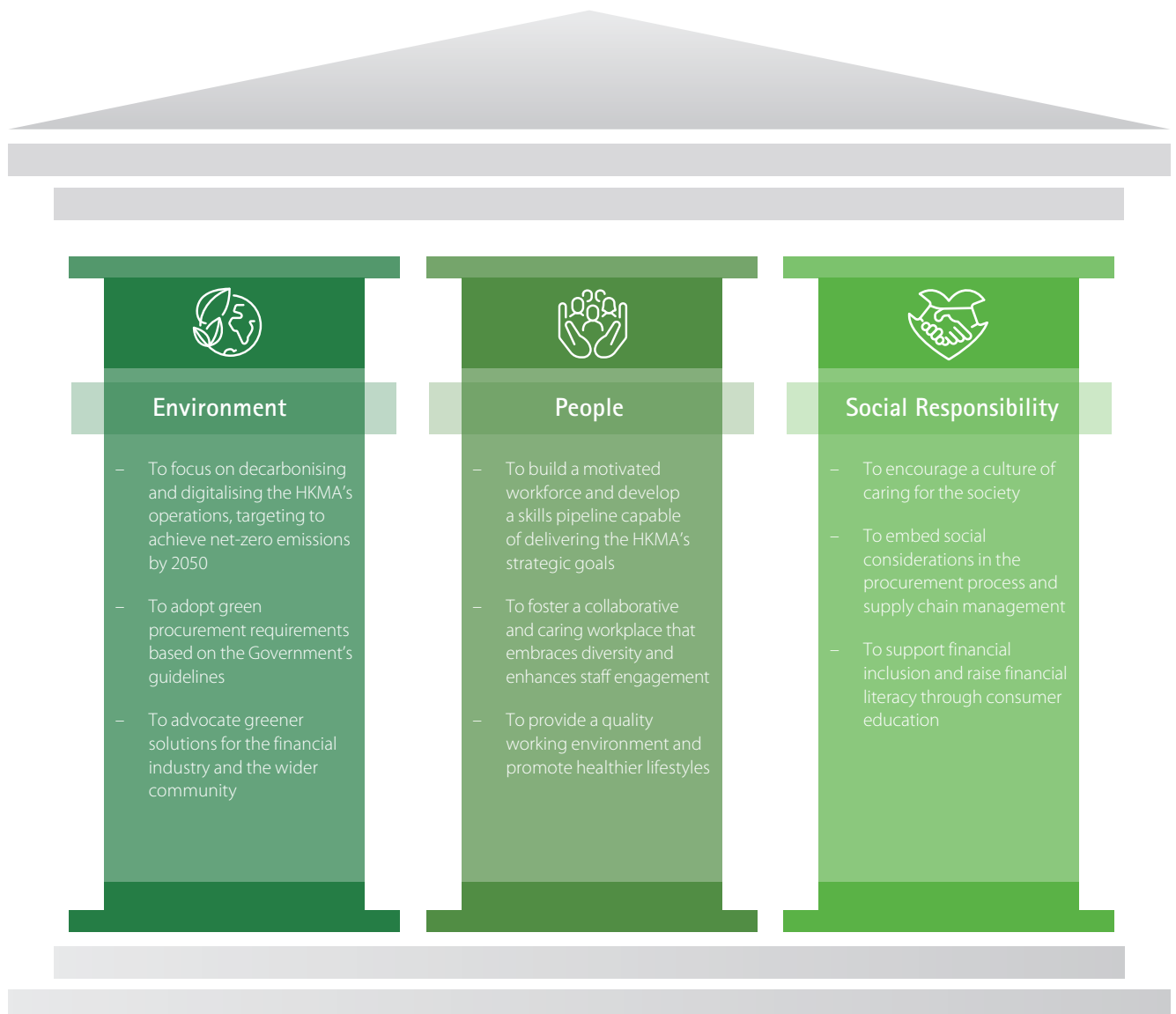


Sustainable HKMA

The three pillars

As a responsible organisation, the HKMA has set sustainability goals across the three pillars of Environment, People and Social Responsibility.

Promoting sustainability across the three pillars



Sustainable HKMA

HKMA's approach to corporate sustainability

The Green and Sustainability Steering Committee (GSSC)¹, chaired by the Chief Executive of the HKMA, was established in October, to act as the key decision-making body for all corporate sustainability initiatives. It took over the Corporate Social Responsibility and Sustainability Committee to steer the development of vision, strategies and policies concerning corporate sustainability and social responsibility matters. At the departmental level, the Executive Director (Corporate Services) oversees execution of designated sustainability activities and reports to the GSSC.

In spearheading corporate sustainability efforts, two working groups are formed. They are the Focus Group on Green Office, a forum to brainstorm ideas to champion a green workplace, and the Committee on Volunteering Services, which aims to encourage a culture of volunteerism.

The HKMA has drawn up a roadmap to guide its transition pathways. The priority is to implement decarbonisation strategies within its own operations, including operating green buildings and data centres, achieving green mobility, adopting energy-efficiency measures, digital tools and eco-friendly business practices, reducing waste, in addition to building a culture of sustainability. The HKMA also plans to make use of carbon insetting tools to reduce emissions within its value chain and carbon offsetting initiatives for emissions that are difficult to abate.

Alongside these environmental commitments for its operations, the HKMA continues to introduce greener solutions for the community, ranging from electronic document submission and communication channels for banks, to electronic payments and coin collection for the general public.

To strengthen and sustain its operational capabilities, the HKMA maintains a professional workforce, develops a talent pipeline and promotes both physical and mental wellness for staff.

In the area of social responsibility, the HKMA encourages staff to take part in volunteering and charitable activities, engages social enterprises in its sourcing, promotes financial consumer education, and works with the banking industry to ensure fair access to basic banking services.

Details of these strategies are given in the rest of this chapter.



Governance

Strategy

¹ See *Sustainability Governance* chapter.



Risk management

Under the HKMA's organisational risk management framework, the high-level Risk Committee², chaired by the Chief Executive of the HKMA, considers potential risks and threats, including those arising from climate change, to the HKMA's operations.

Physical effects of climate change, such as increase in severe weather events resulting in floods or other damage, may affect the HKMA's office premises and disrupt official travel. To manage physical risks³, the HKMA regularly updates its business continuity plans to deal with extreme weather conditions. Drills on evacuation and activation of back-up facilities are conducted regularly to ensure that staff are ready and familiar with the business continuity measures. Various measures have also been integrated into the office design to mitigate potential risks.

Transition risks⁴ could impact the HKMA's energy usage and air travel and waste disposal management. The HKMA has been monitoring its exposure to transition risks by tracking its greenhouse gas (GHG) emissions, waste generation, energy and paper consumption.

Metrics and targets

The HKMA's climate targets are to achieve net zero in Scope 1, Scope 2, and Scope 3 (business air travel) GHG emissions⁵ across all areas of its corporate operations by 2050 or earlier.

As its interim emissions reduction targets, the HKMA plans to completely eliminate Scope 1 emissions through transitioning all existing HKMA-owned cars to electric vehicles, and reduce the intensity of Scope 2 emissions by 63% by 2030 through various decarbonisation and offsetting strategies, using 2015 as the base year.

Whilst there are challenges in determining Scope 3 emissions, the HKMA will endeavor to mitigate GHG emissions, as far as practicable, from various sources included within Scope 3 emissions, such as paper consumption, waste generation and business air travel.

The HKMA's long-term and interim emissions reduction targets are developed with reference to the Science Based Targets initiative methodology, and the approach has been verified by Hong Kong Quality Assurance Agency (HKQAA). The HKMA has appointed HKQAA to verify its emissions, energy and paper consumption, and waste data disclosed in this report⁶. The scope and basis of the verification are set out in the *Verification Statement* enclosed at the end of this report.

² Terms and references of the Risk Committee can be found in the *Corporate Functions* chapter of the *Annual Report 2023*.

³ Physical risk drivers include (a) acute risks arising from extreme weather events, such as cyclones, floods or wildfires; and (b) chronic risks arising from gradual changes in climate, such as changing precipitation patterns, sea-level rise, or longer-term drought.

⁴ Transition risk drivers are changes in government policy, technology and consumer preference in the adjustment to a net-zero economy.

⁵ Scope 1 emissions refer to direct emissions from sources owned or controlled by an organisation. Scope 2 emissions refer to indirect emissions generated from purchased electricity, steam, heating or cooling consumed by an organisation. Scope 3 emissions refer to all other indirect emissions that result from the activities of an organisation.

⁶ Unless otherwise specified, the environmental data disclosed for each calendar year in the period from 2015 to 2023 cover the HKMA's operations in Hong Kong only. The HKMA's operations at its New York office are excluded from this report due to its relatively small environmental footprint.

