

CHINA GREEN BOND MARKET Newsletter

中国绿色债券市场季报

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News and Events

China Green Bond Market 2016 Report launched on 17th January!

The 'China Green Bond Market 2016' report is an in-depth analysis of the labelled green bond markets in China. Produced in partnership with China Central Depository & Clearing Company (CCDC), this report analyses 2016 domestic green bond developments, with a focus on investment trends, green bond issuance and use of proceeds.

Chinese coal city is looking for a transition through green finance

5 December 2016, a <u>'Green City Bonds - China'</u> <u>roundtable</u> was held in Datong, as part of the Datong International Seminar on Green Finance. With an existing economic base in coal, Datong is looking to green finance to help accelerate the transformation to a low carbon economy.

The London Stock Exchange, Climate Bonds Initiative and SynTao Green Finance presented on domestic and international green finance trends, green bond developments and investment outlook.

4th China-France Dialogue includes joint commitments on green finance and green bond market development

China and France's Ministries of Finance have completed the fourth China-France High Level Economic and Financial Dialogue (HED) in Paris. The <u>Communique</u> reflects joint commitments on climate action and green finance, including promoting cooperation amongst PBoC, Bank of France, EUROPLACE, NAFMII and the Green Finance Committee on green finance issues; promoting cooperation between China and France on green bond market development, and supporting green bond issuance in both countries.

Green investment ties strengthened at the 8th UK-China Dialogue

The UK's Chancellor of the Exchequer Phillip Hammond and Chinese Vice Premier Ma Kai concluded the eighth <u>UK-China Economic</u> and Financial Dialogue on 10 November 2016, in London. Both parties agreed to develop channels and financial products for cross border investment in green bonds (including potential new platforms) to facilitate direct international investment into eligible green and climatealigned securities in China's interbank bond market, via the City of London.

Additional commitments centred around bilateral support for Chinese entities to issue green bonds and other green financial products in the UK, and support for British and international investors to issue green bonds and back green projects in China. Cooperation around solutions for financing smart and green cities, and building London as a market for Chinese entities to issue green financial products was also noted.

Climate Bonds Standards: Chinese Version -Launched at Shenzhen Green Bond Seminar

A Green Bonds seminar was jointly held by Climate Bonds Initiative, SynTao Green Finance and Shenzhen Emission Exchange, in November 2016, to promote green finance and market awareness.

Sean Kidney launched the Chinese version of the <u>Climate Bonds Standard (v2.0)</u> to an audience from mainland China and Hong Kong. The Chinese language version of the Standard adds another resource for domestic issuers to assist in the certification of green bonds and understanding of international markets.

At a Glance

Total Q4 Chinese Issuance: USD 12.5 billion / RMB 89.3 billion

Issuance that meet international definition:

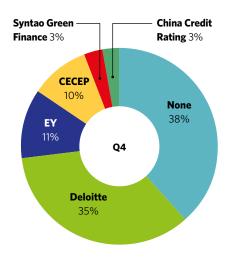
USD 7.7 billion/RMB 53billion

Largest issuer:

Bank of Communications

Largest issuing sector: Energy

Second party reviews of all Chinese green bonds



Policy Update

New Five Year Plan on Wind Energy Development looks to green bonds to support a projected RMB700bn of investment

A specific 13th Five-year Plan on Wind Energy was issued by the National Energy Administration of China in late November. The plan's 2020 targets include increasing electricity generated from wind power to 4,200 TWh (making up 6% of the country's overall electricity generation); reducing 350 tons CO2 emission/year and creating 300,000

new jobs. The Plan also states an intention to explore "innovative financing models [which] reduce financing costs" for the wind industry, as it has been estimated that "at least RMB700bn investment in wind energy will be required" to meet its targets.

The Plan encourages companies in the wind industry to "utilise instruments such as green bonds and securitisation" and targets many energy SOEs, including existing green bond issuers such as State Grid, Huaneng, Datang and CECEP.

Q4 Quick summary

22 bonds were issued in Q4 2016, amounting to RMB89.3bn (USD12.5bn).

The largest issuance was made by Bank of Communications at RMB30bn - also the largest-ever green bond issued up to then.

Goldwind green ABS issuance in August and 2 policy banks bonds in December are increasing market diversification.

The proportion of corporate issuance increased from 8% in Q1 to 33% in Q4.



