

# **Annual Report on Bank of China's 2023 Transition Bond**

Bank of China's (hereinafter referred to as "BOC" or "we") Transition Bonds enable BOC to achieve its decarbonization targets in 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 (2023 Version)* (hereinafter referred to as "the Management Statement")<sup>1</sup>, we hereby provide Annual Report on BOC's 2023 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 2024.

# Introduction

#### 1. Climate Transition Strategy and Governance

BOC embodies a noble sense of duty and commitment over its many years of history. As a signing institution of the UN Principles for Responsible Banking, BOC exerts its utmost effort to build a new financial system that is greener and more inclusive, and continuously contributes to the realisation of the national "dual carbon" goals and the UN Sustainable Development Goals (SDGs).

In 2021, BOC formulated and released the 14th Five-Year Plan for Development and Long-range Objectives Through the Year 2035 of Bank of China Limited. BOC also successively formulated the plan for green finance, as well as the plan for inclusive finance, the work plan for development of county-level financial services and the action plan for boosting rural revitalisation, etc. in the 14th Five-Year Plan period, clarifying the action objectives in key areas.

We keep a close eye on the development goal of achieving "dual carbon" goals, adapt to the trend of sustainable development and economic transformation, and serve the development needs of the real economy. We implement the requirements of green development, intensify the integeration of green philosophy, raise the green development awareness of all staff, and create a green development atmosphere throughout the bank. We integrate green and low carbon concepts into every aspect of our management and business activities, and have established the "BOC Green+" global brand and launched dozens of green financial products and services across five categories, covering deposits, loans, bonds, consumption and other comprehensive services.

BOC keeps refining the top level design and policy systems for green finance. Green finance gradually became our new calling card. BOC established professional green finance teams to coordinate the work on green finance. Full-time or part-time specialists were arranged in relevant departments to carry out green credit, green bonds, environmental and social risk management, carbon market services, data system construction, operational carbon neutrality and other related businesses. Domestic and overseas branches and comprehensive operation companies had set green finance departments, teams or employees in place for relevant work. To ensure the sound

1

<sup>&</sup>lt;sup>1</sup> available at https://www.boc.cn/lu/aboutus/ir10/



implementation of green finance strategies, BOC incorporated green development, environmental and social risk management and other factors into the assessment system for executives and employees, and allocated special-purpose resources to the green finance business to ensure the effective management of green finance.

In order to achieve these targets, as a financial institution and referring 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, BOC keeps following the changes in industrial development and macro policies, and actively seized green investment and financing opportunities in the low carbon and zero-carbon transformation of the real economy. For industries in restricted categories subject to key regulation of the state and industries with major environmental and social risks, we proactively formulated specific credit guidelines and implemented differentiated and dynamic credit policies as well as risk exposure management systems. BOC set the plan for the management of credits granted to industries with high energy consumption and high emissions, and examined and approved energy-intensive and high-emission projects in a prudent way. We support production capacity replacement, green transformation, technological upgrading and the like in high-carbon industries. We guide resources towards key areas such as advanced production capacity, lower unit energy consumption, technology upgrading and transformation, intelligent and efficient operation, and guaranteed energy supply.

Additionally, BOC has signed the "Green Investment Principles for the Belt and Road Initiatives" and also serves as the co-chair of GIP working group on Transition Finance. In 2021, BOC officially signed the UN Principles for Responsible Banking (PRB), and became a supporter of the Task Force on Climate-related Financial Disclosures (TCFD). BOC actively participated in international cooperation on green development. We actively adopted global sustainability-related initiatives or principles, promoted the development of professional cooperation platforms, and participated in various forms of exchange activities on green finance, climate actions and other themes. In this way, we made our voice heard on the international stage of green finance and contributed our wisdom to its development.

#### 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 in China. It has an extensive business and lending portfolio for clients across various geographies and sectors.

In consideration of China's goals of achieving emissions 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 it's 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.

In order to accelerate the further transformation of industry structure of BOC's credit business, BOC formulated the *Supporting Policies of Bank of China Regarding Corporate Green Credit*. In terms of credit policies for relevant industries involving green development, we provided preferential policies for green projects, and detailed guidance and support for the development of green businesses. We opened up green approval channels for qualified green projects, allowing them to enjoy preferential credit support such as loan priorities under the same conditions. BOC



continued to allocate more credit resources to energy conservation, cleaner production, clean energy, ecological environment, green infrastructure upgrading, green services and other green industries specified in the national *Guiding Catalogue for Green Industries*.

