Annual Report on Bank of China's Transition Bonds

Bank of China's (hereinafter referred to as "BOC") Transition Bonds enables BOC to achieve its decarbonization targets of business strategy by financing and/or refinancing eligible transition projects which are in line with strategic pathways of carbon neutrality goals and strategies of the countries and regions where the projects are located in. As stated in the *Bank of China Limited Transition Bonds Management Statement* (hereinafter referred to as "the Management Statement")[1], we hereby provide Annual Report on BOC's Transition Bonds, disclosing the allocation of the bond proceeds as well as the expected greenhouse gas emission reductions of the Eligible Projects as of 31 December 2021.

Introduction

1. Climate Transition Strategy and Governance

In the course of its development over a century, BOC has always taken social responsibilities seriously. In recent years, BOC has been increasingly playing an active role in China's decarbonization steps towards carbon neutrality and global transition towards low-carbon or zero-carbon. BOC has already embodied green finance into the Bank's overall strategy, and going forward it will further integrate "Green and Low-carbon Finance" into the Bank's overall development strategy.

In 2019, BOC formulated a bank-wide "Bank of China Green Finance Development Plan" (the "Plan") and incorporated the philosophy of advancing Green and Low-carbon Finance into the Bank's "14th Five-Year Development Plan". Based on the Plan, a detailed roadmap has been formulated in various business areas such as Green and Low-carbon credit, green bond underwriting, green bond investment, etc.

BOC continuously strengthens the leadership role of the Board of Directors and the management in Green and Low-carbon Finance business. In order to monitor the implementation of the Plan, the Green Finance Committee (the "Committee") has been established to coordinate the management and decision-making of Green and Low-carbon Finance of the whole group. The Committee is chaired by senior executive members, with departments at the Headquarters serving as permanent members, such as, Credit Management Department, Corporate Finance Department, and Asset and Liability Management Department, etc. The Committee reviews and reports the Bank's Green and Low-carbon Finance progress against the Plan to the Board of Directors regularly, and is responsible for the strategic direction and implementation plan for the year ahead.

The decarbonization targets of BOC's business strategy are in full alignment with China's goals of reaching carbon emissions peak before 2030, and achieving carbon neutrality before 2060.

In order to achieve these targets, as a financial institution and referring to the ICMA Climate Transition Finance

[1] available at http://www.boc.cn/en/investor/ir10/

Handbook (2020) and relevant Chinese policy documents including The Guiding Opinions on Promoting Investment and Financing in Response to Climate Change, firstly, BOC further expands green lending, referring to the Green and Low-carbon transition related technical standards and requirements specified in loan's project report, environmental assessment report, and regulatory approval filings, then further clarifies the Green and Low-carbon transition benchmarking standards in the full working process including credit approval, post-loan management, etc. Secondly, BOC increases credit support in transition projects towards low-carbon or zero-carbon, such as technological transformation of traditional industries. When it comes to the selection of the Green and Low-carbon projects including transition finance, BOC focuses on the domestic steel, cement, electrolytic aluminum and other "two high and one overcapacity" (i.e. high pollution, high energy consumption and overcapacity) industries, and follows the principles of commercialization and sustainability to guide the clients in such industries to achieve their decarbonization targets as per relevant processes and technologies, and maximizing environmental and social benefits, hence actively promoting companies to achieve their own climate transition goals and strategies. Meanwhile, BOC aims to contribute to the realization of the United Nations Sustainable Development Goals (the "Goals"), including but not limited to Goals 7 (Affordable and Clean Energy), Goals 9 (Industry, Innovation and Infrastructure) and Goals 13 (Climate Action).

Additionally, BOC has signed the "Green Investment Principles for the Belt and Road Initiatives" and also serves as the co-chair of the green financial product innovation working group. BOC is in the meanwhile a member of the ICMA Green Bond Principles, Social Bond Principles, and Sustainability Bond Guidelines Advisory Council. BOC will proactively strengthen international cooperation with professional organizations that advocate Green and Low-carbon Finance, to collectively drive the realization of the goals set in the Paris Agreement.

