Climate Related Disclosure 2024

Introduction

In active response to the China's "14th Five-Year Plan" for sustainable development, Nanyang Commercial Bank Limited ("NCB") is committed to improving the climate risk management system. We have incorporated climate risk management into our risk management mechanism and strengthened our climate risk management framework. This framework comprises the Board of Directors (the "Board"), management, and relevant departments. The Board serves as the highest decision-making body, while the management assumes comprehensive duties and is accountable for the implementation of risk management. The Risk Management Department acts as the lead department, and the Climate Risk Management Working Group functions as the execution team, working together to organize, unify, and collaborate on climate risk management tasks. The subsequent sections will provide a detailed overview of our comprehensive climate risk management strategy, including the enhancement of the governance structure, the deepening of green finance strategies, the strengthening of risk identification and control mechanisms, and the setting of indicators and goals.

Through a structured governance framework, NCB ensures comprehensive oversight of climate risks and opportunities, promoting efficient cross-departmental collaboration under the leadership of the Board and management. We integrate sustainable development principles into our strategy, introduce diverse sustainable financial products and services, and strive towards netzero emissions through operational improvements. We systematically identify both physical and transition risks, enhance risk response capabilities through stress testing and scenario analysis, and fully integrate climate risk into the overall risk management framework. Additionally, we monitor climate risks and advances toward net-zero transition continuously, laying a solid



foundation for long-term sustainable development. These measures demonstrate our commitment and forward-looking dedication to climate risk management, which strengthen corporate resilience and market competitiveness, and creating greater value for clients, shareholders, and society.



Governance

NCB's governance framework employs a structured and hierarchical management approach, aimed at ensuring comprehensive and rigorous oversight of climate-related risks and opportunities. This framework is centered on the principle of transparency, with clear assignment of responsibilities and institutionalized processes to ensure the effectiveness and consistency of climate risk management.

Management Decision-Making Level

BOARD OVERSIGHT (BOARD OF DIRECTORS AND RISK MANAGEMENT COMMITTEE)

The primary responsibilities of the Board include reviewing, approving, and monitoring climate risk tolerance levels, climate risk management strategies, and the climate risk management framework, as well as serving as the ultimate responsible party for overseeing and managing climate risks. The Risk Management Committee is responsible for approving climate risk management policies, monitoring the risk management related to sustainable development, and implementing effective strategies, controls, and mitigation measures in response to climate change.

MANAGEMENT (GENERAL MANAGEMENT COMMITTEE AND CHIEF RISK OFFICER)

The General Management Committee is responsible for the overall business objectives, strategies, and plans, implementing climate risk management strategies, and overseeing the climate risk management framework. The Chief Risk Officer, as the chair of the Climate Risk Working Groups¹,

¹ In order to implement the Bank's Climate Risk Strategy (hereinafter referred to as the "Strategy") and meet regulatory requirements, the Bank has held this year's Climate Risk Management Group meeting since late August 2024 to initiate the establishment of working groups in response to the five supporting systems in the "Strategy". The groups are: governance structure, products and services, risk management, information disclosure and infrastructure.



facilitates cross-departmental collaboration and ensures the effective implementation of climate risk management measures.

Execution Level

VARIOUS OPERATIONAL AND SUPPORT UNITS

NCB has various business units and risk management units, each of which is responsible for climate risk management within their respective lines of defense. Each unit is responsible for its specific functions, adhering to the Bank's risk management principles, policies, and systems to formulate relevant operational guidelines. The operational structure for climate risk supervision involves multiple levels, with the main responsibilities of each unit including:

First Line of Defense - Front Office and Business Units

Responsible for adhering to risk management policies, systems, procedures, and established limits during business processes. These units collect data, assess, forecast, and monitor the risk status of their respective businesses. They also manage climate and other risks within their units.

