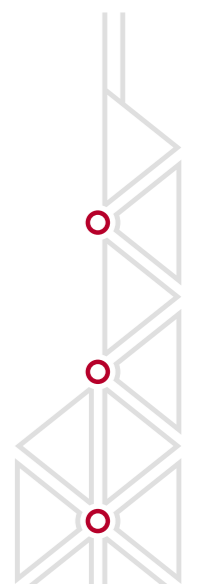


Climate-related Financial Disclosures Report 2022



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ABOUT THIS REPORT

Reporting boundary

The Report provides an overview of the climate risk and opportunity management and performance of BOC Hong Kong (Holdings) Limited (“the Company”) and its subsidiaries (“the Group”), including its principal operating subsidiary Bank of China (Hong Kong) Limited (“BOCHK”), during 2022. It covers the Group’s climate-related financial disclosures, including the Group’s climate-related governance, strategy, risk management, and metrics and targets.

To fully understand the Group’s sustainability and climate-related risk and opportunity management visions, latest measures and performances, we recommend reading this Report along with the Group’s *Annual Report 2022*, *Sustainability Report 2022*, *the Sustainability section of BOCHK’s website*, and *BOCHK’s sustainability-related policies* provided on our website.

Unless stated otherwise, the information and data disclosed in this Report covers the period from 1 January to 31 December 2022.

Preparation of the report

The Report has been prepared with reference to the following disclosure frameworks and requirements:

- Recommendations of the Task Force on Climate-related Financial Disclosures (“TCFD Recommendations”)
- Disclosure requirements of the Hong Kong Monetary Authority (“HKMA”)’s Supervisory Policy Manual (“SPM”) module GS-1 “Climate Risk Management”

Your valued feedback

If you have any comments or suggestions regarding this Report or our sustainability initiatives, you are welcome to send us an online feedback form or contact us through the following email addresses:

- Sustainability Strategy Team (Email: esg@bochk.com)
- Investor Relations Division (Email: investor_relations@bochk.com)

PREFACE

While climate change and human activities have led to more frequent occurrences of extreme weather events, resulting in amplified catastrophe losses and impacts, global climate governance efforts have made strides vigorously amidst challenges in 2022. In addressing global climate change, countries have reached consensus and gathered collaborative support to translate visions into actions, bestowing the future with a hopeful prospect.

As one of the parties to the Paris Agreement, China has earnestly fulfilled its commitments and continuously driven the construction of ecological civilisation. In 2022, the nation further proposed to mobilise green development and promote the harmonious coexistence of human and nature. The notions of respecting, accommodating, and protecting nature have become the inherent requirements to build a modern socialist country in all respects. As one of the world's leading international financial centres, Hong Kong has the first-mover advantage and comparative advantages in green finance. Under the joint efforts of regulators, policymakers and market stakeholders, Hong Kong has gradually established its position as a regional green finance hub in recent years, striving to become an international green finance centre.

We actively support the decisions and strategic deployment of our Parent Bank, Bank of China, and the Board. Adhering to the positions of “supporting clients’ transition to low-carbon economy” and “cultivating regional green finance capabilities”, we continue to drive development in green and sustainable finance. We have systematically incorporated the concept of low-carbon green development into our daily management and business operations. Through a series of measures such as energy efficiency enhancement and consumption reduction, we are reducing greenhouse gas emissions generated by our own operations in an orderly manner, with the aim of achieving carbon neutrality in our own operation by 2030.

Promoting green governance in line with sustainable development. With the fundamental principle of promoting green development of our own activities, the economy and society, we continue to optimise the Group’s governance system and modernise governance capabilities. In 2019, we established a three-tier sustainability governance structure, and established the Sustainability Committee and the Sustainability Executive Committee at the Board level and Management level, respectively, to implement specific tasks related to green development.

Establishing a climate risk analysis framework and integrating it into the overall risk management system.

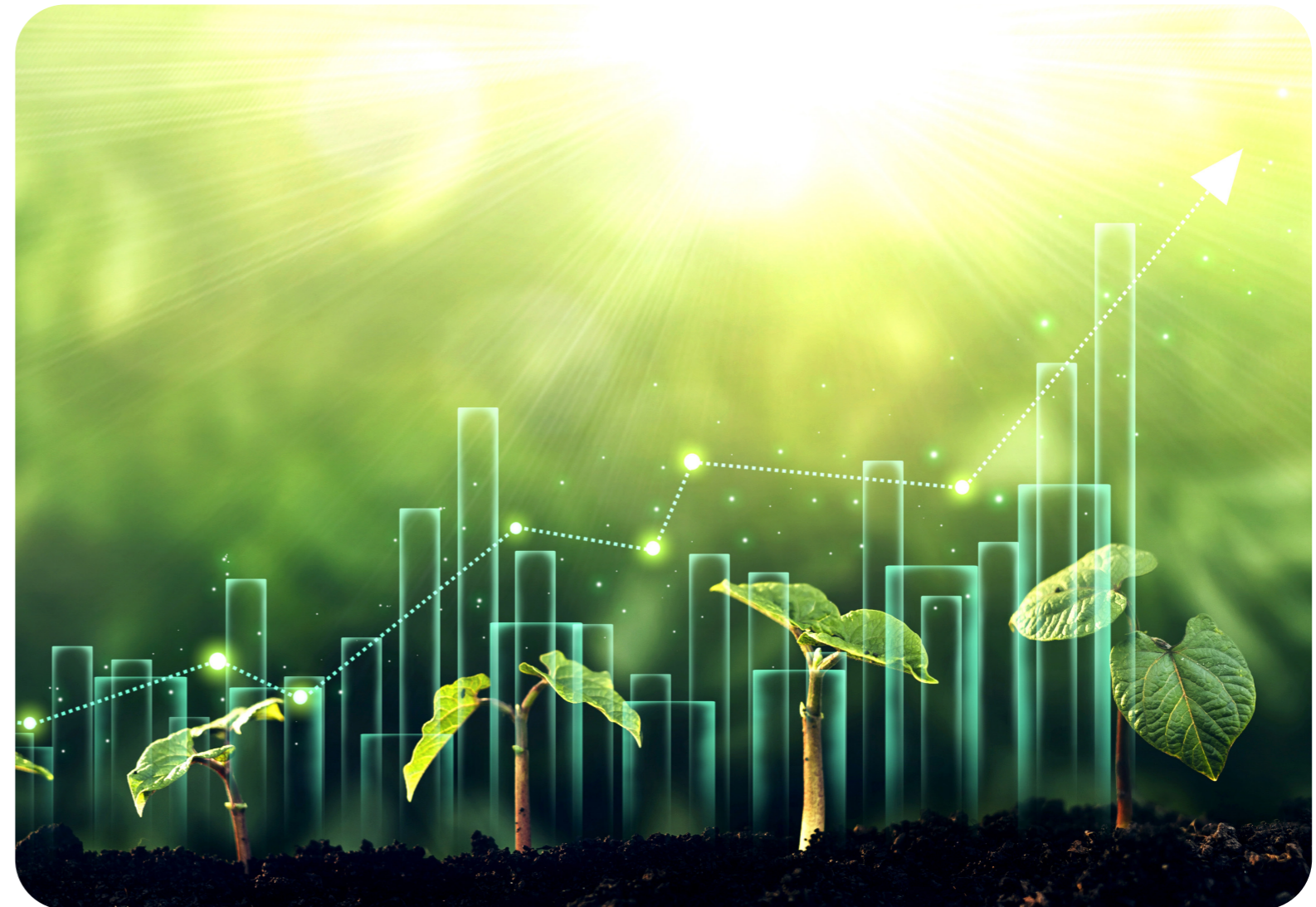
We incorporated sustainability as one of the Group’s major risk management principles, and integrated climate risk management into the overall risk management system. The Risk Committee, which reports to the Board, oversees the Group’s risk management in relation to green and sustainable development. By identifying, assessing, monitoring, reporting and managing climate-related risks on a scientific and systematic basis, we continuously enhance our climate risk management to ensure that climate risk is consistent with overall goals and within risk tolerance levels. The Risk Committee and Sustainability Committee work co-ordinately to lead the Group’s climate related development.

Innovating green finance products and services to facilitate holistic low-carbon transition and capture climate opportunities. Embracing a strategic approach to green and sustainable finance, we continuously innovate green and sustainable finance products to support customers in their low-carbon transition and to seize climate opportunities. BOCHK has launched several pioneering green finance products in Hong Kong, with continued growth in product scales. In 2022, BOCHK and S&P Dow Jones Indices jointly launched the first climate transition index focusing listed companies in the Guangdong-Hong Kong-Macao Greater Bay Area, namely the “S&P BOCHK China Hong Kong Greater Bay Area Net Zero 2050 Climate Transition Index”, providing strong support to achieve the nation’s dual carbon goals and the Hong Kong’s Climate Action Plan 2050.

Responding to the evolving landscape and demonstrating distinctive ESG practices.

The concept of ESG has been widely adopted globally, and the Group has continuously improved ESG performances, garnering recognition from stakeholders and the international community. We have attained the highest AAA rating for two consecutive years from MSCI ESG Research LLC, which places us as the highest-rated bank among peers in Hong Kong. As the first and only Chinese financial institution invited by the International Finance Corporation (IFC) and the Hong Kong Monetary Authority, we have become a cornerstone member of the Alliance for Green Commercial Banks in 2022. We are also among the first members of the Hong Kong International Carbon Market Council established by the Hong Kong Exchanges and Clearing Limited (HKEX), as well as one of the first batch of market participants in Core Climate, an international carbon marketplace of the HKEX, signifying our shared pursuit for development opportunities in the regional carbon market.

Green and sustainable finance has entered a critical phase fraught with tough challenges and has risen from paradigm shifts to changes in strategies and business and operating models. In the future, the Group will continue to promote green and sustainable development through finance and support low-carbon transition across industries through financial product innovation and service upgrade. We will staunchly promote high-quality development, continuously optimise and improve the organisational structure, policies and measures, and product and service frameworks of green finance, as well as enhance the level of disclosures aligning with international standards. We will contribute our wisdom and strength to promoting Hong Kong and the nation to achieve the dual carbon goals.





1 GOVERNANCE

Robust governance in managing climate-related opportunities and risks provides a solid foundation and gives direction for our sustainable growth. In recent years, stakeholders, including investors, have become increasingly concerned about the role of the Board and management of the Group in overseeing and managing climate-related issues. We have therefore established a comprehensive framework in response to climate change. For climate-related opportunities, the three-tier sustainability governance structure (Board level, Management level and Working level) ensures across-the-board implementation of sustainability goals and actions, and effective communication throughout the Group. Regarding climate-related risks, the Risk Committee has full leadership and oversight over the integration of climate risks into the Group's "Three Lines of Defence", ensuring that climate risks are systematically identified, analysed, and managed in the Group's governance and strategy execution.