Sustainable HKMA

Dual awards for HKMA's reports

In 2023, the HKMA published its first standalone Sustainability Report 2022 alongside the Annual Report 2022. Its enhanced ESG reporting efforts were recognised with an ESG Award, public sector category, in the Hong Kong Institute of Certified Public Accountants (HKICPA)'s Best Corporate Governance and ESG Awards 2023. The HKMA is the first financial regulator which has won an HKICPA award in this category. Judges commended the HKMA for achieving a good ESG standard with a clear and reader-friendly Sustainability Report, and for its commitment to transparent and accountable reporting by appointing an independent agency to verify its target setting approach and the environmental data disclosed in the report.

In addition, the HKMA received the highest rating of a Gold Award in the "Non-profit Making and Charitable Organisations" Category of the Hong Kong Management Association's Best Annual Reports Awards 2023. Judges complimented the HKMA's report on its clear presentation of comprehensive financial information and effective use of infographics, demonstrating the HKMA's commitment in advocating financial literacy and inclusion.



HKMA as a Caring Organisation (2006 – 2023)

The HKMA's efforts in caring for the environment, employees and community have been recognised by the Hong Kong Council of Social Service, which has awarded the "15 Years Plus Caring Organisation Logo" to the HKMA for 17 consecutive years since 2006.



Sustainable HKMA

Environment

Going green at the workplace

The HKMA strives to effectively manage the environmental impact of its operations. An internal protocol, *A Guide to Green Office*, sets out guidance for staff on resource usage and waste generation in the office.

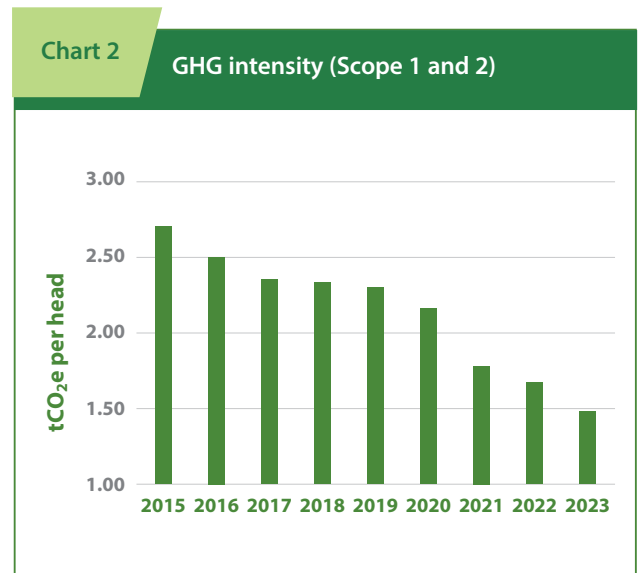
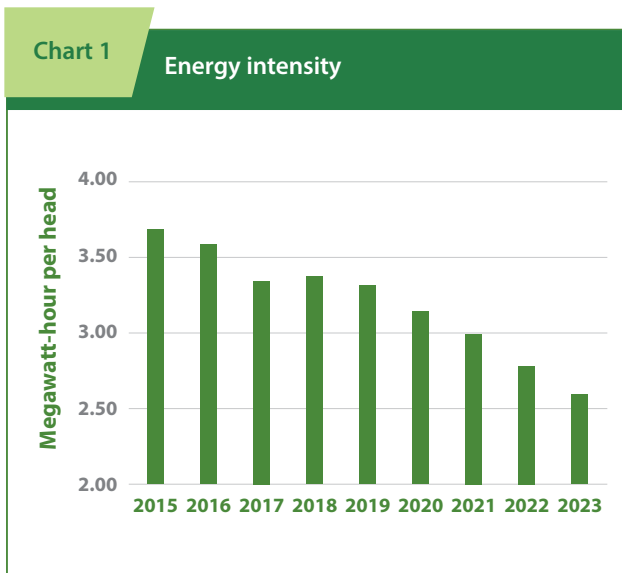
Green buildings

The HKMA has embedded environmental considerations in designing, operating and maintaining its owned and leased office premises. In renovating offices, existing furniture and fit-out elements are reused where possible to reduce waste. Additionally, eco-friendly building and upholstery materials are always preferred. In keeping with this approach, the HKMA has received gold accreditations for part of its renovated premises at the International Finance Centre Office (IFCO) from LEED⁷ and under BEAM Plus Interiors⁸ in 2021 and 2022, respectively.

Energy efficiency

Increasing energy efficiency via technology adoption and optimisation remains the HKMA’s priority. In addition to promoting good habits such as switching off unnecessary lights in working areas after office hours to conserve energy, other implemented measures include use of LED lighting, motion sensors, appropriate air-conditioning temperature settings and efficient energy usage in the information technology network infrastructure. The HKMA’s energy usage continued to fall, amounting to 2.59 megawatt hours on a per head basis⁹ in 2023, down by 29.7% against a 2015 baseline (Chart 1).

Given the nature of its operations, the HKMA’s GHG emissions are primarily indirect GHG emissions arising from electricity consumption derived from fossil fuels. In 2023, the combined intensity of Scope 1 and 2 emissions from fuel and electricity purchased was 1.48 tCO₂e¹⁰ per head, down by 45.2% from 2015 (Chart 2).



⁷ LEED (Leadership in Energy and Environmental Design) is a widely used green building certification system developed by the United States Green Building Council.

⁸ BEAM Plus is the Hong Kong Green Building Council’s initiative to independently assess a building’s sustainability performance. BEAM Plus Interiors’ assessment covers the design and construction of fit-out, renovation and refurbishment works in non-domestic, occupied spaces.

⁹ See details of the calculation basis in the *Performance summary* section on page 56.

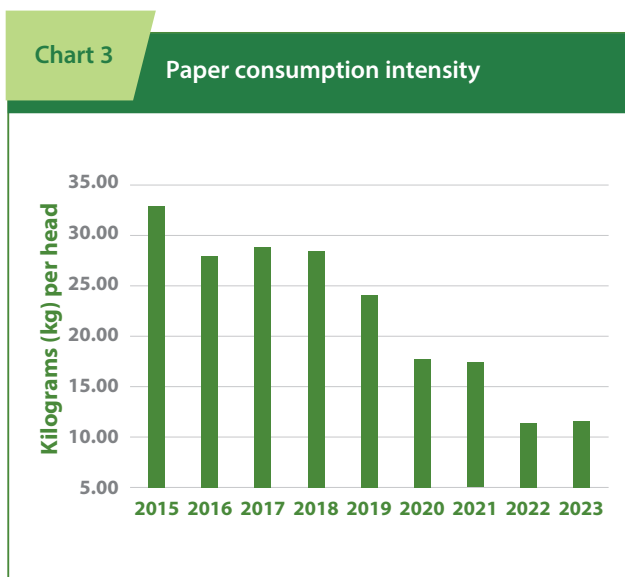
¹⁰ tonnes of carbon dioxide equivalent

Sustainable HKMA

Digital and eco-friendly operations

By introducing digital tools and technologies, automating and streamlining workflows, in addition to standardising equipment, office software and conferencing facilities, the HKMA's digital workplace initiative has enhanced virtual collaboration within the organisation¹¹. Paperless meetings are becoming mainstream. To further reduce paper consumption and enhance efficiency, electronic processes are increasingly used for internal administrative matters. Moreover, staff are encouraged to embrace green and digital ways of working, replacing paper-based documents and communications with digital ones. Implementation of an electronic record-keeping system continues to progress.

The adoption of such green and digital measures are bringing positive results. In 2023, the HKMA's paper consumption intensity was 11.55 kilograms (kg) per head, a significant reduction of 64.8% from the 2015 level (Chart 3).



Flying greener

As many in-person international engagements resumed after the COVID-19 pandemic, and given the need to promote Hong Kong's international financial centre development, it is inevitable for relevant HKMA staff to travel overseas. To mitigate air travel emissions, staff are encouraged to fly direct when attending overseas events, or bundle business trips together, where possible. At the corporate level, in 2023, the HKMA reduced 126 tCO₂e of its Scope 3 emissions in business air travel by purchasing sustainable aviation fuels. Furthermore, by joining a Gold Standard-certified carbon offsetting programme¹² involved in converting waste to energy, generating solar power and providing efficient and cleaner cooking facilities in developing countries, the HKMA offset the rest of its air travel emissions. Similar arrangements will continue in 2024.

Sustainable procurement

The HKMA's procurement practices take into account the factors of sustainability and environmental friendliness. As part of a holistic review of the organisational procurement policy and procedures, existing sourcing practices for green products have been institutionalised and aligned with the green specifications on the Government's Green Procurement List, particularly in relation to procurement of electrical appliances and office consumables. In addition, ESG factors and innovative suggestions to improve productivity and efficiency, are incorporated into the criteria in evaluation of tenders. In all cases, suppliers must undertake to comply with environmental protection regulations.

¹¹ See also *Information technology* and *Digitalisation* sections in the *Corporate Functions* chapter of the *Annual Report 2023*.

¹² Gold Standard for the Global Goals is a comprehensive standard to accelerate global progress toward climate security and sustainable development.

Sustainable HKMA

Waste management

Guided by the four 'R' principles of refuse, reduce, reuse and recycle, the HKMA has adopted a three-pronged approach to minimise waste generation and manage waste disposal. Additionally, two waste audits were conducted in 2022 and 2023 to help formulate targeted waste management strategies.