Second Line of Defense - Risk Management Units

Independent of the business units, these are responsible for the daily management of various types of risks. They conduct independent due diligence on the identification, measurement, assessment, forecast, monitor, control, and report of climate and other risks. They formulate short-term, medium-term, and long-term climate risk management strategies to ensure effective and independent risk management and reporting. This includes drafting risk management policies and procedures, reporting to the Board and/or Risk Management Committee and management on the implementation of policies and the status of various risks, and providing decision support and recommendations.



Third Line of Defense - Audit Department

Responsible for conducting independent audit work, verifying, and evaluating the adequacy and effectiveness of risk management policies and monitoring measures. They report to the Board on the quality of risk management oversight and the completeness and implementation of risk management policies, procedures, and internal controls.

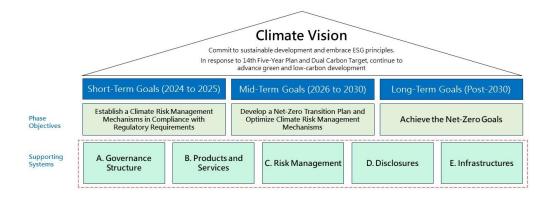
Support Units

Provide backend support for various business operation processes, ensuring that appropriate systems and human resources are in place for climate and other risk management, and assuming corresponding supervisory responsibilities. They formulate short-term, medium-term, and long-term climate risk management strategies. For units responsible for outsourcing, they must assume the responsibilities of the outsourcing business units in accordance with the Bank internal management policies, ensure that suppliers have adequate measures and controls in place for climate and other risk.



<u>Strategy</u>

To actively respond to the sustainable development blueprint outlined in the 14th Five-Year Plan and the "Dual Carbon Target," NCB has integrated climate risk management and sustainable financial development as pillars in achieving our grand vision. This initiative aims to support the national strategic goals of achieving the peak of carbon emissions before 2030 and carbon neutrality before 2060, while promoting the low-carbon transition and high-quality development of society and the economy. As a result, we have systematically established a comprehensive climate risk management strategy and set up five supporting systems (governance structure, products and services, risk management, disclosure, and infrastructure) to ensure the effective implementation of the strategy. Regular meetings are held to communicate specific work targets and progress.



FIVE SUPPORTING SYSTEMS FOR CLIMATE RISK MANAGEMENT

Governance Structure

Clearly define the decision-making responsibilities of the Board and management in climate risk governance, incorporating net-zero transition into their scope and continuously providing climate-



related knowledge and industry trend training to directors and management. Regularly review, update, and enhance the climate risk reporting processes and content, supplementing the qualitative statements on climate risk in the risk appetite framework. Explore the inclusion of quantitative metrics and net-zero targets to ensure that the governance framework complies with regulatory requirements and aligns with market developments.

Products and Services

Committed to achieving the goal of sustainable finance scale growth, enhancing the service capabilities of the front-line team, and improving the sustainable finance product system with NCB's characteristics. Study domestic and foreign sustainable finance classification standards, integrate product systems and classification standards into policy and procedures to meet market needs and strengthen sustainable development goals.

Risk Management

Establish a climate risk identification mechanism and classification standards for high-emitting industries. Develop NCB's capability for climate risk-related stress testing. Additionally, research and optimize the monitoring and reporting mechanisms for climate risk in credit portfolios, updating relevant risk factors and data. Formulate management policies for high-climate-risk businesses to impose risk control which aligns with NCB's risk appetite.

Disclosures

Strengthen the regular collection, review, and reporting of climate risk-related data. Disclose climate-related risks and opportunities in accordance with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). Enhance the granularity of disclosure content in line with regulatory requirements and industry trends to ensure the accuracy and timeliness of the reports.



Infrastructures

Provide climate risk management training for employees to build professional capabilities. Define the goals for data system construction and optimize the operational and financing carbon emissions database. Research and implement automated monitoring of the data. Additionally, explore incorporating climate risk management, sustainable finance, and net-zero targets into performance evaluations to ensure support for the implementation of NCB's climate strategy.

