

China Green Bond Market Mid Year Report 2017 中国绿色债券市场2017半年报

JANUARY-JUNE 2017 2017年1月至6月

Market Overview

China's green bond market growth was on track in the first half of 2017

At the end of June, issuance for 2017 totaled USD 11.52bn: It represents a 33.6% year on year growth from the first half 2016 and more than 20% of global green bonds, with 26 issuers bringing 38 bonds to the market.

Issuance momentum picked up in Q2: Albeit from the slowdown in Q1, largely due to tightened liquidity, domestic interest rate volatility and hence increase of funding costs, the market rallied in Q2, with issuance of USD 7.85bn more than double the amount of Q1 (USD 3.68bn).

Issuers' diversification: More non-bank issuers emerged in China's green bonds market vis-à-vis the first half of 2016. 38% of bonds were issued by non-financial corporates and 24% of bonds by policy banks; commercial banks made up 38% of the market, a smaller proportion compared to 87% in the first six months of last year.

78% of Chinese green bonds have tenors from 3-5 years: In the first half of 2017, the tenors of green bonds ranged from 6 months to 10 years, among which 3-year and 5-year took up the largest percentages, at 42.3% and 35.8% respectively.

Investment-grade green bonds remained

as the norm: Except for privately placed debt financing tools and subprime asset-backed securities, green bonds issued in the first half of 2017 were all rated AA- or higher. Prime-rated (AAA) bonds made up the largest proportion (80.2%) of total issuance. Only 3.8% of Chinese issuance had no ratings.

Differentiation of Green Bond Prices:

Based on like for like comparison of bonds having the same ratings, tenor, type and issuance time, excluding green asset-backed securities, privately placed green debt financing tools, additional issuance and offshore issuance, there were 30 green bonds in the first half of 2017 where we can find comparable non-green equivalents. Among them, 15 green bonds were priced lower than that of the non-green bonds; whereas the other 15 green bonds were issued at a higher cost than their non-green equivalents.

83% issuance received second party reviews: The majority of Chinese issuers upheld the best practice in the Green Bonds Principles.

At a Glance

Total First Half Chinese Issuance: **USD11.52bn/RMB79.39bn**

Issuance that meets international definitions:

USD8.95bn/RMB62.09bn

Largest issuer: China Development
Bank & Bank of Beijing

Largest issuing sector: **Energy**Total Q1 & Q2 Approved: **USD16.85bn/RMB116.3bn**

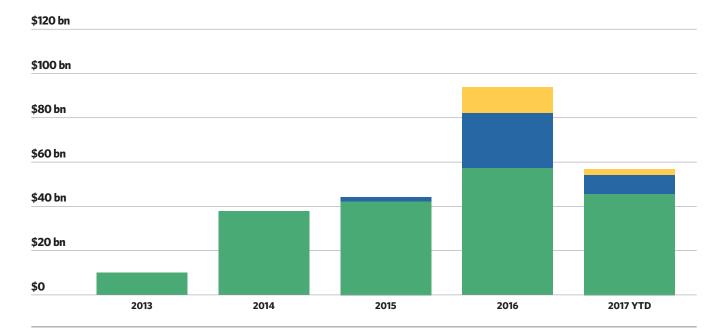
China saw the first Certified Climate Bond:

China Three Gorges Corporation, a leading hydropower operator, has issued its first offshore green bond, raising EUR650 million for two wind projects in Europe. The bond was also the first from a Chinese issuer to gain Climate Bonds Initiative Certification. For Chinese green bond issuers that plan to go global, aligning with a credible international standard gives confidence to the international green bond market on the environmental credentials of their bonds.