Three-pronged approach

| | |
|---|--|
|  <p>Recycling and reducing general waste disposed to landfills</p> | <ul style="list-style-type: none"> ▶ Separating recyclables at source by providing multiple recycling collection points for a range of materials at convenient locations across HKMA's office premises; ▶ Reducing electronic waste through adoption of technology solutions (e.g. private cloud infrastructure, software-defined networking architecture); ▶ Reusing festive decorations; ▶ Donating phased-out computers and LCD^a monitors to charities, where disposal and destruction of hardware are necessary, following the relevant guidelines to ensure human and environmental safety; ▶ Collecting staff donations of pre-owned books, clothes and surplus food for disadvantaged groups; and ▶ Encouraging staff to participate in property management firms' sustainable development programmes for buildings where the HKMA offices are located. <p><small>Note a: LCD – Liquid Crystal Display</small></p> |
|  <p>Say 'no' to single-use items</p> | <ul style="list-style-type: none"> ▶ Eliminating bottled drinks, paper cups, plastic cutlery and plates at pantries, meetings and official events; ▶ Advocating a BYO (Bring-Your-Own) culture where everyone always brings their own cup, bottle and shopping bag; ▶ Asking staff to bring along their own tableware to festive parties for enjoying food, otherwise, renting reusable or eco-friendly ones on-site; and ▶ Installing water dispensers and drinking taps throughout HKMA's office premises. |
|  <p>Re-processing waste into productive resources</p> | <ul style="list-style-type: none"> ▶ Delivering daily food waste collected to a waste-to-energy centre in Hong Kong; and ▶ Educating HKMA staff on the concept of upcycling. <div style="text-align: right;"> <p>Average daily food waste collected</p> <p>↑ 191 %</p> <p>from inception to end-2023</p> </div> |

A breakdown of the non-hazardous waste generated, including general waste disposed to landfills and different categories of recyclable waste, is given in the *Performance summary* section on page 56.

Sustainable HKMA

Give them a second chance!

For the first time in 2023, the HKMA has participated directly in the IFCO building manager's lai see recycling campaign. Staff turned in around 3,000 used but good-as-new lai see packets. A green group then distributed these lai see packets to the general public for reuse in the next Chinese New Year.



Green data centres

As the major sources of the organisation's energy consumption, the HKMA's production and backup data centres have been upgraded to meet the BEAM Plus' highest standard for existing data centres with optimal power usage effectiveness (PUE)¹³. In 2023, the HKMA was the first, and only, organisation in Hong Kong whose data centres were awarded a Gold and a Platinum rating, respectively under the BEAM Plus Existing Data Centres, an assessment guideline issued in 2021.



The production data centre receives a gold rating



The backup data centre obtains the highest rating of Platinum

¹³ PUE is a metric used to determine the energy efficiency of a data centre; generally a lower PUE signifies less energy wastage and lower operating costs.

Sustainable HKMA

The green journey

Boosting energy efficiency of the two data centres has been an ongoing focus of the technology team. To this end, the team has adopted green designs in the fitting-out works and applied energy efficiency best practices to lower and achieve PUE targets, including round-the-clock monitoring of the data centres' environmental facilities and continuous enhancements of environmental factors, such as airflow and temperature settings.



Using in-row air-conditioning system for energy saving and better cooling performance

As the technology team was progressively optimising energy use at the data centres, the HKMA commissioned an external consultancy review in December 2021 to thoroughly assess their green performance and to formulate recommendations for further improving performance in all aspects. The study was completed in mid-2022.

Preparation work for obtaining accreditation as green data centres under the BEAM Plus certification commenced soon afterwards. The process was comprehensive and rigorous. Throughout 2023, the technology team introduced enhancements based on the recommendations in the consultant's report, ranging from energy performance to health and well-being elements of the working environment inside the data centres.

Sustainable HKMA

Culture of sustainability

To build a culture of sustainability, the HKMA circulates a bi-annual newsletter, *S-Connect*, to raise staff awareness of HKMA's continuing sustainability efforts, and embraces green and philanthropy elements in its staff engagement activities (see *A sustainability-themed Family Fun Day* on page 65). Separately, over 1,000 staff members have signed up to the pledge to support the four 'R' waste management principles and avoid single-use items, as far as practicable. Additionally, a variety of green-charity crossover activities are organised for staff to donate their pre-owned clothes and books, and surplus quality food items. In another move, close to 140 HKMA staff have joined a programme to become tree-adopters, planting over 400 trees in another part of the world to help contribute to global decarbonisation.

Empowering staff to become climate literate is crucial to HKMA. On the one hand, staff are encouraged to join external sustainability-related programmes, and on the other hand, in-house training sessions, waste-to-energy facility walking tours and beach clean-ups are arranged to educate staff on sustainability challenges and catalyse their adoption of environmentally friendly habits. Specifically, two climate-related talks in 2023, featuring Professor Leung Wing Mo, a renowned meteorologist, and Professor Elvis Au, former Deputy Director at the Environmental Protection Department, deepened staff understanding of the impacts of global warming and evolving green policies, respectively.



Professor Leung Wing Mo elaborates on the devastating impacts of global warming



Professor Elvis Au advocates a totality approach in assessing the effectiveness of green projects

Green-charity crossover



Book donation



Donation of pre-owned clothes



Festival food collection

Sustainable HKMA

S-Connect

Launched in March, the HKMA's in-house sustainability newsletter, *S-Connect*, aims to connect and educate staff on the HKMA's evolving initiatives. *S-Connect* is published bi-annually, in both English and Chinese, featuring personal experience sharing of sustainability champions, and games to enhance staff interactivity.



From trash to treasure

Two workshops were run in 2023 to educate staff on the concept of upcycling, for example by making dried flower decorations from fresh flowers previously displayed at events. The two workshops were hosted by an environmentally-focused social enterprise, which also re-trains grassroots mothers for re-employment, making the activities even more meaningful.



Sustainable HKMA

Performance summary

| Indicators | Unit | 2023 | 2022 | 2021 |
|---|-------------------------|-----------------|----------|----------|
| Energy management | | | | |
| Total energy consumption ¹⁴ | MWh | 5,215.27 | 4,996.43 | 4,952.30 |
| Energy intensity ¹⁵ | MWh/head | 2.59 | 2.78 | 2.99 |
| Emissions¹⁶ | | | | |
| Direct GHG emissions (Scope 1) ¹⁷ | tCO ₂ e | 23.61 | 24.93 | 30.90 |
| Indirect GHG emissions (Scope 2 – market based) ¹⁸ | tCO ₂ e | 2,964.34 | 2,971.52 | 2,912.57 |
| GHG (Scope 1 and 2) intensity | tCO ₂ e/head | 1.48 | 1.67 | 1.78 |
| Paper consumption | | | | |
| Total office paper consumption | tonnes | 23.31 | 20.49 | 28.72 |
| Office paper consumption intensity | kg/head | 11.55 | 11.41 | 17.36 |
| Waste management | | | | |
| Non-hazardous waste disposed to landfills ¹⁹ | tonnes | 86.92 | 196.67 | 132.18 |
| Waste collected for recycling | | | | |
| – Paper | tonnes | 32.41 | 44.32 | 43.66 |
| – Food waste ²⁰ | tonnes | 7.79 | 0.52 | N/A |
| – Plastics | kg | 550.29 | 361.00 | 321.28 |
| – Metals | kg | 114.63 | 128.03 | 189.04 |
| Total general waste and recyclable waste intensity | kg/head | 63.35 | 134.74 | 106.55 |

¹⁴ From 2022 onwards, to better reflect the HKMA's energy usage, calculation is now based on the amount of purchased electricity and fuels used, excluding any back-up electricity generation facility owned by the building management for contingency purpose. Figures in the previous years have been re-stated for comparison purposes.

¹⁵ Beginning with 2022, the intensity calculations for all performance indicators are based on the numbers of employees and contractors on site. For comparison purposes, similar adjustments have been made to the figures in previous years.

¹⁶ The emissions figures were calculated based on the reporting requirements of the *GHG Protocol Corporate Accounting and Reporting Standard (GHG Protocol)* issued by the World Resources Institute and the World Business Council for Sustainable Development, and the *Practical Guide on Carbon Audit and Management – Guide to Low Carbon Offices* issued by the Environmental Protection Department in Hong Kong.

¹⁷ Scope 1 direct emissions cover carbon dioxide, methane, and nitrous oxide. Hydrofluorocarbons are insignificant in the HKMA's operations while perfluorocarbons, sulphur hexafluoride and nitrogen trifluoride are not applicable.

¹⁸ Scope 2 indirect emissions were calculated by the market-based method as defined by the *GHG Protocol*. The emission factor applied is for each respective year, with reference to information published by the energy companies in Hong Kong.

