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Zhongcai Green Financing

GREEN BOND FRAMEWORK FOR  
INDUSTRIAL AND COMMERCIAL BANK OF CHINA

ASSESSMENT REPORT

Beijing Zhongcai Green Financing Consultant Ltd.

**中国绿色债券评估文件  
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China Green Bond (CGB) Assessment Document  
Version 1.0 (2017.04.01)**

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Industrial and Commercial Bank of China  
Assessment Report**

Beijing Zhongcai Green Financing Consultant Ltd.

Date: 26<sup>th</sup> August 2021

## Assessment Notes

Industrial and Commercial Bank of China ("ICBC" or the "Bank") commissioned Beijing Zhongcai Green Financing Consultant Ltd. ("Zhongcai") to assess "Green Bond Framework for Industrial and Commercial Bank of China" (the "Green Bond Framework" or the "Framework") in accordance with:

- ✓ Green Bond Endorsed Projects Catalogue (2021 Edition) issued jointly by the People's Bank of China (PBoC), the National Development and Reform Commission (NDRC) and the China Securities Regulatory Commission (CSRC)
- ✓ PBoC Announcement No.39 [2015] for "Issuances of green financial bonds in the interbank bond market"
- ✓ PBoC Announcement No.29 [2018] for "Strengthening the supervision and management of green financial bonds during their duration"

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## PART I General Information

## 1.1 General Information of the Assessment

<b>Third-Party Assessment Institution</b>	Beijing Zhongcai Green Financing Consultant Ltd. is a Member of China's National Association of Financial Market Institutional Investors, as well as Approved Verifier of Climate Bond Initiative.
<b>Type of Assessment</b>	Green Bond Framework Assessment
<b>Assessment Scope and Main Content</b>	<ol style="list-style-type: none"> <li>1. Use of Proceeds and Project Categories</li> <li>2. Project Evaluation and Selection</li> <li>3. Management of Proceeds</li> <li>4. Information Disclosure</li> </ol>
<b>Assessment Duration</b>	29 <sup>th</sup> July to 26 <sup>th</sup> August 2021
<b>Assessor</b>	LIU Huixin, QIAO Shinan, ZHOU Jieyu
<b>Technical Reviewer</b>	CUI Ying, LIU Nan
<b>Methods</b>	Review of project documents, issuer-related systems and other documentation, interviews with the management team and stakeholders through interviews and emails etc.
<b>Role of Management Team</b>	Properly arrange and actively cooperate with the Assessment Institution and ensure the integrity, accuracy and timeliness of the information provided
<b>Role of Assessment Institution</b>	Complete the assessment independently, objectively, and impartially and provide the assessment report on time based on the information provided by ICBC and other relevant parties

## PART II Use of Proceeds and Project Categories

### 2.1 Use of Proceeds

The proceeds of each ICBC Green Bond will be used to finance or refinance Eligible Green Assets that promote environmental protection, sustainable economic development, and combating climate change. Eligible Green Assets can contribute to environmental protection, sustainable economic development and combating climate change through energy conservation, emission reduction and resource recycling. The Eligible Green Assets consist of Eligible Green Asset Categories from the various business units of ICBC.

According to *Green Bonds Endorsed Projects Catalogue (2021 Edition)*, “Green bonds refer to marketable securities that use raised funds specifically to support green industries, green projects, or green economic activities that meet specified conditions, and are issued in accordance with legal procedures and repay principal and interest according to agreements”, with the aim of supporting environmental improvement, action to climate change and efficiency improvements, and promoting sustainable economic and social development and industrial green transformation and upgrades. The Green Bond Framework’s regulations on the use of proceeds are in line with the requirements of domestic green bond standards.

