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Chief Executive's Message

Climate change is a real and imminent threat. The urgency to accelerate global climate action has never been greater. The World Meteorological Organization has confirmed that 2024 was the hottest year on record, marking the first time global temperatures exceeded the critical threshold of 1.5°C above pre-industrial levels¹. Meanwhile, global greenhouse gas emissions have hit new highs after the Covid Iull, underscoring the inadequacy of current mitigation efforts². As the world continues to navigate the consequences of global warming, the materialisation of climate-related risks will intensify, bringing unforeseeable economic and financial impact. These challenges are further compounded by the current geopolitical landscape, marked by growing geo-economic fragmentation, heightened energy security concerns, and global economic uncertainty.

Transition to a lower-carbon economy requires tremendous and sustained financing. Nowhere else in the world is this challenge more apparent than in Asia. As suggested by the World Economic Forum, it is here in Asia, the driving engine of global economic growth and also the region most vulnerable to the effects of climate change, that the battle for net zero will ultimately be won or lost. As the premier international financial centre in Asia, Hong Kong needs to step up and play a central role in harnessing the power of finance to support and catalyse regional transition efforts.

To help Hong Kong rise up to this vision, the HKMA launched last year our Sustainable Finance Action Agenda (Action Agenda) to articulate our roadmap to embed sustainability at the core of our financial system. Our work is centred on enhancing the financial sector's resilience to climate-related risks and enabling it to better capture new opportunities while doing our part to lead by example. In particular, our sustainability efforts are underpinned by four key pillars: banking for net zero, investing in a sustainable future, financing net zero, and making sustainability more inclusive.



Mr Eddie Yue, Chief Executive, announces the Sustainable Finance Action Agenda

World Meteorological Organization, 2025. Its report documents spiralling weather and climate impacts (https://wmo.int/news/media-centre/wmo-report-documents-spiralling-weather-and-climate-impacts).

² UN Environment Programme, 2024. Emissions Gap Report 2024: No more hot air... please! (https://www.unep.org/resources/emissions-gap-report-2024).

Chief Executive's Message

Banking for net zero

The banking sector plays a pivotal role in supporting Hong Kong and Asia's transition to net zero, yet it faces significant risks during the transition. Under our Action Agenda, we have set an ambitious target for banks to strive to achieve net zero in their operations by 2030 and in their financed emissions by 2050, as well as to enhance transparency on climate-related risks and opportunities. To this end, in addition to the ongoing work on strengthening banks' climate risk management, we are guiding banks in transition planning to enhance resilience and enable better risk management, collaborating with stakeholders on preparatory work to align local sustainability disclosure requirements with global standards to enhance transparency, and enhancing the Hong Kong Taxonomy for Sustainable Finance launched in May last year to provide clarity on more sustainable activities, including transition activities, to channel more capital into credible transition pathways.

Investing in a sustainable future

Climate change poses significant physical and transition risks that can impact the long-term financial performance and value of the Exchange Fund's investments. However, it also presents opportunities for growth and positive change. Building on our experience that it is possible to align financial performance with positive impact, we strive to achieve net zero emissions in the Exchange Fund's Investment Portfolio by 2050 and support Asia's transition through investment under our Action Agenda. Sustainable investments now exceed 10% of the Investment Portfolio. To catalyse further sustainable investment in the region, the HKMA struck strategic partnership with the Asian Development Bank, the Asian Infrastructure Investment Bank and the International Finance Corporation in last November to pool resources and make collective investments that accelerate Asia's shift to a low-carbon economy. Our HKMA ESG Expectations, launched last September, further promote active ownership and best practices in sustainable investment.

Financing net zero

Access to capital is crucial to accelerate the region's transition. As an international financial hub, and building on our momentum as the top location for arranging international sustainable bond issuances in Asia, including for Mainland provincial and municipal governments, Hong Kong is poised to play a key role in channelling the necessary capital. Our Action Agenda outlines our vision to develop Hong Kong into the go-to sustainable financing platform of the region and our goal to catalyse innovation in sustainable finance. From harnessing the demonstration effect of the Government Sustainable Bond Programme in order to innovate on green bond features (including the world's first multi-currency digital bond issuance in February last year), to the expanded Green and Sustainable Finance Grant Scheme last May that covers transition bonds and loans, and the new Digital Bond Grant Scheme last November, we are paving the way for issuers in the region to decarbonise, leveraging Hong Kong's financial platform.

Making sustainability more inclusive

A robust transition requires more than just capital and innovation – it requires inclusive and accessible frameworks for sustainability, including reliable sustainability-related data, transparent disclosures and a skilled workforce equipped with the necessary knowledge and tools. That is why under our Action Agenda, we are committed to supporting high-quality and comprehensive sustainability disclosures as well as closing sustainable finance talent and knowledge gaps in the region. We have made significant strides in empowering stakeholders and making sustainability disclosures more accessible, particularly for small- and medium-sized enterprises, by enhancing the climate disclosure toolkit with user-friendly reporting templates. The launch of the Professional Level of the Enhanced Competency Framework on Green and Sustainable Finance last November strengthens the knowledge and skills of local banking practitioners, while events like the inaugural Hong Kong Green Week in February last year foster collaboration and innovation, ensuring sustainability is accessible to all.

Chief Executive's Message



Mr Eddie Yue (centre), Chief Executive, with Mr Arthur Yuen, Deputy Chief Executive (second from the left), Mr Donald Chen, Executive Director (Banking Policy) (second from the right), Mr Kenneth Hui, Executive Director (External) (first from the left), and Mr Leong Cheung, the Chief Strategy Officer of the Exchange Fund Investment Office (first from the right) at the launch event

Leading by example through corporate sustainability

Within the HKMA, we align our own operations with our vision. Under the Action Agenda, we have committed to advancing net zero emissions in our corporate operations to 2030, two decades ahead of our original commitment. Furthermore, we are also making active preparation to align our sustainability disclosures with international standards, following the roadmap promulgated by the Government. From adopting electric vehicles in 2024 to embracing low-carbon procurement and digital efficiencies, we are cultivating a culture of sustainability that inspires action among staff.

Pushing ahead

International collaboration and institutions, key underpinnings of the global effort to fight climate change, are being reshaped before our eyes. Geopolitics is adding a layer of complication. But it is not the time to lose heart or scale back our climate ambition or momentum. No matter whether and how we talk about climate change, it is real and it is coming. It is our firm belief that an orderly and inclusive transition is necessary to avert climate risks to our financial system and avail ourselves of the opportunities in the process. As we move forward into 2025, we will push ahead on our sustainability efforts with purpose and determination, forging deeper alliances with like-minded partners. Despite the daunting challenges we face, we remain as dedicated as ever to building a more sustainable future for Hong Kong, Asia, and beyond.

Eddie Yue Chief Executive 25 April 2025

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Priorities for 2025 and Beyond

Climate change is the defining challenge of our era. As an international financial centre and Asia's sustainable finance hub, Hong Kong is committed to assuming a pioneering role in supporting sustainable development in Asia and beyond. In October 2024, the HKMA launched the Sustainable Finance Action Agenda (Action Agenda), outlining its vision in this regard, including where it is heading, when it endeavours to reach various milestones and how it expects the industry to collaborate on this sustainability journey. Through developing strategic policies, strengthening supervisory engagements and enhancing internal operations, the HKMA aims to fortify Hong Kong's financial sector and the HKMA itself against the perils of climate change, while catalysing the region's transition towards a more sustainable economy. The HKMA is also committed to amplifying its impact through active participation in international and regional dialogues, contributing to the formulation of green and sustainable finance policies and standards at both regional and global levels.

Building a climate-resilient banking sector

As a banking supervisor, the HKMA focuses on enhancing the climate resilience of the banking sector and supporting banks in maintaining safety and soundness during their transition to net zero. Our key priority actions for 2025 include:

- conducting a new round of thematic examinations on banks' climate risk management practices and the third series of consultative sessions to review banks' implementation of the HKMA's supervisory requirements and further enhance their climate risk management capabilities;
- optimising the integration of climate risk stress testing into the HKMA's supervisor-driven stress testing framework;
- continuing the work of incorporating climate considerations into the HKMA's Supervisory Review Process;

- preparing the groundwork for formulating relevant regulatory requirements to implement the Pillar 3 disclosure framework for climate-related financial risks to be issued by the Basel Committee on Banking Supervision and the International Financial Reporting Standards Sustainability Disclosure Standards (ISSB Standards) in the local banking sector;
- finalising a new Supervisory Policy Manual module, GS-2, to provide guidance to banks on transition planning; and
- sharing with the industry good practices on climate risk management and green fintech adoption.

In addition to our role as a banking supervisor, we also serve as an enabler to strengthen the green and sustainable finance ecosystem and support banks' financing of the transition. We have released Phase 1 of the Hong Kong Taxonomy for Sustainable Finance to provide the industry with a tool to identify green and sustainable economic activities and facilitate relevant finance flows. The development of Phase 2 of the Taxonomy has commenced, aiming to expand its coverage by introducing transition elements, adding new green activities, and incorporating the climate change adaptation objective. Additionally, building on the success of the FiNETech3 event in 2024 and the Green Fintech Competition in 2023, we will organise another green fintech event in 2025 to advocate for the adoption of green fintech solutions by banks.

Enhancing the green and sustainable finance ecosystem

Hong Kong is well positioned to support the sustainable financing needs of the region. To reinforce this role, we will continue to assist the Government in implementing the Government Sustainable Bond Programme, which has an expanded scope that will cover sustainable projects, such as social projects. This will help deepen local green and sustainable bond market development and create a demonstrative effect for other potential issuers in the region.

Priorities for 2025 and Beyond

Additionally, we will continue to provide subsidies through the Green and Sustainable Finance Grant Scheme to encourage more borrowers in the region to utilise Hong Kong's financing platform for raising sustainable financing. We will also step up our outreach efforts to encourage more governments, institutions, and corporates from the Mainland and other regions to raise green funding in Hong Kong.

In parallel, we will continue our efforts to catalyse and support innovation in sustainable finance. This includes providing incentives to prospective issuers of digital green bonds through the Digital Bond Grant Scheme.

While markets increasingly demand high-quality sustainability disclosures from institutions and corporates, the capacity and readiness of different entities to make sustainability disclosures may vary, with some requiring additional guidance and support. To address this, we will continue our collaboration with other members of the Green and Sustainable Finance Cross-Agency Steering Group to make sustainability disclosures more approachable and inclusive. For instance, we will continue our efforts to enrich the climate disclosure toolkit for banks and their clients by providing easy-to-use reporting templates and supporting tools, explore the use of technology to further enhance the accessibility and usability of available data resources, and offer necessary training to the industry in partnership with key local industry associations.

Given the evolving nature of the sustainable finance landscape, there is a need to expand the local talent pool and fill knowledge gaps in Hong Kong as well as the broader region. Our key initiatives in 2025 include working with the banking industry to develop the training programme for the Professional Level of the Enhanced Competency Framework on Green and Sustainable Finance, and identifying further training needs of the industry through the upcoming study Capacity Building for Future Banking, 2026–2030. Additionally, we aim to step up the promotion of the Government-funded Pilot Green and Sustainable Finance Capacity Building Scheme in collaboration with key stakeholders and suitably reviewing the scope of the Scheme. On a regional scale, through the Alliance for Green Commercial Banks, we, along with the International Finance Corporation, will continue to collaborate on targeted initiatives in Asia, including conducting green finance research, publishing unique market insights, tailoring capacity building and training support, fostering community

engagement, facilitating potential green investment opportunities, and offering practical guidance to help banks develop their roadmaps to mainstream green finance.

Investing responsibly

As a responsible investor, we are committed to achieving net zero emissions for the Investment Portfolio of the Exchange Fund by 2050 with the aim of supporting a whole-of-economy transition. We will continue to enhance the sustainability profile of the Exchange Fund's investments through a pragmatic and disciplined responsible investment approach, focusing on long-term portfolio resilience while exploring opportunities to deliver positive climate outcomes.

Moving forward as a sustainable organisation

The HKMA is dedicated to setting a leading example in corporate sustainability efforts. With the accelerated net zero commitment announced publicly in the Action Agenda, our sustainability journey will continue to evolve by taking incremental and consolidating steps to embed environmental and social considerations into our strategies, risk assessments and reporting. Specifically, in 2025, we will conduct a double materiality assessment to better understand the potential financial and non-financial implications of climate change and other sustainability issues, ensuring that we focus on what matters. Moreover, we will step up our climate resilience and risk preparedness by carrying out energy audits and harnessing technological solutions to assess the material impact of climate risks on our office premises and operations. We support the Government's roadmap on sustainability disclosures in Hong Kong and are actively preparing to align our own disclosures with the ISSB Standards.

In 2025, we will continue to uphold our commitment to incorporating energy efficiency and reduction principles into the selection of data centres facilities for planned upgrade projects. We will also expand our digital initiatives to promote sustainability and efficiency, including the development of digital tools and platforms to support paperless processes, minimise waste, and enhance the overall digital experience for our staff, banks, and the public.

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.



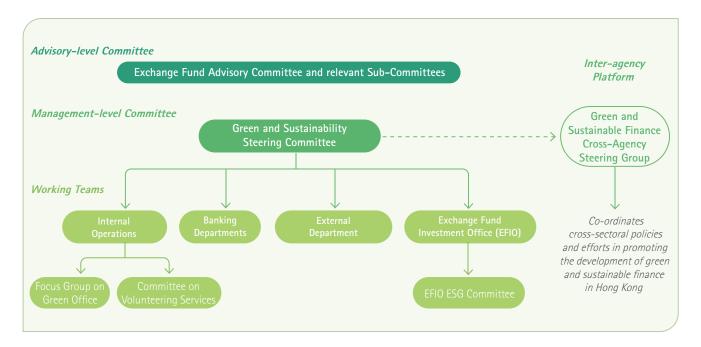
HKMA's sustainability governance structure

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 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-sectoral 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 years, the GSSC was established in October 2023 as a central platform to provide direction and to better co-ordinate all sustainability work across the different functional areas of the HKMA.

Terms of Reference

- Guidance on the development of strategies, policies and plans on ESG-related matters across the four functional areas: banking, green and sustainable finance ecosystem 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 CASG¹ 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.

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.

Climate change could pose risks to the financial system. The HKMA has been prioritising its efforts in strengthening the resilience of Hong Kong's financial system to climate risks, while contributing to Hong Kong's climate goals and the global sustainability agenda.



Banking supervisor

Banks, through their day-to-day activities, are exposed to the impact of different sustainability and climate-related issues. It is, therefore, crucial for banks to proactively manage climate risks. At the same time, banks play an important role in the financial system in channelling capital towards green and sustainable activities. As a banking supervisor, the HKMA focuses on building banks' resilience to climate risks, enhancing their climate risk management capabilities, and accelerating their efforts in supporting the transition to a low-carbon economy.