Green Bonds Comment

Why clean coal projects are not in line with international investors expectations?

Clean coal projects are included in the PBoC green definitions for China. Clean coal differs from regular coal generation as technologies such as gasification are used, during which at least 98% of sulfur contaminants are removed as slag¹. New plants using clean coal technology can reduce emissions compared to existing generation methods, thus helping reduce local air pollution, something is particularly important in the Chinese context as air quality is a serious environmental and health issue in many regions.

While we recognize the positive environmental attributes and the Chinese context, clean coal is not included in the Climate Bonds Taxonomy of eligible green assets.

That is primarily because investment in this technology does not shift energy reliance away from coal use and instead can serve to increase the life of existing retrofitted plants and/or the construction of new plants. Furthermore, even if the most advanced technologies are used, coal-fired power plants still emit about twice the amount of CO2 than that of gas-fired power and 15 times that of renewable energy (over the full lifecycle)². Research from the World Coal Institute showed that the emissions control programme at a power station in South Africa removed 99% of the fly ash but still emitted 60,000 tons of particulates (a major contributor to air pollution in China) every year³.

Given the rapid transition which needs to take place to stay within 2 degrees of warming,

scientific studies and global carbon budget analysis indicates that 80% of current coal reserves should remain unused from 2010 to 2050⁴. Accordingly, all coal-fired power stations need to be replaced as soon as possible. Rather than reducing coal consumption, investment in a coal plant serves to extend the life of coal based energy generation and locks in the use of coal-fired power for decades into the future.

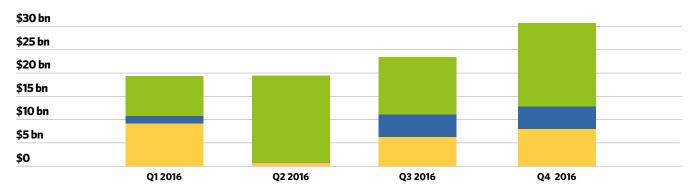
Earlier this year China's energy regulator, the National Energy Administration (NEA), ordered 11 provinces to halt more than 100 coal-fired power projects; a combined installed capacity of more than 100 gigawatts. This is the latest dramatic step to curb the use of coal⁵.

- 1. http://eccc.uno.edu/pdf/Flyer05_Gasification.pdf
- 2. https://europeanclimate.org/documents/nocoal2c.pdf 3. http://www.greenpeace.org/new-zealand/Global/new-zealand/
- http://www.greenpeace.org/new-zealand/Global/new-zealand/ report/2007/1/clean-coal-technology-briefing.pdf
 http://www.nature.com/nature/journal/v517/n7533/full/nature/14016.html
- 5. http://mobile.reuters.com/article/amp/idUSKBN151090

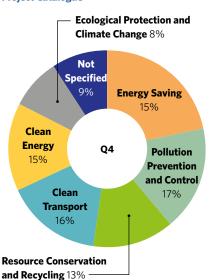
Market Data

2016 growth of Chinese and global green bonds

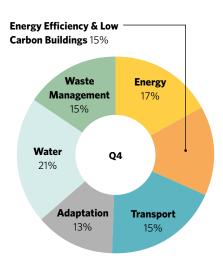
- China Issuance (aligned with China's green definitions)
- China Issuance (aligned with both China and international definitions)
- Other countries Issuance (aligned with both China and international definitions)



Individual issuer's allocation of proceeds according to PBoC's Green Bond Endorsed Project Catalogue



Allocation of proceeds according to CBI Taxonomy



Chinese green bonds issuance in different markets





Individual issuer's allocation of proceeds according to PBoC's Green Bond Endorsed Project Catalogue

- Energy Saving
- Resource Conservation and Recycling
- Clean Energy

- Not Specified
- Pollution Prevention and Control
- Clean Transportation

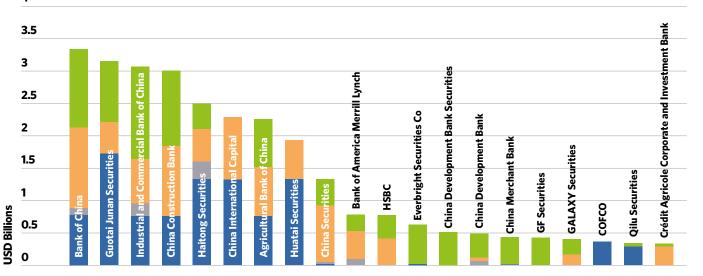
- Ecological Protection and Climate Change Adaptation
- Refinancing



