



Be the Bank of Choice for Green Finance Services





Statement on Preparation of the Report

Bank of China Limited Green Finance (TCFD) Report 2022 (hereinafter referred to as "the Report") is intended to provide information about the progress made in the fields of environment (climate) and green finance by Bank of China Limited (hereinafter referred to as "BOC", "the Bank", or "we"), including the Bank's achievements in promoting green finance and facilitating the green and low-carbon development in 2022.

Reporting Scope

Scope of organization: Consistent with the consolidated financial statements of the Bank.

Time frame: Content of the Report covers the period from January 1, 2022 to December 31, 2022 with some exceptions.

Basis for Preparing the Report

The Report is prepared with reference to a host of standards and requirements, including the disclosure recommendations from the Task Force on Climate-related Financial Disclosures (TCFD) of the Financial Stability Board (FSB), the United Nations' Principles for Responsible Banking (PRB), and the *Guidelines for Environmental Information Disclosure by Financial Institutions* (JR/T 0227-2021) of the People's Republic of China (PBOC).

Data Declaration

Data in the Report are primarily from 2022, with minor exceptions being from previous years. Sources of data mainly include internal systems of the Bank and statistics of its branches. The monetary amounts mentioned in the Report are denominated in RMB, unless otherwise specified.

Form of Publication

The Report is released in both print and online versions. The online version is available on the Bank's website (URL: www.boc.cn). The Report is published in both Chinese and English, whilst the Chinese version shall prevail in the event of discrepancies between the two versions.

Contents

	Message from the Chairman BOC in the Eyes of Stakeholders Our Steps towards Green Development in 2022	09 12
66	Indexes	
		21 23
		27 35 41

Governance structure Policies and systems

Strategy Strategic goals Climate-related risks and opportunities

R	isk Management
M	anaging ESG risks of customers
В	uilding green development capacity
Eı	nsuring data and system security

	Metrics and Targets
44	Green investment and financing
53	Green operation
62	Tables of key indicators

03

Message from the Chairman

Since the 18th National Congress of the Communist Party of China, the Party Central Committee, with President Xi Jinping at its core, has made ecological conservation an initiative vital for sustaining the Chinese nation's development, and launched a host of creative, forward-looking, and fundamentally important measures that are turning the blueprint for a beautiful China where humanity and nature exist in harmony into reality. Faithfully and thoroughly following through plans and strategies made by the Party Central Committee and the State Council, Bank of China has embraced the concept that clean water and lush mountains are invaluable assets, and integrated green development into every aspect of its operations and business development, to support the comprehensive green transition of the economy and society.

We've practiced green governance and contributed our wisdom to global sustainable development. We are part of over ten green or FSG-related initiatives, including the United Nations' Principles for Responsible Banking (PRB), the TCFD, and the Green Investment Principles for the Belt and Road Initiative (GIP); and have supported the 15th Conference of the Parties to the United Nations Convention on Biological Diversity (COP15). We are actively engaged in domestic and international standards setting for sustainable development, and have been sharing our research on green finance and exploring together green development opportunities, with the world. As the sole official banking partner to the 2022 Beijing Winter Olympics & Paralympics, we committed ourselves to the "Green Olympics" concept by supporting the construction of green Olympic venues and green infrastructure, and by ensuring full compliance with low-carbon and eco-friendly requirements throughout the building and operation of our Winter Olympic service outlets to achieve carbon neutrality.

We've bridged supply and demand with diversified financial services in support of building a low-carbon society. We've increased the supply of credit to industries such as clean energy. green construction, and green transportation, to support the transition and upgrade of carbon-intensive enterprises. Our domestic green credit balance has reached RMB1,987.2 billion, representing a year-on-year growth of 41.08% and with a nonperforming credit ratio below 0.5%. Taking full advantage of our expansive global network, we've participated in financing many of the most important green projects globally, including the world's largest offshore wind farm in operation, making us the highest ranking Chinese bank in the Bloomberg League Table for Global Green Loans and for Global Sustainability-linked Loans. We've constantly expanded the scope of our comprehensive green finance offerings to better match the demand; and made new progress in building our "BOC Green+" platform, through which we offer 5 categories and dozens of green finance products and services, covering loans, trade finance, bonds, insurance and more. We've also maintained our market leadership in green bond issuance, underwriting, and investment; and launched more innovative green financial products for retail customers, to facilitate the transition of consumer behavior and add momentum to the new trend of green consumption.

We've held the bottom line of avoiding systemic risks and provided strong support to the carbon peaking and carbon neutrality vision. We've consistently perfected our policy framework, guided by the Group's strategic plan for green finance during the 14th Five-Year Period: and formulated over 20 supporting measures covering 13 aspects, including credit approval, performance assessment, and risk mitigation. We've further enhanced the whole-process management of client ESG risks, adding binding requirements for environmental and social risk management in our credit policies for more than 80 industries. We've also been committing resources to the green and low-carbon development programs under the Belt and Road Initiative (BRI), and exercised stronger ESG risk management for overseas projects, ceasing to provide financing for new coal mining and coal-fired power projects outside the Chinese Mainland. Additionally, we've completed climate-related stress tests on assets in eight carbon-intensive industries to comprehensively assess, and inform the treatment of, transition risks.

We've optimized our management mechanisms and integrated low-carbon transition into daily operations. We've fully incorporated the green and low-carbon development philosophy in our management, business development and operations. We've formed a three-tiered green governance structure consisting of the Board of Directors, the Senior Management, and teams of professional talents. We've put in place Evaluation Standards for Green Finance Exemplary Institutions and the Program for Building Green Finance Specialty Outlets, under which eight tier-1 branches and 12 tier-2 branches have been designated as green finance exemplary institutions and 157 outlets built into green finance specialty ones. We've built a green finance talent cultivation system for the 14th Five-Year Period that emphasizes research and training. The system features a curriculum extending across eight themes including strategies and policies, financial products, financial standards, and information disclosure; and is expected to produce around 10,000 green finance experts by 2025. Having become the first among peers to complete an operational carbon inventory, we have also set out to carry out an environmental footprint inventory, covering over 11,000 branches in the Chinese Mainland and 62 other countries or regions around the world. For the period from 2019 to 2022, we've managed to reduce our total, group-wide energy consumption and direct greenhouse gas (GHG) emissions by 4.86% and 15.58% respectively.

Bank of China believes in greenness as an integral component of high-quality development, and is firmly committed to the Party Central Committee's high-quality development plans and initiatives, and the path of green growth. We will continue to make full use of our strengths in globalization and diversified business platforms to innovate and optimize our products and services, facilitate the carbon peaking and carbon neutrality goals, and support the transition to green and low-carbon economy and society, opening a new chapter for the Bank to empower ecological advancement through finance



Chairman Ge Haijiao

O2 Ge Haijiao

BOC in the Eyes of Stakeholders



Expert from PRB

As a Signatory to the Principles for Responsible Banking, BoC has committed to align its business practice with Paris Agreement and China's national climate targets. Measuring and managing climate-related risk is a first step to delivering on that commitment. Governance structure that includes green and climate factor is also necessary.



Expert

from China Banking Association

Bank of China has demonstrated a strong commitment to green finance by fully and thoroughly implementing the national strategies and regulatory requirements. In line with the national ambition for ecological progress and dual carbon goal, the Bank has made solid efforts to develop green finance, vigorously supported green industries, fostered international cooperation in depth, and established a long-term mechanism to promote green and low-carbon development. The results of efforts to foster the develop green finance and establish a green bank are remarkable.



Senior Researcher from BOC London Branch

We have internalized the concept of green development and incorporated it in all business development practices, offering customers and consumers a comprehensive green finance services and seeking to become the "Bank of Choice for Green Finance Services". From increasing support for the development of green industries and the low-carbon transition of energy-intensive and carbon-intensive industries to actively serving green projects with international influence, we are advancing along the green path to make balanced progress towards the goals of carbon reduction, pollution control, expansion of green industries, and stabilization of economic growth through the sound and steady development of green finance business. In doing sp, we could contribute to building a beautiful world with our financial strength.



Sustainable Investing Analyst from Fidelity International

As a responsible investor, Fidelity firmly believes that active stewardship forms an important part of the bedrock for sustainable investing. Throughout our engagement with Bank of China on topics such as green finance, the bank has been very open to and receptive of investor feedback and has continued to put in efforts to enhance its capabilities around green finance. Its first TCFD report goes a long way in informing readers of its vision and practices around green finance, as well as its efforts to address the environmental and climate change challenges. We look forward to Bank of China's continuing efforts in green finance including its quality, timely, and comprehensive disclosure to keep investors better informed.



ESG Management Expert from Ernst & Young

Bank of China attaches great importance to ESG, especially the transparency and professionalism of environment-related disclosures. As we have witnessed, BOC has been at the forefront of Chinese banking financial institutions in terms of environmental and green finance practices in recent years. Since 2022, the Bank has systematically disclosed environmental (climate) and green finance-related information in its annual corporate social responsibility report (ESG) by referencing TCFD recommendations in advance of its Chinese peers. This practice demonstrates BOC's unwavering dedication and confidence in pursuing the green development path and contributing to the realization of the dual carbon objective.



Photovoltaic Operator in Huzhou, Zhejiang

Huzhou of Zhejiang Province is a city with abundant sunlight. In the Nanxun District alone, approximately 300,000 square metres of unused rooftops are suitable for solar photovoltaic (PV) panel installation. The concentrated installation of distributed solar PV panels could not only alleviate the shortage of industrial electricity in the district, but also stimulate the growth of related industries, resulting in positive economic and social benefits. Informed that our company is responsible for the construction and operation of solar PV power facilities in the entire district, the BOC Huzhou Branch frequently visited us to discuss project cooperation. It customized professional financial service solutions, offered preferential financing interest rates, and assisted us in obtaining project financing efficiently. With the support of BOC, the distributed solar PV projects in our charge progressed in an orderly manner, thereby contributing to the transition of low -carbon economy across the district.



Our Steps towards Green Development in 2022

- Continuously improved a system of the "1+1+N" green finance policy system.
- Issued more than 20 supporting policies to foster a policy package covering 13 areas such as appraisal and incentive, optimized economic capital, and differentiated authorization for green business development.
- Formulated or revised credit policies for nearly **10** green industries, including hydrogen energy, wind power, pumped storage, and forestry.
- Imposed binding requirements to credit policies for environmental and social risk management of more than 80 industries including agriculture, forestry, animal husbandry and fishery, mining and metallurgy, oil, gas and chemical engineering, construction, real estate, and transportation and logistics.
- Conducted the climate risk stress tests over **8** carbon-intensive industries.
- The domestic green credit balance¹ reached to RMB1,987.2 billion, a year-on-year increase of 41.08%. Actively participated in international benchmark green projects. Ranking first among Chinese banks in the Bloomberg League Table for "Global Green Loans" and "Global Sustainability-linked Loans".
- Ranking first among Chinese banks for the domestic and overseas green bonds issuance of total RMB87.7 billion.
- The domestic and overseas underwriting volumes of green bonds are RMB259,529 million and USD28,985 million respectively, ranking first among Chinese banks in the Bloomberg League Table for "Global Offshore Green Bonds".
- Ranking first on NAFMII's list of investors for green debt financing instruments in 2022.
- Launched the *Green Finance Talent Program of Bank of China* to establish a green finance personnel training system for the 14th Five-Year Plan period, with the capacity and targets of cultivating around **10,000** green talents at three levels and in six areas.
- Selected **8** tier-1 branches and **12** tier-2 branches as green finance exemplary institutions.
- Built **157** green finance specialty outlets.
- Completed an operational carbon inventory covering over 11,000 branches in the Chinese Mainland and 62 other countries or regions.
- around the world. The group-wide total energy consumption and direct GHG emissions decreased by **4.86%** and **15.58%** respectively for the period from 2019 to 2022.

1: The former CBIRC's (now the National Administration of Financial Regulation, NAFR) standard for "green credit" was adopted, which mainly consists of green credit in six industries, that is, energy conservation and environmental protection, clean production, clean energy, ecological conservation, infrastructure, and green services, trade-related green credit, and consumption-related green credit.

(Data as of the end of 2022)

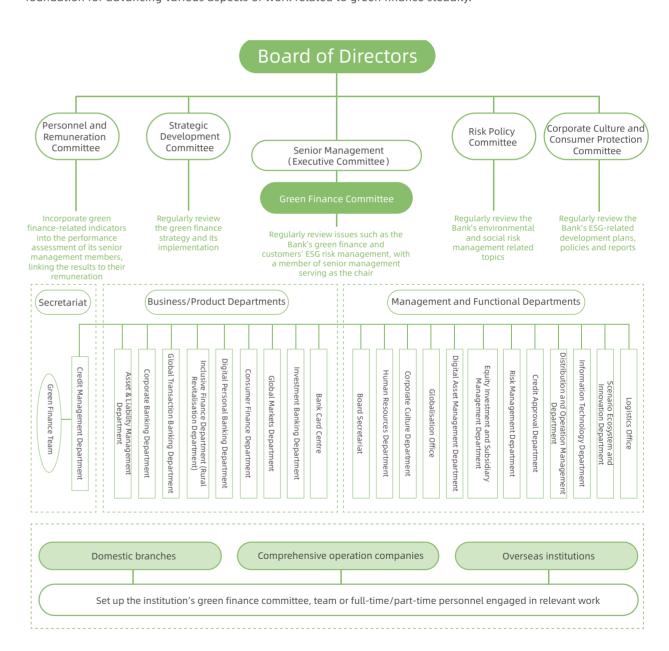
Honors and awards

Name of honor/award	Granted by
 Outstanding Leadership in ESG-linked Loans Asia Pacific: Outstanding Leadership in Transition/ Sustainability-linked Loans, Outstanding Leadership in Sustainable Project Finance, and Outstanding Leadership in ESG-linked Loans Sustainable Finance Award in China Stars of China: Best Sustainability Bank 	Global Finance
 "Market Leader" rankings: Environmental, Social, and Corporate Governance (ESG) - Tier 1 Corporate Social Responsibility (CSR) - Tier 1 	Euromoney
■ Best ESG Bank in China	Asiamoney
 The Best Sustainable Finance Issuer, Best Sustainability-related Bonds, and Best Carbon Neutrality-themed Green Bonds 	The Asset
■ IFF Global Green Finance Award - Innovation Award	International Finance Forum (IFF)
■ Best Progress Award	Green Investment Principles (GIP) for the Belt and Road
■ MSCI ESG rating of "A"	MSCI
 Exemplary Units for Green Banking Outstanding Contribution Award granted by the Special Committee for Green Credit Business 	China Banking Association
■ Best Cases of A-share Listed Companies: ESG Practice	China Association for Public Companies
 "Low-carbon Pioneers of the Year" at the 14th Annual Conference on Social Responsibility of Chinese Enterprises 	Southern Weekly
 Special Jury Prize of EY Sustainability Excellence Awards Outstanding Case (Enabling Finance) of EY Sustainability Excellence Awards 	Ernst & Young
■ Best Bank with Responsible Investment	Sina



Governance structure

BOC gives full play to the organizational management role of the Board of Directors and the Senior Management in the field of green finance, maintains the three-tier governance structure consisting of the Board of Directors, the Senior Management and specialized teams, and continues to raise the standard of green finance governance, thus laying a solid foundation for advancing various aspects of work related to green finance steadily.







Board of Directors (or its special committee)

Board members possess professional knowledge and skills in corporate governance, economy and finance, risk management, internal control and compliance, etc., and are able to offer guiding and constructive opinions and recommendations on issues related to climate change and green finance, as well as effectively perform their climate governance duties. Members of the special committee possess professional knowledge and skills in green finance, inclusive finance, risk management, and corporate culture building, among other aspects.

