Annual Report on China Construction Bank's Transition Bonds

China Construction Bank (hereinafter referred to as the "CCB") Singapore Branch's Transition Bond enables CCB 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 the projects are located in. As stated in the *China Construction Bank Transition Bond Framework* (hereinafter referred to as "the Framework")¹, we hereby provide Annual Report on CCB's Transition Bond, disclosing the allocation of the bond proceeds as well as the expected greenhouse gas emission reductions of the Eligible Projects as of 31 December 2022.

Introduction

1. Climate Transition Strategy and Governance

CCB has always taken social responsibilities seriously. In recent years, CCB has been actively considering how to use financial means to address significant challenges faced by the community. By embedding green finance into the Bank's overall strategy, CCB has gained extensive experience in its constructive exploration of promoting green and sustainable development, making significant achievements and its own contributions to the community. Going forward CCB will further integrate "Green and Low-carbon Finance" into the Bank's overall development strategy.

The Board of Directors of CCB reviewed and approved the Green Credit Development Strategy of China Construction Bank (2016-2021), which takes the prevention of environmental and social risks, the acceleration of green finance development, and the enhancement of corporate social responsibility performance as the three major strategic missions, setting up seven short-term targets and three longer-term goals for green credit development. By making the most of the Group's strengths, the Bank leverages green loans to grow other green finance businesses, creating a complete suite of green financial products and services. According to the Green Credit Development Strategy of China Construction Bank, the Bank specifically formulated the Notice on Strengthening Environmental and Social Risk Management, in order to embed environmental and social risk management into the whole credit process by setting out detailed management requirements and differentiated management

¹ http://www1.ccb.com/cn/investor

measures for pre-loan investigation, credit approval, disbursement review, and postloan management.

CCB has reinforced the organizational support for the Green Finance business by further strengthening the leadership role of the Board of Directors and the management in Green Finance business, and by establishing a vertical and detailed governance structure of the Green Finance business, comprising "the Board of Directors, the Green Finance Management Committee, departments of the head office, dedicated divisions and offices-branches". The Board of Directors is responsible for the deliberation and development of CCB's Green Credit Strategy, and for the supervision and evaluation of its implementation; the Green Finance Management Committee (the "Committee"), chaired by a member of the management, has been established to define the Green Finance Development Strategy and mid-and long-term goals for the Bank and to coordinate the management and decision- making of Green and Low-carbon Finance of the whole group. Members of the Committee come from more than 30 departments including the Board of Directors Office, Asset and Liability Management Department, Finance and Accounting Department, Risk Management Department, and Credit Management Department, and a cross-department mechanism to coordinate and promote green credit initiative has been established for tier-1 branches and subsidiaries. The Committee regularly meets to discuss matters on the Bank's Green Finance development and report to the Board of Directors and its special committees.

The decarbonization targets of CCB's business strategy are in full alignment with China's goals of reaching the carbon emissions peak before 2030 and achieving carbon neutrality before 2060. In order to achieve these targets, as a financial institution, and in response to the ICMA Climate Transition Finance Handbook (2020) and relevant Chinese policy documents including The Guiding Opinions on Promoting Investment and Financing in Response to Climate Change, CCB will continue to increase credit support in transition projects towards low-carbon or zero-carbon, such as the technological transformation of traditional industries. When it comes to the selection of the Green and Low-carbon projects including transition finance, CCB will focus on domestic steel, cement, electrolytic aluminum, and other high-pollution, highenergy-consumption and high-carbon-footprint industries. CCB will also follow the principles of commercialization and sustainability to guide the clients in such industries to fully utilize financial products to transform and upgrade business as per relevant processes and technologies, to achieve their decarbonization targets, and to maximize environmental and social benefits, hence actively promoting companies to achieve their own climate transition strategic goals. By doing so, CCB aims to contribute to the realization of the United Nations Sustainable Development Goals, including but not limited to Goals 7 (Affordable and Clean Energy), Goals 9 (Industry, Innovation, and Infrastructure), and Goals 13 (Climate Action).