Building climate resilience and supporting the transition

Sustainable Finance Action Agenda - Banking for net zero

In October, the HKMA launched the Sustainable Finance Action Agenda (Action Agenda), setting out its vision to further consolidate Hong Kong's position as the sustainable finance hub in the region and support the sustainable development of Asia and beyond. The Action Agenda comprises eight goals across four areas. To assist the banking sector in achieving specific goals related to banking policy, we have been undertaking the following work.



Sustainable Finance Action Agenda Banking for net zero



All banks to strive to achieve net zero in their own operations by 2030 and in \$\inspec\$ 2050 their financed emissions by 2050

2030



All banks to enhance transparency on climate-related risks and opportunities



All banks to strive to achieve net zero in their own operations by 2030 and in their financed emissions by 2050

In December, the HKMA shared good practices on transition planning with the industry and launched an industry consultation on the draft Supervisory Policy Manual (SPM) module GS-2 on "Transition Planning". The new module aims to provide guidance to banks on enhancing their resilience and managing the risks associated with the transition to net zero.

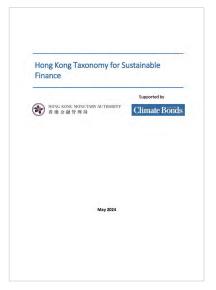
In addition, we are reviewing the Supervisory Review Process used to evaluate and monitor a bank's capital adequacy and determine its Pillar 2 capital requirement. The purpose is to seek to take into account factors related to the effective management of climate-related financial risks, as outlined by the Basel Committee on Banking Supervision (Basel Committee), in the evaluation process, and to incentivise banks to enhance their risk management framework, including transition planning, to better address climate risks.

All banks to enhance transparency on climaterelated risks and opportunities

We have been working towards aligning the local sustainability disclosure requirements with international standards, including the International Financial Reporting Standards – Sustainability Disclosure Standards (ISSB Standards) and the Basel Committee's Pillar 3 disclosure framework for climate-related financial risks. Specifically, we have been analysing the landscape of sustainability disclosures and have supported the Hong Kong Institute of Certified Public Accountants in conducting a technical feasibility study on the application of the ISSB Standards.

Published the Hong Kong Taxonomy to scale up green and sustainable finance flows

Stimulating green and transition finance is key to fulfilling the Action Agenda. In May, the HKMA published the Hong Kong Taxonomy for Sustainable Finance (the Taxonomy) with the objective of addressing greenwashing concerns whilst facilitating the flow of capital towards green and sustainable activities. The Taxonomy encompasses 12 economic activities across four sectors and operationalises the Common Ground Taxonomy to align with the taxonomies of Mainland China and the European Union, while incorporating elements tailored to the local context. We have embarked on Phase 2 development and are engaging with a broad range of stakeholders, with a view to expanding the scope of the Taxonomy to further facilitate the flow of green and sustainable finance.



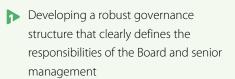
Hong Kong Taxonomy for Sustainable Finance published in May

Enhancing the supervision of climate risk management

During the year, the HKMA further strengthened its supervision of banks' climate risk management and enhanced efforts to support banks in building their capabilities to manage climate-related risks and opportunities, and their resilience to climate change. The HKMA also completed all initiatives outlined in its two-year plan developed in 2022 to integrate climate risk into its banking supervisory processes¹.

Guidance and sharing of good practices on climaterelated risk governance

To facilitate banks in strengthening their climate risk management capabilities, the HKMA shared its observations on good practices identified during thematic examinations and consultative sessions with the banking industry. Key identified good practices include:





Ensuring robust oversight of key aspects of climate-related risk issues



- Fostering and overseeing the effective development and implementation of a climate strategy;
- (2) Exercising appropriate oversight of climaterelated risk management; and
- (3) Cultivating a strong organisational culture around climate risk.

To further strengthen its supervision of banks' climate risk management, the HKMA developed a two-year plan in 2022 to integrate climate risk considerations into its banking supervisory processes. This plan includes six key initiatives: (i) making climate risk management a standing item in prudential meetings with banks' management; (ii) updating the HKMA's risk assessment framework to incorporate climate risk considerations; (iii) conducting thematic examinations on selected aspects of banks' climate risk management; (iv) integrating climate risk stress testing into the supervisor-driven stress testing framework; (v) enhancing the HKMA's 'greenness' assessment framework to focus on banks' transition planning practices; and (vi) continuously reviewing the capital framework for banks.

Balanced and Responsive Supervision Roundtable on climate risk management

The HKMA hosted a dedicated Balanced and Responsive Supervision Roundtable on climate risk management in August. During the Roundtable, bank representatives exchanged views with the HKMA participants on various climate risk related topics, including the challenges banks face in climate risk management, climate risk stress testing, transition planning and finance, etc. The Roundtable provided an interactive platform for information sharing and informed the HKMA's approach to climate risk supervision and other related initiatives.

Thematic examinations on banks' climate risk management practices

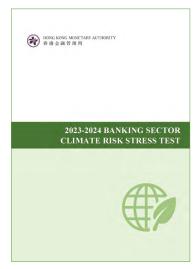
The HKMA launched a round of thematic examinations to evaluate banks' climate risk management frameworks and practices, assessing their robustness and adequacy in accordance with the supervisory expectations set out in the SPM module GS-1 on "Climate Risk Management". The comprehensive thematic examinations encompass the entire risk management process, including risk identification, measurement, monitoring, reporting, control and mitigation, and climate risk scenario analysis and stress testing.

Consultative sessions on banks' progress in implementing the HKMA's supervisory expectations on climate risk management

The HKMA conducted the second series of consultative sessions with a new cohort of banks to assess their progress in implementing the SPM module GS-1 on "Climate Risk Management", and to understand the challenges they face. The sessions also covered the latest regulatory and market developments in climate-related areas, including transition planning, disclosure frameworks and standards, and the issue of greenwashing. We provided feedback and guidance to support individual banks' efforts in managing climate risk, in the light of their specific circumstances.

Climate risk stress test

The HKMA completed the second round of the sector-wide climate risk stress test (CRST) in 2024, with the participation of 21 retail banks and 25 branches of international banking groups. The results showed that the Hong Kong banking sector continued to demonstrate strong resilience against severe climate-related shocks across various scenarios, including one that assumed simultaneous shocks from climate risks and macroeconomic downturns. Compared to the pilot CRST, the participating banks have made significant improvements in their capabilities for measuring and assessing climate risks. A report summarising the CRST results and highlighting good practices observed from the exercise was published in February 2025.



Report on the 2023-2024 Banking Sector Climate Risk Stress Test published in February 2025

Use of technology in climate risk management and adoption of green fintech solutions

Recognising that banks face numerous challenges related to data and methodology in climate risk management, the HKMA have been undertaking several initiatives to promote the application of technology to address these challenges.

To tackle the lack of physical risk-related data and analytical tools for conducting climate risk assessments, the HKMA launched the Physical Risk Assessment Platform in May. The platform allows users to assess the potential impact of physical risks on residential and commercial buildings in Hong Kong under various climate scenarios. Going forward, the HKMA plans to enhance the platform based on user feedback and by incorporating additional local data.

Furthermore, the HKMA has collaborated with relevant stakeholders to promote the adoption of green fintech solutions within banks and the broader financial services sector. During the year, we published an adoption practice guide and two Regtech Use Case Bulletins, featuring technology solutions for environmental, social and governance (ESG) and sustainability assessments as well as greenwashing risk management. We also hosted the FiNETech3 event, which brought together over 150 financial institutions and technology companies to explore collaboration in green fintech.



Ms Carmen Chu, Executive Director (Banking Supervision), opens the FiNETech3 event in November

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 the climate scenarios that help central banks and supervisors understand the macroeconomic and financial impacts of climate change.

In November, the NGFS published the fifth vintage of its long-term climate macro-financial scenarios for forward-looking climate risk assessments. As a member of the Financial Stability Board Transition Plans Working Group, the HKMA has contributed to the analysis of how transition planning by both financial and non-financial firms interacts with financial stability, providing policymakers with a forward-looking, dynamic perspective on climate-related financial risks.

The HKMA publishes the Adoption Practice Guide on Greentech in the Banking Sector to provide authorized institutions with best practices on leveraging Greentech to facilitate their transition to net zero.





On the research front, the HKMA has undertaken several applied research projects that look into the implications of climate change for the financial sector and the economy. The topics studied include the cross-border transmission of climate transition risk², the role of firms' environmental performance in cushioning the impact of monetary policy shocks³, the impact of climate-related factors on foreign direct investment flows⁴, and the role of the financial sector in the transition to a low-carbon economy⁵.

The findings from these research projects enhance our understanding of the impacts of climate change on financial stability and provide valuable insights into the green and sustainable finance ecosystem, informing the development of relevant policies. Locally, these studies support the HKMA's ongoing monitoring and assessment of the financial stability impacts of climate change. These findings have also been shared with a wide range of stakeholders via various channels, including international forums and the HKMA Research Memorandums.

The Hong Kong Institute for Monetary and Financial Research (HKIMR), the research arm of the Hong Kong Academy of Finance, published a research paper on the effect of carbon pricing on firm performance⁶. The study provides evidence indicating that low-emission firms could significantly benefit from carbon pricing, highlighting its efficiency-enhancing effects in redistributing resources from high-emission to low-emission firms. The study was featured in the *HKIMR's Insights from Monetary Research* and disseminated to local and international academic and policy researchers.

Embedding sustainability considerations in the Liquidity Facilities Framework

The HKMA's Liquidity Facilities Framework serves as a collateral-based backstop, providing timely liquidity support to banks when needed. The HKMA has integrated sustainability considerations into the evaluation of eligible collaterals under this framework.

Ho, Wong and Lo (2025), "A simple framework for assessing the cross-border transmission of climate transition risk based on global syndicated loan data", *HKMA Research Memorandum*, 2025/02 (https://www.hkma.gov.hk/media/eng/publication-and-research/research/research-memorandums/2025/RM02-2025.pdf); Wu, Chan and Dong (2024), "A spatial analysis of the spillover effects of geopolitical and climate transition risks on sovereign risk", *Hong Kong Institute for Monetary and Financial Research Working Paper*, No. 11/2024 (https://www.aof.org.hk/docs/default-source/hkimr/working-papers/2024/full-text_wp-no-11_2024.pdf?sfvrsn=63cb9963_0).

Guignard (2024), "Does the influence of US monetary policy shocks on Asian and European stocks depend on their "greenness"?, *HKMA Research Memorandum*, 2024/08 (https://www.hkma.gov.hk/media/eng/publication-and-research/research/research-memorandums/2024/RM08-2024.pdf).

Li, Ng and Wang (2025), "The impact of climate-related factors on global greenfield foreign direct investment", HKMA Research Memorandum, forthcoming.

Kong, Ying and Lam (2025), "The role of banks' bond underwriting activities in the transition to a low-carbon economy: Evidence from the Asia-Pacific Region", HKMA Research Memorandum, 2025/01 (https://www.hkma.gov.hk/media/eng/publication-and-research/research/research-memorandums/2025/RM01-2025.pdf); Leung, Wong and Lu (2025) "Assessing the role of venture capital and private equity investment in financing innovations in green technology", HKMA Research Memorandum, 2025/03 (https://www.hkma.gov.hk/media/eng/publication-and-research/research-memorandums/2025/RM03-2025.pdf); Wu and Dong (2024), "What explains the issuance and arrangement location of corporate green bonds? An analysis using explainable artificial intelligence technique", Hong Kong Institute for Monetary and Financial Research Working Paper, No. 15/2024 (https://www.aof.org.hk/docs/default-source/hkimr/working-papers/2024/full-text_wp-no-15_2024bb143556af62409d9 b333cd74e3b3b36.pdf?sfvrsn=287675fd 0).

Duan, Li and Zhang (2024), "The Effect of Carbon Pricing on Firm Performance: Worldwide Evidence", Hong Kong Institute for Monetary and Financial Research Working Paper, No. 06/2024 (https://www.aof.org.hk/docs/default-source/hkimr/working-papers/2024/full-text_wp-no-06_2024.pdf?sfvrsn=38a046aa_0).

International collaboration

The HKMA actively participates in international and regional discussions on addressing climate risk and mainstreaming sustainable finance. Through such participation, we contribute to international and regional policy dialogues focused on climate change and our impact on financial stability, while also gaining insights into how to enhance the climate resilience of Hong Kong's financial system.



Central Banks and Supervisors Network for Greening the Financial System (NGFS) 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. Starting from 2025, the HKMA serves as a member of the NGFS Steering Committee. The HKMA actively participates in NGFS workstreams and task forces relating to supervision, scenario design and analysis, net zero initiatives for central banks, and nature-related risks. Notably, the HKMA serves as a co-chair of the Workstream on Supervision, which aims to advance the integration of climate-related and environmental risks into supervisory frameworks and practices.



Basel Committee on Banking Supervision (Basel Committee) The HKMA participates in the Basel Committee's Task Force on Climate-related Financial Risks, which adopts a holistic approach to addressing climate-related financial risks within the global banking system. The task force's work encompasses all three pillars of regulation, supervision and disclosure.



Bank for International Settlements (BIS)

The HKMA participates in the BIS Innovation Network, which explores technological solutions to help banks identify, measure and monitor their exposures to climate risks.

We are also a member of the BIS Asian Climate Network, where experts from Asian central banks exchange views, share progress, and disseminate knowledge on climate policy and environmental sustainability.



International Platform on Sustainable Finance (IPSF)

Together with Hong Kong's Securities and Futures Commission, the HKMA represents Hong Kong in the IPSF, which has introduced the Common Ground Taxonomy and is actively promoting transition finance.



Financial Stability Board (FSB)

The HKMA actively engages in the efforts of the FSB on climate risk management. This includes promoting climate-related disclosures, developing a framework for assessing and monitoring climate-related vulnerabilities in the global financial system, and exploring the role of transition plans in ensuring financial stability.

We are a member of the FSB's Climate Vulnerabilities and Data Working Group, which is tasked to analyse and develop tools to monitor climate-related vulnerabilities across sectors and jurisdictions. We also participated in the FSB's Transition Plans Working Group, which aimed to enhance the conceptual understanding of how transition plans of both financial and non-financial firms could interact with climate-related financial risks, providing policymakers with a forward-looking, dynamic and system-wide perspective on these risks.



Executives' Meeting of East Asia-Pacific Central Banks (EMEAP) The HKMA is a member of EMEAP, where sustainable finance is a key strategic priority. The HKMA serves as the Champion of the Interest Group on Sustainable Finance of EMEAP's Working Group on Banking Supervision, which promotes information sharing on various aspects of climate risk management.