2. Business Model Environmental Materiality

BOC is one of the biggest Chinese state-owned commercial banks and also the Bank with the highest degree of globalization as well as integration in China. It has an extensive business and lending portfolio to clients across various geographies and sectors.

In consideration of China's goals of achieving carbon emission peak before 2030 and carbon neutrality before 2060, BOC believes that the future climate and environmental policies, regulatory and market environment factors will result in more severe challenges faced by traditional industries with high emissions. Therefore, the Bank pays significant attention to transition towards low-carbon or zero-carbon within these industries, and will expand BOC's transition financing to effectively reduce BOC's carbon footprint and carbon risk exposure in credit portfolios.

BOC's Corporate Finance Department, Credit Management Department and Credit Approval Department jointly established the Whitelist for Green and Low-carbon projects to provide differentiated support in pricing, scale, EVA ("Economic Value Add"), and other performance indicators, as well as in resource allocation.

With the ongoing development of relevant climate policies in China and globally, BOC continues to expand the Green and Low-carbon credit business and increase its share within the Bank's overall loan portfolio.

In order to accelerate the further transformation of industry structure of BOC's credit business, BOC has been actively promoting the formulation of credit policies for energy conservation and environmental protection sectors,

and improved the Green and Low-carbon credit policy system this year. Meanwhile, BOC has been expanding the business opportunities on eligible Green and Low-carbon projects in several categories such as municipal sewage treatment, garbage treatment, solid waste treatment, industrial water treatment, flue gas treatment, energy-saving technological transformation, etc.

Going forward, BOC further carries out research on Green and Low-carbon projects in growing industries and traditional industries to increase lending business in these related fields. Meanwhile, BOC has also selected National Green Finance Reform and Innovation Pilot Zones such as Huzhou in Zhejiang Province and Guangzhou in Guangdong Province as key areas, where BOC strengthens research work in local policies, optimizes business authorization system and coordinates with domestic and overseas branches to take advantages of local conditions, as well as to promotes green and transition finance product innovation and create BOC's internal Green and Low-carbon Finance Reform Pilot Branch.

BOC reinforces its business guidance to domestic and overseas branches on Green and Low-carbon Finance. For post-disbursement internal compliance inspections, the Bank focuses on the implementation of green and transition projects, also build environmental indicators into the on-site inspection plan for BOC's corporate finance business lines.

3. Climate Transition Strategy to be Science-based including Targets and Pathways

BOC has been continuously increasing its emphasis on the Green and Low-carbon Finance and progressively increasing credit support for Green and Low-carbon projects. BOC is now researching on engaging qualified external consultants, and in the future BOC will conduct environmental and climate risk stress testing to clearly outline its decarbonization targets and pathway in a science-based approach.

Meanwhile, after engaging external consultants, BOC commits to adopting practical methods and means to review BOC's decarbonization target to make sure that BOC is on the track of effectively supporting the Paris Agreement. BOC also intends to make relevant disclosures on the above, subject to data availability.

4. Implementation Transparency

BOC takes issuing Transition Bonds as a starting point and appoint third party reviewers to verify and certify the proceeds allocation for Transition Bonds related projects and the subsequent environmental impacts. With the concept of Green and Low-carbon Finance progressively being embedded into the Bank's overall business, BOC ensures to enhance information disclosure transparency on a wider range of Green and Low-carbon Finance, including transition finance.

