

# Annual Report on Bank of China's November 2016 China Green Covered Bond

In November 2016, Bank of China ("BoC") issued China Green Covered bond in the offshore market through its London Branch ("November 2016 China Green Covered Bond"). As stated in the offering Circular as well as Bank of China Green Bond Management Statement ("the Management Statement")<sup>1</sup>, we hereby provide the first Annual Report on our November 2016 China Green Covered Bond, disclosing the allocation of the bond proceeds as well as the expected environmental impacts of the Eligible Green Projects as of 31st December, 2016.

### **Bond Details**

November 2016 China Green Covered Bond was denominated in USD. The total amount equated to CNY 3,391.60 million, assuming the foreign exchange rate given below as of the settlement date of the bond<sup>2</sup>.

Table 1 Detailed Information of Bank of China's November 2016 China Green Covered Bond

ISIN code	Currency	Tenor (year)	Coupon type	Amount (million)	CNY Equivalent Amount (million)	FX rate
XS1512929842	USD	3	Fixed	500	3,391.60	6.7832

#### Awards for the Issuance

2017 Climate Bonds: The first issuer of a Green Dual Resource Bond in China<sup>3</sup>

2017 IFLR Asia Awards: Securitization and structured finance deal of the year4

2016 GlobalCapital Asia and Asiamoney: 2016 China Deals of the Year, Best Bond – offshore<sup>5</sup>

### **Proceeds Allocation**

After deducting the up-front costs in the course of issuance, the net proceeds of the November 2016 China Green Covered Bond equivalents to CNY 3,381.49 million. As of December 31, 2016, 99.03% of the net proceeds had been utilized to fund the Eligible Green Projects in at least one of the following categories as set out in the Offering Circulars; the remaining unallocated proceeds was in the form of cash and amounted to 32.64 CNY million, accounting for 0.97% of the net proceeds. None of the unallocated proceeds was invested in greenhouse gas (GHG) intensive nor highly polluting nor energy intensive projects.

- 1. Renewable energy: wind power plants and solar power plants ("Renewable Energy Projects");
- 2. Pollution prevention and control: waste water treatment projects ("Pollution Prevention and Control Projects").

Further description of the Project Evaluation and Selection and the Management of Proceeds can be found in the Management Statement, which applies to all of BoC's offshore Green Bonds.

The following tables set forth detailed information about the allocation of proceeds in terms of category (see Table 2) and location (see Table 3):

<sup>&</sup>lt;sup>1</sup> available at <a href="http://www.boc.cn/en/investor/ir10/201607/t20160704">http://www.boc.cn/en/investor/ir10/201607/t20160704</a> 7235334.html

<sup>&</sup>lt;sup>2</sup> refer to the central parity rate published by the People's Bank of China as of November 9, 2016

<sup>&</sup>lt;sup>3</sup> available at <a href="https://www.climatebonds.net/market/2017-awards">https://www.climatebonds.net/market/2017-awards</a>

<sup>&</sup>lt;sup>4</sup> available at <a href="http://www.iflr.com/Article/3666181/Capital-markets/Asia-awards-2017-winners-revealed.html">http://www.iflr.com/Article/3666181/Capital-markets/Asia-awards-2017-winners-revealed.html</a>

<sup>&</sup>lt;sup>5</sup> available at <a href="http://www.globalcapital.com/article/b11qb7cwp2jhyg/2016-china-deals-and-investment-bank-of-the-year-results">http://www.globalcapital.com/article/b11qb7cwp2jhyg/2016-china-deals-and-investment-bank-of-the-year-results</a>

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

Category	Allocated amount(CNY million)	Proportion	
Renewable energy	2,917.20	86.27%	
Pollution prevention and control	431.65	12.76%	
Unallocated proceeds	32.64	0.97%	
Total	3,381.49	100%	

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

Location	Allocated amount (CNY million)	Proportion
Northern China	1,908.67	56.44%
Eastern China	203.00	6.00%
Western China	975.12	28.84%
Central and Southern China	262.06	7.75%
unallocated proceeds	32.64	0.97%
Total	3,381.49	100%

It might be noted that the allocation of proceeds stated above was somewhat different to the ex-ante description in the Offering Circular. This is mainly because: (a) the total loan amount of the projects in Eligible Green Project List formulated prior to the issuance exceeded the amount of net proceeds actually raised; (b) BoC's loan portfolio were subject to on-going changes such as disbursements, amortization and prepayment.