We also actively participate in EMEAP's Working Group on Financial Markets, which promotes investment in green bonds through the Asian Bond Fund initiative.

Meanwhile, at the EMEAP Monetary and Financial Stability Committee, the HKMA shares its knowledge on climate-related issues with fellow authorities by conducting a research project that examines the impact of climate-related factors on global greenfield foreign direct investment.



The HKMA participates in a climate research initiative under the International Banking Research Network, which analyses the impact of climate-related risks on bank lending across sectors.

To reinforce Hong Kong's position as the leading regional hub for green and sustainable finance, the HKMA has stepped up its efforts to enhance market awareness and participation, provide essential infrastructure and catalysts, support pertinent international initiatives, and align with global standards.



Enriching the green and sustainable finance ecosystem

As set out in the HKMA's Sustainable Finance Action Agenda (Action Agenda), the HKMA aims to enhance the green and sustainable finance ecosystem by driving net zero financing and making sustainability more inclusive. Specifically, we seek to develop Hong Kong into the go-to sustainable financing platform for borrowers in the region and beyond, support green innovation in financial markets, enhance the industry's sustainability disclosures, and expand the local green talent pool, while addressing sustainable finance knowledge gaps in Hong Kong and the region.



Sustainable Finance Action Agenda Financing net zero and Making sustainability more inclusive



Develop Hong Kong into the go-to sustainable financing platform



Goal 6

Catalyse innovation in sustainable finance





Support high-quality and comprehensive sustainability disclosures





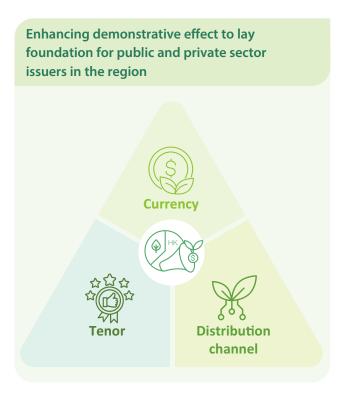
Close talent and knowledge gaps in sustainable finance



Develop Hong Kong into the go-to sustainable financing platform

Government Sustainable Bond Programme

To demonstrate the Government's determination to combat climate change and its 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. To date, the HKMA has assisted the Government in issuing around US\$28 billion equivalent of green bonds targeting both institutional and retail investors, with proceeds allocated to over 110 of the Government's green projects, such as green buildings, waste management and resources recovery, and energy efficiency and conservation, amongst others. We have taken 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. In 2024, to enhance the impact of the Programme and further solidify Hong Kong's position as a green and sustainable finance hub, the scope of the Programme was expanded to cover sustainable projects, and it was renamed the Government Sustainable Bond Programme (GSBP).



To enhance the transparency and accountability of the GSBP, the Government has been publishing annual Green Bond Reports which set out the details on the allocation of the green bond proceeds and expected environmental benefits.

In July, the HKMA assisted the Government in issuing around US\$3 billion equivalent of institutional green bonds under the GSBP. The triple-currency issuance covered renminbi, US dollar, and euro tranches across multiple tenors. The issuance was well received, attracting a wide spectrum of investors and achieving more than US\$15 billion equivalent in orders. In particular, the issuance included the Government's inaugural 20 and 30-year renminbi green bonds, marking the longest tenor renminbi bonds issued by the Government to date, providing new benchmarks for the market and further strengthening the demonstrative effect of the GSBP. The issued bonds also enriched the offshore renminbi product offerings in Hong Kong. Additionally, the global investors' enthusiasm for the Government's green bonds demonstrated their recognition of Hong Kong's commitment towards green and sustainable development.

Green and Sustainable Finance Grant Scheme

To encourage more borrowers in the region to utilise Hong Kong's financing platform to raise sustainable financing, the HKMA continues to administer the Green and Sustainable Finance Grant Scheme, which was launched in May 2021 to provide subsidies for eligible green and sustainable debt issuances in Hong Kong. The Scheme has been well received by the industry. As of the end of 2024, the Scheme has benefited around 500 green and sustainable debt instruments issued in Hong Kong, with a total underlying issuance volume of over US\$140 billion.

In May 2024, the Scheme was extended by three years to 2027, with an expanded scope of subsidies to cover both transition bonds and loans. The extended and expanded Scheme aims to encourage borrowers from relevant industries in the region to leverage Hong Kong's transition financing platform as they transition towards decarbonisation.

Green and Sustainable Finance Grant Scheme

- Subsidised around 500 green and sustainable debt instruments issued in Hong Kong, with underlying volume totalling over US\$140 billion (as of end-2024)
- Extended by three years to 2027, with expanded scope of subsidies to cover transition financing instruments



Issuances from Mainland municipal and provincial governments

In parallel, the HKMA undertook active outreach efforts to promote Hong Kong's sustainable financing platform, yielding positive results. Notably, the Shenzhen Municipal People's Government issued its fourth offshore municipal government bonds in Hong Kong in August. The total issuance of RMB7 billion included RMB2.7 billion of green bonds, RMB1 billion of sustainability bonds and RMB0.9 billion of social responsibility bonds. In September, the People's Government of Guangdong Province conducted its first issuance of RMB5 billion offshore bonds in Hong Kong, which included RMB1.5 billion of green bonds.

In October, the People's Government of Hainan Province also issued its third offshore bonds in Hong Kong, totalling RMB3 billion, including RMB1 billion of blue bonds and RMB1 billion of sustainability bonds. These issuances reaffirmed Hong Kong's unique role in facilitating green and sustainable capital flows between the Mainland and the rest of the world.

With the above concerted efforts, Hong Kong has been reinforcing its position as the go-to sustainable financing platform in Asia. In 2024, Hong Kong upheld its position as the largest arranging hub for international green and sustainable bond issuances in Asia, accounting for 45% of the regional total issuance, which amounted to US\$43.1 billion, as reported by the International Capital Market Association.



US\$84.4 billion

Green and sustainable debt issuance in Hong Kong (2024)

Largest arranging hub for Asian international green and sustainable bond issuances **US\$43.1billion**

Catalyse innovation in sustainable finance

Government tokenised green bonds

To catalyse innovation in sustainable finance, the HKMA assisted the Government in issuing two landmark tokenised green bonds in 2023 and 2024. These issuances marked the world's first tokenised government green bond and the world's first multi-currency digital bond, respectively. They demonstrated the Government's support for the adoption of asset digitalisation and innovative technologies in green and sustainable finance among market participants in the region.

Digital Bond Grant Scheme

The HKMA also launched the Digital Bond Grant Scheme in November to incentivise digital bond issuances, including digital green bonds, in Hong Kong, to encourage and support innovation in our green and sustainable finance markets.

Support high-quality and comprehensive sustainability disclosures

The working group on sustainability disclosures of the Green and Sustainable Finance Cross-Agency Steering Group (CASG)¹ has been working on adopting the International Financial Reporting Standards – Sustainability Disclosure Standards (ISSB Standards) in Hong Kong. With the Government launching the Roadmap on Sustainability Disclosure in Hong Kong in December 2024, a clearly defined pathway has been established for large publicly accountable entities in Hong Kong to fully adopt the ISSB Standards by 2028.

Enrich climate disclosure tools for banks and their clients

The HKMA has been working closely with local and international partners to support entities at different stages of readiness to achieve high-quality sustainability disclosures, making sustainability disclosures more approachable and inclusive.

Notably, we have continued to encourage the use of the Climate and Environmental Risk Questionnaire for Non-listed Companies (the Questionnaire), launched in collaboration with the CASG and the CDP² in 2022. The Questionnaire offers an easy-to-use reporting template to help corporates, including small and medium-sized enterprises (SMEs), make sustainability disclosures. In February 2024, the Questionnaire was digitalised to facilitate online reporting (see QR code below). The HKMA is working to improve both the accessibility and usability of the Questionnaire, including identifying core questions and common use cases, taking into account industry feedback and the latest international developments.

We are also enhancing the compatibility of the Questionnaire with other supporting tools on the CASG website.



More information about the Questionnaire can be found on the webpage

Walk the talk by committing to high-quality sustainability disclosures

The HKMA also demonstrates its commitment by making high-quality sustainability disclosures in its own *Sustainability Report*, aligning with the latest global standards. This includes, but is not limited to, addressing climate-related risks in its corporate operations, and outlining plans and progress toward achieving climate targets. For more details on the sustainability disclosures related to our own operations, please refer to the *Sustainable HKMA* chapter.

Close talent and knowledge gaps in sustainable finance

Recognising the evolving nature of sustainable finance, to close knowledge and talent gaps, the HKMA is enhancing capacity building efforts for the banking industry, and facilitating knowledge sharing with fellow regulators and other international stakeholders.

Enhanced Competency Framework on Green and Sustainable Finance

To strengthen the knowledge and skills of local banking practitioners in sustainable finance, the HKMA, in collaboration with the Hong Kong Institute of Bankers (HKIB), launched the Core Level of the Enhanced Competency Framework on Green and Sustainable Finance (ECF-GSF) in July 2023.

Co-initiated by the HKMA and the Securities and Futures Commission, 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. The CASG 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.

² CDP is a global non-profit that runs an independent environmental disclosure system for companies, cities, states and regions to disclose their environmental impacts. CDP has aligned with the ISSB's climate standard, IFRS S2, as its foundational baseline.

The ECF-GSF is designed to help banking professionals acquire relevant knowledge and develop competencies in green and sustainable finance more effectively. It covers job roles in four key areas: (1) GSF Product and Servicing; (2) Sustainability/ Climate Risk Management; (3) Sustainability Disclosures and Reporting; and (4) Sustainability Strategy, Compliance, and Control.

In November, the Professional Level of the ECF-GSF was launched for middle and senior-level banking practitioners working in functions related to GSF within the banking industry.

To provide the necessary training to banking practitioners, the HKIB, as the administrator of the ECF-GSF, rolled out the Core Level training programme in May. Following the launch of the Professional Level of the ECF-GSF in November, the HKMA will work with the banking industry in 2025 to develop the Professional Level training programme.

Study on Capacity Building for Future Banking, 2025–26

In order to identify further skill requirements and training needs within the banking sector, the HKMA is currently conducting a study titled *Capacity Building for Future Banking, 2025–26*, in collaboration with the banking industry. Findings of the study are targeted to be published in 2025.

This joint study is a sequel to the *Capacity Building for Future Banking, 2021–2025* paper published in June 2020. The findings of this follow-up study will be essential for the industry to both develop and adjust talent development strategies and measures, to support the sustainable development of the banking sector.

Pilot Capacity Building Support Scheme

Through its collaboration with the CASG, the HKMA also continues to support the administration of the Government-funded Pilot Green and Sustainable Finance Capacity Building Support Scheme, which provides subsidies for practitioners, graduates, and students to pursue sustainable finance-related training. As of December 2024, 85 international and local programmes have been registered as eligible training programmes under the Scheme, and over 5,700 reimbursement applications have been approved. As announced by the Government in the 2025–26 Budget, the Scheme will be extended to 2028.

Enhancing regional and international collaboration

The HKMA is committed to leveraging its experience to support capacity building and knowledge sharing through regional and international collaboration.

As an inaugural member of the Capacity-building Alliance of Sustainable Investment (CASI)³, the HKMA Infrastructure Financing Facilitation Office⁴ co-hosted a two-day training workshop with CASI in Hong Kong in June. The workshop featured discussions on global sustainable finance markets, policy frameworks, and innovative instruments.

The HKMA also supported the launch of the Hong Kong Chapter of the Glasgow Financial Alliance for Net Zero (GFANZ)⁵ in October, and will strengthen capacity building efforts in transition planning and transition finance by leveraging GFANZ's networks and expertise.

CASI is an international co-operation platform initiated by the Beijing Green Finance Association aiming to promote sustainable finance capacity building in Emerging

The Infrastructure Financing Facilitation Office serves as an important platform that facilitates infrastructure investments and their financing. The office has around 90 international partners, including key industry stakeholders such as multilateral financial agencies and development banks, project developers and operators, public sector entities and professional service firms.

⁵ 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.

Joint Climate Finance Conference with the Dubai Financial Services Authority

Following the establishment of a new partnership with the Dubai Financial Services Authority (DFSA) in December 2023 to support and enable climate finance in the Middle East and Asia, the HKMA and the DFSA co-hosted the inaugural Joint Climate Finance Conference in Hong Kong in September 2024 as a flagship initiative of this collaboration. The conference brought together like-minded participants from diverse backgrounds across both regions to exchange ideas and forge connections. On the sidelines of the conference, the HKMA and the DFSA signed a Memorandum of Understanding to further deepen our strategic partnership on sustainable finance, and a joint research in this area will be conducted to foster knowledge sharing.



Mr Eddie Yue (left), Chief Executive; and Mr Ian Johnston (right), Chief Executive of DFSA, sign and exchange the Memorandum of Understanding in Hong Kong to promote collaboration on sustainable finance

Hong Kong Green Week

To harness the momentum created from the successful inaugural Hong Kong Green Week in February 2024, the HKMA is actively preparing for the 2025 Hong Kong Green Week. The HKMA will co-host the anchor event, *Climate Business Forum: Asia Pacific*, with the International Finance Corporation (IFC). The HKMA will also co-ordinate a variety of satellite events involving both the public and private sectors, including workshops, roundtables and more, that aim at fostering connections, exchanging insights, and exploring potential collaborative opportunities in sustainability.



More information about 2025 Hong Kong Green Week can be found on the webpage

The development of the Alliance for Green Commercial Banks⁶ has also gained momentum. Since 2021, the Alliance has hosted 28 training and roundtable sessions, benefitting over 8,100 participants globally across Asia Pacific, Europe, the Middle East, Africa, and the Americas.

In 2024, the Alliance organised in-country activities for banks across the Philippines, Thailand, Indonesia, Vietnam, Laos, Cambodia, and Malaysia. As part of the activities, three sector-specific training sessions were held for banks in Thailand, Laos, and Cambodia. These knowledge sharing and training sessions covered a wide range of topics including green taxonomy, strategic roadmap for adopting green banking principles and Hong Kong's green and sustainable finance landscape.



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

In March 2025, the Alliance successfully concluded the inaugural flagship event *Excellence in Green Commercial Banking Immersion Lab* (Immersion Lab) in Hong Kong. The program convened delegations comprising 27 participants from six Alliance member banks, supported by five cornerstone banks⁷ along with 21 knowledge partners⁸. The primary objective of this initiative is to facilitate the sharing of experiences on how banks can transition to green banking to actively contribute to accelerating green financing in support of the transition in Asian emerging markets.

The Immersion Lab guided banks through building blocks of excellence in green banking, providing participants with practical strategies, global best practices, and innovative financial tools to effectively integrate sustainability into their operations.