NCB has established respective working groups, in accordance with these five supporting systems, to effectively implement future climate risk management initiatives.

SUSTAINABLE FINANCIAL SERVICES AND INVESTMENTS

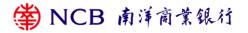
To fully integrate sustainable development concepts into its development strategies and financial services, NCB is committed to launching a series of green financial products in retail and commercial banking services to promote clients' adoption of low-carbon solutions and sustainable practices. To expand its green finance business, NCB:

- In April 2024, NCB provided sustainability-linked loan services to shipping industry clients and was appointed as the Sustainability Structuring Advisor by the clients. We successfully assisted the clients in establishing a green and sustainable finance framework, which received a sustainability certification from the Hong Kong Quality Assurance Agency (HKQAA) in May. Our efforts were further recognized with the award for "Outstanding Award for Green and Sustainable Loan Facilitator (Shipping Industry) – Visionary Sustainability-linked Loan Performance Metrics."
- In April 2024, NCB signed a "Strategic Cooperation Agreement" with the Hong Kong Quality Assurance Agency (HKQAA) to undertake in-depth cooperation across multiple areas,



including innovation, certification of sustainable development and green financial products, as well as corporate green transformation. This collaboration will facilitate the further development and improvement of NCB's green financial products and services to better meet corporate needs.

- In July 2024, NCB successfully assisted a client in hotel industry in obtaining green and sustainable finance certification for a bilateral loan. We were honored to receive the award for "Outstanding Green and Sustainable Loan Facilitator (Hotel Industry) - Visionary Sustainability-Linked Loan Performance Metrics."
- In April 2024, NCB acted as a Joint Bookrunner to successfully assist Nanning Communications Investment Group Co., Ltd. in issuing a 3-year, \$300 million senior unsecured sustainable bond. The funds raised will be used for developing low-emission transportation infrastructure, renewable energy, and energy storage systems to support the development of a low-carbon economy.
- In June 2024, NCB was awarded the "Green Deal of the Year Hong Kong" by the prestigious financial magazine Asian Banking & Finance, recognizing our participation in the issuance of a "Biodiversity" and "Belt and Road" dual-theme green bond by the overseas branches of China Construction Bank in 2023. The issuance consisted of two tranches and two currencies: a 3-year, \$500 million bond issued by China Construction Bank's Sydney branch and a 2-year, RMB 2 billion bond issued by its London branch. This issuance also received a pre-issuance certification from the Hong Kong Quality Assurance Agency.
- NCB also continues to participate in green bond investments, with the scale increasing annually. This includes a variety of issuers and currency markets, actively expanding the



coverage of our green financial products and striving to support the continuous development of green industries.

OPERATIONAL IMPROVEMENTS

Greenhouse gas operational net-zero emissions transition planning

In active response to the Hong Kong Monetary Authority's (HKMA) "Sustainable Finance Action Plan" launched on October 21, 2024, which clearly states that all banks to strive to achieve net zero emissions in their own operations by 2030. NCB has initiated data collection for Scope 1 to Scope 3 greenhouse gas (GHG) emissions. This effort aims to develop a comprehensive operational net-zero transition plan for NCB. (For details, please refer to the next section: Metrics and Targets.)

Proactively Reducing Waste in Our Own Operations

NCB carried out various waste recycling projects, recycling 10,050 kg of waste paper, 142.9 kg of plastic bottles, 252 kg of printer toner cartridges/ink cartridges, and 71 kg of energy-saving lamps and fluorescent tubes. In addition, NCB unified the template for the document envelopes of internal transmission, enhanced the accuracy of physical file transmission, optimized the internal file transmission process, and facilitated the recycling of envelopes by various units, reducing the ordering of envelopes by about 10,000 pieces during the year; with aids of different modules in our system, including incoming-mail management module and other information collection management modules, each unit can operate in an electronic mode and hence reduce the of about 6,000 paper files transmission throughout the year. This promotes the concept of green and sustainable banking, and truly achieve the goal of paperless. At the same time, we actively promote electronic channel account opening, with the objective of paperless during account opening, and all materials are directly stored in the corresponding file system to achieve paperless



archiving. This is the action of saving paper while also reducing manpower of document scanning and costs of paper file storage.