Outstanding BOC Transition Bonds

Transition Bonds	Issue Date	Maturity (year)	Currency	Amount (million)	CNY Equivalent Amount (million)
2021 Transition Bond	2021/1/7	3	USD	500	3,237
	2021/1/7	2	CNY	1,800	1,800

Transition Bonds Details and Proceeds Allocation

Transition Bonds	Alignment with
2021 Transition Bonds were issued in the offshore market through Hongkong Branch in January 2021. The total amount equated to CNY 5,037 million, and net proceeds equated to CNY 5,026.58 million. As of 31 December 2021, all of these net proceeds have been utilized to fund 11 Natural Gas based Cogeneration Projects and 1 Waste Heat Recovery and Power Generation Project at Cement Plant.	Climate Transition Finance

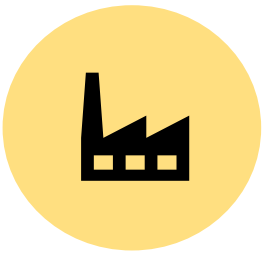
Section breakdown of BOC Transition Portfolio

As of 31 December 2021, the proceeds of BOC Transition Bonds have been allocated to BOC Transition Portfolio, which were split into two sectors, i.e. the Public Utility Industry and Cement Industry. And Natural Gas based Cogeneration Projects of Public Utility Industry take up 92.04%, which is the largest part of the portfolio.

92.04%

Public Utility Industry

Natural Gas Based Cogeneration Projects



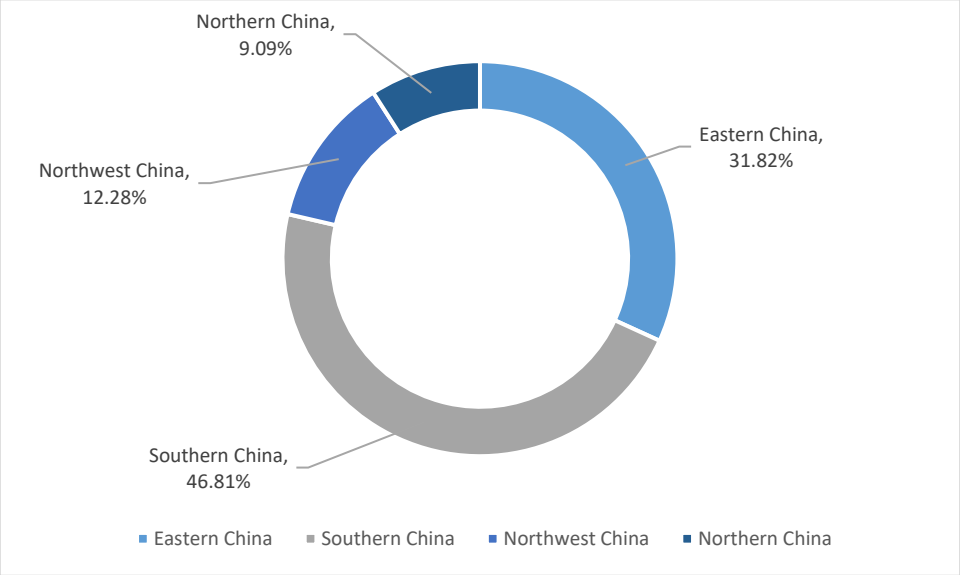
7.96%

Cement Industry

Power Generation Projects at Cement Plants

Geographical breakdown of BOC Transition Portfolio

All of the net proceeds from BOC Transition Bonds have been allocated to the projects in mainland China.



Impact Reporting

The emission reductions
Due to the considerations of confidentiality for our loan clients, the environmental impact results of the transition projects are disclosed on a portfolio basis. For each of the indicators in the table, the project-by-project results include only the pro-rated share (as a percentage of the issuer's share of the total financing) of the total projects' results; these individual pro-rata project impacts are then aggregated to indicate the overall impact of the funded projects in a certain category.
The emission reductions are calculated as:
For **Natural Gas based Cogeneration Projects**, the emission reductions are calculated based on the UNFCCC CDM methodology AM0107 New Natural Gas Based Cogeneration Plant (version 4.0)[2]. Noted by * in the table below.
For **Waste Heat Recovery Projects**, the environmental impact is calculated based on the UNFCCC CDM methodology ACM0012 waste energy recovery (version 6.0)[3]. Noted by ** in the table below.