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 sets up green financial institutions in the green finance reform and innovation pilot zones in ten localities of seven provinces and autonomous regions. These specialized institutions work hard to innovate green financial products and provide green and low-carbon transformation plans for the pilot zones.

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

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

Focusing on the national carbon peak and carbon neutrality goals, we integrated green finance into our 14th Five-Year Plan development plan, and established our "1+1+N" green finance policy system, and refined relevant policies, to guide the Bank towards deepening green finance practices on all fronts. Keenly focusing on the impacts of climate risk changes on our financial assets, we identified and analysed how physical and transitional changes of climate risks caused impacts and transmitted such impacts. The Bank performed the group's stress tests under climate risk macro scenarios, examining the effects of various factors such as temperature rises and carbon emission pricing on the credit risk associated with corporate loans.

#### 4. Implementation Transparency

BOC takes issuing Transition Bonds as a starting point and appoints 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 Transition 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 2023 Transition Bond**

Transition Bonds	Issue Date	Maturity (year)	Currency	Amount (million)	CNY Equivalent Amount (million)
2023 Transition Bond	2023/10/12	3	EUR	300.00	2,282.46

# 2023 Transition Bond Details and Proceeds Allocation

2023 Transition Bond was issued (A) in reference to the ICMA Climate Transition Finance Handbook (2023) disclosure recommendation on issuers' transition activities, (B) with reference to the four pillars of ICMA Green Bond Principles (2021) and Sustainability Bond Guidelines (2021), (C) in line with the industry economic activity classification and technical indicators for climate transition from IPSF Common Ground Taxonomy / EU Taxonomy for Sustainable Activities / Climate Bonds Initiative Sector Criteria, and with reference to the sections of the above standards that relate to the transition industry, as well as the principles of "Avoidance of Carbon Lock-in" and "Do No Significant Harm", to fund eligible transition projects which are in line with the international science-based strategic pathways of carbon neutrality goals.

Transition Bonds	Reference to	Alignment with
2023 Transition Bond was issued in the offshore		
market through Luxembourg Branch in October		
2023. The total amount equated to CNY 2,282.46	Climate Transition Finance Handbook Guidance for Issuers	Common Ground Taxonomy – Climate
million, and net proceeds equated to CNY 2,271.14	June 2023	Change Mitigation
million. As of 31 December 2024, all of these net		
proceeds have been utilized to fund a Reduction of	The Green Bond	<b>EU Taxonomy</b>
carbon emissions/energy consumption during steel	Principles	
processing Project.	The Sustainability Bond Guidelines	Climate Bonds

# Section and Geographical Breakdown of BOC 2023 Transition Bond Portfolio

As of 31 December 2024, the proceeds of BOC 2023 Transition Bond have been allocated to Steel Industry, a project to reduce carbon emissions/energy consumption during steel processing. The project is located in North 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 **Reduction of carbon emissions/energy consumption during steel processing Project**, the environmental impact is calculated based on carbon emissions level and the national industry emission benchmark.

Below show the expected emission reductions in detail.

Reduction of carbon	Allocated amount	Annual GHG emissions reduced
emissions/energy consumption	(CNY million)	(CO <sub>2</sub> tons)
during steel processing	2,271.14	48,017.84



# **Use of Proceeds**

BOC shall select eligible projects in alignment with the industry economic activity classification for climate transition of the *IPSF Common Ground Taxonomy / EU Taxonomy for Sustainable Activities / Climate Bonds Initiative Sector Criteria*. The Bank has taken reference to the sections of the above standards that relate to the transition industry, and identified relevant measurable quantitative indicators as eligibility thresholds (if any). For the following industry categories, BOC has researched and identified the relevant international standards applicable to each industry for reference.