Mr Kenneth Hui, Executive Director (External), gives welcome remarks at the Immersion Lab



Representatives from the HKMA, IFC, member banks, and knowledge partners gather at the Immersion Lab

In November 2020, the IFC and the HKMA launched the Alliance for Green Commercial Banks 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 to collectively finance the infrastructure and business solutions needed to urgently address climate and environmental risks. The HKMA is the founding member and first regional anchor for the Asia Chapter.

⁷ The five cornerstone banks are Bank of China (Hong Kong), Citi, Crédit Agricole CIB, HSBC and Standard Chartered.

The Alliance partners with leading academic institutions, think tanks, and training organisations to provide members with cutting-edge knowledge and tools for advancing sustainable and green finance.

As a major global asset owner and manager, the HKMA is pioneering the development of green and sustainable finance. Grounded in its experiences that demonstrate the feasibility of aligning financial performance with positive impact, the HKMA upholds responsible investment in managing the Exchange Fund, prioritising sustainable assets and mandating active ownership by its external managers.



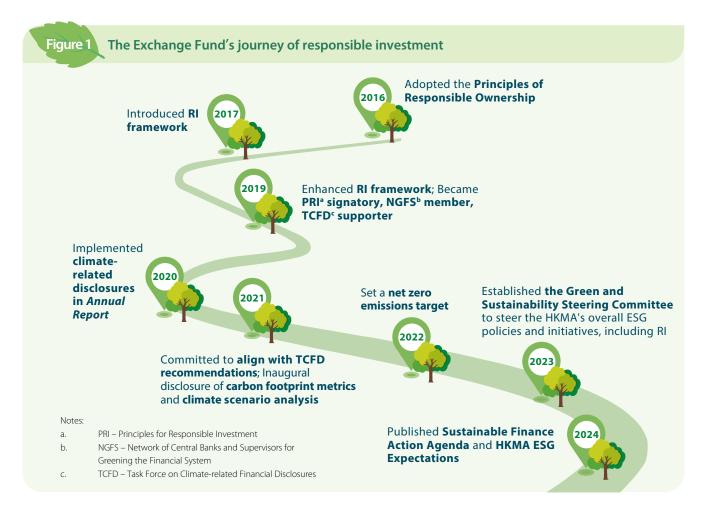
Overview

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 a steadfast signatory of the Principles for Responsible Investment (PRI), the HKMA is dedicated to advancing its responsible investment (RI) initiatives. We place a strong emphasis on sustainability, particularly the pressing issue of climate change, with the aim to bolster resilience and enhance long-term risk-adjusted returns of the Exchange Fund. We continue to actively explore tools to channel capital towards sustainable investments across asset classes, underpinned by a disciplined approach to integrating ESG factors (Figure 1).

Leveraging its role as a major investor, the HKMA contributes to advancing the ecosystem for green and sustainable finance. In September, the HKMA published the HKMA ESG Expectations and made the document available to investment counterparties through the annual ESG Workshop and the HKMA website. We partner 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 these collaborative efforts, we strive to foster a future where finance and sustainability can go hand in hand.

The Sustainable Finance Action Agenda (Action Agenda), published by the HKMA in October, further reinforces its commitment to investing in a sustainable future by achieving net zero emissions² for the Exchange Fund's Investment Portfolio (IP) by 2050 and mobilising its counterparties to support the transition to a low-carbon economy.



Refer to the *Reserves Management* chapter of our *Annual Report 2024* for more details.

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

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 Exchange Fund's guiding principle of RI:

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

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), co-ordinates and oversees all ESG-related efforts within the EFIO. Initiatives and progress discussed at quarterly EFIO ESG Committee meetings are reported to the Chief Executive Officer (CEO) of the EFIO.

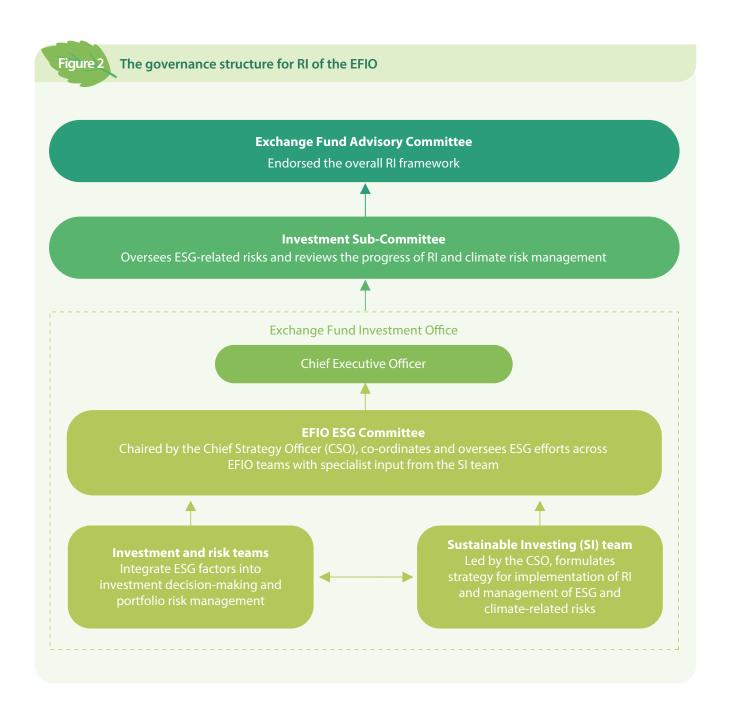
Furthermore, the Green and Sustainability Steering Committee, chaired by the Chief Executive of the HKMA and attended by the CEO and CSO of the EFIO, convenes regularly to provide guidance on the HKMA's ESG policies and initiatives across various functions, including those of the EFIO, in alignment with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



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

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 across a broad range of investments:

- Public investments The Credit, Rules and Compliance Committee, composed of 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 the Advocating active ownership subsection under the Risk management section on page 39).
- 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

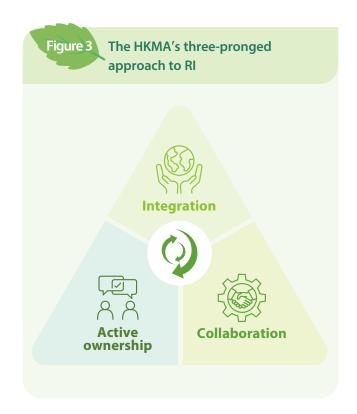
The HKMA recognises that the physical and transition risks³ from climate change, along with related opportunities, can affect the long-term financial performance of the Exchange Fund's investments.

The Emissions Gap Report 2024⁴ by the United Nations (UN) Environment Programme projected a global average temperature rise of 2.6–3.1°C above pre-industrial levels unless there is a massive global mobilisation to rapidly cut greenhouse gas (GHG) emissions. The unpredictability of policy shifts, technological developments and behavioural changes to address the temperature rise could amplify transition risks that may result in increased market volatility affecting asset valuations. Simultaneously, the increasing occurrence and severity of extreme weather events have become evident, posing additional risks of physical damage and financial losses to investments.

Amid these challenges, the pivot towards sustainable solutions by governments and industries also presents investment opportunities in low-carbon solutions, emerging technologies and sustainable infrastructure, which may offer attractive long-term prospects.

Emphasis on climate change for responsible investment

Believing that investing for a sustainable future dovetails with the investment objectives of the Exchange Fund, the HKMA has placed particular emphasis on climate-related factors for ESG integration. It has set a target of achieving net zero emissions by 2050 for the IP of the Exchange Fund. The HKMA is advancing its ongoing efforts through a disciplined three-pronged approach to progress towards achieving the target (see Figure 3).



In 2024, the HKMA announced the Action Agenda, which, among other items, reinforced the Exchange Fund's commitments and efforts related to climate transition (see Figure 4).

In support of the transition to a low-carbon economy, the HKMA prioritises proactive engagement over exclusion or divestment from its permissible investments.

³ 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.

⁴ UN Environment Programme, 2024. Emissions Gap Report 2024: No more hot air... please! (https://www.unep.org/resources/emissions-gap-report-2024).



Sustainable Finance Action Agenda

Investing in a sustainable future





Achieve net zero emissions for the Investment Portfolio of the Exchange Fund by 2050

Actively expand the scope and variety of its sustainable investments, particularly those supporting the theme of climate transition across public and private markets



- Incorporate ESG factors, with a specific focus on climate change and forward-looking transition considerations, into every investment decision
- Set clear ESG expectations in line with international standards and best practices, and require adherence from all external managers, direct investee companies and trade counterparties
- ► Endeavour to reduce weighted average carbon intensity (WACI) of its public equity holdings by 67% by 2030 from the 2017 level



Support transition in the region through investment



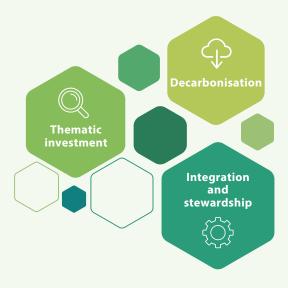
- Continue to engage with external managers to optimise opportunities driving the transition
- ► Continue to actively seek and prioritise sound investment opportunities that foster Asia's transition and generate positive global impacts
- First, maintaining a diversified and resilient portfolio is crucial 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 that possess 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 transition to sustainable and low-carbon practices, resulting in positive changes both for the industries themselves and the global community.

A holistic strategy for sustainable transition

Net zero investment approaches have evolved from a preference for green or low-carbon assets to encompass those with credible transition prospects driving a comprehensive decarbonisation across the entire economy. As a global asset owner, the HKMA acknowledges that achieving long-term portfolio resilience requires not only adjustments within the portfolio but also a transition in the broader economy.

While there is no single perfect solution, the HKMA refined its RI strategy in 2024, adopting a holistic and multifaceted approach to pursue transition outcomes supporting both the Exchange Fund's and global net zero goals.

The strategy will employ a combination of top-down and bottom-up tools, including the fundamental integration of ESG factors and stewardship, portfolio decarbonisation tilts and thematic investments aligned with net zero pathways across asset classes. In public markets, this may involve tilting the portfolio towards ESG leaders or climate solution providers, alongside stewardship to drive corporate transition. In private markets, greater emphasis may be placed on investments that facilitate the transition.



Pursuing sustainable investments

Through the integration of ESG factors into investment decisions, the HKMA continues to seek opportunities that can promote the climate transition while enhancing long-term resilience of the Exchange Fund's portfolios. Sustainable investments across different asset classes constitute over 10% of the Exchange Fund's IP, with comparable financial performances against respective portfolio benchmarks (Figure 5).

Investment highlights in 2024:

Public investments – The HKMA launched an active global public equities mandate focused on sustainability and climate transition, and extended the application of bespoke low-carbon equity indices to two additional externally managed portfolios. It also continues to seek attractive green, social and sustainability (GSS) bonds that offer competitive returns while financing sustainable projects (see the *Enhancing sustainability through GSS bonds* for case studies).

Private investments – The HKMA strives to construct a resilient Long-Term Growth Portfolio (LTGP) by seizing opportunities aligned with climate and energy transition themes. Leveraging its vast network and expertise, the HKMA proactively sourced and vetted opportunities that could accelerate energy transition, including through the formation of strategic partnerships with multinational organisations (see the *Joining forces to tackle climate challenges in Asia and beyond* for examples).

Figure 5

Ongoing initiatives in pursuing ESG investments



- Passive mandate using an ESG index as the benchmark
- ▶ Decarbonisation overlay strategy using bespoke methodologies for non-ESG benchmarked passive and active quantitative mandates
- ► Active governance-themed mandate
- ► Active ESG mandate focusing on sustainability and climate transition themes



- ▶ Projects with sustainable features such as renewable energy infrastructure, and buildings and warehouses with green accreditations
- Funds that focus on energy transition and decarbonisation globally, in Asia and the Global South
- Green, social and sustainability bonds
- ► Green bond fund managed by an international organisation
- ► Managed Co-Lending Portfolio Program (MCPP) run by the International Finance Corporation (IFC) with a focus on sustainable projects in emerging markets
- ► MCPP One Planet focusing on climate-smart investments aligned with the Paris Agreement in emerging markets

Enhancing sustainability through GSS bonds

Case 1

Innovative transformation of sewage treatment plants

The HKMA invested in a green bond issued by a quasi-government organisation. Funding from this green bond has been allocated to several projects, including the upgrading of ageing equipment at various sewage treatment plants. These enhancements encompass improvements to monitoring and control systems as well as pumps, aimed at producing positive environmental benefits from wastewater management, waste reduction and recycling.

Besides continuous wastewater and sludge treatment, these plants achieve a remarkable sludge recycling rate of 100%, by composting or repurposing dehydrated sludge to produce fertiliser, charcoal, cement and other construction materials. The plants also harness digester gas generated during the sludge treatment process to power boilers and generate electricity.



Case 2

Rehabilitating a canal system to transform arid lands

The HKMA invested in a green bond issued by a multi-development bank, which financed various projects, including the rehabilitation of a national canal system. As one of the country's largest irrigation systems, the canal was designed to divert surplus water from rivers to arid regions.

The project focuses on rehabilitating the deteriorating canal lining to prevent seepage, conserve water, enhance water usage efficiency and enable the reclamation of waterlogged areas. Additionally, it introduces capacity building measures for local stakeholders to promote the adoption and optimal use of modern irrigation techniques, such as micro-irrigation and sustainable farm practices.

By expanding irrigation to additional land and increasing the availability of drinking water, the project is expected to create positive social impacts, improving the quality of life of local communities and supporting the development of the agriculture industry.

Creating a dual impact through the canal rehabilitation project



Joining forces to tackle climate challenges in Asia and beyond

Formation of strategic partnerships

Climate change is a paramount challenge of our era, with Asia playing an important role in combating this global challenge. Accounting for half of the world's GHG emissions, Asia's dense population and geographical susceptibility to extreme weather necessitate immediate action to combat these challenges.

Tackling these issues demands sustained dedication and collective effort over an extended period; it cannot be achieved alone. In 2024, the HKMA collaborated with several multilateral organisations, including the Asian Development Bank, Asian Infrastructure Investment Bank and the IFC, to form a strategic partnership, serving as both an example and a call to action for investors and stakeholders to unite against the pressing issue of climate change in Asia. The partners will make collective investments in sectors that contribute to achieving net zero emissions in the region, including renewable energy infrastructure, energy solutions and sustainable transportation. Notably, the Actis Asia Climate Transition Fund, announced in November, is one of the earliest collaborative efforts under this strategic partnership.



Mr Howard Lee, CEO of EFIO (third from right); and Mr Samson Wong, Chief Investment Officer (Private Markets) of EFIO (third from left), announce the strategic partnership at the Asia Climate Investment Seminar

Anchor capital catalysing climate investment

The HKMA has been exploring innovative solutions in climate transition by collaborating with general partners (GPs) of the LTGP to establish transition-themed funds in Asia, where product availability has been limited.