The Board of Directors (or its special committee) is responsible for reviewing and approving the green finance development plan as well as the green finance targets set by the Senior Management and the green finance reports submitted by it. At the same time, it also supervises and evaluates the implementation of the green finance development plan. In 2022, the Board of Directors heard the report on green finance development in 2021 and considered and adopted the *Corporate Social Responsibility Report 2021 of Bank of China Limited (Environmental, Social, Governance)*. The Report marks the first time BOC made information disclosure within the framework of the TCFD recommendations and the United Nation's Principles for Responsible Banking (PRB).

Strategic Development Committee

It shall consider strategic development plans submitted by the Senior Management, evaluate factors that may affect strategies and their implementation; consider the green credit strategy, make recommendations to the Board of Directors, and oversee the implementation and compliance of the Bank's green credit strategy; etc. In 2022, the committee heard the reports on green finance development in 2021, progress in digital transition, and other themes and approved the green finance targets set by the Senior Management and the green finance reports submitted by it.

■ Corporate Culture and Consumer Protection Committee

It shall review the Bank's ESG-related development plans, policies, and reports and make recommendations to the Board of Directors; identify, evaluate, and manage significant ESG matters; establish an appropriate, effective ESG risk management and internal control regime; and regularly hear reports on corporate culture building, ESG, consumer protection, and other aspects of work done by the Bank. In 2022, the committee reviewed the *Corporate Social Responsibility Report 2021 of Bank of China Limited (Environmental, Social, Governance)* and listened to the 2021 work summary and 2022 work plan for corporate culture building.

■ Risk Policy Committee

It shall perform duties related to comprehensive risk management; review and finalize risk management strategies, material risk management policies, and risk management procedures and systems; oversee the implementation of risk management strategies, policies, and procedures; evaluate the status of risk management and the performance of the Senior Management, functional departments, and institutions in fulfilling their risk management and internal control responsibilities. In 2022, the committee examined the Group's risk appetite statement, stress test management policy, and other relevant documents, all of which contained the information pertaining to environmental (climate), social and governance risk (hereinafter referred to as "ESG risk") management.

■ Personnel and Remuneration Committee

It shall finalize the performance appraisal standards for the senior management members of the Bank, and evaluate their actual performance. In 2022, the committee reviewed and adopted the performance appraisal results and salary distribution plan of the Chairman, executive directors and senior management members for 2021, and the implementation plan on the performance appraisal of the Chairman, President, and other senior management members for 2022. The assessment plan included topics related to green finance and the appraisal results were linked to salary distribution.



Senior Management

The Green Finance Committee is responsible for the overall management and professional decision-making of the Group's green financial work, and is chaired by a member of senior leader in charge of risk management departments. Its main functions include implementing the resolutions and decisions of the Board of Directors (or its special committee) related to green finance; forwarding and acting on important national and regulatory policies; reviewing important policies and systems for the management of green finance and ESG risks; organizing or conducting self-evaluations of green finance; and hearing reports on green finance development. The standing members of the committee are 22 departments, which coordinate all business lines and institutions across the Group to develop green finance.

In 2022, the Green Finance Committee held two meetings at which it heard reports on the Group's operational carbon inventory, green credit system, energy-saving retrofit on a trial basis, business results achieved and priorities under green finance, green finance-related product innovation, green financing inventory results, etc., as well as reviewed and adopted documents such as the *Evaluation Standards for Green Finance Exemplary Institutions (Version 2022)* and the *Policy of Bank of China for Managing Environmental (Climate), Social and Governance Risks Associated with Customers (Version 2022)*.



Specialized teams

The Head Office sets up a green finance team to promote the specific work of green finance in the Group. Each department creates full-time and part-time positions to carry out tasks related to green credit, green bonds, ESG risk management, carbon market services, data & system development, and carbon neutral operation, among other aspects.

Departments, teams, or full-time positions dedicated to green finance are set up in each of the branches at home and abroad.

■ Green finance exemplary institutions

The Evaluation Standards for Green Finance Exemplary Institutions (Version 2022) was formulated to select green finance demonstration institutions from domestic tier-1 and tier-1 institutions for rewarding purposes, with the selection criteria covering various aspects such as organizational structure, policies and processes, resource allocation, business development, green operation, and capacity building. Eight tier-1 branches and 12 tier-2 branches were selected as green finance exemplary institutions in 2022.

■ Green finance specialty outlets

The Program for Building Green Finance Specialty Outlets was drafted to set out standards for outlets in a variety of areas, including green finance assessment, staffing, quantity of products, and promotional activities. As of the end of 2022, a total of 157 green finance specialty outlets were constructed.

Case

Green finance training for Board members

In February 2022, BOC invited the former Governor of the Bank of England and Bloomberg experts to give a training course on green finance to Board members of the Bank, which effectively enhanced their understanding of green and low-carbon transition and ESG concepts. A total of 13 Board members attended the training.

Governance

Policies and systems

BOC took the 14th Five-Year Plan for Green Finance as the strategic guidance to continuously improve the "1+1+N" green finance policy system, and guided the comprehensive deepening of green finance practices.

Consolidating the policy foundation

BOC integrated green finance into the Group's "14th Five-Year Plan" development, established a "1+1+N" green finance policy system, and improved relevant policies and procedures.

1: 14th Five-Year Plan of Bank of China for Green Finance

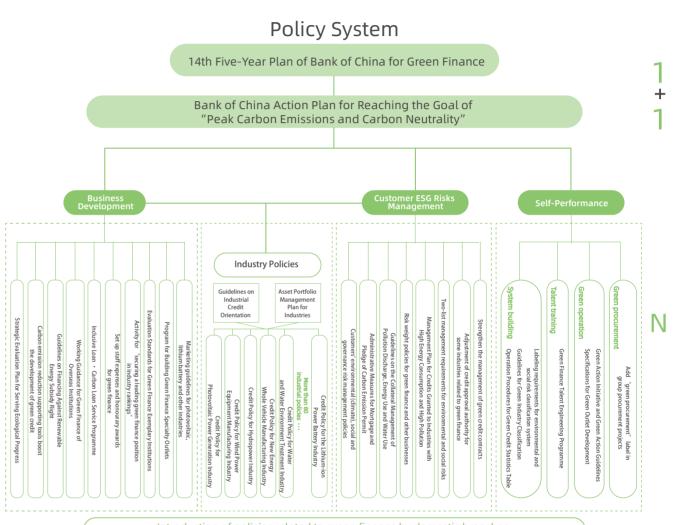
- It makes a comprehensive analysis of the challenges and opportunities BOC faces in the field of green finance, and sets the strategic goals for developing green finance following the principles of "sustainability", "responsibility", and "prudence", in combination with the objectives of China's national determined contributions and the "dual carbon goal" policy.
- It puts forward 45 key work requirements in areas of business development pattern, green performance and supporting measures.

1: Bank of China Action Plan for Reaching the Goal of "Peak Carbon Emissions and Carbon Neutrality"

It formulates specific action implementation pathways from 15 aspects including organizational structure, business development strategy, product innovation, green operation, stress testing, international cooperation, capacity building, and technological empowerment.

N: Green finance policy system

■ The system is built upon "4 beams and 8 pillars" in terms of business development, industry policies, customer ESG risks management and self-performance, along with corresponding data systems established as underpinnings.



Introduction of policies related to green finance by domestic branches, major overseas institutions and comprehensive operation companies

Governance

In 2022, BOC issued more than 20 supporting policies to foster a policy package covering 13 areas to fully forming a strong support for the development of green finance.

Conducting a comprehensive performance assessment

■ The performance appraisal mechanism for green finance was further improved. Appraisal targets were set from four dimensions, that is, Head Office departments, domestic branches, overseas branches, and comprehensive operation companies to ensure that the Head Office and branches could remain consistent in terms of guidance, standards, targets, and pressure and to cover management requirements for many areas such as business development, management of ESG risks associated with customers, and self-performance.

Strengthening industry guidance

- Categorized major green related industries as positive growth industries and encourage credit support.
- Around ten credit policies for green-related industries were formulated or revised to provide detailed guidance for business conducting in terms of customer and project access criteria, related risk identification and prevention, and credit management strategies.

Providing differentiated authorization

- For industries with high ESG risks, such as iron & steel, cement, electrolytic aluminium, and coal chemical, it was clearly stipulated that under certain conditions, credit applications shall be submitted to the Head Office for approval.
- For green industries in the positive growth category to which more credit would be extended, authorization shall be expanded. For example, authorization delegation was applied to the solar PV industry, and the reverse was the case in the coking industry.

Imposing a business incentive and penalty mechanism

- Economic capital costs will be assessed, rewarded or penalized accordingly to the actual performance of green loans and brown loans etc.
- Provide advantaged price support for eligible green loans.

Improving the fast track for green credit approval

A fast track green credit approval mechanism was established to prioritize eligible green projects in terms of application initiation, acceptance, due diligence, meeting scheduling, approval, and drawdown request.



Innovating risk mitigation measures

Risk mitigation policies were rolled out for green finance-related collateral such as carbon emission rights, pollution discharge rights, energy consumption rights, and water use rights.

Intensifying personnel training

■ The Green Finance Talent Program of Bank of China was formulated, with the proposed goal of building a green finance talents pool of about 10,000 staff members to underpin the high-quality development of green finance business.

Introducing personnel expenses and financial incentives



Special personnel expenses individuals with outstanding performance in green finance.



The "BOC Excellence Award" for green finance was created to reward outstanding teams, individuals and achievements.

Carrying out competitions and other activities

 Carried out the open competitions such as "Revealing the Leaderboard to take Command", green finance labour competition, and "Thousands of Galloping Horses" etc., to encourage innovation in green products and management practices, business expansion, ESG risk management, and green operation across all BOC institutions.

Promoting green awareness

■ The Green Action Initiative for Employees of Bank of China and the Green Action Guide for Employees of Bank of China were formulated to popularize green operation knowledge, vividly advocated saving electricity, paper, and water, and created eco-friendly, low-carbon working culture and lifestyle among all employees.



Improving industry credit policies

To serve the "dual carbon goal" with green finance, we actively guided the flow of capital by formulating or revising nearly 10 credit policies for green industries such as hydrogen energy, wind power generation, pumped storage, and forestry, which provided detailed guidance in terms of customer access criteria and credit granting strategies. We included binding requirements for environmental and social risk management in more than 80 industry credit policies, covering such industries as agriculture, forestry, animal husbandry and fishery, mining and metallurgy, oil and gas, materials manufacturing, and transportation. One example of these requirements explicitly stated that no credit support for customers and projects that have illegal logging of natural forests, damage to biodiversity, poaching of wild animals, etc.



BOC credit policies for some key industries¹

Key industry

Credit policy

Slaughtering and meat processing industry

The current Credit Policy of Bank of China for Slaughtering and Meat Processing Industry (Version 2021) was formulated as per the Food Safety Law, the Regulations on the Management of Pig Slaughtering, and the Guiding Opinions on the Action to Improve the Quality and Safety of Meat Products, a document issued by the State Administration for Market Regulation (SAMR). With respect to environmental risks, special attention shall be paid to the annual environmental ratings of enterprises as well as records of previous environmental penalties and rectification measures. It shall be cautious about involvement in customers and projects with great environmental risks. In terms of social risks, focus shall be put on checking whether the slaughtering process complies with norms for humane slaughters and respects religious and folk customs. It is strictly prohibited to provide credit for enterprises that slaughter wild animals and protected animals in violation of the law.

Crop seed industry



Agriculture, forestry, animal husbandry & fishery The current Credit Policy of Bank of China for Crop Seed Industry (Version 2021) was formulated as per the Modern Seed Industry Enhancement Program for the 14th Five-Year Plan Period and the Opinions of the State Council on Accelerating the Development of Modern Crop Seed Industry. Customers that have triggered severe environmental accidents, face significant environmental and social risks, and fail to comply with quality control, environmental protection, and other policies/provisions of the international crop seed industry shall be included in the category of exit.

Edible vegetable oil processing, grain processing, dairy and other industries

The Credit Policy of Bank of China for Edible Vegetable Oil Processing Industry (Version 2022), the Credit Policy of Bank of China for Grain Processing Industry (Version 2022), and the Credit Policy of Bank of China for Dairy Industry (Version 2022) were formulated in accordance with the Food Safety Law, the Food Production License Management Measures, and the Plan of Action to Enhance the Competitiveness of the Dairy Industry during the 14th Five-Year Plan Period. The Bank shall decrease and terminate cooperation with customers who have been inspected by authorized departments or exposed by the media as having major malpractices in food safety, operation, and environmental protection.

Forestry

The Bank issued the Forestry Credit Policy of Bank of China (Version 2022). BOC actively supports the customers and projects that meet biodiversity requirements and obtain international forestry sustainability certification; lists "no illegal logging of natural forests, damage to biodiversity, poaching of wildlife, etc." as one of the customer access criteria; reviews the environmental assessments of forestry projects; pays great attention to the environmental and social transition risks and reputational risks of forestry projects, supports forestry projects that have passed FSC/PEFC/CFCC certification, and does not support the plantation forests that are built at the expense of illegal logging of natural forests; and indicates that the state-certified voluntary emission reductions in the category of forestry carbon sinks that meet the criteria can be included in the scope of collateral and pledge.

Key industry

Credit policy

Steel and copper industries

The Credit Policy of Bank of China for Iron and Steel Industry (Version 2022) and the Credit Policy of Bank of China for Copper Industry (Version 2022) were formulated as per the Guiding Opinions of the State Council on Addressing the Problem of Severe Overcapacity, the Specifications for Iron and Steel Industry (Revision in 2015), and the Implementation Measures for Capacity Replacement in the Iron and Steel Industry. Support shall be focused on projects in line with capacity replacement, energy consumption reduction, process optimization, intelligent transformation, green transformation, ultralow emissions, and gradually withdraw from projects with backward technology and equipment, unqualified product, substandard energy consumption and emissions, and backward production capacity.

Mining and metallurgy

Aluminum rolling and processing industry

The current Credit Policy of Bank of China for Aluminum Rolling and Processing Industry (Version 2021) was formulated as per the Catalog for the Guidance of Industrial Structure Adjustment (Version 2019), a document issued by the National Development and Reform Commission (NDRC), and the Specifications for Aluminum Industry, a document issued by the Ministry of Industry and Information Technology (MIIT). Support shall not be provided to projects with significant environmental and social risks/hazards.

Electrolytic aluminum industry

The current Credit Policy of Bank of China for Electrolytic Aluminum Industry (Version 2021) was formulated as per the Notice of the Ministry of Industry and Information Technology on Matters Concerning the Realization of Capacity Replacement by Electrolytic Aluminum Enterprises by Ways Like Mergers and Acquisitions, the Catalog for the Guidance of Industrial Development and Transfer (Version 2018), the Catalog for the Guidance of Industrial Structure Adjustment (Version 2019), and the Specifications for Aluminum Industry. Customers must use environmentally friendly large prebaked electrolyzer technology with high energy efficiency and low consumption, and shall not use equipment and technology prohibited or eliminated by the state.



Energy and coal

The Credit Policy of Bank of China Credit Policy for Coal Industry (Version 2022) was formulated as per the Catalog for the Guidance of Industrial Structure Adjustment (Version 2019), the Guiding Catalog for Green Industries (Version 2019), and the Opinions on Playing the Role of Advanced Capacity in the Process of Eliminating Overcapacity to Transform and Upgrade the Coal Industry.

The Bank provides key support to large advanced and efficient coal mines with good product quality, cutting-edge production technology, good safety conditions, qualified energy saving, and emission reduction situation. The Bank shall cut the volume of businesses carried out with or even withdraw from the coal enterprises that have small production capacity, weak profitability, and poor production conditions and cannot comply with the national industry policy. It shall accelerate the withdrawal from the coal mines that do not meet environmental protection requirements.

