兴业银行
INDUSTRIAL BANK CO.,LTD.

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2018

IB Annual Green Bond Report[1]

Industrial Bank Co., Ltd.

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[1] IB Annual Green Bond Report 2018 (the “2018 Report”) is drafted by Industrial Bank Co., Ltd. to fulfill the reporting requirement of IB’s Green Bonds (the “Bonds”) issued under the Green Bond Framework for Industrial Bank Co., Ltd. (the “framework”).

Background

Founded in August 1988 and headquartered in Fuzhou, Fujian Province, Industrial Bank (IB, the "Bank") is one of the first batch of joint-stock commercial banks approved by the State Council and the People's Bank of China, and the first Equator Bank in China. On February 5, 2007, IB was listed on Shanghai Stock Exchange (Stock Code: 601166). With a registered capital of RMB20.77 billion by June 30th 2018, IB has become a national joint-stock commercial bank with sound governance, distinctive characteristics, great strength and quality service, staying stably among Global Top 50 Banks.

IB was the first commercial bank in China to fully embrace sustainable development and Green finance. In 2007, the Bank attended the United Nations Environment Programme (UNEP) Global Roundtable and signed the "UNEP Statement by Financial Institutions on the Environment & Sustainable Development". The Bank announced the adoption of the Equator Principles in 2008, becoming the first bank in China that integrated an advanced international environmental and social risk management framework into its daily business. In 2015, the Bank became the first financial institution in China to sign the "Statement by Financial Institutions on Energy Efficiency" initiated by the G20 Energy Efficiency Finance Task Group. In China, as the Vice Secretary-General of the Green Finance Committee (GFC) established under China Financial Forum, the Bank has been proactively promoting Green finance as part of the national agenda, contributing to the drafting of key policies such as the Green Bond Issuance Guidelines by the PBoC; Guidelines for Establishing the Green Financial System by seven ministerial agencies including the PBoC and Ministry of Finance; and participating in GFC's activities such as policy promotion, research, capacity building and international cooperation.

Green Finance Practice of IB

Green Financing

In 2018, IB's Green Financing Portfolio totaled RMB**844.9bn**[2] and IB had **12,143** Green Finance Corporate Clients. Both figures has been growing at over **35%** CAGR since 2013.

Green Financing Portfolio totaled

RMB 844.9 billion

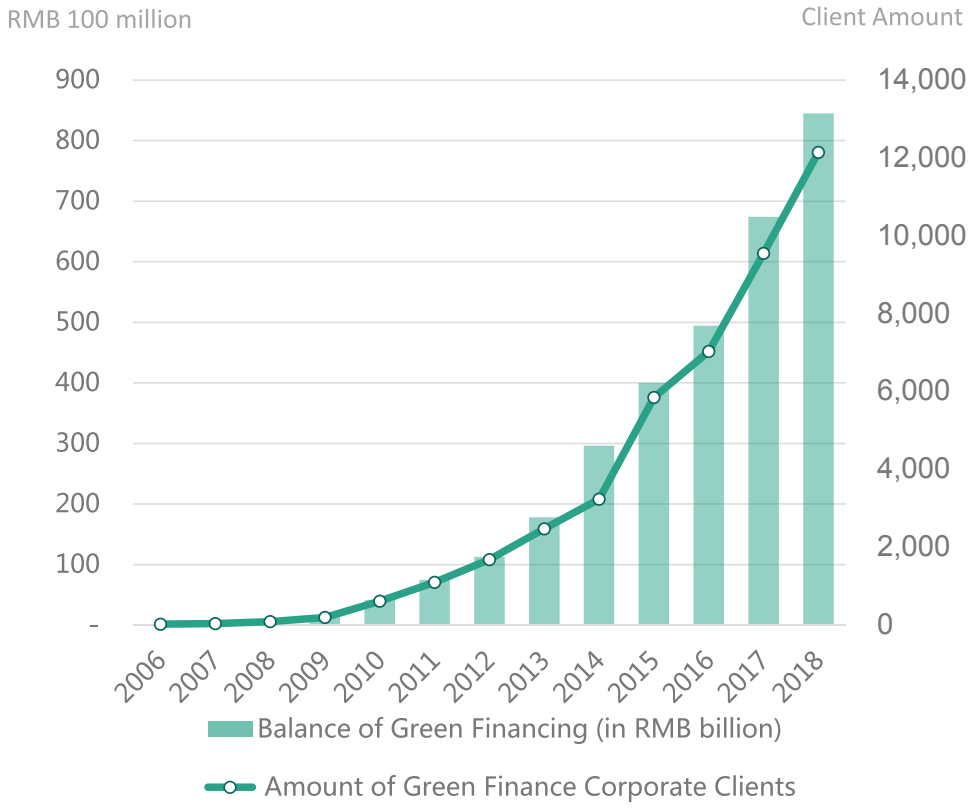
Amount of Green Finance Corporate Clients