CCB has actively examined stress testing techniques and methods for environmental and social risks to anticipate the impact on relevant industries and clients. On the one

hand, CCB has signed the "Green Investment Principles for the Belt and Road Initiatives" ("GIP") and attended the first meeting on 16 August 2019 to discuss environmental and social risk analysis and disclosures and innovation in green financial products with other participants. On the other hand, to gain more experience and further explore the methods, CCB selected clients in the thermal power industry which is relatively vulnerable to climate risk with a well-developed indicator 10 system, for stress testing to assess the impact of climate change risk on their finance costs, credit ratings, and risk-weighted assets. Test results show that the financial conditions of such clients are most significantly affected by carbon trading, while the impact of climate risk on their credit ratings and risk-weighted assets is limited, and the overall risks manageable. In addition, CCB also selected clients in the chemical industry with high environmental risks and to which it has a significant exposure to conduct the special stress testing. Based on the test results, the impact of the environmental risk factor on the credit risk from such clients is manageable in general since CCB has strict entry criteria for high-pollution industries, and all of its existing clients are quality enterprises within the industry with less and limited rating downgrades.

2. Business Model Environmental Materiality

As one of the biggest Chinese state-owned commercial banks, CCB takes the initiative to participate in the development of the green financial market and relevant rules, so as to become a leader in green finance.

In consideration of goals of achieving emissions peak before 2030 and carbon neutrality before 2060, CCB believes that the direction for China to develop a green and low-carbon economy and society will become increasingly clear, and 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 CCB's transition financing to support enterprises to adopt new equipment and technology that can save energy and reduce emissions, facilitating the restructuring and technical transformation and upgrade within traditional industries, and ultimately to reduce CCB's carbon footprint and carbon risk exposure in credit portfolios effectively.

In terms of target setting, a higher proportion of green credit has been incorporated in the annual credit policy. With respect to organization and implementation, the targets for green finance business have been included in the annual comprehensive operation plan and broken down by each business line, branch, and subsidiary. With respect to resource allocation, more resources will be invested in supporting the growth of green credit-related business as a priority. With respect to supervision and inspection, the performance of KPIs for the green finance business has been incorporated in day-today monitoring. With respect to appraisal and evaluation, the KPIs for green credit have been included in the annual KPI appraisal system. A higher share of incremental capital at risk will be allocated to green loans. An annual evaluation will be conducted on the progress made in green finance development by all domestic branches.

By making the most of its strengths as an integrated and diversified provider of financial services, CCB will use a combination of green bonds, green industry funds, green guarantees, green compensation funds, green non- standard assets, etc. to expand financing channels and lower financing costs, and to mobilize various private resources to support and foster green industries by further addressing the lack of longer-term capital sources.

To better solve the issue of how to choose the right model for promoting green development in different areas under different conditions, CCB has set up pilot green finance banks at the head office level in Zhejiang Huzhou, Guangdong Huadu, Chongqing Wanzhou, Shanghai Qingpu, Zhejiang Jiashan and Suzhou Wujiang, to explore replicable green finance models commensurate with the characteristics of the stage of social and economic development and natural ecological conditions in each area, with a view to making better contributions with CCB's solutions by drawing upon the experience gained.

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

CCB has been continuously increasing its emphasis on Green and Low-carbon Finance and progressively increasing credit support for Green and Low-carbon projects. CCB has actively carried out environmental and social risk stress testing to anticipate the impact on relevant industries and clients.

CCB undertakes to assess and use feasible scenarios and methodologies, such as the Assessing Low-Carbon Transition (ACT) initiative and the Science-Based Targets initiative (SBTi), to select an appropriate baseline for carbon emission reduction to support the carbon reduction target under the Paris Agreement, which will be expressed in strength or absolute values. Relevant disclosures will be made subject to data availability.

4. Implementation Transparency

CCB will take 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. In the future, with the concept of Green and Low-carbon Finance progressively being embedded into the Bank's overall business, CCB will ensure to enhance information disclosure transparency on a wider range of Green and Low-carbon Finance, including transition finance.

