



SHANGHAI RURAL COMMERCIAL BANK CO., LTD.

2024 ENVIRONMENTAL INFORMATION DISCLOSURE REPORT

About this Report

Reporting Period

The period covered by this Report is from January 1, 2024 to December 31, 2024.

Reporting Scope

This Report is concerned with Shanghai Rural Commercial Bank Co., Ltd. with some information associated with Yangtze United Financial Leasing Co., Ltd., which was established by Shanghai Rural Commercial Bank Co., Ltd.

Reporting Type

It is an annual report.

Basic Framework

This Report is prepared in accordance with the requirements of *Guidelines for Environmental Information Disclosure of Financial Institutions (JR/T 0227-2021)* of the People's Bank of China, and referenced to the *Guidelines for Carbon Accounting Technology of Financial Institutions(Trial) (YBF [2021]No.119)* of the People's Bank of China, the *International Financial Reporting Standards S2 Climate-related Disclosures (IFRS S2)* of the International Sustainability Standards Board (ISSB), and the suggestions of *Reports from the Task Force on Climate-related Financial Disclosures (TCFD)* of Financial Stability Board.

Data Resources

All information and data used in this Report is mainly from the internal documents or related statistical data of Shanghai Rural Commercial Bank Co., Ltd. Unless Otherwise specified, Green Credit in this Report is consistent with the statistical specification of National Financial Regulatory Administration, including green on-balance sheet loans, green off-balance sheet letter of credit and acceptance bill. All the monetary amounts are expressed in Chinese yuan.

Short Names

For readability purpose, Shanghai Rural Commercial Bank Co., Ltd. is referred to as "SHRCB", the "Bank" or "We", and Yangtze United Financial Leasing Co., Ltd., is referred to as "Yangtze United Financial Leasing" throughout this report.

Legal Entity Identifier

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Release Channels

This Report is prepared in Chinese and English and the Chinese version shall prevail in event of any discrepancy. The Report is released and available for download on www.shrcb.com.

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Contents

About this Report	2
Section I Annual Overview	7
I. About SHRCB	7
II. Green Development	9
1. Development vision	9
2. Strategic goals	9
3. Green finance milestones	9
4. Green finance awards	11
III. Annual Key Achievements	20
IV. Green Finance Performance	24
Section II Environment-related Governance Structure	27
I. Board of Directors	27
II. Senior Management	28
III. The Head Office	29
IV. Branches	30
Section III Environment-related Policies	32
I. Policies Relating to Green Finance	32
1. Management system	32
2. Business development	34
3. Risk management	35
4. Assessments and incentives	36
II. Actions for Regional Green Development	37
1. Complying with regulatory requirements	37
2. Serving the “dual carbon” goals of Shanghai	38
Section IV. Product and Service Innovation relating to Environment	39
I. Corporate and Inclusive Finance Line of Business	39
II. Retail Finance Line of Business	44
III. Financial Market Line of Business	47
IV. Investment Banking Line of Business	51
V. Asset Management Line of Business	52
VI. Finance Lease Line of Business	52
Feature: Strengthening Biodiversity Conservation and Enhancing International Exchanges	55
Section V Environment Risk Management Process	59
I. Identification and Assessment	59

II. Management and Control	60
1. Environmental risk management for credit clients	60
(1) Pre-loan access	60
(2) Loan approval	60
(3) Post-loan management	61
2. ESG risk management for credit bonds	61
Section VI Impact of Environmental Risks on Financial Institutions	63
I. Identification of Environmental Risks and Opportunities	63
1. Environmental risk identification	63
2. Environmental opportunity identification	67
II. Quantitative Analysis of Environmental Risks	69
1. Climate risk stress test	69
2. Impact analysis and target setting based on the Principles for Responsible Banking (PRB)	70
Section VII Environmental Impact of Investing and Financing Activities	72
I. Carbon Emissions of Investing and Financing Activities	72
1. Emissions of credit assets	72
2. Quality of carbon emission data	74
II. Environmental Benefits of Investing and Financing Activities	74
1. Environmental benefits of green credit	74
2. Environmental benefits of green bonds	76
Section VIII Environmental Impact of Operating Activities	78
I. Energy and Resource Consumption	78
II. Carbon Emissions of Operating Activities	79
1. Carbon emission accounting	79
2. Quality of carbon emission data	79
III. Green Operations	80
1 . Green office	80
2 . Green sites	81
3. Green procurement	84
4. Green operations	84
Section IX Data Sorting, Validation and Protection	86
I. Data Security Laws and Regulations	86
II. Data Quality Validation	86
III. Customer Privacy Protection	88
IV. Data Security Emergency Plan	88

Section X Green Finance Innovation and Research Achievements	90
I. Digital Transformation	90
1. Management system	90
2. Transaction system	91
3. Operational system	92
II. Prospective Research	92
Section XI Additional Environmental Information	98
I. Internal Communication	98
Feature: Establishing a Green Finance Research Task Force to Advance Academic Progress	100
II. External Exchange	103
Feature: Strengthening International Exchanges and Cooperation under the PRB Framework to Promote Global Sustainable Development	105
III. Branding Effort	107
Section XII Future Outlook	109
Appendices	110
Appendix 1: Basis for quantitative estimation of environmental impacts	110
Appendix II: Index Catalog of Guidelines for Environmental Information Disclosure of Financial Institutions	116
Appendix III: Index Catalog of Task Force on Climate-related Financial Disclosures (TCFD)	117

Section I Annual Overview

I. About SHRCB

Shanghai Rural Commercial Bank Co., Ltd. (“SHRCB”, “Bank” or “We”) was founded on August 25, 2005. It is a state-owned corporate bank headquartered in Shanghai and the first provincial-level commercial bank from the joint-stock reform of rural credit cooperatives in China. On August 19th, 2021, the Bank was successfully listed on the main board of the A-share market and became a listed company on the main board of the Shanghai Stock Exchange, with the stock abbreviation “Hu Nong Shang Hang” and stock code 601825.

With the mission that “inclusive finance delivers better life”, SHRCB is committed to the vision of “building a service-oriented bank and an integrated regional financial service group with the best experience and outstanding brand.” It practices the core values of “sincerity, responsibility, creation, benefit” and promotes the core spirit of corporate culture to “value virtue and goodness, benefit the city and the people, pursue excellence with diligence, and realize the shared dream of harmony” while continuously intensifying its three core strategies of “insisting on customer-oriented, being committed to inclusive finance, and staying firm in digital transformation.” The Bank is striving to build “a retail financial service system driven by wealth management, an integrated financial service system driven by trading banking, an inclusive financial service system based on agricultural finance, a science and technology financial service system featuring science and technology innovation finance, and a sustainable financial service system underpinned by green finance.” SHRCB provides comprehensive and integrated financial services to businesses and individuals, focusing on fostering and shaping its operational strengths in areas such as inclusive finance, sci-tech innovation finance, rural revitalization, pension finance, green finance, and the integrated development of the Yangtze River Delta.

The influence of SHRCB keeps increasing. It ranked 128th in UK *The Banker’s* Top 1000 Global Banks 2024, the 13th among Top 100 Most Competitive Chinese Banks, and the 23rd among Top 100 Chinese Banks 2024. It holds an S&P Global Ratings’ long-term issuer credit rating of “BBB” and a Standard & Poor’s credit rating of AAAspc with a stable outlook. Moreover, the Bank has been rated “A” in Wind ESG and “AAA” in Sino-Securities ESG Ratings.

SHRCB actively responds to the national “carbon peak and carbon neutrality (dual carbon)” strategy, upholds the principle of sustainable development, and utilizes financial tools to promote green transition and develop green finance. The Bank advances these efforts comprehensively from multiple aspects, including organizational structure, work mechanisms, strategic systems, brand building, business expansion, product innovation, management systems, management tools, information systems and data, information disclosure, and green operations. In this way, it closely aligns itself with the industrial transformation trend driven by the “dual carbon” strategy. The Bank focuses on five key sectors: green agriculture, green energy, energy efficiency and environmental protection, green manufacturing, and green buildings, aiming to become a leader in green finance in the Yangtze River Delta.

II. Green Development

1. Development vision

Adhering to the concept of sustainable development, SHRCB focuses on green agriculture, green energy, energy efficiency and environmental protection, green manufacturing and green building, and provides green financial services around green credit, green bonds, green service, green financing and green leasing, aiming to promote customers' green transformation development. Furthermore, SHRCB, with a long-term view, explores its development paths for financial transformation to create the greenest bank in Yangtze River Delta.

2. Strategic goals

SHRCB's strategic goals are based on an in-depth study of the national "dual carbon" goals and actively respond to the Five Tasks of green finance development. The Bank strives to meet the needs of regional green and low-carbon transition, support the high-quality development of the real economy, and align with the green and low-carbon business development trend. Aiming to enhance market competitiveness, the Bank strengthens climate risk management in response to challenges posed by climate change. It also follows the United Nations Principles for Responsible Banking (PRB) and integrates the principles of sustainable development into its strategic goal-setting to comprehensively promote green transition and sustainable development of the economy and society.

In its development strategy for 2023-2025, SHRCB has set the following goals: maintaining a high growth rate in the total amount of green financial services, achieving an industry-leading level in green credit, and reducing its total energy consumption, thereby positioning itself as a pioneer in green and low-carbon transition. SHRCB strives to achieve the amount of green financing services totaling 130 billion yuan by 2025, including 100 billion yuan of green credit and 16.5 billion yuan of on-balance-sheet and off-balance-sheet green bond investments..

3. Green finance milestones

In recent years, the Bank has actively embraced the concept of green development, closely integrating carbon peak and carbon neutrality with its overall development strategy. By coordinating resources, we strive to be a witness and promoter of green finance in Shanghai, achieving significant results across various green finance business areas.

Year	Month	Events
2022	May	Formulated <i>SHRCB Work Plan for Carbon Peak and Carbon Neutrality during the 14th Five-Year Plan Period</i>
	September	Launched the green finance business management system
	October	Officially signed the United Nations Principles for Responsible Banking (PRB) and joined the United Nations Environment Programme Finance Initiative (UNEP FI), becoming the first commercial bank in Shanghai to commit to adhering to the UN PRB
		Collaborated with the Shanghai Environment and Energy Exchange to land the first pledge financing business in China using carbon emission allowances (SHEA) in the medical textile industry
2023	February	Included for the first time into MSCI ESG ratings and awarded with A-rating
	April	Signed a special cooperation agreement on Water-saving Benefit program with the Shanghai Water Authority and launched the first batch of Water-saving Benefit program in Shanghai
	May	Issued <i>SHRCB 2023-2025 Development Strategy</i> , incorporating the Sustainable Financial Service System with Green Finance as the Foundation into one of the five major strategic systems
		Issued <i>SHRCB Management Methods for Green Finance</i>
	June	Joined the Carbon Neutrality Working Committee of the Shanghai Urban Renewal Research Institute as an initiating member
	September	Initiated and joined the Green Financial Services Professional Committee of the Shanghai Energy Conservation Association as a vice-director unit
2024	January	Successfully selected as one of the first batch of institutions to register on Shanghai Green Finance Service Platform,
	February	Launched Phase II of the second phase of the green finance business management system, embedding the green credit identification process into the business system
	April	Issued <i>the SHRCB Transition Finance Service Plan (Trial)</i>
		SHRCB implemented China's first transition finance loan in the chemical industry, marking the first cross-border cooperation between banks and insurance institutions in transition finance field in China
	July	Established a Green Finance Research Task Force
	August	Established an ESG Leadership Working Group and a Green Finance Working Group
		The Shanghai Industrial Green Loan was officially launched, with SHRCB becoming one of the first batch of registered banks
	September	As one of the first batch of financial institutions, SHRCB signed a strategic cooperation agreement with the Ecology and Environment Bureau of Pudong New Area on climate investment and financing pilots and facilitated the implementation of Shanghai's first batch of climate investment and financing projects
		Issued the <i>SHRCB Green Credit Verification Guideline</i> and the <i>SHRCB Green Finance Risk Management Appraisal Guideline</i>
	December	Invited to participate in the 18th Global Roundtable Forum of the United Nations Environment Programme Finance Initiative (UNEP FI) and made a thematic presentation at the closed-door meeting of the Chinese delegation

4. Green finance awards

In 2024, SHRCB received numerous accolades in overall institutional strength, climate risk management, digital and intelligent transformation, and environmental information disclosure. The widespread acclaim from society for the Bank has enhanced its brand influence in the market.

- Outstanding Unit in Green Financial Services in Shanghai's Banking Industry of Shanghai Banking Association



- The Best Financial Institution Award in GF 60 Green Finance Cases at 2024 Green Finance Forum of 60



- Risk Management Innovation Case of the Year 2024 by The Chinese Banker



- 2024 Silver Award for Outstanding Practice at the Tianyi China Financial Risk Managers Annual Forum



- Outstanding Case in Security and Controllability by the Rural Credit Banks Funds Clearing Center



- Digital Financial Innovation Leader by the Chinese Alliance of Community Banks



- Pilot Organization for Carbon Emission Accounting and Information Disclosure by Financial Institutions in Pudong New Area by the Financial Committee of the CPC Pudong New Area Committee



- Top 10 Urban Commercial Banks and Rural Financial Institutions in green debt

financing instruments by the National Association of Financial Market Institutional Investors



- Outstanding Underwriter for CCDC Green Bond Index by China Central Depository & Clearing Co., Ltd.

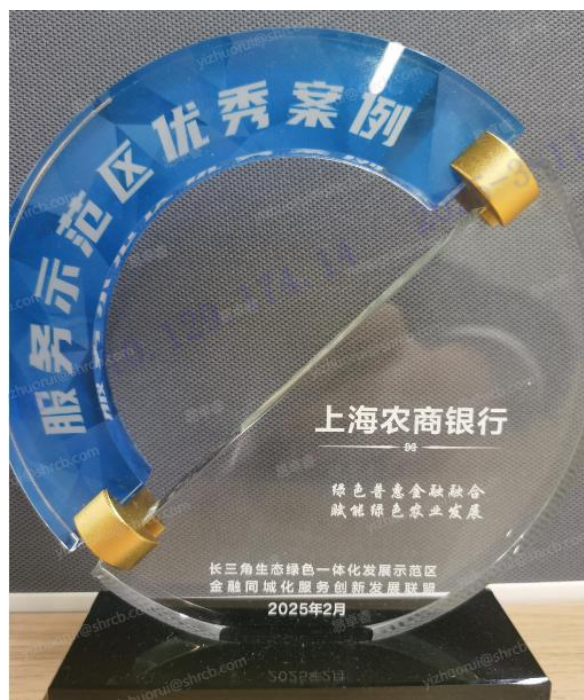


- Outstanding Case for Service Demonstration Zones by the Financial Integration Innovation Development Alliance for Yangtze River Delta Integration Demonstration Zone

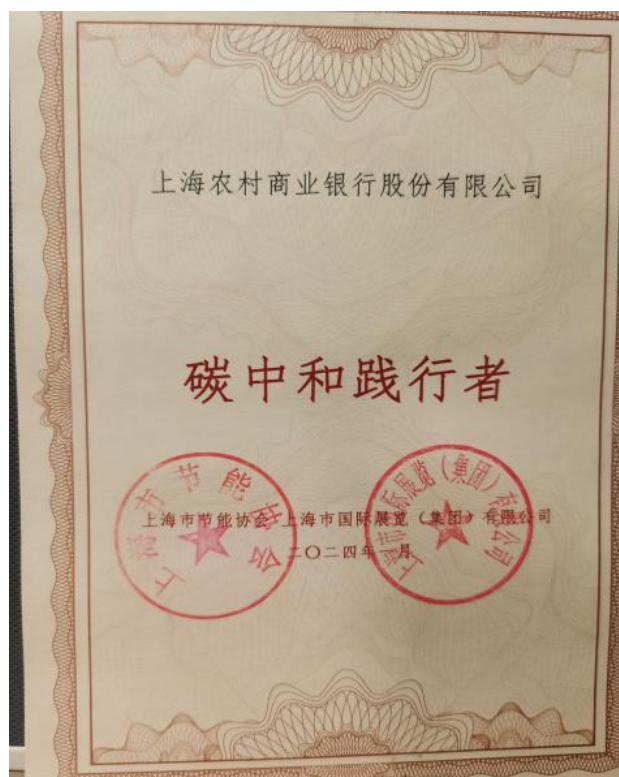


- Outstanding Case for Service Demonstration Zones: Integration of Green and Inclusive Finance Empowering Green Agriculture Development by the

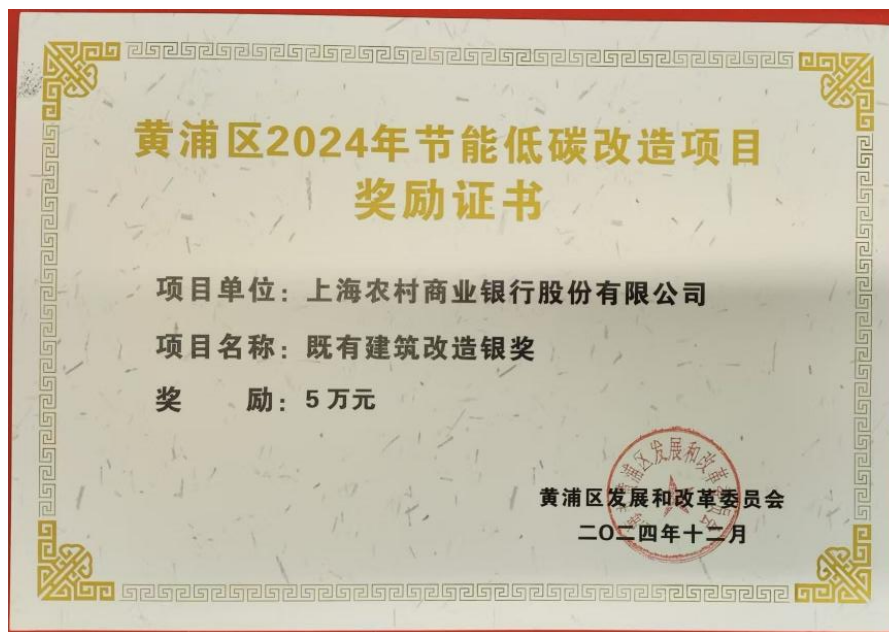
Demonstration Area in the Yangtze River Delta on Ecologically Friendly Development and Financial Integration Innovation Development Alliance



- Carbon Neutrality Practitioner by Shanghai Energy Conservation Association and Shanghai International Exhibition (Group) Co., Ltd.



- 2024 Energy-Saving and Low-Carbon Retrofit Project Award Certificate for existing building renovation by the Development and Reform Commission of



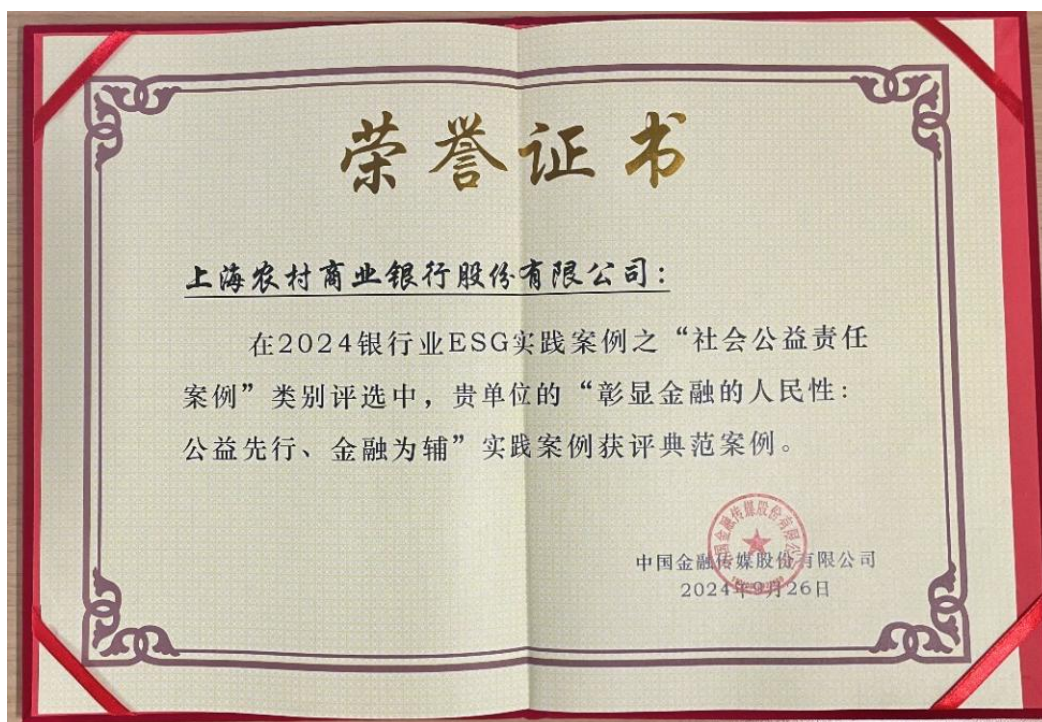
- Outstanding Contribution Award at the 2024 Shanghai International Carbon Neutrality Technology, Products and Achievements Expo by the Council for the Promotion of International Trade Shanghai



- Top 20 Rural Commercial Banks in Overall ESG Performance by China Financial Media



- 2024 Exemplary ESG Practice Case in the Banking Sector by China Financial Media



- Top 30 ESG Pioneers among Listed Companies in the Financial Sector in China by China Media Group



III. Annual Key Achievements

SHRCB remains committed to the principle of sustainable development, actively enhancing its green finance management system, fostering the growth of green initiatives and product innovation, and pioneering new models of eco-friendly operations. It is dedicated to becoming the greenest bank in the Yangtze River Delta region.

In 2024, the Bank excelled in executing its green finance strategy, achieving remarkable outcomes. We fulfilled the strategic objectives for the year across multiple areas, including creating a robust green management system, expanding green investment and financing, and optimizing our green operational practices. These accomplishments have solidified our groundwork for advancing the society's shift towards green, low-carbon initiatives and empowering social governance. By the end of 2024, we saw a remarkable surge in green loans, outpacing the overall loan growth rate for the same period. Our holdings of on-balance sheet green debt financing instruments ranked among the top in rural financial institutions nationwide, and the growth rate of green leasing was over 50%.