#### **Green Projects Examples**

As of December 31, 2016, the proceeds of November 2016 China Green Covered Bond had been utilized to fund 12 Eligible Green Projects, of which 2 examples are listed below.

**Project I:** A 300MW wind power project (the "Project") is located in the east of Inner Mongolia Autonomous Region. So far, Phase I of this Project (49.5MW) had already been put into operation. It is learnt from the on-site investigation that the total installed capacity of this project is 49.5MW with the generating hours of 1,486 hours and the grid-connect volume of 73,540MWh. Equivalently, the Project could save standard coal of 23,400 tons and reduce  $CO_2$  emission of 70,200 tons.

Project II: A Water treatment project (the "Project") located in the eastern China consisting of an Urban Sewage Treatment Plant Construction Project, the Urban Network Construction Project, the expansion and the quality upgrading and standard reaching of an Industrial Sewage Treatment Plant (the "Industrial Sewage Treatment Project"), and the Village&Town Sewage Treatment Plant together with the laying of supporting pipeline (the "Village&Town Sewage Treatment Project"). So far, the Industrial Sewage Treatment Project and the Village&Town Sewage Treatment Project have already been put into operation, the Urban Sewage Treatment Plant has not yet started constructing. Based on the on-site investigation, the treatment capacity of the Industrial Sewage Treatment Plant in 2016 is 2.85 million tons. The direct reduction of pollutants are as follows: COD: 327.91 tons / year, BOD: 35.71 tons, SS: 86.16 tons / year, Ammonia Nitrogen: 16.84 tons / year, TN: 5.99 tons / year, TP: 4.47 tons / year. The treatment capacity of the Village&Town Sewage Treatment Plant in 2016 is 4.53 million tons, and the direct reduction of pollutants are as follows: COD: 154.56 tons / year, BOD: 90.77 tons/year, NH<sub>3</sub>-N: 36.38 tons / year, SS: 98.45 tons / year, TN: 31.12 tons / year, TP: 4.45 tons / year.

### **Impact Reporting**

Table 4 and Table 5 (see the next page) show the expected environmental impacts in detail. The format follows the recommendations outlined in the "Working towards a harmonized framework for Green Bond impact reporting"<sup>6</sup>. Due to the confidential considerations for our loan clients, the impact results 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 (i.e. Renewable energy and Pollution prevention and control).

### Methodology

The environmental impacts are calculated in categories. The impacts of the Renewable Energy Projects refer to the UNFCCC CDM methodology ACM 0002 Grid-connected electricity generation from renewable sources (version 17.0)7. Noted by \* in the table 4 below.

For Pollution Prevention and Control Projects, the environmental impacts are calculated based on the capacity of the pollution prevention facility and the treatment effectiveness (waste water treatment = treatment capacity of the facility \* (influent quality - effluent quality)). Noted by \*\* in the table 5 below.

<sup>&</sup>lt;sup>6</sup> available at <u>www.icmagroup.org/greenbonds</u>

<sup>&</sup>lt;sup>7</sup> available at

### Table 4 Environmental Impacts of the Renewable Energy Projects on a Portfolio Basis

	Signed amount <sup>8</sup>	Share of total portfolio financing <sup>9</sup>	Eligibility for green bonds	RE component	Allocated amount <sup>10</sup>	Average portfolio	Annual generation	Renewable energy capacity added	Annual GHG emissions reduced*
	CNY million	%	%	%	CNY million	year	MWh	MW	tonnes of CO <sub>2</sub> equivalent
Renewable Energy	2917.20	34.98	100	100	2917.20	20	391,208.8	882	333,000

## Table 5 Environmental Impacts of the Pollution Prevention and Control Projects on a Portfolio Basis

	Signed Share of total portfolio amount financing		Eligibility for green bonds	Allocated amount	Average portfolio	Annual pollution prevention**	
	CNY million	%	%	CNY million	year	tonnes	
Pollution prevention and control	421.65	20.02	100	421 CF	20	COD <sup>11</sup>	NH <sub>3</sub> -N <sup>12</sup>
	431.65 28.03	100	431.65	20	228	25	

<sup>&</sup>lt;sup>8</sup> This represents the amount legally committed by the issuer for the project or component that is eligible for green bond financing.

<sup>&</sup>lt;sup>9</sup> This is the share of the total project cost that is financed by the issuer.

<sup>&</sup>lt;sup>10</sup> This represents the amount of green bond proceeds that has been allocated to disbursements to the project.

<sup>11</sup> Chemical Oxygen Demand

<sup>12</sup> Ammonia Nitrogen