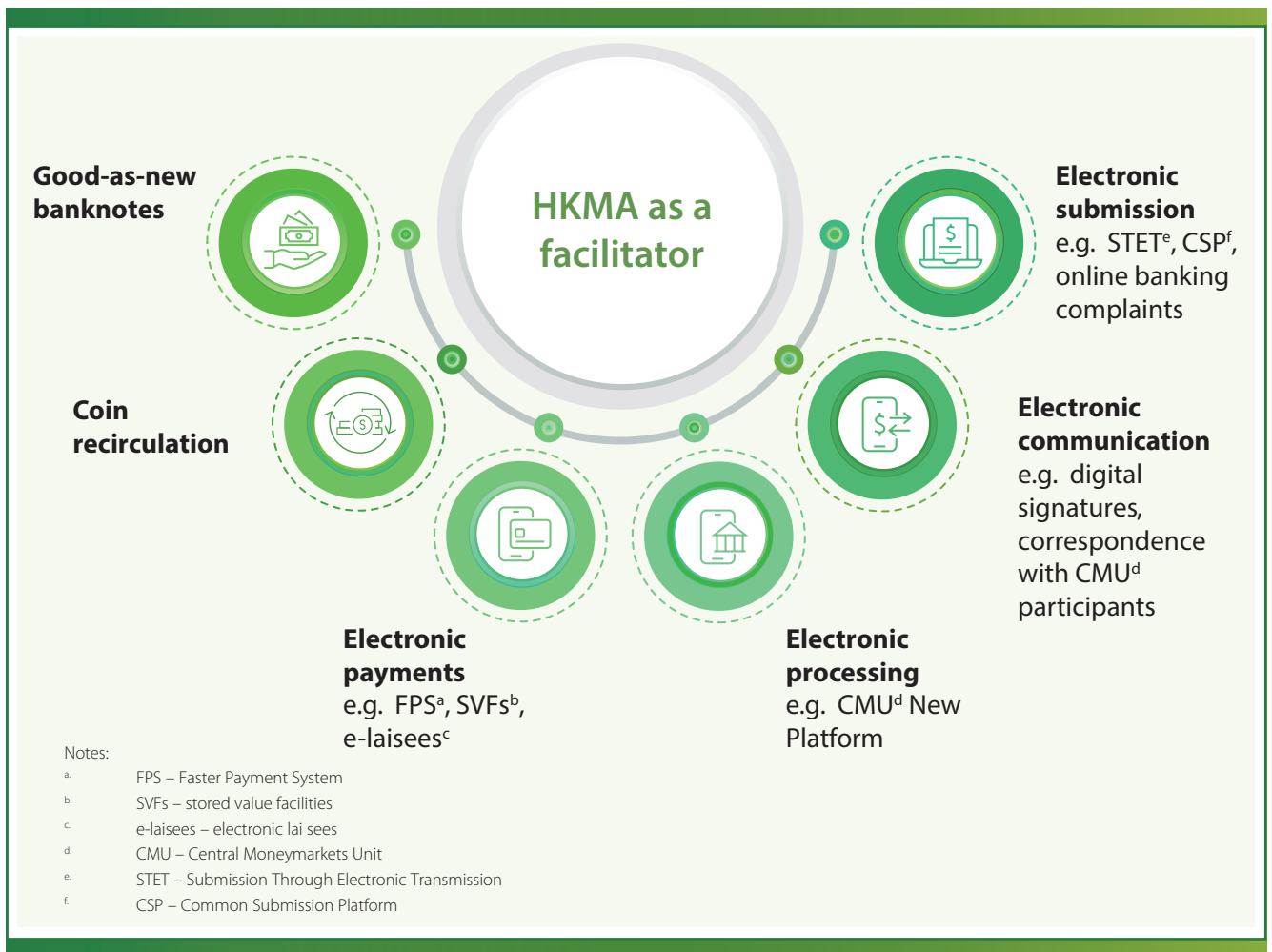
¹⁹ Starting from July 2022, the IFCO building manager has adopted a different weighing methodology to more accurately reflect each building occupant's amount of general waste generated.

²⁰ The food waste recycling programme was launched in mid-November 2022.

Sustainable HKMA

Facilitating the market place to go green

The HKMA adopts measures to enhance industry-wide operational efficiency, reduce paperwork and minimise resource consumption for both the HKMA and the financial industry. The HKMA also encourages the public to adopt environmentally responsible behaviour.



Electronic submission and communication channels with banks

The HKMA's online system, Submission Through Electronic Transmission (STET) is a one-stop platform for banks to make electronic submissions to the HKMA, encompassing various types of regular reports that are required on a weekly, monthly, quarterly or yearly basis. In 2023, the HKMA launched the next generation electronic submission platform – Common Submission Platform (CSP) for certain regulatory data submissions to help further streamline banks' submission process and facilitate back-end processing and analysis using advanced technologies. Another system, e-Delivery, enables the HKMA to disseminate information such as circulars and guidelines to the banks through a secure electronic communication channel. All these systems help to save hundreds of thousands of sheets of paper annually.

In respect of the HKMA's handling of banking complaints and enforcement work, the HKMA has taken steps to support paperless document submission via electronic channels and online forms for banking customer complaints, in addition to developing a new complaint handling and enforcement management system, slated for implementation in 2025. This new system marks a significant shift to a fully digitalised approach, with enhanced data management and analysis capabilities. The transition to a secured digital platform not only ensures the security and integrity of complaint data but also enables efficient access and retrieval of information, leading to better public service by the HKMA.

Sustainable HKMA

Green initiatives of the Central Moneymarkets Unit

As part of its operational process enhancement, the Central Moneymarkets Unit (CMU)²¹ has, since 2022, applied digital signatures in all its outbound communications and correspondences with CMU participants (primarily financial institutions). In 2023, there was a 50% increase in the number of CMU participants registered for using digital signatures in inbound communications, further reducing paper printing and the need for delivering documents physically. In addition, the launch of Phase 1 of the CMU New Platform in July has enabled the electronic processing of some major CMU services, including primary issuance of debt securities and account management. The CMU will, through more education, encourage its participants to use digital tools and electronic services.

Electronic payments and lai sees

The HKMA supports increased adoption of electronic payments as an alternative to cash and paper cheques by promoting the use of the Faster Payment System (FPS) and stored value facilities (SVFs). More information on FPS and SVFs can be found in the *International Financial Centre* chapter of the *Annual Report 2023*.

Giving electronic lai sees (e-laisees) is simple and convenient, and contributes to sustainable development by reducing the usage of physical red packets and banknotes. The HKMA continued to encourage the use of e-laisees via a publicity campaign in the run-up to the Chinese New Year, while major banks and electronic payment operators also made their own efforts to promote e-laisees.



The HKMA promotes e-laisees on social media

Good-as-new banknotes

Using good-as-new banknotes, which are used banknotes in good condition, rather than new banknotes for lai see giving also helps promote sustainable development. Good-as-new banknotes can reduce the need for printing new banknotes, in turn reducing the environmental footprint. Feedback from the note-issuing banks showed increasing popularity over the years.

²¹ The CMU, operated by the HKMA, is a central securities depository providing clearing, settlement and custodian services for debt securities.

Sustainable HKMA

Coin Collection Programme

The Coin Collection Programme is a key plank in the HKMA's efforts in the recirculation of coins. Two Coin Carts visit all 18 districts of Hong Kong on a rotational basis. The free coin collection service gives the public the choice of exchanging their coins for banknotes, topping up their SVF accounts, such as Octopus cards or e-wallets, or donating to the Community Chest charity. The coins collected are recirculated to meet public demand, making circulation more efficient, and at the same time reducing the need for minting new coins.



A Coin Cart is serving a public housing estate



Each Coin Cart is equipped with two high-speed coin counting machines



Taking coins out of a piggy bank for processing by Coin Cart staff



- Served > **1.1 million** people
- Collected > **910 million** coins with a total face value of over **HK\$ 1.4 billion**
- **79%** of users in 2023 digitalised some or all of their coin values by topping up their SVF accounts

Sustainable HKMA

Coin Carts at a glance

Introduced in 2014, the Coin Collection Programme is the world's first structured coin collection scheme based on the concept of a mobile truck and has, over the years, won local and international awards in recognition of its innovative and green approach.

Apart from coin recirculation, the programme also supports charitable donations and educational activities. On an ongoing basis, the HKMA collaborates with the Hong Kong Council of Social Service to deploy the Coin Carts to collect coins on flag days for non-governmental organisations. Coin Carts are also periodically assigned to support various educational events (e.g. visits by school children).



School children visit the Coin Cart to learn about coin recirculation



All proceeds from sale of the limited edition Coin Cart miniature models are used to sponsor charitable events

In addition, spatial data of the two Coin Carts have been uploaded to the Government's Common Spatial Data Infrastructure portal, from which the public may download the spatial service schedule and parking location data of the two Coin Carts. This measure supports both the community's access to Coin Carts, and the Government's smart city development of Hong Kong.



Information about the Coin Collection Programme, including the service schedule, is available on the HKMA website (coincollection.hkma.gov.hk)

Sustainable HKMA

People

A motivated, engaged and healthy workforce is essential to attain the HKMA's strategic goals.