Below show the expected emission reductions in detail.

Public Utility Industry (Natural Gas based Cogeneration Projects)	Allocated amount (CNY million)	Annual GHG emissions reduced* (CO_2 tons)
	4,626.58	418,915

Cement Industry (Power Generation Projects at Cement Plants)	Allocated amount (CNY million)	Annual GHG emissions reduced** (CO_2 tons)
	400.00	3,531

[2] Available at https://cdm.unfccc.int/methodologies/DB/LNCA9RBFUK6S53W1CDLHM9TASAEP48
[3] Available at https://cdm.unfccc.int/methodologies/DB/FXBXLVGFF4DLI5WC1PKFW7KBRW62QB

Use of Proceeds

BOC selected eligible projects based on the countries or regions where the projects are located and the relevant national and regional pathways of achieving carbon neutrality ultimately, the principle of best practice including the data availability of eligible projects in each country and region, EU Taxonomy transition activity classification and relevant measurable quantitative indicators as thresholds (if any).

All the net proceeds raised from Transition Bonds were used for financing or refinancing of eligible projects set out in the below section, including but not limited to supporting acquisition, research and development, manufacturing, construction, equipment operation and/or maintenance, procurement and installation of equipment and related facilities. Proceeds unallocated to eligible projects will be managed in accordance with the approach described in the "Management of Proceeds" section.

Based on the two principles of “Avoidance of Carbon Lock-in” and “Do No Significant Harm” and the list of “Explicitly Excluded Projects”, eligible projects include:

1. Projects in the Public Utility Industry:

a) Project Categories
• Production of Electricity from Gas (including but not limited to natural gas) • Cogeneration of Heat/Cool and Power from Gas (including but not limited to natural gas) • Production of Heat/Cool from Gas (including but not limited to natural gas)
b) Eligibility Criteria and Project Examples
• Power generation, cogeneration, heating or cooling using natural gas • Improvement of energy efficiency of natural gas power generation, cogeneration, heating or cooling • Maintenance and technical upgrade of natural gas pipelines to reduce and prevent gas leakage, and to prepare for the integration of using hydrogen or other low carbon gases (construction and expansion of natural gas pipelines are excluded) • Carbon capture and storage technology for energy systems • Research and development of technologies that can reduce the carbon intensity/energy consumption of natural gas power generation, cogeneration, heating or cooling
c) Quantitative Indicators and Eligibility Thresholds (including but not limited to)
Projects located in China: • Carbon emission to be below the national average of 72.8 tons CO2/TJ of natural gas consumption Projects located in the EU: • To comply with the requirements of the EU Taxonomy, including carbon emissions of natural gas power generation and cogeneration to be below 100 grams of CO2e/kWh Projects located in other regions: • Reference to relevant local towards low-carbon or zero-carbon transition policies and guidelines (if any)

2. Project in Cement Industry:

a) Project Category

• Manufacture of Cement
b) Eligibility Criteria and Project Examples
• Reduction of the clinker-to-cement ratio (including but not limited to the production of blended cement) • Furnace heating using natural gas • Improvement of energy efficiency of clinker production (including but not limited to the use of automation systems to optimize kiln operation and clinker production) • Recovery and utilization of waste heat energy (including but not limited to power generation using waste heat) • Carbon capture and storage technology for the cement industry • Research and development of technologies that can reduce the carbon intensity/energy consumption of cement production
c) Quantitative Indicators and Eligibility Thresholds (including but not limited to)
Projects located in China: • Clinker-to-cement ratio to be below the national average of 0.64 (if applicable) • To meet the State Council's latest environmental targets, such as the "13th Five Year Plan" 2020 target value of energy consumption of cement clinker production to be 105 kg standard coal/ton (equivalent to 3.07 GJ/ton) or lower (if applicable) Projects located in the EU: • To comply with the requirements of the EU Taxonomy, including carbon emissions from clinker production to be below 0.766 tons of CO2e/ton of cement clinker Projects located in other regions: • Reference to relevant local towards low-carbon or zero-carbon transition policies and guidelines (if any