Growth of Chinese and global green bonds

- China Issuance (aligned with international and China definitions)
- Other countries Issuance

China Issuance (only aligned with China definitions)







Policy Update - China

Market development supported by a flurry of policies and regulations

China Securities Regulatory Commission (CSRC) releases new green bond guidelines for Chinese listed companies1: the guidelines by the CSRC adopted the green definitions used by People's Bank of China (PBoC), with a restrictive proviso excluding high polluting companies that conflict with the national industrial planning policy. The guidelines also encourage financial institutions including brokerages, fund management companies and banks to invest in green bonds, and prompted Shanghai and Shenzhen stock exchanges to develop dedicated green bond lists, indices and other instruments to facilitate investment.

Green Finance and Ecological Protection written into 2017 Government Work Report²:

China's Prime Minister Li Keqiang presented the 2017 Government Work Report at the 12th National People's Congress, where he stressed that the Xi administration will continue to make major efforts to develop green finance, to contribute to ecological conservation and to work actively to respond to climate change. This is another policy step marking China's commitment to the Paris Agreement.

China-EU collaboration on harmonisation of green bond guidelines: People's Bank of PBoC and the European Investment Bank (EIB) have launched a joint initiative³ to develop a clear framework for analysis and decision-making in green finance.

The EIB and China Green Finance Committee have committed to look at harmonisation of green bond guidelines between EU and China.

Green Belt and Road: China's President Xi Jinping has proposed⁴ to other world leaders at a Belt and Road Initiative (BRI) summit the establishment of an international coalition for green development on Belt and Road, coupled with the "Guideline on Promoting Green Belt and Road"5 jointly issued by four Ministries, which identified developing green financial system as one of the main tasks.

PBoC and Hong Kong Monetary Authority approve the "Bond Connect" scheme6: The scheme allows all investors to trade bonds directly in the mainland and Hong Kong bond markets through connection between the mainland and Hong Kong Financial Infrastructure Institutions.

It starts with "northbound" trading first at the initial stage, giving global investors access to buy and sell Chinese bonds. Green bond issuance and trading in the mainland are expected to benefit from the scheme.

PBoC and four other Ministries jointly publish the Construction and Development Planning of the Financial Industry Standardization7:

China's Central Bank and CSRC, China Banking Regulatory Commission (CBRC), China Insurance Regulatory Commission (CIRC) and the Standardization Administration of PRC are making a concerted effort to establish and implement standards for the financial sector by 2020.

This will include developing standards and certification schemes for green financial products, including green loans, green bonds, green funds, green insurance products etc.

The State Council sets up pilot zones in 5 provinces to promote green finance8:

Guangdong, Guizhou, Jiangxi, Zhejiang and Xinjiang will each have a pilot zone to focus on different aspects of green financing, including growing green bond issuance. Financial institutions will be given various incentives to offer credit and special funds for environmentally friendly industries. The zones will explore replicable ways to boost green financing, to support its industrial upgrading and cut red tape.

Taipei Exchange establishes Green Bonds **Guidelines with reference to Global**

Standards: Taipei Exchange, has issued guidelines endorsing the Climate Bonds Standard and Green Bond Principles (GBP) to identify green bonds.

- 1. http://www.csrc.gov.cn/pub/zjhpublic/G00306201/201703/
- 2. http://news.xinhuanet.com/politics/2017l-h/2017-03/16/c_1120638890_2.htm
- 3. http://www.eib.org/infocentre/press/releases/all/2017/2017-073-new-peoples-bank-of-china-and-eib-initiative-to-strengthen-
- 4. http://news.xinhuanet.com/english/2017-05/14/c_136282982.
- 5. https://eng.yidaiyilu.gov.cn/zchj/qwfb/12479.htm 6. http://www.pbc.gov.cn/english/130721/3309693/index.html
- 7. http://www.pbc.gov.cn/goutongji-aoliu/113456/113469/3322066/index.html
- 8. http://english.gov.cn/policies/policy_watch/2017/06/15/content_281475686873286.htm

News and Events

6th March Climate Bonds, in partnership with the City of London and the Green Finance Initiative held the 2017 Green Bond Awards at the Guildhall. The Awards recognise leading organisations, financial institutions and governments, who have been pioneers in the development of green finance and the green bond market in the past year. Award winners include the Bank of Communications, SPD Bank and People's Bank of China (PBoC). Recognition was also given to Export-Import Bank of China and Shanghai Stock Exchange.