1.1 GOVERNANCE STRUCTURE

In managing climate-related opportunities, the Group has elevated sustainability to a long-term strategy. Over the past decade, the Group has established and continuously enhanced our governance structure to promote and implement all aspects of sustainability in a comprehensive and coordinated manner across the Bank. **In managing climate-related risks**, we have holistically incorporated climate risk into the Group’s comprehensive risk management system, with the Risk Committee overseeing climate risk-related management initiatives.

The Board places high importance on sustainability and climate-related opportunity and risk management. The Board, with the support of the Risk Committee and Sustainability Committee, establishes strategies and guidelines for managing issues related to climate change, reviews and approves the Group’s sustainability objectives and related risks, with particular focus on the climate risk management objectives, and oversees the Group’s sustainability performance and progress.

Climate Risk Management		Climate-related Opportunity Management	
Main Responsibilities	Risk Management Structure	Three-Tier Sustainability Governance Structure	Main Responsibilities
Board Level			
<ul style="list-style-type: none"> Monitoring all types of risks, approving high-level risk policies and material exposures or transactions Monitoring the Group’s sustainability-related risk management, particularly the resilience against climate risk 	Risk Committee	Sustainability Committee	<ul style="list-style-type: none"> Responsible for approving the Group’s sustainability strategy, objectives, and priorities Overseeing the sustainability progress of the Group Deciding on key climate-related issues, regulations, and applicable scope Determining the scope of disclosure related to appropriate climate-related opportunities Promoting a bank culture that embraces sustainability
Management Level			
<ul style="list-style-type: none"> Overseeing the Group’s sustainability-related risk management Managing all types of the Group’s risks, approving risk management policies, and approving significant exposures or transactions within the scope of the delegated authority 	Chief Executive and Responsible Senior Management	The Sustainability Executive Committee	<ul style="list-style-type: none"> Formulating and implementing the Group’s sustainability strategy Reporting regularly to the Sustainability Committee on climate-related issues and progress Encouraging the development of a sustainable culture at the employee level
Working Level			
<ul style="list-style-type: none"> Coordinating cross-departmental sustainable finance and risk-related developments Assisting the Chief Executive in day-to-day management of various risks and internal control 	Units involve in “Three Lines of Defence” Risk Management	The Sustainability Strategy Working Group	<ul style="list-style-type: none"> Advancing the Group’s sustainability strategy Implementing climate-related policies and operations Coordinating sustainable finance, risk management, carbon neutrality, and other cross-departmental initiatives Promoting culture of sustainability in staff level

1.2 THE BOARD AND ITS COMMITTEES

Our Board members possess a diverse range of knowledge, experience, and skills, including corporate strategy, banking operations, corporate governance, finance, risk management, and compliance. Such expertise enables them to effectively exercise their governance responsibilities as well as provide robust oversight of and constructive opinion on climate-related issues. Board and committee members keep up-to-date with knowledge on sustainability management, strategy, risk management and disclosure. Meanwhile, we also collaborate with professional bodies, actively monitoring the governance and disclosures of climate risks in the banking industry as well as the latest developments and implementation trends in relevant rules and regulations, in order to support the Board in effectively fulfilling its oversight and management responsibilities on sustainability-related issues (including climate risks and opportunities).

Risk Committee

The Risk Committee, established at the Board level of BOCHK, consists of 5 members as at end 2022, and all of them are independent non-executive directors. The primary responsibility of the Risk Committee is to provide comprehensive oversight and monitoring of the Group's risk exposures. By establishing the Group's risk appetite and risk management strategy, the Risk Committee determines the Group's risk portfolio. In addition, it also identifies, assesses and manages the significant risks posed to the Group, as well as reviews and evaluates risk management policies of the Group. In the current risk management framework of the Group, the management of climate-related risks is fully integrated and incorporated throughout all systems and all lines of defence. As a committee of the Board, the Risk Committee fully monitors the Group's sustainability-related risk management, particularly in its resilience to climate risks.

Sustainability Committee

The Sustainability Committee, established at the Board level of BOCHK, is comprised of 8 members, including 7 independent non-executive directors, as well as the Executive Director and Chief Executive as at end 2022. The Sustainability Committee is responsible for achieving the Group's sustainability-related goals by overseeing the management of the Group's climate-related opportunities, governing the strategies, policies, and implementation related to sustainability and corporate culture, monitoring climate change issues, optimising the standard and quality of climate-related disclosures, and enhancing the Group's sustainability performance.

The Sustainability Committee, supported by numerous working sessions with the secretariat, held two meetings in 2022. In the meetings, the Sustainability Committee oversaw and thoroughly discussed progress on the following key climate-related issues and made relevant decisions to proceed with the sustainability strategy and climate-risk related work:

Meeting Dates	Sustainability Committee
23 rd March 2022	<ul style="list-style-type: none"> Approved BOC Hong Kong (Holdings) Limited's 2021 Sustainability Report and material issues (Addressing Climate Risks being one of the material issues)
24 th October 2022	<ul style="list-style-type: none"> Reviewed the "Carbon Neutral" Targets and Implementation Roadmap of BOCHK Business Operations, received reports on financed emissions Received reports on promoting low-carbon transition at our branches and for our customers Received reports on the progress of BOCHK's climate and ESG risk management work

The Sustainability Committee reports regularly to the Board on the Group's progress on material climate and sustainability-related issues to ensure that the Board is aware of relevant issues that may have a material impact on the Group, as well as assisting the Board in making decisions on sustainability and climate-related opportunities and risks.

The Risk Management Department and the Economics & Strategic Planning Department serve as secretariats to the Risk Committee and the Sustainability Committee respectively and attend committee meetings. Other departments may attend as required to provide relevant supplementary information in a timely manner. Other members of management and representatives of external advisors may attend some or all of the committee meetings as needed to assist the committees in the effective discussion and management of relevant issues. All attending members of management will also provide full support to the committees as requested.

(For details on the Group's Risk Committee and Sustainability Committee including their membership, please refer to the [2022 Annual Report](#))

To continuously enhance the Group's ability to manage climate risks and opportunities, the Board also actively monitors the performance of management through sustainability-related performance indicators, to assess the effectiveness of management regarding matters relevant to climate-related opportunities and risks.



1.3 THE MANAGEMENT AND ITS COMMITTEES

Sustainability Executive Committee

At the management level, we established the Sustainability Executive Committee (the “Executive Committee”), which is authorised by the Management Committee to implement the Group’s sustainability strategy in a holistic manner, to approve the implementation of sustainability policies (strategic objectives, financial operations, risk management, operations, and other key principles), and to escalate key issues to the Board on a regular basis.

The Executive Committee is chaired by the Chief Executive of BOCHK. It currently consists of Senior Members from Senior Management and General Managers of 12 key departments. The Executive Committee aims to fully integrate sustainability and climate-related opportunities and risk management into all aspects of the Group’s operations. The Economics & Strategic Planning Department and the Risk Management Department act as joint secretaries of the Executive Committee and share the responsibilities of the Secretariats, in a bid to strengthen the coordination of cross-departmental sustainability-related work:



The Executive Committee held two sustainability-related meetings in 2022. In the meetings, the Executive Committee discussed and examined progress on the following key issues and made decisions to further advance the implementation of sustainability and climate risk-related work:

Meeting Date	Meeting Agenda
15 th March 2022	<ul style="list-style-type: none"> Reviewed and approved BOC Hong Kong (Holdings) Limited’s 2021 Sustainability Report and material issues (Addressing Climate Risks being one of the material issues) Discussed on the restructuring of the Sustainability Strategy Working Group and Executive Committee and Sustainability Strategy Working Group Secretariats
28 th September 2022	<ul style="list-style-type: none"> Discussed peer practices and proposed strategies to manage greenwashing risk Discussed the progress report on key sustainability work of 2022, reviewed and approved the annual review of targets Reviewed the progress report on BOCHK’s climate and ESG risk management work Reviewed the “Carbon Neutral” Targets and Implementation Roadmap of BOCHK Business Operations Reviewed reports on promoting low-carbon transition for our branches and customers Reviewed the progress report on the calculation of BOCHK’s financed emissions

After thorough consideration and decision making on the above issues, the Executive Committee performs its duties by closely monitoring the progress of implementation, escalating key issues to the Board and its committees, and assisting the Board in formulating their decisions.

In 2022, departments within the Group also reported to the Management Committee on key issues related to climate risks and opportunities, including BOCHK’s latest implementation status of the HKMA’s SPM module GS-1 “Climate Risk Management”, as well as key sustainability related work progress in 2022.

1.4 THE SUSTAINABILITY STRATEGY WORKING GROUP

The Sustainability Strategy Working Group (the “Working Group”) is composed of various departments and is primarily responsible for organising, coordinating, and implementing the Group’s sustainability-related business activities, as well as supporting the Sustainability Committee and Sustainability Executive Committee in implementing climate related work. Based on the 2021-2025 Sustainability Plan, the Working Group sets out the key tasks and objectives every year and coordinates the strategic planning and implementation of the Bank’s sustainable development among different aspects including sustainable finance, risk management, green operations, culture building, talent cultivation, and information disclosures.

In terms of working mechanism, the Working Group has also optimised its management structure, with the Chief Risk Officer, the Chief Financial Officer, and the Deputy Chief

Executive (Corporate Banking) jointly serve as the co-heads of the Working Group, while the Economics & Strategic Planning Department and the Risk Management Department share the responsibilities as Working Group Secretariat. The Working Group holds meetings on a quarterly basis to report on the progress of its work to the Co-Heads to ensure close cross-departmental cooperation and the orderly implementation of all related tasks.

In addition to the Working Group, our Corporate Social Responsibility (CSR) Office and dedicated professional staff are responsible for the follow-up and implementation of sustainability-related matters, including participating in ESG ratings by international and local rating agencies, responding to enquiries and questionnaires from investors and stakeholders on the Group’s ESG and sustainability-related issues, as well as carrying out philanthropic and social responsibility related initiatives.



1.5 SUSTAINABILITY AND CLIMATE-RELATED MANAGEMENT SYSTEM



Performance Evaluation

To facilitate the implementation of the Group's sustainability and climate risk-related strategies, the Group and Senior Management have introduced climate and sustainability-related key performance indicators in the performance appraisal, including quantitative targets for green and sustainable finance activities, operational carbon neutrality targets, and qualitative indicators for sustainability and climate risk management key actions. The assessment weighting of sustainability indicators in 2022 has also been increased compared to that in 2021. These qualitative and quantitative indicators are monitored by the Board and are reviewed on a regular basis. In addition, based on our functions and strategic positioning, we further differentiated and refined the aforementioned performance indicators at the departmental and subsidiary levels to ensure that the objects are communicated and effectively implemented.