Wellness office

The HKMA provides a safe and modern work environment for its staff. All offices adopt an open layout, where workstations are equipped with height-adjustable desks, ergonomic chairs that comply with occupational safety and health regulations, and eye-protection screens on LCD monitors to enhance productivity.

In another enhancement, the HKMA has embraced the agile office concept to foster a positive work environment and economise the use of office space. The first agile office, completed in August, has incorporated flexible seating and facility arrangements, and provided plenty of collaboration areas, focus zones and noise-cancelling booths for virtual meetings. Furthermore, in support of the breastfeeding-friendly workplace initiative, a mother's care room has been set up for post-natal female staff.

Office hygiene is paramount, and is always maintained at the highest standards, with office sanitisation being carried out regularly. At the IFCO, there are sensors to monitor indoor air quality and touchless lift buttons to reduce accidental virus transmission from lifts. Similarly, door sensors are installed to enable contactless access to toilet facilities.

Staff well-being

At the HKMA, occupational health, safety and well-being of its staff are crucial. As part of the competitive remuneration package, there are fringe benefits comprising medical, dental and well-being benefits offered to staff and eligible family members. To provide a work environment that is conducive to staff well-being, there is a broad range of measures including regular medical check-ups, flu vaccinations, health talks, counselling services, stress management workshops and sports practices. Popular initiatives, such as Fruit Mondays, also aim to help develop a healthier lifestyle.

To promote mental wellness, staff and their immediate family members have access to external counselling services sponsored by the HKMA. These services offer professional and confidential counselling support via a consultation hotline, a face-to-face interview or a clinical psychology service.

Separately, considering flexible and remote working is becoming more common, the HKMA introduced a flexible work arrangement in 2023 following a pilot programme, providing staff with the flexibility to work-from-home up to one day per week, subject to approval and operational needs.

Staff connectivity

The HKMA strives to cultivate a sustainable, collaborative and inclusive work environment. In March, the HKMA launched its Corporate Portal, an e-hub designed to promote information sharing internally across the organisation and encourage interactive communication. Staff can stay connected by receiving regular updates on divisional news and sharing. This self-service platform also supports more efficient information retrieval, such as internal policies and guidelines, workflows, and details of in-house events.

Sustainable HKMA

Similarly, since mid-2022, a collaborative area, Hub 55, has been made available on the 55th floor of the IFCO, where staff can collaborate, chat and connect. To foster a sense of belonging among colleagues across the organisation, various engagement activities are run at Hub 55. Initiated in late 2022, the Sharing Circles on Fridays have been popular amongst staff, with new activities such as tea appreciation, impromptu speaking, singing bowl meditation and a book club added in 2023. The Friday Recreation Room has also resumed since September 2022, where there are table tennis and snooker tables, darts, and board and video games for staff to play and enjoy on the third Friday of each month.

In addition, staff have many opportunities to mingle and network by participating in inter-organisational activities, such as basketball tournaments and dragon boat races with fellow regulators, which also help to foster and nurture the HKMA's team spirit.



The HKMA's basketball teams playing at the Supervisory Cup matches

30 years of commitment



Mr Eddie Yue (centre), Chief Executive, and some of the long service awardees holding their souvenirs on stage with Mr Arthur Yuen (far right) and Mr Darryl Chan (far left), both Deputy Chief Executives

Of the staff who joined the HKMA at its establishment on 1 April 1993, 19 are still with the organisation three decades on. Among them is Mr Eddie Yue, Chief Executive of the HKMA. These colleagues are passionate about serving the public and find their jobs both challenging yet rewarding.

Sustainable HKMA

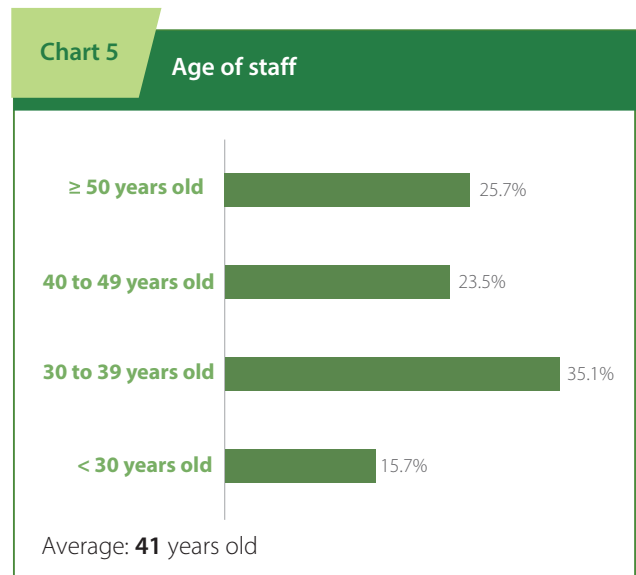
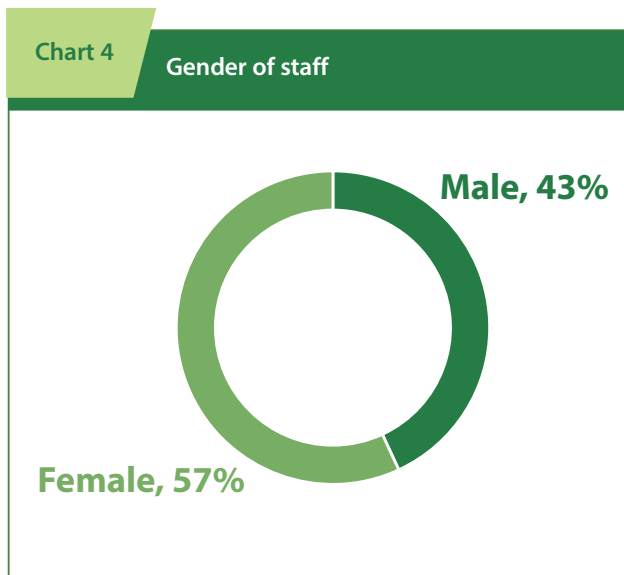
Equal opportunities policy

The HKMA strongly believes that everyone should be able to work in an environment free of discrimination, harassment, vilification or victimisation. The HKMA’s equal opportunities policy applies to job advertisements, recruitment, terms and conditions of employment, performance assessments, promotions, transfers, training opportunities, dismissals, grievance procedures and general conduct.

Diversity

The HKMA values diversity in its workforce, which has a balanced gender representation and covers a spectrum of different age groups. Female representation at the rank of Executive Director or above was 28.6% as of January 2024.

Human capital key statistics as of 1 January 2024



More details about the HKMA’s staff remuneration and development initiatives are given in the *Corporate Functions* chapter of the *Annual Report 2023*.

Sustainable HKMA

Communications with staff

The HKMA emphasises effective communication within the organisation. Two staff consultative committees have been formed to facilitate regular, open and productive dialogue between the staff and the management. While the HKMA Staff Consultative Committee consults staff on policy matters and subjects of common interest, the Consultative Committee on Provident Fund Schemes for Staff of the HKMA, as its name implies, focuses on retirement fund issues, including the performance of the fund managers. Both committees comprise representatives from different departments and ranks.

In addition to updates about organisational matters on the Corporate Portal, there are regular all-staff communications at town hall meetings, where the Chief Executive and the three Deputy Chief Executives keep staff apprised of important organisational matters and the HKMA's strategic priorities for keeping pace with the changing macro environment and market developments.

The HKMA greatly values employees' opinions and feedback. Staff can share their views and ideas through the staff suggestion box. In addition, surveys are conducted periodically to collect staff views on topics ranging from bonding activities to expectations on sustainability matters.

Staff communication channels

- ▶ Consultative committees
- ▶ Town hall meetings
- ▶ Corporate Portal
- ▶ In-house newsletters
- ▶ Suggestion box
- ▶ Surveys
- ▶ Social activities



Town hall meeting in February

Sustainable HKMA

A sustainability-themed Family Fun Day

The Family Fun Day, which spanned three afternoons in August, was organised at the IFCO as part of the in-house celebration of the HKMA's 30th anniversary. Key sustainability elements – green, well-being and philanthropy, were embedded into the activities.

Over 1,000 staff, alumni and their family members participated and spent quality time together. The event began with close-up magic and included a variety of family-friendly games and face painting. The excitement continued as participants learned about upcycling and ecology, such as making mosquito repellent from coffee grounds, growing Spanish moss in glass pots, and decorating lamp shades with pressed flowers. These upcycling workshops were hosted by social enterprises. In addition, an ethnic minority group was invited to the event, sharing and teaching participants how to draw dot mandala patterns on wood coasters as a way to foster appreciation of different cultures and promote inclusivity.

Furthermore, in line with the HKMA's green principles, participants were asked to bring along their own tableware or rent reusable ones on-site to enjoy the food choices.

In addition, through charity sales of tea leaves and coffee, and donations for joining workshops and fun activities, around HK\$80,000 were collected to support three charity organisations, enabling participants to support the community while having fun.