We also participated in Hong Kong Green Organization Certification and successfully obtained the "Wastewi\$e Certificate" and "Energywi\$e Certificate". As evaluated by independent certification agency, we also successfully obtained the "Hong Kong Green Organization" certification. In addition, we also participated in the "The Programme on Source Separation of Commercial and Industrial Waste Commendation Scheme 2023/24" organized by the Hong Kong Waste Reduction Website of the Government, and successfully won the highest level award "Diamond Award" for NCB.



Risk Management

NCB's risk management framework has been strategically designed to comprehensively identify, assess, and mitigate climate-related risks, ensuring business resilience and flexibility in addressing emerging challenges. Through systematic processes and stress testing, climate risks are integrated into the overall risk management system to support sustainable development goals.

IDENTIFICATION OF CLIMATE-RELATED RISKS

Physical Risk

Physical risks arise from climate change-induced natural events, such as tropical cyclones, floods and extreme weather, which have a direct impact on the assets and operations of the Bank and its clients. Such risks may damage the value of borrowers' assets or reduce their output levels, which in turn may lead to credit, market and liquidity risks. For example, extreme weather may cause business disruptions or supply chain disruptions, increasing operational risks.

Transition Risk

Transition risks arise from policy, technology and market changes in the transition to a low-carbon economy, such as carbon pricing, technological advancements or escalating regulatory requirements. Such risks may lead to increased financial pressure on borrowers or fluctuations in asset values, affecting credit and market risks. For example, investor pressure on high-emitting industries may trigger changes in corporate bond prices and challenge the stability of the portfolio.



In order to understand the impact of climate risks on the Bank, we conducted a qualitative assessment and its transmission to traditional risk types. The transmission of climate risks to traditional risk types is summarized as follows:

Traditional Risk Types	Physical Risk	Transition Risk	Risk Level
Credit Risk	Climate events such as	Factors such as carbon	Short-term
	tropical cyclones and	pricing and technological	risk is low,
	floods can impact	advancements can put	medium-term
	borrowers' asset values	financial pressure on	risk is
	and output levels,	borrowers, increasing the	moderate
	increasing the risk of credit	risk of credit defaults	
	defaults		
Market Risk	Climate events can impact	Investor pressures and	Low
	macroeconomic indicators,	stakeholder concerns can	
	causing fluctuations in the	cause fluctuations in	
	prices of government	corporate bond prices	
	bonds and foreign currency		
	non-derivative assets		
Liquidity Risk	Climate events can	Factors such as carbon	Low
	increase borrowers' cash	pricing and technological	
	needs, leading to a	advancements can put	
	significant increase in cash	financial pressure on	
	outflows	borrowers, leading to	
		higher cash outflows	
Operational and Legal	Extreme weather events	Changes in legal and	Low
Risk	can disrupt business	regulatory requirements	
	activities	can increase legal risks	
Reputation Risk	The impact of climate event	Market perspectives can	Low in the
	management on bank	change due to NCB's	short term,
	services and operations	actions in addressing	moderate in
	can alter consumer	climate transition	the medium
	sentiment		term
Strategic Risk	Failure to address and	Failure to address climate	Low
	mitigate climate events can	transition can lead to a	
	lead to a decline in	decline in competitiveness	
	competitiveness		



CLIMATE RISK STRESS TESTING AND SCENARIO ANALYSIS

NCB actively participated in the HKMA's 2023-2024 climate risk stress test, following predefined short-term and long-term scenarios as outlined in the guidelines. Based on the Bank's experience in participating in the 2021 climate risk stress test pilot program, we worked with external consultants to improve stress testing methods and procedures, including expanding climate scenarios and conducting more comprehensive assessment requirements.