3. Projects in Aluminium Industry:

a) Project Category
• Manufacture of Aluminium
b) Eligibility Criteria and Project Examples
• Reduction of carbon emission/energy consumption of aluminium refining and smelting • Collection and recycling of scrap aluminium, and utilization of aluminium scrap for aluminium reproduction • Aluminium manufacturing using natural gas-generated electricity • Recovery and utilization of waste heat energy • Research and development of technologies that can reduce carbon intensity/energy consumption of aluminium production
c) Quantitative Indicators and Eligibility Thresholds (including but not limited to)
Projects located in China: • Aluminium refining and processing energy consumption to be below the national average of 11,525 MJ/ton (if applicable) • To meet the State Council's latest environmental targets, such as the "13th Five Year Plan" 2020 target value of electricity consumption of aluminium smelting is to be 13,200 kWh/ton or lower (if applicable) Projects located in the EU: • To comply with the requirements of the EU Taxonomy, including carbon emissions of aluminium production to be below 1.514 tons of CO2e/ton of aluminium

Projects located in other regions: • Reference to relevant local towards low-carbon or zero-carbon transition policies and guidelines (if any)

4. Projects in Steel Industry:

a) Project Category
• Manufacture of Iron and Steel
b) Eligibility Criteria and Project Examples
• Reduction of carbon emissions/energy consumption during steel processing (including but not limited to the use of hydrogen and biomass as reducing agents) • Collection and recycling of scrap iron and steel, and utilization of scrap iron and steel for steel reproduction • Furnace heating with natural gas (including but not limited to natural gas) • Recovery and utilization of waste heat energy (including but not limited to recovery and utilization of waste heat energy during sintering and dry quenching) • Carbon capture and storage technology for the steel industry • Research and development of technologies that can reduce carbon intensity/energy consumption of steel production
c) Quantitative Indicators and Eligibility Thresholds (including but not limited to)
Projects located in China: • To meet the State Council's latest environmental targets, such as the "13th Five Year Plan" 2020 target value of energy consumption per ton of steel to be 560 kg standard coal/ton (equivalent to 16.37 GJ/ton) or lower Projects located in the EU: • To comply with the requirements of the EU Taxonomy, including carbon emission of hot metal production to be below 1.328 tons CO2e/ton iron Projects located in other regions: • Reference to relevant local towards low-carbon or zero-carbon transition policies and guidelines (if any

5. Projects in Fertilizer Manufacturing Industry:

a) Project Category
• Manufacture of Fertilizers and Nitrogen Compounds
b) Eligibility Criteria and Project Examples
• Fertilizer manufacturing using natural gas • Equipment maintenance and technological upgrades to improve raw material management and reduce gas leakage • Use lower carbon and clean technologies and methods to produce fertilizers (including but not limited to renewable electrolysis, biomass gasification) • Research and development of technologies that can reduce the carbon intensity/energy consumption of fertilizer manufacturing
c) Quantitative Indicators and Eligibility Thresholds (including but not limited to)
Projects located in China: • To meet the State Council's latest environmental targets, such as the "13th Five Year Plan" 2020 target value of energy consumption of synthetic ammonia production to be 1,300 kg standard coal/ton

(equivalent to 38.01 GJ/ton) or less Projects

located in the EU:

- To comply with the requirements of the EU Taxonomy, including carbon emission of nitric acid production to be below 0.302 tons of CO2e/ton of nitric acid, and the carbon emission of ammonia production to be below 1.3 tons of CO2e/ton of ammonia

Projects located in other regions:

- Reference to relevant local towards low-carbon or zero-carbon transition policies and guidelines (if any)

Note: The locations of the above natural gas related eligible projects are limited to countries and regions where natural gas is currently considered as a part of the local energy transition trajectory in International Energy Agency's Sustainable Development Scenario, such as China.