20th March Luxembourg Stock Exchange (LuxSE) and Shenzhen Stock Exchange (SZSE) jointly launched the China Green Bond Index Series with the Central University of Finance and Economics (CUFE). The index series will be displayed on both LuxSE and SZSE and will act as a market benchmark for the increasingly mainstream green bond market in China.

27th March A LATAM delegation led by the InterAmerican Development Bank visited China's various finance bodies, such as PBoC and CBRC, to gain insight into China's green finance sector.

15th April More than 500 green finance experts from regulators and industry gathered at the annual Green Finance Summit in Beijing. The Summit has been held annually since 2015 by the China Financial Society Green Finance Committee with the support of PBoC. Major issues on the agenda this year included opportunities and challenges facing green credit and green bond markets; the establishment of green financial systems at a local level and innovation in green financial products etc. 21st April International Finance Corporation (IFC) and European largest listed asset manager Amundi launched a USD2bn green bond fund to support the financing of low-carbon investments in emerging markets, with 20% of the fund investing in China's green bond market.

19th June A new green index series was jointly launched by the Shanghai Stock Exchange and China Securities Index Co. The index series consists of three indices: the SSE Green Corporate Bond Index, the SSE Green Bond Index and CSI Exchange Green Bond Index; and quotes of the former two are displayed synchronously on Luxembourg Stock Exchange (LuxSE) and Shanghai Stock Exchange (SSE) platforms. The indices aim to provide greater transparency on value of green bonds issued and listed on the stock market in Shanghai and facilitate access to Chinese green securities for investors in Europe.





Green Bond Discussion

Global green muni bond issuance ramped up in the first half of 2017, will Chinese munis be the next big story?

Green municipal bonds are debt securities issued by local governments that meet the international green bond standard, generally used to finance public projects, such as transportation, telecommunications, housing, hospitals and schools etc. At the end of Q2, global green munis issuance stood at USD 8.07bn, with 51% growth from the first half of last year.

US municipalities have been taking the lead in tapping into the green muni bond market in the first six months, accounting for over 60% of global issuance. Green muni bonds make up the largest part of US green bond issuance to date.

Despite President Trump announced that the U.S. would withdraw from the Paris Climate Accord and cease all implementation measures of the agreement immediately, state level climate plans remain ambitious. Numerous State governments have joined the US Climate Alliance pledging to work towards Paris Agreement objectives within their borders.

Being the world's leading green bond market, China is expected to demonstrate green municipal leadership in financing low carbon transition at the local level going forward.

Here are the reasons (read our discussion paper, <u>Study of China's Local Government</u> <u>Policy Instruments for Green Bonds</u>, for detailed analysis).

Rapid expansion of China's green

bond market - In the first half of 2017, China's green bond market expanded in both depth and width. Not only the total issuance grew by 33% year-over-year, there were also more issuers making their debut green bond issuance, among them, many were local entities. Harbin Bank in Heilongjiang province issued the first green bond, filling the vacuum in China's Northeast. Besides, Bank of Beijing, Bank of Nanjing and Chongqing Longhu Development are also some of the large issuers from local level that issued green bonds for the first time.

Strong policy signals - Ever since the Guidelines for Establishing the Green Financial System were released in August 2016 jointly by seven ministries in China, led by PBoC, local governments at provincial and municipal levels also actively responded to the call by developing green finance plans.

They began to encourage non-financial corporates to issue green bonds. These included major centers like Beijing, Shanghai, Guangdong Province, Qinghai Province and Zhejiang Province.

Along with the establishment of five green finance pilot zones, these signals are conducive in reducing policy uncertainty and buoying market confidence.

Standardisation of local government financing underway – Since 2011, the China government has been stepping up efforts to help local governments to deleverage and mitigate rising credit risks, by amending the Budget Law to allow local governments issuing municipal

bonds to finance public investment, as well as expanding the scope of pilot programmes governments.