1. Improving the green finance governance system to drive a new journey of green development

We have refined the top-level design of green finance, with the Board of Directors' Strategy and Sustainability Committee guiding the overall advancement of green finance and environmental protection efforts. At the executive level, an ESG Leadership Working Group, with a subordinate Green Finance Working Group, has been set up to further enhance the overarching leadership for green finance efforts. We have also established dedicated green finance divisions within the front and middle offices, adopting a dual-driven approach to promote the development of green finance across the Bank. Additionally, we have increased support for green finance in our credit allocation policies and optimized and refined the green credit identification and assessment systems to provide systematic support for the healthy growth of green finance business.

2. Focusing on green finance sectors to drive rapid business growth

Upholding the principles of sustainable development, we concentrate on five key sectors: green agriculture, green energy, energy efficiency and environmental protection, green manufacturing and green building. Through five primary business directions—green credit, green bonds, green services, green wealth management, and green leasing—we provide all-around green finance services. As of the end of 2024, the Bank's green credit balance stood at 84.335 billion yuan,¹ marking an increase of 37.28%, significantly outpacing the overall loan growth rate for the same period; its holdings in on-balance sheet green bond investments reached 15.212 billion yuan, reflecting a growth rate of 31.71%; the off-balance sheet balance of wealth management investments in green bonds was 2.334 billion yuan, a 9.09% increase from the end of the previous year; the green leasing balance reached 15.767 billion yuan,² up by 55.38% from the end of the previous year.

3. Upgrading green finance products and services to meet financing needs innovatively

We have bolstered industries like green energy by comprehensively utilizing monetary policy tools for green finance, such as the carbon-reduction credit facility, green financial bonds, and the Water-saving Benefit program. Moreover, we launched the first transition finance loan for the chemical industry in China and the first batch

¹ Consistent with the statistical specification of the National Financial Regulatory Administration, including on-balance sheet loans, off-balance sheet letters of credit, and acceptance bills.

² Consistent with the statistical specification of the National Financial Regulatory Administration.

of climate investment and financing projects in Shanghai. We have also expanded our support for green finance by formulating the *Distributed PV Marketing and Promotion Plan for Industrial and Commercial Sectors*. Meanwhile, we are advancing government-enterprise cooperation. As one of the first institutions to register on the Shanghai Green Finance Service Platform, we launched the first batch of green projects included in the Shanghai Green Project Database and became one of the first “Industrial Green Loan” registered banks recognized by the Commission of Economy and Informatization. These initiatives effectively integrate green finance and inclusive finance, contributing to the green and low-carbon transition across society.

4. Enhancing carbon footprint management and refining the climate-related risk analysis model

We have deepened carbon footprint management and climate-related risk management, further expanded the coverage of carbon emission measurements for investments and financing as well as our own operations, and introduced more calculation methods to lay a solid foundation for improving carbon accounting data quality in the future. These efforts have earned us the title of Pilot Organization for Carbon Emission Accounting and Information Disclosure by Financial Institutions in Pudong New Area granted by the Financial Committee of the CPC Pudong New Area Committee. We have also calculated environmental benefits, scientifically accounted for the environmental benefits of green project loans and green bonds, and strengthened support for green industries. Meanwhile, we have furthered our exploration in climate transition risk stress testing to assess the impact of transition requirements on high-emitting and regulated enterprises, thus proactively responding to climate change.

5. Advancing green digital and intelligent transformation to empower the growth of green business

We are accelerating the digital transformation of green finance, actively advancing the green finance business system, and exploring a digital transformation path driven by both business and data. In 2024, we launched the second phase of the green finance business system, which significantly enhanced the processing efficiency of green credit business with a green credit verification process embedded. Our digital and intelligent development efforts have been recognized by external parties, and our system received the Digital Financial Innovation Leader Award from the Chinese

Alliance of Community Banks and the Outstanding Case in Security and Controllability from the Rural Credit Banks Funds Clearing Center.

6. Intensifying environmental information disclosure and increasing international exchanges and cooperation

For three consecutive years, we have released environmental information disclosure reports, which comprehensively showcase our highlights and achievements in green finance at industry-leading timeliness and quality. As the first signatory to the Principles for Responsible Banking (PRB) in Shanghai, we have released PRB reports for two consecutive years to provide detailed disclosures on the six principles. Additionally, we engaged in in-depth discussions with the Administrator of the United Nations Development Programme (UNDP) and the Asia-Pacific Lead of the United Nations Environment Programme Finance Initiative (UNEP FI). We were also invited to attend the 18th UNEP FI Global Roundtable and delivered a keynote speech, further enhancing our international influence.



7. Exploring green operation model to embody sustainability concept

We are actively exploring new models of green operations. Multiple green office initiatives have been implemented to promote energy conservation and consumption reduction across the Bank. Moreover, we have launched a Low Carbon Life mini program for localized “carbon neutrality” in office settings. We have also upgraded the Xin Project energy management platform to effectively monitor and manage energy consumption data. Additionally, we are seeking to establish a green procurement mechanism to accelerate the digital transformation process and fulfill our social responsibilities.

8. Creating green demonstration sites to support the implementation of the “dual carbon” goals

The Bank prioritizes the development of green sites by optimizing layouts, adopting energy-efficient equipment, and enhancing energy management. These measures aim to reduce energy consumption and carbon emissions in site operations. Sijing Sub-branch in Songjiang District is a typical example of the green site campaign, having earned the title of Shanghai’s Demonstrate Site of Green Banking. Zhangjiang High-tech Sub-branch is the first banking outlet in Shanghai to achieve carbon neutrality. Since 2021, it has maintained carbon neutrality for four consecutive years and received carbon neutrality certification.



Honors for green operations of the Bank

IV. Green Finance Performance

In 2024, the Bank’s green finance business experienced substantial growth, with expansions in green credit, green bonds, green leasing, and other green financing activities. The Bank’s asset structure has been further decarbonized, the scope of carbon emissions accounting for investing and financing activities expanded, with reduced carbon emission intensity.

➤ Green finance business

Indicator	Unit	2023	2024	Change
Green credit balance	100 million yuan	614.31	843.35	37.28%
Balance of on-balance sheet green bond investment holdings	100 million yuan	115.49	152.12	31.71%
Off-balance sheet balance of wealth management investments in green bonds	100 million yuan	21.39	23.34	9.09%

Indicator	Unit	2023	2024	Change
Green bond underwriting size	100 million yuan	10.50	7.30	-30.48%
Green lease balance	100 million yuan	101.47	157.67	55.38%

➤ Carbon emissions of investing and financing activities

Indicator			Unit	2023	2024	Change
Credit	Balance ³		100 million yuan	3,525.01	3,652.55	3.62%
	Carbon emissions		10,000 tCO ₂ e	695.36	730.45	5.05%
	Carbon emission intensity		tCO ₂ e/million yuan	19.73	20.00	1.36%
	In which, high-intensive industries	Balance ⁴	100 million yuan	53.62	55.14	2.84%
		Carbon emissions	10,000 tCO ₂ e	120.27	101.17	-15.88%
		Carbon emission intensity	tCO ₂ e/million yuan	224.28	183.46	-18.20%

➤ Energy and resource consumptions in the Bank's own operations⁵

Energy consumption		Unit	2023	2024	Change
Natural gas	Total	10,000 m ³	32.96	44.07	33.71%
	Per-capita	m ³	30.46	39.71	30.36%
Petroleum	Total	10kL	43.79	35.33	-19.34%
	Per-capita	L	40.48	31.83	-21.36%
Diesel	Total	10kL	7.15	6.68	-6.56%
	Per-capita	L	6.61	6.02	-8.90%
Water ⁶	Total	Ton	11,525.00	13,216.00	14.67%
	Per-capita	Ton	7.35	8.40	14.31%

³ Consistent with the *Guidelines for Carbon Accounting Technology of Financial Institutions (Trial)*, the statistical specification for the investment and financing balances of the Bank in 2023 and 2024 is the monthly average balance.

⁴ Consistent with the *Guidelines for Carbon Accounting Technology of Financial Institutions (Trial)*, the statistical specification for the investment and financing balances of the Bank in high-emitting industries in 2023 and 2024 is the monthly average balance.

⁵ Per capita data includes employees, labor dispatch workers, and contractors at the Bank's headquarters and 21 branches in Shanghai.

⁶ The statistical specification for office water consumption is the Bank's headquarters.

Electricity	Total	10,000 kWh	8,148.17	7,050.75	-13.47%
	Per-capita	kWh	7,531.35	6,353.75	-15.64%
Paper ⁷	Total	Ton	26.80	15.48	-42.24%
	Per-capita	Kg	7.49	3.88	-48.18%

➤ Greenhouse gas emissions⁸

Emission type	Unit	2023	2024	Change
Total greenhouse gas emission	Ton	50,370.48	33,764.63	-32.97%
Scope I	Ton	1,878.67	1,916.59	2.02%
Scope II ⁹	Ton	46,469.00	29,740.29	-36.00%
Scope III	Ton	2,022.81	2,107.76	4.20%
Per-capita greenhouse gas emissions	Ton/person	4.66	3.04	-34.65%
Greenhouse gas emissions per unit area	Ton/m ²	0.08	0.06	-30.15%

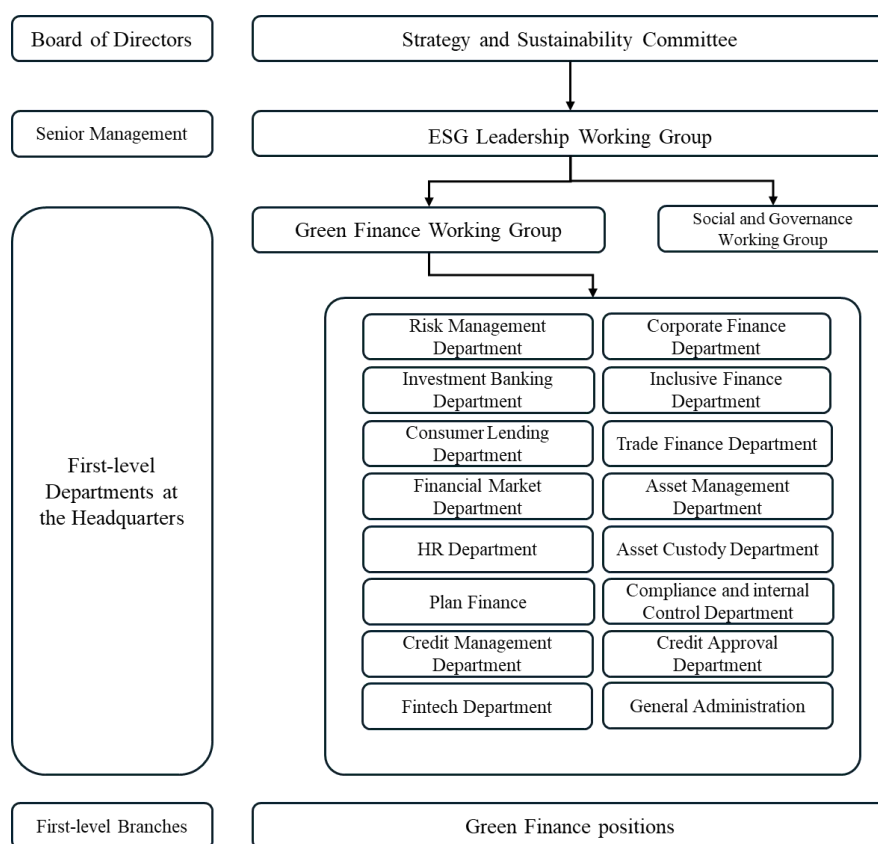
⁷ The statistical specification for office paper consumption is the Bank's headquarters and Zhangjiang Central Park.

⁸ Greenhouse gas emissions primarily arise from energy use and fugitive greenhouse gas, divided into Scope 1, Scope 2, and Scope 3 as defined by ISO 14064. Scope 1 covers direct emissions from the combustion of fossil fuels such as natural gas, gasoline, and diesel. Scope 2 covers indirect emissions from purchased electricity. Scope 3 covers supply chain carbon emissions from purchased goods and services, employee business travel, etc.

⁹ The carbon emission factors for the Bank's operations are determined as per the *Guidelines for Carbon Emission Accounting and Information Disclosure for Financial Institutions in Pudong New Area (Trial)*, *China Greenhouse Gas Emission Coefficient Library for Product Life Cycle (2022)*, and the *Announcement on Releasing the Electricity Carbon Dioxide Emission Factors for 2022*.

Section II Environment-related Governance Structure

Embracing the green development approach, the Bank actively responds to environmental and climate challenges, and integrates green principles into the corporate governance framework. It continually enhances the organizational structure of green finance initiatives to reinforce their effectiveness and reliability.



Branch level Organizational structure for green finance in SHRCB Asset and Liability Management Department

I. Board of Directors

The Board of Directors of SHRCB shoulders the primary responsibility for green finance. It sets up the principles of conservation, low-carbon, environmental protection, and sustainable development, prioritizes the role of banking institutions in advancing the ecological civilization and facilitating comprehensive green transformation for economic and social development, and aims to create a sustainable

development model that fosters mutual benefits with society. Strategy and Sustainability Committee of the Board is responsible for defining the green finance development strategy, approving the green finance objectives set by and reviewing the green finance reports submitted by the senior management. It also designates a dedicated committee to oversee green finance initiatives and assesses how well the Bank's green finance development strategy is executed.

The Strategy and Sustainability Committee at the board level is responsible for overseeing the Bank's overall progress of green finance and environmental protection initiatives. This committee strengthens research on sustainability-related issues, particularly focusing on green finance development and social responsibility/ESG strategic planning. It tracks and evaluates the progress of green finance development and social responsibility initiatives. In 2024, the Strategy and Sustainability Committee reviewed or received 6 proposals or reports related to green finance.

Session date	Green finance-related issues reviewed or presented
February 2, 2024	<ul style="list-style-type: none"> Reviewed the <i>Proposal on of the Strategy and Sustainability Committee's Annual Work Summary for the Year 2023 and the Work Plan for the Year 2024</i>.
April 24, 2024	<ul style="list-style-type: none"> Reviewed the <i>Proposal on the 2023 CSR & ESG Report of Shanghai Rural Commercial Bank Co., Ltd.</i> Received the <i>Reporting on SHRCB's Green Finance Development in the Year 2023</i>.
May 17, 2024	<ul style="list-style-type: none"> Reviewed the <i>Proposal on SHRCB's 2023 Environmental Information Disclosure Report</i>. Reviewed the <i>Proposal on SHRCB's Self-Assessment Report on Principles of Responsible Banking</i>.
December 27, 2024	<ul style="list-style-type: none"> Received the <i>Reporting on SHRCB's Green and Low-Carbon Transition Action Plan (2025-2027)</i>.

SHRCB upholds the principles of sustainable development. In its development strategy for 2023-2025, the Bank has stated the strategic objective of building a model bank in ESG. By creating an exemplary corporate governance practice for small and medium-sized banks, positioning itself as the most environmentally conscious bank in the Yangtze River Delta, and pioneering a Shanghai model of inclusive finance empowering social governance, SHRCB aims to continually fulfill its social responsibility.

II. Senior Management

In accordance with decisions made by the Board of Directors, the senior management sets green finance objectives, establishes mechanisms and procedures, clarifies responsibilities and authorities, and conducts internal supervision, inspection,

and performance evaluations. Annually, they report the progress of green finance development to the Board of Directors and submit and disclose relevant information on green finance to regulatory authorities or their designated agencies as required by laws or regulations.

The Bank has a comprehensive leadership and coordination mechanism for green finance initiatives. At the senior management level, an ESG Leadership Working Group has been established. Under it, there is a Green Finance Working Group, co-chaired by the Bank leaders of business and risk, specifically responsible for advancing the Bank's green finance initiatives, including green finance risk management and business development, as well as conducting relevant policy research. It also formulates strategic plans, sets targets and roadmaps, and studies and decides on key matters throughout the green finance implementation process, such as those related to development direction, resource allocation, and incentive mechanisms.

In November 2024, the Bank held an ESG Leadership Working Group meeting to clarify ESG work objectives and vigorously promote the development of green finance business. The meeting defined the Bank's positioning in establishing signature labels and an ESG brand and emphasized the need to strengthen internal resource support and team building and enhance professional expertise and capabilities. In the same month, the Bank convened a Green Finance Working Group meeting, setting specific requirements for advancing green finance and environmental risk management, including strengthening resource support, tool development, capacity building, process control, internal management, low-carbon operations, and information disclosure.

III. The Head Office

Giving full play to its strength as a group, the Bank clearly defines departmental responsibilities and sets up dedicated green finance divisions within the front and middle offices. It enhances coordination between the front, middle, and back offices, as well as between headquarters and branches. This comprehensive and systematic approach drives the green finance initiatives forward.

The front office is primarily responsible for developing green finance products, identifying green clients, and promoting green banking. Front office departments include Corporate Finance, Investment Banking, Inclusive Finance, Retail Finance, Trade Finance, Financial Markets, and Asset Management. In the Corporate Finance

Department, a Green Finance Business Development Section has been established to lead business expansion, product innovation, client services, and performance evaluation for green credit.

The middle office is primarily responsible for building the green finance management system for the Bank. Specifically, in the Risk Management Department, a Green Finance Business Risk Management Section has been established to lead the establishment of a green finance management system, improve the environmental and climate risk management system, create green credit Classification Standard, lead green finance regulatory reporting, environmental information disclosure, and system management, as well as track and evaluate the progress of the green finance initiatives across the Bank. The Credit Management Department is responsible for mainstreaming green credit requirements into the overall credit process system as well as creating and implementing differentiated green credit approval mechanism. The Compliance and Internal Control Department is tasked with legal matters regarding green finance. The Asset and Liability Management Department oversees the bank-wide management of green asset structures, leads the issuance and fundraising management of green bonds, and provides differentiated pricing guidance for green finance business.

The back office is responsible for the bank-wide green operations, ESG information disclosure, talent development, assessment and incentives, branding, and promotion. It provides effective support and assurance for the development and management of green finance in the Bank.

IV. Branches

The Bank's branches are responsible for specific business tasks in green credit. Their responsibilities include expanding the market for green credit business, implementing the Bank's green credit policies, conducting environmental, social, and governance (ESG) risk due diligence for clients or projects, collecting and organizing green credit business data, and implementing green credit classification standards, credit investigation, and label management. In the lending and post-loan stages, the branches shall strengthen the monitoring and management of ESG risks for credit clients and projects and regularly conduct internal training related to green finance.

Take the Songjiang sub-sub-branch as an example. Strategically, the Songjiang sub-branch focuses on five key sectors when scaling up green credit: green agriculture,

green energy, energy efficiency and environmental protection, green manufacturing, and green buildings. The sub-sub-branch follows the Bank's differentiated credit policies for the Yangtze River Delta to expand its upstream and downstream green client base. It explores the local market, focusing on green infrastructure upgrade areas such as green industrial parks and green buildings, to seize opportunities for green transition among existing clients. It also strengthens green client channels, monitors the investment progress of major municipal and district-level projects, and continuously follows up on township and village projects. Additionally, the Songjiang sub-sub-branch places a strong emphasis on risk control. It has conducted multiple rounds of green finance training in coordination with the head office to help the staff better understand and implement green finance policies. It has also reinforced green finance data management at the source to propel the healthy development of green finance.

The Bank will actively practice green finance and strive to create the greenest bank in the Yangtze River Delta by supporting the development of new infrastructure projects such as wind power, new energy vehicle industry chains, energy storage, and peak regulation. It will comprehensively utilize policy tools such as those for carbon reduction to support local energy efficiency and environmental protection retrofitting and green building projects. It will continue to focus on areas such as carbon finance, carbon inclusion, carbon accounts, and climate investment and financing, provide premium financial services to clients with carbon trading service needs, and assist enterprises in their green and low-carbon transition. Through these efforts, the Bank aim to establish a strong brand for its green finance services.

Section III Environment-related Policies

Guided by the concept that green mountains and lucid waters are invaluable assets, the Bank continuously improves the green finance management system and long-term mechanisms to form a comprehensive system covering management system, business development, risk management, and performance assessment and incentives.

I. Policies Relating to Green Finance

The Bank is committed to building a sustainable financial system backed by green finance. It continuously refines the “2+N” strategic framework for green finance and specifies strategic layouts and objectives and has introduced the *SHRCB 2023-2025 Development Strategy*, the *SHRCB 2021-2025 Green Finance Development Strategy*, and *SHRCB’s Work Plan for Carbon Peak and Carbon Neutrality for the 14th Five-Year Plan Period*, aiming to establish a sustainable financial service system characterized by green finance. The Bank is also establishing a robust long-term mechanism to support the development of a green, low-carbon, and circular economy, with a focus on key sectors such as green agriculture, energy, energy efficiency and environmental protection, manufacturing, and construction. It has developed specific work plans for the national “carbon peak and carbon neutrality” goals to comprehensively guide and facilitate its practices and progress in green finance and environmental protection.

1. Management system

With *SHRCB Management Methods for Green Finance*, *SHRCB Green Credit Classification Standard*, *SHRCB Green Credit Verification Guideline* and the *SHRCB Green Finance Risk Management Appraisal Guideline* in place, the Bank defines its green finance management system and division of responsibilities, optimizes and refines green credit certification and assessment systems, and standardizes green credit management at branches and sub-branches. The *SHRCB Management Methods for Funds Raised via Green Bond Issuance* has been issued to standardize the management of funds raised through green bonds, ensuring that funds raised are specifically used to support green sectors.