2016 Top 20 Underwriters

■Q1 ■Q2 ■Q3 ■Q4

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Reports



COP22 Green Bond Directions paper

Report highlights:

- Growing awareness of green bonds as NDC financing tools.
- Growth has been driven by government action and demonstration issuance in China - soon to be the world's largest green bond market - with other emerging markets, including India, Brazil and Mexico.
- Green bonds are now being seen as a capital raising tool to meet mitigation and adaptation targets set out in the Nationally Determined Contributions (NDCs). <u>Download report</u>



China Green Bond Market 2016

Report highlights (您也可以获取本报告中文版):

- In 2016 China became the world's largest green bond market, taking just 1 year to accomplish what in other markets has taken over 5 years.
- Growth has been spurred by key policy developments and incentives put in place by the PBoC and NDRC.
- China, through these policy developments, has proven what Climate Bonds Initiative and other market players have long been saying - that policy tools are essential for the growth of green finance and the green bond market. <u>Download report</u>



Q4 Chinese Green Bonds Issuance							
ISSUER	MARKET	DATE	ISSUED AMOUNT**	SECOND REVIEWER	RATING AGENCY	RATING	USE OF PROCEEDS*
Wuhan Metro	China Interbank	26/10/2016	2 billion	China Credit Rating	Chengxin Rating	AAA	Low carbon transport
China Datang Renewables	Shanghai Stock Exchange	21/10/2016	500 million	EY	Dongfang Jincheng	AAA	Renewable energy
Beijing Enterprise Water	China Interbank	02/11/2016	2.8 billion	Syntao Green Finance	Shanghai Brilliance	AA+	Water management
Poten Environment	Shanghai Stock Exchange	12/10/2016	300 million	EY	Shanghai Brilliance	AAA	Water treatment
Bank of China (London)	London Stock Exchange	09/11/2016	500 million (USD)	EY	Moody's Bond Rating	Aa3	Mixed
Beijing SPC Environmental	China Interbank	31/10/2016	1.09 billion	none	Lianhe Rating	AA	Mixed*
GEM Co., Ltd.	China Interbank	31/10/2016	500 million	none	Lianhe Rating	AA	Mixed*
State Grid Corp of China	China Interbank	20/10/2016	5 billion	none	Dagong	AAA	Energy*
	China Interbank	20/10/2016	5 billion	none	Dagong	AAA	Energy*
Yunnan Energy	China Interbank	07/11/2016	500 million	none	none	none	Mixed*
Bank of Communications	China Interbank	22/11/2016	10 billion	Deloitte	Shanghai Brilliance	AAA	Mixed
	China Interbank	22/11/2016	20 billion	Deloitte	Shanghai Brilliance	AAA	Mixed
Bank of Qingdao	China Interbank	24/11/2016	3 billion	EY	Shanghai Brilliance	AA+	Mixed
	China Interbank	24/11/2016	1 billion	EY	none	none	Mixed
Industrial Bank Co Ltd	China Interbank	17/11/2016	20 billion	none	Shanghai Brilliance	AAA	Mixed (inc. clean coal)*
Export-Import Bank of China	China Interbank	07/12/2016	1 billion	CECEP	none	none	Mixed
Dunan Holding Group	China Interbank	01/12/2016	1 billion	China Credit Rating	Dagong	AA+	Mixed
Bank of Urumqi Co., Ltd.	China Interbank	08/12/2016	500 million	EY	Lianhe Rating	AA	Mixed
Jiangsu Guoxin Investment	China Interbank	08/12/2016	200 million	China Credit Rating	Chengxin Rating	AAA	Mixed
Jiangsu Nantong Rural Bank	China Interbank	14/12/2016	500 million	CECEP	Chengxin Rating	AA	Mixed
Guangdong Huaxing Bank	China Interbank	21/12/2019	1 billion	CECEP	Chengxin Rating	AA	Mixed
Agricultural Development Bank of China	China Interbank	23/12/2016	6 billion	CECEP	none	none	Mixed

^{*} 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.

** In RMB unless otherwise specified.













This newsletter is also available in Chinese 您也可获取本季报中文版

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