The proceeds raised from Transition Bonds will be used for financing and/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) Internationally Relevant and Applicable Standard(s)

<u>EU Taxonomy for Sustainable Activities</u>
 With reference to the EU Taxonomy activities "Electricity generation from fossil gaseous fuels" and "High-efficiency co-generation of heat/cool and power from fossil gaseous fuels"

#### d) Quantitative Indicators and Eligibility Thresholds (including but not limited to)

#### • EU Taxonomy for Sustainable Activities

The specific carbon emission thresholds for eligible fossil gaseous fuel related projects are as follows:

 $_{\odot}$  the life-cycle GHG emissions from the generation of electricity using fossil gaseous fuels are lower than 100g CO $_{2}$ e/kWh



The below criteria apply to qualified fossil gas fuel-related projects for which the construction permit is granted by 31 December 2030:

- o the power to be replaced cannot be generated from renewable energy sources; and
- the activity replaces an existing high emitting electricity generation activity that uses solid or liquid fossil fuels; and
- the facility is designed and constructed to use renewable and/or low-carbon gaseous fuels
  and the switch to full use of renewable and/or low-carbon gaseous fuels takes place by 31
  December 2035, with a commitment and verifiable plan approved by the management body
  of the undertaking; and
- the replacement leads to a reduction in emissions of at least 55% GHG over the lifetime of the newly installed production capacity; and
- o For electricity generation projects from fossil gaseous fuels:
  - direct GHG emissions of the activity are lower than 270g CO₂e/kWh of the output energy; or
  - annual direct GHG emissions of the activity do not exceed an average of 550kg
     CO<sub>2</sub>e/kW of the facility's capacity over 20 years; and
  - the newly installed production capacity does not exceed the capacity of the replaced facility by more than 15%
- o For relevant projects that increase energy efficiency of fossil gaseous fuels:
  - direct GHG emissions of the activity are lower than 270g CO₂e/kWh of the output energy; and
  - 2. the activity achieves primary energy savings of at least 10% compared with the references to separate production of heat and electricity; and
  - the newly installed production capacity does not exceed the capacity of the replaced facility

If carbon capture, utilization, and storage (CCUS) technology is used for the fossil gaseous fuel projects, transportation and storage must comply with the following standards:

Components		Standards		
	1.	The CO <sub>2</sub> transported from the installation where it is captured to the		
		injection point does not lead to CO <sub>2</sub> leakages above 0.5 % of the mass of CO <sub>2</sub>		
Transportation		transported.		
	2.	Appropriate leak detection systems are applied and a monitoring plan is in		
		place, with the report verified by an independent third party.		
	1.	Characterization and assessment of the potential storage complex and		
		surrounding area, or exploration is carried out in order to establish whether		
		the geological formation is suitable for use as a CO <sub>2</sub> storage site.		
	2.	For operation of underground geological CO <sub>2</sub> storage sites, including closure		
Storage		and post-closure obligations:		
		a. Appropriate leakage detection systems are implemented to		
		prevent release during operation;		
		b. A monitoring plan of the injection facilities, the storage complex,		
		and, where appropriate, the surrounding environment is in place,		



	with the regular reports checked by the competent national
	authority.
	3. For the exploration and operation of storage sites, the activity complies with
	ISO 27914:2017 for geological storage of CO <sub>2</sub> .

#### 2. Project in Cement Industry:

#### a) Project Category

Manufacture of Cement (ISIC: 2394)

# 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)
- Research and development of technologies that can reduce the carbon intensity/energy consumption of cement production

# c) Internationally Relevant and Applicable Standard(s)

• EU Taxonomy for Sustainable Activities

With reference to the EU Taxonomy activity "Manufacture of cement"

Climate Bonds Initiative

With reference to the Climate Bonds Initiative "Cement Criteria"

# d) Quantitative Indicators and Eligibility Thresholds (including but not limited to)

• EU Taxonomy for Sustainable Activities

The specific carbon emission thresholds for eligible cement projects are as follows:

Eligible asset	Specific carbon emission thresholds	
Grey cement clinker	0.722 tCO₂e / t product	
Cement from grey clinker or alternative hydraulic binder	0.469 tCO₂e / t product	

#### • Climate Bonds Initiative

 The relevant cement production facilities are eligible if their emissions intensity, adjusted using the relevant correction factors, are lower than the thresholds of the carbon emissions pathway for cement production facilities over time.