Capacity Building

To enhance the understanding of sustainability and climate change amongst members of the Board and management, the Group is committed to providing relevant trainings and materials to build capacity within the board-level committees, Executive Committee, and Working Group, so as to ensure that they are equipped with sufficient relevant expertise to lead all departments in driving BOCHK's sustainability and climate risk management process together. To provide the Board and Senior Management with the latest market trends and information on climate change and sustainability, we invited professional institutions to share with the Board, management from all key relevant departments and from Southeast Asian entities on areas such as the banking industry's governance on climate-related issues, its impact on credit ratings, and climate risk disclosure. At the same time, the presentation on TCFD recommendations and best practices by professional institutions helps the Board and Senior Management to have further understanding on international trends, leading to a more effective exercise of oversight and management responsibilities on sustainability and climate-related issues. In addition to receiving expert institutional training, members of the Board also participate in sustainability-related webinars to keep abreast of the latest environmental, social and governance trends and value creation opportunities in the banking industry. The Board Secretariat also provides the Board with reference materials related to climate risk and sustainability on a regular basis. All members of the Board participate in continuous professional development training (including, but not limited to sustainability) annually to enhance their knowledge and skills. During the year, the average number of training hours attended by Board members was approximately 20-30 hours.

Driven by the Group's needs for sustainability strategy and talent development, we established a tiered training framework during the year and launched the "ESG Sustainability Study Roadmap" to provide various types of ESG training to employees at different levels. For the core talent in ESG, we collaborated with the Hong Kong University Business School to launch a customised professional certificate course on green finance. We held 4 courses, with approximately 200 participants. We also arranged more than 90 key staff including our Southeast Asian entities to enrol in the Certificate in Green and Sustainable Finance offered by the Chartered Institute of Bankers (United Kingdom) to strengthen our team of ESG professionals. For all employees, we launched the "Net Zero Elite" learning pack (20 courses) and a "Zero Carbon Journey" online course. Through these learning rewards programmes, we encourage employees to learn more about key issues such as regulatory trends in green finance, climate risks, and greenwashing risks. Eventually, employees should fully integrate climate-related opportunity and risk management concepts and measures into their daily work to enhance their ESG awareness and capabilities.

During the year, the Group also enhanced green finance-related guidance for our frontline staff in the business units to reinforce their understanding at all levels. This included organising 2 "Green Seed" group trainings for corporate banking staff, a sharing on low-carbon transition of 3 industries, a sharing on carbon markets, and a sustainable finance training session from the Construction Industry Council.

Relevant Policies

In order to strengthen governance on climate-related issues within the Group and to set targets and standards for processes, we developed sustainability-related policies and mechanisms in various areas, drawing on local and international sustainability guidelines and standards. All entities within the Group must strictly comply with and implement these policies.

At the highest level, the Group Operating Principles (“GOP”) has incorporated sustainability principles into the Group’s core values, strategic objectives, business development, and daily operations. GOP sets out clear requirements for sustainability related management mechanisms, policy and procedure formulation, performance evaluation, staff training, communications and disclosure, etc. The Group has long-term and comprehensive consideration for sustainable development, encourages and actively promotes sustainable and high-quality development.

We developed a Sustainability Policy that sets out key principles for pushing forward sustainable development within the Group, covering various issues related to environmental, social, governance, and climate change, and seeks to promote and pursue sustainability within the Group. In particular, the policy acknowledges the need for the Group to respond to the opportunities presented by climate change, include facilitating our transition towards a low-carbon economy, as well as setting carbon neutrality and emission reduction targets according to regulatory requirements and guidelines to reduce greenhouse gas emissions, energy consumption, water consumption, and waste production. In addition, the policy states that climate risk considerations will be gradually integrated into the risk management framework through effective risk management processes to identify, measure, monitor, report, control, and mitigate climate risks. The policy also states that the Group should continue to enhance its disclosure framework in line with TCFD recommendations.

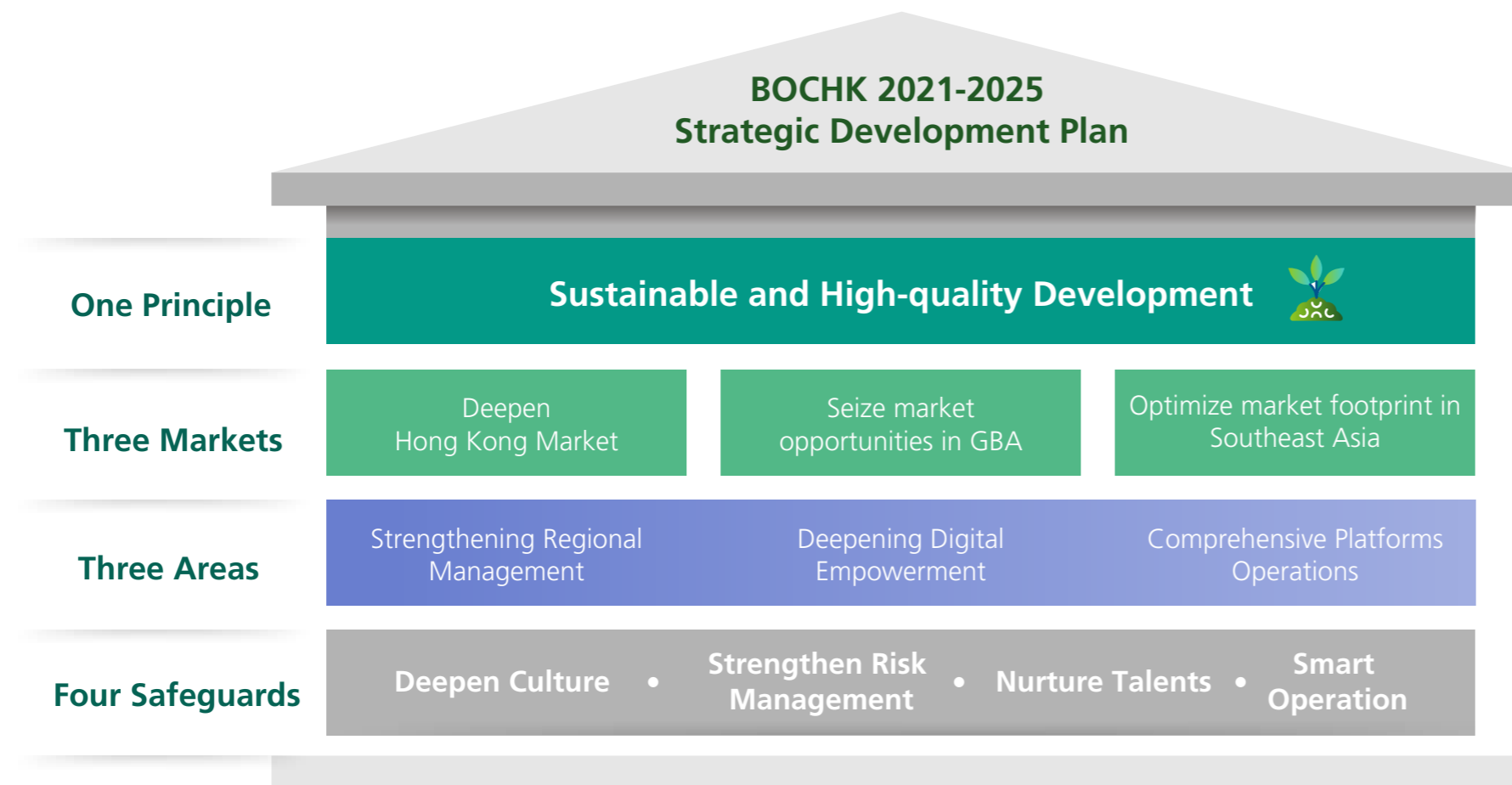
In our procurement process, we strive to integrate sustainability-related concepts, including climate change, as one of the key considerations. In the *Sustainable Procurement Policy*, we integrate climate, environmental, and social considerations into the procurement of products and services, encouraging all suppliers to manage the impacts of their operations on climate, environment, and society more effectively. In the *Supply Chain Code of Conduct*, we outline requirements and assessment mechanisms in areas such as social, environmental, ethical, corporate governance, and labour management. In addition to the Code of Conduct, we have also developed a Supplier Production Behaviour Self-Assessment Questionnaire that covers climate-related issues, such as whether the company has a mechanism or procedure in place to address greenhouse gas emissions. We consider sustainability and environmental protection as an important scoring criterion. If an existing supplier receives a relatively low score in routine review and fails to submit an effective improvement plan within a brief timeframe, we will consider suspending our collaboration with that supplier. In addition to the questionnaire, we require suppliers to provide environmental certificates or qualifications to assist the scoring process.

2 STRATEGY

In response to the nation's dual carbon goals and the HKSAR Government's strategic planning in "Hong Kong's Climate Action Plan 2050", and to implement "Carbon Peaking and Carbon Neutrality Target" Action Plan set out by our Parent Bank, Bank of China, BOCHK has fully integrated sustainability and climate change considerations into the medium to long-term planning of the Group. By formulating comprehensive operational and business strategies, we aim to effectively address potential risks arising from climate change, capture the opportunity of the transition towards a low-carbon economy, and help customers put green and low-carbon transition into practice, creating sustainable value for the Bank's operations.

2.1 DRIVEN BY OUR BANK-WIDE STRATEGY

The Group's 2021-2025 Strategic Development Plan places "sustainable and high-quality development" at the heart of our future growth for the medium and long term. Strengthening the Bank's resilience to climate risks is an important foundation for maintaining our robust and high-quality development.



- As a sub-plan of the 2021-2025 Strategic Development Plan, the 2021-2025 Sustainability Plan integrates addressing climate change into the sustainability blueprint, highlighting a number of quantitative and qualitative development goals and implementation roadmap. Specifically, with regard to the risks and opportunities brought by climate change, our relevant business and operational strategies revolve around three main aspects:



2.2 SUPPORTING CUSTOMERS IN GREEN AND LOW-CARBON TRANSITION

As carbon neutrality drives widespread transition towards low-carbon economy, green and sustainable finance has become a key to continued innovation and growth in the banking sector. BOCHK is actively playing a leading role as a financial institution, launching a variety of green and sustainable finance products and services based on customer and market needs, and directing capital flows towards areas in climate change mitigation and adaptation, as well as areas that are in line with the transition towards net-zero emissions.

With market opportunities arising from climate-related issues, BOCHK has established a rich ecosystem of products in its three business segments of Corporate Banking, Personal Banking and Financial Markets, and has become a steadfast companion for customers on their low-carbon transition journey, directing capital towards areas including energy transition and technological innovation. In 2022, we have continued to strengthen support for green and sustainable finance business, such as providing internal funds transfer pricing (FTP) incentives in relevant deposit and loan businesses, so as to encourage frontline teams to expand green and sustainable finance business activities and consolidate our leading position in the industry.