The Principle of "Avoidance of Carbon Lock-in"

Along with the global progression in transition towards low-carbon or zero carbon, BOC closely follows the latest transition standards and policy guidelines towards low-carbon or zero-carbon in each country and region, regularly evaluates the local threshold selection criteria for projects, and phases out ineligible or out-of-dated transition projects to avoid the proceeds raised from Transition Bonds "locked-in" such projects. By referring to the decarbonization pathway of the countries or regions where the relevant projects are located, and actively responding to the development and deployment of decarbonization technologies, BOC strives to fund projects which ultimately contribute to achieving carbon neutrality target.

The Principle of "Do No Significant Harm"

In addition to making substantial contributions to climate change mitigation and adaptation, BOC applies the principle of "Do No Significant Harm", namely, to do no significant harm to other important environmental goals such as water and marine resources, pollution prevention and control, biodiversity, and meet the social safeguard requirements set by local laws and regulations of the countries or regions where the relevant projects are located. Therefore, under the premise of meeting the threshold of the aforementioned project categories, each project obtains, for instance, feasibility study report and approval, environmental impact assessment report and approval, energy conservation assessment report, soil and water conservation report, or other compliance documents, in order to meet the requirements for eligible projects.

Explicitly Excluded Projects:

- Coal related projects, including clean coal power generation or other higher efficiency coal plant technologies (e.g. subcritical or supercritical to ultra-supercritical technology for coal plants)
- Biofuels, biogas or biomass which utilize food crops as sources
- Nuclear related projects
- Mining and quarrying related projects
- Luxury services or goods related projects, such as clubhouse operation
- Alcoholic beverages related projects
- Gambling and predatory lending enterprises related projects
- Tobacco and tobacco-related products related projects
- Weapons and ammunitions related projects

Process for Project Evaluation and Selection

BOC follows the procedures below, to evaluate and select the Eligible Projects:

- Preliminary Screening

Domestic and overseas branches of BOC conduct a preliminary screening of potential projects in accordance with the criteria and standards set out in BOC's internal regulations and the Eligible Project categories as described in the "Use of Proceeds" section, and form a list of nominated projects which are submitted to the Headquarter for review.

- Review and Approval

The Headquarter reviews each of the nominated projects for approval as Eligible Projects. The approved projects form an Eligible Project list.

- Update and Maintenance

BOC's Headquarters shall review the Eligible Project List on a quarterly basis and determine if any change(s) is necessary (for example, if a project has become ineligible due to amortization, prepayment, sale or other reasons). If such change(s) is necessary, the Headquarters shall organize domestic and overseas branches to nominate new projects and approve the eligible ones to replace projects that have become ineligible due to amortization, prepayment, sale or other reasons.

Management of Proceeds

BOC allocates the proceeds of the Transition Bonds to the eligible projects across various domestic and overseas markets via BOC's global network. BOC has established an effective mechanism to manage the proceeds, ensuring that the proceeds raised from Transition Bonds will be corresponded to the eligible projects

- Planning for Use of Proceeds

Prior to the issuance of Transition Bonds, BOC developed the preliminary Eligible Project List as per "Process for Project Evaluation and Selection" section in the Statement, to ensure that proceeds raised from Transition Bonds can be allocated to the eligible projects.

- Management of Separate Ledger

BOC records the source and allocation of proceeds in a separate ledger to ensure that all the net proceeds of the Transition Bonds are used to fund Eligible Projects. The ledger contains detailed information of the funding source (including the issue amount, the coupon rate, the issue date and the maturity date of the Transition Bonds) and the capital allocation (including the project name, the borrower description, the project category, the balance, the release date, the repayment date, the relevant FX rate and the interest rate of the loan). BOC reviews and updates the ledger on a quarterly basis. Any proceeds allocated to the projects that have amortized, been prepaid, sold or otherwise become ineligible shall be reallocated to newly nominated and approved Projects.