Outstanding Transition Bond

Transition Bond	Issue Date	Maturity (year)	Currency	Amount (million)	CNY Equivalent Amount	
					(million)	
2021 Transition Bond	2021/4/15	2	CNY	2,000.00	1,997.86	

Transition Bond Details and Proceeds Allocation

Transition Bond	Alignment with
2021 Transition Bond was issued in the offshore market	
through Singapore Branch in April 2021. The total amount	
equated to CNY 2,000.00 million, and net proceeds equated	Climate
to CNY 1,997.86 million. As of 31 December 2022, all of	Transition Finance
these net proceeds have been utilized to fund 4 Natural Gas	in inditoo
based Distributed Energy Station Projects and 3 Natural Gas	
based Trigeneration projects.	

Section breakdown of Transition Portfolio

As of 31 December 2022, the proceeds of CCB's Transition Bond have been allocated to CCB's Transition Portfolio, which were belong to the Electricity, Gas, Steam, and Air Conditioning supply Industries. And Natural Gas based Trigeneration project take up 57.75%, which is the largest part of the portfolio.



Geographical breakdown of Transition Portfolio



All of the net proceeds from CCB's Transition Bond 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 Distributed Energy Station 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 **Natural Gas based Trigeneration projects**, the environmental impact is calculated based on the UNFCCC CDM methodology AM0107 New Natural Gas Based Cogeneration Plant (version 4.0). Noted by * in the table below.

² Available at https://cdm.unfccc.int/methodologies/DB/LNCA9RBFUK6S53W1CDLHM9TASAEP48

Below show the expected emission reductions in detail.

Projects	Allocated amount (CNY million)	Annual GHG emissions reduced* (CO2 tons)	
Natural Gas based Distributed Energy Station Projects	844.15	1,110,542	
Natural Gas based Trigeneration Projects	1,153.71	552,659	

Use of Proceeds

CCB 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 Electricity, Gas, Steam, and Air Conditioning supply Industries:

a) Project Categories					
Production of Electricity from Gas (including but not limited to natural gas)					
Cogeneration of Heat 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, and heating or cooling using natural gas					
 Improvement of energy efficiency of natural gas power generation, 					
cogeneration, and 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					

2. Projects in the Building Materials 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 low-carbon fuel (including but not limit to 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 				

3. Projects in the Non-Ferrous Metals 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

4. Projects in the 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 bin as reducing agents) Collection and recycling of scrap iron and steel, and utilization of s and steel for steel reproduction Furnace heating with low-carbon fuel (including but not limited to m gas) 	scrap iron						
 Recovery and utilization of waste heat energy (including but not lin recovery and utilization of waste heat energy during sintering and quenching) Carbon capture and storage technology for the steel industry Research and development of technologies that can reduce carbo intensity/energy consumption of steel production 	dry						

5. Projects in the Petrochemical Industry:

a)	Project Category
	Manufacture of petrochemical products
b)	Eligibility Criteria and Project Examples
	 Reduction of carbon emissions/energy consumption during the processing of petrochemical products Carbon capture and storage technology for the petrochemical industry Recovery and utilization of waste heat energy/pressure (including but not limited to power generation using waste heat) Research and development of technologies that can reduce carbon
	intensity/energy consumption of the production of petrochemical products

6. Projects in the Chemical Industry:

a) Project Category
Manufacture of Fertilizers and Nitrogen Compounds
 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

7. Projects in the Pulp and Paper Industry:

a)) Project Category					
	Manufacture of paper					
b)	Eligibility Criteria and Project Examples					
	 Water-saving and efficient use of water during production 					
	Treatment of water pollution					
	 Reduction of carbon emission/energy consumption of papermaking 					
	 Recovery and utilization of heat energy (including but not limited to power generation using waste heat) 					
	 Furnace heating with low-carbon fuel (including but not limited to natural gas) 					
	Collection and recycling of waste paper, and utilization of wastepaper for paper reproduction					
	Research and development of technologies that can reduce carbon intensity/energy consumption of papermaking					

8. Projects in the Aviation Industry

a)	Project Category				
	Air Transport				
b)	b) Eligibility Criteria and Project Examples				
	Reduction of carbon emissions/energy consumption during air transport				
	Research and development of technologies that can reduce carbon				
	intensity/energy consumption of air transport				

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 the International Energy Agency's Sustainable Development Scenario, such as China.