121,143

Size of portfolio and amount of clients growth rate since 2013 (CAGR)

35%

Green Financing Portfolio and Amount of Corporate Clients



[2] Including loans, debt investment, bond investment, financing leasing, managed class assets, and equity investment that aligned with IB's green financing standards (the "IB green finance standards") . IB green finance standards is a series of self-developed standards which are drafted based on domestic and international green finance standards and industrial standards.

IB's Green Financing Portfolio in 2018 is expected to realize the following environmental impacts per year[3]:

Coal Usage Reduction:
29.79 million tons

CO_2 Emission Reduction:
84.17 million tons

COD

COD Emission Reduction:
3.98 million tons

NH_3-n

NH_3-n Emission Reduction:
159.0 thousand tons

SO_2

SO_2 Emission Reduction:
877.9 thousand tons

NO_2

NO_2 Emission Reduction:
78.7 thousand tons

Solid Waste Recycling:
45.43 million tons

Water Saving:
409.78 million tons

[3] Environmental impacts are extracted directly from projects approval documents issued by National and Local Development and Reform Commission (NDRC, 国家发展改革委员会), or other official agencies. The calculation of environmental impacts has applied Chinese Regulatory Standards, including China Banking and Insurance Regulatory Commission's (CBIRC, 中国银行保险监督管理委员会) *Guidelines for Calculation Energy Saving and Emission Reduction for Green Credit Projects* (绿色信贷项目节能减排量测算指引), and Chinese National Standards, including China Administration of Quality Supervision, Inspection and Quarantine (AQSIQ, 中国国家质量监督检验检疫总局)'s *General Technical Rules for measurement and verification of energy saving GB_T 28750-2012* (节能量测量和验证技术通则) and *General Principles for calculation of the comprehensive energy consumption GB_T 2589-2008* (综合能耗计算通则). The method involves calculation of baseline, absolute and relative emission, and is similar to EIB Carbon Footprint Methodology.

Green Bonds

IB issued the first Green finance bond in China in 2016. By the end of 2018, IB has seven green bonds outstanding, including RMB 110 billion listed domestically[4], USD 600 million listed in Hong Kong and EUR 300 million in Luxembourg. Funds are raised to finance projects in environmental protection, energy efficiency, renewable energy, clean energy, resource conserving and recycling, clean transportation, ecological protection, climate change response and other industries that are included in Chinese domestic and international green bond standards.

These Green bonds issued by IB will be a further elaboration of the Bank's sustainable development strategy and will facilitate the implementation of environmental protection endeavors in accordance with China's National 13th Five-year Plan. The bank issued these green bonds to optimize the issuer's financial conditions, promote the development and enhance the service level of IB's Green finance business. It also serves the purpose of delivering the bank's consistent effort in Green development to its investors and supporting them to meet their objectives in the expanding Green economy.

[4] IB's RMB 110 billion domestically issued green financial bonds, which are traded on China Inter-Bank Bond Market, are not issued under the *Green Bond Framework for Industrial Bank Co., Ltd* but are subjected to green bonds regulatory requirements proposed by Chinese domestic financial regulators, including People's Bank of China (PBoC, 中国人民银行) and China Banking and Insurance Regulatory Commission (CBIRC, 中国银行保险监督管理委员会). Corresponding green bond reports are posted on www.chinabond.com.cn as of regulatory requirements.