No.	Policy name	Policy description
1	<i>SHRCB Management Methods for Green Finance</i>	This policy clearly defines relevant terms in green finance and outlines the organizational structure and division of responsibilities for green finance management within the Bank. It sets forth management requirements in areas such as policies and institutional capacity building, investing and financing process management, internal control management, and information disclosure.
2	<i>SHRCB Green Credit Strategy</i>	This policy provides the fundamental principles guiding the development of green credit within the Bank, identifies key areas and industries for supporting green, low-carbon, and circular development, and states the basic requirements for classifying and identifying green credit.
3	<i>SHRCB Management Methods for Funds Raised via Green Bond Issuance</i>	This policy defines relevant business processes and departmental division of responsibilities and specifies requirements for green industry project evaluation and selection management, raised fund management, third-party evaluation and certification, and information disclosure management to ensure that the raised funds are exclusively used for green projects.
4	<i>SHRCB Green Credit Verification Guideline</i>	This policy defines the division of responsibilities and further breaks down the main responsibilities and operational guidelines for relevant divisions at the head office and branches in green credit verification management. It also optimizes the verification process by defining the process and requirements for green verification for specific business practices. By introducing tiered reviews, it enhances verification efficiency, reinforces primary responsibilities, and strengthens the full-process management of green credit verification.
5	<i>SHRCB Green Finance Risk Management Appraisal Guideline</i>	This policy defines responsibilities and standardizes the duties of relevant divisions at the head office and branches to further enhance green finance management awareness and ensure the implementation of green finance risk management requirements. It specifies the content of green finance risk management evaluation, including two focal areas: business development quality and risk management capability. The quantitative evaluation method highlights strengths and weaknesses in the development of green finance business and helps effectively improve green finance management.
6	<i>SHRCB's Credit Allocation Policy for the Year 2024</i>	This policy integrates the green philosophy into all credit business lines across the Bank, aiming to promote green transition in the Bank's business practices in traditional corporate finance, inclusive finance, tech finance, and retail finance and significantly increase the proportion of green credit assets. It also sets differentiated

No.	Policy name	Policy description
		risk weight adjustment factors for green loans to enhance support for green finance business practices.

SHRCB's Credit Allocation Policy for the Year 2024 intensifies support for green finance and defines the support directions and key areas for green finance, aiming to shape the Bank's new differentiated competitive edges in green finance. In the policy, credit for key industries is reflected as follows:

- **Agriculture:** The Bank should focus on supporting key areas in modern agriculture, including agricultural industrialization, agricultural mechanization, and agricultural technology research and promotion. This includes actively supporting rural revitalization, integrating into agricultural industry chains, and promoting green and low-carbon development in rural areas and agriculture.
- **Energy Use:** The Bank should support the development of low-carbon, safe, and efficient clean energy and the establishment of a clean energy system. This includes actively supporting new energy power generation projects and vigorously supporting the construction of new power systems and new energy vehicles.
- **Oil and Natural Gas:** The Bank should focus on supporting green and intelligent manufacturing upgrades in the petrochemical and fine chemical industries. In the modern logistics sector, the Bank should prioritize segments with stable demand, such as bulk commodities and energy, such as automobiles, oil, and natural gas.
- **Biodiversity:** The Bank should actively monitor clients' performance in environmental protection, energy conservation, carbon reduction, clean production, circular economy, and biodiversity and strengthen the management of clients' ESG risks to mitigate systemic transition risks. It should facilitate increasing financial support in biodiversity protection, with a focus on major projects in the conservation and restoration of critical ecosystems and biodiversity conservation, as well as the construction, maintenance, and operations of ecological function zones. It should also progress practical cooperation in resource conservation and environmental protection to contribute to a planet where humanity and nature coexist in harmony.

2. Business development

With a well-established system for the development of green finance business,

the Bank has clearly defined the key directions for supporting green finance in various policy documents. In 2024, the Bank issued the *SHRCB Transition Finance Service Plan (Trial)*, the *Work Recommendations on Financial Services in the Areas of the Expanded Carbon-Reduction Credit Facility*, and the *SHRCB “Green Power Loan” Financial Service Plan*. These policies have addressed policy gaps and improved the business institutional framework.

No.	Policy name	Policy description
1	<i>SHRCB Transition Finance Service Plan (Trial)</i>	This plan specifies requirements for the Bank’s transition finance business, including target entities, industries, pathways and objectives, information disclosure, and service tools.
2	<i>SHRCB “Green Power Loan” Financial Service Plan</i>	This plan defines the target client base, service scenarios, and content for the Green Power Loan.
3	<i>Work Recommendations on Financial Services in the Areas of the Expanded Carbon-Reduction Credit Facility</i>	This plan outlines the focal points of the policy tool, industry expansion scope and descriptions, and marketing directions for the expansion of the carbon-reduction credit facility in Shanghai.
4	<i>SHRCB Sustainability-Linked Loan Service Plan</i>	This plan sets out requirements for loan approval, loan management, and contractual agreements for the Bank in utilizing sustainability-linked loans.

3. Risk management

The Bank places great importance on environmental risk management. We have clearly defined environmental risk management requirements in various business management systems with on-going efforts into improving our environmental risk management mechanisms.

➤ Credit business

In the *Fixed Asset Loan Management Measures of SHRCB*, the Bank clearly states that projects must comply with national policies related to industry, land, and environmental protection, as well as the Bank’s credit policies, and that whether the projects and loan applicants meet environmental protection requirements must be examined during pre-loan check and approval processes.

The *Working Capital Loan Management Measures of SHRCB* require verification and analysis during the pre-loan check and review process to assess whether the borrower’s production and business activities comply with national environmental protection policies and green finance requirements.

The *Basic Operating Procedures for Pre-loan Check for Corporate Credit Business within SHRCB* require investigations on green credit and environmental protection to verify whether the borrower’s production and business activities comply with national environmental protection policies and green credit requirements and

whether outdated production capacity or non-compliant enterprises or projects are involved. A preliminary classification and verification of green credit shall be conducted as per the Bank's green credit classification standard. Additionally, the investigation report shall include an initial assessment of the environmental and social risk level.

In the *Basic Operating Procedures for Review and Approval Credit Business within SHRCB*, the Bank requires that reviewers/approvers must be clear whether the borrower complies with national requirements in green finance in terms of energy consumption, pollutant discharges, chemical and waste management, and safety and health management, and whether the borrower presents any potential major environmental and social risks.

The *SHRCB Management Regulations for Post-loan Inspections for Corporate Credit* require that regular inspections shall assess whether the borrower complies with national environmental policies in areas such as energy consumption, pollutant discharge, chemical and waste management, and health and safety management; whether there are potential significant environmental and social risks; whether the loan's green verification and classification are accurate; whether relevant evidence is complete. Meanwhile, changes in the borrower's green certification status shall be placed under continuous monitoring.

➤ Financial market business

The Bank's *Internal Rating and Access Criteria for Enterprise Credit Bond Issuers* incorporates Environmental, Social, and Governance (ESG) related access requirements, defines access thresholds for credit bond issuers from the dimensions of environment, society, and governance, and requires continuous monitoring and evaluation.

4. Assessments and incentives

The Bank continuously enhances assessments and incentives for green finance. It provides support for green finance through internal funds transfer pricing support, favorable conditions for risk assessments, and differentiated performance assessments, to boost the enthusiasm for green marketing across the entire organization.

➤ Intensifying support for green credit

In the *SHRCB's Credit Allocation Policy for the Year 2024*, the Bank has further intensified its support for green credit by outlining clear green credit strategies. In risk weight adjustment, a certain proportion of adjustment weight is allocated to green

credit and loans included as underlying assets for green financial bonds. With these initiatives, the Bank aims to accelerate the establishment of a sound green, low-carbon, and circular economic system and accomplish the Five Tasks of green finance.

➤ Increasing green finance assessment incentives

The Bank incorporates green finance-related indicators into the evaluation of senior management, thereby reinforcing top-down accountability for green finance management. Green finance-related performance indicators have been added to branch performance evaluations. Support for credit to all green industries are ensured through unified deployment across the organization. This encourages each branch to provide specialized financial services for green industry projects aimed at environmental improvement, climate change adaptation, and efficient resource utilization. The branch performance bonus distribution plan incorporates green finance-related resource allocation to encourage the branches to expand its green credit business.

II. Actions for Regional Green Development

The Bank adheres to national environmental laws and regulations, and effectively embody national strategic deployments and industry policy guidance. It closely aligns with the requirements of Shanghai's low-carbon development and green finance policies, actively participates in the effort into developing Shanghai into a green and low-carbon city and contributes to the region's high-quality development.

1. Complying with regulatory requirements

The Bank implements various green finance policies and regulations, such as the *Guidelines for Green Finance in the Banking and Insurance Sectors* and the *Action Plan for Promoting Green Finance Development and Serving the Peak Carbon and Carbon Neutrality Strategy of the Banking and Insurance Sectors in Shanghai during the 14th Five-Year Plan Period*. It has integrated green finance into the new three-year strategy and formulated the *Green Finance Management Measures of SHRCB*. Additionally, SHRCB has enhanced institutional mechanisms, clarified the scope of green finance business, bolstered support for green industries, improved ESG risk management capabilities, and comprehensively elevated the quality and effectiveness of green finance.

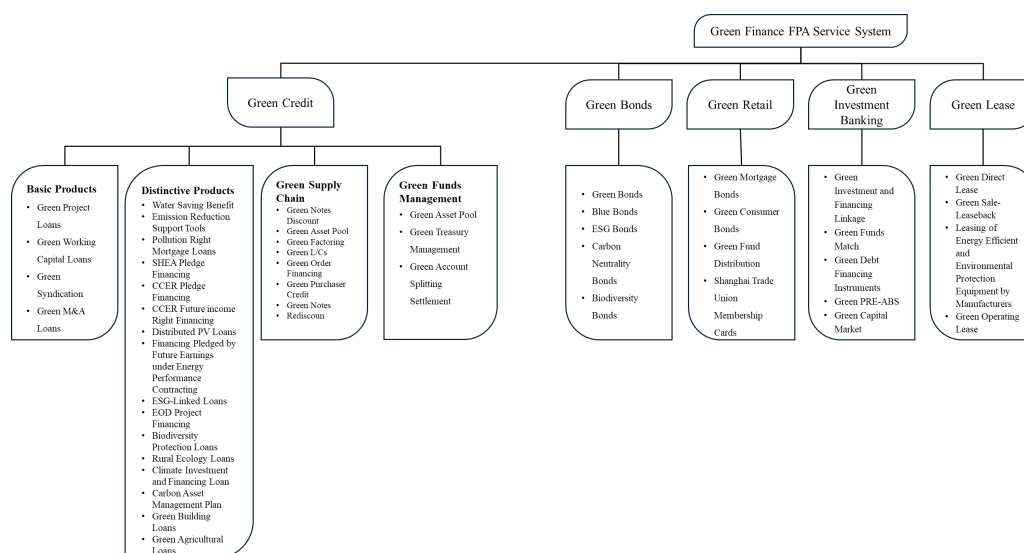
2. Serving the “dual carbon” goals of Shanghai

In line with local strategies such as *Opinions on Accelerating the Development of Shanghai to a Green Finance Hub to Serve the Carbon Peak and Carbon Neutrality Goals* and *Action Plan for Targeting New Tracks to Promote the Green and Low-Carbon Industries in Shanghai*, the Bank has clarified the direction of green finance development. It continuously innovates products in areas such as climate finance and carbon finance with pilot projects to lead the way. The Bank spares no effort in supporting major projects at both the municipal and district levels in Shanghai and accelerating the significant industrial projects, major infrastructure projects, and major livelihood projects. The Bank actively liaisons with the government offices at the municipal and district levels in Shanghai, and supports the effort via a list-based grid management. It sets up special project teams and opens up expedited approval channels, to support major project construction with greater speed and intensity. In 2024, Shanghai major projects cover five areas: science and technology industries, social livelihood, ecological civilization, urban infrastructure, and urban and rural integration, and rural revitalization. The Bank actively followed up and provided comprehensive green finance services in the five sectors, vigorously supporting low-carbon and green development in the economy and society.

Section IV. Product and Service

Innovation relating to Environment

The green finance FPA (Finance Product Aggregate) service system launched by the Bank covers key areas such as green credit, green bonds, green retail, green investment banking, and green leasing. With this system, the Bank is committed to providing customers with comprehensive financial service solutions in both local and foreign currencies, as well as on-balance sheet and off-balance sheet products, striving to build a convenient “one-stop” green finance service platform.



SHRCB's green finance FPA service system

I. Corporate and Inclusive Finance Line of Business

The Bank closely follows national strategies by continuously deepening innovation in green financial products and services and assisting enterprises in revitalizing environmental equity assets. The Bank has actively participated in and facilitated a series of green finance projects to support enterprises in their green transition. Additionally, the Bank has been admitted as one of the first institutions to join the Shanghai Green Finance Service Platform, and several of its projects have been included in the first batch in the Shanghai Green Project Database. These practices not only demonstrate the Bank's leadership in and commitment to the green finance sector but also contribute to the global progress of green finance.

Case study: China's first transition finance loan in the chemical industry implemented

In April 2024, the Bank issued China's first transition finance loan in the chemical industry, totaling 41 million yuan, to Shanghai P Titanium Dioxide Company. The loan adopts the sustainability-linked loan (SLL) structure, linking the loan interest rate to the sustainability performance targets (SPTs) of the company's transition in the production of sulfuric acid process rutile titanium dioxide, using financial incentives to promote green corporate transition. If the company achieves the SPTs during the assessment period, the subsequent loan interest rate will be reduced by 10 basis points (bps) from the current rate, which will effectively reduce the financial costs for corporate transition. Additionally, to effectively address risks such as unmet transition targets or less-than-expected transition outcomes, China Pacific Insurance provided insurance coverage tailored to transition finance for the company, a "safety net" for the transition finance incentive services. The dual mechanism of loan incentives and insurance coverage provides a strong assurance for the company to carry out transition activities more actively. This also marks the first bank-insurance collaboration model for transition finance in China.

Case study: Leading a syndicated loan to support Shanghai's first batch of climate investment and financing projects

In September 2024, as one of the first participating financial institutions, the Bank signed a strategic cooperation agreement with the Ecology and Environment Bureau of Pudong New Area on climate investment and financing pilots and facilitated the implementation of Shanghai's first batch of climate investment and financing projects. The W Data Center, supported by the Bank, has been included in Shanghai's first list of climate investment and financing projects. The Bank actively supported the construction and renovation of the W Data Center by coordinating multiple banks to form a large-amount, long-term, low-interest syndicated loan, for which it served as the lead bank, agent bank, and settlement bank to ensure the successful implementation of the project. The funds of the syndicated loan are directly allocated to increasing the proportion of renewable energy usage, AI-driven operational efficiency improvement plans, energy-saving technological upgrades and retrofitting, and chilled water waste heat recovery projects for heating.



Case study: Registering on the Shanghai Green Finance Service Platform in the first batch and serving the Green Project Database

In January 2024, the Shanghai Green Finance Service Platform was officially launched, and the Bank became one of the first institutions to register on the platform. Meanwhile, the Shanghai T Smart City Regional Energy Project and the B Renewable Energy Utilization Center Project, both supported by the Bank and securing approximately 1.4 billion yuan in financing, were included in the Shanghai Green Project Database in the first batch. The Bank will continue to converge Shanghai's green project resources in different areas, such as green finance, transition finance, and climate investment and financing, and facilitate project matching and financing. These efforts will rely on the Shanghai Green Finance Service Platform and comply with the *Guidelines of Shanghai Municipality for Green Project Classification and Certification* and the *Interim Measures for Green Project Vehicle Management*.



Case study: Opening the first carbon emission trading custody account to facilitate carbon inclusion trading

In August 2024, Shanghai H New Energy Company's distributed PV power station project at H Smart Technology Park was designated as a carbon-inclusion distributed PV power generation and emission reduction project in Shanghai and received the carbon dioxide emission reduction certification for 2023. In September, Shanghai's voluntary greenhouse gas emission reduction trading product was launched on the Shanghai Environment and Energy Exchange. The Bank opened a carbon emission trading custody account for Shanghai H New Energy Company and supported the company in selling the carbon dioxide emission reductions from the H Project and completing its first carbon-inclusion trading deal.

This is a case of the Bank's cooperation with the Shanghai Environment and Energy Exchange in fund custody, aiming to secure carbon emission trading funds. In the future, the Bank will intensify its green finance support, covering areas such as wind power, new energy vehicles, and energy storage. It will utilize policy tools to support environmental protection renovation and green buildings and upgrade carbon finance and carbon-inclusion services to provide financial support for corporate green transition.

Case study: Carbon-reduction credit facility supports a renewable energy utilization center project

Against the backdrop that Shanghai has been implementing its waste sorting policy for some time, the B Renewable Energy Utilization Center Project, a major municipal green infrastructure project, was launched to maximize processing efficiency. The Bank proactively engaged with the enterprise during the project preparation phase to address funding needs by providing financing solutions. Despite the challenge of limited collateral of the project, the Bank formed a syndicate in a pure credit model and became the original participating lender for the project's syndicated loan. The current syndicated loan credit for the project exceeds 3.7 billion yuan, with the Bank's contribution amounting to approximately 1.4 billion yuan. Moreover, the Bank effectively leveraged the carbon-reduction credit facility, a green monetary policy tool provided by the central bank, to transmit low-cost funds from the central bank, thereby reducing the loan interest rate for the renewable energy utilization center. This project is the largest green relending project in the Shanghai market.

The renewable energy utilization center has commenced trial operations. This project will meet both the near-term and long-term waste disposal needs of Baoshan District. At the same time, it is expected to generate nearly 800 million kWh of electricity annually, with over 500 million kWh supplied to the grid each year, reducing carbon dioxide emissions by over 380,000 tons annually. This project is among the first to be included in Shanghai's Green Project Database.

Case study: Inclusive finance bolsters hydrogen agriculture and facilitates green transition and rural revitalization

Shanghai's Qingpu is advancing the emerging practice of hydrogen agriculture, with China's first cooperative engaging in large-scale cultivation of hydrogen-enriched rice achieving notable success. The project has demonstrated multiple advantages, including quality improvement, effectiveness enhancement, and reduced pesticide use. As a new driver for green transition and rural revitalization, hydrogen agriculture is setting a new trend in agricultural development. The Bank actively engaged in the project by providing 2 million yuan in credit to support the growth of green agricultural cooperatives. Moving forward, the Bank plans to strengthen collaboration with green agricultural enterprises to further contribute to the transition to green agriculture and rural revitalization.

Case study: From Shanghai Port to Chancay Port, an integrated financial services package supports enterprises in going global

In 2024, Chancay Port, situated in Chancay Bay north of Lima, the capital of Peru, officially commenced operations as a key project between China and Peru under the Belt and Road Initiative and the first smart port in South America. Behind this project is the financial backing from a regional Chinese commercial bank, Shanghai Rural Commercial Bank (SHRCB). Acting as the joint lead arranger for the syndicated loan for the first-phase terminal construction of Chancay Port, the Bank facilitated financing support of over 900 million US dollars for the project.

Additionally, Yangtze Financial Leasing, a key member of the SHRCB Group, has actively supported the strategic transformation of Shanghai W Technology Co., Ltd. into the port's agent operator. Recently, the company's flagship product, the E-Truck, a smart-connected new energy heavy-duty truck, embarked on its journey to Peru. The E-Truck is expected to significantly enhance logistical efficiency at Chancay Port, reduce operating costs, and set a benchmark for safe operations, thereby advancing smart upgrades and green development at the port.



II. Retail Finance Line of Business

In retail finance, the Bank focuses on promoting green credit products and services, such as green personal loans. Regarding green personal business loans, the Bank integrates green finance with inclusive finance, and connect with personal business loan platforms, directing loans towards green sectors such as energy conservation, environmental protection, clean energy, and new materials. Regarding green personal consumption loans, through public-private cooperation, the Bank

combines loans for green building projects and new energy vehicle producers with personal green mortgage loans and new energy vehicle loans to provide financial products and services for individual green consumption. The Bank also communicates green finance through public welfare activities and promotes the low-carbon lifestyle through online campaigns. Moreover, it actively engages in the distribution of green public funds, contributing to the transition to a green and low-carbon society.

Case study: Supporting green and low-carbon development in transportation with customized products

The Bank developed marketing plans tailored to the consumption scenarios of new energy vehicles (NEVs). In collaboration with an automotive group's NEV brand and the brand's largest car dealer in Shanghai, the Bank developed a marketing plan for the consumption scenario of the 2024 model of the NEV brand and launched a customized cooperative auto loan product. Through these initiatives, the Bank effectively supported consumers' demand for purchasing pure electric vehicles (EVs), further increased the proportion of pure EVs in the transportation sector, and actively advanced green and low-carbon transition efforts.

Case study: Promoting green finance through a wide range of activities

The Mental Home public welfare service project adheres to the philosophy of green finance and fosters a green, harmonious, and sustainable service ecosystem within communities. First, relying on the Mental Home public welfare service stations that cover 100% of streets and towns across Shanghai, the project conducts green finance education, environmental protection-themed handicrafts, and waste sorting promotion activities to encourage community residents to adopt a green lifestyle. In June 2024, the Shanghai International Carbon Neutrality Expo hosted the Mental Home Green Lecture, where an expert from the Chinese Academy of Agricultural Sciences was invited to disseminate knowledge about edible landscapes and household greenery, enhancing public awareness and understanding of a green lifestyle and green finance. Second, the project has established a green-themed section at the Mental Home public welfare demonstration site, integrating the ecological features of Gu-Li Garden in Caolu Town, Pudong, to promote nature conservation in the community. Third, the Mental Home Senior University designs financial education and specialized courses tailored to the elderly and offers training on topics such as smartphone applications to guide senior residents in learning to use modern intelligent devices. Fourth, the project actively expands the Mental Home green

business cooperation model. It partners with the Shanghai Academy of Agricultural Sciences and companies such as Shanghai Songlin Food to showcase green products and offer group purchase discounts. In this way, it conveys green consumption and actively supports the development of green enterprises. Fifth, the Mental Home mini program establishes a community activity URL platform for “cloud classrooms,” activity sign-ins, and work displays. By migrating similar offline services online, it has effectively reduced carbon emissions.



Case study: Low-carbon elements incorporated into online user activities

The Bank incorporated low-carbon elements into online activities such as “19 Happy” and “More Joy Every Month” in 2024, using step-count rewards to motivate user participation. Users were encouraged to reduce reliance on high-emitting travel modes, lead a low-carbon everyday life by opting for green commuting and making online payments for utilities such as water, electricity, and gas, and share their green, low-carbon achievements. These activities not only helped reduce carbon emissions but also raised users’ awareness and recognition of a green lifestyle, promoted the green, low-carbon living philosophy, and fostered users’ understanding of a green, low-carbon, and circular economy. As of December 31, 2024, the activities had attracted 250,000 participants, and 127,000 low-carbon rewards were distributed.

Case study: Active distribution of publicly offered green funds

In 2024, the Bank sold 18 publicly offered funds associated with ESG, low carbon, new energy, and environmental protection on behalf of fund managers, with a total sale of 4,940,600 yuan.