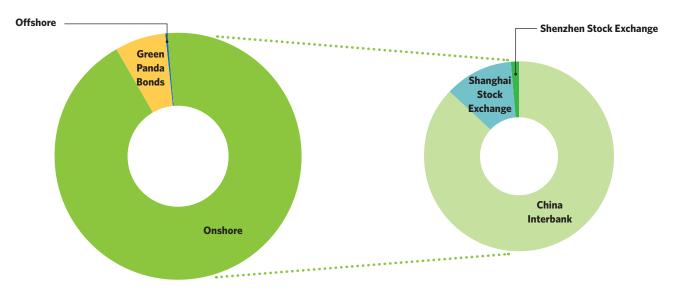
A senior official from the Ministry of Finance⁹ has recently said that following the announcement of Local Government Land Reserve Special Bond Management Approach and Local Government Toll Road Special Bond Management Approach, the Ministry would keep exploring different areas that special bonds can finance, to help meet local financing needs.

While central government and regulatory authorities play a pivotal role in setting the stage for greening the debt market, at the local level, provincial and municipal governments should also gear up to support the development of China green bond market. As Dr. Ma Jun, Chief Economist of PBoC Research Bureau says, while large financial institutions and major cities take a leading role in promoting green finance, as the market develops, actively engaging other different cities and local financial institutions becomes necessary. Only in this way, the access of green finance can expand to the entire Chinese economy, and China would be able to support majority of the SMEs going green.

9. http://www.scio.gov.cn/32618/Document/1559929/1559929.htm 10. http://www.schu.com/a/154644942_481887

Market Data Q1 & Q2 2017

Snapshot of Q1 & Q2 issuance Onshore breakdown Q1 & Q2

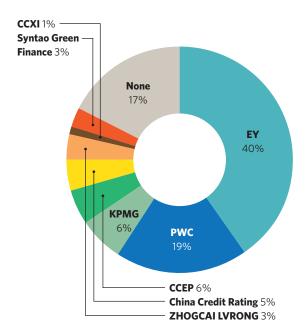




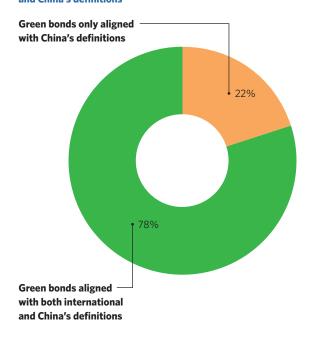


Market Data

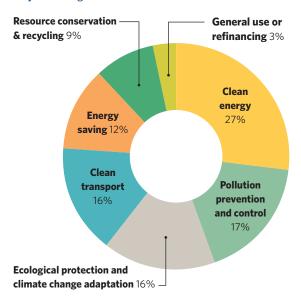
83% issuance in China received second party reviews



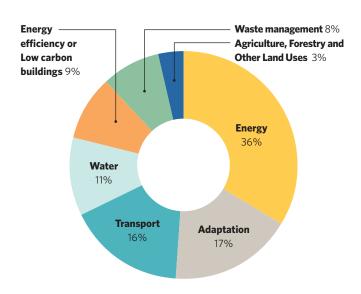
Nearly 80% of Chinese green bonds aligned with both international and China's definitions



Allocation of proceeds according to PBoC's Green Bond Endorsed Project Catalogue

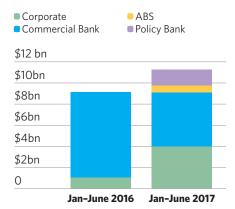


Allocation of proceeds according to CBI Taxonomy



Financial Institutions are the largest issuers*						
SECTORS	ISSUANCE SIZE (BN, RMB)	% OF ISSUANCE	NO. OF BONDS	% OF BONDS		
FINANCE	53.6	67.51%	22	42.31%		
UTILITIES	16.6	20.91%	15	28.85%		
INDUSTRIAL	4.15	5.23%	11	21.15%		
PROPERTY	4.04	5.09%	3	5.77%		
INFORMATION TECHNOLOGY	1	1.26%	1	1.92%		
TOTAL	79.39	100.00%	52	100.00%		

Chinese green bond market recorded 33% growth in the first half of 2017



^{*} According to the CCDC's classification, ABS are separately counted.