### 2.2 Project Categories

The Eligible Green Assets under the Green Bond Framework include:

- Renewable energy
- Clean transportation
- Energy efficiency
- Sustainable water and wastewater management

For the avoidance of doubt, in any case, the Eligible Green Assets shall exclude the assets that are involved in the following sectors or activities below:

- Fossil fuel related assets
- Nuclear and nuclear related assets:
- Biomass/feedstock that
  - ◆ will be derived from sources that compete with food production
  - ◆ will be grown in areas with currently or previously high in biodiversity
  - ◆ will decrease carbon pools in soil

In addition, the Green Bond Framework further explains, "Assets in all eligible categories shall at least reach the threshold of relevant green official standards of environmental impacts recognized in the local jurisdictions. In case of no official standards locally recognized, corresponding international standards shall apply." According to *Green Bond Endorsed Projects Catalogue (2021 Edition)*, the Eligible Green Assets under the Framework are compatible with the following categories:

"Eligible Green Asset Categories" under the Green Bond Framework		Green Bond Endorsed Projects Catalogue (2021 Edition)	
Category	Eligibility Conditions	Category	Description/Condition
Renewable energy	Generation and transmission of energy from renewable energy sources: Renewable energy sources include offshore and onshore wind, solar, tidal, large hydropower (lifecycle emissions below 100g CO <sub>2</sub> e/kWh or power density above 5 W/m <sup>2</sup> ), and biomass (lifecycle emissions below 100g CO <sub>2</sub> e/kWh).	3. Clean Energy Industry 3.2 Clean Energy 3.2.2 The Construction and Operation of Renewable Energy facilities	The component products selected for solar photovoltaic power generation facilities should meet the following requirements: 1) The minimum photoelectric conversion efficiency of polycrystalline silicon cells and monocrystalline silicon cells shall not be less than 19% and 21% respectively; 2) The minimum photoelectric conversion efficiency of polycrystalline silicon cell modules and single crystal silicon battery modules shall not be less than 17% and 17.8% respectively; 3) The minimum photoelectric conversion efficiency of silicon-based, CIGS, CdTe and other thin-film battery modules shall not be less than 12%, 14%, 14%, 12%; 4) The decay rates of polycrystalline silicon battery modules and monocrystalline silicon battery modules shall not be higher than 2.5% and 3% in the first year, and not higher

			<p>than 0.7% per year, and not higher than 20% within the period of 25 years; the attenuation rate of thin-film battery module shall not be more than 5% in the first year, no more than 0.4% per year in the following year, no more than 15% within the period of 25 years. Other projects need to ensure ecological and environmental security conditions such as "no significant impact on the ecological environment, no serious damage to marine ecology and biodiversity".</p>
Clean transportation	<p>Construction, maintenance, research and development of zero direct emission (e.g. electric and hydrogen) transportation facilities excluding any infrastructure or rolling stock assets used for the transportation of fossil fuel or mining products: Examples include metro, rail tram, bus rapid transit systems, and electric vehicles;</p> <p>Manufacture of key assets, systems, and components dedicated for zero</p>	<p>5. The Green Upgrade of Infrastructure</p> <p>5.5 Green Transport</p>	<p>The Railway Transport should meet the following requirements:</p> <p>Construction and operation of freight railway facilities such as freight railway lines, yards and stations, and special power substations; construction and operation of existing railway electrification, yards and stations and energy-saving and environmental protection reform projects of railway-related equipment. Among them, railway yards and stations must meet the relevant provisions of the "<i>Green Railway Passenger Station Evaluation Standard</i>" (TB/T 10429-2014).</p>



	direct emission vehicles and vessels.		
Energy efficiency	<p>Products or technologies that increase energy efficiency and reduce at least 30% energy consumption of the related asset(s), technology(ies), product(s) or system(s): Examples include LED lights, improved chillers, and improved lighting technologies</p> <p>Improved efficiency in the delivery of bulk energy services: Examples include smart grids and energy storage</p>	<p>1. Energy Saving and Environmental Protection Industry 1.1 Energy Efficiency Improvement 5. The Green Upgrade of Infrastructure 5.1 Energy Efficiency Improvement</p>	The energy-saving equipment manufacturing should meet the energy efficiency, pollution emissions and other standard restrictions and requirements of the corresponding product.
Sustainable water and wastewater management	<p>Water collection, treatment, recycling technologies and related infrastructure: Examples include water pipes and collection facilities to collect water or rainwater for recycling, and wastewater treatment plant facilities</p>	<p>1. Energy Saving and Environmental Protection Industry 1.3 Pollution Prevention 1.3.2 The Treatment of Sewage Water 1.4 Water Saving and Non-conventional Water Resources 1.4.1 Non-</p>	The recycling of various types of water and wastewater resources is subject to different domestic water use standards and restrictions according to the use of water resources.