- Use of Unallocated Proceeds

Unallocated proceeds hasn't been invested in greenhouse gas (GHG) intensive, highly polluting, energy intensive projects nor projects with negative social impacts (including but not limited to "Explicitly Excluded Projects"). The unallocated proceeds could be temporarily invested in Green or Transition Bonds issued by non-financial

institutions in domestic or international capital markets, and in money market instruments with good credit ratings and market liquidity, or kept in cash until they are allocated to eligible projects.

Reporting

As long as the Transition Bonds are outstanding, BOC will make disclosure in relation to the allocation of the proceeds and the environmental and/or social impacts of the funded Eligible Projects on an annual basis on its official website (http://www.boc.cn/en/investor/ir10/) when the Transition Bonds remain outstanding. BOC is committed to ensuring the transparency of information disclosure in accordance with the best practices recommended by the ICMA. The contents to be disclosed annually include but not limited to:

- Annual report of the Transition bonds, where the content includes but not limited to the following proceeds allocation and environmental impacts information:
  - A brief description of the eligible projects where the proceeds were allocated, and breakdown in terms of amount and percentage allocated to each of the categories
  - The unallocated proceeds and how they are invested temporarily
  - Appropriate case information of the selected Eligible Projects
  - The environmental benefits of each category of the eligible projects where the proceeds were allocated
- An assurance report for the annual report issued by a qualified third party.
- An assurance report for the use of proceeds issued by a qualified third party.

2021 Transition Bond

Table 1 Detailed Information of 2021 Transition Bond

ISIN code	Currency	Tenor (year)	Coupon type	Amount (million)	CNY Equivalent Amount (million)	FX rate	CNY Net Amount (million)
XS2280441721	CNY	2	Fixed	1,800	1,800	1	1,797.99
XS2279870575	USD	3	Fixed	500	3,237	6.4746	3,228.59
Total							**5,026.58**

Table 2 Proceeds Allocation in Terms of Category

Category	Allocated amount (CNY million)	Number of Projects	Proportion
Natural gas based cogeneration project	4,626.58	11	92.04%
Waste heat recovery and power generation project at cement plant	400.00	1	7.96%
Total	**5,026.58**	**12**	**100.00%**

Table 3 Proceeds Allocation in Terms of Location

Location	Allocated amount (CNY million)	Proportion
Eastern China	1,599.55	31.82%
Southern China	2,352.82	46.81%
Northwest China	617.29	12.28%
Northern China	456.92	9.09%
Total	**5,026.58**	**100.00%**

Table 4 Environmental Impact

Public Utility Industry (Natural Gas based Cogeneration Projects)	Allocated amount (CNY million)	Annual GHG emissions reduced* (CO_2 tons)
	4,626.58	418,915

Cement Industry (Power Generation Projects at Cement Plants)	Allocated amount (CNY million)	Annual GHG emissions reduced** (CO_2 tons)
	400.00	3,531

Example

- A Natural Gas based Cogeneration Project located in Eastern China. The project is equipped with 2×400MW level gas-steam combined cycle cogeneration units. In 2021 the total natural gas consumption is 1.3×10^8 Nm^3 and the project supplied 694,451 MWh to the grid which will result in the CO_2 emissions reduction of about 36,388 tons. The Bank's loan accounted for approximately 17.99% of the total project investment, which reduced CO_2 emissions of 6,544 tons in 2021.

- A Waste Heat Recovery and Power Generation Project at Cement Plant located in Shaanxi Province of China. The project is equipped with a pure low-temperature waste heat recovery and power generation system with the installed capacity of 15 MW on one clinker line. In 2021 the project delivered 23,370 MWh electricity which will result in the CO_2 emissions reduction of 15,575 tons. The Bank's loan accounted for approximately 22.67% of the total project investment, which reduced CO_2 emissions of 3,531 tons in 2021.

Bank of China Limited
17 March 2022