No.	Fund name	Sales (10,000 yuan)
1	Truvalue Carbon Neutrality	2.25

2	Guangfa Environmental Protection Index	1.10
3	Hua An New Energy Vehicle ETF Link	4.67
4	HSBC Jin Trust Low Carbon Pioneer Stocks	63.72
5	China Universal ESG Sustainable Growth	1.89
6	China Universal Environmental Protection Industry Stocks	18.79
7	China Universal Carbon Neutrality Theme	72.69
8	Harvest Environmental Protection and Low Carbon Stocks	36.92
9	Harvest New Energy Materials	102.38
10	Invesco Low-Carbon Technology	1.35
11	Invesco Great Wall Environmental Protection Premium Stocks	3.23
12	Invesco Great Wall New Energy Stocks	34.04
13	Ping An CSI New Energy Vehicle ETF Initiation Link	9.25
14	AXA-SPDB Environmental Protection New Energy	3.69
15	SWS MU New Energy Vehicle	8.61
16	SWS CSI Environmental Protection Industry Index	30.31
17	E Fund Environmental Protection Theme	96.25
18	China Overseas New Energy Stocks	2.92
Total		494.06

III. Financial Market Line of Business

The Bank remains committed to thoroughly implementing major national and regional strategies, deepening its efforts in the Yangtze River Delta, and scaling up on-balance-sheet green bond investments. It is also expanding innovative green finance products, facilitating green transition and development, and steering investment and trading toward green and real-economy sectors.

Case Study: Supporting a Yangtze River Delta enterprise in new energy structural transformation with bond investment

In 2024, the Bank participated in the investment in S Co., Ltd.'s 2024 Series 1 Green Medium-Term Note (Carbon Neutrality Bond). The funds raised from the bond were all utilized to replace the company's 2021 Carbon Neutrality Bond, which involved five wind power projects located in Qinghai Province and Inner Mongolia Autonomous Region, with an issuance size of 1 billion yuan and a total project

investment amount of 2.166 billion yuan. Compared with equivalent thermal power generation, the projects are expected to reduce 282,700 tons of carbon dioxide emissions, save 101,500 tons of coal equivalent, and reduce the emissions of 28.02 tons of sulfur dioxide, 44.9 tons of nitrogen oxides, and 5.74 tons of particulate matter every year. As of the end of 2024, the Bank held 50 million yuan in face value of the green bond. This move has supported the Yangtze River Delta enterprise in new energy structural transformation and contributed to the improvement of the national clean energy industry chain and green transition and development.

Case study: First green business support repurchase transaction with a non-banking financial institution in the interbank market concluded

In September 2024, the Bank concluded a green business support reverse repurchase transaction with H Financial Leasing Co. Ltd. in the China Foreign Exchange Trade System, becoming the first bank in the interbank market to conclude a green business support repurchase transaction with a non-bank financial institution.

The green business support repurchase leverages the flexible and convenient trading mechanism of pledged repurchases, with all raised funds allocated to green leasing business practices. This model propels green business, reduces green financing costs, and further supports the high-quality development of the real economy. In 2024, the Bank was recognized as the Indirect Financing Financial Service Institution of the Year in the Leasing Industry by the Shanghai Leasing Trade Association.

As a core trader in the interbank market, the Bank actively enhances trading activity in the money market and provides comprehensive bond underwriting and market-making services, thereby continuously enhancing its market influence. In the future, the Bank will continue to focus on the strategic layout of “a sustainable finance service system featured by green finance,” deepen its efforts in green finance, actively participate in green finance business innovation, and play a positive role in accelerating the green transition of economic and social development.

Case study: Yangtze River Delta Green-Themed Bond Basket wins the Trade System’s Monthly Active Basket award

In 2024, the Bank’s SHRCB Yangtze River Delta Green Commercial Bank Financial Bond Basket (basket code: BBX034001), launched in the interbank market, received the Active Basket of the Month award from the China Foreign Exchange Trade System.

The basket was launched in December 2023 as the first Yangtze River Delta green-themed bond basket in the market. It enables investors to allocate funds across multiple green financial bonds issued by commercial banks in one portfolio, thereby meeting their investment needs in the green and low-carbon economic growth of the Yangtze River Delta. Since the launch of the basket, the Bank has continuously monitored market transactions and issuance and promptly adjusted the basket's constituent bonds to maintain its optimal configuration and trading attributes.

The Bank will continue to uphold its strategic objective of “creating the greenest bank in the Yangtze River Delta” and adhere to its original aspiration of providing financial services. It will engage in upholding fundamental principles and breaking new ground in the financial factor market, with a focus on enhancing the liquidity of domestic green bonds. With such efforts, the Bank aims to contribute to the achievement of the national carbon peaking and carbon neutrality goals and sustainable economic development in the Yangtze River Delta.

Case study: Green financial bond presents significant environmental benefits in bond duration

In expanding green financing channels, the Bank successfully issued its inaugural green bond in July 2023. The bond is abbreviated as 23 SHRCB Green Bond 01 with the bond code 2321019. The bond was issued for a size of 3 billion yuan, with a coupon rate of 2.67%, and a maturity period of 3 years. The funds raised are exclusively allocated to green projects in sectors such as energy efficiency and environmental protection, clean energy, and green infrastructure upgrades. This green bond marks a significant initiative for the Bank in broadening green financing channels and guiding special support from social capital towards green development.

In the bond duration, the Bank identifies and screens green industrial projects in strict accordance with the standards outlined in the *Green Bond Endorsed Projects Catalogue (2021 Edition)* while taking into account the status of its clients, the characteristics of their industries, and the significance of the invested projects' environmental benefits.

As of the end of 2024, the Bank's outstanding green financial bonds amounted to 3 billion yuan, with all the funds raised used as loans for a total of 31 green projects. The funds were primarily directed toward green projects such as new energy batteries, ultra-low energy consumption buildings, and green buildings. These projects achieved annual savings of 3.295 million tons of water and 69.24 tons of coal equivalent, reduced carbon dioxide emissions by 137.04 tons, nitrogen oxides by 0.03 tons, sulfur

dioxide by 0.02 tons, and particulate matter by 0.005 tons, and disposed of 11,404.15 tons of solid waste.



SHRCB's green bond

Case study: Successful counter sale of CEXIM 2024 Series 1 Green Financial Bond

In April 2024, the Export-Import Bank of China (CEXIM) launched the 2024 Series 1 Green Financial Bond for counter sale, and the Bank's distribution quota was fully subscribed. With strong promotion by various business operators, corporate and retail investors actively subscribed through multiple channels provided by the Bank. The bond was issued as a 2-year green financial bond, and the funds raised were exclusively allocated to green industry projects. By participating in the bond issuance, clients not only responded to the national call for green industry development but also diversified their asset allocation channels.



IV. Investment Banking Line of Business

The Bank actively guides capital towards green industries by underwriting green bonds and carbon-neutral bonds to support green development, facilitating financing for green projects to promote green transition and development, and empower the real economy.

Case study: Underwriting a carbon neutrality / rural revitalization / revolutionary base areas triple-labeled bond

In June 2024, the Bank, as the lead underwriter, assisted Z Financial Leasing Co. Ltd. in issuing the 2024 Series 3 Green Medium-Term Note (Carbon Neutrality Bond / rural revitalization / revolutionary base areas). The issuance marks the Bank's first "carbon neutrality bond + rural revitalization + revolutionary base areas" triple-labeled bond, with an issuance size of 500 million yuan, a term of three years, and a coupon rate of 2.19%. The funds raised from this issuance are intended for financing leasing projects for renewable energy power generation (wind and PV). The power generated from the wind power project will be supplied to the Central China Grid, and

the power generated from the PV projects will be supplied to the Northwestern and North China Grids. These projects are expected to deliver exceptional outcomes in energy conservation and emission reduction. In this bond issuance, 58% of the funds raised have been allocated to supporting rural development. This arrangement is significant for implementing rural clean energy projects, strengthening rural power grids, and comprehensively enhancing rural power supply capabilities. In this way, it consolidates poverty alleviation achievements and boosts rural economic growth. Additionally, 40% of the funds raised have been allocated to supporting the development of revolutionary base areas and expanding financing channels for revitalizing these regions.

V. Asset Management Line of Business

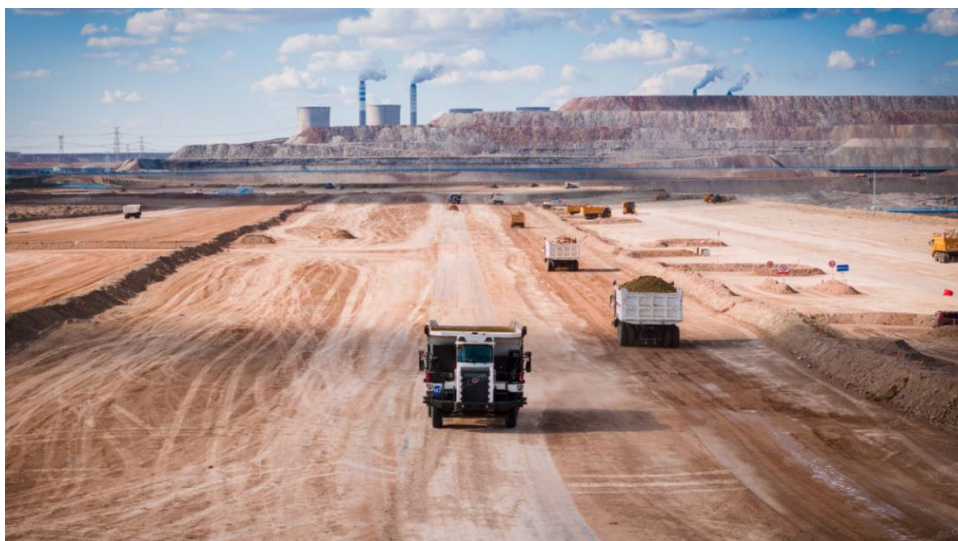
Guided by the principles of “finance for good” and “green finance”, the Bank strives to become the one of the “greenest banks” in the Yangtze River Delta region. In 2024, the Bank explored high-quality issuers of green bonds and increased investment in green-themed bonds. By the end of 2024, the balance of green bond investments in its asset management business line reached 2.334 billion yuan, this marked its active role in supporting and contributing to the country’s strategic goal of carbon peak and carbon neutrality. What is more, the Bank emphasizes the empowerment of asset management quality and efficiency through financial technologies. It further refined the internal fintech system and enabled the electronic mode for the entire life cycle of wealth management business. This could reduce operational costs in investment operations, risk control, compliance management, and operational accounting, thereby enhancing the transmission of green and low-carbon values.

VI. Finance Lease Line of Business

Yangtze United Financial Leasing, one of the Bank’s subsidiaries, actively integrates into the group’s business strategy by further focusing on green transportation, green manufacturing, green energy, and green environmental protection. Through business synergy and leveraging the strengths of both banking and leasing services, it comprehensively meets the financing needs of customers for new projects, continuously creates momentum for the development of green leasing.

Case study: “Carbon Path Pioneer” empowers unmanned mining trucks

In 2024, Yangtze Financial Leasing deployed hundred-ton-class new energy unmanned mining trucks to empower the high-quality development of open-pit mines. By offering a tailored direct lease financing solution, the company enabled fully unmanned operations on a single worksite, accelerating the commercialization of unmanned open-pit mines. Yangtze Financial Leasing assessed risk value based on an innovative logic of “investment banking mindset + scenario-based leasing.” It performed closed-loop management of cash flows based on the high-quality accounts receivable within a closed business scenario, which broke away from the conventional leasing model that primarily focuses on evaluating a company’s short-term financial status. It adopted a forward-looking perspective, emphasizing value-creating elements, such as core technology development, market growth potential, green environmental management, and operational management capabilities. With practical actions, Yangtze Financial Leasing contributed to the green and intelligent transformation and sustainable development of the mining industry.

**Case study: New momentum boosts the digital and intelligent transformation of modern logistics**

Yangtze Financial Leasing partnered with Shanghai W Technology to support intelligent heavy-duty truck technology in “going global,” facilitating the successful opening of Chancay Port in Peru and injecting new momentum into the economic development of countries along the Belt and Road Initiative (BRI). W Technology, a national high-tech enterprise and a “little giant” (a top performer among specialized, high-end and innovation-driven SMEs that provide distinctive products or services), is a leading provider of intelligent services for many BRI and *Regional Comprehensive*

Economic Partnership (RCEP) member countries. As a comprehensive “AI + new energy” solution provider in the logistics sector, the company operates across sea, land, and air, with a global footprint in 20 countries and regions. Yangtze Financial Leasing proactively cooperated with W Group’s subsidiary in the strategic transformation to port agent operations and successfully implemented a direct lease project for AI-powered unmanned heavy-duty trucks. Leveraging technological innovation, it drove productivity upgrades and propelled the transition of the logistics sector to new-quality production models that are more intelligent and greener. With the direct leasing model, the company rapidly deployed new energy unmanned heavy-duty trucks and their corresponding vehicle management and dispatch systems to meet the client’s urgent need for equipment to commence operations.



Feature: Strengthening Biodiversity Conservation and Enhancing International Exchanges

China has identified biodiversity conservation as a key component in advancing ecological civilization and building a Beautiful China. The report to the 20th National Congress of the Communist Party of China emphasized the commitment to enhancing the diversity, stability, and sustainability of China's ecosystems and announced a series of major biodiversity conservation projects to be launched.

The Bank attaches great importance to biodiversity conservation and actively explores and innovates financial products and services better suited to supporting this cause, thereby contributing to China's grand vision of ecological civilization and the Beautiful China initiative.

As one of the 36 Chinese banks signing the *Joint Declaration of the Banking Sector to Support Biodiversity Conservation*, the Bank actively implements the Post-2020 Global Biodiversity Framework and continuously elevates the strategic importance of biodiversity conservation. It leverages financial resources to facilitate eco-friendly, sustainable, green, and inclusive development.

Case study: Ecological afforestation: Building a Green Wall for biodiversity

Amid the ongoing interaction between human civilization and natural ecosystems, biodiversity is losing at an alarming rate. The Bank prioritizes ecological afforestation projects and provides financial support for enterprises engaged in such projects, thereby contributing to China's goals for advancing ecological civilization.

A preliminary land formation project for the Nanhui Dongtan Ecological Afforestation Project, led by a municipal state-owned enterprise responsible for the conservation and management of tidal flat resources, has started in recent years. The project aims to create terrain conditions for the construction of ecological corridors and address issues related to afforestation landscapes, drainage, and soil salinization. To resolve the enterprise's working capital challenges in its routine operations, the Bank provided a 340 million-yuan medium-term working capital loan, facilitating the smooth implementation of the project.

The Bank's strong support for ecological afforestation projects reflects its commitment to biodiversity conservation. Ecological afforestation has become a vital systemic initiative in reconstructing a shared future for all life on Earth and holds

significant importance for biodiversity conservation.

Case study: Contributing to the green transition of agricultural production and biodiversity conservation

As a key financial service provider for agriculture, rural areas, and farmers in Shanghai, the Bank leverages specialized farmers' cooperatives as a critical tool for supporting rural revitalization and the green transition of agricultural production. Chongming J Specialized Farmers' Cooperative, established in 2014, primarily engages in crop cultivation and tidal flat aquaculture. The cooperative adopts a green "rice-fish culture" farming model for producing rice, rice fish, and rice soft-shelled turtles, integrating rice planting with fish rearing. In this model, fish swim freely in the rice paddies and consume pests and weeds while excreting waste that fertilizes the soil, creating favorable conditions for rice cultivation and fostering a harmonious coexistence with rice. To address the cooperative's funding challenges in agricultural production, the Bank acted swiftly and tailored a specialized financial service plan based on the cooperative's practical needs, business model, and business cycle. It issued loans totaling over 9 million yuan to bridge the cooperative's funding gap and support the sustainable development of green agriculture.

By supporting the green "rice-fish culture" model, the Bank demonstrates its commitment to biodiversity conservation and aligns with the current ESG investment trend. This model protects non-target organisms by reducing reliance on chemical pesticides and fertilizers, thus maintaining ecosystem balance. It leverages natural ecological cycles to achieve harmonious coexistence between agricultural production and the natural environment. Moreover, this green farming model improves the quality and safety of agricultural products, providing the local community with healthier and more eco-friendly food options. It also contributes to the sustainable development of the rural economy and helps increase farmers' income.

Case study: Supporting vegetation maintenance and ecological restoration in suburban parks

The Bank prioritizes biodiversity conservation and stays committed to its mission and responsibilities as a financial institution. It continuously launches innovative eco-friendly financial services to foster a harmonious coexistence between humanity and nature.

L Suburban Park covers a total area of over 450 mu (approximately 30 hectares), comprising farmland, forests, green spaces, water bodies, wetlands, and natural

villages. To enhance the park's environment, a comprehensive plan has been developed to upgrade vegetation maintenance, improve infrastructure, and restore the ecological environment. The Bank has provided a ten-year fixed asset loan of 15 million yuan. The funds will be used for transforming under-forest spaces such as existing farmland, seedlings, and conservation forests and optimizing the natural water ecological purification system. The aim is to establish an internal cycle of water resources and nutrients and create a conducive habitat for species to thrive and reproduce.

Case study: Bond investment supporting biodiversity conservation

The Bank attaches importance to biodiversity conservation and is committed to its responsibilities as a financial institution. It continuously seeks innovative eco-friendly financial services to foster a harmonious coexistence between humanity and nature.

Through bond investments and other financial instruments, the Bank directly or indirectly supports biodiversity initiatives. The Bank participated in the primary distribution of the 2023 Green Financial Bond (Series 3) of the Agricultural Development Bank of China (23 ADBC Green Bond 03) in October 2023 and held 30 million yuan of the bond as of the end of 2024. The biodiversity-themed bond, with an issuance size of 4.3 billion yuan and a 3-year term, is allocated to 23 projects with biodiversity conservation benefits, including mine ecological restoration and national reserve forests. Upon implementation, these projects are expected to restore 19,680.72 mu (approximately 1,312.048 hectares) of mining areas and add 231,903.16 hectares of forests, which correspond to a carbon sink amount of 69,570,900 tons, sulfur dioxide absorption of 28,013.90 tons/year, water conservation of 889,452,300 tons/year, dust retention of 5,023.02 tons/year, and oxygen release of 2,782,800 tons/year.

Case study: Party building empowers green finance and writes a new chapter in biodiversity conservation

To explore new models to advance financial empowerment for green communities and ecological governance in collaboration with branches and sub-branches, the Bank hosted a joint event with the Communist Party of China Branch of the Changning District Bureau of Ecology and Environment in October 2024. They visited a habitat garden in Changning District, Shanghai, which was selected as one of the “100+ Biodiversity Positive Practices and Actions Around the World” by the

United Nations and designated as an Ecological Civilization Practice Base in Changning District. The visit provided insights into how the residential community integrates urban micro-renewal with biodiversity conservation to enhance the quality of community ecological spaces. It deepened participants' understanding of biodiversity and underscored the critical importance of biodiversity conservation.

Following the visit, the two parties held a discussion session, sharing their efforts and achievements in green and low-carbon practices and biodiversity and exploring ways to further integrate green finance with biodiversity conservation. The session provided valuable insights and new strategies for advancing the Bank's green and sustainable development initiatives.





Section V Environment Risk Management Process

The Bank continuously refines environmental risk and opportunity management. In this regard, it optimizes processes for identifying, assessing, and addressing climate-related risks, integrates environmental and social risk reviews and assessments throughout the credit process management, enhance its ESG risk management access and alert system for debentures. This ongoing effort strengthens its environmental risk management capabilities.

I. Identification and Assessment

The Bank attaches high importance to the environmental, social, and governance risks associated with clients or projects. Throughout the credit granting process, the Bank incorporates environmental risk identification and assessment requirements into the entire management process. This requires paying attention to the environmental risks of clients or projects during pre-loan access, loan approval, and post-loan management stages. The Bank imposes strict credit or investment restrictions on clients with substandard environmental, social, and governance performance. It does

not provide credit or investment to clients or projects that violate China's industrial, environmental, and safety policies, the Bank's credit policies, or those affected by environmental and social incidents that impact their ongoing operations. It directs credit funds towards green and environmentally friendly sectors, and increases support for the green economy, low-carbon economy, and circular economy, thereby contributing to a green and low-carbon society.

II. Management and Control

Environmental risk management requirements are incorporated into multiple stages, including pre-loan, during the loan period, and post-loan. Relevant risk controls are enhanced throughout the entire process including pre-loan access, loan approval and post-loan management, aiming to enhance the quality and effectiveness of environmental risk management.

1. Environmental risk management for credit clients

(1) Pre-loan access

- Industry classification: Investigations shall be conducted to verify whether the borrower's production and business activities comply with national environmental protection policies and green credit requirements and whether outdated production capacity or non-compliant enterprises or projects are involved. A preliminary classification and certification of green credit shall be conducted as per the Bank's green credit classification standard.
- Due diligence check: Account managers are required to complete the Environmental and Social Risk Rating Form and conduct an initial assessment of the environmental and social risk level. If the project has an environmental impact, a thorough investigation of the current situation must be conducted, and valid and complete environmental protection approval from the relevant authorities must be obtained.

(2) Loan approval

- Risk review: Review and approval personnel are required to conduct thorough environmental and social risk assessments of clients. This includes analyzing whether the borrower/project meets national green finance requirements in terms of energy consumption, pollutant emissions, chemical and waste management, and safety and health management, as well as comprehensively determining whether there are potential significant environmental and social risks based on

factors such as the client's environmental and social rating by the account manager.

- Expedited approval channel: The Bank has a reviewer liaison mechanism under which green specialists are appointed in each review department. The approval approach featuring specialized liaison and fast handling is applied to green credit granting to ensure green credit activities receives the highest priority in resource allocation and timely business response.
- Contract management: Clauses related to environmental and social risk management are added to credit contracts.

(3) Post-loan management

In routine inspections of borrowers (guarantors), the Bank requires account managers to assess whether the borrower complies with national environmental policies in areas such as energy consumption, pollutant discharge, chemical and waste management, and health and safety management; whether there are potential significant environmental and social risks; whether the loan's green certification and classification are accurate; whether relevant evidence is complete. Meanwhile, changes in the borrower's green certification status shall be placed under continuous monitoring. The Bank also maintains risk alerts and post-loan monitoring on clients with significant environmental and social risks in its credit risk alert system.

2. ESG risk management for credit bonds

The Bank introduces publicly sourced authoritative ESG ratings and alert data about debenture issuers into its evaluation of debenture issuers across environmental, social corporate governance dimensions. This enables the Bank to identify and mitigate environmental and social risks associated with issuers while also identifying high-quality clients with sustainable development potential. Against the ESG ratings of credit bond issuers, the Bank has set access thresholds to mitigate ESG investment risks.