The bank has adopted strict management and control policies towards new coal mining and coal power projects outside the Chinese Mainland, ceasing to provide financing to such projects since 2021Q4. Financing agreements previously entered into for this type of developments will still be honored in accordance with commercial principles.

Governance

Key industry

Credit policy

Petroleum refining industry

The current Credit Policy of Bank of China for Petroleum Refining Industry (Version 2021) was formulated as per the Guiding Opinion of the State Council General Office on Structural Adjustment, Transformation Promotion, and Efficiency Enhancement in Petrochemical Industry, the Catalog for the Guidance of Industrial Structure Adjustment (Version 2019), and the Planning and Deployment Program for the Petrochemical Industry. The Bank shall strictly implement the Guiding Opinions of the National Development and Reform Commission and the Ministry of Industry and Information Technology on Promoting Green Development of the Petrochemical Industry, the Catalog of Construction Projects with Environmental Impact Assessment Documents Approved by the Ministry of Ecology and Environment (Version 2019), as well as pollution discharge-related policies and systems.



Oil and natural gas

Natural gas industry

The Credit Policy of Bank of China for Natural Gas Industry (Version 2022) was formulated as per the Opinions on Accelerating the Utilization of Natural Gas and the Opinions on Accelerating the Construction of Gas Storage Facilities and Improving the Market-based Auxiliary Service Mechanism for Gas Storage and Peak Regulation. The environmental impact assessment documents of large-scale natural gas projects that may have a significant impact on the environment shall be approved by the Ministry of Ecology and Environment of the People's Republic of China through prescribed procedures. Highly polluting enterprises, enterprises outdated in production techniques/substandard in workplace safety, environmental protection, and energy consumption, enterprises having triggered severe environmental pollution and safety production accidents, etc. shall be included in the categories of customers that the Bank will phase out or withdraw.

Key points in biodiversity-related credit policy

BOC pays close attention to the impact that its customers cause on the ecosystem in their business activities, strictly complies with the laws, regulations, and rules on the protection of biodiversity, and prohibits the provision of credit support for acts that seriously damage biodiversity.

For controversial projects, after making sure their compliance with the laws and regulations in the countries/regions where they are located, the Bank will extensively solicit the suggestions of professional assessment agencies, residents, media, and non-profit environmental protection organizations, among other stakeholders, prudently assess the environmental and social risks and nail down credit strategies, and urge related enterprises to establish ecological protection compensation mechanisms and consciously undertake ecological protection and restoration obligations.

BOC incorporates clear biodiversity protection requirements into the credit policies of key industries such as wind power generation, pumped storage, and coal, as part of its efforts to safeguard the boundary of natural ecological protection as well as the national ecological safety.

Case

Key elements in customer ESG risk assessment carried out by BOC: biodiversity conservation and sustainable management of natural resources

Land use or conversion by customers may increase topsoil erosion, resulting in habitat loss and fragmentation, which consequently compromise biodiversity. Biodiversity loss may in turn reduce the ability of ecosystems to provide stable and sustainable key ecological goods and services, such as clean air and water, and reduces the total amount of natural resources available for future use. Biodiversity and ecosystems are closely linked to industries such as agriculture, forestry, fishery, and livestock that obtain bulk commodities through the development and utilization of natural resources. Customers in these industries should avoid or mitigate the threats to biodiversity posed by their own operations and manage renewable natural resources in a sustainable manner.

Our evaluation criteria for customers and their projects include but not limited to:

whether customers, as a matter of priority, seek to avoid negative impacts on biodiversity and ecosystem; when avoidance of negative impacts is not possible, whether customers adopt measures to minimize impacts and restore biodiversity and ecosystem;

given the complexity in predicting the long-term impacts of the project on biodiversity and ecosystem, whether customers implement dynamic management throughout the project cycle, that is, to adjust mitigation and management measures according to changing conditions and monitoring results.





Strategic goals

As a leader in green finance, Bank of China fully integrates the concept of sustainable development into its own development strategy and makes every effort to build a new green finance system. We set out the basic principles, strategic objectives, and incentives for the green finance development in the 14th Five-Year Plan for Green Finance of Bank of China, aiming to contribute to the realization of the dual carbon goal in China and the protection of the common home of mankind.

Strategic goal

Implement the green and low-carbon concept, and strive to become the bank of choice for green finance services

Description

BOC will integrate green and low-carbon concepts into every aspect of management and operation activities, including organizational framework, corporate governance, policies and systems, business development, products and services, risk management, corporate culture, information disclosure, and daily operation, forge a green finance system that adapts to the new pattern, and create a distinctive brand of carbon finance.

Instance

BOC was rated one of the "Exemplary Units for Green Banking" by China Banking Association.

Strategic goal 2

Achieve leapfrog development of green finance business

Descriptior

During the 14th Five-Year Plan period, the Bank will continue to scale up green finance businesses such as green credit, green bonds, green asset management, green leasing, and green insurance, along with setting up relevant quantitative targets.

Instance

By the end of 2022, BOC's domestic green credit balance reached RMB1,987.2 billion, a year-on-year increase of 41.08%. The Bank topped all other Chinese-funded banks by the green bonds issued at home and abroad equating to RMB87.7 billion. The underwriting volumes of green bonds issued at home and abroad reached RMB259,529 million and USD28,985 million respectively, marking BOC topped all other Chinese institutions on Bloomberg's ranking of the world's offshore green bonds.

Strategy

Strategic goal 3

Manage environmental and social risks properly

Description

BOC will incorporate customer ESG risk management into its comprehensive risk management system step by step, and use big data technology to better identify, prevent, and control related risks. It will conduct environmental risk stress tests to identify and quantify the financial risks triggered by environmental factors and the potential investment opportunities created therefrom.

Instance

The Bank actively carried out work related to climate risk stress tests. Such stress tests were conducted on different types of climate risks such as transition risks and physical risks. The testing results showed that the related risks were manageable overall.

Strategic goal 4

Specify carbon neutral targets and action plans for commercial bank operations and asset portfolios

Description

BOC will start the operation carbon footprint identification work as soon as possible, strengthen carbon footprint management, and adjust the credit portfolio structure in a timely manner to adapt to the changed industrial policies in the country.

Instance

Operations: The Bank strengthened energy conservation and consumption reduction management to reduce energy losses and improve energy efficiency in office activities, which involves water, electricity, paper, and oil. It practiced the concept of green procurement and pushed forward the construction of green data centers. It made an environmental footprint inventory to get a big picture.

Asset portfolios: The Bank explored a carbon accounting methodology suitable for its asset portfolios and launched a trial calculation of carbon footprints for asset portfolios in carbon-intensive industries. On the premise of ensuring energy security and industrial chain/supply chain stability, it kept reducing the carbon intensity of asset portfolios in a progressive way until they finally became carbon neutral, as a response to the dual carbon goal of the state.

Climate-related risks and opportunities

Climate-related risks

BOC identified and analyzed the transmission paths and impacts of climate risk to its key risks from the perspectives of physical risk and transition risk, taking into account the definition and classification of climate risk by the TCFD and the Network of Central Banks and Regulators for Greening the Financial System (NGFS).



It is the risk that a customer's business operation, asset value, and other aspects will be negatively impacted by increasingly severe and frequent climatic disasters (such as typhoons, floods, droughts, and heat waves), continuous climate change (such as sea level rise and temperature rise), and loss of ecosystem services (such as desertification, water scarcity, and degradation of soil quality or marine ecology).



It is the risk that a customer's operational and financial conditions will be affected by policy changes, technological innovation, changes in consumer and investment preferences, innovative business models, etc. as result of addressing the challenges of climate change.



	Transmission path of environmental (climate) risks	
Risk type	Environmental (climate) risk instance	Duration of impact
Credit risk	Physical risk: Extreme weather impairs the value of assets held by the Bank's customers, resulting in damage or devaluation of collateral or the supply chain disruption, thereby undermining the customers' operations, profitability, and viability and increasing default rates. Transition risk: Carbon emission reduction policies affect the profitability of carbon-intensive companies, and related assets may be stranded.	
Market risk	Physical risk: Extreme weather could damage national infrastructures and weaken economic growth and employment, leading to a decline in credit ratings, which could impact the value of the Bank's assets held on its balance sheet. Transition risk: The dual carbon goal will trigger a change in investor preferences and a decline in the expected return on carbon-intensive assets. In this case, the Bank may be exposed to the risk of declining valuations and increased investment volatility.	Short term, medium and long term
Liquidity risk	Physical risk: Extreme weather could cause extensive physical property damage, resulting in significant construction and repair costs, a surge in fund withdrawals and emergency loan demands, which exacerbates the Bank's liquidity pressures. Transition risk: Increased environmental awareness among depositors and investors will increase support for green finance business, while funding sources for other financial businesses may be adversely affected.	Medium and long term
Operational risk	Physical risk: Extreme weather could have a negative impact on the Bank's infrastructure facilities, systems, processes, and employees, thereby interfering with its business continuity. Transition risk: In response to climate change, the Bank's internal procedures, systems, etc. are inadequate, leading to losses.	Medium term
Reputational risk	Physical risk: The Bank will be exposed to reputational risk when it provides financial support for the customers and their projects that destroy habitats and affect biodiversity. Transition risk: The Bank will be exposed to reputational risk when if it continues to finance companies with high in pollution, energy consumption, and carbon emissions or if it increases its holdings of carbon-intensive assets.	Short term, medium and long term
Country risk	Physical risk: Continual sea level rise poses a physical threat to the infrastructures and economies of island countries. Transition risk: Countries that heavily rely on the traditional carbonintensive development model will encounter shocks and challenges during the transition to a green and low-carbon economy.	Medium and long term

Risk type	Environmental (climate) risk instance	Duration of impact
IT risk	Physical risk: Extreme weather can negatively affect the Bank's equipment and systems, which may cause system failure and data loss or damage, thus resulting in financial or reputational losses. Transition risk: Financial losses are sustained by the Bank since its original IT means are no longer responsive to new demands of customers arising from the low-carbon transition of the economy and society.	Short term, medium term

At this stage, banking financial institutions confront substantial transition risks. China will alter its mode of economic development, energy mix, technological path, and production and consumption patterns profoundly in order to achieve the dual carbon goal. While traditional industries transition to green and low-carbon practices, related enterprises will experience varying degrees of financial impact, depending on the intensity of carbon emissions. Consequently, their solvency will be affected. There may be an increase in the default rate, which will in turn impact the asset quality of banks.



Climate-related opportunities

At a time when the world is active in addressing climate change and China has announced the dual carbon goal, the ongoing industrial restructuring and upgrading drive has presented both challenges and opportunities for the banking industries.

An increasingly prominent atmosphere for global green finance

- Green finance is becoming a common topic around the world.
- Communication and cooperation around green finance has become a key driver of the Group's global development.

Huge development potential in green industries

 Green industries embrace new opportunities for development, and traditional industries rush to green themselves.

Considerable policy dividends for green finance in China

A diversity of green finance policies from central to local levels encourage commercial banks to develop green finance business in leaps and bounds.

Abundant opportunities in the field of carbon finance

- China's carbon emissions trading market is expected to grow in size under the "zero carbon ambition".
- The Bank's deep involvement in the carbon finance sector could propel it toward fast revenue growth.



Bank of China establishes explicit risk appetite, enhances the management of ESG risks associated with customers, increases support for green industries and projects, promotes the green and low-carbon transformation of energy-intensive and carbon-intensive industries, and encourages business practices and consumption behaviors that have a positive impact on the environment and society, thereby contributing to the mitigation and adaption of climate change. In 2022, BOC added a qualitative statement on environmental and social risk appetite to its risk appetite statement, which was considered and adopted by the Board of Directors at its meeting. The Bank included the management of environmental and social risks in the Group's comprehensive risk management report, which would be regularly sent to the Risk Policy Committee of the Board of Directors for consideration.

Managing ESG risks of customers

BOC formulated the *Policy of Bank of China for Managing Environmental (Climate), Social and Governance Risks Associated with Customers (Version 2022)*, improved the policies, systems, and processes used for managing ESG risks, established an effective whole-process management approach that could cover risk identification, measurement, assessment, monitoring and reporting, and control and mitigation, and controlled or reduced the risks that might arise from its business in accordance with the national goals and plans to attain green and low-carbon development as well as relevant environmental protection laws and regulations, industrial policies, and industry access policies. The policy was reviewed and adopted by the Green Finance Committee.

The Bank established an ESG risk governance architecture that is commensurate with its business size and attributes, and defined ESG risk management responsibilities within the framework of three lines of defense.



ney are required to implement is grisk management policies to categorize, identify, measure, assess, monitor, control, manage, and dispose of risks in accordance with the standard procedures.

First line of defense

departments



They are responsible for ESG risk management policies and procedures, as well as providing guidance, training monitoring, and inspecting the work of the first line of defense.

Second line of defense

Risk manageme departments



They are obligated to regularly conduct internal audits of green finance.

Third line of defense

Audit departments Green Finance (TCFD) Report 2022 Risk Management

Risk identification

BOC classifies customers into three categories, that is, A, B and C, given many factors such as their potential environmental (climate) and social risks, industries to which they belong, and their stage of development, label them in related business management systems, and takes more stringent assessment and review measures for high-risk customers. The classification results shall be re-examined periodically. In case of unexpected events that cause changes to the classification results, updates shall be made to the relevant systems in a timely manner.

- possibly with high environmental (climate) and social risks
- Customers whose construction, production, and operational activities are likely to significantly change the initial condition of the environment and produce irreversible negative environmental and social consequences.
- Category A customers: Customers R Category B customers: Customers possibly with medium environmental (climate) and social risks
 - Customers whose construction, production, and operational activities will result in adverse environmental and social impacts that can be easily mitigated.
- Category C customers: Customers possibly with small environmental (climate) and social risks
- Customers whose construction, production, and operational activities do not have obviously adverse environmental and social effects.

Risk measurement

At the portfolio level, the Bank establishes quantitative and qualitative indicators and targets to measure, monitor, assess, and manage exposures to ESG risks, and to analyze the concentration and severity of such risks by industry and region.

- Monitor the balance and proportion of credit to brown industries¹ on a quarterly basis
- Measure the carbon intensity of major brown industries
- Evaluate the impact of customer ESG risks

For the industries prone to ESG risks and regions potentially exposed to high physical risk, etc., the Bank closely monitors and dynamically analyses the changes in Chinese and foreign laws, policies, technologies, and markets on customers' operating conditions and industry developments. In accordance with regulatory requirements, it develops different climate risk scenarios (e.g. sea level rise and rising carbon costs), conducts scenario analysis and stress tests on certain industries or regions, evaluates the solvency, internal capital adequacy, and liquidity adequacy of the entire Bank or pilot areas, and uses the results of stress tests to strengthen the internal management.

In 2022, the Bank participated in the PBOC-organized pilot programs of climate risk sensitivity stress tests and supported the development of corporate carbon accounting methodologies.

Climate Risk Sensitivity Stress Tests

Transition risk

Climate scenario analysis model

With reference to the NGFS scenario. a top-down approach is adopted to analyze how changes in customers' financial data under different climate scenarios could impact the Bank.

- Region: the Chinese Mainland.
- Industries: electric power, iron & steel, building materials, petrochemical engineering, chemical engineering, papermaking, civil aviation, and nonferrous metal smelting.
- Risk indicators: carbon price and free carbon allowances.

Test results:

Customers in the eight carbon-intensive industries see their repayment ability declining to varying extents under the stress scenarios. As a result, credit rating downgrades follow, but risks remain under control overall.