Social responsibility

The HKMA is committed to fulfilling its corporate social responsibility. On an ongoing basis, it supports the local community through employee volunteering and partnership with social enterprises, and works with the financial industry to raise financial literacy and promote financial inclusion.

Volunteering and charitable activities

The HKMA encourages its staff and family members to take part in community service and support fundraising events. The Committee on Volunteering Services, established in 2021, organises wide-ranging volunteering activities, with the elderly as the preferred priority for 2023. The HKMA

staff spent a total of 443 hours volunteering at 54 activities in 2023, and 10 staff members with the highest annual volunteering hours received the Volunteer Recognition Awards in appreciation of their dedication.

Upskilling staff volunteers

For the first time, a professional trainer from the Agency for Volunteer Service's Hong Kong Institute of Volunteers conducted a workshop for over 20 HKMA staff volunteers in July, covering volunteer service skills and tips on caring for the elderly. It was a meaningful and interactive session where participants shared candidly their stories on community services, and through role-playing exercises, sharpened their communication skills to better connect with others.

Sustainable HKMA

Star volunteers

Despite the demanding office work, 10 staff members were very motivated and contributed up to 138 hours to volunteering activities in 2023. At the end of the year, they were granted the Volunteer Recognition Awards for their efforts in making a tangible impact and forging meaningful connections with the individuals and organisations that the HKMA supports. Seven of them talked about their passion for community services.

The veteran volunteers have been serving the community for many years, some as early as in secondary school. Most importantly, they share a strong sense of purpose and find the experience rewarding. As Shirley Wong, chairlady of the Committee on Volunteering Services, reflected, "I feel great satisfaction from seeing the smiling faces of the seniors whom I have served". This was echoed by Yolly Lee, who added: "It is more blessed to give than to receive".

While they work in different departments, they often find the opportunity to mingle with one another at the monthly meal distribution activity. "I can serve the elderly in need. I think the activity is very meaningful," shared Vicki Ng. For Edna Cheng, she also values the opportunity to communicate with the elderly. "I like visiting old people at their homes. One of my most memorable volunteering experiences was in bringing homemade food to an old man living in a remote village."

Frances Lee concurred. "Social distancing measures during COVID-19 caused considerable stress to elderly living alone. When I visited them and offered a sympathetic ear, they could talk about their stories for hours." Indeed, the volunteers find that disadvantaged groups, be they old or young, appreciate volunteers' visits, because they feel that in the world there are still people who are concerned and care about them.

At the HKMA, organising volunteer activities is part of its corporate social responsibility. "These volunteer opportunities link us to those who are most in need of our support," said Shirley Ho.



*Yolly Lee, Manager, Enforcement (left)
Shirley Wong, Secretary, Banking Policy (centre)
Edna Cheng, Secretary, Banking Conduct (right)*



*Vicki Ng, Assistant Manager, Banking Supervision (far left)
Frances Lee, Head, Rates and Credit (left)
Shirley Ho, Senior Manager, Banking Conduct (right)
Samuel Ng, Manager, Administration (far right)*

In 2023, Samuel Ng contributed the highest number of volunteering hours. "It is worthwhile to sacrifice some personal time to join volunteering activities after work or on the weekends." Samuel has set a goal for himself to be volunteering at least once a month. "Just having a conversation with a needy person can make a greater difference than providing material things," he concluded.

Looking ahead, all the seven volunteers are keen to expand the HKMA's volunteer team and their scope of services, covering people from different walks of life, and in some cases, also protecting the environment and advancing sustainable development.

Sustainable HKMA

Passing on the spirit of volunteering

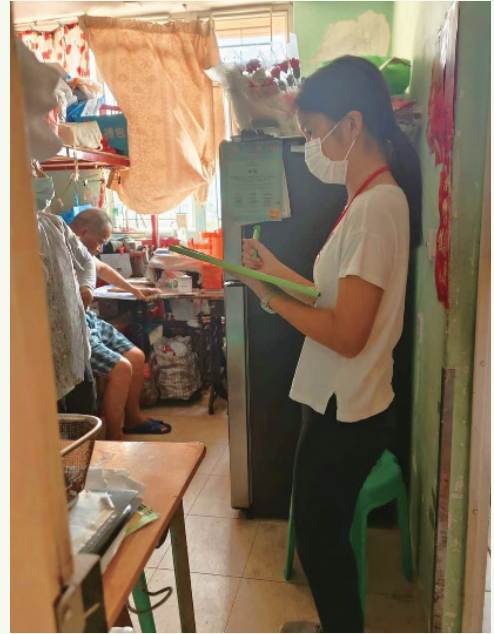
Jocelyn, aged 13, has been joining volunteering activities, including those organised by the HKMA, along with her father, Stephen Pang, Senior Manager, Financial Infrastructure Development, for many years. She figured that she had so far participated in some 60 events.

“I hope my daughter would be thankful and know that giving back to society is important,” Stephen said. “Also, volunteering activities are great opportunities for the family to spend quality time together while working jointly for a meaningful cause.”

“Volunteering helps kids cultivate compassion, which is a great virtue,” noted Shirley Ho, Senior Manager, Banking Conduct. As a young parent, Shirley is another staunch supporter of family volunteering. Her two daughters, Valerie and Hillary, aged 10 and seven respectively, came along to several of the HKMA’s volunteering activities during 2023.

All three children enjoyed reaching out to the elderly via home visits. Interacting with people of different backgrounds let them see a world other than their own and become aware of what life is like for the less privileged. All were again present at the Feeding Hong Kong’s food sorting activity arranged by the HKMA’s volunteer team. Jocelyn is more experienced in dealing with surplus food as she previously helped in picking up leftovers from wet markets for people in need. For Valerie and Hillary, the experience, not only brought excitement, but also brought home to them the importance of sharing.

Through volunteering with the HKMA, these children have learned leadership, collaboration and communication skills. Jocelyn has recently initiated a society service group in her school, rolling up her sleeves to run a charity sale for a food bank. Stephen and Shirley both agreed that volunteering can help their children as much as it helps others.



Jocelyn surveying an old couple on their necessity needs



Valerie and Hillary checking expiry dates of each pack of peanuts at the food bank

Sustainable HKMA

Activity highlights

Love to paint, paint to love

Around 70 staff volunteers and their family members joined the event, co-organised with Banyan Services Association in April to paint and distribute almost 200 goody bags to the elderly.



Meals for seniors

During 2023, HKMA staff volunteers participated in 33 free meal distribution activities sponsored by either Banyan Services Association or Gingko House. The recipients were mostly single elderly people. On each occasion, HKMA volunteers worked as a tight-knit team packing food boxes and handing out the hot meals.



Rescuing food

HKMA volunteers, along with their family members and friends, had a hands-on experience at the Feeding Hong Kong's food bank, packing donated quality surplus food for delivery to different charities. Volunteers also had the opportunity to look at the food bank's logistics management and were heartened by its huge quantity of donated food.



Sustainable HKMA

Engaging social enterprises

The HKMA supports social inclusion and ethnic diversity, and includes social enterprises on its list of local vendors with an aim to empowering people with different abilities. During 2023, the HKMA engaged social enterprises which are dedicated to assist women, ethnic minorities or disadvantaged groups, for hosting craft workshops, making chocolate and cookies gift packs, as well as running pop-up refreshment kiosks and lunch delivery services.



A lady instructor demonstrating dot mandala design



Hong Chi Association's students run a pop-up kiosk inside Hub 55



The Nesbitt Centre delivers lunch in recyclable boxes on alternate Wednesdays

Managing supply chain

One of the HKMA's key guiding principles when carrying out procurement practices is to source goods and services from suppliers that uphold sustainability values. There are rigorous supplier selection criteria, including consideration of a supplier's track record in complying with labour and health and safety regulations, and the working conditions and remuneration for non-skilled labours.

Sustainable HKMA

Addressing the needs of specific groups

Accessibility of Hong Kong banknotes

To help the visually impaired differentiate among different denominations of Hong Kong banknotes, accessibility features, including Braille, tactile lines and high-tactility numerals, are incorporated in the banknotes. In addition, the HKMA has sponsored the Hong Kong Society for the Blind to develop a mobile note-scanning app; and, together with the three note-issuing banks, sponsored the production of note-measuring templates to help the visually impaired identify the denominations of Hong Kong banknotes.

Free tools to help the visually impaired identify banknote denominations



Hong Kong Banknotes Reader application



Note-measuring template

Accessibility of public information

With a clear navigation structure on the HKMA website, the public can easily search for up-to-date information about the HKMA's work and regulations. A dedicated webpage on "Information in Other Languages" under the "Smart Consumers" section provides useful information on banking services in multiple languages which are commonly used in Hong Kong. The HKMA also aims to ensure that its website and online publications conform to the World Wide Web Consortium's Web Content Accessibility Guidelines 2.0 Level AA standard, to the maximum extent possible, in order to help people with specific needs access its online information.