Proactively, the HKMA requested dedicated investment products, assessed frameworks for evaluating eligible projects and provided essential anchoring funds to facilitate execution.

This collaboration not only led to the successful launch of a dedicated Asian climate strategy but also spurred a GP to uncover a robust pipeline, culminating in the development of a global iteration of the climate strategy, which has been well received by investors. Ultimately, the initiative expanded the investment universe supporting the transition, reinforcing the HKMA's commitment to driving sustainable capital flows through collective efforts.

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.

HKMA ESG Workshop

In 2024, the HKMA successfully organised its sixth annual ESG Workshop, hosting over 90 investment professionals from the EFIO and its counterparties. Gathering asset managers from both public and private markets for the first time, the workshop facilitated engaging panel discussions on the current sentiments, challenges and opportunities in RI. It also featured the launch of the inaugural version of the HKMA ESG Expectations document, which establishes a framework for engagement and dialogue with the HKMA's investment counterparties, aimed at promoting best practices in sustainable investing (see the *Advocating active ownership* subsection under the *Risk management* section on page 39 for details).



Mr Howard Lee, CEO of EFIO, delivers remarks at the HKMA ESG Workshop 2024

Collaboration with international organisations

Internationally, the HKMA remained at the forefront of promoting industry-wide ESG investment standards and practices in 2024:

- At the platform of the Network of Central Banks and Supervisors for Greening the Financial System (NGFS), the HKMA is co-chairing with the European Central Bank the new subgroup on transition planning for central banks for 2024–2026, under the Workstream "Net Zero for Central Banks".
- The HKMA participated in various industry forums and media interviews, sharing its experiences in RI and advocating for the adoption of sustainable investment practices. The number of speaking engagements increased notably compared to the previous year, significantly enhancing the HKMA's outreach.



Mr Leong Cheung, CSO of EFIO, speaks at an international conference on institutional investment



Mr Leong Cheung, CSO of EFIO, interviewed by the RTHK programme "Vibrant Hong Kong"

Assessing portfolio climate resilience

The HKMA utilised scenarios (see Figure 6) developed by an external consultant to assess the resilience of the Exchange Fund's IP against potential vulnerabilities and opportunities arising from different states of climate change.

- Rapid Transition: This scenario features an abrupt pricing-in of transition risks, accompanied by disruptive sentiment shocks in the very near future. It is to be driven by ambitious global policies aimed at limiting global warming to 1.5°C by the end of the century.
- Orderly Transition: This scenario envisions a collaborative effort to limit global warming to less than 2°C by the end of the century through systemic policy implementation.
- Limited Transition: Introduced in 2024, this scenario assumes that policymakers will partially implement their Nationally Determined Contributions. Consequently, the world is expected to fall short of meeting the Paris Agreement goals, despite certain efforts towards decarbonisation.

Failed Transition: This scenario assumes that no new additional climate policies will be enacted, leading to severe physical risks and a temperature increase of nearly 4°C by the end of the century.

The analysis assesses the impact of varying levels of physical and transition risks on the IP's investment returns across short, medium and long term horizons. In the short term, transition risk is likely to dominate, especially in the Rapid Transition scenario that assumes sudden asset repricing. In the medium term, both transition and physical risks can influence returns, with physical damage shocks being more pronounced in the Limited and Failed transition scenarios. Over the long term, physical risk is expected to be the primary driver of climate impacts, particularly in the Limited and Failed Transition scenarios.

Overall, the IP demonstrates resilience across all four scenarios, with modest impacts on annualised returns in the short, medium and long term. The IP is positioned to withstand extreme situations, including the rapid pricing-in of transition risks in the Rapid Transition scenario and the prolonged severe physical damages modelled in the Failed Transition scenario.

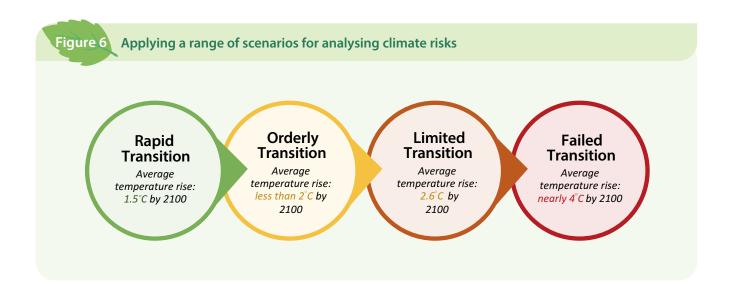


Figure 7

Highlights of the climate scenario analysis



A successful transition is an imperative: In the long term, achieving a successful transition, as opposed to scenarios with higher temperature outcomes, results in positive projected returns by mitigating physical damages.



Sector exposure is key. Low carbon electricity and renewable energy assets are poised to benefit from the transition to a low-carbon economy.



- Public equities are more vulnerable to climate risks. A short-term performance shock may occur in the Rapid Transition scenario due to aggressive asset repricing, although the likelihood of this happening is relatively low.
- ▶ Conventional fuels and utilities continue to be the most negatively impacted in the transition.

While scenario analysis provides a comprehensive simulation of climate-related uncertainties, it has its limitations. In addition to the inherent challenges of modelling the multifaceted uncertainties of climate change, the analysis focuses on sector allocation of market benchmarks at the strategic asset allocation (SAA) level, without considering the active selection of specific securities within those sectors. An in-depth examination reveals that the IP's investments are generally better positioned for – or less affected by – shocks compared to the SAA market benchmarks, reaffirming the HKMA's commitment to RI in enhancing portfolio resilience.

Nonetheless, the potential negative impacts on investment returns underscore the need for continuous monitoring and management of climate risks and opportunities. The finding that avoiding scenarios with severe physical risks aligns with the financial interest of long-term investors further emphasises the importance of the HKMA's stewardship efforts in advocating for a successful transition.

Strengthening internal capacity

Developing internal capacity is crucial for the further progress in RI. 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.

In addition to staff undertaking sustainability-related courses and acquiring relevant certifications, the HKMA actively participated in conferences and seminars organised by esteemed international organisations such as the PRI, NGFS, fellow central banks and investment counterparties. The events provided opportunities for the HKMA to engage with international investors, exchanging insights and best practices on ESG implementation.

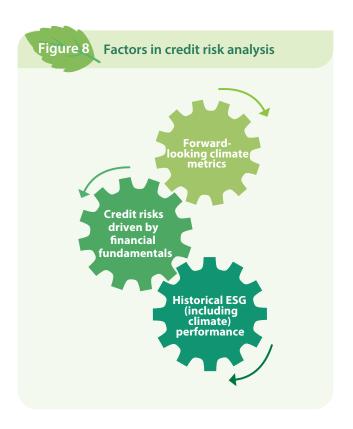
To facilitate internal knowledge sharing, every EFIO ESG Committee meeting includes a standing agenda item comprising a discussion about ESG news and the market landscape (see the *Governance* section above). Furthermore, sustainability and green finance-related topics were frequently featured in the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

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 (see Figure 8).

Recognising the multifaceted nature of climate change and the importance of future transition potential of investment assets, the HKMA has since 2023 incorporated forward-looking climate factors in the credit risk model, placing additional emphasis on climate-related commitments and transition plans of 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.

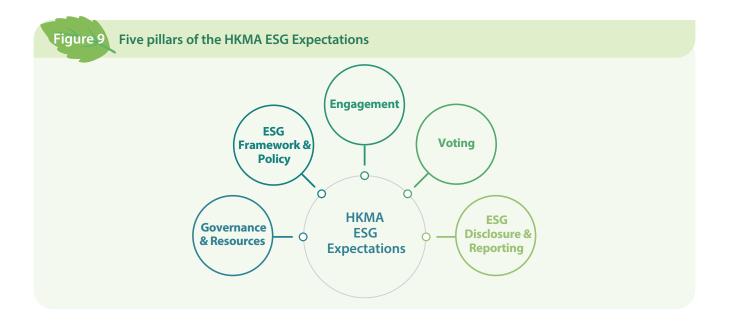
To enhance transparency regarding the indicators it uses to evaluate the counterparties and service providers, we launched the inaugural HKMA ESG Expectations in 2024, outlining the preferred ESG practices of our counterparties and service providers, including, for example, issuers or counterparties of financial instruments, external managers and GPs.

Focusing on climate change and transition, the HKMA ESG Expectations are structured around five key pillars: governance and resources, ESG framework and policy, engagement, voting, and ESG disclosure and reporting (see Figure 9).

The HKMA adopts a pragmatic approach when applying the HKMA ESG Expectations in the selection, appointment and monitoring process, recognising that some expectations may not apply universally to all investments and counterparties within its diversified portfolios. We will regularly review the HKMA ESG Expectations to incorporate the latest international standards and best practices, reinforcing our commitment to continuous advancement in ESG integration.



HKMA ESG Expectations



Promoting transparency for private investments

The HKMA examines GPs' ESG policies and practices as a mandatory part of its due diligence work for every investment mandate of the LTGP. The HKMA conducts assessment using the HKMA's ESG due diligence questionnaire, which is based on the industry standard developed by the PRI and the Institutional Limited Partners Association⁵ and includes the HKMA's proprietary questions. For real estate investments, green accreditation is also a predominant factor in the assessment.

On an ongoing basis, we incorporate ESG integration clauses in the legal documentation and require 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 our risk monitoring. To further address the current challenge of ESG data availability and standardisation, we are encouraging our GPs to utilise industry templates, such as those developed by the ESG Data Convergence Initiative⁶.

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.

To demonstrate accountability for the commitment, we announced as part of the Action Agenda that we will endeavour to reduce the weighted average carbon intensity (WACI)⁷ of the Exchange Fund's public equities by 67% from 2017 levels by 2030. The interim milestone is grounded in the latest science from the Intergovernmental Panel on Climate Change and has been reviewed by an external consultant.

However, challenges persist in establishing interim milestones for other asset classes due to limitations in data availability and lack of well-founded net zero pathways. The HKMA will actively monitor market practices to track relevant decarbonisation progress.

Guided by the RI framework and approaches described in the *Strategies* section above, we are steadfastly pursuing our RI efforts to facilitate progress towards the target.

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

The ESG Data Convergence Initiative is a collaborative initiative between GPs and limited partners to enhance efficiency of ESG data collection and drive convergence around meaningful ESG metrics for the private markets.

WACI is a metric recommended by the Task Force on Climate-Related Financial Disclosures and NGFS. It measures a portfolio's exposure based on Scopes 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.

Measuring carbon emissions

Quantitative measurement is useful for the HKMA's ongoing risk monitoring and assessment of measures taken. In the context of 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.

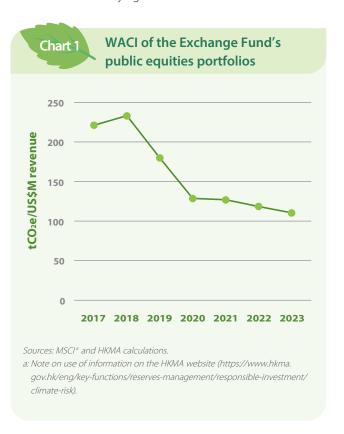
We continue to monitor the WACI, expressed as tCO₂e⁸/US\$ million revenue, for the Exchange Fund's portfolios in line with industry practices. Scope 3 emissions⁹ are excluded due to the low data availability and the absence of a consistent calculation methodology at this time, which leads to significant estimations dependent on the methodologies of data providers.

Monitoring of emissions from public equities portfolios takes precedence because of the more reliable measurement and disclosure practices in the market. This focus is in line with results from the climate scenario analysis, which indicate that public equities are more susceptible to climate risks compared to other asset classes within the Exchange Fund.

Chart 1 presents the WACI of the Exchange Fund's public equities portfolios from 2017 to 2023, using methodologies and tools developed by an external data provider. Where reported data were unavailable, the data provider estimated carbon emissions using its proprietary model. Together, the reported and estimated data together covered more than 98% of the asset values of the assessed portfolios in 2023.

As of the end of 2023, the WACI of the public equities portfolios stood at 109 tCO₂e/US\$ million revenue, reflecting an 8% reduction compared to 2022 and an overall 50% reduction compared to the 2017 level. This figure remains lower than the market investment benchmark, indicating the Exchange Fund's lower exposure to carbon-intensive assets relative 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 portfolio asset mix, strategies in response to market developments and fluctuations in underlying asset valuations.



tCO₂e refers to tonnes of carbon dioxide equivalent.

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

Focusing on long-term transition

While the WACI is an important metric for assessing carbon exposure of investment portfolios, it relies on investee companies' disclosures, which are inherently backward-looking, and does not account for future potential for low-carbon transitions.

Importantly, the HKMA's net zero philosophy does not rely on simply excluding heavy emitters; rather, it aims 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 positive climate outcomes are realised in the longer run. Overreliance on this single indicator may encourage short-termism, potentially undermining the long-term objective of a comprehensive economic transition.

To complement its analyses, the HKMA has been monitoring several forward-looking metrics. It is observed that a majority of companies within the Exchange Fund's investments already have climate-related targets, with a growing trend towards aligning with a net zero pathway.

As international disclosure standards and collaborative efforts continue to advance, we will remain vigilant in monitoring these developments to identify suitable metrics for enhancing our climate exposure monitoring and reporting.

The HKMA is committed to being a responsible and sustainable organisation. A highlight of this commitment in action in 2024 was its plan to bring forward the net zero target date for its corporate operations to 2030, 20 years earlier than its original target, in support of the Sustainable Finance Action Agenda. Apart from promoting environmental sustainability, the HKMA also pledges to support staff development and well-being, and to progress financial inclusion and literacy in the community.



HKMA's approach to corporate sustainability

Governance

The Green and Sustainability Steering Committee (GSSC)¹, chaired by the Chief Executive of the HKMA, is the key decision-making body for all corporate sustainability initiatives. To demonstrate the HKMA's commitment to climate change, in October 2024, the GSSC approved the HKMA's refreshed target of achieving net zero in its corporate operations by 2030, as part of the Sustainable Finance Action Agenda (Action Agenda).

At the departmental level, the Executive Director (Corporate Services) guides the implementation of sustainability initiatives related to corporate operations, staff well-being and community engagement, and reports regularly to the GSSC. The Administration Section acts as a coordinator and central hub for execution, communications and reporting of corporate sustainability initiatives.

Two working groups, which comprise members from different operational units, add another layer of support. They are the Focus Group on Green Office, a forum to propose ideas to green the workplace, and the Committee on Volunteering Services, which aims to foster a culture of volunteerism among staff.



HKMA as a Caring Organisation (2006–2024)

In recognition of the HKMA's efforts in caring for the environment, its employees and the community, The Hong Kong Council of Social Service has awarded the "15 Years Plus Caring Organisation Logo" to the HKMA for 18 consecutive years since 2006 to 2024.