Q1 & Q2 2017 Chine	ese Green Bon	ds Issuance					
ISSUER	MARKET	DATE	ISSUED AMOUNT (RMB)	SECOND REVIEWER	RATING AGENCY	RATING	USE OF PROCEEDS*
Hebei Financial Leasing	China Interbank	23-01-2017	100mn	EY	Chengxin Rating	AA+	Energy & Transport
Huarong Financial Leasing	China Interbank	15-02-2017	1bn	EY	Chengxin Rating	AAA	Mixed
	China Interbank	15-02-2017	1bn	EY	Chengxin Rating	AAA	Mixed
Chongqing Longhu Development	China Interbank	17-02-2017	1.6bn	None	Shanghai Brilliance Credit Rating	AAA	Low carbon buildings?
	China Interbank	17-02-2017	1.44bn	None	Shanghai Brilliance Credit Rating	AAA	Low carbon building*
	China Interbank	07-03-2017	1bn	None	Shanghai Brilliance Credit Rating	AAA	Low carbon building*
Wuhai Bank	China Interbank	21-02-2017	500mn	China Credit Rating	Chengxin Rating	AA-	Mixed
China Development Bank	China Interbank	23-02-2017	10bn	PWC	None **	None	Mixed*
	China Interbank	02-05-2017	5bn	PWC	None **	None	Mixed*
Agriculture Development Bank of China	China Interbank	27-02-2017	4bn	CECEP	None **	None	Adaptation
Dongjiang Environment	Shenzhen	10-03-2017	600mn	None	Chengxin Rating	AA	Mixed*
Nantong Economics	China Interbank	22-03-2017	300mn	None	None	None	N/A
Technological Development Zone	China Interbank	21-06-2017	700mn	None	None	None	N/A
Guiyang Public Transport	Shanghai	24-03-2017	2.65bn	Zhongcai Lvrong	N/A	N/A	Transport
Harbin Bank	China Interbank	11-04-2017	2bn	EY	Lianhe Credit Rating	AAA	Mixed*
	China Interbank	10-05-2017	2bn	EY	Lianhe Credit Rating	AAA	Mixed*
	China Interbank	10-05-2017	1bn	EY	Lianhe Credit Rating	AAA	Mixed*
Bank of Beijing	China Interbank	19-04-2017	12bn	EY	Lianhe Credit Rating	AAA	Mixed*
	China Interbank	19-04-2017	3bn	EY	Lianhe Credit Rating	AAA	Mixed*
Beijing Enterprise Water Group	China Interbank	24-04-2017	2.1bn	Syntao Green Finance	Shanghai Brilliance Credit Rating	AAA	N/A
State Grid Energy Conservation Service	China Interbank	25-04-2017	1bn	CCXI	Chengxin Rating	AA+	Energy
Bank of Nanjing	China Interbank	27-04-2017	4bn	EY	Chengxin Rating	AAA	Mixed
	China Interbank	27-04-2017	1bn	EY	Chengxin Rating	AAA	Mixed
Liuyang Modern Manufacturing Industrial	China Interbank / Shanghai	02-05-2017	900mn	None	None	None	Waste*
Bank of Luoyang	China Interbank	12-05-2017	1bn	KPMG	Chengxin Rating	AA+	Mixed*
China Longyuan Power Group	Shanghai	16-05-2017	2bn	KPMG	Dagong Global Credit Rating	AAA	Energy
Bank of Changsha	China Interbank	16-05-2017	2bn	KPMG	Chengxin Rating	AA+	Mixed
China Power New Energy Development	China Interbank	19-05-2017	800mn	CCXI	None	None	Energy
SPIC Ronghe Financial Leasing	China Interbank	22-05-2017	1bn	None	None	None	Energy
Bank of Gansu	China Interbank	24-05-2017	1bn	None	Lianhe Credit Rating	AA+	Mixed*
Beijing Capital	Shanghai	26-05-2017	1bn	None	Chengxin Rating	AAA	N/A
Yunnan Water Investment	China Interbank / Shanghai	01-06-2017	550mn	None	Lianhe Credit Rating	AA+	Water*
	Shanghai	29-06-207	1.2bn	None	None	None	N/A
Leshan Commercial Bank	China Interbank	05-06-2017	800mn	China Credit Rating	Lianhe Credit Rating	AA	Mixed*
	China Interbank	05-06-2017	200mn	China Credit Rating	Lianhe Credit Rating	AA	Mixed*
China Three Gorges	China Interbank	07-06-2017	2bn	China Credit Rating	Chengxin Rating	AAA	Energy
	Dublin	21-06-2017	650mn (EUR)	EY	Moody's/Fitch Ratings	A1/A+	Energy
China Huadian	Shanghai	09-06-2017	2bn	None	Lianhe Credit Rating	AAA	Energy*