In Southeast Asia, we implement climate and green finance strategies based on local conditions, actively developing sustainable finance in Southeast Asian branches and subsidiaries in line with local regulatory requirements and banks' risk appetites, and utilising sustainability as a cross-cultural breakthrough in building BOCHK's sustainable brand image.

BOCHK and S&P Dow Jones Indices jointly launch China Hong Kong Greater Bay Area Net Zero 2050 Climate Transition Index

2022 Highlight

Project Highlights: In July 2022, BOCHK and S&P Dow Jones Indices jointly launched the first climate transition index focusing on listed companies in the Greater Bay Area, aiming to encourage listed companies in the Greater Bay Area to achieve a variety of climate transition targets, facilitating their transition towards a low-carbon economy and supporting the national dual carbon goals and Hong Kong's Climate Action Plan 2050.

Project Characteristics: The index aims to encourage listed companies in the Greater Bay Area to achieve low-carbon transition, and to provide cost-effective and diversified investment options for the capital market, facilitating greater capital flows towards industries undergoing low-carbon transition. The index is compliant with the EU Climate Transition Benchmarks Regulation to achieve the objectives of the Paris Agreement, which adopts a weighting strategy to achieve a number of carbon reduction targets, such as a 7% annual reduction in carbon emissions and a 30% reduction in overall carbon intensity relative to the parent index.

In 2023, the BOCHK Greater Bay Area Climate Transition ETF, which is the exchange-traded fund tracking the S&P BOCHK China Hong Kong Greater Bay Area Net Zero 2050 Climate Transition Index, was listed on the main board of the Hong Kong Stock Exchange. It's Hong Kong market's first ETF to track the index focusing on Environmental, Social and Governance (ESG) theme and investing in the Guangdong-Hong Kong-Macao Greater Bay Area.



2.3 WORKING TOWARDS CARBON NEUTRALITY IN OUR OWN OPERATIONS

With an aim to achieve carbon neutrality in our own operations by 2030, BOCHK has been actively accelerating the Bank's carbon reduction efforts in our operations. We have developed a decarbonisation roadmap and have conducted a major carbon audit at the Group level, covering all our Southeast Asian entities and subsidiaries. Having regard to the Bank's greenhouse gas emissions at the operational level, we will systematically carry out decarbonisation in our operations through the three major measures of reducing, replacing and offsetting.

In our operations, we adhere to the principle of "first reduce, then replace, and offset at last", minimising greenhouse gas emissions in our own operations through a series of energy saving and emission-reduction measures. In terms of "reducing", we put green operations into practice, such as enhancing energy-saving and emission reduction measures in buildings, air-conditioning, and lighting for our own properties, implementing green offices and expanding green branches. As for "replacing", we have been installing photovoltaic solar panels or wind turbines at properties where feasible to increase the use of renewable energy. We formulated four major green operating goals and developed quantitative carbon reduction targets, with plans to reduce total carbon emissions (Scope 1 and 2) by 40% by 2025, compared to the baseline level in 2019. The target has been incorporated into the Group's annual review to ensure effective implementation. Lastly, we will adopt "offsetting" measures to address residual carbon emissions by purchasing renewable energy certificates and carbon credits in Hong Kong and across the globe.

For details, please refer to the [2022 Sustainability Report](#).



2.4 MANAGING CARBON EMISSIONS IN FINANCED ACTIVITIES

In order to drive the Group's sustainability strategy and enhance the resilience of our portfolios in response to climate change, BOCHK has closely followed the "Carbon Peaking and Carbon Neutrality Target" Action Plan set out by our Parent Bank, Bank of China. Since the fourth quarter of 2021, we have committed to cease financing for new coal mining and coal-fired power projects outside of the mainland, except for those already contracted. At the same time, for carbon intensive industries such as coal, electric power, oil and gas, and steel, we have detailed the environmental, climate, and social risk assessment requirements in relevant industry guidelines.

To further strengthen the Bank's management of carbon emissions in financed activities under a quantitative manner, we have started to calculate financed emissions for the Bank's carbon intensive and other associated industries in 2022, based on the methodology published by Partnership for Carbon Accounting Financials (PCAF). We continue to improve the accuracy of calculations and target setting through constant optimisation of calculation methodologies and formulation of plans to collect customer data, laying a foundation for the Bank to set up carbon neutrality targets for financed emissions in the future.

For details, please refer to [Section 4.1 Climate-related Metrics and Targets](#).

Among the first batch of market participants in Core Climate, international carbon marketplace launched by the Hong Kong Exchanges and Clearing Limited (HKEX)

2022 Highlight

BOCHK joined the Hong Kong International Carbon Market Council established by the HKEX in July 2022 and has been actively involved in the development of a high-quality carbon market in Hong Kong and the surrounding region, making recommendations on product design, trading models, cross-border carbon market connectivity and other related areas, as well as working closely with the HKEX and the industry to jointly drive the initial development of Core Climate, Hong Kong's international carbon marketplace.

As the first batch of market participants in the Core Climate carbon marketplace, we successfully completed a number of international carbon credit transactions, priced and settled in RMB and HKD, in the first batch of transactions, and were awarded the "The NEW CARBON MARKETPLACE FROM HKEX – Hong Kong International Carbon Market Inaugural Participant" and "The NEW CARBON MARKETPLACE FROM HKEX – Hong Kong International Carbon Market Council Inaugural Member" by the HKEX. We will continue to support the development of the voluntary carbon market in the future, striving to promote the low-carbon transition in the region, and moving towards a sustainable future.





3 RISK MANAGEMENT

We believe that proper risk management is a vital component to the robust operations of a financial institution. We manage climate risks systematically by incorporating climate risk factors into our risk management framework and developing appropriate management systems and processes to identify, assess, monitor, report, control, and mitigate related risks. In our daily operations, we assess and identify climate risks to analyse its economic and financial impacts on our operations and business development, formulate control measures and strategies for the assessed risks, and ultimately, improve our overall risk management process and resilience in tackling climate change.

3.1 CLIMATE RISK MANAGEMENT SYSTEM

We have integrated “climate risk management” into our overall risk management system and have set out clear policies on the Group’s risk management principles and related management processes. This is to ensure that specific risks are systematically addressed in the risk management system and properly controlled within acceptable levels. The BOCHK Group Risk Management Policy Statement, as the highest level of the Group’s risk management document, has incorporated sustainability as one of the Group’s major risk management principles. We have fully incorporated climate-related considerations in the newly revised BOC Hong Kong (Holdings) Limited Sustainability Policy. At the same time, we have been gradually incorporating climate-related factors into our risk management framework, relevant policies, and risk appetite statement to continuously improve the management of related risks.

We have established a risk management structure for climate risk management, reinforced the “Three Lines of Defence”, and defined the functions and responsibilities of different units in managing various types of risks, including climate risks:



3.2 IDENTIFICATION OF CLIMATE RISKS

Climate change has a significant impact on the economy and financial markets, which may affect the stability of individual banks and even have a broader impact on the banking system, making it an important challenge to maintain the stability of the financial system. The climate risks we face are defined as various financial risks triggered by climate change and may affect the stability of the financial system. Climate risks can be divided into two categories: transition risks and physical risks:

Transition Risks

Factors arising from mitigating and adapting to climate change, such as policy adjustments, technology changes, and changes in consumer preferences, leading to increase in greenhouse gas emissions pricing, as well as changes in market demand and structure, resulting in higher production costs, lower profits, and lower asset valuations for enterprises, thereby increasing the risk of default.

Physical Risks

Factors arising from climate change, such as water scarcity, natural capital depletion, natural disasters, air, water, and soil pollution, leading to direct negative impact on the real economy, such as lower production capacity, higher costs, early retirement of fixed assets, and damage to buildings. Physical risks can arise from short-term or acute weather events (such as tornadoes, hurricanes, or floods), or from long-term or chronic changes in climate patterns (such as persistent high temperatures that may cause sea level rise or prolonged heat waves).

Climate risk is global in nature and its impacts on banks are manifested through transmission to other traditional risk types. We refer to the TCFD recommendations to holistically identify the transmission channels of climate risk on our traditional risk types. We also assess the impact of climate risk on our traditional risks and its corresponding time horizon of impact.

Risk Type	Businesses Affected	Time Horizon ¹
Credit Risk	Under the transition towards a low-carbon economy, the operation and financial conditions of our customers may be affected by factors such as policy changes, technological breakthroughs, changes in public consumption and investment preferences, and innovative business models, which may lead to a decrease in debt repayment ability and an increase in the risk of default, ultimately resulting in financial losses due to incomplete recovery of loan values by banks. In addition, our customers' business operations and asset values are subject to impacts from ongoing climate changes and extreme weather conditions, which may reduce their profitability. Natural disasters such as typhoons and floods may cause loss or damage to real estate or fixed assets pledged to us, resulting in a reduction in the value of our pledged assets.	Short to long-term
Market Risk	Large, abrupt, and negative price adjustments could be triggered if market prices or valuations have not incorporated climate risk factors. At the same time, a breakdown in correlation between assets or a sharp decline in market liquidity for a particular asset could exacerbate the decline in market prices. In addition, fluctuations in financial market prices could affect the value of bank positions, such as in equities and commodities.	Short to mid-term
Operational Risk and Compliance Risk	Operational risk is the risk of loss resulting from inadequate or failed internal processes, people, systems, or from external events, including legal risk, but excluding strategic risk and reputation risk. Compliance risk is the risk of legal or regulatory sanctions, financial losses, or damage to the reputation of the Group as a result of its failure to comply with applicable laws and regulations. Extreme weather events may cause business disruption to the Group's operations. The Group is exposed to regulatory risks associated with climate change, which may result in increased operating cost and capital expenditure to comply with climate-related regulations and regulatory requirements.	Mid to long-term
Liquidity Risk	Climate risk may cause our customers to reduce deposits or increase drawdowns on their credit lines to meet the additional costs of transitioning towards low-carbon economy. Acute climate risk may even trigger bank runs. In addition, as market preferences change in response to climate-related factors (e.g., as the public and investors move towards climate or environment-friendly products, services, and business activities), banks may have fewer sources of funding and the cost of funding may also increase.	Mid to long-term
Legal Risk	Legal risk is the risk of disruption or adverse effects on the Group's operations or financial condition arising from unenforceable contracts, litigation, or adverse judgments. Climate, environmental, and sustainability factors may give rise to legal risks, for example, where the performance or disclosure of information on climate, environment and sustainable development in the course of the Group's operation has not met the expectation of stakeholders and the public, or where the Group becomes a party to litigations or disputes related to climate, environment, and sustainability.	Short to long-term
Reputation Risk	Reputation risk is the risk that negative publicity about the Group's business practices, conduct or financial condition, whether genuine or not, may impair public confidence in the Group, resulting in a potential decline in the customer base, or lead to costly litigations, business or revenue erosion. Market rumours or public perception are important factors in determining the level of such risk. The change in market condition and consumers' preference for climate- or environmentally-friendly products will lead to public or interest groups' increased focus/expectation on the Group to undertake more social responsibility in relation to combating climate change and the transition process. If due consideration is not given during business development in relation to environmental issues, the building or maintenance of the Group's business relationships may be negatively affected.	Short to long-term
Strategic Risk	Banks may lose their competitiveness and market position if failing to respond in a timely manner to changing market conditions, not taking full account of market preferences for climate or environment-friendly solutions or banking services, or not fully meeting increasing climate or environmental regulatory requirements.	Mid to long-term

¹ Short-term: less than a year; Mid-term: 1 to 5 years; Long-term: more than 5 years

3.3 CLIMATE RISK MANAGEMENT MECHANISM

3.3.1 Climate Risk Appetite

Risk appetite refers to the types and levels of risk that the Group is willing to take in order to meet the requirements and expectations of various stakeholders, to operate in a sound and sustainable manner, and to achieve its business plans and strategic development objectives within its risk bearing capacity.