Physical risk (Taking BOC Singapore Branch's analysis of Bangladesh's power sector as an example)

The Bank has calculated the absolute rates of loss caused by the physical risk that Bangladesh would suffer due to typhoons and floods under the Intergovernmental Panel on Climate Change's (IPCC) high carbon emission scenario (RCP8.5), to obtain the impact of climate physical risk on the value of collateral.

- The absolute rate of loss caused by typhoons in Bangladesh would range from 0.57%-0.67% over the period 2020-2050.
- Overall, the impact of typhoons on the collateral of the credit portfolio in the power sector is marginal.
- The absolute rate of loss caused by floods in Bangladesh would range from 2.63%-3.22% over the period 2020-2050.
- Overall, the impact of flood on the collateral of the credit portfolio in the power sector is insignificant.

The Bank started the research in asset carbon accounting methodology, and trial calculation of asset carbon footprints for main carbon-intensive industries by referring to the Partnerships for Carbon Accounting Financials (PCAF) and the PBOC's Technical Guidelines for Carbon Accounting of Financial Institutions (Trial).

Risk assessment

BOC manages and assesses the ESG risks of customers and their projects in a category-based manner from 13 dimensions given the characteristics of the industries and regions to which they belong.

Key elements in ESG risk assessment

- Labor and working conditions
- Pollution prevention and control
- Biodiversity conservation and sustainable management of natural resources
- Carbon footprint management
- Community health and safety
- Land acquisition and involuntary resettlement

- Assessment and management system of customers' ESG risks
 Respect for cultures and customs of indigenous peoples and ethnic minorities
 - Protection of the cultural heritage
 - Explosives and chemicals management
 - Management of ESG risks along supply chains
 - Organizational structure and operational management
 - Financial management and risk management

^{1:} The brown industries mentioned herein are the eight major industries under emission control that have been and will be included in the national carbon market as well as the coal industry. Specifically, the eight industries are the thermal power generation, iron and steel, petrochemical, chemical engineering, non-ferrous metals, cement, paper-making, and civil aviation industries.

Risk Management

Green Finance (TCFD) Report 2022

The Bank adds ESG risk-related factors to the relevant modules of its internal customer credit rating model, explores running the ESG assessment model on a trial basis, and assesses the ESG risk conditions and business impacts of customers and their projects as well as the resulting business impacts, thus further building up its ability to manage ESG risks associated with customers.

Case

BOC Frankfurt Branch explored specialized ESG analysis of credit assets

BOC Frankfurt Branch established an analysis model to assess the ESG risks of its overall credit portfolio with reference to the ESG ratings of customers published by S&P Global and relevant industry information, while making the carbon inventory of credit assets on an ongoing basis. The relevant analysis and assessment results were included in the quarterly credit risk report of the local regulator.



BOCIM built and kept improving an ESG evaluation framework suitable for the domestic bond market entities, which would be used for investment decision-making and information disclosure of its fund products.

Risk monitoring and reporting

Risk monitoring

Risk forewarning: For customers and projects in industries and areas identified by the national environmental protection and workplace safety departments as being in violation of laws and regulations, internal risk alerts or risk warnings shall be issued. BOC tracks and monitors a risk event throughout the entire process, and adjusts the risk level and response measures in light of actual conditions.

Risk grading: The Bank divides emergency ESG risk events into four levels: general, large, severe, and particularly severe according to work safety accidents or sudden environmental events. For the ESG risk events triggered by customers, the relevant entities are required to immediately activate the contingency plan and deal with such events appropriately.

Risk reporting

BOC works to establish a sound customer ESG risk reporting mechanism, detect and monitor customer ESG risk conditions, and make timely reports as actually needed.

Periodic reports:

- In the Group's major risk screening and reporting processes, it is necessary to comprehensively screen institutions for material ESG risk matters and to report relevant findings to the management in a timely manner.
- The Bank shall regularly update the risk reports and analyze ESG risks.
- The Bank shall disclose the information related to ESG risks that concerns stakeholders in its annual reports and corporate social responsibility (CSR) reports (Environmental, Social, Governance). Meanwhile, it shall do better in information disclosure by learning from the International Sustainability Standards Board (ISSB), TCFD, PRB, and other international conventions, guidelines, or good practices.

Emergency reports:

- When customers trigger severe ESG risk events, the Bank shall urge the customers concerned to take corresponding risk disposal measures and report the possible consequences of such events in a timely manner.
- For a large ESG risk event, the relevant entity shall report the situation to the Head Office within one working day of being informed of the event.
- For a material or particularly material ESG risk event, the relevant entity shall orally report the event to the Head Office within one hour of being informed of the event. Accelerated reporting is allowed in emergency situations. A formal report shall be subsequently presented as required.

Risk control and mitigation

BOC controls and mitigates ESG risks by adopting key business strategies, differentiated authorization processes, and other ways based on accurate identification, measurement, and assessment of customer ESG risks associated with customers.

Key business strategies

Supporting enterprises and projects with good ESG performance



- On the premise of effective risk prevention, the Bank shall actively channel resources to the green industries on the Guiding Catalog for Green Industries (which engage in energy saving and environmental protection, clean production, clean energy, ecological environment, green upgrading of infrastructures, green services, etc.) to advance the tough campaign in pollution prevention and control and move towards the dual carbon goal in an orderly way.
- The Bank shall be active in facilitating the construction of a clean and low-carbon energy system nationwide, supporting key industries and fields to save energy consumption, reduce pollution, cut carbon emissions, increase the adoption of green operation, prevent disasters, implement clean production, enhance the promotion and application of green and low-carbon technologies, and act on policies and requirements for carbon emissions and carbon intensity.
- The Bank shall offer support for the enterprises that carry out eco-friendly construction, production, and operational activities, protect employees and their health, protect biodiversity, and create jobs for people with disabilities.
- The Bank shall offer support for the enterprises that safeguard the legitimate rights and interests of shareholders and put in place sound financial management and risk management mechanisms.
- The Bank shall strengthen the combination of green finance and inclusive finance, support green and inclusive enterprises, and well balance the relations of economic, environmental and social benefits.
- The Bank shall actively guide customers and their upstream and downstream industrial chains to regulate their ESG behavior.

Tightening the control over brown industries



- While resolutely curbing the blind expansion of energy-intensive, high-emission, and low-level projects, the Bank shall promote the transformation and upgrading of carbon-intensive industries, refrain from "one-size-fits-all" solutions and movementstyle carbon reduction attempts, and insist on overall planning and differentiated management. On the premise of ensuring energy security and industrial chain/supply chain stability, it shall keep reducing the carbon intensity of asset portfolios in a progressive way until they finally become carbon neutral.
- At the same time, the Bank shall optimize the structure of assets allocated to brown industries, promote production capacity replacement, green transition, and technology upgrading, and get resources concentrated in key areas of advanced capacity, low power consumption of output per unit, technology upgrading and transformation, safe, green, intelligent and efficient operation, energy supply assurance, etc.

Underpinning the green and low-carbon development under the BRI



- Under the premise of effective risk prevention, the Bank shall actively support the green and lowcarbon development under the BRI and strengthen the management of ESG risks related to proposed overseas credit and investment projects.
- For overseas projects, the Bank shall require project sponsors and their principal contractors and suppliers to comply with the ecology, environment, land, health, safety laws, and other relevant regulations of the countries or regions where the projects are located, adhere to relevant international practices or standards, and ensure that the management of projects is substantively consistent with international good practices.
- In the process of carrying out business, the Bank shall fully consider the factors related to ESG risks, manage the entire process, and enhance communication with
- stakeholders; employ qualified and independent third-party agencies to assess the proposed credit or investment projects that generate considerable controversy regarding ESG risks, and conduct adequate reviews of the ESG risks faced by the projects; and take various measures to reduce the risks faced by related businesses proactively, and disclose relevant assessment and inspection reports in an appropriate form after obtaining authorization from customers or project parties to prevent reputational risks.
- The Bank strictly abides by its commitment on ceasing to provide financing for new coal mining and coal power projects outside the Chinese Mainland since 2021Q4 onwards, except where a financing agreement had been entered into previously.

Circumstances in which the Bank shall not provide or be cautious about providing credit or investment support

Under one of the following circumstances, the Bank shall not provide credit or investment support for new businesses; in the case of existing businesses, it shall urge the customers concerned to make rectification and take effective risk mitigation measures. Where rectification cannot be made as required, exit procedures shall be performed as soon as possible.

Projects fail to pass the national environmental impact assessment; environmental credit ratings are "red" or "black", or customers are included in the list of entities committing environmental violations, the Credit Statistics of Enterprises with Significant Environmental, Safety, and Other Risks, and other catalog of enterprises delivering non-compliant environmental and social performance; enterprises or projects are announced or identified by ecological environment and other relevant administrations to have pronounced issues in energy consumption and environmental pollution and fail to make effective rectification; projects fall within the restricted and eliminated categories in the Catalog for the Guidance of Industrial Structure Adjustment, and projects and enterprises are included in the scope of backward production capacities to be phased out defined by the state; enterprises have had particularly severe safety accidents or environmental emergencies and cannot make rectification at all or the rectification is still underway.



- Enterprises involved in human trafficking and illegal employment.
- Enterprises that destroy critical habitats, important biodiversity areas and national nature reserves; enterprises that illegally log, fish and poach wildlife; enterprises that blindly expand oil palm plantations leading to deforestation; and enterprises that illegally occupy and destroy forest lands.
- Enterprises committing market manipulation, serious tax evasion, and violations of state laws and regulations, among other behavior.

Under one of the following circumstances, the Bank shall be cautious about providing credit or investment support for new businesses; in the case of existing businesses, it shall urge the customers concerned to make rectification and take effective risk mitigation measures. Where rectification is difficult or cannot be made as required, exit procedures shall be performed as soon as possible.

- Enterprises whose environmental credit rating has a color code of yellow; and enterprises that
 are above the industry average in pollutant emissions or energy consumption and have no
 technological adaption plans.
- Enterprises that may have a significant adverse impact on the health or living environment of indigenous people and ethnic minorities, or that may trigger severe conflicts over resources or land and have not developed effective mitigation measures.
- Enterprises that seriously infringe on the rights of shareholders of small and medium-sized enterprises (SMEs) and that are short of financial management and risk management mechanisms and have no plan to rectify the situation.



Differentiated authority and processes

For industries with high ESG risks, such as iron & steel, cement, electrolytic aluminium, and coal chemical, it is clearly stipulated that under certain conditions, credit applications shall be submitted to the Head Office for approval. For green industries in the positive growth category to which more credit would be extended, authorization shall be expanded. For example, authorization delegation was applied to the solar PV industry, and the reverse was the case in the coking industry.



Column

ESG risk management incorporated into whole processes of key businesses

Risk identification and classification

 BOC classifies customers into three categories, that is, A, B and C, and takes more stringent assessment and review measures for high-risk customers.

Business approval

 As to the customers committing serious violations of laws and regulations and incurring significant ESG risks, the business approval departments shall strictly restrict credit granted to or investments made in them.

Fund disbursement

 It is important to strengthen the management of fund disbursement.
 The manner in which customers manage their ESG risks shall be considered an essential criterion for fund disbursement and be incorporated into the pre-disbursement review.



Due diligence

- Due diligence on customers/projects can be conducted from 13 dimensions in total, which include the ESG risk assessment and management system, labor and working conditions, pollution prevention and control, biodiversity conservation, sustainable management of natural resources, and carbon footprint management.
- Customers and their projects that may have significant impacts on social stability and public interest, must undergo an adequate ESG risk assessment. Approval process shall be terminated for the customers (projects) that don't undergo due diligence on ESG risks.

Contract management

 Requirements for ESG risk management shall be specified in contracts.

Post-lending/post-investment management

 ESG risks of customers shall be brought under dynamic assessment and included in the post-lending/post-investment management process.

Case

ESG due diligence: A customer was rejected for financing due to ESG risks

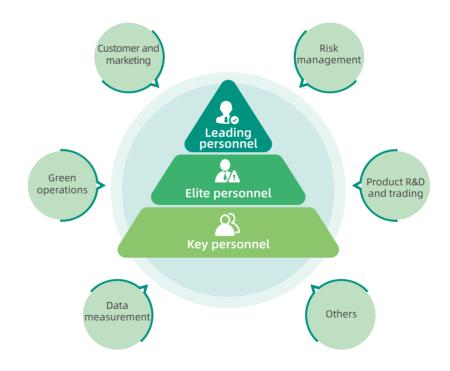
BOC Frankfurt Branch was invited by a co-lead bank to participate in a syndicated loan totaling EUR500 million for a globally renowned meatpacking company, which featured a leading position in the industry, good financial standing from 2021 to 2022, stable bank-enterprise relations, and relatively controllable credit risk in the short and medium term. However, the branch found through investigation that the company had problems such as exploiting cheap labor and providing poor labor and living conditions for workers, and involved negative information on animal welfare and corporate governance. After several rounds of internal discussions, the branch decided not to participate in the syndicated refinancing project, because it believed that the borrower had potential ESG risks.

Cultivating green development capabilities

Bank of China is committed to cultivate and support green finance professional talents teams; continuously improve the green finance training system and carry out various themed training activities for different positions and business fields; organize various green finance competitions to enhance business ability of employees; and establish green finance-related inhouse magazines and publications, to better spread green concepts and raise green development awareness among all staff members.

Deepen the cultivation of green finance talents

In 2022, the *Plan for Green Finance Talents Project of Bank of China* was formulated to establish a green finance personnel training system for the 14th Five-Year Plan period, which could cover 10,000 persons at three levels and in six areas.



The Bank was well-staffed by green finance professionals, built a team of green finance talents, and helped employees boost their capacity for handling green finance business. A series of themed training courses were held in respect of business development, ESG risk management, green operation, etc., including green finance policy interpretation, product-specific training, and green finance talent training courses for comprehensive operation companies. Through multiple measures, the Bank constantly improved the employees' competence and performance in green finance with a view to building a green finance talent team.

Case

BOC Green Finance Academy



BOC continued to build the Green Finance Academy. Bearing in mind the needs of the Head Office, domestic and overseas branches, and comprehensive operation companies, as well as the actual conditions of different job ranks, business fields, and regions, the Bank created a green finance curriculum and set up a platform where all employees could learn knowledge about green finance. To date, there has formed an online training regime that consists of more than 80 courses on eight themes. As of the end of 2022, the platform registered more than 750,000 visits in total.

Green finance strategy - Green finance products - Green credit data and systems - Green finance standards and information disclosures

ESG risk management Green Finance Lecture Hall Carbon neutrality in operation Textbooks and cases

BOC was committed to establishing a green finance learning mechanism with more abundant resources and more diverse activities, which would be essential for creating a good learning atmosphere.

Learning journals

- The e-journal called "Newsletter on Production, Education and Research in Green and Inclusive Finance" was launched on a trial basis.
- Branches/institutions in London, New York, Paris, Sydney, Zhejiang, Jiangxi, and other places at home and abroad created inhouse publications on green finance, ESG, and other themes to communicate and exchange views on the latest industry developments.

Professional qualifications

- Some staff members of BOC London Branch attended and received certificates from the Carbon Management Course recognized by the Institute of Environmental Management and Assessment (IEMA) in the UK.
- A number of employees at BOC London Branch and Paris Branch received the Green and Sustainable Finance Certificate from the Chartered Banker Institute (CBI).

Innovative activities

 A wide array of activities were held to help employees build up their abilities and skills with respect to green finance through continuous learning and training, which included the green finance day, labor competitions, business competitions, and award-winner selections. It would cultivate green finance professionals at a faster pace.