The Bank conducts assessments of credit bond issuers from the dimensions of environment, social, and corporate governance in its ESG rating system. Regarding the environmental dimension, the Bank places emphasis on assessing the issuer's awareness and investment in environmental protection, as well as whether there are conflicts of interest between the issuer's development and environmental protection efforts. Regarding the social dimension, the Bank focuses on assessing whether there are conflicts of interest between the issuer's development and the needs of key social groups such as customers, employees, and others stakeholders. Regarding the corporate governance dimension, the Bank emphasizes assessing whether the issuer's

daily management is of high quality and efficient, with a focus on incentive and oversight mechanisms, management capabilities, and the potential impact of external regulatory environments on corporate governance.

According to this assessment system, a higher score indicates better ESG performance of the bond issuer. Following the assessment, the Bank continues to monitor and assess the ESG performance of bond issuers by enhancing investment analysis, and strengthening pre-investment risk identification, in-investment credit reviews, and post-investment risk management. This can promote green investment and sustainable development.

Section VI Impact of Environmental Risks on Financial Institutions

The Bank identifies environmental risks and opportunities that may arise in its production and operational activities, and takes various measures to address them. It explores climate risk stress tests to gradually enhance its ability to respond to climate change.

I. Identification of Environmental Risks and Opportunities

With the increasing occurrences of environmental and climate issues, the Bank recognizes the potential impact of climate change on its overall strategic landscape and financial condition. In order to address potential climate risks and seize development opportunities stemming from climate change, the Bank has referenced the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). It has systematically identified and assessed relevant risks and opportunities from dimensions including physical risks, transition risks, and climate opportunities, in line with the Bank's business development situation and characteristics.

1. Environmental risk identification

Environmental risks primarily take the forms of physical risks and transition risks, potentially resulting in direct or indirect impacts on the Bank. Physical risks typically mean potential extreme weather events that cause significant damage to the balance sheets of businesses, households, and financial institutions, leading to financial and macroeconomic instability. Transition risks mean changes in climate policies, technology, market sentiment, and other factors during the transition to a low-carbon economy, leading to movements in asset prices or broader economic crises. The Bank conducts thorough analysis of climate change-related risks across various dimensions such as duration, category, and mitigation strategies. It delves into the financial risk mechanisms resulted from climate change to bolster its climate risk management initiatives.

Risk Category	Potential impact	Duration ¹⁰	Mitigate measures
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¹⁰ The Bank defines a short term as 1 year, a middle term as 1 to 5 years, and a long term as 5 to 10 years.

Risk Category		Potential impact	Duration ¹⁰	Mitigate measures
Physical risk	Immediate risk	As global climate change intensifies, extreme weather events such as typhoons, floods, and heat-waves are more frequent, with their intensity continually increasing. These extreme weather events may cause severe disruptions to the production and operations of the Bank's clients, leading to business interruptions, supply chain disruptions, and varying degrees of damage to their fixed assets such as factories and equipment. Consequently, there is a significant risk of asset impairment and an increase in the likelihood of defaults. The Bank's sites in various locations may also be forced to temporarily suspend operations due to the impact of extreme weather, with some financial infrastructure being damaged and an increase in daily operating costs.	Short term	For asset management, the Bank explores incorporating physical climate risks into its risk management framework. The Bank has initiated pilot projects for analyzing physical climate risks related to agricultural assets and credit bond issuers in the Yangtze River Delta region. It has completed in-depth assessments of the potential impacts of extreme weather events on agricultural production and business operations within the region. In terms of agricultural business and credit bond investments in the Yangtze River Delta region, the Bank will pay closer attention to the measures taken by clients in water-saving irrigation, drought resistance, flood prevention, wind disaster mitigation, and other aspects, guide and support clients to enhance agricultural production resilience and strengthen their ability to withstand natural disasters, and better safeguard the security of financial assets.
	Non-immediate risk	With the continuous rise of global average temperatures and gradual decline of soil productivity, clients in certain industries and regions may face challenges such as increased production costs and reduced output efficiency, which significantly impair profitability. The Bank's own operating costs may also increase with greater pressure on daily operational management. What is more, the risk of rising sea levels is increasingly prominent. Clients in coastal areas may face challenges such as seawater intrusion and land salinization, which may result in intermittent	Middle to long term	In terms of operations and management, natural disasters triggered by extreme weather events may pose a threat to the normal operation of bank sites, endangering the employees and customers' lives and properties. The Bank attaches great importance to this with a feasible emergency response mechanism for catastrophic weather events. A specialized emergency response team has been set, and the roles and responsibilities of each department and position are

Risk Category		Potential impact	Duration ¹⁰	Mitigate measures
		production activities and continuous accumulation of operating losses, as well as damaged infrastructure and deterioration in asset quality.		defined in disaster weather prevention efforts. The Bank has developed and enhanced relevant emergency plans, and allocated necessary disaster prevention supplies and facilities. At the same time, the Bank emphasizes the enhancement of employees' emergency response capabilities by arranging regular disaster prevention and mitigation training sessions and drills. To address the frequent occurrence of typhoons, floods, and other disaster weather events, the Bank has established a specialized inspection mechanism to promptly identify and eliminate various types of hazards, thereby minimizing disaster losses.
Transformation risk	Policy and regulation risk	<p>Guided by the “dual carbon” goals, China is accelerating its transition to a low-carbon economy, with relevant policies and standards being issued continually. This means an increase in operating costs and compliance risks for high-energy-consuming and high-emission businesses.</p> <p>As a financial institution, the Bank is also subject to increasingly stringent climate risk management requirements. Additional compliance costs may also occur.</p>	Short, middle to long term	<p>At the business level, the Bank consistently endeavors to construct a comprehensive framework for green finance products and services by innovating green, low-carbon financial products to meet the diverse financing needs of clients throughout their green transition journey. By providing credit support for low-carbon projects and assisting entities in issuing green bonds, the Bank directs more social capital towards green industries, thereby facilitating the real economy in low-carbon transformation.</p>
	Technology risk	With the continuous advancement of low-carbon technologies, the existing high-carbon businesses or products of some clients may face the risk of shrinking market demand. To align with the low-carbon development trend, these clients	Short to middle term	<p>In credit operations, the Bank screens financing applications from industries with high pollution, high energy consumption, and overcapacity, reducing the scale of loans to these industries. Meanwhile, the</p>

Risk Category		Potential impact	Duration ¹⁰	Mitigate measures
		need to take technological upgrades and business transformations, which requires substantial investment and entails certain technical risks. Some clients may find themselves in operational distress due to the high transitional costs or incorrect technological choices, which subsequently negatively impacts their debt-servicing ability.		Bank performs green categorization of credit assets, manages credit assets based on their environmental benefits and prioritizes support for projects with positive environmental benefits. The Bank also performs stress tests on the transition risks of high-carbon industries. Through scenario analysis and sensitivity testing, the Bank assesses the financial condition, credit quality, and default risks of high-carbon industry clients under the NGFS transition delay scenario. This lays the groundwork for future risk management. The Bank also explores carbon accounting for credit assets, analyzes the carbon footprint of credit assets, and create a roadmap for carbon neutrality of credit assets. It strives to contribute to achieving the “dual carbon” goals through efforts in the financial sector.
	Market risk	<p>In the context of the transition to a low-carbon economy, market demand is accelerating towards green and low-carbon sectors. For clients still reliant on high-carbon products or services, the reduction in market demand and the increase in costs of high-carbon raw materials may lead to risks such as decreased income, asset devaluation, and increased operating costs. As a financial institution, the quality of the Bank’s assets may be impacted to some extent by deterioration in the operating conditions of these clients.</p> <p>Meanwhile, the market demand for green financial products is increasing. An increasing number of clients expect the Bank to offer a diverse range of green products and services to support their green transition. Failure to catch market trends, such as timely developing and promoting high-quality green financial products, and effectively controlling ESG risks throughout the product and service lifecycle may expose the Bank to the risk of customer</p>	Middle to long term	<p>In its own operations, the Bank places high importance on energy efficiency and emission reduction in daily business activities. Operational carbon emissions accounting is applied to clarify the Bank’s own carbon footprint. The Bank plans to further set measurable operational carbon reduction targets. Through measures such as improving energy efficiency, optimizing business processes, and promoting green office practices, we aim to minimize carbon emissions from operational activities and fulfill the social responsibility of an</p>

Risk Category		Potential impact	Duration ¹⁰	Mitigate measures
		loss.		environmentally friendly financial institution.
	Reputation risk	Poor performance in climate risk management and green finance practices, and failure to implement the Principles for Responsible Banking may trigger questioning of the Bank's reputation and brand image by stakeholders, leading to reputation damage.	Short, middle to long term	As a signatory to the United Nations Principles for Responsible Banking, the Bank has publicly committed to aligning its business strategy with the goals of the <i>Paris Agreement</i> and China's "dual carbon" goals. The Bank will explore identifying, assessing, and managing climate risks across all businesses, reducing risk exposure in high-pollution and carbon-intensive industries, and supporting clients in their green and low-carbon transformations.

2. Environmental opportunity identification

The Bank seizes market opportunities presented by national goals such as carbon peak and carbon neutrality, industrial transformation, and the comprehensive effort into a green and low-carbon lifestyle system. We promote innovation in green finance business and products, increase the presence of green financial products, significantly enhance the proportion of green credit assets across the Bank, make a green credit strategy that aligns with regional development strategies, integrates with inclusive innovation, achieves breakthroughs in key areas, and comprehensively implements green concepts. This aims to drive the entire Bank's business towards green transformation.

Opportunity Category		Potential impact	Duration	Actions
Clim ate-related opportunities	Resource efficiency opportunities	Improving resource efficiency and energy efficiency can both reduce the consumption of natural resources, electricity consumption, and the generation of waste. This can effectively lower the operation costs for the Bank and its clients.	Mid-term	At the business level, the Bank places great emphasis on the development of green finance. Through integrated effort into policies, products and systems, it provides customers with comprehensive financial services for low-carbon transformation. In terms of product

Opportunity Category		Potential impact	Duration	Actions
	Opportunities in energy sources	Promoting renewable energy sources can help mitigate the risk of energy price fluctuations in operations. The lower carbon emissions during the operation of renewable energy projects make it easier for businesses to control carbon emission costs and reduce overall operation expenses. On the other hand, actively utilizing renewable energy resources showcases an organization's green image, which can garner recognition from consumers and investors, and enhance its brand reputation.	Middle to long term	<p>innovation in green finance, the Bank has introduced a range of distinctive credit products such as pollution right mortgage loans, SHEA pledge financing, CCER pledge financing, distributed photovoltaic loans, and ESG-linked loans, to support the development of green industries.</p> <p>In the green finance market, the Bank directs more social capital towards low-carbon projects by investing in green bonds. Through financial leverage, this contributes to the realization of the “dual carbon” goals. The Bank will further enrich its green finance product range, expand green investment and financing, and promote the virtuous cycle of green and low-carbon development.</p>
	Product and service opportunities	The “dual carbon” goals have unveiled significant development opportunities for green and low-carbon industries. A growing number of businesses are beginning to prioritize low-carbon transitions, leading to a continuous growth in demand for green financial products and services. The Bank innovates and develops green financial products, which can better meet the diverse financing needs of customers in low-carbon transitions, thereby accelerating the development of green industries and opening up new spaces for revenue growth.	Short, middle to long term	<p>At the operation level, the Bank sets an example by advocating for green and low-carbon practices. On one hand, the Bank optimizes its operation model by adopting a series of energy-saving and emission-reduction measures. These include adopting energy-efficient power equipment in office spaces and promoting double-sided printing to maximize the efficiency of energy and resource utilization to reduce operation costs. On the other hand, the Bank explores the application of renewable energy sources. For instance, at the Zhangjiang High-tech sub-branch, it is piloting solar power generation, aiming to achieve “zero carbon” emissions in operations. It also</p>
	Adaptation opportunity	Climate change has become a common challenge for the mankind. Frequent extreme weather events pose severe challenges to the production and operation of industrial and commercial companies. More and more clients are aware that	Middle to long term	

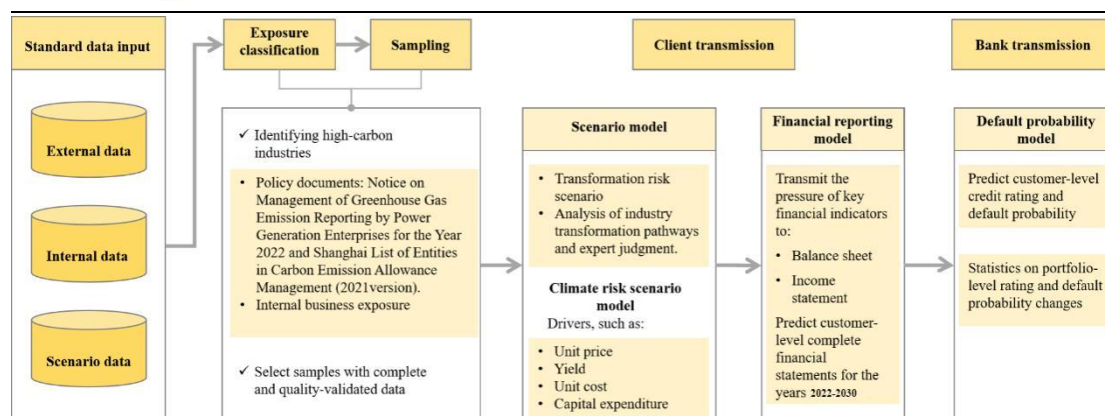
Opportunity Category		Potential impact	Duration	Actions
		that focusing solely on their own decarbonization efforts is far from sufficient; they also need to enhance adaptive capacity to address the impacts of climate change. This has created new opportunities for the banking sector to develop climate adaptive financial products.		encourages employees to opt for low-carbon and green travel options and tries to shape an office environment featuring energy efficiency and environmental protection. With the joint efforts of all levels, the Zhangjiang High-tech sub-branch has achieved carbon neutrality for three consecutive years, setting an example across the Bank.

II. Quantitative Analysis of Environmental Risks

1. Climate risk stress test

The Bank has conducted climate risk sensitivity stress testing to assess the potential impact of the transition to carbon peaking and carbon neutrality on its credit assets. The test focused on high-carbon industries such as power generation, construction materials, steel, non-ferrous metals, petrochemicals, chemicals, paper-making, civil aviation, and corporate clients included in Shanghai's carbon emissions allowance management. The Bank has specifically examined the impact of rising carbon emissions costs on asset quality and capital adequacy ratio, to test its ability to address climate risks within the context of the carbon peaking and carbon neutrality goals.

The scenario of transition delay as defined by the People's Bank of China and the Network for Greening the Financial System (NGFS) were adopted in the stress test. It was conducted using a bottom-up approach, with the target determined based on relevant regulations of the Ministry of Ecology and Environment and the Shanghai Municipal Bureau of Ecology and Environment, as well as the Bank's credit exposure as of the end of 2023. By examining the impact of rising carbon emission costs on corporate financial statements and subsequently estimating transmitted losses through internal assessments, the stress test evaluated the impact on the Bank's capital adequacy ratio and assessed its capacity to respond to climate-related risks against the "dual carbon" goals.



Climate risk stress test path at SHRCB

According to the test results, under the stress scenario from 2024 to 2060, the overall credit risk of clients in high-emitting industries and certain regulated enterprises would increase, with some credit ratings experiencing slight downgrades. However, the impact on the Bank's capital adequacy ratio is limited, and the overall risk remains manageable.

2. Impact analysis and target setting based on the Principles for Responsible Banking (PRB)

As the first signatory bank to the UN Principles for Responsible Banking (PRB) in Shanghai, the Bank adopts the United Nations Environment Programme Finance Initiative (UNEP FI) Portfolio Impact Analysis Tools for Banks to assess the impact of sustainable development and uses the analysis results to guide target setting.

1. Impact analysis

The Impact Analysis Tools, based on the Holistic Impact Methodology developed by UNEP FI, feature an interactive workflow for data input and output. By entering the Bank's business data into the tools and utilizing the built-in Impact Mappings module, multiple output results can be generated to help the Bank identify its most significant impact areas and determine priorities, and support strategy formulation and target setting in line with Principle 2 of the PRB.

During the analysis process, the Bank actively engaged in discussions with UNEP FI expert groups on the methodological principles of the Impact Analysis Tools and the applicability of impact areas across different industries. Based on its practical data availability, the Bank employed the tool's Context Module and Institutional Banking / Identification Module to conduct impact analysis, identify environmental and social impact areas in its corporate banking business, and assessed the relationships between these impact areas.

2. Target setting

Based on the analysis of the potential environmental, social, and economic impacts of the Bank's core assets using the Impact Analysis Tools, the Bank identified the availability of resources and services, climate stability, and the circular economy as key impact areas. Accordingly, the Bank initiated target setting in green finance and inclusive finance

Section VII Environmental Impact of Investing and Financing Activities

The Bank has increased its focus on the environmental impact of its asset structure by starting carbon emissions accounting for investment and financing activities and quantifying the environmental benefits of green loans and green bonds. This is intended to enhance the “green content” of its assets, which means increasing environmentally friendly investments in the asset structure to better support the sustainable development goals.

I. Carbon Emissions of Investing and Financing Activities

The Bank remains committed to aligning with the national “dual carbon” goal and resonates with the green development of the Yangtze River Delta economy by effectively supporting the real economy. Its credit asset scale continues to grow steadily. During this period, the Bank’s credit asset scale grew steadily and healthily, fully demonstrating its commitment to facilitating social and economic green transition and sustainable development while ensuring business growth.

1. Emissions of credit assets

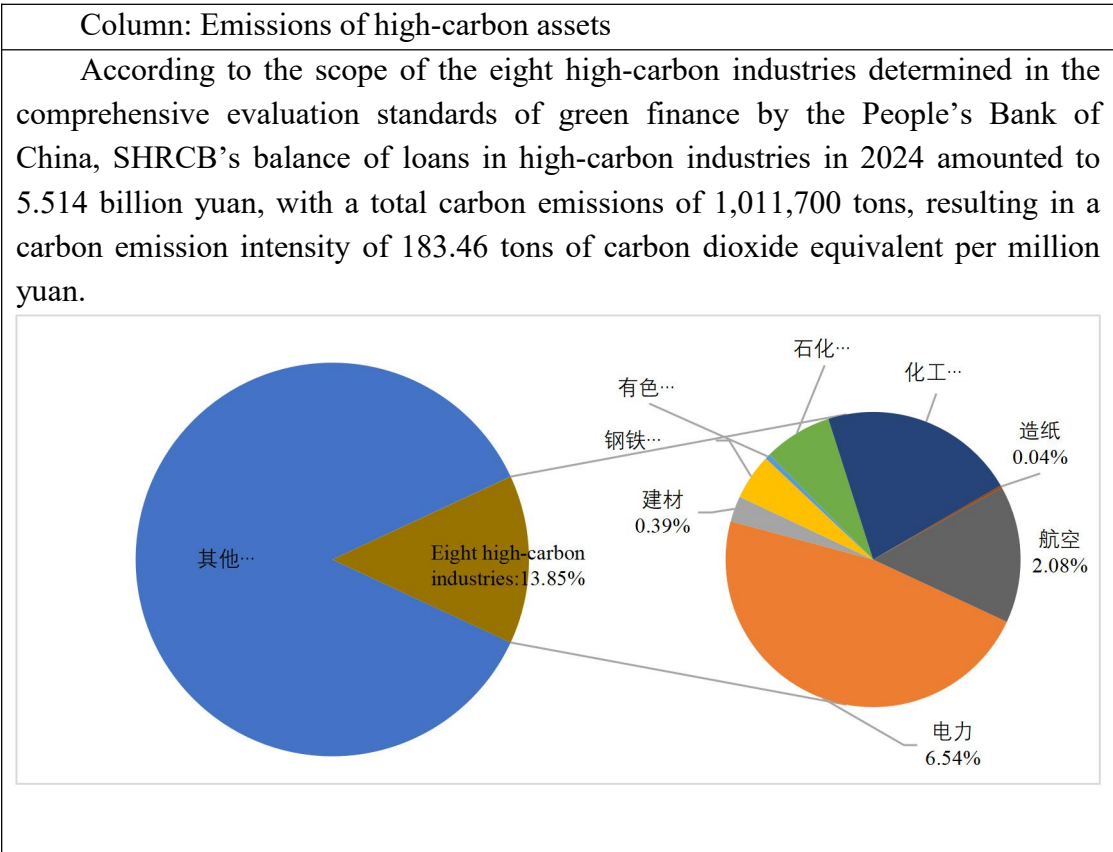
In 2024, the carbon accounting for credit assets was continued with the coverage of the accounting extended. A pilot project was launched to collect physical activity data from corporate loan clients, laying a solid foundation for improving the quality of carbon accounting data. The Bank used the Partnership for Carbon Accounting Financials (PCAF) methodology to calculate the carbon emissions of its credit assets through attribution factors. Based on the carbon emissions disclosed in the ESG and sustainability reports of publicly listed corporate clients, as well as energy consumption, industrial production, and operating revenue data, the Bank summarized carbon emission factors and calculated carbon emissions for corporate loans where data was available. In 2024, the Bank introduced the physical activity-based approach in its carbon emission calculation methodology for investments and financing. Meanwhile, it accounted for loans to the eight high-emitting industries according to the comprehensive evaluation standards of green finance set by the People’s Bank of China.

As of the end of 2024, the monthly average balance of corporate loans covered by the calculation was 365.255 billion yuan, corresponding to a total carbon emissions of 7,304,500 tons, with a carbon emission intensity of 20.00 tons of carbon dioxide equivalent per million yuan.

Indicator name	Unit	2024
Total carbon emissions	10,000 tCO ₂ e	730.45
Balance of corporate loans covered by the accounting scope	100 million yuan	3,652.55
Carbon intensity of loans	tCO ₂ e/million yuan	20.00

Specifically, the monthly average balance of corporate loans in high-emission industries¹¹ covered by the calculation was 5.514 billion yuan, corresponding to a total carbon emissions of 1,011,700 tons, with a carbon emission intensity of 183.46 tons of carbon dioxide equivalent per million yuan.