Green Bond Issued under the Green Bond Framework for IB

On November 20th 2018, IB issued through Hong Kong Branch its first offshore green bonds (the "Green Bonds"), which include two tranches with a total value of over USD 900 million. A *Green Bond Framework for Industrial Bank Co., Ltd.* (the "Framework") was also prepared to define the use of proceeds, project evaluation and selection, management of proceeds and reporting of the Green Bonds.[5,6]

Issue Type	Senior Unsecure Bond	
Issue Format	MTN Reg S	
Issue Rating	Baa2 (Moody's)	
ISIN	XS1898122301	XS1898123374
Issue Date	2018/11/20	2018/11/20
Maturity Date	2021/11/20	2021/11/20
Issue	USD 3Y FRN	EUR 3Y FRN
Size	USD $600,000,000.00	EUR €300,000,000.00
Issue Price	100	100
Benchmark	3-Month USD LIBOR	3-Month EUR EURIBOR
Coupon Rate	3M-LIBOR + 85bps	3M-EURIBOR + 85bps
Listing Venue	Hong Kong Stock Exchange	Luxembourg Stock Exchange
Use of Proceeds	To finance and refinance, in whole or in part, eligible Green assets as defined in the Framework	
Second Opinion Provider	CICERO Center for International Climate Research ("CICERO"). The Framework obtained a Dark Green shading rating from CICERO.	
CBI Certification	The Bond obtained the Climate Bonds Initiative (CBI) Pre-issurance Certification.	
HKQAA Certification	The USD 3Y FRN Tranche of the Bond obtained HKQAA Green Finance Certification (Pre-issuance Stage).	
Allocated Proceeds (USD equivalent)	326.62	
Unallocated Proceeds (USD equivalent)	611.33	
% of proceeds allocated	34.82%	

[5] For the latest version of IB's Green Bond Framework, green bond second opinions, certifications and verifications, check our website at: www.cib.com.cn/en/aboutCIB/about/notice/20181107.html

[6] IB's domestically issued green financial bonds, which are traded on China Inter-Bank Bond Market, are not issued under the framework but are subjected to green bonds regulatory requirements proposed by Chinese domestic financial regulators, including People's Bank of China (PBoC, 中国人民银行) and China Banking and Insurance Regulatory Commission (CBIRC, 中国银行保险监督管理委员会). Corresponding green bond reports are posted on www.chinabond.com.cn as of regulatory requirements.

Allocation of Proceeds

RMB 2280.9 million (USD 326.6 million) , which accounts for 34.8% of the total fund raised by the Green Bonds, had been allocated to two Renewable Energy and three Low Carbon and Low Emission Transportation projects by Dec 31st, 2018.

Unallocated proceeds were held in IB's general account in accordance with IB's prudent liquidity management policy. No temporary investment was made with unallocated proceeds. The significant amount of unallocated proceeds is due to limited time between date of issuance (Nov 20th, 2018) and date of reporting (Dec 31st, 2018). IB expects all proceeds to be fully allocated within the year of 2019. Proceeds allocation is as follows:

Ref. No	Type	Categoty	Location	Allocated Amount (RMB million)	Allocated Amount (USD million equivalent)	
Project 1	Renewable Energy	Onshore Wind Power	Gutian, Fujian, China	68.25	9.77	
Project 2			Quanzhou, Fujian, China	175.48	25.13	
	Subtotal			243.73	34.90	
Project 3	Low Carbon and Low Emission Transportation	Metro	Zhengzhou, Henan, China	650.00	93.08	
Project 4			Guangzhou, Guangdong, China	620.00	88.78	
Project 5			Xiamen, Fujian, China	767.21	109.86	
	Subtotal			2,037.21	291.72	
	Total Allocation			2,280.94	326.62	
	Unallocated Proceeds			4,269.29	611.33	
	Total			6,550.23	937.95	

Impact Reporting

The Green Bonds issued are estimated to reduce CO_2 emission by 60,133 tons per year in the short term (by 2020) and 72,948 tons per year in the long term (by 2045) . Additional environmental impact also includes 17.57 tons of SO_2 reduction per year, 18.44 tons of NOx reduction per year, and lime ash reduction of 5390 tons per year. The estimations are based on reported allocation of proceeds and may vary if the allocation changes. National approved or international recommended methodologies have been applied for the calculation of environmental impact indicators.