The Group aims to meet the overall expectations of its key stakeholders and select the type and scale of risks it can bear in accordance with its development strategy and capital strength; it also strives to promote environmental and social sustainability by maintaining and strengthening long-term ESG management, establishing a good and sustainable corporate culture, and promoting good ethical and responsible business practices. This includes fulfilling corporate governance responsibilities, promoting environmental protection, addressing climate change, supporting environmentally friendly businesses, and incorporating climate and other environmental considerations into credit and other business considerations. By incorporating climate-related considerations in the risk appetite, we support business activities that have a positive impact on the environment and practice sustainable operations.



3.3.2 Climate Risk Management Process

Combining the Group's sustainability strategy and changes in regulatory requirements, we actively identify transition risks, physical risks, and their impacts. In all aspects of risk management, we fully integrate climate risk factors, formulate relevant risk countermeasures, and strengthen and enhance our comprehensive risk management system.

3.3.2.1 Climate Risk-related Credit Management Process

We respond to the risk factors arising from climate change, uphold the principle of prudent risk management, formulate and continuously enhance credit risk management policies and industry guidelines related to climate risk, specify the credit risk identification, assessment, monitoring, stress testing, reporting, and other risk management requirements for climate risk, and integrate climate risk into the entire process of credit management as an important basis for business entry, credit approval, and post-lending management.

In order to support the national dual carbon goals and to meet the need for safe and stable energy supplies, we will orderly guide and promote the green transition of customers in carbon intensive industries and avoid blind suspensions or withdrawals of loans. At the same time, we place a high importance on the prevention and control of transition risks in carbon intensive industries. By gradually refining and supplementing the requirements for environmental, climate, and social risks in guidelines for carbon intensive industries, we standardise business entry standards, principles, and management requirements, and raise concerns on the risks involved in conducting business in key carbon intensive industries, in a bid to facilitate the orderly development of business activities.

Key carbon intensive industries	Descriptions of Climate-related Industry Guidelines
Coal-related	Under the "Carbon Peaking and Carbon Neutrality Target" Action Plan set out by our Parent Bank, except for those projects already contracted, we have ceased to provide financing for new coal mining and coal-fired power projects outside of mainland since the fourth quarter of 2021.
Electricity	Clear demonstration of compliance with local sustainability legislations and relevant regulatory requirements, including legal and policy obligations related to environmental and social impacts, and to thoroughly examine the climate, environmental, and social impacts posed by project constructions and operations. Existing customers in the coal-fired power industry should be encouraged to upgrade and undergo transition.
Oil and Natural Gas	The interaction between the customer and the environment, climate and society should be thoroughly examined, with an emphasis on: <ul style="list-style-type: none"> • The management of greenhouse gas emissions and environmental pollution by the customer • Strategies for addressing environmental, climate, and social risks • Negative information about the customer For companies that do not conform to local industry developments, an exit strategy should be adopted to safeguard against credit risks.
Steel	The interaction between the customer and the environment, climate and society should be thoroughly examined, with an emphasis on: <ul style="list-style-type: none"> • The impact of the latest policies on emission reduction and carbon reduction, environmental protection, energy conservation, and production reduction and restriction issued by the countries, provinces, and cities where the steel company is located • The management of emission reduction, carbon reduction and environmental pollution by customers • Strategies for addressing environmental, climate, and social risks • Negative information about the customer

Pre-Lending Business Entry

As the first line of defence in risk management, relevant credit officers are required to understand the specific environmental, climate, and social risks faced by customers and assess the risk resilience of the customers. We incorporate climate risk factors into our credit due diligence process through two aspects. Firstly, we assess the climate impact of the customer's business, understand whether the customer has properly managed and handled various types of emissions and energy consumption levels in the business process and require the customer to understand and comply with relevant local laws and regulations, including environmental protection laws, so as to ensure consistency with international best practices. In addition, we also assess the specific level of climate risk faced by our customers and the potential financial impacts associated with transition risk and consider whether the customer has a strategy in place to address such risks, and whether a low-carbon transition target has been established and is being carried out on progress and in an orderly manner. In terms of physical risk, we will consider the impacts of climate change on the business continuity of customers, the stability of the customer's supply chain, and the value of the customer's assets or collateral. Based on the above considerations, we will categorise and manage customers according to their climate risk levels and adopt corresponding credit strategies as appropriate.

In addition, we have developed customer questionnaires to systematically assess these items mentioned above for our major customers. This involves a top-down analysis on the awareness of the customer's climate risk management from group level, the inherent risks in the organisation's business, relevant countermeasures, as well as borrower-level analysis. The residual risk approach is used to assess their climate risks.

Within Lending Credit Approval

Differentiated credit strategies will be implemented depending on the level of climate risk of our customers or projects. For customers with higher risk profiles, we will take appropriate risk control and mitigation measures, such as requiring customers to conduct business under a commitment to formulate mitigating measures or transition plans within a reasonable timeframe, and continuously monitoring and regularly reviewing the implementation progress of such mitigating measures or transition plans of the customers. If customers fail to meet such requirements within a reasonable timeframe, we will consider adopting control measures such as loan reduction or exit strategies and setting more stringent lending terms, where appropriate. Loans involving ecologically sensitive matters must be classified as special credit transactions or counterparties and must be carefully evaluated and strictly controlled when processing related credit applications, in order to prevent violation of the Group's sustainability strategy. Such loans are also subject to more stringent credit approval requirements.

Post-Lending Post-loan management

We integrate climate risk information from our credit customers into our daily post-lending monitoring process, such as issuing risk alerts and conducting thematic reviews as appropriate. In case of unexpected climate risk events, we will promptly initiate review and report. We continuously track risk values (e.g. probability of default (PD), exposure at default (EAD)) of climate risk-sensitive credit portfolios to monitor changes in their credit quality and report to Senior Management on a regular basis. In addition, we adopt a brown industry definition that is highly consistent with of our Parent Bank, Bank of China, so as to specify the scope of these high-carbon industries that the Group is highly concerned and report regularly to the Board on the credit portfolio of customers in brown industries.

3.3.2.2 Climate-related Risk Management Processes of Other Risks

Key Risk Type	Management and Mitigation Mechanisms
Market Risk	<ul style="list-style-type: none"> Established relevant policies and practices for market risk management, and made continuous improvement on relevant risk management policies and practices to ensure that relevant risks arising from climate risk are fully considered in the management of market risk. In terms of stress testing, a basic methodology for climate risk scenario analysis and stress testing is established, covering different timescale and physical and transition risks scenarios. Market risk factors such as bond credit spreads and equity prices of the affected industries are stressed to assess the impact of climate risk on trading book positions. In terms of risk identification and assessment, we identify climate risks through new product due diligence. We also conduct climate risk assessment based on industry classification when accessing trading book stocks lists.
Operational Risk and Compliance Risk	<ul style="list-style-type: none"> Relevant policies and administrative measures for operational and compliance risk management have been established with due consideration on relevant risk arising from climate risk and the mechanism for collecting information on operational loss due to climate risk is under enhancement. Climate risk considerations have been added to the management principles of the <i>Operational Risk Management Policy</i> for risk management of external events. Active use of different methods and tools to conduct scenario analysis, participate in studies conducted by regulators, identify the transmission pathways of climate risks, and assess the impact of physical and transition risks arising from climate change on business activities. In accordance with the HKMA's SPM TM-G-2 "Business Continuity Planning", we have formulated corresponding Business Continuity Plan for different business nature, setting out the management requirements and processes as well as the management structure and roles and responsibilities. Response plans have been formulated to consider the impact of extreme weather events so that we can respond appropriately in case of such events.
Reputation Risk	<ul style="list-style-type: none"> Fully considered the impact of climate risk in the development of products, services, and business and gradually establish a sound climate risk management mechanism to prevent reputation risk arising therefrom. For business operations and risk management activities that may trigger or have triggered reputation risk, risk identification, assessment, monitoring, early warning, reporting, and disposal processes are implemented in accordance with the Administrative Measures for Reputation Risk Management. The Group will continue to improve the relevant risk management policies and practices to ensure that the risks arising from climate risk are fully considered in the monitoring and management of reputational risk.
Legal Risk	<ul style="list-style-type: none"> Relevant policies and administrative measures for legal risk management have been established. Through continuous improvement of relevant risk management administrative measures, we ensure that relevant risks arising from climate risks are fully considered in legal risk control and management. In daily management and business operations, each department identifies, prevents, monitors, evaluates, reports, and disposes legal risks that may be caused by climate factors in a timely manner, in accordance with the processes stipulated in the Administrative Measures for Legal and Compliance Risk Management.

3.4 CLIMATE RISK STRESS TESTING

3.4.1 Credit Risk and Market Risk

Stress testing and scenario analysis are key measures in our assessment and quantification of climate risk. We conduct stress testing and scenario analyses for climate risk in line with the Group’s business development and regulatory requirements, incorporating conventional risk analysis tools as appropriate. Climate risk stress testing and scenario analysis have enabled us to analyse the impact of physical and transition risks on credit risk and market risk and to assess the impact to the Banks’ profitability and capital adequacy levels under climate scenarios.

We were invited to participate in the HKMA’s pilot program for Hong Kong’s Pilot Banking Sector Climate Risk Stress Test in 2021 and were among one of the first institutions in the Hong Kong banking sector to submit stress testing results by testing the following scenarios suggested by the HKMA.

Building on the 2021 testing, we have developed an optimisation plan in 2022 for climate risk stress testing and scenario analysis. With the assistance of external consultant, we have initiated the refinement of the stress testing and scenario analysis model and its related workflows, including expanding the industry scope, refining specific climate risk transmission pathways, and further collecting customer climate risk-related information and procuring climate risk data, in order to understand the implication on credit risk and market risk in terms of customer climate risk exposures on underlying credit portfolios and trading book positions in corporate bonds and equity-related products. We make reference to international climate agencies, such as the Intergovernmental Panel on Climate Change (“IPCC”) and the Network for Greening the Finance System (“NGFS”) climate risk stress testing scenarios (including physical risk and transition risk) to enhance the granularity of the scenario variables. The methodology and assumptions adopted are in line with the requirements of Module GS-1 “Climate Risk Management” and IC-5 “Stress-testing” of HKMA’s SPM module and are prepared with reference to the framework and practical experience of the HKMA’s Pilot Banking Sector Climate Risk Stress Test 2021.