Indicator name	Unit	2024
Total carbon emissions	10,000 tCO ₂ e	101.17
Balance of corporate loans covered by the accounting scope	100 million yuan	55.14
Carbon intensity of loans	tCO ₂ e/million yuan	183.46



¹¹ The statistical specification for high-emitting industries is based on the comprehensive green finance evaluation criteria of the People's Bank of China, including eight sectors: electric power, construction materials, steel, non-ferrous metals, petrochemicals, chemicals, paper, and aviation.

2. Quality of carbon emission data

With reference to the methodology of the Partnership for Carbon Accounting Financials (PCAF) and relevant local guidelines,¹² the Bank focuses on data quality when calculating and disclosing financed emissions data for credit assets to gradually enhance its level of carbon accounting and information disclosure. In 2024, the Bank piloted the use of the physical activity-based approach to calculate carbon emissions for some corporate credit assets. This approach further improved the quality of financed emissions data and laid a solid foundation for ongoing enhancements in carbon accounting data quality.

No.	Data sources	Balance of loans (100 million yuan)	Data quality
1	Reporting-based ¹³	121.70	1
2	Physical activity-based ¹⁴	87.82	3
3	Activity-based ¹⁵	3,443.03	5
Quality of carbon emission data for credit assets			4.82

II. Environmental Benefits of Investing and Financing Activities

1. Environmental benefits of green credit

The Bank is committed to green finance, with a continuous increase in the balance and growth rate of green loans. As of the end of 2024, the balance of green loans at the Bank amounted to 84.335 billion yuan. The top three green industries among them are green infrastructure upgrade, energy efficiency and environmental protection, and clean energy.

Category	Indicator	Unit	2023	2024
Green credit	Green credit balance	100 million yuan	614.31	843.35
	-Green infrastructure upgrade	100 million yuan	245.80	357.18
	-Energy efficiency and environmental protection industries	100 million yuan	139.31	152.76
	-Clean energy industry	100 million yuan	100.46	98.83

¹² The methods outlined in the draft document Guidelines for Carbon Emission Accounting and Information Disclosure for Financial Institutions in Pudong New Area issued by the Pudong New Area Financial Bureau for measuring the data quality of carbon emissions were used.

¹³ This approach involves obtaining corporate carbon emission data through publicly available channels such as corporate ESG reports and corporate social responsibility reports.

¹⁴ The physical activity-based approach calculates a company's carbon emissions by converting primary energy consumption data with corresponding carbon emission factors, or by converting its product output data, when its direct emissions data is unavailable.

¹⁵ This approach involves deriving corporate carbon emission data by converting economic activity intensity data of the specific entity and the industry average statistical data.

The Bank has increased its support for green projects to help drive the sustainable development and environmental protection forward. In accordance with the requirements outlined in the *Annex the Guidelines for Calculating Energy Conservation and Emission Reduction for Green Credit Projects* attached to the *Notice on Work of Green Financing Statistical System* (HYBJBT [2020] No. 87) as well as other relevant documents, the Bank scientifically calculates the environmental benefits generated by green project loans based on essential data such as feasibility reports and approvals of green projects, energy conservation assessment reports, and environmental impact assessment reports provided by clients.

As of the end of 2024, the Bank's balance of project loans with calculable environmental benefits and evidence amounted to 5.642 billion yuan. These loans covered various green sectors, including clean energy generation, recycling of agricultural waste, and green construction, and equated to saving 67,652.98 tons of coal equivalent and reducing carbon dioxide equivalent by 158,485.88 tons.

Indicator name	Unit	2024
Balance of project loans covered into the accounting scope	100 million yuan	56.42
Savings of tCEs	10,000 tons	67,652.98
Reduction of carbon dioxide emissions	10,000 tCO ₂ e	158,485.88
Water savings	10,000 tons	10,482,021.28
Reduction of sulfur dioxide emissions	Ton	1,641.56
Reduction of nitrogen oxides emissions	Ton	198.37
Reduction of COD discharges	Ton	1,153.01
Reduction of ammonia nitrogen emissions	Ton	132.13
Reduction of total nitrogen emissions	Ton	100.77
Reduction of total phosphorus emissions	Ton	19.50
Reduction of smoke emissions	Ton	705.43
Reduction of VOC discharges	Ton	200.09

Case study: Supporting distributed PV power generation projects

The project plans to install distributed photovoltaic (PV) power generation systems on the rooftops of factory buildings and carports to optimize the energy mix and the energy consumption structure and reduce corporate electricity costs. It also aims to assist the enterprise and local government in fulfilling green electricity consumption targets and increasing the proportion of green electricity usage. The total investment of the project is 10.71 million yuan, with a total installed capacity of 2 MWp. Once completed, the electricity generated by the power station will be primarily consumed by the factory itself. According to calculations, during the

reporting period, the project is expected to achieve an average annual power generation of 1,930,900 kWh. Every year, it can save 673.87 tons of coal equivalent for the grid, reduce CO₂ (greenhouse gas) emissions by 1,683.72 tons, and reduce SO₂ (atmospheric pollutant) by 50.78 tons and NO_x (atmospheric pollutant) by 25.29 tons, as well as 2.32 tons of dust. Furthermore, it can conserve water and mitigate the pollution caused by wastewater and heated effluent in the water environment.

Case study: Supporting a large-scale renewable energy project: Converting waste to energy for efficient utilization

A renewable energy utilization center project primarily processes household waste and combustible construction waste residues that cannot be further recycled or reused in the region. The total investment in the project is 4,683,450,000 yuan, covering a construction area of 105,085 square meters. Its total incineration capacity is 3,000 tons/day, including 500 tons/day of kitchen waste and 300 tons/day of food waste. According to calculations, the project can annually process 985,500 tons of dry waste and 292,000 tons of wet waste. By utilizing waste heat for power generation, the project can supply 542.89 million kWh of electricity to the grid annually under normal operating conditions, saving 175,800 tons of coal equivalent.

2. Environmental benefits of green bonds

The Bank continually strengthens its investment in green bonds, emphasizing the positive environmental impact of green bond investments. Following the principles of the Partnership for Carbon Accounting Financials (PCAF), the Bank evaluates the environmental benefits of its green bond investments using the proportion of its green bond holdings to the total issuance, with reference to green bond assessment reports certified by third-party organizations in the market.

As of the end of 2024, the Bank's green bond holdings with measurable environmental benefits totaled 5.439 billion yuan, saving 87,067.22 tons of coal equivalent and reducing carbon dioxide emissions by 1,426,604.50 tons.

Indicator name	Unit	2024
Balance of green bonds covered into the accounting scope	100 million yuan	54.39
Savings of tCEs	10,000 tons	87,067.22
Reduction of CO ₂ e emissions	10,000 tCO ₂ e	1,426,604.50
Reduction of sulfur dioxide emissions	Ton	982.05
Reduction of nitrogen oxides emissions	Ton	104.61
Reduction of smoke emissions	Ton	14.25

Case study: Investment in carbon neutrality bonds to support rail transit construction

In 2024, the Bank participated in the investment of Nanjing D Group Co., Ltd.'s 2024 Series 1 Green Medium-Term Note (Carbon Neutrality Bond). The funds raised, totaling 2 billion yuan, were used to replace the project loans for 21 urban rail transit projects that the issuer invested in and operated. According to the green evaluation report of the green bond, based on the proportion of the issuance size to the total investment amount, the program is expected to reduce 1,684.11 tons of carbon dioxide emissions, save 839.71 tons of coal equivalent, and decrease nitrogen oxide emissions by 2.49 tons and PM₁₀ emissions by 0.05 tons every year. As of the end of 2024, the Bank held 90 million yuan in face value of the green bond, accounting for 4.5% of the total issuance size. It is equivalent to reducing 75.78 tons of carbon dioxide emissions, saving 37.79 tons of coal equivalent, and decreasing nitrogen oxide emissions by 0.11 tons and PM₁₀ emissions by 0.002 tons every year.

Case study: Investing in grid bonds to support intelligent grid construction

In 2024, N Power Grid Co., Ltd. issued the 2024 Series 2 Green Medium-Term Note, raising 1.5 billion yuan, all of which was allocated to intelligent grid construction and operation projects by its subsidiaries in four provinces: Guizhou, Yunnan, Guangdong, and Hainan, covering a total of 222 sub-projects. According to the green evaluation report of the green bond, based on the proportion of the issuance size to the total investment amount, the projects, by reducing line loss rates in the project areas, are expected to save 1,980,700 tons of coal equivalent and reduce 546.71 tons of sulfur dioxide emissions, 876.05 tons of nitrogen oxide emissions, and 111.98 tons of PM₁₀ emissions annually. As of the end of 2024, the Bank held 50 million yuan in face value of the green bond, accounting for 3.3% of the total issuance. It is equivalent to saving 66,000 tons of coal equivalent and reducing 18.22 tons of sulfur dioxide emissions, 29.20 tons of nitrogen oxide emissions, and 2.73 tons of PM₁₀ emissions annually.

Section VIII Environmental Impact of Operating Activities

The Bank promotes green office practices by strengthening management of daily operational energy and resource consumption, as well as greenhouse gas emissions, and enhancing the awareness of sustainable development among employees. It fosters a culture of environmental responsibility and guides employees towards adopting green lifestyles. Additionally, the Bank encourages and guides all employees to integrate green concepts into their daily lives, take concrete actions, such as energy conservation and emission reduction measures and resource recycling, and contribute to a sustainable environment by practicing a green and environmentally friendly lifestyle.

I. Energy and Resource Consumption

The Bank upholds the principles of green development and continuously promotes effective energy conservation. Utilizing advanced systems, the Bank has intensified the refined management of properties such as office spaces, official vehicles, meeting rooms, and warehouses to reduce unnecessary energy consumption. Into 2024, as business operations fully returned to normal, the Bank strengthened monitoring of energy and resource consumption to ensure that fluctuations remained within a reasonable range.

Resource consumption		Unit	2023	2024	Change
Natural gas	Total	10,000 m ³	32.96	44.07	33.71%
	Per-capita	m ³	30.46	39.71	30.36%
Petroleum	Total	10kL	43.79	35.33	-19.34%
	Per-capita	L	40.48	31.83	-21.36%
Diesel	Total	10kL	7.15	6.68	-6.56%
	Per-capita	L	6.61	6.02	-8.90%
Water ¹⁶	Total	Ton	11,525.00	13,216.00	14.67%
	Per-capita	Ton	7.35	8.40	14.31%
Electricity	Total	10,000 kWh	8,148.17	7,050.75	-13.47%
	Per-capita	kWh	7,531.35	6,353.75	-15.64%
Paper ¹⁷	Total	Ton	26.80	15.48	-42.24%
	Per-capita	Kg	7.49	3.88	-48.18%

¹⁶ The statistical specification for office water consumption covers the Bank's headquarters.

II. Carbon Emissions of Operating Activities

1. Carbon emission accounting

The Bank exerts great effort into its operational carbon emission management by calculating the carbon emissions generated during the reporting period. In 2024, the Bank's total greenhouse gas emissions amounted to 33,764.63 tons (a 32.97% decrease compared to the previous year), with a per capita emission of 3.04 tons (a 34.65% decrease compared to the previous year).

Emission type	Unit	2023	2024	Change
Total greenhouse gas emission	Ton	50,370.48	33,764.63	-32.97%
Scope I	Ton	1,878.67	1,916.59	2.02%
Scope II ¹⁸	Ton	46,469.00	29,740.29	-36.00%
Scope III	Ton	2,022.81	2,107.76	4.20%
Per-capita greenhouse gas emissions	Ton/person	4.66	3.04	-34.65%
Greenhouse gas emissions per unit area	Ton/m ²	0.08	0.06	-30.15%

2. Quality of carbon emission data

With reference to the methodology recommended by the Partnership for Carbon Accounting Financials (PCAF)¹⁹, and given the emission sources and data sources, the Bank calculates the quality of its operation-related carbon emissions.

Accounting type	Emission sources	Data sources	Carbon emissions (ton)	Data quality
Scope I	Natural gas	Reporting approach	951.88	1
	Petroleum	Reporting approach	784.24	1
	Diesel	Reporting approach	180.46	1
Scope II	Electricity	Reporting approach	29,740.29	1
Scope III	Paper	Economic activity approach	27.24	5
	Water	Economic activity approach	34.23	5

¹⁷ The statistical specification for office paper consumption covers the Bank's headquarters and the Zhangjiang Central Park.

¹⁸ The carbon emission factors for the Bank's operations are determined as per the *Guidelines for Carbon Emission Accounting and Information Disclosure for Financial Institutions in Pudong New Area (Trial)*, *China Greenhouse Gas Emission Coefficient Library for Product Life Cycle (2022)*, and the *Announcement on Releasing the Electricity Carbon Dioxide Emission Factors for 2022*.

¹⁹ For measuring carbon emission data quality, the Bank refers to the methods outlined in the *Guidelines for Carbon Emission Accounting and Information Disclosure for Financial Institutions in Pudong New Area (Trial)* issued by the Pudong New Area Bureau of Finance.

	Kitchen waste	Economic activity approach	0.22	5
	Electronic products	Reporting approach	1,691.84	1
	Accommodations	Reporting approach	354.22	1
Total			33,764.63	1.01

III. Green Operations

1 . Green office

The Bank advances green operations by taking various measures across multiple fronts such as water usage, electricity consumption, and paper usage to promote energy conservation and reduction throughout the entire organization. In 2024, the Bank enhanced digital and intelligent administration, further promoting green and efficient office practices throughout the organization.

- The Phase I development of the privatized video conferencing system, Xiaoban Meeting, was completed.
- A total of 8,019 paperless online meetings were held.
- An integrated seal management system has been developed to enable electronic sealing.
- Online processes have been developed for senior management committee meetings and branch office meetings.
- Inventory, standardized sorting, and digital processing were conducted for all historical archives, which effectively reduced paper usage and manual material handling costs.
- The Bank passed the acceptance review of the national-level enterprise group digital archive (room) pilot program. By implementing electronic document archiving, the Bank is expected to reduce print paper by 15 million pieces annually.
- The photovoltaic panels installed on the pedestrian bridge in Zhangjiang Park generated 500,900 kWh of green electricity in 2024, saving 156 tons of coal equivalent and reducing emissions of carbon dust by 475 tons, carbon dioxide by 130 tons, sulfur dioxide by 14.32 tons, and nitrogen oxides by 7.16 tons.
- In 2024, office electricity consumption (including public areas) at the Zhangjiang Data Center decreased by 913,200 kWh, a reduction of 8.66% year-on-year.

Waste management ²⁰		Unit	2023	2024
Non-hazardous waste	Disposed electronic and office supplies	Piece	17,338	11,057
	Disposed kitchen waste	Ton	43.75	50
Hazardous waste	Disposed toner and ink cartridges	Ton	6.6	3.1

Case study: Low Carbon Life mini program

The Bank has developed and launched a Low Carbon Life mini program. It has 12 personal daily carbon reduction activities in its initial setting and converts different actions into carbon emissions and points. It also features sections for green information and quizzes, presented in a competitive ranking format to encourage employees to adopt carbon-reducing behaviors and promote green and low-carbon practices among all employees. Throughout the year, 104 articles on “dual carbon” themes were published, and 4,077 employees registered over 304,500 attendances in carbon reduction activities, achieving a cumulative carbon reduction of over 220 tons. A pilot program was launched for employees’ collection of personal office supplies at the headquarters, linking it to carbon reduction actions, with an aim to achieve partial “carbon neutrality” in the office supply usage under the headquarters office setting.

2 . Green sites

The Bank actively responds to the national “dual carbon” strategy by continuously promoting green sites. Through measures such as optimizing spatial design, applying energy-saving equipment, and enhancing resource efficiency, the Bank has comprehensively improved the environmental performance of its sites. During the year, two sites were recognized as “Green Standard Sites” for their outstanding performance in energy conservation, energy consumption reduction, and intelligent services. Another site was recognized as a “Green Demonstration Site” for its innovative low-carbon operation model and high-standard application of green technologies. These practices not only effectively reduce energy consumption and carbon emissions from daily operations but also organically integrate environmental protection with financial services, supporting the implementation of the Bank’s sustainable development strategy. In the future, the Bank will continue to explore green finance scenarios, deepen the low-carbon transition of its sites, and inject more momentum into the green development of society.

²⁰ 1. The statistical specification for the disposal of electronic and office supplies covers the Bank’s headquarters and 21 branches in Shanghai.

2. The statistical specification for the disposal of kitchen waste and hazardous waste covers the Bank’s headquarters building.

Case study: Building a green bank demonstration site in Shanghai

Sijing sub-branch was selected as the pilot and starting point for the Bank to build green and low-carbon business sites across the organization. The sub-branch became Shanghai's green bank demonstration site and was awarded the Silver Prize in the Assessment of Green and Low-Carbon Renovation of Existing Buildings in Shanghai. Additionally, it was selected as one of the hundred cases showcased at the 2023 Shanghai Urban Expo focusing on green renovation of existing buildings. Toned by the rich cultural and historical heritage and the human-friendly environment of Sijing Ancient Town in Songjiang District, Sijing sub-branch utilized eco-friendly materials, high-efficiency electromechanical equipment, age-friendly facilities, green low-carbon operations, and innovative technological measures to develop itself into a people-centric, green, and low-carbon bank site. Starting from the design phase, the sub-branch fully considered its own needs, design capacity, equipment selection and layout, system efficiency, and green low-carbon effects. The design was based on the *Technology Directory for Green Banking Sites in Shanghai* and the *Rules on Certification of Green Banking Sites in Shanghai (Trial)*. This approach integrated the green concept into the entire lifecycle of bank site planning, design, construction, and operation, and embodied multidimensional design philosophy that emphasizes health, applicability, and efficiency.





Green decorations in Sijing sub-branch

Case study: Zhangjiang High-tech sub-branch achieved carbon neutrality for four consecutive years

Zhangjiang High-tech sub-branch, the Bank's carbon reduction innovation lab, has obtained carbon neutrality certification for four consecutive years. Its twenty energy-saving initiatives across eight key areas, including the site's air conditioning, lighting, building envelope, water conservation, high-efficiency appliances, renewable energy, automatic control, and operational management, have been implemented throughout the Bank. These initiatives help to promote green development across the Bank, foster employees' awareness of low-carbon and energy-saving practices, and advance the Bank's green operations.



3. Green procurement

The Bank is exploring the establishment of a green procurement mechanism. Starting with green site construction and green material procurement, it is developing a sound green procurement mechanism. It is also exploring the formulation of a green procurement scoring system, expanding and refining the criteria and weighting of green procurement evaluations based on existing certifications, such as carbon neutrality certificates and ISO 14001 environmental management system certification.

The Bank prioritizes green, energy-saving, and environmentally friendly products in procurement. It actively studies and adopts new standards and requirements for green products, including but not limited to green construction materials, high-efficiency equipment, and energy-saving and environmentally friendly products. In daily procurement activities, the Bank is giving more priority to purchasing green raw materials, products, and services that are energy-saving, water-saving, and material-efficient, thus contributing to environmental protection.

The Bank has strengthened green supplier management. It actively promotes green and low-carbon principles and green supply chain management to suppliers and leverages the demonstrative role of green procurement. It has established green supplier standards and is exploring ways to increase the proportion of green suppliers. In 2024, the proportion of green suppliers reached 39.44%, an increase of 9.02% compared to 2023.

4. Green operations

The Bank is committed to green technology development. It has accelerated the digital transformation process and comprehensively expanded and refined the functions of its mobile banking app.

- The Bank's online deposit certificate service allows users to conveniently apply for and obtain deposit certificates through the mobile banking app, eliminating the need to queue at sites. This service significantly improves business processing efficiency, saves customers time and effort, and effectively reduces resource consumption from paper printing and travel.
- The mobile banking app's electronic billing function enables customers to easily manage account transaction records without the need for paper bills. This function not only provides transparent and real-time billing management but also significantly promotes paperless billing and reduces paper consumption.
- The Bank has thoroughly optimized the electronic receipt function, making the display of transaction records more straightforward and the search, filter, and export features more usable. This function significantly improves the

convenience and accuracy of information access for users and further mitigates dependence on paper receipts, thus reducing resource usage.

- The Bank has introduced the “Anxiangbanlao” planning function. It includes new wealth management and savings products and unique companion-style functions such as account position splitting management and transfer transactions, providing multi-channel, end-to-end, and fully digital one-stop companion-style wealth planning.
- The Bank has introduced an asset allocation function that provides tailored asset plans for customers. This function enables wealth management advisors to allocate clients’ assets digitally and systematically and serves as a digital tool for wealth management advisors to enhance marketing and better serve clients.
- The Bank has introduced remote video services and a same-screen guidance function. Customers can initiate remote video processes through the mobile banking app, with same-screen guidance available for transfers. Services such as withdrawal PIN reset, debit card replacement, and customer information updates can now be processed via online video links. They address issues for customers unable to visit the site or unfamiliar with mobile banking, thereby expanding the coverage of online services.
- The Bank has introduced an intelligent search function, which supports fuzzy search, pinyin search, homophone search, and synonym (or near-synonym) search on the mobile banking app. It allows users to search across five categories: functions, products, promotions, information, and sites. The function recommends potentially relevant content based on user behavior, calculates mobile banking search data to generate a trending list, and provides direct links to heated search keywords, keyword rankings, and associated categories.

Section IX Data Sorting, Validation and Protection

The Bank has been improving its data compliance and governance system, and refining the organizational structure to ensure compliance throughout the entire process of data production, reporting, and usage. As a result, its data quality control capabilities have been enhanced.

I. Data Security Laws and Regulations

The Bank has released *SHRCB Data Security Management Procedures* and other institutional documents based on the *Data Security Law of the People's Republic of China*, the *Financial Data Security — Security Specification of Data Life Cycle (JR/T0223-2021)*, and related regulatory requirements. It has created a bank-wide data security management organization and security grading standards. Each business department determines the security level of data within its domain according to these grading standards. The Bank has broken down security policies and standards across the data lifecycle, including collection, deletion, and destruction. The aim is to strengthen its data security management, protect customer privacy, reduce data breach risks, and ensure the confidentiality, integrity, and availability of data.

In accordance with national data classification regulations, the Bank has classified our data security into four grades based on the impact of data breaches on affected parties and the severity of the impact. It has also clearly defined security policies and standards for data at different security grades in scenarios such as data collection, transmission, storage, usage, deletion, and destruction.