The formula of using the correction factors: multiplying the carbon emissions intensity of the cement production facilities with the correction factor according to the cement class of the cement produced by the relevant facilities.

 The thresholds of the carbon emissions pathway for all cement production facilities over time are as follows:

Year	Carbon intensity (t CO <sub>2</sub> / t cementitious product)	Year	Carbon intensity (t CO <sub>2</sub> / t cementitious product)
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2020	0.469	2036	0.253
2021	0.458	2037	0.234
2022	0.448	2038	0.216
2023	0.437	2039	0.197
2024	0.427	2040	0.179
2025	0.416	2041	0.161
2026	0.406	2042	0.143
2027	0.395	2043	0.125
2028	0.384	2044	0.107
2029	0.374	2045	0.089
2030	0.363	2046	0.071
2031	0.345	2047	0.054
2032	0.326	2048	0.036
2033	0.308	2049	0.018
2034	0.289	2050	0.000
2035	0.271		

o The correction factors for determining the grade of cement production are as follows:

Cement class (MPa)	Expected emissions (tCO $_2$ e / t cementitious product)	Correction factor
32.5	0.550	1.18
42.5	0.649	1.00
52.5	0.748	0.87

- ii. If the cement facilities use biomass, hydrogen, or waste-derived fuels as a fuel source, additional carbon emissions criteria would be required:
  - Cement production facilities that use biomass, including residues, energy crops and lignocellulosic biomass, must reach established carbon emissions thresholds, and reduce the risk of indirect land use impact (iLUC).
  - The thresholds of carbon emissions for cement production facilities that use biomass as their primary energy source are as follows:

Biomass related asset type	Thresholds for biofuel/biomass produced/used (primary energy)	Energy efficiency thresholds	
Facilities producing liquid biofuel,			
solid and gaseous biomass for	16.0 gCO₂e/MJ	N/A	
heating and co-generation			
Facilities producing biofuel for	18.8 gCO₂e/MJ	N/A	
transport	16.8 gCO <sub>2</sub> e/1VIJ		
Heating/cooling, and co-			
generation facilities using	16.0 gCO₂e/MJ	80%	
biofuel/biomass			



- Cement production facilities that use hydrogen as fuel to produce cement must comply with established carbon emissions thresholds.
- $\circ\quad$  The carbon emission thresholds for using hydrogen as a fuel over time are as follows:

	Carbon emission threshold	s for using hydrogen as a fu	el
2023	2030	2040	2050
3 tCO <sub>2</sub> e / tH <sub>2</sub>	1.5 tCO <sub>2</sub> e / tH <sub>2</sub>	0.7 tCO <sub>2</sub> e / tH <sub>2</sub>	0 tCO₂e / tH₂

- Cement production facilities that use waste-derived fuels, including municipal solid waste (MSW):
  - All waste of recycling potential cannot be used as a fuel, and must be removed prior to burning in line with the waste hierarchy; and
  - 2. MSW will no longer be eligible as a fuel for cement production after 2035.
- iii. If the cement production facilities adopt the Carbon Capture Utilisation and Storage (CCUS) technology, additional criteria on  $CO_2$  transportation and storage in the below are required:

Components	Standards	
	1.	The CO <sub>2</sub> transported from the installation where it is captured to
		the injection point does not lead to $\mbox{CO}_2$ leakages above 0.5 % of the
Transportation		mass of CO <sub>2</sub> transported.
Transportation	2.	Appropriate leak detection systems are applied and a monitoring
		plan is in place, with the report verified by an independent third
		party.
	1.	Characterization and assessment of the potential storage complex
		and surrounding area, or exploration is carried out in order to
		establish whether the geological formation is suitable for use as a
		CO <sub>2</sub> storage site.
	2.	For operation of underground geological CO₂ storage sites,
		including closure and post-closure obligations:
Storage		a. Appropriate leakage detection systems are implemented
Storage		to prevent release during operation;
		b. A monitoring plan of the injection facilities, the storage
		complex, and, where appropriate, the surrounding
		environment is in place, with the regular reports checked
		by the competent national authority.
	3.	For the exploration and operation of storage sites, the activity
		complies with ISO 27914:2017 for geological storage of CO <sub>2</sub> .