Climate Risk Type	Physical Risk	Transition Risk	
Climate Scenario	IPCC RCP 8.5	NGFS Disorderly Transition	NGFS Orderly Transition
Timeline of Testing	Mid-term: 2051-2060	Short-term: 2030-2035	Long-term: 2020-2050 (in 5-year intervals)
Scenario Description	<p>Hong Kong will be affected by acute impacts of extreme weather events, including:</p> <ul style="list-style-type: none"> • Increasing temperature • Rising sea levels • More intense tropical cyclones 	<ul style="list-style-type: none"> • Authorities will not introduce climate policies until 2030, leading to an abrupt reduction in greenhouse gas emissions afterwards in order to achieve the Paris Agreement targets • This will give rise to conspicuous changes in energy consumption patterns and carbon price. As a result, high-emitting industries will be significantly affected • The impact on global economy will be noticeable as there will be substantial friction in the transition to low-emission energy sources and production processes 	<ul style="list-style-type: none"> • Authorities will take early and progressive actions to achieve targets set by the Paris Agreement with the availability of new technology • The Paris Agreement targets will be achieved in a more orderly manner and there will be fewer disruptions to global economy throughout the process

3.4.2 Operational Risk

The Group was invited to participate in the Hong Kong Pilot Banking Sector Climate Risk Stress Test organised by the HKMA in 2021 to assess the impact of climate change on the Group's operational risk with reference to the climate risk scenarios of the IPCC and the Hong Kong Observatory using operational risk scenario analysis related to tropical cyclones. In late April 2023, HKMA issued a new guidance on climate risk stress testing. The Group is going to enrich the operational risk scenarios, including enhancement on typhoon scenario and addition of sea level rise scenario, and arrange for a new round of stress testing in accordance with the regulatory requirements. In addition, these scenarios will be gradually extended to the Southeast Asian region once developed.



3.5 CLIMATE RISK DATA MANAGEMENT



We ensure data quality based on our established data management mechanism. In the meantime, we place high importance in accumulating climate-related data internally via utilising our “Customer Questionnaire” to collect customer-level climate-related data and help assess the level of climate risk of our customers.

Meanwhile, to improve the effectiveness of bank-wide climate risk management, we actively procure customer-level climate data from external suppliers and strengthen the consolidation and verification of the relevant data to ensure its accuracy. At the moment, data from external suppliers have been applied in our financed emissions measurement, climate risk stress testing, and other climate risk management scenarios.

3.6 CHALLENGES AND OUTLOOK

We understand that Hong Kong's financial industry is still in the process of developing climate-related regulations and policies, and that local regulators will gradually introduce more in-depth and detailed regulatory requirements. The financial industry needs to continuously improve its own management structure and related processes to adapt to the latest development of regulatory requirements. Moreover, the various difficulties in data collection pose a major challenge for managing climate risks within the financial industry. Looking forward, we will continue to enhance the integration of climate risk-related factors into the Group's various risk management measures, strengthen the existing climate risk management structure and policies, and review and update the Group's internal definitions and control processes on climate risk in a timely manner to ensure that climate risk is kept at an appropriate level, and that our risk management capabilities are enhanced constantly.



4 METRICS AND TARGETS

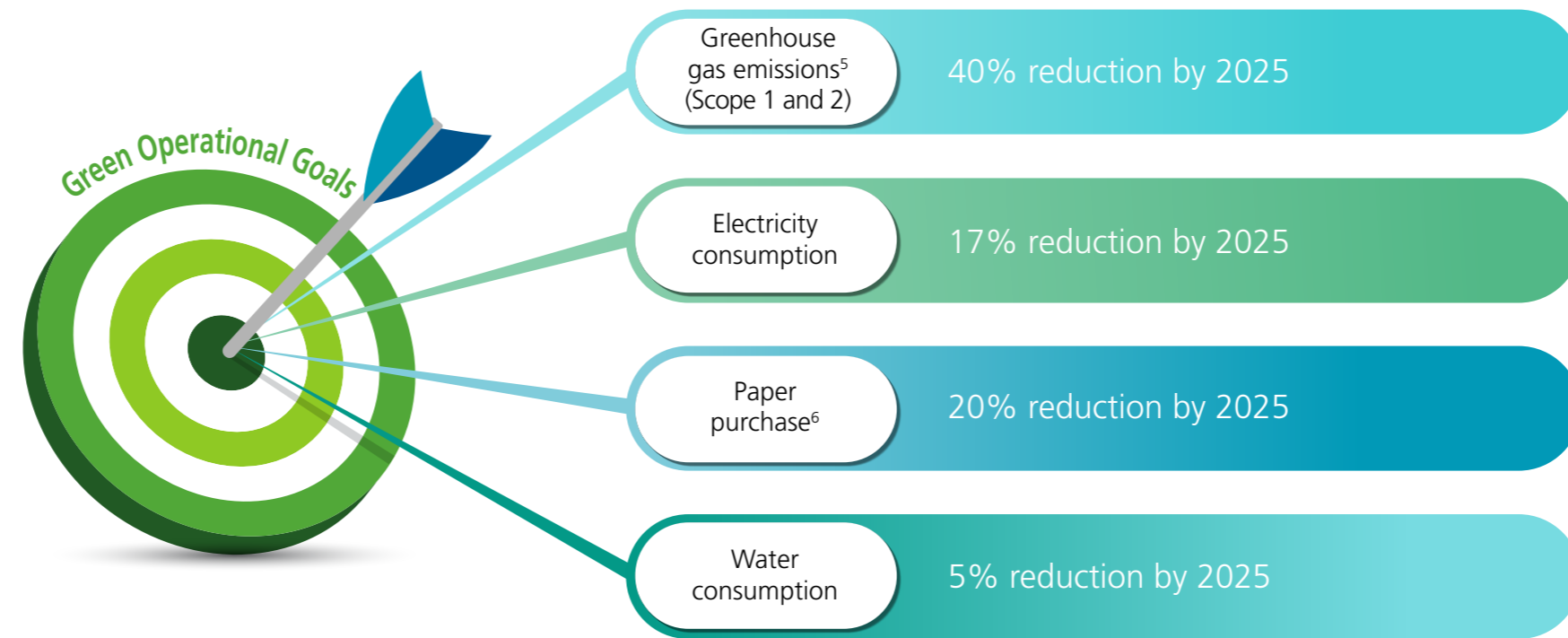
We regularly monitor the Group's performance in addressing climate change, as well as analyse and manage a range of climate change-related metrics, so as to ensure the effective implementation of the Group's long-term decarbonisation plan. In addition, we are actively assisting customers in their low-carbon transition by providing support for sustainable projects and offering customers with diverse sustainable finance and investment products. We have announced our goal to achieve carbon neutrality in our own operations by 2030, and will actively cooperate with our Parent Bank in the future, supporting our country in achieving the national dual carbon goals.

4.1 CLIMATE-RELATED METRICS AND TARGETS

4.1.1 Greenhouse Gas Emissions from Operations²

We have been committed to enhancing the Group’s environmental performance and reducing greenhouse gas emissions from business operations. Therefore, we closely measure and manage energy and water efficiency, paper consumption, and greenhouse gas emissions on a regular basis. In addition to continuously measuring and reducing our greenhouse gas emissions since 2019, the Group has also set clear goals for the four major green operational metrics through the 2021-2025 Sustainability Plan.

Green Operational Goals (2019 as the base year³)



Cumulative progress by 2022⁴ (2019 as the base year)

Greenhouse gas emissions⁵ (Scope 1 and 2)
Baseline Year 2019

↓ 29%

Electricity consumption
Baseline Year 2019

↓ 17%

Paper purchase⁶
Baseline Year 2019

↓ 38%

Water consumption
Baseline Year 2019

↓ 32%

² Greenhouse gas emissions in operations refer to Scope 1 emissions from direct operations, covering greenhouse gas (GHG) emissions emitted directly from operations owned or controlled by the Company, and Scope 2 emissions, covering indirect GHG emissions produced from the Company’s internal consumption (purchased or acquired) of electricity, heat, cooling, and steam.

³ In order to enhance the level of data disclosure, the scope of data reporting on GHG emissions and energy consumption has been expanded to cover the Group’s business network, branch network, office buildings (self-occupied portion) and leased-in offices in Hong Kong, as well as the mainland and Southeast Asia regions from 2022 onwards. To maintain consistency and comparability, the data for 2019 has been adjusted accordingly to ensure that the reporting scope and calculation methodologies are consistent with those for 2022, effectively reflecting the tracking of progress towards the achievement of targets.

⁴ The reporting of water consumption and paper consumption data covers only the Group’s business outlet, branches, office buildings (owned portion) and leased offices in Hong Kong during the reporting period. Paper consumption refers to paper purchase.

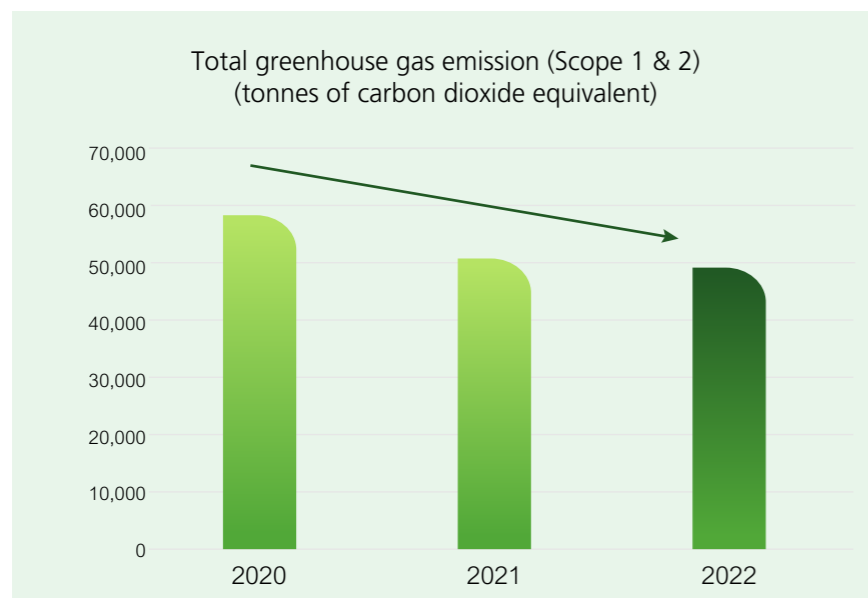
⁵ The calculation standards and methodologies for GHG emissions referenced the Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for Buildings (Commercial, Residential or Institutional Purposes) in Hong Kong (2010 edition) published by the Environmental Protection Department (EPD) and the Electrical and Mechanical Services Department (EMSD) of the Hong Kong SAR Government. The sources of emissions factors for the reporting of GHG emissions include Sustainability Reports of the local utility companies, Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for Buildings (Commercial, Residential or Institutional Purposes) in Hong Kong (2010 edition) and the “How to Prepare an ESG Report: Appendix 2: Reporting guidance on Environmental KPIs” published by HKEX. The GHG calculations cover carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), while hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF₆) and nitrogen trifluoride (NF₃) are not applicable. Greenhouse gas emissions in Scope 3 include methane gas generation at landfill due to disposal of paper waste, greenhouse gas emissions due to electricity used for freshwater processing by the Water Services Department and sewage processing by the Drainage Services Department.