		conventional Water Resources 5. The Green Upgrade of Infrastructure 5.3 Pollution Prevention 5.3.1 Urban Environmental Infrastructure 5.4 Water Saving and Non- conventional Water Resources 5.4.1 Water Saving	
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**The green asset categories under the Green Bond Framework are all in line with the criteria of the *Green Bond Endorsed Projects Catalogue (2021 Edition)*. The project selection is subject to the description/condition of the green project categories listed in the *Green Bond Endorsed Projects Catalogue (2021 Edition)*.**

## PART III Project Evaluation and Selection

### 3.1 Project Evaluation and Selection

Eligible Green Assets in the Green Bond Framework will be from the various business units of ICBC globally, including its domestic and overseas branches and subsidiaries. They will then be reviewed by a dedicated Green Bond working group at ICBC Head Office (the "Working Group") which comprises representatives of Asset & Liability Management Department, Credit and Investment Management Department, Corporate Banking Department, Modern Finance Research Institute and other departments if relevant.

Prior to the issuance, the Green Bond Working Group will review all proposed Eligible Green Assets to determine their compliance with the ICBC Green Bond Framework for approval as "Eligible Green Asset" and form an eligible green asset list (each "Eligible Green Asset", collectively the "Eligible Green Asset List"). For refinancing projects, the Working Group will prioritize the most recent projects.

In the Working Group, representatives nominated shall include experts possessing environmental experience and knowledge, and enjoy a veto power to the final decision on the selection. The assets vetoed by them shall be excluded from the Eligible Green Asset List. Annually, the working group will review the allocation of the raised fund to the Eligible Green Asset List and determine if any changes are necessary (for example, if a project has amortized, been prepaid, sold or otherwise become ineligible) and facilitate ongoing reporting. The Working Group will decide any necessary update of the Eligible Green Asset List (such as replacement, deletion, or addition of projects) to maintain the eligibility of the Use of Proceeds.

According to the description of green projects in China's Green Bond Endorsed Projects Catalogue (2021 Edition), green assets firstly come from various business units of the ICBC Group (including domestic and overseas branches and subsidiaries), then the green assets are reviewed by a "dedicated green bond working group" at ICBC Head Office. This bottom-up selection process and professional review mechanism can effectively screen out green projects that meet the requirements of domestic green bond standards and ensure the quality of green projects in the eligible asset pool, thus ensuring that the fund raised are truly used to support environmental protection, sustainable economic development and combating climate change.

**The Green Bond Framework establishes a scientific process for project evaluation and selection, which will effectively select eligible green assets.**

## PART IV Management of Proceeds

### 4.1 Management of Proceeds

Prior to the issuance of a Green Bond, ICBC shall develop a preliminary Eligible Green Asset List in accordance with the procedures as described in the Project Evaluation and Selection section to ensure that the proceeds can be allocated to the Eligible Green Assets in a timely manner.

A Green Bond allocation register (the "Register") will be established to record the allocation of Green Bond proceeds. The proceeds of each ICBC Green Bond will be deposited in the general funding accounts and "earmarked" pending allocation.

The Register will contain, for each Green Bond issued, information including:

1. Details of Green Bond: currency, amount, ISIN, pricing date, maturity date, etc.
2. Details of Eligible Asset List: information including:
  - (1) Eligible Green Asset Categories
  - (2) Summary of details of projects financed such as amount, project description, age of the project, etc.
  - (3) Amount of allocated proceeds on the projects
  - (4) Other necessary information so that the aggregate of issuance proceeds allocated to the Eligible Green Assets is recorded at all times
  - (5) Estimated environmental and social impact where applicable of the projects financed

### 4.2 Management of Unallocated Proceeds

Any balance of issuance proceeds not allocated to Eligible Green Assets will be held in accordance with ICBC's sound and prudent liquidity management policy. The remaining unallocated proceeds will be handled as compliant with the relevant green bond standards of the issuing location, which includes to be temporarily invested in Green Bonds issued by non-financial enterprises, money market instruments with good credit rating and market liquidity in the domestic and international markets until they are allocated to Eligible Green Assets. The unallocated proceeds shall not be invested in highly polluting, high-carbon emission or resource-intensive projects.