II. Data Quality Validation

In accordance with regulatory requirements and internal arrangements, the Bank advances various data governance initiatives with full steam ahead. Leveraging green finance standardization, it has been enhancing data standard management to continually improve the quality of green credit data.

With a firm commitment to green finance development strategy, and in alignment with external regulatory requirements such as the *Notice of the People's*

Bank of China on Revising the Special Statistical System for Green Loans (YF [2019] No. 326) and the *Notice of the Shanghai Banking and Insurance Regulatory Office on Relevant Work of Green Financing Statistical System (HYBJBT [2020] No. 87)*, the Bank spares no effort into creating standard systems. It enforces and promotes various standards including national standards and industry standards, and devise internal standards such as green credit classification, to standardize and normalize data accordingly.

Case study: Intensifying green finance data inspections

To improve the quality management mechanism of green finance data and continuously enhance the quality of green credit data at the source, the Bank conducted a comprehensive green credit data inspection in 2024. By combining full-scale checks of large-amount contracts with sampling checks of small and medium-amount contracts, it intensified post-loan management, strengthened green credit data governance, and promoted the high-quality development of green finance. Alongside the special inspection, the Bank also completed a self-assessment of green finance data quality for 2024, further enhancing the overall quality of green finance data.

The Bank identified, analyzed, and resolved issues during the inspection. It has further improved its institutional framework by formulating the *SHRCB Detailed Rules on the Implementation of Green Credit Certification*, which refines the green credit certification process, standardizes green credit management, and improves the quality of green credit data. Additionally, the Bank has advanced system digitalization and enabled machine + manual controls for green credit certification with the intelligent recognition model in the green finance system. In 2024, the green certification process was seamlessly integrated into all business systems. This move significantly enhances efficiency and user-friendliness, facilitates green credit classification and certification, and reduces the burden on frontline staff. It is a case of digital empowerment for the orderly and high-quality development of green finance. The Bank has also enriched its case library. It summarized supporting materials required for typical green credit classifications based on actual business cases. This initiative provides guidance for frontline staff in information collection, improves business processing convenience, and strengthens green credit data quality management.

Case study: Training on enhancing green credit data quality

In October 2024, the Bank thoroughly explained the newly formulated *SHRCB Detailed Rules on the Implementation of Green Credit Certification* to its branches and emphasized the importance of green credit data accuracy, instilling a correct perspective on green credit data among the branches. The *Detailed Rules* define the criteria and procedures for green credit certification and provide standardized guidelines for data entry and classification across branches. This policy effectively mitigates subjective and arbitrary data entry, thus improving data accuracy and consistency. The training empowered frontline staff to better understand the significance of green credit data, effectively enhanced data quality, and provided robust data support for the Bank's green finance business development.

III. Customer Privacy Protection

To protect personal information, the Bank has developed several regulations, including the *SHRCB Procedure on the Protection of Personal Customer Information*, *SHRCB Policy on the Management of Personal Information Protection*, and *SHRCB Detailed Rules on the Implementation of Personal Customer Information Protection Impact Assessment*. These policies apply to all business lines and branches of the Bank and specify requirements for every stage of the personal information processing lifecycle, including the collection, use, processing, provision, and disclosure of consumer financial information. Additionally, they set out provisions on personal information protection impact assessments and approval processes, as well as emergency response procedures for personal information incidents.

IV. Data Security Emergency Plan

SHRCB Special Emergency Plan for Cybersecurity Incidents has been released to ensure swift and effective response in the event of cybersecurity incidents. To maintain the timeliness and adaptability of the emergency plans, the Bank regularly evaluates and inspects the emergency plan to ensure its timeliness and applicability. For any issues identified, timely amendments will be made to keep the plan aligned with the latest threat landscape and technological developments.

The Bank organizes emergency drills in accordance with the emergency drill plan and enhances emergency response procedures accordingly. Regular cybersecurity emergency drills and routine phishing email exercises are conducted in

the Bank. Simulations of real-world cyberattack scenarios are used to assess employees' response capabilities and cybersecurity awareness during actual operations. With the production data backup recovery verification plan in place, the Bank randomly samples and recovers production data backup media to ensure the integrity and availability of backup data.

To ensure data integrity and availability, the Bank has established a production data backup and recovery verification plan and conducts periodic sample recovery tests on backup media. Additionally, the Bank has issued the *SHRCB Data Emergency Management Procedure (Trial)*, which defines the responsibilities of each unit in data emergency management and standardizes data emergency preparedness, drills, activation, and response procedures.

Section X Green Finance Innovation and Research Achievements

I. Digital Transformation

Embracing the concept of the digital economy, the Bank continuously explores the path of digital transformation driven by both business and data. Focusing on core application scenarios such as management systems, transaction systems, and operational systems, it uses data applications to empower business development and advance process optimization and operational efficiency.

1. Management system

To accelerate the digital transformation of green finance, the Bank is advancing the management systems for green finance business. The system comprises core modules for intelligent identification of green assets, calculation of environmental benefits, and statistical queries. It is designed to provide the Bank with accurate tools for identifying green assets, thereby ensuring compliance with regulatory requirements for green credit business.

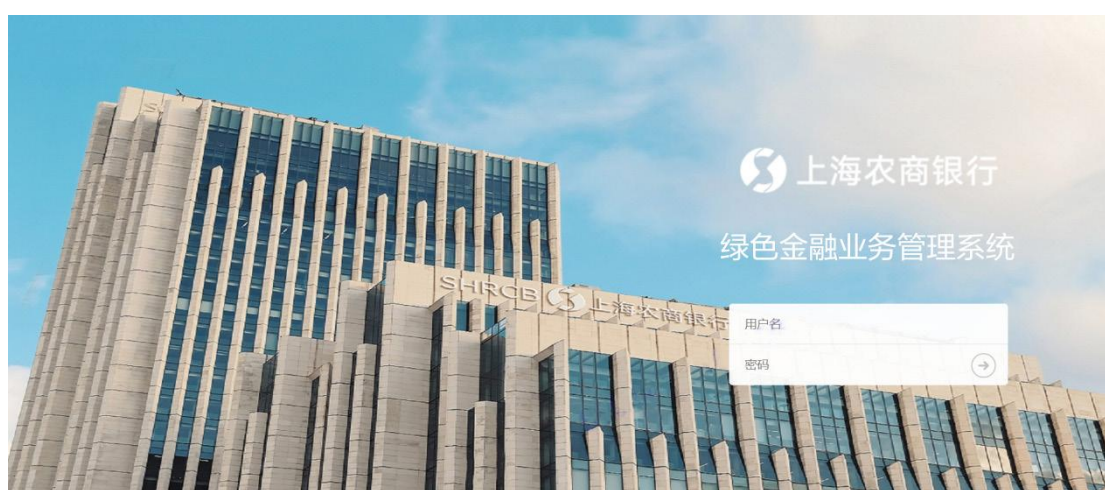
This system enables online certification for green credit at the Bank with significantly improved accuracy of green identification as well as scientific and precise data management and reporting. Since its launch, the system has not only greatly enhanced the efficiency and accuracy of green finance identification during business processes but also laid a solid foundation for the collection, calculation, and verification of green finance data.

To further optimize the system, the Bank has deepened its integration into core business systems, including the corporate credit system, personal loan system, and microcredit system, embedding a green certification process and enabling synchronization of green data. Account managers can now initiate green certification, calculate environmental benefits, and utilize auxiliary tools directly during the loan processing stage in each business system without switching. Additionally, they can conveniently access information such as green loan ledgers and contract ledgers, which significantly enhances both operational efficiency and user experience.

At the technical level, the Bank has redesigned the architecture of the green finance business system, defining data exchange interfaces between systems to ensure

seamless integration with upstream business systems. Additionally, the Bank has introduced artificial intelligence technology to enable intelligent identification of green business cases, rapid calculation of environmental benefits, automated calculation of regulatory reporting data, and visualized presentation of green finance. These enhancements have further improved management efficiency and decision-making quality.

Furthermore, the online operation of the system has accumulated a wealth of green business data for the Bank, laying a solid data foundation for the future expansion of its green finance business. Overall, the development and application of the green finance business system have strongly propelled the rapid growth of the Bank's green finance business.



SHRCB green finance business management system

2. Transaction system

As an active player in carbon market development, the Bank catches the opportunities to collaborate with the Shanghai United Asset and Equity Exchange and the Shanghai Environment and Energy Exchange to provide comprehensive services for carbon emission allowance trading.

The Bank has signed a strategic cooperation framework agreement with the Shanghai United Assets and Equity Exchange (SUAEE) and the Shanghai Environment and Energy Exchange. According to the agreement terms, the Bank intends to establish long-term and stable cooperation mechanisms with markets covering various factors, such as the SUAEE, the Environment and Energy Exchange, the Shanghai Agricultural Assets & Equity Exchange, and the Shanghai Equity Exchange. The cooperation will focus on asset transactions, innovation of financial products, and expansion of market functions, particularly exploring new paths in “dual carbon”-related areas. The Bank has also signed a *Bank Cooperation Agreement*

on Carbon Emission Trading Settlement with the Shanghai Environment and Energy Exchange for joint efforts to create a carbon emission trading clearing system for the exchange.

In 2024, the Bank did an active job in developing the carbon emission trading system. The system was officially launched and put into operation during the year, facilitating services such as account opening, contract signing, withdrawals, deposits, inquiries, and reconciliation related to carbon emission trading funds.

3. Operational system

The Bank strengthens its green operational management by continuously upgrading its energy management platform called Xin Project. The platform enables real-time monitoring of air quality and energy consumption at sites, timely detection of peaks and anomalies in energy consumption such as air conditioning, lighting, and special electrical usage, collection and analysis of various monitoring data to help take sound energy-saving and water-saving measures, thereby improving energy efficiency. Xin Project platform will be able to predict equipment failures and control equipment operation status, automate maintenance, inspection, warranty, and other tasks, thereby reducing operating costs and enhancing the level of green and low-carbon management at Bank sites.



Xin Project energy management platform

II. Prospective Research

Through the regular communication mechanisms with regulatory authorities,

industry associations, research institutions, and other stakeholders, and with a focus on key issues such as green finance and financial transformation, the Bank actively participate in research projects in the field of green finance as a way to contribute the SHRCB wisdom and insights and explore the latest trends and heated topics in green finance.

➤ ***An Exploratory Study on the Construction and Application of an ESG Evaluation System for Commercial Bank Clients***

This report draws extensively on the experiences of mainstream domestic and international ESG evaluation systems and explores the construction of a localized ESG evaluation model using public external data and third-party supplier data. Taking micro and small enterprises and bond issuers as examples, the study analyzes and assesses the rating results to explore how ESG evaluation outcomes can be applied in the credit process. The report also proposes policy recommendations targeting challenges in the model's development and application. Finally, the research team offers a preliminary plan for constructing the Bank's ESG evaluation system based on the Bank's credit industry distribution, business scale, and data foundation, recommending a phased and step-by-step approach to its construction and application.

➤ ***A Strategic Study on Building a Sustainable Development System for Green Finance***

This report provides an in-depth exploration of strategies for commercial banks to develop green credit, covering a wide range of aspects including green finance policy review, market overview, industry analysis, current challenges, future outlook, and optimization recommendations. First, it systematically reviews China's green development policies, including the top-level design and measures at the industry level and in the financial sector. Then, from the perspective of green credit, it analyzes the current status of the green credit market within China's banking industry and summarizes best practices from peer institutions. From an industrial perspective, the report conducts a detailed analysis of industries undergoing green and low-carbon transition, with a special focus on the green sector layout in Shanghai's plan during the 14th Five-Year Plan. Next, taking SHRCB as an example, the report examines its current conditions and existing issues in green credit, including its shortcomings in governance structure, policy systems, product innovation, incentive mechanisms, and

data quality. Finally, based on a comprehensive analysis of national industrial and financial policies, peer practices, Shanghai's industrial landscape, and the Bank's current conditions and gaps in green credit, the report offers strategic recommendations for the Bank to advance green credit. The aim of this study is to provide valuable insights and references to support the rapid and high-quality development of the Bank's green credit business.

➤ ***Recommendations on Exploring the Coordination and Interplay of “Meteorology x Finance” to Support High-Quality Economic and Social Development***

This article explores pathways for the coordination and interplay of “meteorology x finance” to support high-quality economic and social development. According to the article, broader meteorological finance refers to the use of meteorological data to identify, assess, and manage weather-related risks in financial activities, as well as to develop relevant financial products and services. In recent years, China has continuously improved its meteorological finance policies, and relevant financial products, such as weather indices, weather insurance, and weather derivatives, have been put into practice. They are primarily applied in areas such as business innovation, risk management, and asset allocation. However, the field as a whole remains in an unexplored realm with numerous challenges. The article recommends that financial institutions, including banks, actively explore financing needs related to meteorological finance, strengthen climate-related risk management, and enhance innovation capacity in meteorological research. These efforts would boost meteorological finance and contribute to the high-quality transition of the economy and society.

➤ ***Research on Practices and Optimization Paths for Developing Green Finance by Constructing Green Industrial Parks***

Green industrial parks are a relatively underexplored area in green finance services. The Bank completed a research project titled *Research on Practices and Optimization Paths for Developing Green Finance by Construction Green Industrial Parks*. It explores exclusive integrated financial service solutions tailored to green industrial parks and identifies and compiles lists of enterprises related to national-level and Yangtze River Delta provincial/municipal-level green industrial parks, green

factories, green supply chains, and green products, providing practical references for businesses in their marketing and service activities.

The research outcome has been included in the *Outstanding Development Research Outcomes in China's Banking Industry (2024)*, selected by the China Banking Association.

➤ ***Reflections on the Development of Transition Finance by the Bank***

The Bank conducted prospective research on transition finance in line with the *Shanghai Transition Finance Catalogue (Trial)* issued by the Shanghai Municipality and the Bank's operational planning and completed *Reflections on the Development of Transition Finance by the Bank*. The study reviews the current landscape of transition finance both domestically and internationally, including regulatory policies, standard-setting, and service cases. It then offers outlooks on future development from the perspectives of transition standard-setting, information disclosure, products and tools, and incentive policies. To conclude, the study proposes strategies for the Bank's future development as a reference for advancing its transition finance business.

➤ ***Practices and Exploration of Green Finance Management at Small and Medium-Sized Banks***

This report aims to outline the development trajectory of green finance against the backdrop of global climate change and sustainable development. It analyzes the Bank's practices and exploration in the field of green finance, including closely following national policies, strengthening internal management, and increasing green credit issuance, among other initiatives. At the same time, it acknowledges the difficulties and challenges in the development of green finance. Based on both industry trends and the Bank's actual situation, the report offers practical and actionable recommendations and explores the driving forces behind the high-quality and sustainable development of green finance. The aim is to support the Bank in making steady progress in the green finance sector and to contribute more significantly to the green transition of the economy and society.

➤ ***ESG Practice Guide for the Banking Industry***

This report summarizes the Bank's experience and achievements in ESG practices. The *Guide* comprehensively covers ESG-related concepts, ESG

management frameworks for banking institutions, identification of material issues, information disclosure standards, and mechanisms for exchanges and collaboration. It fully reflects regulatory policy requirements, considers the concerns of market investors, and aligns with the current ESG practices among Chinese banking institutions, offering valuable reference for banking institutions to enhance ESG performance. In addition, the report outlines specific practices and key evaluation points across three dimensions: environmental, social, and governance, providing useful guidance for banking institutions to establish scientific ESG management frameworks and standardize their information disclosure.

➤ ***Frontier Exploration of ESG Practices of Commercial Banks***

This article explores the current status, challenges, and future directions of China's commercial banks in advancing ESG practices under the guidance of the new development philosophy. It points out the significant progress made by China's commercial banks in ESG practices, including the continuous growth of green credit and strong overall ESG ratings, while also acknowledging issues such as limited product diversity, low participation from small and medium-sized banks, and insufficient standardization in information disclosure. Commercial banks should establish ESG evaluation systems for clients, expand ESG-linked credit products, broaden the scope of green finance, advance transition finance, and actively participate in building the ESG ecosystem. Such efforts would enhance the ESG performance of client enterprises, support high-quality and sustainable economic and social development, and contribute financial strength toward achieving the “dual carbon” goals.

➤ ***Guidelines for the Preparation of Corporate Environmental, Social and Governance Reports***

The guidelines were developed under the leadership of the Shanghai Federation of Industrial Economics, with contributions from experts across multiple fields. It aims to provide enterprises with concrete and detailed guidance for preparing ESG reports. SHRCB, as the only participating bank in the compilation, contributes to building a green, environmentally friendly, and sustainable financial ecosystem. The Guidelines define the content framework for ESG reports, including specific indicators and disclosure requirements across environmental, social, and governance

dimensions. It supports ESG information disclosure for organizations of all sizes, with an emphasis on ensuring diversity, accessibility, and alignment with international standards. By following the guidelines, enterprises can prepare ESG reports in a scientific and standardized manner, offer a comprehensive and accurate portrayal of their performance in environmental, social, and governance aspects, and thereby advance their sustainable development.

➤ ***Implementation Procedures for Green Credit Certification***

With the continuous advancement of green finance and the ongoing refinement of standards for financing tools such as green credit, the Bank has expanded the scale and scope of its green credit offerings. To promote the high-quality development of green credit and to position itself as the greenest bank in the Yangtze River Delta, the Bank has formulated internal implementation standards for green credit certification in accordance with the *Directives for Standardization—Part 1: Rules for the Structure and Drafting of Standardizing Documents*. The *Procedures* aim to standardize certification and classification criteria for green credit across the Bank, thereby better preventing risks in practical operations and enhancing green finance data governance capabilities. By ensuring data quality at the source, the policy support the high-quality development of the Bank's green and low-carbon transition business. Additionally, it facilitates external stakeholders' supervision of the Bank's green credit standards and classification.

Section XI Additional Environmental Information

The Bank exerts greater effort into internal promotion of green finance to enhance the awareness of sustainable development among all staff members. It engages in exchanges and cooperation within the green finance community, where advanced practices and achievements in green finance development are explored and green intelligence is pooled. The Bank maintains promoting its green finance brand and actively participates in various exhibitions, expos, and forums related to green finance, contributing its expertise in this regard.

I. Internal Communication

The Bank cultivates awareness of sustainability among employees through various training sessions, lectures, and thematic events, aiming to enhance their capabilities in green initiatives. The Bank reinforces internal promotion of green operations, and encourages employees to lead by example and fully embrace the low-carbon practices in both work and life.

In 2024, the Bank completed comprehensive training for all branches and sub-branches in the first half of the year, along with off-line specialized training for several branches and sub-branches. By the end of October, the Bank completed specialized training for risk management department managers and green finance specialists at branches and sub-branches, focusing on the detailed rules for the implementation of green credit certification and typical case studies. In total, 32 training sessions were held for over 1,800 participants.

The Bank has compiled issues identified during routine green certification and analyzed them for its branches. Additionally, it addressed the challenges and questions faced by branches during the implementation of the detailed rules and green credit certification. By combining online and offline sessions and integrating policies with business operations, the Bank has standardized procedures across the organization. These efforts have strengthened primary-level staff's understanding and awareness of green credit, improved certification efficiency and accuracy, and supported the healthy development of green finance.

Event: Jing'an sub-branch holds specialized training on green certification

In October 2024, the Jing'an sub-branch conducted specialized training on green credit certification to enhance account managers' understanding of green finance and improve their certification accuracy. The training covered an interpretation of the *SHRCB Detailed Rules on the Implementation of Green Credit Certification*, with detailed explanations of certification authority, procedures, system changes, and operational requirements during the transition period. The session also included case studies to illustrate common issues, misconceptions, and identification techniques in line with the Jing'an sub-branch's current green finance business and relevant documents, to help account managers better identify potential business opportunities and classify them correctly.

In this training, the Jing'an sub-branch studied the guiding principles from the Bank's green finance work conference, understood the strategic importance of green finance and the critical role of data quality, and offered suggestions for future work.





Feature: Establishing a Green Finance Research Task Force to Advance Academic Progress

In 2024, the Bank established a dedicated Green Finance Academic Research Task Force (“Green Finance Task Force”) to further implement the bank-wide management directive of “implementation, management and internal strength,” progress the “Task of Green Finance,” and providing strong support for the Bank’s postdoctoral research. The task force follows the principles of voluntary employee participation, inter-departmental collaboration, use of off-duty time, and coordinated leadership guidance. Focused research activities are regularly organized on industry trends in green finance, paths to digital transformation, and innovative management and business practices. The task force places strong emphasis on the practical implementation and real-world applicability of research outcomes. By establishing the task force, the Bank aims to further deepen academic research in the field of green finance culture, provide solid support for the healthy development of green finance business operations, and lay a strong foundation for building and cultivating a green finance workforce.

Event: Research on the impact of ESG on the sustainable development of commercial banks

In 2024, the Bank established a partnership with the Huangpu District

Postdoctoral Innovation Research Center and introduced the first postdoctoral researcher, whose research focused on green finance and ESG management. In collaboration with the postdoctoral research, the Green Finance Task Force explored the development of an ESG evaluation system, the enhancement of credit assessment and risk control processes, and the expansion of the Bank's green finance business spectrum. The research also provided valuable insights for strengthening the Bank's ESG capabilities. Focusing on ESG rating upgrades from authoritative rating agencies while taking into account data collection, regulatory feedback, and internal assessments, the Bank identified phased ESG priorities and formulated an ESG rating improvement plan. These efforts helped to enhance the Bank's sustainable development capabilities and brought meaningful impact on its strategic planning and business expansion.

Event: Sharing challenges in and pathways to developing transition finance

At an event of the Green Finance Task Force, the Bank analyzed and discussed the challenges and pathways to developing transition finance, drawing on the experiences of developed countries while aligning with domestic business realities.

Currently, transition finance practices in China face several obstacles. First, there is a lack of authoritative national-level definitions and standards for transition finance. Second, transition finance requires increased financial support for high-emitting enterprises' transition activities, which conflicts with current regulatory policies aimed at reducing lending to “two-high (high-pollution and high-energy-consumption) and overcapacity” industries. Third, there is an absence of effective incentive mechanisms.