⁶ Based on the amount of office A4 paper purchased.

In terms of greenhouse gas emissions in our own operations, we aim to achieve carbon neutrality in our own operations by 2030. We have already made significant progress in reducing greenhouse gas emissions from our own operations through various energy-saving and emission reduction measures in our own premises and by strengthening the implementation of green offices and green branches. We have also included the carbon footprint of mainland subsidiaries and Southeast Asian branches in the data reporting scope in 2022 and updated the greenhouse gas emissions data from 2019 to 2021 accordingly to facilitate trend analysis and ensure accuracy, completeness and comparability of data coverage.

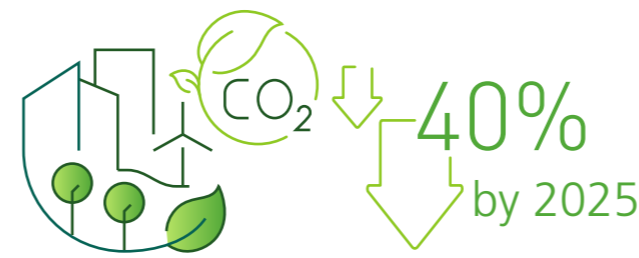
For details, please refer to the [2022 Sustainability Report](#).

Greenhouse gas emission



Emission reduction target

Plan to reduce total greenhouse gas emission (Scope 1 & 2)



(2019 as the base year)

Plan to reduce total electricity consumption



(2019 as the base year)

Aim to achieve
Carbon Neutrality in our own Operations by 2030

Greenhouse gas emission metrics ⁷	Unit	(2019 as the base year)			
		2020	2021	2022	2025 Target
Direct greenhouse gas emissions (Scope 1) ⁸	Tonnes of carbon dioxide equivalent	629	577	575	–
Indirect greenhouse gas emissions (Scope 2) ⁹	Tonnes of carbon dioxide equivalent	57,533	50,074	48,522	–
Other indirect greenhouse gas emissions (Scope 3) ¹⁰	Tonnes of carbon dioxide equivalent	89	64	86	–
Total greenhouse gas emissions (Scope 1 & 2)	Tonnes of carbon dioxide equivalent	58,162	50,650	49,097	40.0% decrease
Total greenhouse gas emissions (Scope 1, 2 & 3)	Tonnes of carbon dioxide equivalent	58,251	50,715	49,182	–

⁷ Ibid. Notes 3. After the restatement, the total GHG emissions for 2020 and 2021 decreased by 9% and increased by 10% compared to the data before restatement.

⁸ Including the diesel and petrol consumption by corporate fleet.

⁹ Including GHG emissions due to electricity and gas consumption.

¹⁰ Including methane gas generation at landfill due to disposal of paper waste, GHG emissions due to electricity used for freshwater processing by the Water Services Department and sewage processing by the Drainage Services Department.



4.1.2 Carbon Emissions in Financed Activities

In addition to greenhouse gas emissions from their own operations, financial institutions also induce climate impacts through financial activities such as loans and investments, which result in carbon emissions in financed activities¹¹. As a bank with a forward-looking vision to lead the transition towards a low-carbon economy, we actively carried out the measurement of carbon emissions in financed activities and piloted the assessment of net zero targets for trial industries. Such work informs the Bank with the status of carbon emission of our business activities and climate risk resilience, gradually enhances the transparency of information delivered to our investors and customers, and facilitates the Bank in taking such emission metrics for reference when making financial decisions in the future.

To ensure consistency and standardisation in the measurement of carbon emissions in financed activities, we make reference to the PCAF Global GHG Accounting and Reporting Standard for the Financial Industry ("PCAF Standard") published by PCAF for the measurement. PCAF is an international initiative formed by financial institutions, aiming to develop a globally consistent methodology for measuring carbon emissions in financed activities. The PCAF Standard is widely recognised on the international level, and its methodology is in line with the Corporate Value Chain (Scope 3) Accounting and Reporting Standard issued by the Greenhouse Gas Protocol. The general principle is to account for greenhouse gas emissions corresponding to the value of assets through tracking the flow of funds. The current PCAF Standard covers asset classes such as equity, bonds, business loans, and mortgages.

¹¹ Carbon emissions in financed activities are GHG emissions generated through financial services such as loans and investments.

General Calculation Approach of the PCAF Standard:

$$\text{Carbon Emissions in Financed Activities} = \sum \left(\frac{\text{Attribution Factor} \times \text{Outstanding Amount of Loan or Investment}}{\text{Total Debt and Equity}} \right) \times \text{GHG Emissions}_{\text{Borrower or Investee}}$$

This year, we carried out our pilot project of measuring carbon emissions in financed activities with reference to the PCAF Standard, focusing on the Group's corporate loans (including project finance) and banking book bond exposures of key industries, including power and heat, oil and gas, steel, etc. We commenced the measurement of carbon emissions in financed activities for different time periods and piloted the assessment of carbon reduction and net zero targets for trial industries.

This marked the Bank's first time in the measurement of carbon emissions in financed activities and the assessment of relevant targets. We have comprehensively organised the measurement methodology and data benchmarks of carbon emissions in financed activities data for each company in the portfolio. We have also performed review, cleaning and consolidation on relevant data to ensure the accuracy and reliability of the measurement. Those efforts established a foundation for the Bank to develop future plans for the reduction of carbon emissions in financed activities on a scientific basis. Considering the current limitations in methodology and data availability, we combine the use of the companies' publicly disclosed greenhouse gas emission data, greenhouse gas emissions estimated through the companies' financial data and industry-average data, in order to develop models and perform measurements. We also analysed and assorted the estimations for each industry and communicated the results thoroughly with industry experts. We actively incorporate the feedback from management and industry experts into subsequent measurements and analysis framework for the results.

Going forward, we will keep track of regulatory requirements and industry practices in a timely manner and continue to optimise the models for carbon emissions in financed activities, enhance the data collection and data quality of the companies' greenhouse gas emissions, and improve the scientific basis and accuracy of measurements for carbon emissions and financed activities. We will also formulate carbon reduction and net zero pathways for key industries based on the results enabled by optimised model and enhanced data, directing the Bank's capital flows in line with climate adaption pathways and facilitating the Group to gradually and feasibly reduce the impact of investment and financing activities on climate change. We will also disclose the Bank's carbon emissions in financed activities and net zero targets for key industries in due course.

4.2 CLIMATE-RELATED FINANCIAL PRODUCTS AND BUSINESS ACHIEVEMENTS

Promoting sustainable finance at the business level of the Group is one of our core strategies to achieve carbon neutrality. We actively innovate and develop various climate-related financial products and services, and serve as green finance advisors for customers, assisting customers to formulate green finance framework, establish a sustainable business model, and facilitate low-carbon transition. BOCHK continuously promotes the Group's sustainable finance products and services, and has achieved significant business growth during the year.