Risk Management













- 1. BOC (New Zealand) held an ESG training course
- Some staff members of BOC London Branch attended and received certificates from the Carbon Management Course recognized by the Institute of Environmental Management and Assessment (IEMA) in the UK.
- 3. ESG Snapshot (a bimonthly journal in English created by BOC New York Branch)
- 4. Bank of China Fundamentals of Green Finance6. Green Finance Day
- 5. 7. 8. BOC employees at green finance-themed labor competition

Conducting frontier research

BOC participated actively in academic research in order to provide suggestions and inputs for the formulation of pertinent national policies. A series of research programs on domestic and international developments in green finance, advanced industry experiences, and business opportunities in green finance and carbon market, etc., were conducted to intensify industry communication and cooperation and develop green finance business.

Internal research BOC tracked hot topics regarding green finance available domestically and internationally. The BOC Research Institute has published numerous research papers in both internal and external journals on topics such as response to climate change, green consumption transition, and energy transition with the support of green finance.

Some research results of BOC

The New Features of the U.S. Energy Transition under the Global Energy Decarbonization Goals
International Experience and Lessons Learned from the ECB's Response to Climate Change
International Experience in and Inspirations of Green Finance in Supporting Energy Transition
Boosting Carbon Sink Capacity to Blaze a New Trail for Economic Transformation and Development

Context of Green and Low-carbon Transition

Carbon Inclusion Mechanism and Carbon Account Development to Facilitate the Transition toward

Green Consumption

International Experience and Related Suggestions for Enhancing China's Energy Security in the



Formulation

of standards

- The PKU-BOC Center for EU Economic and Strategic Research was built to finish two studies, including the "Green Economy Development, Transition, and Cooperation between China and Europe".
- BOC led the project of International Experience Research on Green Finance by the Green Finance Committee, China Society for Finance & Banking and released the report.
- BOC carried out research projects on transition finance, carbon accounting methodologies, and source-network-load-storage integration of wind and solar PV power.

BOC got actively involved in the formulation of a series of standards for Chinese and international

organizations. In the process, the Bank gradually changed from a participant in green finance to a

• E

standard formulator.

- ESG evaluation standards for investment projects (NDRC)
- Development of and discussion about carbon accounting, transition finance, and other related standards (PBOC)
- Key Indicators for Green Finance Self-Evaluation (China Banking Association)
- Application Guidelines for ESG Evaluation and Credit Process Management of Corporate Financing Entities Conducted by Banking Financial Institutions (T/ZJFS 007-2022) (a standard of Zhejiang Finance Society)
- BOC participated in the development of and discussion about the relevant standards of the International Sustainability Standards Board (ISSB) and ISO/TC 322 Sustainable Finance.

Supporting global green initiatives

To fully exploit its expertise and leading role in green finance, BOC got actively involved in international green governance. It signed or participated in more than 10 green and ESG-related initiatives and mechanisms, contributing its wisdom and solutions to climate change response.



United Nations Principles for Responsible Banking (UN PRB)



Task Force on Climate-related Financial Disclosures (TCFD)



Green Investment Principles (GIP) for the Belt and Road



International Finance Forum (IFF)



The Sustainable Markets Initiative (SMI)

The Pilot Program of UK-China Climate and Environmental Information Disclosure



The International Sustainability Standards Board (ISSB)

ISO/TC 322

Sustainable finance

China's Mirror Working Group of ISO/TC3221



The Initiative to Measure and Promote
Aviation's Carbon-free Transition (IMPACT)

Undertook climate risk management and disclosure under the PRB framework and participated in the deliberations on the PRB framework.

Carried out climate risk management and disclosure under the TCFD framework.

Got various aspects of work related to GIPs done properly, performed the role of the Chinese Chair of GIP Working Group III, and won the "Best Progress Award from GIP".

Joined the IFF Green Finance Working Group as the only Chinese commercial bank, and participated in the compilation of the *White Paper of the US-China Green Finance Working Group.* BOC President Liu Jin attended via video link the 19th IFF Annual Conference and delivered a keynote speech on "Promoting Development of and Cooperation on Green Finance".

Was elected as the vice chair of the SMI China Council and attended seminars about sustainable development.

Conducted disclosure and in-group communication as required by the pilot program.

Participated in workshops related to the exposure drafts of some international sustainability disclosure standards developed by the ISSB, a body established by the IFRS Foundation, and providing feedback.

Participated in the development and discussion of ISO standards related to sustainable finance.

BOC London Branch joined IMPACT as a founding member and the first Chinese bank, taking positive action to reduce emissions in the aviation sector.

^{1:} The technical committee responsible for the development of the International Organization for Standardization (ISO) standards relating to sustainable finance

BOC actively attended conferences and events related to green development at home and abroad to promote exchanges among financial institutions about addressing climate change and developing green finance, and to share its experiences and results achieved in these domains.

Case

Attending the 15th Conference of the Parties to the United Nations Convention on Biological Diversity

The second phase of the 15th Conference of the Parties to the United Nations Convention on Biological Diversity (CBD COP15) took place in Montreal, Canada in December 2022. BOC attended and organized a side event themed on "Banking Initiatives for Nature and Climate" hosted by China Banking Association, introducing its practices in supporting biodiversity through a video clip, releasing the *Joint Action Plan for Banking Financial Institutions to Support Biodiversity Conservation*, and advocating greater financial support for biodiversity conservation. Meanwhile, it also participated in a series of offline exchange activities.

- During the China-Quebec Cooperation Forum organized by the Chinese Consulate General in Montreal, BOC (Canada) was invited to participate in a roundtable discussion on the theme of "World Food Crisis and Renewable Agriculture Practices" to share its experiences in supporting the development of eco-agriculture with financial strength.
- At the Business and Biodiversity Forum: Leadership Dialogue hosted by the United Nations Secretariat, BOC (Canada) introduced the ecological progress achieved in China and its own explorations in this regard, in addition to sharing the Bank's innovative practices in green finance, such as issuing the world's first USD-denominated biodiversity bond among financial institutions and supporting ecological restoration projects.



BOC at a series of COP15 activities

The Annual Conference of Financial Street Forum 2022

BOC co-organized with xinhuanet.com the "Digital Economy and Fintech Parallel Forum: Fintech Practices ESG Concepts and Promotes Sustainable Development of Real Economy" at the Annual Conference of Financial Street Forum 2022, at which President Liu Jin was present and delivered a keynote speech.

Forum on New ESG Concepts

BOC co-hosted with Citigroup the Forum on New ESG Concepts, where guests shared their views on such topics as practicing the new ESG concepts, offering financial support for comprehensive transformation, and building a net-zero bank, and discussed about how green concepts were upheld and practiced in various industries.



In October 2022, the ESG Working Group of BOC New York Branch attended the ESG USA Conference hosted by the Center for Financial Professionals.

Ensuring data and system security

Utilizing its data risk control system, data management system, and information support system, Bank of China could capture and share risk data, make risk management a more proactive and consistent process, and identify, prevent, and control risks more effectively. Simultaneously, the Bank kept building cybersecurity and information security capacity to erect a solid line of defense for data security.



Consolidating the data management base

- The Bank labeled customers in related business management systems given their classification results for ESG risks and maintained these labels in accordance with the statistical requirements for green finance. Besides, regular checks were conducted to improve the quality of data.
- It constantly optimized or overhauled the systems so as to enhance the degree of automation and get the quality and efficiency of data collection and reporting further assured



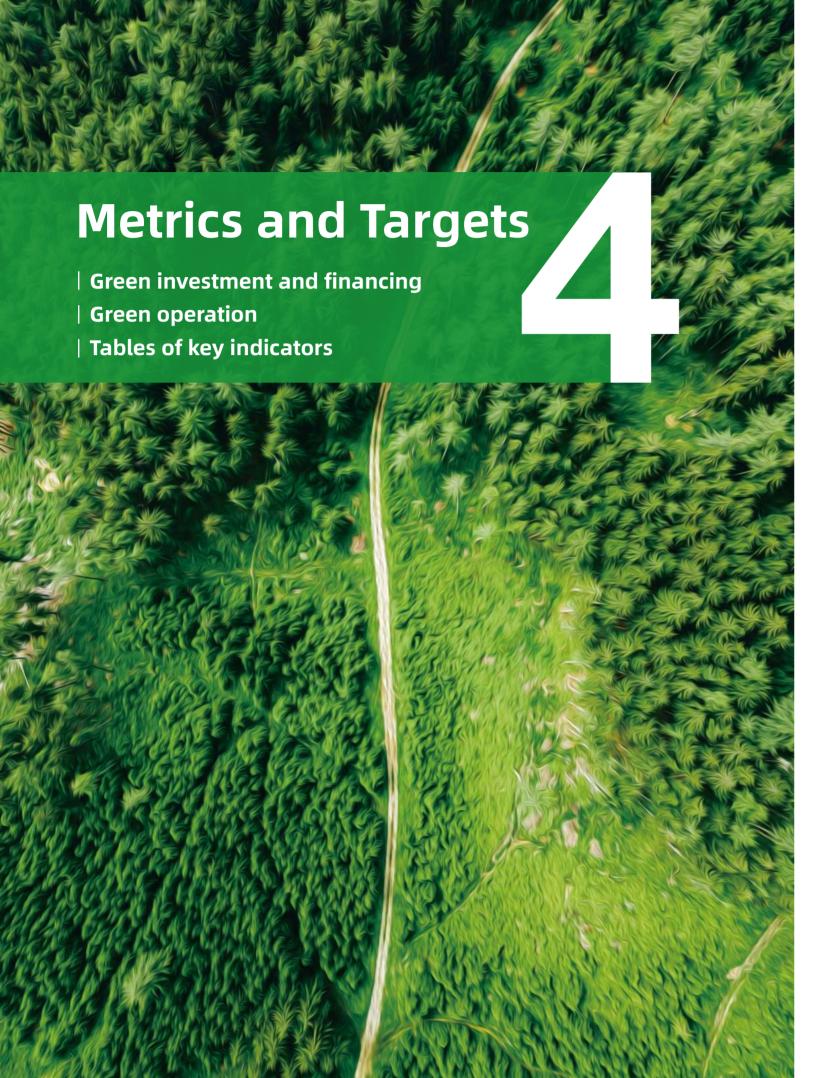
Improving the information support system

- The Bank made headway in building an enterprise-level architecture, stepped up efforts in development of information systems and integrated application of internal and external data, and further automated the management process.
- The Bank continued to improve the layered forewarning mechanism so that client managers, product managers, and risk managers could obtain customers' environmental and social risk information in a timely manner to support business initiation, decision-making, and risk management departments.
- The intelligent identification function for green credit became operational in the corporate credit management system (CCMS), enabling the initial automation of the identification of green projects and the measurement of environmental benefits.





- In response to potential network, information, and data security risk events and vulnerabilities, the Bank specified reporting and disposal procedures and formulated contingency plans.
- Meanwhile, a cybersecurity attack and defense laboratory at the Group level was
 established, and a cybersecurity taskforce was established to enhance the professional
 capabilities for ensuring cybersecurity and information security through routine drills.
 Professional agencies were hired to conduct cybersecurity assessments and penetration
 tests annually.



Bank of China actively implemented the strategy of ecological progress, underpinned to realize the national "carbon peak, carbon neutrality" goals, and strove to become the "Bank of Choice for Green Finance Services." Relying on its advantages in globalized operation and features of integrated operation, the Bank moved faster to innovate modes of green finance products and services, forged the "BOC Green+" brand, and facilitated the low-carbon transition of the Chinese society with financial strength. Committed to green and low-carbon operation, it put forward the two objectives of "installing energy-efficient lighting fixtures and reducing food waste in office space by 2025".

aste in office space by 2025" ¹ .					
Business field	d Target ²	Status			
	BOC will provide no less than RMB1 trillion of financial support for green industries in 2021-2025, with the balance of green credit going up year by year.	The periodic target was overfulfilled, and the domestic green credit balance reached RMB1,987.2 billion in 2022, including an increase of RMB578.6 billion since the end of 2021, and representing an increase of RMB1,090.4 billion from the end of the 13th Five-Year Plan period. YoY growth of domestic green credit balance reached			
		41.08%.			
Green	BOC will maintain sound asset quality.	Non-performing ratio of green credit was below 0.5%, which was lower than the overall non-performing ratio of credit in the Group.			
credit	BOC will tighten credit control over the brown industries in 2021-2025.	The proportion of the balance of credit to brown industries in domestic corporate business loans kept going down and fell below 10% in 2022.			
	The Bank strictly abides by its commitment on ceasing to provide financing for new coal mining and coal power projects outside the Chinese Mainland since 2021Q4 onwards, except where a financing agreement had been entered into previously.	In 2022,no new financing for new coal mining projects and new coal power projects outside of Chinese Mainland.			
		Issuance: The bank ranked first among Chinese banks for the domestic and overseas green bonds issuance of total RMB87.7 billion.			
¥	BOC will remain at the forefront of the industry in terms of bond underwriting,	Underwriting: The domestic and overseas underwriting volumes of green bonds are RMB259,529 million and USD28,985 million respectively, ranking first among Chinese banks in the Bloomberg League Table for "Global Offshore Green Bonds".			
Green bonds	issuance, and investment.	Investment: The bank continuously and vigorously promoting green bond investments in its RMB portfolio. It ensured the quality and efficiency of green bond investments through meticulous pre-investment preparation, strict in-process risk control, and continuous post-investment monitoring. It ranked first on NAFMII's list of investors with green debt financing instruments in 2022.			

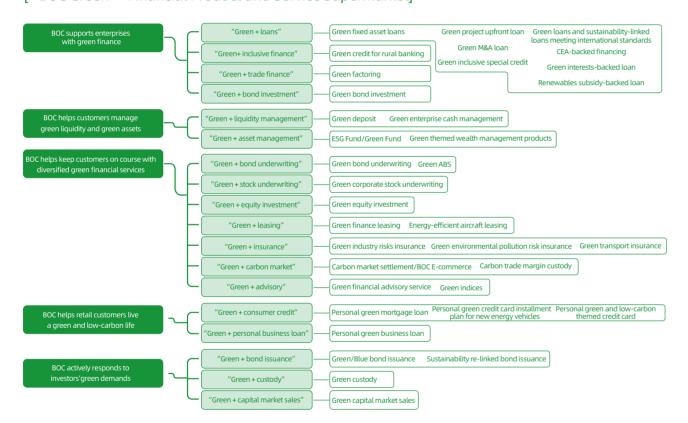
^{1:} Work space of the Head Office in Beijing.

^{2:} Owing to limitations of space, only a portion of targets related to green development of the Bank is listed here.

Green investment and financing

Keenly aware of the dual carbon goal proposed by the state, Bank of China developed green credit, green bonds, green inclusive finance, green consumption, and green comprehensive services in an innovative manner to meet the diversified financial needs of customers.

["BOC Green+" Financial Product and Service Supermarket]





BOC set aggressive targets for green development, strongly underpinned green industries such as clean energy, green transportation, and green buildings, and grew green credit business fast. As at the end of 2022, BOC's domestic green credit balance reached RMB1,987.2 billion, a year-on-year increase of 41.08%, with a non-performing ratio of less than 0.5%.

At the same time, BOC propelled carbon-intensive industries toward transformation and upgrading and tightened the credit balance control over brown industries. The Bank explored a carbon accounting methodology suitable for its asset portfolios and launched a trial calculation of carbon footprints for asset portfolios in carbon-intensive industries. In 2022, the proportion of domestic corporate brown industries credit continued to go down and fall below 10%.