# 3. Projects in Aluminium Industry:

- a) Project Category
  - Manufacture of Aluminium (ISIC: 4240)



# 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) Internationally Relevant and Applicable Standard(s)

<u>EU Taxonomy for Sustainable Activities</u>
 With reference to the EU Taxonomy activity "Manufacture of aluminium"

# d) Quantitative Indicators and Eligibility Thresholds (including but not limited to)

EU Taxonomy for Sustainable Activities

The thresholds for the manufacture of primary aluminium are as follows:

- Manufacturing activity of primary aluminium complies with two of the following criteria until 2025 and with all of the following criteria after 2025:
  - 1. The GHG emissions do not exceed 1.484 tCO<sub>2</sub>e per ton of aluminium manufactured;
  - The average carbon intensity for the indirect GHG emissions does not exceed 100g CO<sub>2</sub>e/kWh;
  - The electricity consumption for the manufacturing process does not exceed 15.5
     MWh/t Al.

#### 4. Projects in Steel Industry:

#### a) Project Category

Manufacture of Iron and Steel (ISIC: 2410/2431)

# 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) Internationally Relevant and Applicable Standard(s)

Common Ground Taxonomy

With reference to the Common Ground Taxonomy section "C1.2 Manufacture of iron and steel"

EU Taxonomy for Sustainable Activities

With reference to the EU Taxonomy activity "Manufacture of iron and steel"



#### Climate Bonds Initiative

With reference to the Climate Bonds Initiative "Steel Criteria"

# d) Quantitative Indicators and Eligibility Thresholds (including but not limited to)

#### • <u>Common Ground Taxonomy / EU Taxonomy for Sustainable Activities</u>

The GHG emissions thresholds for different iron and steel manufacturing process steps, after taking relevant measures to reduce the emissions of waste gases from the iron and steel production process, are as follows:

	Eligible asset	Specific criteria
i.	Hot metal	1.331 tCO <sub>2</sub> e / t product
ii.	Sintered ore	0.163 tCO <sub>2</sub> e / t product
iii.	Coke (excluding lignite coke)	0.144 tCO <sub>2</sub> e / t product
iv.	Iron casting	0.299 tCO₂e / t product
٧.	Electric Arc Furnace (EAF) high alloy steel	0.266 tCO₂e / t product
vi.	Electric Arc Furnace (EAF) carbon steel	0.209 tCO₂e / t product

The requirements for using scrap steel as raw material in electric arc furnaces producing high-alloy steel or carbon steel are as follows (based on the output product as the calculation basis) are as follows:

- o Proportion of steel scrap input for the production of high-alloy steel ≥ 70%
- o Proportion of steel scrap input for the production of carbon steel ≥ 90%

# • <u>Climate Bonds Initiative</u>

The applicable certification standards for whole existing eligible iron and steel production facilities (operational prior to 2022) are as follows:

Eligible facilities	Specific criteria					
	A plan that describes how the use of renewable energy will be					
	increased/introduced in the facility within the term of the bond					
Using Electric Arc	through different strategies such as:					
Furnace (EAF)						
	a) Increasing renewable-based captive power generation					
	b) Increasing renewable-based power purchase agreement					
	The investment shall not be for relining; and					
	A bundle of decarbonisation measures has been / will be implemented					
Production line	at the steel production facility that has / will reduce the facility's					
with a blast	carbon emissions intensity (tCO2 / t steel product) between 2022 and					
furnace (BF) that	2030 by:					
became						
operational in 2007	o 20% (if the pre-decarbonisation baseline emissions intensity is					
or later	greater than or equal to 2 tCO <sub>2</sub> / t steel product); and by 2030 the					
	carbon emissions intensity of the steel production facility should					
	be below 1.8 tCO <sub>2</sub> / t steel product; or					