SUMMARY OF KEY HIGHLIGHTS IN 2022

	Latest Progress	Future Actions
Governance		
a) Board of Directors ("Board") oversight of climate risks and opportunities	<ul style="list-style-type: none"> The Board and the Board-level Risk Committee is responsible for approving the Group's climate risk appetite. The Risk Committee is also responsible for overseeing climate-related duties, approving the integration of contents related to climate risk into relevant risk management policies. The Board-level Sustainability Committee held two meetings, during which decisions relevant to the management of climate risks and the strategic formulation of climate-related opportunities were made. Invited professional institutions to share with the Board on climate-related issues for banking industry. 	<ul style="list-style-type: none"> The Risk Committee will further promote the addition of climate change management to the Group's risk appetite statement and the inclusion of climate risk related reference metrics. The Sustainability Committee will continue to review the Group's climate-related strategies and policies and making timely adjustments to the Group's relevant strategies and policies. Provide the Board with ongoing updates on the latest information on climate change and sustainability and organise thematic training to ensure that directors have sufficient relevant expertise to lead BOCHK's climate management processes.
b) Management's responsibilities in assessing and managing climate risks and opportunities	<ul style="list-style-type: none"> At the management level, the Sustainability Executive Committee held two meetings on sustainability issues, which include reviewing the material issues on climate risk management. Continued to promote and implement Board-level policies related to climate risk management, such as the BOC Hong Kong (Holdings) Limited Sustainability Policy, BOCHK Group Risk Management Policy Statement, etc. 	<ul style="list-style-type: none"> Implement BOCHK's sustainability-related work mechanism on an ongoing basis. The Management will continuously push forward sustainability and climate-related work base on regulatory requirements and latest market developments. Gradually enhance climate and environmental risk management in line with local conditions and regulatory requirements for our Southeast Asia entities.
Strategy		
a) Identify climate risks and opportunities over the short, medium, and long term	<ul style="list-style-type: none"> Our risk identification process, including credit risk, market risk and liquidity risk, etc has incorporated the consideration of climate risk factors. We also strengthened the identification of climate-related opportunities, including products and services, resource efficiency, and other areas. 	<ul style="list-style-type: none"> Identify the impact that climate risk may have on our business and operations on an ongoing basis, and to progressively identify and assess how climate risk may transmit to other traditional risk types for the banking industry, such as interest rate risk and operational risk.
b) The impact of climate risks and opportunities on business, strategy and financial planning	<ul style="list-style-type: none"> We aim to achieve carbon neutrality in our own operations by 2030 and have developed a carbon neutrality pathway to reduce greenhouse gas emissions through "first reduce, then replace, and offset at last". During the year, we launched a series of sustainable finance products, such as green and sustainable loans, climate transition index, and carbon trading, to assist customers in their transition to a low-carbon economy. 	<ul style="list-style-type: none"> Enhance our asset portfolio's resilience against climate change, formulate business strategy on carbon intensive industries, so as to support the Group's long term sustainability plan. Continue to grasp climate-related opportunities, understand market demands and trends, and enrich the Group's existing green and sustainable products to assist our customers in their low-carbon transition.
c) Resilience of the strategy to different climate-related scenarios (including 2°C or lower warming scenarios)	<ul style="list-style-type: none"> During the year, enhancements were carried out for stress testing and scenario analysis modelling based on the reference scenarios published by the IPCC and the NGFS, in order to analyse the respective impacts of physical risk and transition risk in relation to credit risk, market risk and operational risk with appropriate integration of conventional risk analysis tools. 	<ul style="list-style-type: none"> Continue to enhance our understanding of climate risk, strengthen existing stress testing and scenario analysis to identify the climate risks associated with the Group's underlying assets and infrastructure.
Risk Management		
a) Processes for identifying and assessing climate risks	<ul style="list-style-type: none"> Assessed how climate risks are transmitted to various traditional risks and their impact to strengthen the ability to identify climate risks. 	<ul style="list-style-type: none"> We will respond flexibly and quickly to market changes, improve existing identification methods and tools, and proactively identify potential risks.
b) Processes for managing climate risks	<ul style="list-style-type: none"> Implemented the "Three Lines of Defence" mechanism to clearly define the roles and responsibilities of different units in managing various risks, including climate risks. Established climate-related credit risk management mechanism, with requirements on identifying, assessing, mitigating, monitoring and reporting, etc; and established climate risk reporting mechanism, which is to report to the Management semi-annually on credit portfolio of high climate risk sensitive industry and report to the Board regularly on credit portfolio on brown industry. Climate risks have been thoroughly incorporated into relevant market risk management policies and procedures. Climate risks are evaluated before new equity adding into equity list and during the review of equity list of trading book. Independent risk management guideline for climate-related greenwashing risk is being developed with reference to identified good practices in the Circular on Due Diligence Processes for Green and Sustainable Products issued by HKMA. 	<ul style="list-style-type: none"> Enhance modelling capabilities of stress testing and scenario analysis and continue to examine the impact of climate risk on credit portfolios and trading book positions. Further enrich operational risk scenario settings, so as to assess the impact of physical risk on operational risk. Enhance resilience to climate risks and further improve credit risk management requirements for brown industries, such as through optimising portfolio-level indicators and credit guidelines. Regularly conduct greenwashing risk compliance reviews to further reduce potential greenwashing risks. Incorporate contents related to climate risk into the bank-wide specialized training for reputation risk management to enhance risk prevention awareness across all units and employees.
c) Integration of climate risk identification, assessment and management processes into overall risk management	<ul style="list-style-type: none"> The <i>BOCHK Group Risk Management Policy Statement</i> has clearly and progressively integrated the consideration of climate change impacts into the management framework, relevant policies and risk appetite statements of various related risks, which have now been fully integrated into the credit risk management process. 	<ul style="list-style-type: none"> Further optimise the management of climate risk factors in operational risk, liquidity risk, and market risk management processes. Strengthen management work related to climate risk, continue to enhance system functions, so as to improve data collection and risk identification capabilities.
Metrics and Target		
a) Metrics used in assessing climate risks and opportunities in accordance with the strategy and risk management processes	<ul style="list-style-type: none"> During the year, BOCHK initiated the process of establishing metrics for financed emissions in line with the PCAF standard. 	<ul style="list-style-type: none"> Perform ongoing work on the establishment of financed emission metrics and reduction targets to facilitate the Group in reducing the climate impact of its investments and financing activities over time, where feasible.
b) Scope 1, Scope 2 and Scope 3 greenhouse gas emissions and associated risks	<ul style="list-style-type: none"> Implemented a number of measures to reduce Scope 1 and Scope 2 greenhouse gas emissions. In 2022, Scope 1 and 2 emissions have been reduced by 29% compared to the 2019 baseline; electricity consumption has also been reduced by 17% compared to 2019. 	<ul style="list-style-type: none"> Gradually construct a carbon emission data collection platform and conduct analysis and adopt corresponding measures and policies to reduce carbon emissions. Monitor industry practices and regulatory requirements in a timely manner, and continue to improve the scientific basis and accuracy of greenhouse gas emissions calculations. At the same time, improve the quality of data disclosure.
c) Targets for managing climate risks and opportunities and the progress of such targets	<ul style="list-style-type: none"> Formulated multifaceted targets for managing climate-related risk and opportunities, as well as the regular monitoring of progress and review of planned objectives. The quantitative objectives consist of developing sustainable finance, accelerating the process towards carbon neutrality, promoting green and low-carbon customer service, and detailing sustainability-related appraisal. 	<ul style="list-style-type: none"> Continue to measure progress towards our carbon neutrality goal in our own operations and develop appropriate strategies and policies to manage climate risks and related opportunities.

APPENDIX 1: REPORT CONTENT INDEX

Disclosures in this report are prepared in line with the disclosure requirements of the HKMA's SPM module GS-1 "Climate Risk Management", and with reference to the TCFD's 11 disclosure recommendations.

TCFD Recommendations	Report Section
Governance	
a) Describe the board's oversight of climate-related risks and opportunities	
The board's oversight of climate-related issues, including processes and frequency by which the board and/or board committees are informed about climate-related issues; how the board considers climate-related issues when reviewing and guiding areas including strategy and plans; and how the board monitors and oversees progress against climate-related targets.	1.1 Governance Structure 1.2 The Board and its Committees 1.5 Sustainability and Climate-related Management System
b) Describe management's role in assessing and managing climate-related risks and opportunities	
The management's role related to the assessment and management of climate-related issues, including whether such they report to the board; description of organisational structures; processes to be informed of climate-related issues; and how climate-related issues are monitored.	1.1 Governance Structure 1.3 The Management Level and its Committees 1.4 The Sustainability Strategy Working Group 1.5 Sustainability and Climate-related Management System
Strategy	
a) Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term	
Short-, medium-, and long-term time horizons; climate-related issues potentially arising in each time horizon that could have a material financial impact on the organisation; and the processes used to determine climate risks and related opportunities.	2.2 Supporting Customers in Green and Low-carbon Transition 2.3 Working towards Carbon Neutrality in our Operations 3.2 Identification of Climate Risks
b) Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning	
How identified climate-related issues affects businesses, strategy, and financial planning; the impact of climate-related issues on financial performance and financial position; initiatives taken to reduce greenhouse gas emissions; and climate scenarios used to inform strategy and financial planning.	1.5 Sustainability and Climate-related Management System 2.1 Driven by Bank-wide Strategy 2.2 Supporting Customers in Green and Low-carbon Transition 2.3 Working towards Carbon Neutrality in our Operations 2.4 Managing Financed Emissions

TCFD Recommendations	Report Section
<p>c) Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario</p> <p>Resilience of strategies to climate-related risks and opportunities, taking into consideration a transition to a low-carbon economy consistent with a 2°C or lower scenario and, where relevant to the organisation, scenarios consistent with increased physical climate-related risks.</p>	<p>3.4 Climate Risk Stress Testing</p>
Risk Management	
<p>a) Describe the organisation's processes for identifying and assessing climate-related risks</p> <p>Risk management processes for identifying and assessing climate-related risks, including how the relative significance of climate-related risks are determined in relation to other risks; and how existing and emerging regulatory requirements related to climate change is considered.</p>	<p>3.3 Climate Risk Management Mechanism 3.4 Climate Risk Stress Testing 3.5 Climate Risk Data Management</p>
<p>b) Describe the organisation's processes for managing climate-related risks</p> <p>Processes for managing climate-related risks, including how decisions are made to mitigate, transfer, accept, or control those risks; and processes for prioritising climate-related risks.</p>	<p>3.3 Climate Risk Management Mechanism 3.4 Climate Risk Stress Testing 3.5 Climate Risk Data Management</p>
<p>c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management</p> <p>How processes for identifying, assessing, and managing climate-related risks are integrated into overall risk management.</p>	<p>3.3 Climate Risk Management Mechanism 3.4 Climate Risk Stress Testing 3.5 Climate Risk Data Management</p>

TCFD Recommendations	Report Section
Metrics and Targets	
a) Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process	
Key metrics used to measure and manage climate risks and opportunities; and internal carbon prices as well as climate-related opportunity metrics (if applicable).	4.1 Climate-related Metrics and Targets 4.2 Climate-related Financial Products and Business Achievements
b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas emissions, and the related risks	
Scope 1, scope 2, and scope 3 emissions (if applicable) and its related risks.	4.1 Climate-related Metrics and Targets 4.2 Climate-related Financial Products and Business Achievements
c) Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets	
Key climate objectives in response to anticipated regulatory requirements, market changes, or other objectives	4.1 Climate-related Metrics and Targets 4.2 Climate-related Financial Products and Business Achievements

APPENDIX 2: VERIFICATION STATEMENT



Scope of the verification

Hong Kong Quality Assurance Agency (“HKQAA”) has been engaged by the Bank of China (Hong Kong) Limited (“BOCHK”) to undertake an independent verification for providing limited assurance for the BOC Hong Kong (Holdings) Limited Climate-related Financial Disclosures Report 2022 (the “Report”) to be issued by BOCHK that reference to ‘Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures (October 2021)’ released by Task Force on Climate-related Financial Disclosures.

The scope of HKQAA’s verification covers the general content of the Report and data disclosed in the Report for the period from January 1, 2022 to December 31, 2022 (the “Selected Information”).

Level of Assurance and Methodology

The process applied in this verification was based on the International Standard on Assurance Engagements 3000 (Revised) – ‘Assurance Engagements Other Than Audits or Reviews of Historical Financial Information’ issued by the International Auditing and Assurance Standards Board (ISAE 3000). Our evidence-gathering process was designed to obtain a limited level of assurance as set out in ISAE 3000 for the purpose of devising the verification conclusion and the extent of this verification process undertaken was provided for the Core Elements of Task Force on Climate-Related Financial Disclosures.

HKQAA’s verification procedure covered verifying the framework for disclosures, mechanisms for collecting and analysing relevant information, and internal controls of reporting and reviewing of supporting evidence pertaining to the Statement. In addition, interviewing responsible personnel with accountability for preparing the disclosed contents and verifying the selected representative sample of data and information were covered. Raw data and supporting evidence of the selected samples were also examined during the verification process.

Independence

BOCHK was responsible for the collection and presentation of the information presented. HKQAA did not involve in establishing the disclosure framework, analysis of scenarios and risks, formulation of action plans and measurements as well as compiling or in development of the Report. Our verification activities were independent from BOCHK. There was no relationship between HKQAA and BOCHK that would affect the independence of HKQAA for providing the verification service.

Conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Report has not been prepared without reference to ‘Implementing the Recommendations of the Task Force on Climate-related Financial Disclosure (October 2021)’ nor the operational emissions data disclosed in report are unreliable.

Our assurance was limited to the selected information on the Report, and did not include statutory financial statements, financial statements and economic performance. Our assurance is limited to policies and procedures in place as of 19 May 2023.

Signed on behalf of the Hong Kong Quality Assurance Agency

Assistant Director, Finance Business

Teresa Leung

25 May 2023