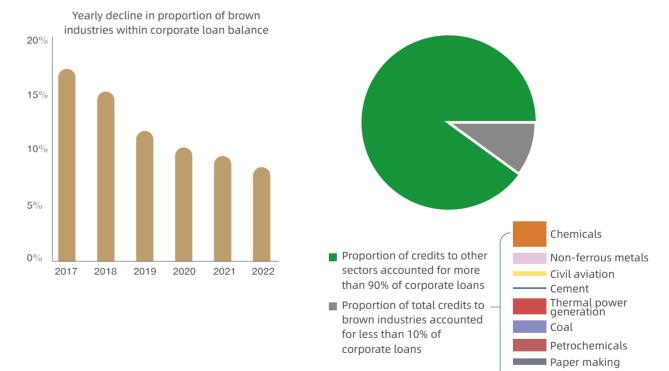
41.08%

As at the end of 2022, BOC's green credit balance in the Chinese Mainland witnessed a year-on-year increase of 41.08%.

0.5%

Non-performing ratio of green credit balance was less than 0.5%.

Steel



Metrics and Targets

Green Finance (TCFD) Report 2022

BOC Zhejiang Branch revitalized idle bamboo forest resources in an effort to realize the value of ecological products

Anji County, Zhejiang Province, known as the "hometown of bamboo in China", is rich in bamboo forest resources and carbon reserves, with about 580 square kilometers of moso bamboo forests. Affected by factors such as rising labor costs and inadequate infrastructure. some of the moso bamboo forests have in recent years been abandoned and degraded as a result of poor operation. In order to support the value realization of ecological products, BOC Zhejiang Branch took the lead in organizing an RMB5.2 billion syndicated loan to Anji Liangshan Ecological Resources Assets Management Co., Ltd. The loan would be exclusively used for the Anji Bamboo Industry Transformation and Upgrading Project to Enhance Carbon Sink Capacity, with an aim to revitalize the resources that have been dormant for many years and open up a new avenue to the effective value realization of ecological products.

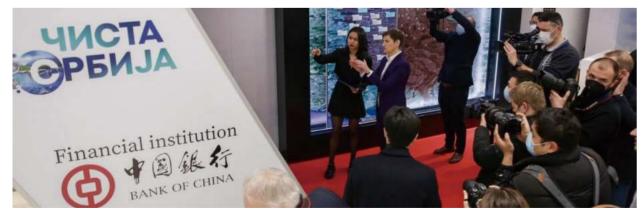


Case

BOC Zhejiang Branch revitalized bamboo forest resources to turn natural resources into invaluable assets

As the most globalized bank in China, BOC gives full play to its advantages in global operation, supports its overseas branches to innovate green finance services, and spares no efforts to render customers worldwide with top-notch green and sustainable finance services. In 2022, the Bank topped all other Chinese banks making their way to the Bloomberg League Table for "Global Green Loans" and "Global Sustainability-linked Loans".

- BOC Dubai Branch was appointed to lead a standalone water project in the Red Sea coast of Saudi Arabia. It was the first
 project in the region to convert a thermal water desalination plant into a greenfield reverse osmosis facility.
- BOC London Branch supported the world's largest operational offshore wind farm as one of the lead banks.
- BOC Sydney Branch launched a multi-currency green deposit scheme (including RMB) that could comply with the Common Ground Taxonomy, a joint initiative of China and the European Union.
- BOC Hungary Branch signed a bilateral financing agreement worth EUR203 million with the Serbian government, to participate in the project of municipal sewage and solid waste treatment system with efficient financial services. This is the first sovereign green finance structured financing business in Central and Eastern Europe.



Prime Minister of Serbia Ana Brnabić visited the "Green, Eco-friendly, and Sustainable Development" Exhibition of Chinese enterprises in Serbia and listened to a presentation at the CRBC-BOC booth for the wastewater treatment project in Serbia.



BOC vigorously develops green bond business to maintain a leading position in the market. It provides a new engine for China's green, low-carbon development by issuing, underwriting and investing in green bonds.

Case

Assisting Hungary to issue RMB2 billion green sovereign Panda bonds

BOC, as the lead underwriter and bookrunner, assisted Hungary in issuing RMB2 billion of green sovereign Panda bonds with a three-year term and a coupon rate of 3.75%. It is the first green bond issued by a foreign sovereign issuer in the Chinese bond market since the official release of the China Green Bond Principles in 2022. The proceeds would be used to support eligible green projects in six areas, that is, renewable energy, energy efficiency improvement, environmentally sustainable management of biological and land resources, water and wastewater management, clean transportation, and adaptation, so as to help Hungary transition to a low-carbon, climate-resilient, and environmentally sustainable economic model.

Case

Assisting an international development agency to issue the first sustainability-themed Panda bond

In May 2022, BOC, as the lead underwriter and bookrunner, assisted the Asian Infrastructure Investment Bank (AIIB) in issuing in the Chinese interbank market RMB1.5 billion of sustainability-themed Panda bonds with a three-year term and a coupon rate of 2.4%. The bond was issued under the AIIB's Sustainability Bond Framework as the first of its kind initiated by an international development agency in China. The funds raised would be used to support the construction of sustainable development infrastructure, thus producing remarkable environmental and social benefits. It could not just provide high-quality RMB assets for domestic and foreign investors, but also help China's capital market to go

Case

BOC Frankfurt Branch issued an international green bond based on the updated *Common Ground Taxonomy*

In June 2022, BOC Frankfurt Branch issued the first USD500 million green bond based on the *Common Ground Taxonomy* (updated version), raising funds for green projects in China, Germany, the Netherlands, and many other countries, which were distributed in a wide range of fields such as wind power generation, pumped storage, urban rail transit, pure electric buses, and energy-efficient equipment manufacturing.

Metrics and Targets

Case

BOC Paris Branch issued the first US dollar-denominated biodiversity-themed green bond among global financial institutions

In November 2022, BOC Paris Branch issued the first US dollar-denominated biodiversity-themed green bond among global financial institutions. As the first biodiversity-themed green bond in Europe, it adopts the three-year fixed rate and comes in a size of USD400 million. The funds raised would be used for a number of biodiversity conservation projects, including protection of rare plants, natural landscape restoration, national forest reserves, water environment treatment, eco-water network building, and ecological protection of lakes. The bond was rated the "Best Green Bond: Biodiversity" under *The Asset's* "Triple A Sustainable Capital Markets Awards".



The first US dollar-denominated biodiversity-themed green bond among global financial institutions issued by BOC Paris Branch was as rated the "Best Green Bond: Biodiversity" by The Asset

Case

BOC Johannesburg Branch actively explored developing green finance business

In February 2022, BOC Johannesburg Branch completed the pricing of a USD300 million green bond issue, which is the first green bond issued by a Chinese financial institution in Africa. In addition, the branch formulated the *Green Finance Policy Guidelines* to promote the development of local green finance business, and actively explored ways to cooperate with local institutions in search of new modes of green finance and ESG development.



BOC is committed to the close integration and mutual promotion of green credit and inclusive finance, and supports small and micro enterprises and projects that could help improve the environment, address climate change, and conserve and efficiently use resources

Case

BOC Zhejiang Branch launched the Inclusive Loan • Carbon Loan Service Program to turn carbon reductions into credits

BOC Zhejiang Branch has effectively increased its credit support to small and micro enterprises that could reduce carbon emissions, since the launch of the Inclusive Loan • Carbon Loan Service Program along with relevant government departments in late 2021. Directly connected to the government system, the program could allow the branch to collect multi-dimensional data of enterprises such as comprehensive evaluation results in carbon efficiency upon customer application and authorization, and use the selfdeveloped scorecard to effectively identify customers doing well in carbon reduction. Specifically, small and micro enterprises with higher scores would win a pure credit line of up to RMB5 million. Besides, the branch also provided interest rate concessions to small and micro enterprises with higher ESG scores through ESG-linked loans. As at the end of 2022, the credit balance under the program stood at RMB441 million.



Case

BOC Hunan Branch boosted green development of small and micro enterprises with financial strength

Hunan Baling Furnace Energy Conservation Co., Ltd. (Baling Furnace) is a high-tech small and micro enterprise specializing in the R&D and manufacturing of energy-saving equipment for industrial furnaces as well as providing related energy-efficient services. Meanwhile, it has also made its way to the national list of "little giant enterprises" featuring specialty, refined management, distinction and innovation. Informed that Baling Furnace fell short of working capital due to the expansion of coverage in the industrial chain in 2022, BOC Hunan Branch immediately set up a financial service team to provide the green small and micro enterprise with a credit of RMB10 million, which promptly eased its shortage of working capital and effectively supported its business development.



BOC Hunan Branch supported an energy-saving retrofit of furnace manufacturing

Metrics and Targets

Green Finance (TCFD) Report 2022



BOC has innovated personal green financial products, guided consumers to increase low-carbon behavior, and promoted green transformation on the consumer end. As more people choose a low-carbon lifestyle, there would form a new trend of green consumption.

Case

Issuing green, low-carbon bank cards

BOC actively guided individuals to develop a green and low-carbon lifestyle by issuing green, low-carbon bank cards. As at the end of 2022, the total number of customers applied for green, low-carbon debit cards reached 1,156 thousand across the Bank.

 BOC Shanghai Branch upgraded its "Green Account Debit Card" to "Green, Low-carbon Card", creating the industry's first debit card in the "waste sorting + low carbon" concept, which would also support the functions of the government's green account platform.



BOC's green, low-carbon card

 BOC Qinghai Branch innovated and launched personal green accounts, built an "account+equity" framework, and promoted the concept of low-carbon and environmentally friendly lifestyle, in a way to continuously store and add value to the ecological protection endeavor of Qinghai.



BOC Qinghai Branch launched personal green accounts

Case

BOCHK diversified personal green finance products

- Expanding the coverage of the "Green Mortgage Scheme": Following the launch of the first "Green Mortgage Scheme" in Hong Kong in 2021, which offered green property mortgage loans to individuals purchasing first-hand private residences with a Building Environmental Assessment Method (BEAM) label of Platinum or Gold, BOCHK expanded the scheme in 2022 to include first-hand and second-hand private residential properties with specified certification, as well as government subsidized housing applications, so as to promote public support for green buildings.
- Making the "Green Private Loan Program" available under the electric vehicle scenario: The program provides preferential loans to customers who wish to purchase electric vehicles, encouraging would-be car owners to practice green transportation concepts and supporting the transition to low-carbon transport.

Case

BOC Singapore Branch issued the first green credit card among overseas branches

In September 2022, BOC Singapore Branch issued a green credit card named the "BOC Premier Card",. Featuring extra rewards for green spending, this card product could encourage cardholders to increase green spending and involvement in environmental protection. Cards are made from eco-friendly materials that are 100% recyclable.



Focusing on the requirements of national strategies for economic restructuring and industrial development, BOC gave full play to its advantages in comprehensive operation and used various financial instruments such as equity, bond, investment, funds and asset management to provide green industries with a variety of financial services



Bonds



Insurance



Direct investment



Leasing



Index



Asset management

- BOCI underwrote 11 green and sustainability bonds for 2022, with the amount exceeding USD5.5 billion in equivalent.
- BOC Securities, as the lead underwriter, assisted issuers in raising a total of RMB50.9 billion through green bond issuance.
- BOC Insurance developed innovative green insurance products, preferentially supported green and eco-friendly industries such as new energy, new materials, and new energy vehicles, formulated the Green Finance Development Measures, and initially formed an insurance product lineup that mainly encompassed three functional types of insurance, namely environmental pollution liability insurance, green industry risk liability insurance, and green transportation liability insurance. By the end of 2022, BOC Insurance developed a total of 85 green insurance products, assuming insurance liabilities of RMB165.6 billion.
- As at the end of 2022, the investment balance of BOC Asset Investment in green industries stood at RMB28,599 million, accounting for over 38.23% of its investment portfolio.
- BOCG Investment invested in 4 green projects throughout 2022, with the principal amounting to HKD3.3 billion.
- The balance of BOC Financial Leasing's green assets was RMB17.587 billion, accounting for about 37.04% of its total leasing assets.
- BOC Aviation ranked first place among the aircraft leasing companies in Asia as measured by the value of owned aircraft, and owned new aircraft using the latest green technology.
- BOCHK cooperated with S&P Dow Jones Indices and launched the first climate transition index covering listed companies in the Guangdong-Hong Kong-Macao Greater Bay Area.
- BOC Wealth Management continued 51 green finance themed products, with the cumulative product volume of about RMB20,374 million.
- BOCIM developed 17 green and ESG mutual fund products under the three categories of low-carbon and green development concept funds, social responsibility funds, and ESG concept themed funds, achieving a scale of RMB16.0 billion*.

(*Calculated with reference to the ESG fund classification standards of CITIC Securities)

Metrics and Targets

Case

BOC Insurance underwrote the first ecological environment relief liability insurance project in the demonstration zone for integrated ecological and green development in the Yangtze River Delta

BOC Insurance joined the green insurance pool for the demonstration zone for integrated ecological and green development in the Yangtze River Delta (the Demonstration Zone) and successfully participated in underwriting the first ecological environment relief liability insurance project in the Demonstration Zone in August 2022. The coverage of the project could include third party personal casualty, third party property damage, ecological damage, contamination cleanup costs, emergency rescue costs, emergency evacuation and temporary relocation costs, and legal costs caused by sudden environmental pollution incidents in the coverage areas. The project was intended to mitigate the risk of governmental underwriting liability arising from sudden environmental pollution events to some extent.

Case

BOC Asset Investment invested in GAC Aion with the aim to boot the development of China's new energy vehicle industry

GAC Aion, the pure electric car offshoot of China's GAC Group, has emerged as one of the most successful state-owned original equipment manufacturers (OEMs) amid the transition toward new energy sources. Fully leveraging the Bank's advantages in integrated operation, BOC Asset Investment invested RMB1 billion in GAC Aion's projects, a move that strongly supported the development of new energy vehicles in China.



Green operation

Bank of China practices the concept of green operation. After completing an operational carbon inventory ahead of peers, the Bank made an environmental footprint inventory, which covered over 11,000 branches in the Chinese Mainland and 62 other countries or regions around the world. The inventory results show that the group-wide total energy consumption and direct GHG emissions decreased by 4.86% and 15.58% for the period from 2019 to 2022, respectively.

Building green outlets

BOC actively explored ways to green its outlets. The *Green Outlets Building Specifications of Bank of China (Trial)* was released to encourage business outlets at all levels to practice the concept of green development. While setting up new outlets or upgrading old ones, the Bank complied with the document to promote green energy and energy-saving technologies.

Green Outlets Building Specifications



Case

BOC Shenzhen Branch blazed a trail to become carbon neutral in operation

In December 2022, BOC Shenzhen Branch reviewed and adopted the *Carbon Neutral Program and Three-year Action Plan*, becoming the first commercial bank in Shenzhen to formulate a carbon neutrality roadmap. With 2021 as the base year, the program indicates a pathway to operational carbon neutrality, specifies a "three-step" development strategy, and aims to complete the ongoing green transition in 2023.



The Hetao Huanggang Branch under BOC Shenzhen Branch was awarded the "Carbon Neutral Certificate" by Shenzhen Carbon Emissions Exchange, becoming the first green financial institution in Shenzhen to achieve carbon neutrality in its operations throughout 2022.

Case

BOCHK transitioned to low-carbon operation at a faster pace

BOCHK set its own target of and path to operational carbon neutrality in line with the dual carbon goal of the state. It aimed to achieve operational carbon neutrality by 2030. At the same time, BOCHK considered environmental factors in its business development process, adopted energy-efficient and low-carbon operational measures, and devised green operational targets covering four areas, that is, energy, carbon emissions, water use, and paper procurement, in a bid to manage its operational carbon footprint sustainably.



2022 Target Completion Progress

Electricity consumption Baseline Years

17%

Carbon emissions Baseline Years 2019

Water consumption Baseline Years 2019

→32%

Paper purchase Baseline Years

▼38%

Promoting green office

Energy conservation

In strict accordance with the Energy Conservation Law of the People's Republic of China, the Energy Conservation Management Measures for Key Energy-consuming Institutions, and the Evaluation Standards for Green Buildings, among other requirements, BOC has established an energy management system, in which building energy conservation is regarded as important reference for its construction, purchase and leasing of offices, and priority is given to energy conservation in the entire process including the approval, design, tendering, construction, and use of office building projects. As a result, the energy efficiency of the Bank's office buildings has reached a nationally advanced level.