Production line with a blast furnace (BF) that became operational prior to 2007	<ul> <li>15% (if the pre-decarbonisation baseline emissions intensity is less than 2 tCO<sub>2</sub> / t steel product); and by 2030 the carbon emissions intensity of the steel production facility should be below 1.8 tCO<sub>2</sub> / t steel product</li> <li>The investment shall not be for relining; and</li> <li>A bundle of decarbonisation measures has been / will be implemented at the steel production facility that have / will reduce the facility's carbon emissions intensity (tCO<sub>2</sub> / t steel product) between 2022 and 2030 by 50%; and</li> <li>By 2030, the carbon emissions intensity of the steel production facility should be below 1.8 tCO<sub>2</sub> / t steel product</li> </ul>
Production line with Direct Reduction Iron (DRI)	<ul> <li>If the steel production plant is fossil gas based:         <ul> <li>A bundle of decarbonisation measures has been / will be implemented at the steel production facility that have / will reduce the facility's carbon emissions intensity (tCO<sub>2</sub> / t steel product) between 2022 and 2030 by 20%; or</li> </ul> </li> <li>If the steel production plant is coal based:         <ul> <li>A bundle of decarbonisation measures has been / will be implemented at the steel production facility that have / will reduce the facility's carbon emissions intensity (tCO<sub>2</sub> / t steel product) between 2022 and 2030 by 40%</li> </ul> </li> </ul>

The applicable certification standards for eligible new iron and steel production facilities (operational in 2022 or thereafter) are as follows:

Eligible facilities	Specific criteria
BF-BOF production line with integrated	<ul> <li>CCUS should capture at least 70% of all emission</li> <li>If the steel production facilities adopt the CCUS technology, additional criteria on CO<sub>2</sub> transportation and storage in the below are required:</li> </ul>
CCUS	Components Standards



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Smelting reduction production line with integrated CCUS		Transportation	2.	captured to the in leakages above 0.9	ed from the installa jection point does r 5% of the mass of C letection systems a in place, with the r	not lead to CO <sub>2</sub> O <sub>2</sub> transported. re applied and a
Fossil gas- based DRI- EAF production line with integrated CCUS			2.	Characterization a storage complex a in order to establis formation is suitab	nd assessment of the nd surrounding are shownesher the geo ole for use as a CO <sub>2</sub> anderground geologic sure and post-closure	a is carried out logical storage site.
		Storage		implemented operation;	eakage detection sy to prevent release plan of the injectio	during
Fossil gas- based DRI production facility with integrated				storage comp	environment is in pl	oropriate, the ace, with the
ccus	•				•	7 for geological
Scrap based Electric Arc Furnace (EAF)	•	The facility need	ds to	use 70% of scrap as and (100%) Hydrogo annual inputs	total annual inputs	; or
100% Hydrogen- based DRI	Hydrogen- emission thresholds. The carbon emission thresholds for using hydrogen reducing agent over time are as follows:					
100% Hydrogen-		Carbon en 2023	nissic	n thresholds for usi 2030	ng hydrogen as a re 2040	ducing agent 2050
based DRI-		3 tCO₂e / tH	2	1.5 tCO <sub>2</sub> e / tH <sub>2</sub>	0.7 tCO <sub>2</sub> e / tH <sub>2</sub>	0 tCO <sub>2</sub> e / tH <sub>2</sub>



EAF production line	
Electrolysis of iron ore steelmaking production line	<ul> <li>A plan that describes how the use of renewable energy will be increased/introduced in the facility within the term of the bond through different strategies such as:         <ul> <li>Increasing renewable-based captive power generation</li> <li>Increasing renewable-based power purchase agreement</li> </ul> </li> <li>The plan shall be provided with evidence of the strategies that will be implemented. Progress of the implementation plan to be assessed every 36 months.</li> </ul>

#### 5. Projects in Fertilizer Manufacturing Industry:

#### a) Project Category

• Manufacture of Basic Chemicals (ISIC: 2011)

# b) Eligibility Criteria and Project Examples

- Basic chemicals 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 basic chemicals (including but not limited to renewable electrolysis, biomass gasification)
- Research and development of technologies that can reduce the carbon intensity/energy consumption of basic chemicals manufacturing

# c) Internationally Relevant and Applicable Standard(s)

Common Ground Taxonomy

With reference to the Common Ground Taxonomy section "C1.1 Manufacture of organic basic chemical"

**EU Taxonomy for Sustainable Activities** 

With reference to the EU Taxonomy activity "Manufacture of organic basic chemicals", "Manufacture of anhydrous ammonia", "Manufacture of nitric acid", "Manufacture of chlorine", "Manufacture of carbon black", and "Manufacture of soda ash"