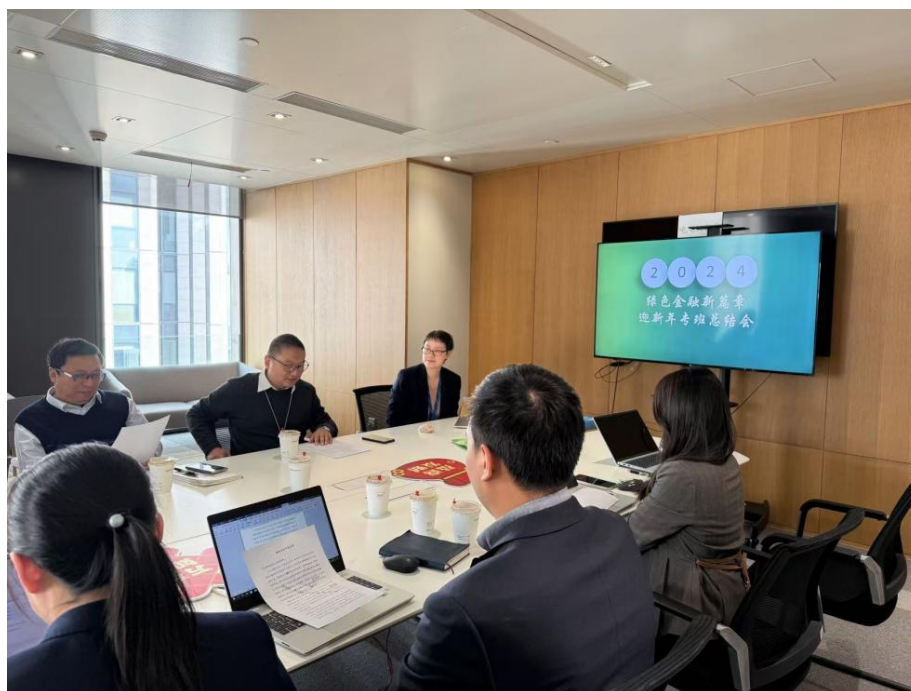
Based on the business reality at financial institutions, the following recommendations for transition finance were proposed. First, authoritative national-level standards should be introduced for defining transition finance as soon as possible. Second, the People's Bank of China and the National Financial Regulatory Administration should coordinate to shift lending restrictions over “two-high and overcapacity” industries to lending restrictions over “two-high and overcapacity” activities and to “encourage” rather than “restrict” loans to transition activities in line with the transition catalog. Third, the scope of the carbon-reduction credit facility should be expanded to include eligible transition finance business practices, and local governments should be encouraged to support transition finance through interest subsidies, guarantees, and other incentive measures.

Event: 2024 annual summary of the Green Finance Task Force

In December 2024, members of the Green Finance Task Force gathered with representatives from branches and sub-branches to review and share the Task Force's notable achievements over the past year. Since its establishment, the Task Force has operated with strong collaboration across the Bank's departments, branches, and sub-branches and organized diverse training sessions, including internal study sessions, expert-led workshops, and field research activities. The training covered a wide range of topics such as green finance knowledge popularization, policy interpretation, explanation of cutting-edge concepts, and transition finance-themed sharing. These efforts significantly enhanced the team's professional expertise in green finance.

Throughout 2024, the Green Finance Task Force held multiple training sessions, engaging nearly 200 participants. Through sustained learning and effort, the Task Force made remarkable progress in green finance and produced several high-quality interim research reports, including *An Exploratory Study on the Construction and Application of an ESG Evaluation System for Commercial Bank Clients*.

Looking ahead, the Task Force will explore more diversified activity formats and expand the outreach of green finance education. Members will continue leveraging their specialized expertise to promote integrated development with green finance, especially in the areas of industry research, digital transformation, and managerial innovation.



II. External Exchange

In 2024, the Bank actively participated in conferences related to the Principles for Responsible Banking (PRB) and contributed insights. It also engaged in external exchanges and collaborations in green finance areas such as carbon emission accounting. These efforts allowed the Bank to stay aligned with international trends and stay abreast of the latest trends and dynamics in green development.

Event: Participating in UNDP Roundtable to Drawing a new blueprint for international cooperation in green finance through exchanges with UNDP

In October 2024, a delegation led by the Administrator of the United Nations Development Programme (UNDP) visited Shanghai Data Group. As part of the visit, SHRCB attended a seminar on data empowering the development of green finance. The event strengthened the Bank's collaboration and communication with the UNDP, Shanghai Data Group, and other stakeholders, joined forces to promote international cooperation in green finance, and contributed to the green and low-carbon transition of the economy and society.



Event: GF60 and PCAF visit SHRCB to explore new paths for green finance development

The Green Finance Forum of 60 (GF60), together with its international strategic partner, the Partnership for Carbon Accounting Financials (PCAF), paid a visit to SHRCB. Focusing on the development and improvement of green finance service systems, the two sides engaged in in-depth discussions on green finance development strategies, environmental information disclosure by financial institutions, and climate-related risk management at commercial banks. Representatives from the Bank

presented the Bank's latest progress and practices in green finance. GF60 and PCAF representatives shared green finance trends and market opportunities in a global vision and expressed their expectations for broader cooperation with the Bank in the future.



Event: “Xin Xin’ Heart-to-Heart” Youth Exchange Green Finance Session

In April 2024, the Bank collaborated with SAIC Motor to hold the second green-themed session of the “Xin Xin’ Heart-to-Heart Youth Exchange.”

During the discussion, the Bank emphasized green finance as a key strategic priority for the Bank and encouraged young people to pioneer in promoting green practices, contributing their talents and energy to green development. That day, participants visited the SAIC Motor R&D Innovation Headquarters and saw new vehicle models, followed by a tour of the Bank's history exhibition hall. From a micro-lecture, participants learned key concepts of green finance, its current status, and the collaborative efforts between the Bank and SAIC Motor in the green sector. Young representatives from both organizations exchanged ideas on “how young employees can contribute to the financial sector's green transition.”



Feature: Strengthening International Exchanges and Cooperation under the PRB Framework to Promote Global Sustainable Development

In 2024, the Bank made significant progress under the framework of the Principles for Responsible Banking (PRB). As the first PRB signatory in Shanghai, the Bank actively participated in exchanges organized by the United Nations Environment Programme Finance Initiative (UNEP FI) and published PRB reports for two consecutive years to showcase its achievements in ESG practices. At the UNEP FI Global Roundtable, the Bank's representatives shared insights and experiences in sustainable development, further enhancing its international credibility. In the future, the Bank will continue to deepen global cooperation, promote best practices, and actively contribute to propelling global sustainable development.

Event: Hosting a UNEP FI delegation

In August 2024, the Bank hosted a delegation led by the Asia-Pacific Lead of the UNEP FI. During the meeting, the two parties engaged in in-depth discussions on the strategic development of UNEP FI and the PRB in China, as well as green finance and inclusive finance. As the first PRB signatory in Shanghai, the Bank has published PRB reports for two consecutive years to disclose its achievements in ESG practices

to international investors. In the future, the Bank intends to leverage the PRB platform to deepen international cooperation, promote best practices, and further enhance its global influence.



Event: Participating in the Global Roundtable upon invitation from UNEP FI and delivering a thematic presentation

In December 2024, the 18th UNEP FI Global Roundtable was held in Geneva, Switzerland. As a member of the Chinese delegation, the Bank presented how the Shanghai-based financial state-owned enterprise implemented the national “dual carbon” strategy and practiced sustainable development principles, as well as its initiatives and achievements in strengthening green credit support, innovating green financial products and services, and promoting the orderly development of green finance and transition finance. It was the first time that the Bank shared insights into sustainable development at an international conference.

By participating in the UNEP FI Global Roundtable, the Bank showcased its practices and achievements in sustainable development. Moreover, as a PRB signatory, the Bank interacts with global partners by releasing self-assessment reports, further enhancing its international recognition in green finance and inclusive finance. In the future, the Bank will further leverage the global platform of UNEP FI to amplify the impact of its sustainability practices and contribute to global sustainable development.



III. Branding Effort

Leveraging major international and domestic events in the green sector as opportunities, the Bank has highlighted its commitment to ecological sustainability, as a part of its effort to promote its green finance brand and showcase its image in green and low-carbon initiatives.

Event: Participating in the Shanghai International Carbon Neutrality Expo

In June 2024, the second Shanghai International Carbon Neutrality Expo in Technologies, Products and Achievements was held at the Shanghai New International Expo Center. The Bank set up an exhibition booth under the theme “Safeguarding the Green Finance Tree, Pursuing a Green Finance Path.” The “trunk” was surrounded by a wide array of financial products in green finance, transition finance, green leasing, and green mobility, collectively branching out to turn green into wealth. In addition, the Bank established a Green Finance Milestones Display Zone, an “Initiatives in Action” Interactive Experience Zone, a Presentation and Release Zone, and a Client Product Display Zone. These sections showcased the Bank’s recent efforts to “create the greenest bank in the Yangtze River Delta,” advance ecological and environmental protection, fulfill economic, social, and environmental responsibilities, and empower social governance with inclusive finance. During the Expo, the Bank also released the *SHRCB Transition Finance Service Plan*

and initiated a bank-insurer partnership with China Pacific Insurance, further enhancing the “green finance + insurance” cross-sector collaboration. A “Mental Home” Green Lecture was hosted for individual visitors and clients, at which an expert from the Academy of Agricultural Sciences was invited to share knowledge on edible urban landscapes and home greenery. Additionally, a Green Leasing Lecture was held, and the Bank’s first ESG report was released.



Section XII Future Outlook

Guided by the national “dual carbon” goals, green finance has become a key lever for the banking industry to serve the real economy and fulfill its social responsibilities. Drawing on a profound understanding of the contemporary significance of Xi Jinping Thought on Ecological Civilization, we will fully integrate the green development philosophy into our strategic planning, use finance to nourish ecological civilization, and support a comprehensive green and low-carbon transition of the economy and society.

The first focal point is the leading role of management systems and risk control reinforcements. We will continue to enhance top-level design and improve the green finance institutional framework. We will accelerate the pace of digital and intelligent transformation and proactively leverage technologies such as big data and AI to upgrade systems to empower business development and management enhancement. At the same time, we will deepen the application of climate-related risk management tools and embed ESG principles throughout the investment and financing process, driving the shift in green finance from “policy-driven” to “internally motivated.”

The second focal point is business innovation as the driving force and integration with scenarios. We will focus on key areas such as clean energy and the circular economy to continuously improve our diversified product matrix and explore transition finance instruments and carbon finance-related services. We will deepen regional coordination and leverage the strategic advantages of the Yangtze River Delta to develop a distinctive model that closely integrates green industries with financial services.

The third focal point is green operational practices and ecological collaboration. We will advance our energy conservation and emission reduction agenda on all fronts, continuously enhance the carbon neutrality value of our operations, and actively promote paperless offices and green site renovation. These efforts will facilitate the value conversion of “lucid waters and lush mountains” into “invaluable assets.”

Looking ahead, we will remain committed to the strategic goal of “creating the greenest bank in the Yangtze River Delta.” By optimizing our management systems, upgrading our business models, and enhancing operational efficiency, we aim to achieve an organic integration of economic and environmental benefits. We will contribute financial strength to the cultivation of new quality productive forces and the building of a Beautiful China, striving to write a chapter featuring modern finance

Appendices

Appendix 1: Basis for quantitative estimation of environmental impacts

1. Estimation of emissions of Investing and Financing Activities

SHRCB estimates the carbon emissions of its investment and financing activities based on relevant documents such as the *Guidelines for Carbon Accounting for Financial Institutions* (Trial) (YBF [2021] No. 119), the Partnership for Carbon Accounting Financials (PCAF), and other related guidelines, with extensive reference to Annex the *Guidelines for Calculating Energy Conservation and Emission Reduction for Green Credit Projects* attached to the *Notice on Work of Green Financing Statistical System* (HYBJBT [2020] No. 87), *General Guideline of the Greenhouse Gas Emissions Accounting and Reporting for Industrial Enterprises* (GB/T 32150), the *General Technical Rules for Measurement and Verification of Energy Savings* (GB/T 32045), and *Technical Specification at the Project Level for Assessment of Greenhouse Gas Emission Reductions—General Requirements* (GB/T 33760), and given the pre-loan checks, feasibility studies, energy assessment reports, and environmental impact assessment reports, among other relevant materials.

Specific formula:

$$\text{Carbon emission of loan} = \sum \text{Monthly average balance of loan to enterprise} \times \frac{\text{Enterprise's annual emission}}{\text{Enterprise's total assets}}$$

Where:

1. In terms of data selection, priority is given to data voluntarily disclosed by companies. Where carbon emission data is not disclosed by companies or the data is incomplete, model-calculated data is utilized.

2. SHRCB follows the guidelines of the Partnership for Carbon Accounting Financials (PCAF). For a listed company, the total assets are determined by its enterprise value, i.e., sum of the capitalization and total liabilities. For a non-listed company, the total assets are determined by its equity and total debts.

3. As of the report release, some of our clients have not yet published their 2024 ESG reports or corporate social responsibility reports. As such, we were unable to obtain the carbon emissions and total assets data for these clients for the year 2024. Therefore, in calculating the 2023 asset carbon emissions, we followed the recommendations of PCAF by utilizing the most recently available data. For some companies, this required using the carbon emissions from 2023 divided by the total assets for 2024 as the most recent available carbon intensity data for calculation.

2. Estimation of Environmental Benefits of Green Investment, Investing and Crediting

2.1 Estimation of environmental benefits of green credit

In accordance with the requirements outlined in the Annex the *Guidelines for Calculating Energy Conservation and Emission Reduction for Green Credit Projects* attached to the *Notice on Work of Green Financing Statistical System* (HYBJBT [2020] No. 87) as well as other relevant documents, the Bank calculates the environmental benefits generated by on-balance sheet green project loans. Primary data sources include approval documents for green credit projects, energy-saving reports, feasibility studies, environmental impact assessment reports, and project measurement data. The formula is:

$$\begin{aligned} & \text{Annual carbon emission reduction supported by the green project loan} \\ &= \sum \text{annual reduction after green project completion} \\ & \times \frac{\text{Monthly balance of green project loan}}{\text{Total investment into the green projec}} \end{aligned}$$

Where, the annual emission reduction post-construction of the green project is calculated with the following formula, with a renewable energy generation project as an example:

(1) Reduction in carbon dioxide emissions

$$CO_2 = W_g \times \alpha_i + Q_g \times b_g \times 10^3 \times 2.21$$

The formula calculates the reduction in carbon dioxide emissions by combining the renewable energy electricity generation with the baseline carbon dioxide emission factor of the regional electricity grid, as well as the heat supply. where:

CO_2 :—The project's carbon emission reduction (tCO₂e);

W_g :—The project's annual electricity supply (MWh);

α_i :—The baseline carbon dioxide emission factor of the regional electricity grid where the project is located (tCO₂e/MWh). According to UNFCCC's Tool to Calculate the Emission Factor for an Electricity System (version 5.0),

$\alpha_i = 75\% \times EF_{grid,OM,y} + 25\% \times EF_{grid,BM,y}$ for wind power and PV projects; for other renewable energy generation projects such as hydropower and biomass generation projects, $\alpha_i = 50\% \times EF_{grid,OM,y} + 50\% \times EF_{grid,BM,y}$.

Q_g :—The project's annual heat supply (MGJ); if only electricity generation is provide without heat supply, Q_g is zero;

b_g :—Average coal consumption for centralized heating boilers nationwide (Kgce/GJ). The default value is 40 Kgce/GJ.

(2) Energy savings

$$E = W_g \times \beta \times 10 + Q_g \times b_g \times 10^3$$

where:

E —Fossil energy consumption substituted annually (tce/y);

W_g —The project's annual electricity supply (GWh/y);

β —National average coal consumption for thermal power generation in the year of project commissioning (Kgce/kWh). According to the 2022 *National Electricity Industry Statistics* released by the National Energy Administration, the standard coal consumption for power plants with a capacity of 6,000 kilowatts and above in 2022 was 0.3015 kgce/kWh.

Q_g :—The project's annual heat supply (MGJ);

b_g : —Average coal consumption for centralized heating boilers nationwide (Kgce/GJ). The default value is 40 Kgce/GJ. The heat supply value is zero if the project does not supply heat.

(3) Reduction in sulfur dioxide emissions

$$SO_2 = W_g * E_{SO_2} * 10^{-2}$$

where:

SO_2 —Annual reduction in sulfur dioxide emissions (t/y);

W_g —The project' substitution of annual electricity generation from thermal plants (GWh/y);

E_{SO_2} —Sulfur dioxide emission by unit electricity generation from thermal power plants, the coefficient is 0.101g/kWh according to *2022 National Electricity Industry Development Report*.

(4) Reduction in nitrogen oxides emissions

$$NO_x = W_g * E_{NO_x} * 10^{-2}$$

where:

NO_x —Annul reduction in nitrogen oxide emissions (t/y);

W_g —The project' substitution of annual electricity generation from thermal plants (GWh/y);

E_{NO_x} —Nitrogen oxide emission by unit electricity generation from thermal power plants, it is 0.152g/kWh according to *2022 National Electricity Industry Development Report*.

(5) Reduction in smoke emissions

$$Smoke = W_g * E_{smoke} * 10^{-2}$$

where:

Smoke- Annul reduction in smoke emissions (t/y);

W_g -- The project' substitution of annual electricity generation from thermal plants (GWh/y);

E_{Smoke} —Smoke emission by unit electricity generation from thermal power plants, it is 0.022g/kWh according to *2022 National Electricity Industry Development Report*.

$$Smoke = W_g * E_{smoke} * 10^{-2}$$

2.2 Estimation of environmental benefits of green bonds

In accordance with the requirements outlined in the Annex the *Guidelines for Calculating Energy Conservation and Emission Reduction for Green Credit Projects* attached to the *Notice on Work of Green Financing Statistical System* (HYBJBT [2020] No. 87) as well as other relevant documents, the Bank calculated the annual carbon emission reduction benefit supported by its investment in green bonds, by considering the carbon emission data supported by the funds raised through green bonds and the proportion of the Bank's investment in green bonds to the total funds raised through these bonds. The formula is:

$$\begin{aligned} & \text{Annual carbon emission reduction supported by green bond investment} \\ &= \frac{\sum \text{annual emission reduction supported by funds raised via green bond}}{\text{face value of green bond investment}} \\ &\times \frac{\text{Total amount raised via green bond}}{\text{Total amount raised via green bond}} \end{aligned}$$

Where

Annual carbon emission reduction supported by green bond investment is from publicly available green bond assessment reports certified by third-party agencies.

3. Estimation of Carbon Emissions of Operating Activities

SHRCB estimates the greenhouse gas emissions of its operating activities based on carbon emission factors for various energy consumption categories, and in accordance with requirements including the *Guidelines for Carbon Accounting for Financial Institutions* (Trial) (YBF [2021] No. 119) and *General Guideline of the Greenhouse Gas Emissions Accounting and Reporting for Industrial Enterprises* (GB/T 32150).

Carbon emissions of operating activities cover scope I, scope II and scope III emissions and their formulas are:

Scope I:

$$E_{\text{Combustion}} = \sum_{i=1}^n (AD_i \times EF_i)$$

where:

$E_{\text{Combustion}}$ —The carbon dioxide emissions generated from the combustion of fossil fuels consumed during the accounting period (tCO₂);

AD_i —The activity data for the i-th type of fuel consumed during the accounting period (GJ);

EF_i —The carbon dioxide emission factor of i-th type of fuel (tCO_2/GJ);

i—The code of the fossil fuel type.

Scope II:

$$E_{\text{Purchased electricity}} = AD_{\text{Purchased electricity}} \times EF_{\text{Electricity}}$$

where:

$E_{\text{Purchased electricity}}$ —The carbon dioxide emissions generated from the electricity purchased (tCO_2);

$AD_{\text{Purchased electricity}}$ —The electricity purchased during the accounting period (MWh);

$EF_{\text{Electricity}}$ —The carbon dioxide emission factor of electricity (tCO_2/MWh);

Scope III:

$$E_{\text{Scope III}} = AD_{\text{Scope III}} \times EF_{\text{Scope III}}$$

where:

$E_{\text{Scope III}}$ —The carbon dioxide emissions generated from scope III activities such as goods purchase, employee commuting, and waste disposal (tCO_2);

$AD_{\text{Scope III}}$ —Activity level for scope III with the unit depending on the specific activity type;

$EF_{\text{Scope III}}$ —Carbon dioxide emission factor for scope III.

Greenhouse gas type	Greenhouse gas source	Basis for calculating the greenhouse gas emission factor
Scope I	Natural gas	<i>Guidelines for Accounting and Reporting Greenhouse Gas Emissions by Public Building Operators (Trial)</i>
	Petroleum	
	Diesel	
Scope II	Electricity	<i>Notice on Management of Greenhouse Gas Emission Reporting by Power Generation Enterprises for the Period 2023-2025 (HBQHH [2023] No.43).</i>
Scope III	Paper	<i>China Greenhouse Gas Emission Coefficient Library for Product Life Cycle (2022)</i>
	Water	
	Kitchen waste	

	Electronic and office supplies	
	Business trips	

Appendix II: Index Catalog of Guidelines for Environmental Information Disclosure of Financial Institutions

Indicators	Index of disclosure content
1.Overview of the year	P7-25
2.Environment-related governance structures of the financial institution	P26-30
3.Environment-related polices and systems	P31-37
4.Environment-related products and services innovation	P38-57
5.Environmental risk management process	P58-60
6.Impacts of environmental factors on the financial institution	P61-69
7.Environmental impacts of the investment and financing activities of the financial institution	P70-75
8.Environmental impacts of operation activities of the financial institution	P76-83
9.Data sorting, verification and protection	P84-87
10.Innovation and research results of green finance	P88-95
11.Other environment-related information	P96-107

Appendix III: Index Catalog of Task Force on Climate-related Financial Disclosures (TCFD)

Indicators	Index of disclosure content
1.Governance	
1.1 Describe the board's oversight of climate-related risks and opportunities.	P26-30
1.2 Describe management's role in assessing and managing climate-related risks and opportunities.	P26-30
2.Strategy	
2.1 Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	P61-67
2.2 Describe the impact of climate related risks and opportunities on the organization's businesses, strategy, and financial planning.	P61-67
2.3 Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	P67-68
3.Risk management	
3.1 Describe the organization's processes for identifying and assessing climate-related risks.	P58-60
3.2 Describe the organization's processes for managing climate-related risks.	P58-60
3.3 Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	P58-60
4.Metrics and targets	

4.1 Disclose the metrics used by the organization to assess climate related risks and opportunities in line with its strategy and risk management process.	P67-68
4.2 Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	P70-75, P76-79
4.3 Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	P70-75, P76-79

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