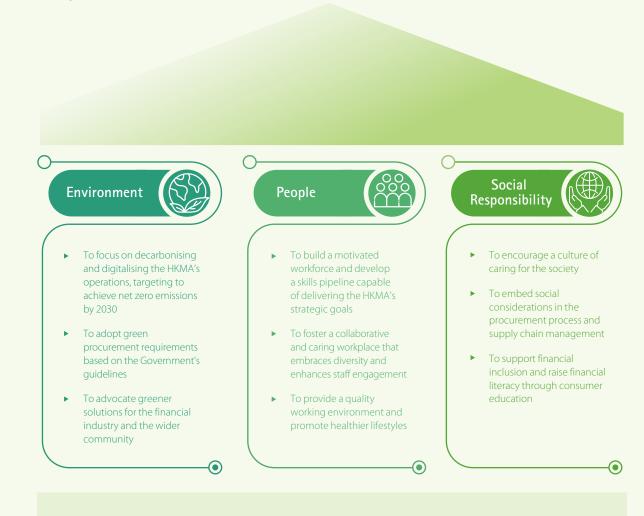


See Sustainability Governance chapter.

Strategy

The HKMA's sustainability strategy continues to be structured around three pillars: Environment, People and Social Responsibility.

The three pillars



The HKMA is committed to leading by example as a climate champion. In October 2024, the HKMA announced, as part of the Action Agenda, its plan to accelerate the target of achieving net zero in its corporate operations by 2030, 20 years earlier than its original commitment. The HKMA has revised the roadmap which guides its transition pathway to net zero. The priority is to manage the environmental impact of its operations responsibly, with a focus on reducing carbon emissions, saving energy and paper, and recycling waste, while leveraging the local power companies' improvements in their fuel mix for electricity generation. In addition, building a digitally empowered workplace within the HKMA simultaneously enhances efficiency and mitigates its carbon footprint.

Furthermore, the HKMA recognises the importance of cultivating a culture of sustainability, and through ongoing awareness and action campaigns, encourages staff to actively adopt sustainability-friendly practices.

Underpinned by its overarching 2030 net zero goal, the HKMA has been exploring the use of carbon insetting tools to reduce emissions within its value chain, and exercising low-carbon procurements where possible. In this regard, from 2023 onwards, the HKMA has fully offset its emission in business air travel by purchasing sustainable aviation fuels and joining a carbon offsetting programme. The HKMA will expand its carbon insetting and offsetting plans to cover all remaining material emissions.



S-Connect, the bi-annual newsletter, aims to connect and educate staff on the HKMA's evolving sustainability initiatives

Alongside these environmental commitments for its physical operations, the HKMA continues to catalyse low-carbon transition in the marketplace, from enabling electronic document submissions and processing, to advocating electronic payments and collecting coins for recirculation.

Details of the HKMA's strategy in leading environmental stewardship, and supporting staff's well-being and the community, are given in the rest of this chapter.

Risk management

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

To better assess the impacts that climate change might bring to its operations, the HKMA has identified various climate-related risks, and reviewed their actual and potential implications.

Physical risks				
Risks	Description and implications	Time horizon		
Acute risk	Increase in severe weather events (e.g. typhoons, floods, rainstorms) and subsequent shortage of energy and water supplies, may pose risks to the maintenance of the HKMA's premises, disrupt staff travel and affect the operational ability of the organisation, resulting in reputational damage and direct cost implications. Acute risk can also impact the companies that supply the HKMA with goods and services.	Short to medium term		
Chronic risk	Gradual changes in climate (e.g. changes in mean temperatures and precipitation patterns, rising sea-levels) have the potential to impact the HKMA's operational expenditure, for example, rising mean temperatures would lead to higher demand for cooling in the building premises.	Long term		
Transition risks				
Policy and legal risks	The potential introduction of regulations and policy measures by governments on energy businesses could cause fluctuations in energy prices and affect the HKMA's energy usage and staff business air travel plans. New requirements on waste disposal in Hong Kong could impact the HKMA's waste management strategies. These risks could also affect the HKMA's suppliers of goods and services.	Short to medium term		

Short term: current and up to 5 years Medium term: 5 to 10 years Long term: beyond 10 years

To address climate-related risks while ensuring business continuity, the HKMA has integrated various measures into the office design to mitigate potential physical hazards, fire and other emergencies. In addition, the HKMA regularly updates its business contingency plans, incorporating comprehensive measures that cover not only its office premises but also its communications and computer services. Drills on evacuation and activation of back-up facilities are conducted regularly to ensure that staff are ready and familiar with the business contingency measures. The HKMA has also been monitoring its exposure to transition risks by tracking greenhouse gas (GHG) emissions from its own operations, waste generation, energy and paper consumption.

Terms and references of the Risk Committee can be found in the Corporate Functions chapter of the Annual Report 2024.

Metrics and targets

The HKMA's refreshed climate targets are to achieve net zero in Scope 1, Scope 2, and Scope 3 GHG emissions that are relevant to its corporate operations by 2030. These targets are developed with reference to the Science Based Targets initiative methodology.

The HKMA measures and reports its corporate emissions using the GHG Protocol³. Scope 1 emissions are direct emissions from its petrol cars. Given the nature of its operations, the HKMA's major GHG emissions are indirect Scope 2 GHG emissions arising from electricity consumption derived from fossil fuels. The HKMA uses a conservative approach to estimate its material Scope 3 emissions from purchased goods (including capital goods) and services in the absence of supplier-specific data. Other relevant Scope 3 emissions cover waste to landfill, staff business air travel and staff commuting between home and work. Details of the calculations for 2023 and 2024 are given in the *Performance Summary* section on page 50.

The HKMA's disclosed performance data⁴ is independently validated by Hong Kong Quality Assurance Agency (HKQAA). The scope and basis of the HKQAA's verification are set out in the *Verification Statement* enclosed at the end of this report.

The GHG Protocol Corporate Accounting and Reporting Standard issued by the World Resources Institute and the World Business Council for Sustainable Development.

Unless otherwise specified, the environmental data disclosed 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. Emissions of the two operationally independent companies owned by the Government through the Exchange Fund, namely, The Hong Kong Mortgage Corporation Limited (100% owned) and Hong Kong Note Printing Limited (55% owned), are disclosed separately.

Environment

The HKMA holds itself to the same climate-related standards that it expects of the banks it regulates and the financial system it oversees.

Going green

As the first step towards green mobility, the HKMA has started to replace its petrol cars with electric vehicles in 2024 and will continue to replace its fleet in 2025 with a view to achieving full green mobility.

The HKMA continued to incorporate environmental considerations in designing, operating and maintaining its office premises. Specifically, during various renovation works in 2024, existing furniture and fitting-out elements were re-used or traded in to reduce waste.

To boost the overall energy efficiency, the HKMA conducted regular reviews of its energy consumption and energy-saving practices at the office and the data centres. In particular, the HKMA optimised the Power Usage Effectiveness (PUE)⁵ of its BEAM Plus certified data centres⁶ by adopting a modular design of the Uninterrupted Power Supply (UPS) in the 2024 upgrade. This design allows for scalable capacity expansion, efficiency at partial loads, advanced cooling technology, and improved power density.

The HKMA's digital workplace has enhanced virtual collaboration within the organisation, which together with streamlined workflows, have effectively decreased paper consumption. Furthermore, the HKMA has extended the service period of mobile and desktop devices to align with the manufacturer's software update roadmap, enabling a longer and more secure device lifespan⁷.

To reduce waste generated at the office premises, the HKMA followed the four 'R' principles of refuse, reduce, reuse and recycle, and conducted regular waste audits to help formulate targeted waste management strategies. Multiple recycling collection points for a wide range of materials have been set up at convenient locations across the office premises. To increase recycling rates, in 2024, recycling bins for beverage cartons and plastic fruit nets were added. Furthermore, since November 2022, food waste collected has been delivered to a waste-to-energy centre in Hong Kong. The HKMA joined the Environmental Protection Department's Green Event Pledge in May 2024, undertaking to adopt measures to reduce waste generated at all its events.

The HKMA continued to prioritise procuring goods, in particular, electrical appliances and office consumables, that aligned with the green specifications on the Government's Green Procurement List.

To reduce air travel emissions, the HKMA encourages staff to carefully plan their travel by, for example, combining different trips when attending overseas events. At the corporate level, since 2023, the HKMA has committed to purchase sustainable aviation fuels to reduce around 10% of its annual emissions in business air travel. In addition, through a Gold Standard-certified⁸ carbon offsetting programme focusing on renewable energy production and electrification initiatives for emerging markets, the HKMA offset the residual air travel emissions.

⁵ 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.

⁶ In 2023, under the BEAM Plus Existing Data Centres' assessment, the HKMA's production data centre received a gold rating and the backup data centre obtained the highest rating of Platinum.

See also *Information technology and Digitalisation* sections in the *Corporate Functions* chapter of the *Annual Report 2024* for details on other IT and digitalisation projects undertaken by the HKMA.

⁸ Gold Standard for the Global Goals is a comprehensive standard to accelerate global progress toward climate security and sustainable development.

Performance summary

Indicators	Unit	2024	2023
Energy management			
Total energy consumption	MWh	5,891.69	5,215.27
Energy intensity ⁹	MWh/head	2.93	2.59
Emissions ¹⁰			
Direct GHG emissions (Scope 1)11	tCO ₂ e	18.12	23.61
Indirect GHG emissions (Scope 2 – market based) ¹²	tCO ₂ e	3,255.48 ¹⁹	2,964.34
GHG emissions intensity (Scope 1 and 2)	tCO2e/head	1.63	1.48
Indirect GHG emissions (Scope 3)13			
Category 1 – Purchased goods and services ¹⁴	tCO ₂ e	4,104.69 ²⁰	3,114.33
Category 2 – Capital goods14	tCO ₂ e	2,172.16 ²⁰	1,482.52
Category 3 – Fuel- and energy-related activities ¹⁵	tCO ₂ e	115.98	103.33
Category 5 – Waste generated in operations ¹⁶	tCO ₂ e	53.90	53.25
Category 6 – Business air travel ¹⁷	tCO ₂ e	-	-
Category 7 – Employee commuting18	tCO ₂ e	701.37	688.48
Total GHG emissions (Scope 1, 2 and 3)	tCO ₂ e	10,421.69	8,429.86
Total GHG emissions (Scope 1, 2, and 3) intensity	tCO ₂ e/head	5.19	4.18
Paper consumption			
Total office paper consumption	tonnes	24.87	23.31
Office paper consumption intensity	kg/head	12.39	11.55
Waste management			
Non-hazardous waste disposed to landfills	tonnes	88.01	86.92
Waste disposed to landfills intensity	kg/head	43.83	43.09
Waste collected for recycling			
Paper	tonnes	31.70	32.41
Food waste	tonnes	8.40	7.79
Plastics	kg	683.54	550.29
Metals	kg	176.23	114.63

The intensity calculations for all performance indicators are based on the numbers of employees and contractors on site.

Calculations are based on the GHG Protocol methodology.

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.

Scope 2 indirect emissions are calculated by the market-based method. The emissions factor applied is for each respective year, with reference to information published by the power companies in Hong Kong.

Data relate to material Scope 3 emissions according to the 15 categories set out by the GHG Protocol. Information about the HKMA's financed emissions is given in the Responsible Investment chapter.

Material Scope 3 Category 1 and 2 GHG emissions are assessed using a hybrid approach, combining the average data and spend-based methods with industry-average emissions data. The evaluations mainly cover contracts subject to tender.

Scope 3 Category 3 GHG emissions are calculated based on the electricity transmission and distribution losses (%) reported by the power companies in Hong Kong.

Scope 3 Category 5 GHG emissions relate to solid waste generated in the office premises using waste-type-specific method.

From 2023 onwards, the HKMA has offset all Scope 3 Category 6 business air travel GHG emissions by purchasing sustainable aviation fuels and joining a carbon offsetting programme.

Scope 3 Category 7 GHG emissions are based on the numbers of employees and contractors on site and assessed using distance-based method.

Higher Scope 2 emissions in 2024 were mainly due to higher electricity consumption as the HKMA increased technology adoption in its operations including use of Al tools, and additional office space taken up to meet operational needs.

Higher emissions in these two categories in 2024 were largely attributed to rising professional fees, expanded IT infrastructure and fitting-out works for the additional office space.

Raising awareness of greener practices

In 2024, the HKMA organised various learning events, such as talks and guided tours at waste-to-energy facilities, to deepen staff's understanding of environmental sustainability issues.



A power expert explains new technologies for generating zero-carbon electricity



An Environmental NGO talks about adopting nature-based solutions to improve ocean health in Hong Kong





Staff and their families learn about the city's efforts to transform waste into energy

The first HKMA Green Month, themed "Think Green, Live Green, Work Green", was held from 22 April 2024, the Earth Day, and throughout May. It was an opportunity to engage internally on the HKMA's alignment, commitment and momentum towards environmental sustainability within its operational sphere.



The green talk "Recycling: Doing it right"

Features of the campaign included a "Sustainability BINGO scorecard" to encourage staff to embrace green living, "Save the Earth" trivia, a Kokedama workshop for participants to learn a Japanese method for growing indoor plants, in addition to the sharing of waste audit results and a community recycling facility operator's presentation about recycling best practices.

Raising awareness of greener practices

To sustain the Green Month momentum, the "Recycle the Recyclables" campaign followed in October, spanning a period of approximately six months, which focused on handling waste responsibly, and advocated how small changes made by individual staff could add up towards making a big difference to the organisation's overall recycling performance. A highlight of this campaign was the launch of a call-to-action video "Act Green", in which the senior management offered recycling tips. This campaign also rolled out a series of screensavers, eye-catching posters, intranet articles and e-reminders, emphasising actions to help minimise waste and increase recycling.



The short video "Act Green"



Screensaver series

At the end of 2024, a survey was conducted to better understand HKMA's staff sustainability awareness and gather their views on proposed green office measures. The findings helped to inform future sustainability training agendas and waste management strategies.

Catalysing the low-carbon transition

As Hong Kong's central banking institution, the HKMA sees itself as a change agent, taking the lead in fuelling the low-carbon transition and driving sustainability practices in the financial industry and the community.

Bolstering electronic submissions and communications

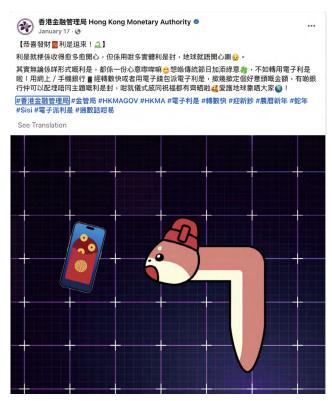
The HKMA has launched several initiatives to enhance the efficiency of its external processes. Following successful launch of the Common Submission Platform (CSP) in 2023, the HKMA extended this service in 2024 to include non-banking institutions, such as stored value facilities (SVFs), for certain regulatory data submissions. This CSP expansion aims to further streamline the submission process for reporting organisations, providing a more seamless experience for all users, while reinforcing the HKMA's commitment to sustainability.