Climate Bonds Initiative
 With reference to the Climate Bonds Initiative "Basic Chemicals Criteria"

d) Quantitative Indicators and Eligibility Thresholds (including but not limited to)



# Common Ground Taxonomy / EU Taxonomy for Sustainable Activities

The GHG emissions thresholds for the organic basic chemical production processes are as follows:

Eligible asset	Specific carbon emission reduction criteria
High Value Chemicals (HVC)	0.693 tCO₂e / t of HVC
Aromatics	0.0072 tCO₂e / t of complex weighted throughput
Vinyl Chloride	0.171 tCO₂e / t of vinyl chloride
Styrene	0.419 tCO₂e / t of styrene
Ethylene Oxide/ Ethylene Glycols	0.314 tCO₂e / t of ethylene oxide/glycol
Adipic Acid	0.32 tCO <sub>2</sub> e / t of adipic acid

# EU Taxonomy for Sustainable Activities

The standard thresholds for the inorganic basic chemical production processes are as follows:

Eligible asset	Specific criteria
	Ammonia is produced from hydrogen that complies with the
	technical screening criteria set out under "Manufacturing of
Anhydrous Ammonia	hydrogen" (i.e. Hydrogen of lifecycle GHG emissions lower than 3
	tCO <sub>2</sub> e/tH <sub>2</sub> ); or
	Ammonia is recovered from waste water.
Nitric Acid	GHG emissions from the manufacture of nitric acid are lower than
Nitric Acid	$0.038\ tCO_2e$ per tonne of nitric acid.
	Electricity consumption for electrolysis and chlorine treatment is
Chlorine	equal or lower than 2.45 MWh per tonne of chlorine; and
Ciliotitie	Average lifecycle GHG emissions of the electricity used for
	chlorine production is at or lower than 100g $CO_2e/kWh$ .
Carbon Black	GHG emissions from the carbon black production processes are
Cal DOIT DIACK	lower than 1.141 tCO $_{2}$ e per tonne of product.
Soda Ash	GHG emissions from the soda ash production processes are lower
Soud ASII	than 0.789 tCO₂e per tonne of product.

# • <u>Climate Bonds Initiative</u>

The production facility should meet the basic chemical-specific carbon and energy intensity thresholds. In addition, the energy source should not be coal, coal derivatives or biomass. The feedstock should not be coal or coal derivatives. The thresholds for the basic chemical production processes are as follows:

		Criteria				
Asset Type	2022	2030		2050	applicable in	
			2040	2050	all years	



	<3 t CO₂e/t	1.67 t CO₂e/t	1.0 t CO₂e/t	0.6 t CO₂e/t	
Ammonia	H <sub>2</sub> , for the life cycle emissions of hydrogen used as feedstock; or ammonia is recovered from wastewater	H <sub>2</sub> , for the life cycle emissions of hydrogen used as feedstock; or ammonia is recovered from wastewater	H <sub>2</sub> , for the life cycle emissions of hydrogen used as feedstock; or ammonia is recovered from wastewater	H <sub>2</sub> , for the life cycle emissions of hydrogen used as feedstock; or ammonia is recovered from wastewater	CO <sub>2</sub> from ammonia production should not be used for urea production.
Nitric Acid	0.038 t CO₂e/t nitric acid	0.021 t CO₂e/t nitric acid	0.011 t CO₂e/t nitric acid	0.007 t CO₂e/t nitric acid	Use electricity that meets the most up to date Climate Bonds criteria for electricity grids.
Chlorine	2.45 MWh electricity/t chlorine	1.85 MWh electricity/t chlorine	Uses only electricity produced from renewable sources	Uses only electricity produced from renewable sources	Implement one of the following alternatives: a. Renewable- based captive power generation b. Renewable- based power purchase agreement
Carbon Black	1.141 t CO <sub>2</sub> e/t carbon black	0.63 t CO₂e/t carbon black	0.34 t CO <sub>2</sub> e/t carbon black	0.20 t CO <sub>2</sub> e/t carbon black	N/A
Disodium Carbonate / Soda Ash	0.789 t CO₂e/t disodium carbonate/ soda ash	0.44 t CO <sub>2</sub> e/t disodium carbonate/ soda ash	0.23 t CO <sub>2</sub> e/t disodium carbonate/ soda ash	0.14 t CO <sub>2</sub> e/t disodium carbonate/ soda ash	Implement one of the following alternatives: a. Renewable -based captive