During the test, we completed the climate risk stress test scenario analysis and expansion, data collection and collation, risk identification, risk transmission and measurement method development based on the following four scenarios using the scenarios from the central bank and regulator green financial system (Network for Greening the Financial Systems, "NGFS").

- Short-term Scenario: The assessment period is from 2023 to 2027, and it includes climate risk drivers of transition risks (accelerated transition to a low-emission economy), physical risks (more frequent occurrences of extreme weather events such as typhoons and heavy rainfall), and macroeconomic risk drivers (Global economic downturn, slowdown in Mainland China and Hong Kong in recession).
- Long-term Scenario: The assessment period is from 2023 to 2050, covering the following transition pathways:
 - 1. Below 2°C (i.e., an orderly transition with high transition risk and low physical risk);
 - Delayed Transition (i.e., a disorderly transition with high transition risk and high physical risk); and
 - Current Policies (i.e., transition limited to policies already implemented, with low transition risk and high physical risk).



The Hong Kong Monetary Authority also provides corresponding climate risk scenario parameters, including:

- For transition risks: industry transition pathways, energy prices, energy quantities, carbon emissions, carbon prices, etc.;
- For physical risks: changes in key meteorological indicators, such as precipitation and sea level.
- Macroeconomic Environment: GDP, unemployment rate, etc.

Scenario Setting (Starting from the End of 2022)

Short-Term Scenario (2023 to 2027)	Long-Term Scenario (2023 to 2050): Three scenarios adopted from the Network for Greening the Financial System (NGFS) of the third generation central banks and regulatory bodies, 		
New Scenarios Introduced by the Hong Kong Monetary Authority Transition Risk (Accelerating Transition to a Low-Emissions Economy) Physical Risk (Increased Frequency of Extreme Weather Events Such as Typhoons and Heavy Rains) Macroeconomic Stress (Slowdown in the Mainland Economy and Hong Kong Economic Recession)	Below 2°C Orderly Transition • Early and decisive actions by governments, businesses, and consumers gradually reduce global emissions • Sufficient limit the increase in global average temperature to below 2°C High Transition Risk Low Physical Risk	Delayed Transition Disorderly Transition Government actions to address climate change are delayed until 2030 Sufficient limit the increase in global average temperature to below 2°C. A 10-year delay has exhausted the global carbon budget, requiring more significant action to catch up High Transition Risk Low Physical Risk	Current Policies Transition Limited to Implemented Policies • Governments fail to introduce additional policies to address climate change beyond those already announced • Paris climate targets not achieved - global temperature increase exceeds 3°C. Low Transition Risk High Physical Risk

To stay abreast of the latest developments in relevant areas and continuously enhance the capabilities, NCB actively participates in various climate risk stress testing forums organized by regulatory bodies and professional associations, and maintains close communication with stakeholders.



MANAGING CLIMATE-RELATED RISKS AND INTEGRATING THEM INTO THE OVERALL RISK FRAMEWORK

Based on the climate risk assessment and climate risk stress testing, NCB will implement the following measures to further improve its management practices:

- A "Climate Risk Management Policy" has been established, along with a climate risk identification mechanism and process, ensuring regular updates to incorporate the latest regulatory guidelines and industry best practices.
- Compile a high-emitting industry directory to support risk assessment at the industry level; research is being conducted to expand monitoring and develop policies for high-emitting industries (for details, please refer to the following section: Metrics and Targets).
- Assist the Board and management in their oversight of climate risk management and provide them with continuous training on the latest climate risk regulatory guidelines
- Supplement the Risk Appetite Statement with qualitative considerations and quantitative metrics for climate risks.