According to the PBoC Announcement No.39 [2015], in terms of the management of proceeds, the issuer "shall open a special account or establish a special ledger to manage and supervise the transfer, allocation and payback of green bond proceeds. This is to earmark the fund and make sure that all the unallocated proceeds in the duration can be invested in green projects". And during the period when the proceeds are unallocated, the issuer may "invest the unallocated proceeds in green bonds

issued by non-financial enterprises and money market instruments with good credit rating and market liquidity". The Green Bond Framework specifies that a special ledger will be established to manage the proceeds of green bonds, and ICBC plans to use the unallocated proceeds to temporarily "invest in green bonds issued by non-financial enterprises and money market instruments with good credit rating and market liquidity". The management and use of proceeds both follow the requirements of the PBoC Announcement No.39 [2015].

**The Green Bond Framework has a sound plan for the subsequent management and use of proceeds, which will effectively ensure that the proceeds are used for eligible green assets.**

## PART V Information Disclosure

### 5.1 Reporting and Disclosure

ICBC commits to publish a Green Bond Annual Report which will provide information on allocation and impacts on an annual basis, and provide timely updates shall there be any material changes to the projects allocated.

For Green Bonds issued in China domestic market, ICBC will also follow the requirements of Chinese Green Bond Standards, including the “Green Bonds Endorsed Projects Catalogue (2021 Edition)” jointly announced by the PBoC, NDRC and CSRC; the PBoC Announcement No.39 [2015] for “Issuances of green financial bonds in the interbank bond market”; and the PBoC Announcement No.29 [2018] for “Strengthening the supervision and management of green financial bonds during their duration”, in which it is required to disclose the use of proceeds to the market on a quarterly basis. ICBC will disclose the annual report on the use of proceeds and special audit report from the previous year, and the use of proceeds in the first quarter of the year by 30<sup>th</sup> April every year. The annual report on the use of proceeds from last year will also be reported to the PBoC.

### 5.2 Information Disclosure

#### 5.2.1 Allocation Reporting

Information will be provided on amounts equal to the proceeds of the Green Bond issued and provide disclosure on the below aspects:

- (1) aggregate amount allocated to the various Eligible Green Asset Categories
- (2) remaining balance of funds which have not yet been allocated
- (3) geographical distribution of the proceeds (on country level)
- (4) examples of Eligible Green Assets (subject to confidentiality disclosures)

Furthermore, ICBC will confirm that the use of proceeds of the Green Bond issuance conforms to the Framework.

#### 5.2.2 Impact Reporting

ICBC will endeavor to report on the relevant environmental and social impacts by project and on a pro-rated basis according to the share of ICBC’s Green Bond financing where applicable resulting from Eligible Green Assets, and the relevant information on the methodology and assumptions used for impact evaluation.

Subject to the nature of Eligible Green Assets and availability of information, ICBC aims to include, but not limited to, the following potential impact indicators :

Eligible Green Asset Categories	Potential Impact Indicators
Renewable energy	<ul style="list-style-type: none"> <li>• KWh of power generated from renewable energy</li> <li>• Tonnes of CO2 (or other GHG) avoided</li> </ul>
Clean transportation	<ul style="list-style-type: none"> <li>• Tonnes of CO2 (or other GHG) avoided</li> <li>• Length of new tracks built (km)</li> <li>• No. of passenger</li> <li>• No. of electric vehicles purchased</li> </ul>
Energy efficiency	<ul style="list-style-type: none"> <li>• KWh of energy saved per year</li> <li>• Percentage energy efficiency achieved</li> </ul>
Sustainable water and wastewater management	<ul style="list-style-type: none"> <li>• Amount of water saved</li> <li>• Amount of waste water treated</li> </ul>

The Green Bond Report(s) will be publicly available via annual updates on ICBC's official global website [www.icbc-ltd.com](http://www.icbc-ltd.com).