Other new initiatives introduced in 2024 included the SurveyTool, which helps to simplify the submission process for banks' responses to surveys initiated by the HKMA, and the Smart Knowledge and Document Management System (SKDMS), a centralised platform that provides users with advanced searching capabilities for banking documents.

Advocating 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 SVFs. More information about FPS and SVFs can be found in the *International Financial Centre* chapter of the *Annual Report 2024*.

Since 2021, the HKMA has been promoting electronic lai sees (e-laisees), an environmentally friendly practice that reduces the use of physical red packets and banknotes. In the run-up to the 2025 Chinese New Year, the HKMA produced an animation video and leveraged various social media platforms to publicise e-laisees. In parallel, major banks and electronic payment operators launched their own campaigns to encourage giving e-laisees.



The HKMA promotes e-laisees on social media

Promoting good-as-new banknotes

The HKMA continued to encourage the public to use good-as-new banknotes, which are used banknotes in good condition, rather than new banknotes for lai see. Using 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.

Recycling metal coins unfit for recirculation

On some occasions, Hong Kong circulation coins returned to the Government Vault are not suitable for recirculation. In such cases, the HKMA engages a smelter or a mint to recycle coinage scraps and retrieve the residual value from the associated scrap metals. In 2024, scrap metals worth around HK\$14 million were retrieved from 62.4 million pieces (or 250 tonnes) of such coins, and the recycled value was credited to the Exchange Fund.

Collecting coins for recirculation

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.



- ► Served > 1.3 million people
- ► Collected > 1 billion coins with a total face value of over HK\$ 1.6 billion
- \blacktriangleright 82% of users in 2024 digitalised some or all of their coin values by topping up their SVF accounts

Small change, big impact

As e-wallets and other electronic payment methods are becoming more popular, demand for using coins to pay transport fares or making small-value purchases has greatly decreased. As a result, some Hong Kong people simply accumulate their spare coins at home.

Service at your doorstep

Introduced in October 2014, the HKMA's Coin Collection Programme, where two Coin Carts go around the city on a rotational basis, lets the general public cash in their coins for free. It is the first initiative of its kind globally, and it serves a dual purpose – public servicing and environmental protection. As the coins collected can be recirculated to meet public demand, this initiative helps to significantly reduce the need for minting new coins. Indeed, had the HKMA not collected over a billion coins for recirculation since inception of the programme, it would have cost as much as HK\$698 million to mint a similar quantity of new coins for public use.

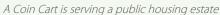
The Coin Collection Programme was initially launched in 2014 as a pilot scheme for two years till 2016. It was then extended for another two years, and has become an ongoing service since 2018.

Each Coin Cart is converted from a 10-ton truck chassis and equipped with quality security devices. The exterior is based on the design created by the champion, out of 840 entries submitted by secondary school students, in the 2013 "Mobile Coin Collection Kiosk" Design Competition. There are two high-speed counting machines on each Coin Cart, which can sum up the values of the coins rapidly and efficiently.



Members of the public trying out the new service at the inception of the Coin Collection Programme in 2014









Coin counting machine on a Coin Cart

Small change, big impact

The operation is environment-friendly too. The Coin Carts are parked at locations that have suitable power supply facilities where possible, reducing the need for using their own stand-by generators. In addition, their interior structures allow ample natural light to come in to minimise electricity use.

Over the years, this programme has won many awards in recognition of its innovative and green approach. In particular, in 2015, the International Association of Currency Affairs commended it as a creative solution to stop coin hoarding, and awarded it the "Best New Coin Innovation".



An electrical wheelchair lift is available for use by those physically challenged

2023

A decade of progress Oct 2013 The 26th International "Mobile Coin Collection Galaxy Awards Silver Winner 2015 Kiosk" Design 22 Oct 2015 Competition targeting Awarded the "Best New secondary school Coin Innovation by the students in Hong Kong IDA Design Awards International Association of 2017 Gold Winner Currency Affairs at the Annual 2013 Coin Conference in Madrid 2017

2014

19 Sep 2014 Coin Collection Programme Launching Ceremony

6 Oct 2014

Two Coin Carts started visiting various districts on a rotational basis to collect coins from the public

22 June 2016

2016

7 Nov 2015

flag day for NGOs

First collaboration with the

Hong Kong Council of Social

Service to collect coins on a

July 2016

2016 Hong Kong Designers Association Global Design Awards Silver Winner

First school visit to host

educational activity

2018

10 April 2018 New top up service accepting e-wallets

April 2018

A Design Award & Competition Certificate of Excellence

Dec 2022

2022

MUSE Design Awards

2020 Gold Winner

2020

Coin Carts location uploaded to the Government's Common Spatial Data Infrastructure

2H 2024

Upgraded coin

5 Dec 2023

sorting machines

Coin Cart Limited

Edition Miniature Model Charity Sale

> Upgraded security device and introduced a customer service survey pad on each Coin Cart

Small change, big impact

In its early years of operation, it was not uncommon to see newsstand operators and minibus drivers bringing in heavy bags of coins for exchange. Today, the service remains popular, frequented by wet market merchants and store cashiers. The public can easily check the Coin Carts' rotational schedule on the HKMA's website or the Government's Common Spatial Data Infrastructure portal²¹.



Information about the Coin Collection Programme, including the service schedule, is available on the HKMA website



School children visit the Coin Cart to experience coin collection

Apart from regular services, the Coin Carts, in collaboration with the Hong Kong Council of Social Service, collect coins on flag days for NGOs, and visit schools periodically to host educational activities.

People

As a responsible and caring employer, the HKMA continuously invests in the physical and mental wellness of its staff, fosters a diverse and inclusive culture, and enhances its people policies.

Building a healthy workplace

The HKMA provides a quality work environment for its staff. The office adopts an open layout that increases capacity and space efficiency. Measures to improve staff health and productivity, such as height-adjustable desks, ergonomic chairs and eye-protection monitor screens, are implemented. Office hygiene is always maintained at the highest standards.

In addition, the HKMA has embraced the agile office concept in specific areas, where there are flexible seating arrangements and collaboration areas to foster a positive work environment, and noise-cancelling booths for holding virtual meetings that obviate the need for air travel in some instances. Furthermore, in support of the breastfeeding-friendly workplace initiative, a mother's care room has been set up for post-natal female staff.

Enhancing wellness and development

The HKMA continued to enhance staff wellness through a series of accessible initiatives.

As part of the competitive remuneration package, fringe benefits comprising medical, dental and well-being benefits, such as regular medical check-ups, flu vaccinations, are also offered to staff and eligible family members. In support of a family friendly environment, the HKMA introduced marriage and compassionate leave for staff in 2024. They can also access external counselling services sponsored by the HKMA. These services offer professional and confidential counselling support via a consultation hotline, face-to-face interviews or clinical psychology services. During 2024, there were also health talks, stress management workshops, sports practices and Fruit Mondays, aiming to encourage a healthier lifestyle.

Separately, the flexible working arrangement, introduced in 2023, provides staff with the flexibility to work-from-home up to one day per week, subject to approval and operational needs

On professional and career development, the HKMA continued to strengthen the talent pipeline across all levels, including leadership and trainee programmes for nurturing well-rounded future leaders. With an organisation-wide focus on continuous learning, a comprehensive learning curriculum, covering a wide range of topics, such as financial market developments, communication and management skills, are available all-year around, equipping staff with the knowledge and skills they need to advance their careers. In 2024, staff across the organisation took part in various courses, completing 4.2 training days per staff.

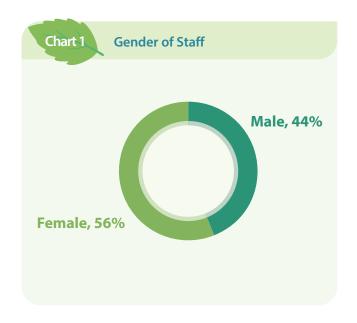
More details about the HKMA's staff remuneration and development initiatives are given in the *Corporate Functions* chapter of the *Annual Report 2024*.

Embracing fairness and diversity

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.

The HKMA values diversity in its workforce, which has a balanced gender representation and covers a spectrum of different age groups (see Charts 1 and 2). Female representation at the rank of Executive Director or above was 26.7% as of January 2025.

Key human capital statistics as of 1 January 2025





Strengthening communication and dialogue

The HKMA emphasises effective communication within the organisation.

Two staff consultative committees are in place to facilitate regular, open and productive dialogue between the staff and the management. They are the HKMA Staff Consultative Committee, which consults staff on policy matters and

subjects of common interest; and the Consultative Committee on Provident Fund Schemes for Staff of the HKMA, which focuses on retirement fund issues. Both committees consist of representatives from different departments and ranks.

There are regular all-staff communications at town hall meetings, where the Chief Executive and the three Deputy Chief Executives update strategic priorities as well as upcoming plans and initiatives.





Town hall meeting

The Corporate Portal is an e-hub designed to promote staff connectivity. There are regular postings of divisional news and in-house events. It is also a self-service platform for easy retrieval of useful information, such as workflows, internal policies and guidelines.

In addition, a suggestion box is available for staff to share their views and ideas. Surveys are also conducted periodically to collect staff's views on their work and career development in the HKMA, and various aspects including bonding activities and expectations on environmental sustainability matters.

Staff also have many opportunities to mingle and network. They can join in-house engagement activities, such as Sharing Circles, Friday Recreation Room, or participate in inter-organisational tournaments and races which also promote team bonding.



Friday Recreation Room



Tea appreciation session, a "Sharing Circles" activity



Dragon Boat Race



The HKMA's Acapella Singing Group



Basketball Supervisory Cup 2024



Social responsibility

Deeply connected to the local community, the HKMA is committed to fulfilling its corporate social responsibility through employee volunteering, charitable donations and community partnerships. The HKMA also collaborates with the financial industry and other financial regulators to champion and strengthen financial literacy and promote financial inclusion.

Serving the community

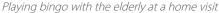
The HKMA encourages its staff and family members to take part in community services and support fundraising events. A cross-departmental working group, the Committee on Volunteering Services, plans wide-ranging volunteering activities involving elderly care, social inclusion and environmental conservation.

In 2024, 298 HKMA staff volunteers, alumni and their family members contributed 650 volunteering hours of their own time to 53 projects and programmes in the community. Ten staff members with the highest annual volunteering hours received the Volunteer Recognition Awards in appreciation of their dedication. Additionally, staff supported community services through donations to large-scale fundraising events organised by the Community Chest and Youth Outreach.



The organisation-wide volunteering efforts were recognised with a Certificate of Appreciation, non-commercial organisation category, in the Home and Youth Affairs Bureau and Agency for Volunteer Service's Hong Kong Volunteer Award 2024.







Sorting food for charity deliveries

The HKMA's first Community Month themed "Giving, Sharing and Caring" took place in the summer of 2024, with the aim of building a more inclusive and caring community together. Staff volunteers and their family members participated in 18 volunteering activities, covering visits to the elderly community, raising funds for charity and promoting environmental protection. The popular Young Volunteer Programme, which formed part of this campaign, admitted children aged three to 13 to the HKMA's community work along with their parents. For instance, in a food repurposing activity, young children, and their parents, helped to sort food at a food bank's warehouse, thereby raising their awareness towards food waste and its connection to hunger.

Separately, donating used items to charities helps Hong Kong's people in need and lessens waste in landfills. Every year, the HKMA donates old office computers and collects pre-owned books and surplus food from staff for donation to grassroots families.

Engaging social enterprises

The HKMA seeks to engage with social enterprises by including them on its list of local vendors, empowering people with different abilities and advancing social inclusion. In 2024, the HKMA engaged with various social enterprises to provide goods and services, such as hosting upcycling workshops, running pop-up refreshment kiosks, and offering catering services. Two social enterprises were also invited to showcase their meaningful work at an HKMA's in-house event, helping them to connect to a wider audience.



Gingko House runs a pop-up kiosk inside Hub 55



Christian Family Service Centre explains its multi-services at an HKMA in-house event

Practising sustainable procurement

Apart from purchasing green goods and services, where available, another key guiding principle in the HKMA's procurement practice is to source goods and services from suppliers that uphold sustainability values. To this end, sustainability factors are incorporated into the supplier selection criteria, including consideration of a supplier's track record in complying with labour, health and safety regulations, and the working conditions and remuneration for non-skilled labours.

Enhancing accessibility

The HKMA has been working proactively on initiatives to address the needs of specific groups.

Incorporating special features in Hong Kong banknotes

The HKMA is committed to helping 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

Maintaining comprehensive online information

The HKMA's website adopts a clear navigation structure, and the public can easily search for up-to-date information about the HKMA's work and regulations. There is also a dedicated webpage "Information in Other Languages" under the "Smart Consumers" section, which provides useful information about banking services in multiple languages commonly used in Hong Kong²². Moreover, the HKMA 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, facilitating people with specific needs to access its online information.

²²

Heightening public vigilance against financial scams

Combatting financial scams is a priority at the HKMA. The popularity of social media platforms and the rise in online transactions have, however, increased cases of phishing scams and other digital financial frauds in Hong Kong and globally. To this end, in 2024, the HKMA stepped up its anti-scam efforts through multiple touchpoints, helping people recognise, prevent and report these financial scams and frauds.

Launching cross-media publicity campaign

In 2024, the HKMA featured a new round of anti-scam campaign and collaborated with various authorities and the financial services industry to convey clear and effective messages to a broad public audience.

To caution the public about the risks of clicking on suspicious links indiscriminately, the HKMA launched a Cantonese anti-scam song "Don't Click Links Indiscriminately", sung by Mr Wan Kwong, a renowned singer, and Mr Arthur Yuen, Deputy Chief Executive. The song, and the respective music video, were broadcast on multiple channels, spanning television, radio, cinema, mobile apps, social media platforms, outdoor billboards and MTR trackside and in-train TV panels, which together with advertisements on bus bodies, reached out to the public across multiple different demographics. The HKMA's expanded education efforts were recognised with an international marketing award.

In addition, in 2024, the HKMA reached out to diverse audiences via its various social media platforms, keeping the public informed about the common tactics used by scammers, such as impersonation, deepfakes, fake apps and platforms, while also providing practical tips to avoid falling victim. This comprehensive, proactive approach ensured that vital information on preventing financial loss was accessible to all segments of the community, fostering greater awareness and understanding.