In 2022, to implement the requirements put forth in the national campaign of "channeling computing resources from the east to the west" and the requirements for building green data centers, the Bank made strides in the energy-saving and carbon-reduction retrofit of the Hefei and Inner Mongolia cloud computing centers. The BOC Hefei Cloud Computing Base project was named one of the "National Green Data Centers in 2021". The BOC FinTech Center's project in the Inner Mongolia Horinger New Area was designed to make the best of the low average annual temperature in the local area. It adopted such technologies as indirect evaporative cooling and waste heat recovery to reduce the energy consumption of the server room. The project was accompanied by an energy management platform to pave the way for the subsequent enhancement of green operation and maintenance capabilities. Meanwhile, the Head Office adopted a series of energy-saving measures, such as launching the Green Lighting Campaign, using frequency conversion technology to retrofit air conditioners, and phasing out/replacing outdated equipment. As estimated, these measures would save about 91 tons of coal equivalent every year.

Case

BOC (New Zealand) obtained a certificate on carbon reduction for two consecutive years

BOC (New Zealand) has achieved significant results in a series of emission reduction projects, including energy and water conservation, resource recycling, and waste management, over the past few years. Its total carbon emissions in 2021 were 48.95 tCO2e, a 72% decrease from the base year of 2019, as certified by a third-party independent agency in October 2022 in accordance with the ISO 14064-1:2018 standard. The subsidiary has been certified for carbon emission reduction for two consecutive years, remaining in the vanguard of carbon footprint management among the local peers.



BOC (New Zealand) strengthened waste management

Case

BOC Chile Branch created an eco-friendly office environment

The BOC Chile Branch established a green operation ledger to record data on water, electricity, and paper consumption as well refuse recycling on a monthly basis. A quantitative analysis of consumption trends enabled it to quickly identify office areas that could be optimized for green operation, thereby improving its efforts to save energy and reduce its carbon footprint.

Water resource conservation

BOC complies with the requirements set out in the pertinent laws, regulations and standards including the Water Pollution Prevention and Control Law of the People's Republic of China, the Ordinance on Urban Drainage and Sewage Treatment, the Measures for the Administration of Drainage and Water Recycling in Beijing, and the Integrated Water Pollutants Discharge Standards. With cooking oil and grease put under rigid control, existing equipment was retrofitted to realize the rain-sewage shunting and oil separation in the car wash sediment basin in 2022.

Water used by the Bank is sourced from municipal water supply, without its own water source. The Head Office and the institutions based in Beijing set their water consumption target and develop their water use plan and water conservancy plan each year as per the Notice on the Planned Water Use Indicator issued by the Beijing Water Conservancy Management Center. Water consumption target for the Head Office and other three offices based in Beijing in 2022 was 350,995 cubic meters

The Bank only produces domestic sewage from daily office operations, which is discharged into municipal sewer networks. It engages a qualified third-party testing agency to regularly monitor sewage discharge.

Paper conservation

Offices across BOC went paperless by making full use of teleconferencing and videoconferencing systems to reduce carbon emissions from business travel, accommodation, and other activities. BOC Luxembourg Branch streamlined and electronized many routine processes such as business trip management, seal use, and expense approval through an online office platform available to all employees.

Waste sorting, reduction, and recycling

The Bank strictly complies with the Law of the People's Republic of China on the Prevention and Control of Solid Waste Pollution, the Notice on the Mandatory Classification of Domestic Waste in the Offices of Central State Organs in 2018, the Implementation Plan on the Mandatory Classification of Domestic Waste in the Offices of Central State Organs, and other pertinent laws, regulations, and policies. It implements the waste sorting and reduction campaign in office areas of the Head Office Building, with all trash cans replaced with waste sorting bins, food waste & garbage disposal units installed in some working areas of the Head Office Building, and a qualified agency hired to dispose of hazardous waste. In 2022, the Head Office set the waste reduction target of "zero direct discharge of hazardous waste and full coverage of waste sorting/processing", which was accomplished.

Pollution prevention and control

BOC has managed the main pollutants discharged by the Head Office building (such as oily fume, particulate matters, non-methane total hydrocarbons, nitrogen oxides, and sulfur dioxide), and hired professional institutions to test the fumes and boiler emissions for the purpose of ensuring that the emissions could meet the provisions set out in the Law of the People's Republic of China on Atmospheric Pollution Prevention and Control, the Ordinance on Atmospheric Pollution Prevention and Control in Beijing, the Emission Standards of Air Pollutants for Catering Industry, the Emission Standards of Air Pollutants for Boiler, and other pertinent laws, regulations and standards. In addition, the gas boilers/burners were installed at the Head Office building and the oil fume filters were installed in some office areas of the Head Office building.



Practicing green procurement

BOC practices the concept of green and responsible procurement, aligns itself with excellent green procurement practices in the industry, and takes the initiative to incorporate responsible procurement into all aspects of supplier management.

Demand release

- Energy-saving, water-saving, recyclable, low-carbon and other factors are considered in nailing down procurement demands with reference to national standards, industry standards, and government procurement requirements set out in the catalogs of ecofriendly and energy-saving products, products up to environmental standards, green products, etc.
- It is clearly stated in procurement invitation documents of all projects that "suppliers shall not have any violations against laws and regulations that cause environmental and social risks such as environment pollution and illegal employment".

Supplier selection and procurement review

- The Bank shall evaluate suppliers' undertaking to environmental protection and social responsibilities.
- In specific projects, suppliers are inspected in terms of environmental equipment and measures, healthy and safe office environment, and labor protection measures, among other aspects, and inspection results are considered in the evaluation process.
- The "Green Procurement" labels shall be added to centralized procurement projects, and corresponding content shall be added to the invitation documents for centralized procurement in supplier access qualifications and bidding/consultation scoring measures. In 2022, the Head Office implemented green procurement projects such as copy paper and lighting fixtures.

Advocating green concepts

In 2022, the *Green Action Initiative for Employees of Bank of China* and the *Green Action Guide for Employees of Bank of China* were distributed to promote green and ecofriendly concepts among all employees. The Head Office launched resource-saving initiatives by pasting energy-saving posters at the entrance of the cafeteria and other venues, and putting up water-saving slogans in restrooms, pantries, and other areas. In 2022, the office areas of the Head Office were awarded three stars in the Model Units in Promoting Green Office Activities organized by the Beijing Social Enterprise Quality Association, Beijing Energy Society, and Beijing Society for Environmental Science.



BOC was awarded three stars in the "Model Units in Promoting Green Office Activities"





Leaflets of green initiatives for BOC employees

BOC has been actively involved in the communities in which it operates, taking the initiative to participate in public benefit activities such as reforestation and animal protection, which are closely related to making ecological progress. In doing so, it aims to convey the green concept through practical actions. In 2022, BOC Qinghai Branch actively explored new measures to facilitate environmental protection and ecological management, by working with the Three Rivers Source Ecology Conservation Foundation to launch an ecological conservation campaign at the sources of the Yangtze, Yellow and Lancang rivers.



BOC (Malaysia) staff took part in a beach cleanup organized by the China Enterprises Chamber of Commerce in Malaysia

Case

BOC Sichuan Branch got staff members involved in green initiatives through multiple channels

BOC Sichuan Branch took multiple measures to get young employees involved in green initiatives.

Promoting green concepts: The branch created a column called "Green Initiatives" in internal and external new media platforms to introduce its excellent practices; produced serial cartoons and animations titled "Travel Low Carbon"; and hosted greenthemed essay, photography, calligraphy, and other competitions.

Launching public benefit activities: The branch encouraged young employees to participate in a variety of public benefit activities such as tree planting and environmental protection as a move to celebrate important festivals and holidays in China including the Lei Feng Volunteer Service Month, Tree-planting Day, and Youth Day.

Carrying out thematic activities: The branch attracted young employees to participate in a series of interesting online activities, including the 100 Days of Discipline Challenge camp, plogging, and sharing of energy-saving and carbon reduction tips.



A painting drawn by BOC Sichuan Branch employees around the theme of green initiatives

Metrics and Targets

Green Finance (TCFD) Report 2022

A full package of financial services for Green Winter Olympics

As the only official bank partner of the 2022 Beijing Winter Olympics & Paralympics, BOC actively practiced the concept of "Green Olympics". While providing financial support for the construction of green Olympic venues and other infrastructure projects, the Bank fully met the low-carbon and eco-friendly requirements in fields such as outlet building so as to help the event fulfill its commitment to carbon neutrality.

Supporting the construction of green Winter Olympic venues and other infrastructure projects

- BOC made full use of financial products to provide a full package of comprehensive financial services for the construction and operation of Winter Olympic venues and other infrastructure projects that could meet green building and other eco-friendly standards.
- BOC Beijing Branch granted cumulative green loans of RMB1.05 billion to the Shougang Industrial Park project, financing the renovation of Shougang Cooling Tower, an industrial legacy facility, and the construction of Big Air Shougang, a three-star green building, as well as surrounding ancillary facilities.

Building green outlets at Winter Olympic venues

- BOC designed and built its temporary outlets for the Winter Olympics with green building standards and materials, and provided green energy supply for these outlets, which became LEED-certified green buildings.
- The Bank comprehensively calculated its carbon emissions in the outlet construction and operations, machinery operation, consumable usage, dining and traveling of personnel and other activities during its support for the Beijing Winter Olympics and Paralympics. It offset inevitable carbon emissions by means such as purchasing carbon quotas and developing carbon sink projects.
- BOC became carbon neutral in providing financial services for the event.



Supporting biodiversity conservation during Beijing Winter Olympic Games

The public private partnership (PPP) project for the Yanging competition area of the 2022 Beijing Winter Olympics & Paralympics was the only Winter Olympic project that accessed market-based financing in the whole competition area. The project encompassed the construction, renovation, and operation of the Winter Olympic Village, Mountain Press Center, and supporting infrastructures, as well as the post-game operation of the National Alpine Ski Center, National Sliding Center, and supporting infrastructures.

Considering that the project site, Xiaohaituo Mountain in Yanging, possesses the most complete natural ecosystem in the surrounding areas of Beijing, a number of measures, such as near-situ conservation and ex-situ conservation were taken during the construction process for the protected plants that got in the way. At the same

time, animal protection passages were established to strengthen the habitat protection for wild animals. During the project construction and operation period, ecological restoration was completed in millions of square meters to protect the surrounding natural environment to the greatest extent, making Yanging a real-sense "ecological competition area".

BOC Beijing Branch, as the lead bank and correspondent bank, organized a green syndicated loan of RMB2,578 million for the project. All loan funds were used in compliance with green loan identification standards to support the construction of green buildings and the comprehensive restoration of ecology in the competition area. As at the end of 2022, the branch disbursed loan funds of RMB543 million for the project, of which RMB64.47 million was new during the year.



Yanging Winter Olympic (Paralympic) Village

Tables of key indicators

Green finance development

Indicator (unit)	2022
Balance of domestic green credit denominated (RMB100 million)	19,872
YoY growth of balance of domestic green credit (%)	41
Domestic and overseas underwriting volumes of green bonds (RMB100 million)	4,539
Domestic and overseas issuing volumes of green bonds (RMB100 million)	877

Green credit environmental benefits

Indicator (unit)	2022
CO ₂ equivalent emission reduction attributed to green credit (10,000 tons)	20,410
Sulfur dioxide emission reduction attributed to green credit (10,000 tons)	3,909
Water conservation attributed to green credit (10,000 tons)	20,969
Standard coal conservation attributed to green credit (10,000 tons)	8,920
COD emission reduction attributed to green credit (10,000 tons)	63
Ammonia nitrogen emission reduction attributed to green credit (10,000 tons)	20
Nitrogen oxide emission reduction attributed to green credit (10,000 tons)	4,326

Energy consumption

Indicator (unit)	2022	2021	2020
Total energy consumption (MWh)	2,688,308	2,754,463	2,717,945
Energy consumption per FTE (MWh)	8.78	8.95	8.79
Direct energy consumption			
Gasoline consumption (ton)	11,049	12,400	12,658
Diesel oil consumption (ton)	540	463	482
Natural gas consumption (10,000 m³)	1,763	1,779	1,638

Indicator (unit)	2022	2021	2020
Indirect energy consumption			
Electrical power consumption by offices (MWh)	1,272,768	1,279,768	1,164,930
Electric power consumption by the Data Center (MWh)	536,492	506,101	585,547
Heat consumption (MkJ)	1,955,218	2,214,424	2,251,532

Note 1: 10 types (such as gasoline, diesel oil, natural gas, electric power and heat) of energy were consumed by the operation of the Group during 2020-2022. Gasoline and diesel oil were mainly consumed by office vehicles, natural gas, liquefied natural gas and other types of energy by the canteens in office places, electric power by office buildings and the Data Center, and heat by office places in the northern region.

Note 2: The total energy consumption was calculated according to the consumption of various types of energy and the conversion factor provided in the *General Rules for Calculation of Comprehensive Energy Consumption* (GB/T 2589-2020).

Greenhouse gas emissions

Indicator (unit)	2022	2021	2020
Total greenhouse gas emissions (tCO₂e)	1,537,546	1,534,060	1,512,554
Greenhouse gas emission (tCO ₂ e) within Scope 1	74,899	79,309	77,214
Greenhouse gas emission (tCO ₂ e) within Scope 2	1,462,647	1,454,751	1,435,340
Greenhouse gas emissions intensity per FTE (tCO ₂ e/FTE)	5.02	4.99	4.89

Note 1: According to the business scope of the Group, the greenhouse gas emissions from its own operations mainly include carbon dioxide, methane and nitrous oxide. The greenhouse gas emission from the operation of the Group during 2020-2022 was mainly incurred by energy consumption and included the emissions within Scope 1 and Scope 2. Scope 1 refers to the direct emissions from combustion of fossil energy such as gasoline, diesel oil, natural gas, liquefied natural gas, liquefied petroleum gas, fuel oil, coal and coke. Scope 2 refers to the indirect emissions embodied in electric power and heat consumption.

Note 2: The greenhouse gas emissions were accounted by using the energy-related emission factor mentioned in the Accounting Methods and Reporting Guidelines for Greenhouse Gas Emissions of Public Building Operators (Provisional) and the Accounting Methods and Reporting Guidelines for Greenhouse Gas Emissions of Land Transport Enterprises (Provisional) issued by the National Development and Reform Commission, carbon dioxide emission factors of China's regional power grids issued by the State, and the electric power emission factors issued by overseas regions, based on the accounting scope proposed in the ISO14064-1 Greenhouse Gases-Part 1: Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals and the Greenhouse Gas Accounting System released by the World Resources Institute (WRI).

Note 3: In 2022, BOC completed the carbon verification, trading and other aspects of work at the Head Office level in accordance with the Approval Method for Quotas of Key Carbon Emission Institutions in Beijing, the Decision on Carrying out the Pilot Carbon Trading in Beijing on the Premise of Strict Control over Total Carbon Emissions, and provisions of other government departments. The Head

Office purchased 650 tons of carbon credits in total throughout the year.

Note 4: The Bank is actively setting a greenhouse gas emission target across the Group, and has tested the programs and their feasibility under three different target scenarios.

Water resource use

Indicator (unit)	2022	2021	2020
Total water consumption (m³)	13,535,554	13,618,321	13,207,165
Total cycling use of water (m³)	149,834	141,122	105,045

Note: Data covered the entire Group

Waste management

Indicator (unit)	2022	2021	2020
Discharge of hazardous waste (tons)	1,296	1,228	1,168
Discharge of non-hazardous waste (tons)	44,419	44,542	42,369

Note: Data covered the entire Group.