Information on banking services in multi-languages

| | |
|--------------------|--------------|
| ▶ Chinese | ▶ English |
| ▶ Bahasa Indonesia | ▶ Hindi |
| ▶ Nepali | ▶ Punjabi |
| ▶ Tagalog | ▶ Thai |
| ▶ Urdu | ▶ Vietnamese |

Sustainable HKMA

Promoting financial consumer education

Financial consumer education of the public has been a key HKMA priority. Its education efforts are tied in with market development, to help the public keep up with changing circumstances, and more importantly, educating the public to use banking and financial services smartly and responsibly. The HKMA also seeks to help the public, and particularly younger generations, learn more about developments and career opportunities in the financial sector in Hong Kong. Multiple media and different communication channels are deployed to reach out to as wide a range of target audiences as possible.

Campaign themes

Encouraging the public to give out e-laisees and use good-as-new banknotes



Green habits

Drawing public's attention to the FPS' latest development



Sustainable HKMA

Campaign themes

Green and sustainable finance

Explaining the use of technology in the Government's tokenised green bond issuance



Raising the public's awareness of the Government's retail green bond offering



Designating "digital and sustainable economy" as the theme of a competition targeting secondary school students



Hong Kong Financial Literacy Championship

Smart financial consumers

Pointing out issues to note when shoppers buy online and choose "Buy Now, Pay Later" products



Updating on new fintech development



Sustainable HKMA

Campaign themes

Smart financial consumers

Teaching money management concepts through board games and workshops



Bank simulation game

Ongoing education on the Linked Exchange Rate System and other areas of the HKMA's work



Building a talent pipeline

Showcasing the work, career opportunities and prospects in four growing areas of the financial industry



Data science



Fintech



Green and sustainable finance



Wealth management

New video series: "Financial Special Forces: Unleashing New Horizons"

Sustainable HKMA

Sounding alerts

The HKMA, in collaboration with the Hong Kong Association of Banks (HKAB), launched the Anti-Scam Consumer Protection Charter in June to reinforce the importance of safeguarding credit card and personal information. The Charter was strongly supported by the banking industry, merchants across different sectors, the Hong Kong Police Force and the Consumer Council. Under the Charter, all the participating card issuing banks and merchants committed to convey the message – *Beware of scams* – to the public through various channels.

To capture public interest, the HKMA rolled out a cross-media awareness campaign on staying vigilant against fraudulent links embedded in instant electronic messages purportedly from banks and merchants.

In parallel, the HKMA strongly supported a series of promotions and activities arranged by the HKAB to remind the public to protect their personal and credit card information, and promote digital financial literacy, fraud prevention and data privacy protection for students and senior citizens.



Launching the Anti-Scam Consumer Protection Charter



Brand new video: "Protect your Personal Digital Keys; Beware of Fraudulent Links!"



The HKAB's publicity campaign: "Credit Card Transaction Protection – What You Need to Know"



The HKAB rolls out education activities targeting students and seniors



The HKMA officiates the opening ceremony of a bank-organised public education event to raise public awareness of fraud prevention

Sustainable HKMA

Cultivating a financial mindset

As part of its continuous efforts to raise financial literacy in Hong Kong, the HKMA launched in 2023, a new educational board game – “\$mart Money Management 321”, targeting primary school students. This life-simulation game lets children players learn different payment methods, money management skills, fintech and cybersecurity concepts.



During 2023, the HKMA organised various outreach activities, such as trial sessions for students, train-the-trainer workshops for teachers and social workers of non-governmental organisations, to familiarise themselves with this educational resource.



Experiential Centre at PMQ



Promotion at Hong Kong Book Fair 2023



School trial sessions



The “\$mart Money Management 321” board game and the “\$mart Money Management Experiential Centre” at PMQ won multiple international design awards, including the International Design Awards 2023 of the USA

Sustainable HKMA

Advocating financial inclusion

The HKMA strives to ensure that banking customers, including the vulnerable groups, are being treated fairly and have fair access to basic banking services. Embracing the spirit of financial inclusion, industry guidelines have been promulgated in recent years, setting out the relevant principles and recommended good practices to guide banks to serve customers in need. The banking industry is supportive of the initiatives and has implemented various barrier-free measures, arrangements and customer protection measures for customers with physical, hearing, visual and intellectual impairments, and for persons with dementia. These efforts have been well received by the community. The HKMA seeks to continue improving customer experience in accessing and using banking services in Hong Kong.



More than 2,000 automated teller machines (ATMs) are installed at a height suitable for wheelchair users

Caring of vulnerable banking customers



Promoting barrier-free banking services



Assisting persons with intellectual disabilities

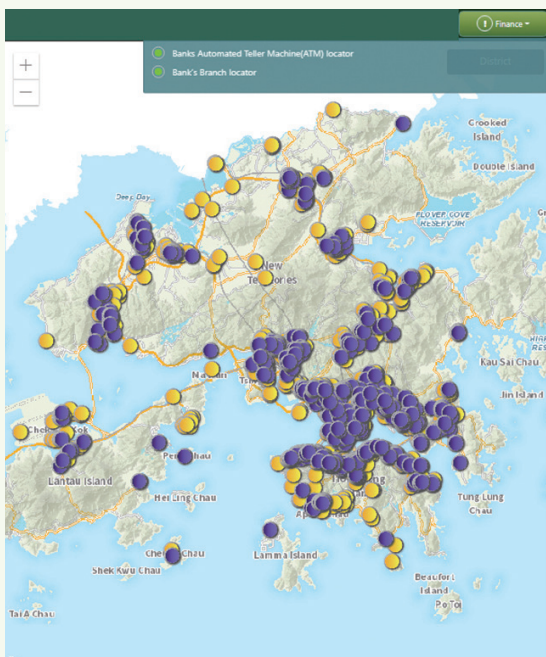
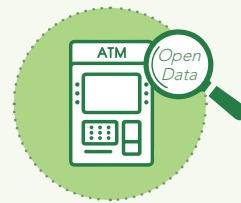


Assisting persons with dementia

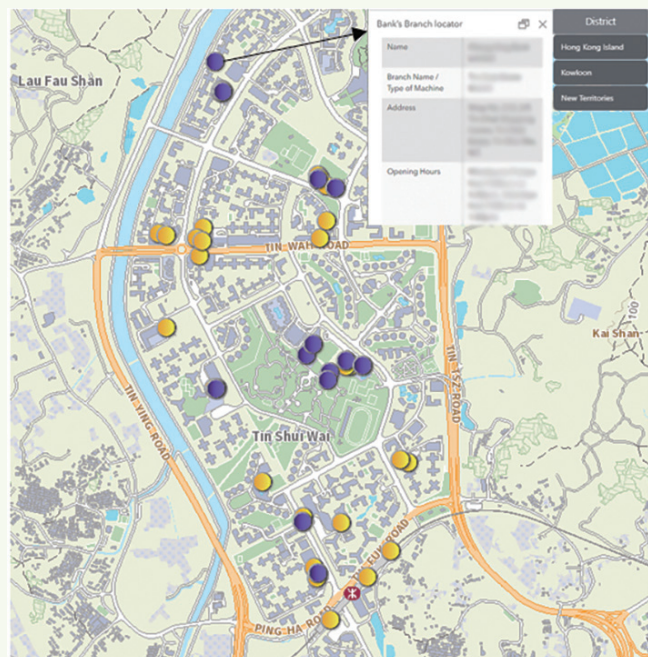
Sustainable HKMA

Displaying spatial information of physical branches and ATMs of retail banks

In 2023, the HKMA launched an open data inventory of physical banking facilities for public use, which comprises the locations and other information of branches and ATMs of 20 retail banks in Hong Kong. It serves as a centralised point of access for application (app) developers, technology service providers, and the public at large to make use of the open information for any potential applications development. Such information is also exhibited on an interactive digital map for the convenience of the public.



The public can browse the locations of branches and ATMs of retail banks through the digital platform



The spatial information of branches and ATMs can be found by districts

Sustainable HKMA

Supporting post-pandemic economic recovery

Multi-pronged support for the community

The HKMA and HKMC Insurance Limited (HKMCI)²² have been keeping track of the operating environment of corporates and maintaining a close dialogue with the banking and commercial sectors, in particular the small and medium-sized enterprises (SMEs), on exiting relief measures launched amid the COVID-19 pandemic, while assisting those sectors facing temporary difficulty in business resumption to secure appropriate credit support.

Pre-approved Principal Payment Holiday Scheme

The HKMA and the Banking Sector SME Lending Coordination Mechanism launched this scheme in May 2020, covering around 120,000 eligible corporates. As the pandemic was over and the participation rate had declined to 1% of eligible corporates from 16% at the initial stage, an orderly exit from this scheme commenced at the end of July 2023. To assist corporates to return to normal repayment, the partial principal repayment options were further enhanced by extending the duration of the repayment period. For corporates which were not financially able to transition to partial principal repayment, banks continued to offer principal moratorium on a case-by-case basis.