The music video highlights the importance of safeguarding personal data, bank account and credit card information

Heightening public vigilance against financial scams



HKMA's 2024 anti-scam awareness campaign won an esteemed international marketing award



Alerting the public of financial scams via the HKMA's multiple social media platforms

受害人不虞有诈便立即转账。

Heightening public vigilance against financial scams

Inaugurating Anti-Scam Consumer Protection Charter 2.0

The HKMA, in collaboration with the Hong Kong Association of Banks (HKAB), launched the Anti-Scam Consumer Protection Charter 2.0 in April to step up efforts to combat fraudulent hyperlinks. The Charter 2.0 received full support of the Airport Authority, the Consumer Council, the Hong Kong Police Force, the Insurance Authority, the Mandatory Provident Fund (MPF) Schemes Authority, the Securities and Futures Commission and the Travel Industry Authority. Over 230 financial institutions and merchant institutions have participated in the Charter 2.0, covering different sectors (including banking, insurance, MPF, securities and futures industries, as well as food and beverage, logistics, transport, travel, and retail sectors). Under the Charter, participating institutions commit not to send



With the support of the Airport Authority, the Consumer Council, the Hong Kong Police Force, the Insurance Authority, the Mandatory Provident Fund Schemes Authority, the Securities and Futures Commission and the Travel Industry Authority, the HKMA and HKAB jointly launched the Anti-Scam Consumer Protection Charter 2.0 to raise public awareness on safeguarding payment card and other key personal information

customers any instant electronic messages (e.g. SMS, WhatsApp, WeChat) with embedded hyperlinks to acquire bank, credit card, investment, insurance and MPF account or other key personal data online. Participating institutions also undertook to provide appropriate channels for customers to verify the authenticity of messages, enhance staff training to fulfil the Charter 2.0 commitment, and handle customer enquiries effectively.

Supporting industry-led initiatives

Furthermore, the HKMA strongly supported the anti-fraud and anti-scam activities run by the banking industry to promote fraud and scam prevention messages to different target groups of the public.



Mr Arthur Yuen, Deputy Chief Executive, interacts with participating senior citizens at a bank's anti-fraud-and-scam event



Mr Arthur Yuen, Deputy Chief Executive (fourth from right), participates in a bank's anti-fraud concert, leveraging the power of music to enhance community vigilance against financial scams

Furthering financial literacy

As an advocate and champion of financial literacy, the HKMA develops a multitude of initiatives to deliver pertinent financial education information and nurture good financial management habits.

To use more interactive means to reach out to teenagers, the HKMA, the Education Bureau and other stakeholders have been running the "Hong Kong Financial Literacy Championship" competition, which targets secondary school students, for 10 years since the academic year 2014/15.

While the competition started off as a simple online quiz about money management concepts, it has evolved over the years and has since become an annual flagship financial education activity on Hong Kong's secondary school calendar. Today, the competition not only features an online quiz, but also

includes the "Young Financial Talent Runway", an engaging activity where students are paired with seasoned mentors to learn about the latest development of the financial market and prepare for the design thinking challenge. Throughout the process, students receive training and guidance on ideation, business planning, marketing strategies, pitching skills and integration of technological innovation in finance from their mentors. To mark the 10th anniversary of the Championship, a special "Greater Bay Area (GBA) Invitational Match" was added in 2024, enabling students to build wider connections across the GBA.

Over the 10-year period from 2015 to 2024, the online quiz of the Championship recorded around 125,000 submissions from 440 secondary schools, and more than 90% of the secondary schools in Hong Kong had joined the Championship.







Evolution of the Championship's programme design over the past decade





The "GBA Invitational Match" enhances interaction among students in Hong Kong, Macau and other cities in the GBA

In addition, promotion of the award-winning educational board game "\$mart Money Management 321" continued throughout 2024. Kids and parents tried the board game during workshops at schools, community centres and the HKMA premises, and the game counter inside the HKMA's booth at the Hong Kong Book Fair 2024.

The HKMA also proudly collaborated with the Education Bureau to organise train-the-trainer workshops to encourage secondary school teachers to use the board game to convey money management concepts covered in the financial education module of the new subject "Citizenship, Economics and Society", targeted for implementation in the academic year 2024/25.



Engaged visitors playing at the HKMA's booth while learning money management concepts at the Book Fair 2024



Secondary school teachers experiencing the board game at a train-the-trainer workshop







The financial education board game workshops attracted over 3,600 participants in 2024

In another 2024 focus, the HKMA actively promoted green and sustainable finance in Asia and beyond through various initiatives, including the Hong Kong Taxonomy for Sustainable Finance, the Action Agenda, and key events such as the Hong Kong Green Week – Finance Stream and the HKMA-DFSA²³ Joint Climate Finance Conference. Through collaborative efforts with the Government, peer regulators, the financial industry, and the media, the HKMA leveraged traditional and social media platforms to successfully disseminate information about these latest developments in sustainability. The information was presented in a straightforward and easily understandable manner, to a broad audience, promoting a deeper understanding of the subject among both industry practitioners and the general public.



Social media posts on the HKMA's green and sustainable finance initiatives

As a further step to help the younger generation cultivate a green mindset, the HKMA designed the first board game with a green finance theme in Hong Kong, unveiling it at the Hong Kong Book Fair 2024. This strategy game "企業綠化大變身²⁴" aims to teach children players how to obtain green financing to transform brown industries into low-carbon emitters.



Hong Kong's first educational board game on green finance



Children trying out the new green finance board game at the Hong Kong Book Fair 2024

More details about the HKMA's financial consumer education work can be found in the *Corporate Functions* chapter of the *Annual Report 2024*.

The Dubai Financial Services Authority.

The Chinese title of the game literally translates into corporates in greening transformation.

Empowering vulnerable groups

In December, the HKMA issued guidance to banks to introduce Money Safe (MS), as an additional initiative for bank customers to protect themselves from financial scams and frauds. Under the MS arrangement, customers could protect a portion of their bank deposits from fund outflows, and stringent anti-fraud-and-scam focused verification with the customers will be performed by the banks before releasing the protected funds. This extra layer of security would be particularly useful for vulnerable groups, such as elderly and students, in protecting their deposits from financial scams and fraud.

Promoting financial inclusion

The HKMA has been actively encouraging the banking industry to continue enhancing access to banking services through both conventional and innovative means. The HKMA has also encouraged banks to put in place appropriate measures for customers in need to provide better customer experience, taking into account the banking needs and expectations of the community.

Separately, the HKMA has partnered with the Consumer Council to undertake a consumer education initiative, which involves the development of interactive virtual reality (VR) games designed to strengthen the financial literacy of vulnerable customers, including persons with intellectual disabilities and the senior citizens. This initiative aims to raise their awareness on the proper use of banking services and to empower vulnerable customers' capability in guarding against financial scams. Specifically, an online role-playing programme was launched jointly by the HKMA and the Consumer Council in December to educate the public on how to use credit cards responsibly.



Mr Arthur Yuen (fourth from right), Deputy Chief Executive and Mr Alan Au (third from left), Executive Director (Banking Conduct) at the Financial Inclusion







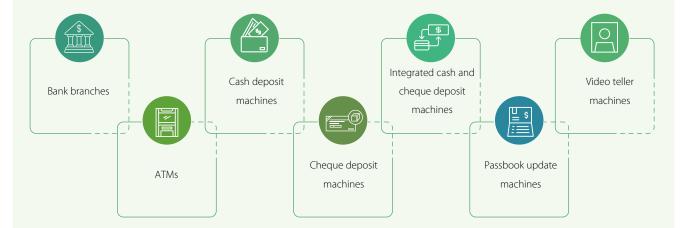






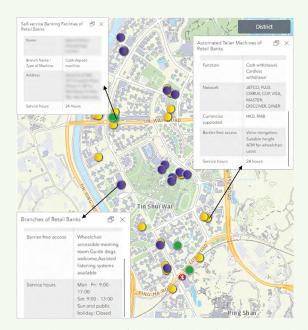
Accessing information of physical banking facilities

In 2024, the HKMA further expanded its open data inventory of physical banking facilities to also include the five types of self-service machines (SSMs) for public use. There are currently a total of three datasets published on the HKMA's website, providing information about physical branches, automated teller machines (ATMs) and other types of SSMs, from 20 retail banks in Hong Kong. Wide-ranging information is available for open access, such as the locations, service hours, barrier-free measures of physical banking facilities, and the currencies available for both deposits and withdrawals through the ATMs. The information is also shown on an interactive digital map for the convenience of the public.





Locations of retail banks' SSMs can now be searched online by the public, in addition to branches and ATMs



Open data inventory of physical banking facilities is enriched

Broadening support for corporates

The HKMA and HKMC Insurance Limited (HKMCI)²⁵ have been maintaining a close dialogue with the banking and commercial sectors to better understand the operating environment and financing needs of corporates, in particular the small and medium-sized enterprises (SMEs), and provide appropriate assistance to them in a timely manner.

Launching measures to support SMEs

In March, the HKMA and the Banking Sector SME Lending Coordination Mechanism introduced nine measures to assist SMEs in obtaining financing from banks and to support their continuous development. Banks committed to being sympathetic and offering suitable assistance under the overarching principle of prudent risk management, including not to demand early repayments from mortgage customers paying on schedule; not to adjust a credit limit merely due to a decline in collateral value; to give a transition period of at least six months for cases warranting adjustment of credit limits; and to provide credit reliefs, such as partial principal repayment or even principal moratorium, to SMEs still facing challenges. To further support SMEs' development, upgrade and transformation, the HKMA and the banking sector introduced five additional measures in October. These include, among others, banks setting aside a total of over HK\$370 billion of dedicated funds to support SMEs.

>31,000 SMEs have benefitted from the March 2024 announcement of nine SME support measures up to end-2024, involving an aggregate credit limit of over HK\$73 billion

Updating the SME Financing Guarantee Scheme

Operated by the HKMCI, the SME Financing Guarantee Scheme (SFGS) covers the 80% and 90% Guarantee Products, and the Special 100% Loan Guarantee, which was introduced in response to the COVID-19 outbreak. With the Hong Kong economy returning to normalcy after the pandemic, the Special 100% Loan Guarantee has fulfilled its purpose, and its application period expired at end-March 2024. Over 67,000 applications for loans amounting to HK\$143.7 billion have been approved to benefit around 40,000 local SMEs and 400,000 related employees. Meanwhile, the application period of the 80% and 90% Guarantee Products has been extended to end-March 2026.

In October 2024, the Government announced enhancements to the SFGS, aimed at alleviating the repayment pressure on borrowing enterprises, thus helping them address challenges encountered during economic restructuring. First, borrowing enterprises may apply for principal moratorium for up to 12 months in respect of both existing and new loans. Secondly, the maximum loan guarantee periods of the 80% and 90% Guarantee Products have been extended to ten years and eight years respectively. Thirdly, partial principal repayment options are offered to new loans under the two guarantee products.

>109,000 applications for the SFGS approved as at end-2024, totalling HK\$288.5 billion

Executing the Dedicated 100% Loan Guarantee Schemes

In 2023, the HKMCI introduced the Dedicated 100% Loan Guarantee Schemes (DLGS) for the travel sector and the cross-boundary passenger transport trade to support resumption of their business and services, as well as for the taxi trade to provide an incentive for taxi owners to replace their liquefied petroleum gas, petrol or hybrid taxis with battery electric taxis.

The DLGS for Travel Sector assisted 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, to keep up with the pace of resumption of inbound and outbound tourism activities. The DLGS for Cross-boundary Passenger Transport Trade allowed 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. The application period of these two schemes ended in October 2024.

Promoting the use of battery electric taxis is one of the Government's measures to develop green transport, which helps achieve the carbon neutrality target of Hong Kong. The application period of the DLGS for Battery Electric Taxis will last for five years till early September 2028.

>220 applications with a total loan amount of HK\$224.4 million approved for the DLGS for the travel sector and the cross-boundary passenger transport trade as at end-2024, while >100 applications amounting to HK\$36.3 million approved for the DLGS for Battery Electric Taxis

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

Issuing social bonds

In October 2024, the HKMC successfully issued its third tranche of social bonds of around HK\$23.8 billion equivalent, under its Social, Green and Sustainability Financing Framework. The issuance marked the largest social bond issuance in Asia Pacific, breaking the HKMC's September 2023 record when it launched its second tranche of social bonds of close to HK\$20 billion equivalent. 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

Action Agenda Sustainable Finance Action Agenda
Basel Committee Basel Committee on Banking Supervision

CASG Green and Sustainable Finance Cross-Agency Steering Group

CEO Chief Executive Officer
COVID-19 Coronavirus disease 2019
CSO Chief Strategy Officer

ECF-GSF Enhanced Competency Framework on Green and Sustainable Finance

EFIO Exchange Fund Investment Office
ESG Environmental, social and governance

GHG Greenhouse gas
GPs General partners

GSBP Government Sustainable Bond Programme

GSS Green, social and sustainability

GSSC Green and Sustainability Steering Committee

HKIB Hong Kong Institute of BankersHKMA Hong Kong Monetary Authority

HKMC Hong Kong Mortgage Corporation Limited
HKQAA Hong Kong Quality Assurance Agency
IFC International Finance Corporation

IFRS International Financial Reporting Standards

IP Investment Portfolio

ISSB Standards International Financial Reporting Standards – Sustainability Disclosure Standards

Kg Kilogram

LTGP Long-Term Growth Portfolio

NGFS Network of Central Banks and Supervisors for Greening the Financial System

PRI Principles for Responsible Investment

RI Responsible investment

RMB Renminbi

SEC Securities and Futures Commission

SFGS Small and medium-sized enterprise Financing Guarantee Scheme

Sustainable Investing

SMEs Small and medium-sized enterprises

SVF Stored value facility

tCO₂**e** Tonnes of carbon dioxide equivalent 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 ("The Data") of the Hong Kong Monetary Authority ("HKMA"). The Data included the energy consumption, scope 1 and scope 2 greenhouse gas ("GHG") emissions, paper consumption, non-hazardous waste generated (covering general waste disposed to landfills and recyclable waste), and emissions from business air travel, for the year of 2024, as well as their intensities. In addition, the Data also included Scope 3 GHG emission and their intensities from purchased goods and services, capital goods, fuel-and energy-related activities, non-hazardous waste generated (covering general waste disposed to landfills and recyclable waste) and employee commuting for the year 2023 and 2024. 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 scope included six offices and warehouses assets, which are the five offices located respectively at 1) Two International Finance Centre, 2) Hopewell Centre, 3) One Pacific Place, 4) Kowloon Commerce Centre, 5) The International Commerce Centre, and the warehouse at 6) 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 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 six 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 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 Data preparation process.

Conclusion

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

- The 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 Head of Audit

Hong Kong Quality Assurance Agency

March 2025



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