Note: * The CBI Taxonomy excludes clean coal projects, although they are eligible under the China Green Bond Endorsed Project Catalogue. Also, large hydropower projects are currently excluded from our taxonomy due to issues of reservoir emissions and other social and environmental impacts. There may be scope to include these in the future but more research will be required from our recently convened technical working group.

^{**}Policy banks effectively act as agents of the state, notwithstanding the issuance didn't seek a credit rating, it is deemed equivalent to AAA.





Green Bonds Approved by Regulators in Q1 & Q2 2017			
ISSUER	Amount approved (RMB)	Approval Date	Regulatory Authority
State Grid Conservation Service	1bn	06-01-17	NDRC
Shaanxi Xixian Xinqu Fengxi Development and Construction (Group)	1.67bn	07-01-17	NDRC
Jiangsu Zhenjiang Dantu District Construction Investment Limited	1.4bn	11-01-17	NDRC
Liuyang Modern Manufacturing Industrial	1.8bn	18-01-17	NDRC
Wuhan Metro	5bn	25-01-17	NDRC
China Development Bank	25bn	08-02-17	PBOC
Leshan City Commercial Bank	4bn	06-03-17	CBRC, PBOC
Tibet Urban Development and Investment	1.82bn	07-03-17	NDRC
Bank of Beijing	15bn	09-03-17	CBRC, PBOC
Kaifeng Developmeng Investment	1.3bn	14-03-17	NDRC
Bank of Nanjing	5bn	13-03-17	CBRC, PBOC
Bank of Luoyang	1bn	22-03-17	CBRC, PBOC
Bank of Changsha	5bn	24-03-17	CBRC, PBOC
Guiyang-Pingan Green ABS	2.65bn	31-03-17	N/A
China Power New Energy Development Co. Ltd.	2.5bn	April-17	N/A
Bank of Gansu	1bn	April-17	CBRC, PBOC
Zhongli Group	700mn	20-04-17	CSRC
China Huadian Corporation	5bn	20-04-17	CSRC
Anhui Tongling Development Investment Group	1.2bn	25-04-17	NDRC
Jingjiang Binjiang New Town Investment Development	970mn	28-04-17	NDRC
Danyang Investment Group	1.5bn	28-04-17	NDRC
Pingxiang Huifeng Investment Company	2bn	05-05-17	NDRC
Heilongjiang Quanlin Ecological Agriculture Company	3bn	11-05-17	NDRC
China Longyuan Power Group	6bn	15-05-17	NDRC
Sichuan Naxing Group	1bn	19-05-17	NDRC
Guangzhou Development Group	4.8bn	22-05-17	NDRC
Jiangsu Hongzehu Shenzhou Tourism Development	1bn	25-05-17	NDRC
Huishang Bank	5bn	June-17	CBRC, PBOC
Bank of Zhengzhou	5bn	June-17	CBRC, PBOC
Qingdao Rural Commercial Bank	4bn	June-17	CBRC, PBOC