>118,000 applications for loan tenor extensions and other forms of relief, aggregating **HK\$1.2 trillion** approved by banks up to end-2023

The SME Financing Guarantee Scheme

Operated by the HKMCI, the SME Financing Guarantee Scheme (SFGS) covers the 80% and 90% Guarantee Products, as well as the Special 100% Loan Guarantee, which have provided crucial support to SMEs during the pandemic, enabling them to carry on their businesses and keep the jobs of their employees.

In 2023, around 12,000 applications for the SFGS were approved, involving a total loan amount of about HK\$37.5 billion. During 2023, the Government announced a further extension of the SFGS' application period to the end of March 2024. More flexible repayment options have also been made available. The enterprises may choose to repay only 10%, 20% or 50% of the original principal repayment amount each month during a specified period, giving them more time to gradually switch from principal moratorium to normal repayments.

>65,000 applications for the Special 100% Loan Guarantee under the SFGS approved up to end-2023, totalling **>HK\$139 billion**

The 100% Personal Loan Guarantee Scheme

The HKMCI also operated the 100% Personal Loan Guarantee Scheme (PLGS) which was launched in 2021, to offer a supplementary financing option to individuals suffering from cessation of main recurrent incomes from employment in Hong Kong during the pandemic. With the Hong Kong economy recovering steadily from the beginning of 2023, the PLGS' application period expired at the end of April.

>59,000 borrowers with a total loan amount of **HK\$4.66 billion** benefited under the PLGS

The Dedicated 100% Loan Guarantee Schemes

Pursuant to the Government's 2023-24 Budget, the HKMCI launched in late April 2023 the Dedicated 100% Loan Guarantee Schemes (DLGS) for the travel sector and the cross-boundary passenger transport trade, helping them to resume business following the COVID-19 pandemic.

The DLGS for Travel Sector aims to assist licensed travel agents and local tour coach owners in resolving short-term funding difficulties, hiring staff as soon as practicable and accelerating operational capability enhancement, so as to keep up with the pace of resumption of inbound and outbound tourism activities. The objective of the DLGS for Cross-boundary Passenger Transport Trade is to allow eligible registered vehicle owners, or ferry operators/owners of cross-boundary passenger transport, to apply for loans for the purpose of vehicle or ferry repair and maintenance, buying insurance, etc., with a view to resuming services as soon as possible.

Around **200** applications with a total loan amount of **HK\$201 million** approved as at end-2023

²² The Hong Kong Mortgage Corporation Limited (HKMC) is wholly-owned by the Government through the Exchange Fund. The HKMCI is a wholly-owned subsidiary of the HKMC.

Sustainable HKMA

Social bonds

In September, the HKMC successfully issued its second social bonds of close to HK\$20 billion equivalent, under its Social, Green and Sustainability Financing Framework and the US\$30 billion Medium Term Note Programme. The issuance marked the largest social bond issuance in Asia, and for the first time, for a Hong Kong bond issuer to launch Hong Kong dollar, renminbi and US dollar tranches in one transaction. The net proceeds from the issuance were mainly used to finance or refinance the loans under the Special 100% Loan Guarantee of the SFGS, creating a positive social impact for society.

Abbreviations

| | |
|------------------------|---|
| AML | Anti-money laundering |
| Basel Committee | Basel Committee on Banking Supervision |
| BIS | Bank for International Settlements |
| CAMEL | Capital adequacy, Asset quality, Management, Earnings and Liquidity |
| CASG | Green and Sustainable Finance Cross-Agency Steering Group |
| CASI | Capacity-building Alliance of Sustainable Investment |
| CEO | Chief Executive Officer |
| CMU | Central Moneymarkets Unit |
| CO₂e | Carbon dioxide equivalent |
| CRST | Climate risk stress test |
| CSO | Chief Strategy Officer |
| DLGS | Dedicated 100% Loan Guarantee Schemes |
| ECF-GSF | Enhanced Competency Framework – Green and Sustainable Finance |
| EFAC | Exchange Fund Advisory Committee |
| EFIO | Exchange Fund Investment Office |
| EMEAP | Executives’ Meeting of East Asia-Pacific Central Banks |
| ESG | Environmental, social and governance |
| FCLTGlobal | Focusing Capital on the Long Term |
| FPS | Faster Payment System |
| FSB | Financial Stability Board |
| GFANZ | Glasgow Financial Alliance for Net Zero |
| GHG | Greenhouse gas |
| GIFP | Green Investment and Finance Partnership |
| GPs | General partners |
| GSSC | Green and Sustainability Steering Committee |
| HKAB | The Hong Kong Association of Banks |
| HKICPA | Hong Kong Institute of Certified Public Accountants |
| HKMA | Hong Kong Monetary Authority |
| HKMC | Hong Kong Mortgage Corporation Limited |
| HKMCI | Hong Kong Mortgage Corporation Insurance Limited |
| HKQAA | Hong Kong Quality Assurance Agency |
| ICMA | International Capital Market Association |
| IFC | International Finance Corporation |
| IFRS | International Financial Reporting Standards |
| IP | Investment Portfolio |
| IPSF | International Platform on Sustainable Finance |
| ISC | Investment Sub-Committee |
| ISSB | International Sustainability Standards Board |
| Kg | Kilogram |
| LCD | Liquid Crystal Display |

Abbreviations

| | |
|-------------|--|
| LED | Light-emitting diode |
| LEED | Leadership in Energy and Environmental Design |
| LTGP | Long-Term Growth Portfolio |
| MCPP | Managed Co-Lending Portfolio Program |
| MWh | Megawatt-hour |
| NGFS | Network of Central Banks and Supervisors for Greening the Financial System |
| PCAF | Partnership for Carbon Accounting Financials |
| PLGS | Personal Loan Guarantee Scheme |
| PRI | Principles for Responsible Investment |
| PUE | Power usage effectiveness |
| RI | Responsible investment |
| RMB | Renminbi |
| SFC | Securities and Futures Commission |
| SFGS | Small and medium-sized enterprise Financing Guarantee Scheme |
| SI | Sustainable Investing |
| SMEs | Small and medium-sized enterprises |
| SPM | Supervisory Policy Manual |
| SVF | Stored value facility |
| TCFD | Task Force on Climate-Related Financial Disclosures |
| WACI | Weighted average carbon intensity |

Verification Statement



Verification Statement

Scope and Objectives

Hong Kong Quality Assurance Agency (“HKQAA”) conducted an independent verification of the environmental data in 2023 (“The 2023 Data”) of the Hong Kong Monetary Authority (“HKMA”). The 2023 Data included the energy consumption, scope 1 and scope 2 greenhouse gas (“GHG”) emissions, GHG emissions from business air travel, paper consumption, non-hazardous waste generated (covering general waste disposed to landfills and recyclable waste) for the year of 2023, as well as their intensities, and changes compared to the 2015 levels. In addition, the 2023 Data included the food waste amount, its intensity and changes compared to the November 2022 level when the HKMA’s food waste recycling programme was launched. The GHG emissions data of the HKMA were prepared in accordance with the Greenhouse Gas Protocol (“GHG Protocol”) jointly issued by the World Resources Institute and the World Business Council for Sustainable Development. The verification covered the corresponding data for the period from 1st January 2023 to 31st December 2023, and except for the food waste amount, the relevant data for the period from 1st January 2015 to 31st December 2015 for annual performance comparisons.

The verification scope included five offices and warehouse assets, which are the four offices located respectively at 1) Two International Finance Centre, 2) Hopewell Centre, 3) One Pacific Place, 4) Kowloon Commerce Centre, and the warehouse at 5) Roxy Industrial Centre, located at Kwai Chung.

The aims of this verification are to provide a reasonable assurance on the accuracy and reliability of the 2023 Data and to confirm the adequacy of the HKMA’s data collection mechanism.

Level of Assurance and Methodology

Within the verification scope, HKQAA reviewed the activity data and supporting evidence of the selected samples out of the five assets. The verification process was conducted according to the International Standard on Assurance Engagements (ISAE) 3000 (Revised) – “Assurance Engagements Other Than Audits or Reviews of Historical Financial Information” issued by the International Auditing and Assurance Standards Board. The verification procedure was designed for devising opinions and conclusions to obtain a reasonable level of assurance. The extent of this verification process undertaken covered the requirements specified in the GHG Protocol.

Integrity and accuracy of the aggregated data were tested by tracing the selected sample data back to their sources. The underlying processes for data collection, aggregation, estimation, calculation and internal checking were reviewed and subject to a reliability test. The process also included reviewing internal data collection and management mechanism, interviewing with personnel responsible for preparing the 2023 Data, and checking the raw activity data and supporting evidence of the selected data samples.

Independence

The HKMA is responsible for the collection and presentation of the information. Our verification activities are independent and impartial. HKQAA’s verification team did not partake in the 2023 Data preparation process.

Conclusion

Based on the verification results, HKQAA has obtained reasonable assurance and is of the opinion that:

- The 2023 Data are materially accurate and reliable; and
- The overall data collection mechanism of the HKMA is adequate.

Signed on behalf of Hong Kong Quality Assurance Agency

Connie Sham
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