Summary of Environmental Impacts: [7,8,9,10]

Renewable Energy Power Output:

- Generator Capacity: **88.40** MW
- Annual Power Output: **200.92** GWh

Low Carbon and Low Emission Transportation Construction:

- Length of track: **89.38** KM

- Transportation Capacity by 2023: **1.78** million passengers/day
- Transportation Capacity by 2045: **3.69** million passengers/day

Emission and Pollution Control:

- Annual CO_2 Reduction by 2023: **60,133.96** tons
- Annual CO_2 Reduction by 2045: **72,948.00** tons
- Annual SO_2 Reduction: **14.28** tons
- Annual NO_x Reduction: **18.44** tons

- Annual Lime ash Reduction: **5,390** tons

[7] Capacity installed, power output per year, length of tracks and passengers transported per year are reported at project level.

[8] CO_2, SO_2, NO_x reduction and other environmental impacts for a certain project are calculated in the following method: environmental impact attributed to green bond proceeds = environmental impact of the project * (proceeds allocated/total investment)

[9] Environmental impacts of Renewable energy projects are calculated with the methods mentioned in *Green Finance Practice of IB* of this report.

[10] Environmental impacts of Transportation Projects have applied the EIB Carbon Footprint Methodology, which involves estimation of Baseline scenario and calculation of Absolute and Relative Emission. Absolute emission of projects are calculated by estimated energy consumption (kWh) of projects multiplied by national weighted average CO_2 emission intensity (549g/kWh by the year of 2023 and 410g/kWh by 2045, IB's indoor research). Baseline emission is calculated by multiplying estimated total transportation capacity in distance (transportation capacity in number of passengers per year * average distance per trip) with baseline weighted average CO_2 emission intensity (g/km per passenger). Surveys on local residence's transportation pattern are conducted to determine baseline weighted average CO_2 emission intensities (g/km per passenger) of each projects.

Environmental Impacts: Renewable Energy Power Output & Low Carbon and Low Emission Transportation Construction

Ref. No	Type	Categoty	Generator Capacity (MW)	Annual Power Output (GWh)	Length of track (KM)	Transportation Capacity by 2023 (thousand passengers/day)	Trans portation Capacity by 2045 (thousand passenger/day)
Project 1	Renewable Energy	Onshore Wind Power	40.00	84.69	-	-	-
Project 2			48.40	116.23	-	-	-
	Subtotal		88.40	200.92	-	-	-
Project 3	Low Carbon and Low Emission Transportation	Metro	-	-	9.46	145.61	322.67
Project 4			-	-	43.20	1,237.00	2,454.00
Project 5			-	-	36.72	401.60	910.00
	Subtotal		-	-	89.38	1,784.21	3,686.67
	Total		88.40	200.92	89.38	1,784.21	3,686.67

Ref. No	Type	Categoty	CO_2 Reduction by 2023 (ton/y)	CO_2 Reduction by 2045 (ton/y)	SO_2 Reduction (ton/y)	NO_x Reduction (ton/y)	Other Impacts
Project 1	Renewable Energy	Onshore Wind Power	15,415.07	15,415.07	2.04	2.91	-
Project 2			41,176.93	41,176.93	12.25	15.54	Reduction of 5390 tons of lime ash/y
	Subtotal		56,591.99	56,591.99	14.28	18.44	Reduction of 5390 tons of lime ash/y
Project 3	Low Carbon and Low Emission Transportation	Metro	571.36	5,316.97	-	-	-
Project 4			2,099.41	6,008.12	-	-	-
Project 5			871.19	5,030.91	-	-	-
	Subtotal		3,541.97	16,356.01	-	-	-
	Total		60,133.96	72,948.00	14.28	18.44	Reduction of 5390 tons of lime ash/y

Project Description

Project 1

This onshore wind power project locates in south-eastern China with a site area about 5.0KM². The project plans to install 20 sets of 2.0MW wind power generator sets with a construction scale of 40MW. The annual power output is 84.69 GWh with 2059.09 GEAH (Generating Equipment Availability Hours) when running at full capacity. The project is expected to reduce emission of 76,400 tons of CO_2, 10.09 tons of SO_2 and 14.41 tons of NO_x each year.