The Principle of "Avoidance of Carbon Lock-in"

Along with the global progression in the transition towards low-carbon or zero-carbon, CCB will closely follow the latest transition standards and policy guidelines towards low-carbon or zero-carbon in each country and region, regularly evaluate the local threshold selection criteria for projects, and phase out ineligible or out-of-date 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, CCB 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, CCB will apply 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, and biodiversity, and to 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 shall obtain, 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 (including but not limited to 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 and projects
- Weapons and ammunition related projects

Process for Project Evaluation and Selection

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

• Preliminary Screening

Based on the project compliance documents (such as feasibility study report and approval, environmental impact assessment report and approval), and referring to criteria and standards of eligible project categories defined in the "Use of Proceeds" section, CCB's domestic and overseas branches shall conduct a preliminary screening of eligible projects, to form the list of nominated projects and submit to the Headquarter for further review.

• Review and Approval

CCB's Headquarter shall review each of the nominated projects, and then submit to professional third party agencies for independent assessment. Approval will be granted to nominated projects certified by professional third-party agencies. The approved projects will form the Eligible Project List.

• Update and Maintenance

CCB's Headquarter shall review the Eligible Project List on a quarterly basis and determine if any changes are necessary (for example, if a project has become ineligible due to amortization, prepayment, sale, or other reasons). If such changes are necessary, the Headquarter 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

CCB will allocate the proceeds from the Transition Bonds to the eligible projects across various domestic and overseas markets via CCB's global network. CCB has established an effective mechanism to manage the proceeds, ensuring that the proceeds raised from Transition Bonds will correspond to the eligible projects.

Planning for Use of Proceeds

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

Management of Separate Register

CCB shall record the source and allocation of proceeds in a separate register management system to ensure that the proceeds of the Transition Bonds are properly managed and used. The register system shall contain information including but not limited to: transaction information (including but not limited to issue amount, coupon, issue date, and maturity date, etc.) and proceeds allocation information (including but not limited to project name, borrower description, project category, balance, release date, repayment date, exchange rate, interest rate of the loan, etc.). CCB will review and update the register on time. Any proceeds allocated to the projects that have been amortized, prepaid, sold, or otherwise become ineligible due to other reasons shall be reallocated to newly nominated and approved projects.

• Use of Unallocated Proceeds

Unallocated proceeds shall not be invested in greenhouse gas-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

CCB will make disclosure in relation to the eligible projects' proceeds allocation and environmental impacts on an annual basis when the Transition Bonds remain outstanding. CCB 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)
XS2331711072	CNY	2	Fixed	2,000.00	1,997.86	1	1,997.86
Total							1,997.86

Table 2 Proceeds Allocation in Terms of Category

Category	Allocated amount (CNY million)	Number of Projects	Proportion
Natural Gas based Distributed Energy Station Projects	844.15	4	42.25%
Natural Gas based Trigeneration projects	1,153.71	3	57.75%
Total	1,997.86	7	100.00%

Table 3 Proceeds Allocation in Terms of Location

Location	Allocated amount (CNY million)	Proportion
Southern China	1,838.86	92.04%
Eastern China	159.00	7.96%
Total	1,997.86	100.00%

Table 4 Environmental Impact

Projects	Allocated amount (CNY million)	Annual GHG emissions reduced* (CO ₂ tons)
Natural Gas based Distributed Energy Station Projects	844.15	1,110,542
Natural Gas based Trigeneration projects	1,153.71	552,659

Transition bonds

Example

A Natural Gas based Trigeneration project located in Southern China. The project is equipped with 2*400MW level gas-steam combined cycle cogeneration units. In 2022 the total natural gas consumption is $1.63*10^6$ Nm³. And this project generated 6,020,800 GJ heat and $3.29*10^9$ KWh capacity. The Bank's loan accounted for approximately 27.06% of the total project investment, which reduced CO₂ emissions of 495,867 tons in 2022.