ICBC will also make disclosure through other channels where feasible, such as annual reports and corporate social responsibility reports, which will also be published on [www.icbc-ltd.com](http://www.icbc-ltd.com).

According to the PBoC Announcement No.39 [2015] and the PBoC Announcement No.29 [2018] for "Strengthening the supervision and management of green financial bonds during their duration", the domestic green bond information disclosure requirements are "the issuer shall disclose the annual report on use of proceeds and special audit report from last year, and use of proceeds in the first quarter of the year by 30<sup>th</sup> April every year. The annual report on use of proceeds shall be reported to the People's Bank of China". The content of the information disclosure should contain "management of proceeds, use of proceeds, information on green projects supported by the proceeds and environmental benefits, information disclosure rules and implementation, etc." The information disclosure and impact reporting under the Framework meet the requirements of the PBoC Announcement No.39 [2015] and the PBoC Announcement No.29 [2018] for "Strengthening the supervision and management of green financial bonds during their duration".

**The Green Bond Framework establishes a comprehensive plan for green bond disclosure, which will effectively ensure effective disclosure of green bond information.**

**PART VI Assessment Conclusion**

The assessment institution and assessors of Zhongcai have neither found evidence of misrepresentation nor substantive error that leads to non-compliance of the Green Bond Framework against the Green Bonds Endorsed Projects Catalogue (2021 Edition), the PBoC Announcement No.39 [2015] for “Issuances of green financial bonds in the interbank bond market”, and the PBoC Announcement No.29 [2018] for “Strengthening the supervision and management of green financial bonds during their duration” by reviewing relevant documents and communicating through interviews and emails with the relevant departments and persons from ICBC.

Based on a comprehensive assessment of the use of proceeds and project categories, project evaluation and selection, management of proceeds, and information disclosure within the Green Bond Framework, the following assessment conclusions are drawn:

1. The green asset categories under the Green Bond Framework are all in line with the criteria of the *Green Bonds Endorsed Projects Catalogue (2021 Edition)*. The selection of projects is subject to the description/condition under the green project categories listed in the *Green Bonds Endorsed Projects Catalogue (2021 Edition)*.
2. The Green Bond Framework establishes a scientific process for project evaluation and selection, which will effectively select eligible green assets.
3. The Green Bond Framework has a sound plan for the subsequent management and use of proceeds, which effectively ensure that the proceeds are used for eligible green assets.
4. The Green Bond Framework establishes a clear scheme for green bond disclosure, which will effectively ensure effective disclosure of green bond information.

Signature of Assessor: Huixin Lin

Shinan Qiao

jiexu shou

Beijing Zhongcai Green Financing Consultant Ltd.

Signature of Technical Reviewer: Ying Cui

Nan Lin

Assessment Report Date: 26<sup>th</sup> August 2021



## PART VII Disclaimer

The assessment institution abides by the principles of independence, objectivity and fairness, and follows the relevant laws, regulations and self-regulatory rules in this assessment. Based on the information collected in the course of practice, it promises that the content stated in the assessment report is objective, true and accurate, and bears the liability for the reasonableness of the assessment conclusion. The assessment statement is based on information provided by the Issuer and the Issuer is responsible for the integrity, accuracy, and timeliness of the information.

The assessment institution evaluated the use of proceeds and project categories, project evaluation and selection, management of proceeds, and information disclosure within the green bond framework. This assessment provides information support only in the aforesaid areas and does not accept liability for damages based on this opinion and its information.

The assessment opinions shall not be interpreted as any indication or guarantee for relevant bond investment decisions. In no case may the opinions hereof operate as the interpretation or guarantee for economic performance of the bonds, credit rating and actual utilization of the raised fund.