						power generation b. Renewable -based
						power
						purchase
						agreement
l	High Value					
	Chemicals	0.51 t CO₂e/t	0.28 t CO₂e/t	0.15 t CO₂e/t	0.09 t CO <sub>2</sub> e/t	
	(ethylene,	high value	high value	high value	high value	N/A
	propylene,	chemical	chemical	chemical	chemical	
	butadiene)					
	Aromatics					
	BTX	0.0072 t	0.0040 t	0.0021 t	0.0012 t	
	(benzene,	CO₂e/t	CO₂e/t	CO₂e/t	CO₂e/t	N/A
	xylene and	aromatics BTX	aromatics BTX	aromatics BTX	aromatics BTX	
	toluene)					
		<3 t CO₂e/t	1.67 t CO₂e/t	1.0 t CO₂e/t	0.6 t CO <sub>2</sub> e/t H <sub>2</sub>	
		H <sub>2</sub> , for the life	H₂ for the life	H <sub>2</sub> for the life	for the life	
		cycle	cycle	cycle	cycle	
	Methanol	emissions of	emissions of	emissions of	emissions of	N/A
		hydrogen	hydrogen	hydrogen	hydrogen	
		used as	used as	used as	used as	
		feedstock	feedstock	feedstock	feedstock	

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 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-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 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, 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 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 power generation 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

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, BOC's domestic and overseas branches shall conduct preliminary screening of eligible projects, to form the list of nominated projects and submit to the Headquarter for further review.

#### Review and Approval

BOC'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 the professional third party agencies. The approved projects will form the Eligible Project List.

#### Update and Maintenance

BOC's Headquarter shall review the Eligible Project List on a regular 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**

BOC will allocate 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 shall develop the preliminary Eligible Project List as per "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 shall record the source and allocation of proceeds in a separate ledger management system to ensure that the proceeds of the Transition Bonds are properly managed and used. The ledger 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.). BOC will review and update the ledger 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

BOC will make disclosure in relation to the eligible projects' proceeds allocation and environmental impacts on an annual basis on the official website (https://www.boc.cn/lu/aboutus/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 attestation report of the annual report issued by a qualified third party.
- An attestation report of the use of proceeds issued by a qualified third party.

# **2023 Transition Bond**

Table 1 Detailed Information of 2023 Transition Bond

ISIN code	Currency	Tenor (year)	Coupon type	Amount (million)	CNY Equivalent Amount (million)	FX rate	CNY Net Amount (million)
XS2702157855	EUR	3	Fixed	300.00	2,282.46	7.6082	2,271.14
Total							2,271.14

# **Table 2 Proceeds Allocation in Terms of Category**

Category	Allocated amount (CNY million)	Number of Projects	Proportion
Reduction of carbon			
emissions/energy consumption	2,271.14	1	100.00%
during steel processing		l	
Total	2,271.14	1	100.00%

# **Table 3 Proceeds Allocation in Terms of Location**

Location	Allocated amount (CNY million)	Proportion
North China	2,271.14	100.00%
Total	2,271.14	100.00%

# **Table 4 Environmental Impact**

Reduction of carbon	Allocated amount	Annual GHG emissions reduced	
emissions/energy consumption	(CNY million)	(CO <sub>2</sub> tons)	
during steel processing	2,271.14	48,017.84	

Transition Bonds Appendix

# Example

A Reduction of carbon emissions/energy consumption during steel processing Project located in North China. This project adopts advanced and efficient energy saving and carbon reduction technology in sintering, ironmaking and other processes, and rationally uses the waste heat, pressure and energy generated in the production process to achieve energy saving and emission reduction. The carbon emissions intensity for Hot metal and Sintered ore is below GHG emissions thresholds (1.331 tCO $_2$ e / t product for Hot metal and 0.163 tCO $_2$ e / t product for Sintered ore).



The Bank's loan accounted for approximately 3.97% of the total project investment, which reduced  $CO_2$  emissions of 48,017.84 tons in 2024.

Bank of China Limited 11 April 2025