Generator Capacity

40 MW

Annual Power Output

84.69 GWh

Generating Equipment Availability Hours

2,059.09 GEAH

The project is expected to reduce emission of

76,400 tons of CO_2

10.09 tons of SO_2

14.41 tons of NO_x

Project 2

This onshore wind power project locates in south-eastern China. The project plans to install 24 sets of 2.0MW wind power generator sets and one 110kV booster station. The annual power output is 116.23 GWh with 2333.54 GEAH (Generating Equipment Availability Hours) when running at full capacity. The project is expected to reduce emission of 103,900 tons of CO_2, 30.9 tons of SO_2, 39.2 tons of NO_x and 13,600 tons of lime ash each year.

Generator Capacity

48.4 MW

Annual Power Output

116.23 GWh

Generating Equipment Availability Hours

2,333.54 GEAH

The project is expected to reduce emission of

103,900 tons of CO_2

30.9 tons of SO_2

39.2 tons of NO_X

13,600 tons of lime ash

Project 3

This electrified urban metro project locates in one of the major city in central China. The project is 9.461 km in length and contains 6 underground stations. The cost of the construction of stations is not covered by this green bond offering. The transportation capacity is expected to reach 145.6 thousand passengers per day in 2023 and 322.7 thousand passengers per day in 2045. The project is designed to meet the growing needs of urban transportation and reduce local people's reliance on other carbon-intensive transportations. In the short term (by 2023) and long term (by 2045), the project is expected to generate CO_2 emission reduction (relative emission) of 5,130.4 tons and 47,741.8 tons, respectively.

Length of track

9.461 km

Transportation Capacity by 2023

145.6 thousand passengers per day

Transportation Capacity by 2045

322.7 thousand passengers per day

CO_2 emission reduction by 2023

5,130.4 tons

CO_2 emission reduction by 2045

47,741.8 tons

Project 4

This electrified urban metro project locates in one of the major coastal city in south-eastern China. The project is 43.2 km in length and contains 32 underground stations. The transportation capacity is expected to reach 1.24 million passengers per day in 2021 and 2.45 million passengers per day in 2043. The project is designed as a ring line around the most populated area of the city in order to meet the growing demand of urban transportation and to reduce local people's high reliance on carbon-intensive transportations, especially private automobiles and motorcycles. In the short term (by 2021) and long term (by 2043), the project is expected to generate CO_2 emission reduction (relative emission) of 142.4 thousand tons and 407.6 thousand tons, respectively.

Length of track

43.2 km

Transportation Capacity by 2021

1.24 million passengers per day

Transportation Capacity by 2043

2.45 million passengers per day

CO_2 emission reduction by 2021

142.4 thousand tons

CO_2 emission reduction by 2043

407.6 thousand tons

Project 5

This electrified urban metro project locates in one of the major coastal city in south-eastern China. The project is designed to connect the local high-speed railway station and the new city airport which is currently under construction. It is expected to benefit both local residence and regional travelers. The project is 36.7 km in length, which includes 29.2km underground section and 6.92km elevated section. The project also contains 26 stations. The transportation capacity is expected to reach 400 thousand passengers per day in 2023 and 910 thousand passengers per day in 2045. In the short term (by 2023) and long term (by 2045), the project is expected to generate CO_2 emission reduction (relative emission) of 33.08 thousand tons and 191.04 thousand tons, respectively.

Length of track

36.7 km

underground section

29.2 KM

elevated section

6.92 KM

stations

26

CO_2 emission reduction by 2023

33.08 thousand tons

CO_2 emission reduction by 2045

191.04 thousand tons

Disclosure and Reporting

IB has engaged Center for International Climate Research (“CICERO”) to act as an external reviewer of this Green Bond Framework for GBP alignment. The Green Bonds issued on Nov 20th 2018 are Climate Bonds Certified (pre-issuance). The USD tranche has also obtained HKQAA Green Finance Certification.

IB has engaged Sustainalytics as an independent third party to provide assurance (the “Assurance Report”) on its 2018 Annual Green Bond Report which provides information on allocation and impacts.

The framework, Second Opinion report, Certifications, Verification Letter, Letter of Approving and Assurance Report are publicly available on IB’s website at: www.cib.com.cn/en/aboutCIB/about/notice/20181107.html.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