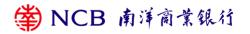


Metrics and Targets

In order to build a comprehensive climate risk monitoring mechanism and net zero operation transition plan, NCB systematically evaluates and tracks the risk exposure of high-emitting industry clients portfolios through the "Climate Risk-Related Monitoring Mechanism", and gradually formulates climate risk response strategies in a timely manner. At the same time, "figures such as the growth rate of green loan are used to measure NCB's expansion of green and sustainability-linked loan and bond products. In addition, "Scope 1 to 3 Greenhouse Gas Emissions" aims to quantify NCB's carbon footprint: Scope 1 direct emissions (such as burning fossil fuels in its own facilities), Scope 2 indirect energy emissions (generated by electricity purchases), Scope 3 related emissions (travel), and disclose total emissions from this year to clarify the progress of carbon reduction targets. These figures and quantitative indicators will help the Bank implement TCFD recommendations, improve climate risk management transparency, and support sustainable financial strategies and net zero transition.

Climate risk-related monitoring:

As of the end of 2024, electric utilities (3%), construction (2%), oil and gas (2%), and chemicals
(2%) are the four high-emitting industries with largest proportion of the Bank's loan outstanding balance.



Green and Sustainable Finance Development:²

By the end of 2024, NCB's green loan outstanding balance will be close to HK\$ 10 billion, an increase of more than 45% over the same period last year. The green bond holdings will reach HK\$ 4.87 billion, an increase of 44% over the same period last year.

Scope 1 to 3 greenhouse gas emissions (GHGs):³

Greenhouse Gas Emission Indicators (tons of CO2 equivalent, tCO2e)	Year of 2024
Total Greenhouse Gas Emissions	3,136.24
Scope 1: Greenhouse Gas Emissions	28.83
Scope 2: Greenhouse Gas Emissions	3,071.11
Scope 3: Greenhouse Gas Emissions – Business Travel ⁴	36.30

² The classification and verification of green and sustainable financial products are conducted by a third-party verification from the Hong Kong Quality Assurance Agency. The performance of green bonds is measured using the Bloomberg "Green Bond Index."

³ Scope 1 and Scope 2 greenhouse gas emissions are calculated using a tool developed in collaboration between the Hong Kong University of Science and Technology and the Green and Sustainable Finance Cross-Agency Steering Group. The calculations are based on the Hong Kong Government's " Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for Buildings (Commercial, Residential or Institutional Purposes) in Hong Kong" guidelines, as well as data related to consumed electricity, gas, and other relevant information.

⁴ Travel emissions cover only the emissions generated from business-related air travel within the reporting year. The emission quantities are calculated using the International Civil Aviation Organization (ICAO) Carbon Emissions Calculator, which is based on flight distance, number of passengers, and cabin class.



Future outlook

NCB will continue to deepen operational improvement measures to support the climate risk strategy and the achievement of the country's "Dual Carbon Target" by:

- Governance Structure: Continuously review net-zero progress and update monitoring metrics in the risk appetite statement as needed;
- Products and Services: Establish NCB's green and sustainable finance classification standards, explore the scope of transition finance products and services, establish an industry transformation coaching mechanism, and aim to cover NCB's high-emitting industry clients;
- Risk Management: Optimize climate risk-related stress testing and study the monitoring and control of high-emitting industries;
- Disclosures: Report the status of climate risk management in accordance with regulatory requirements and industry trends;
- Infrastructures: Research the automation of monitoring for operational and financing emissions, aiming to fully achieve low-carbon operations and provide efficient and sustainable services to clients.

NCB actively promote various actions to achieve short-term goals. In response to the everchanging climate risk management, we will also consider internal and external factors (including but not limited to regulatory policies, technological transformation, and changes in market behavior) in a timely manner on the basis of existing medium- and long-term goals, in order to enhance climate resilience in a pragmatic and continuously improving manner.