ChinaBond China Climate-Aligned Bond Index performance

ChinaBond China Climate-aligned Bond Index is the world's first climate related bond index, compiled in collaboration between China Central Depository & Clearing Co. Ltd, China Energy Conservation and Environmental Protection Consulting Co. Ltd (CECEP) and the Climate Bonds Initiative. The index identifies a broad list of bonds that are supporting low carbon and climate resilient projects as defined by the Climate Bonds Taxonomy and the China Green Bond Endorsed Project Catalogue. The index was released in September 2016.

As of 30 June 2017, the ChinaBond China Climate-Aligned Bond Index comprised 312 bonds amounting to RMB1.34 trillion, with average maturity of 4.89 years. The 1-year and YTD return rates of the index were -0.84% and 0.1% respectively.

Total Return-ChinaBond China Green Bond Selected Index



Total Return - ChinaBond China Climate-Aligned Bond Index and other ChinaBond China Green Bond Indices TOTAL RETURN INDEX 1 Month 1 Year 3 Years 5 Years YTD 2017 CHINABOND CHINA CLIMATE-ALIGNED BOND INDEX 1.61% -0.84% 20.19% 28.82% 0.10%

-0.17%

-0.37%

1.50%

1.52%

Green Bond First Movers and Innovation

First Green Bond listed on Shenzhen Stock Exchange

- Dongjiang Environment

First Green Asset-backed Note (ABN) in China

CHINABOND CHINA GREEN BOND SELECTED INDEX

- Beijing Enterprises Water Group

CHINABOND CHINA GREEN BOND INDEX

First Financial Lease Company issuing Green Bond

- SPIC Ronghe Financial Leasing

First Green Bond in China to finance for Biomass Energy project

- State Grid Energy Conservative Service

18.03%

18.58%

First Euro-denominated Green Bond from a Chinese Corporate

- China Three Gorges Corporation

First Offshore Non-Financial Enterprise to issue Green Panda Bond

- China Power Clean Energy Development

Reports



Study of China's Local Government Policy Instruments for Green Bonds:

This report is jointly released by SynTao Green Finance and Climate Bonds Initiative at China's Green Finance Committee Annual Conference in April 2017. It provides an overview of local government policy instruments for developing green bond market in China with further recommendations. Download the report.



Green Bond Pricing in the Primary Market: January 2016 - March 2017:

27.76%

27.76%

0.43%

0.35%

Anecdotal evidence has suggested that green bonds are heavily oversubscribed and may price tighter than expected. This report explores the data to discover whether or not this is happening.

Download the report.

Follow us













This report is also available in Chinese 您也可获取本报告中文版

This report produced in partnership with China Central Depositing and Clearing Co. (CCDC) ©Climate Bonds Initiative & CCDC July/August 2017 Designed by Godfrey Design

Disclaimer: The information contained in this communication does not constitute investment advice in any form and the Climate Bonds Initiative is not an investment adviser. Any reference to a financial organisation or debt instrument or investment product is for information purposes only. Links to external websites are for information purposes only. The Climate Bonds Initiative accepts no responsibility for content on external websites

The Climate Bonds Initiative is not endorsing, recommending or advising on the financial merits or otherwise of any debt instrument or investment product and no information within this communication should be taken as such, nor should any information in this communication be relied upon in making any investment decision.

Certification under the Climate Bond Standard only reflects the climate attributes of the use of proceeds of a designated debt instrument. It does not reflect the credit worthiness of the designated debt instrument, nor its compliance with national or international laws.

A decision to invest in anything is solely yours. The Climate Bonds Initiative accepts no liability of any kind, for any investment an individual or organisation makes, nor for any investment made by third parties on behalf of an individual or organisation, based in whole or in part on any information contained within this, or any other Climate Bonds Initiative public communication.