Paper consumption

Indicator (unit)	2022	2021	2020
Office paper consumption (tons)	12,115	12,211	12,152
Paper conservation (tons)	96	-59	58

Note: Data covered the entire Group.



Third Party Statement of Greenhouse Emission and Energy Data

Statement of Greenhouse Gas and Environmental Data

This statement focuses on

Bank of China Limited

No.1 Fuxingmen Nci Dajie, Xicheng District, Beijing, 100818,

and covers the greenhouse gas emissions and main environmental data of Bank of China Limited globally in the period 1st January 2020 – 31st December 31 2022.

Energy consumption		2021	2020
imption (t)	11,049	12,400	12,658
ption (t)	540	463	482
nsumption (10 ⁴ Nm ³)	1,763	1,779	1,638
ption of office space (MWh)	1,272,768	1,279,768	1,164,930
ption of Data Center (MWh)	536,492	506,101	585,547
tion (GJ)	1,955,218	2,214,424	2,251,532
Comprehensive energy consumption (MWh)		2,754,463	2,717,945
Greenhouse gas emissions		2021	2020
ise gas emissions for Scope I and Scope II (tCO2e)	1,537,546	1,534,060	1,512,554
Greenhouse gas emissions for Scope I (tCO2e)	74,899	79,309	77,214
Greenhouse gas emissions for Scope II (tCO2e)	1,462,647	1,454,751	1,435,340
Other environmental footprint		2021	2020
Office paper quantity (t)		12,211	12,152
Total water consumption (m ³)		13,618,321	13,207,165
Among which: Total cycling use of water (m3)		141,122	105,045
Total discharge amount of hazardous waste (t)		1,228	1,168
Total discharge amount of harmless waste (t)		44,542	42,369
	ption (t) ption (t) psumption (10 ⁴ Nm³) ption of office space (MWh) ption of Data Center (MWh) ption (GJ) e energy consumption (MWh) nissions use gas emissions for Scope I and Scope II (tCO₂e) Greenhouse gas emissions for Scope I (tCO₂e) Greenhouse gas emissions for Scope II (tCO₂e) tal footprint mantity (t) usumption (m³) which: Total cycling use of water (m³) e amount of hazardous waste (t)	Imption (t) 540 Insumption (10 ⁴ Nm³) 1,763 Insumption of office space (MWh) 1,272,768 Insumption of Data Center (MWh) 536,492 Insumption (GJ) 1,955,218 Insumption of Data Center (MWh) 2,688,308 Insumption of Scope I and Scope II (tCO₂e) 1,537,546 Insumption of Scope I and Scope II (tCO₂e) 1,537,546 Insumption of Scope I (tCO₂e) 1,462,647 Insumption (m³) 12,115 Insumption (m³) 13,535,554 Insumption (m³) 149,834 Insumption of hazardous waste (t) 1,296	mption (t) 11,049 12,400 ption (t) 540 463 nsumption (10 ⁴ Nm³) 1,763 1,779 ption of office space (MWh) 1,272,768 1,279,768 ption of Data Center (MWh) 536,492 506,101 ption (GJ) 1,955,218 2,214,424 te energy consumption (MWh) 2,688,308 2,754,463 nissions 2022 2021 use gas emissions for Scope I and Scope II (tCO₂e) 1,537,546 1,534,060 Greenhouse gas emissions for Scope II (tCO₂e) 74,899 79,309 Greenhouse gas emissions for Scope II (tCO₂e) 1,462,647 1,454,751 tal footprint 2022 2021 namity (t) 12,115 12,211 nsumption (m³) 13,535,554 13,618,321 which: Total cycling use of water (m³) 149,834 141,122 examount of hazardous waste (t) 1,296 1,228

Greenhouse gas accounting is based on the accounting scope proposed in ISO14064-1 "Greenhouse gases - Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals" and the "Greenhouse Gas Protocol" issued by the World Resources Institute (WRI). Based on the nature of Bank of China business, this statement uses the emission factors provided in "the Accounting Methods and Reporting Guidelines for Greenhouse Gas Emissions of Public Building Operating Enterprises (Trial)", "the Accounting Methods and Reporting Guidelines for Greenhouse Gas Emissions of Land Transport Enterprises (Trial)", "2006 IPCC Guidelines for National Greenhouse Gas Inventories" and "2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories", the latest average carbon dioxide emission factors of China's regional power grid, and the latest electric power emission factors issued by local governments abroad.



Bank of China Limited Green Finance (TCFD) Report 2022

Indexes

Indexes

Task Force on Climate-related Financial Disclosures (TCFD) Index

TCFD Recommended Disclosure	Response	Location of Disclosure
Governance: Disclosure of the organization's governance around climate-related risks and opportunities		
a) Description of board's oversight of climate relate	ed risks and opportunities	
Processes and frequency by which the board and/or board committees are informed about climate-related issues; whether the board and/or board committees consider climate-related issues when reviewing and guiding strategy, major plans of action, risk management policies, annual budgets, and business plans as well as setting the organization's performance objectives, monitoring implementation and performance, and overseeing major capital expenditures, acquisitions, and divestitures; and how the board monitors and oversees progress against goals and targets for addressing climate-related issues.	The Board of Directors (or its special committee) is responsible for reviewing and approving the green finance development plan as well as the green finance targets and reports set by the Senior Management it. In addition, it supervises and evaluates the green finance development plan's implementation. In 2022, the Board of Directors heard the report on green finance development in 2021 and considered and adopted the Corporate Social Responsibility Report 2021 of Bank of China Limited (Environmental, Social, Governance). In 2022, BOC added a qualitative statement on environmental and social risk appetite to its risk appetite statement, which was considered and approved by the Board of Directors at its meeting. The Bank included environmental and social risks management in the Group's comprehensive risk management report, which would be regularly sent to the Risk Policy Committee of the Board of Directors for review. The Steering Group for Green Finance and Industry Planning & Development (hereinafter referred to as "the Steering Group") has been established at the Group level. With Chairman and President of the Bank serving as the head and deputy head, the Steering Group is responsible for planning, directing, and coordinating the work related to green finance and industry planning. In 2022, the Steering Group convened two meetings to consider and adopt the Work Plan for Green Finance of Bank of China in 2022, which set out 45 measures to be taken by the Bank in seven areas, including business development, environmental and social risk management, carbon operation, cooperation and exchange, and information disclosure.	9-10,27
b) Description of management's role in assessing and managing climate-related risks and opportunities		
Whether the climate-related responsibilities have been assigned to management-level positions or committees; a description of the associated organizational structure (s); processes by which management is informed about climate-related issues; and how management monitors climate-related issues.	The Green Finance Committee is responsible for the overall management and professional decision-making of the Group's green finance work, and is chaired by a member of senior management in charge of risk management departments. Its primary responsibilities include reviewing key policies and systems for managing green finance and ESG risks. The standing members of the committee are 22 departments, which coordinate all business lines and institutions across the Group to develop green finance.	11

TCFD Recommended Disclosure	Response	Location of Disclosure
Strategy: Disclosure of the actual and potential importance of the actual actual and actual actua	pacts of climate-related risks and opportunities on the organiz	ation's businesses,
a) Description of climate-related risks and opportu	nities identified by the organization over the short, medium ar	nd long term
Description of climate-related risks and opportunities in the short-, medium-, and long-term time horizons; description of the specific climate-related issues that could arise in each time horizon (short, medium, and long term) and have a material financial impact on the organization; and description of the process(es) used to determine whether risks and opportunities could have a material financial impact on the organization.	The Bank defines strategic objectives for the development of green finance, and considers the impact of climate risks in the short-, medium-, medium and long-, and long-term time horizons, as well as the associated opportunities in the context of the global response to climate change and the dual carbon goal.	21-25
Supplemental guidance for the banking sector: Banks should describe credit exposure to carbon-related assets and climate-related risks (transition and physical) in their lending and other financial intermediary business activities.	The Bank has identified and analyzed climate-related risks (physical and transition), conducted corresponding climate risk stress tests, and promoted the transformation and upgrading of carbon-intensive industries. In 2022, the proportion of domestic corporate brown industries credit continued to go down and fall below 10%.	23-25,45
b) Description of impact of climate-related risks an	d opportunities on the organization's businesses, strategy and	d financial planning
Description of how climate-related issues influence businesses, strategy, and financial planning; description of how climate-related issues serve as an input to financial planning process, the time period(s) used, and how these risks and opportunities are prioritized; and description of climate-related scenarios used in strategy and financial planning (if applicable).	As a leader in green finance, the Bank fully integrates sustainable development into its own development strategy and makes every effort to establish a new green finance system. It has set out the fundamental principles, strategic objectives, and incentives for the development of green finance in the 14th Five-Year Plan for Green Finance of Bank of China. The Bank has analyzed the transmission paths and impacts of climate risks (physical and transition) on its key risks, and identified major opportunities for banking financial institutions in the context of climate change response.	12-19,21-25
c) Description of the resilience of the organization's	s strategy, taking into consideration different climate-related s	cenarios
Description of how resilient the organization's strategies are to climate-related risks and opportunities, taking into account scenarios such as an increase of 2°C or more in the global average temperature and an increase in physical climate-related risks.	For the industries sensitive to ESG risks and the regions possibly exposed to high physical risk, etc., the Bank closely tracks the changes in Chinese and foreign laws, policies, technologies, and markets and dynamically analyzes their impact on customers' operating conditions and industry developments. As per regulatory requirements, it devises different climate risk scenarios, conducts scenario analysis and stress tests on certain industries or regions, evaluates the solvency, internal capital adequacy, and liquidity adequacy of the entire Bank or certain key branches, and uses the results of stress tests to strengthen the internal management.	28-29

TCFD Recommended Disclosure	Response	Location of Disclosure
Risk management: Disclosure of the processes used	d by the organization to identify, assess, and manage climate-	related risks
a) Description of the organization's processes for identifying and assessing climate-related risks		
Management processes for identifying and assessing climate-related risks; and whether the organization considers existing and emerging regulatory requirements related to climate change as well as other relevant factors.	The Bank has improved the policies, systems, and processes used for managing ESG risks, established an effective whole-process management approach that could cover risk identification, measurement, assessment, monitoring and reporting, and control and mitigation, and controlled or reduced the risks that might arise from its operational activities in accordance with the national goals and plans to attain green and low-carbon development as well as relevant environmental protection laws and regulations, industrial policies, and industry access policies.	27-34
Supplemental guidance for the banking sector: Description of climate-related risks by the risk types facing traditional banks (such as credit risk, market risk, liquidity risk, and operational risk) as well as the risk classification framework used.	The Bank has identified and analyzed the transmission paths and impacts of climate-related risks (physical and transition) on its key risks including credit risk, market risk, liquidity risk, operational risk, reputational risk, country risk, and IT risk.	23-25
b) Description of the organization's processes for m	nanaging climate-related risks	
Description of processes for managing climate- related risks, including how decisions to mitigate, transfer, accept, or control those risks are made; and description of processes for prioritizing climate-related risks.	The Bank has devised a whole-process management approach that could cover risk identification, measurement, assessment, monitoring and reporting, and control and mitigation, established an ESG risk governance architecture that is commensurate with its business size and attributes, and defined ESG risk management responsibilities within the framework of three lines of defense. The Bank controls and mitigates ESG risks by adopting key business strategies, differentiated authorization processes, and other ways based on accurate identification, measurement, and assessment of ESG risks associated with customers.	27-34
c) Description of how processes for identifying, assessing, and managing climate related risks are integrated into the organization's overall risk management		
Description of how processes for identifying, assessing, and managing climate related risks are integrated into the organization's overall risk management.	The Bank formulated the Policy of Bank of China for Managing Environmental (Climate), Social and Governance Risks Associated with Customers (Version 2022), which was reviewed and approved by the Green Finance Committee.	27-34

TCFD Recommended Disclosure	Response	Location of Disclosure
Metrics and targets: Disclosure of the metrics and	targets used to assess and manage relevant climate-related ri	sks and opportunities
a) Disclosure of the metrics used by the organization	on to assess climate-related risks and opportunities in line with	n its strategy and risk
Description of the key metrics used to measure and manage climate-related risks and opportunities; whether the key metrics are incorporated into remuneration policies where climate-related issues are material; and description of internal carbon prices as well as climate-related opportunity metrics (if applicable).	To become the "Bank of Choice for Green Finance Services", the Bank has moved swiftly to innovate modes of green finance products and services, forged the "BOC Green+" brand, and facilitated the low-carbon transition of the Chinese society with financial strength. Committed to green and low-carbon operations, it has set the two goals of "installing energy-efficient lighting fixtures and reducing food waste in work space of the Head Office in Beijing by 2025". Green finance indicators have been introduced to the senior management personnel appraisal, and appraisal results are linked with salary distribution.	14,43-64
Supplemental guidance for the banking sector: Description of the metrics used to assess the impact of climate-related risks on lending and other financial intermediary business activities in the short, medium, and long term; the amount and percentage of carbon-related assets relative to total assets; and the amount of lending and other financing associated with climate-related opportunities.	The Bank has set targets in the field of green finance, which involves green credit, green bonds, and green consumption, among other aspects. In 2022, the balance of BOC's domestic green credit reached RMB1,987.2 billion, and the proportion of domestic corporate brown industries credit continued to go down and fall below 10%.	43-52,62
b) Disclosure of Scope 1, Scope 2, and, if appropria	ete, Scope 3 greenhouse gas (GHG) emissions, and the related	risks
Provision of Scope 1, Scope 2, and Scope 3 GHG emissions and related risks; provision of related, generally accepted industry-specific GHG efficiency ratios (if applicable); and provision of GHG emissions and associated metrics for historical periods to allow for trend analysis.	The Bank supports green industries such as clean energy, green transportation, and green buildings, drives carbon-intensive industries towards transformation and upgradation, and tightens credit balance control over brown industries. It adheres to the concept of green operation. From 2019 to 2022, the group's total energy consumption and direct GHG emissions decreased by 4.86% and 15.58%, respectively.	45,62-63
Disclosure of GHG emissions for lending and other financial intermediary business activities.	The Bank endeavours to channel funds into the green, low-carbon, and eco-friendly fields. Its green credit contributed to a reduction of 204 million tons of CO ₂ -equivalent emissions in 2022.	45,62

TCFD Recommended Disclosure	Response	Location of Disclosure	
c) Description of the targets used by the organization to manage climate-related risks and opportunities and performance against targets			
Description of key climate-related targets in line with anticipated regulatory requirements, market constraints, or other goals.	The Bank has developed innovative green credit, green bonds, green inclusive finance, green consumption, and green comprehensive services to meet the diversified financial needs of customers. In 2022, it ranked first among Chinese banks in the Bloomberg League Table for "Global Green Loans" and "Global Sustainability-linked Loans" and "Global Offshore Green Bonds". It ranked first on NAFMII's list of investors with green debt financing instruments.	43-64	

The Guidelines for Environmental Information Disclosure by Financial Institutions issued by the PBOC

Disclosure Content	Location of Disclosure
6.1 Annual overview	2,6-7
6.2 Environmental governance structure of a financial institution	9-11
6.3 Environmental policies and systems for a financial institution	12-19
6.4 Environmental product and service innovation of a financial institution	43-52
6.5 Environmental risk management process for a financial institution	27-34
6.6 Impact of environmental factors on a financial institution	23-25
6.7 Impact of investing and financing activities by a financial institution on the environment	45-52,60-62
6.8 Impact of operating activities by a financial institution on the environment	53-59,63-64
6.9 Data sorting, verification, and protection	41
6.10 Green finance innovation and research results	35-40
6.11 Other environmental information	65



