

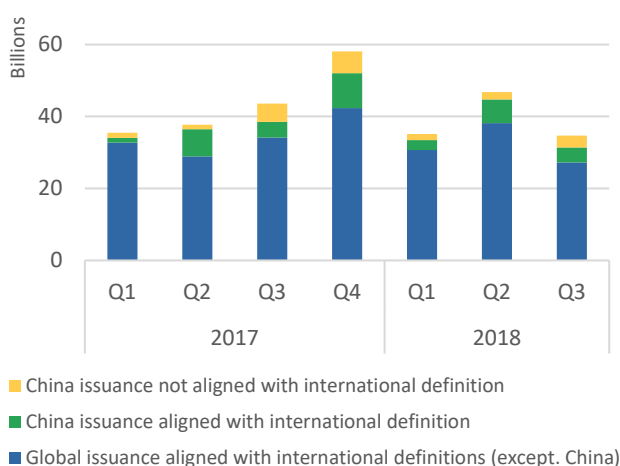
# China Green Bond Market Newsletter Q3 2018

## 中国绿色债券市场季报 2018 第三季度

JULY-SEPTEMBER 2018/2018 年 7 月至 9 月

### Market overview

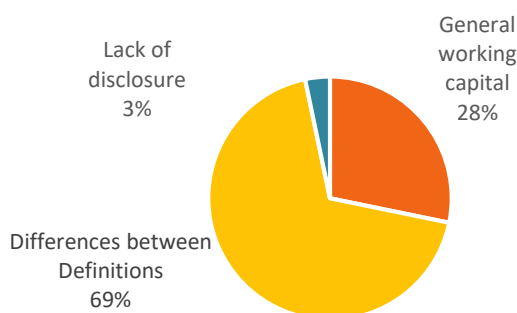
#### China vs. global green bond issuance



#### Chinese issuance in the first three quarters has surpassed last year's Q1-Q3 volume

In spite of the fact that Q3 issuance of USD8.5bn translates to a 9% drop from the USD9.4bn in Q3 2017, the total amount of green bond issued in the first three quarters of 2018 has reached USD21.5bn, surpassing the USD20.9bn issued in the same period last year. So far, China's green bond market has been primarily driven by the momentum in the beginning of this year.

49% (or USD4.2bn) of Q3 volumes from Chinese issuers is aligned with international green bond definitions, while the rest has been excluded in accordance with [CBI Green Bond Database Methodology](#). Proceeds allocation to working capital and assets/projects that are not aligned with [CBI Taxonomy](#) remain the primary reasons for exclusion.



There was only one bond excluded for insufficient information in Q3 – a private placed bond issued by Shanxi Jinmei Huayu Coal Chemical Co., Ltd. Expected use of proceeds is not available for this bond,

#### At a glance

##### Total Q3 Chinese issuance:

USD 8.5bn / RMB58.9bn

##### Onshore issuance:

USD 6bn/ RMB41.6bn

##### Offshore issuance:

USD 2.5bn/ RMB17.3bn

##### Issuance that meets international definitions:

USD4.2bn/RMB29.1bn

##### Certified Climate Bonds:

China Construction Bank

##### Largest issuer:

China Construction Bank

##### Largest issuing sector:

Renewable Energy

and the issuer's main business area suggests that the proceeds may be allocated to clean coal.

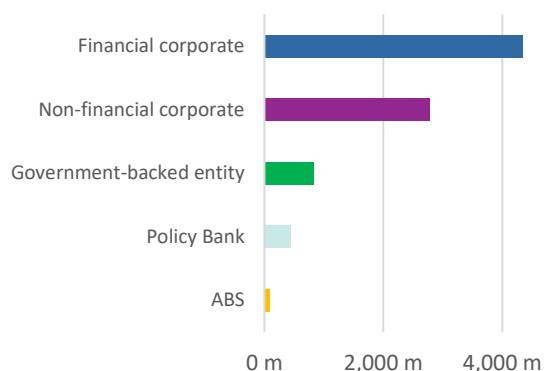
In addition to the excluded bonds, there are three bonds on the pending list as further investigations are required on their hydro projects to be financed.

#### Financial corporates dominate the issuer type

Issuance from financial corporates stood at USD4.3n, accounting for 51% of the Q3 total. 5 out of the 11 financial institutions are new green bond issuers and most of them are small- and medium-sized banks serving local business. These include Fudian Bank, Bank of Jiujiang, Hebei Xingtai Rural Commercial Bank and Ping An Financial Leasing. China Construction Bank, as one of the top five commercial banks in China, has also joined the market with its debut offshore green bond issued in September.

Local government financing vehicle (LGFV) issuers are picking up momentum in Q3 with USD 827m issued in Q3: triple the amount in last quarter. Beijing Infrastructure Investment, Qingdao Guoxin Development, Chongqing Qianjiang Urban Investment, Urumqi City Urban Investment Group are among the new LGFV issuers.

## Financial corporates dominated issuance



## Green ABS issuance in Q3

Two green ABS totalling USD91.6m were recorded in Q3 2018. Wuxi Huaguang Boiler Co. is using the revenues from the heat and power supply services of a subsidiary to finance waste to energy projects.

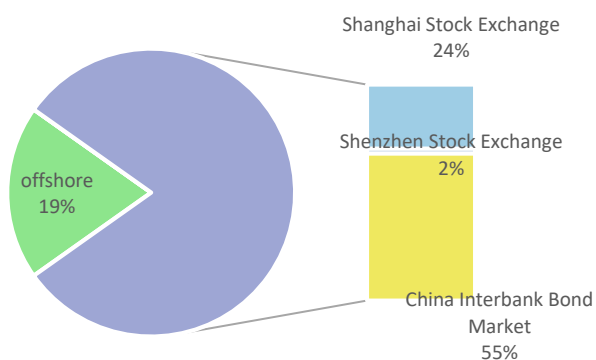
Issuer	Asset / ABS collateral	Amount (CNY)
Wuxi Huaguang Boiler Co., Ltd.	Revenues from the heat and power supply services	265m
Chongqing Kangda Environmental Protection Industrial Co.,Ltd	Wastewater treatment receivables	360m

Total Chinese green ABS issuance for the first three quarters reached USD952m with 9 deals from 9 issuers. The largest deal is from China Resources Leasing, which is backed by receivables from 76 leasing deals and proceeds raised will be fully allocated to 27 solar farms and 1 onshore wind farm. The most common sectors so far are renewable energy and water infrastructure.

## Offshore issuance accounts for 19% of Q3 issuance

Three deals were listed on overseas stock exchanges in Q3, accounting for 19% of the quarterly issuance. China Construction Bank, CGNPC, and China Everbright Bank issued offshore green bonds on Luxembourg Green Exchange, Euronext Ireland and Hong Kong Stock Exchange respectively.

The three venues are among the global top 20 green bond trading platforms in Q3, according to the [Q3 global market report](#) recently released by Climate Bonds Initiative.



China Construction Bank Corporation has also issued USD1bn worth sustainable bond on Hong Kong stock exchange, which is not included in the analysis of this research.

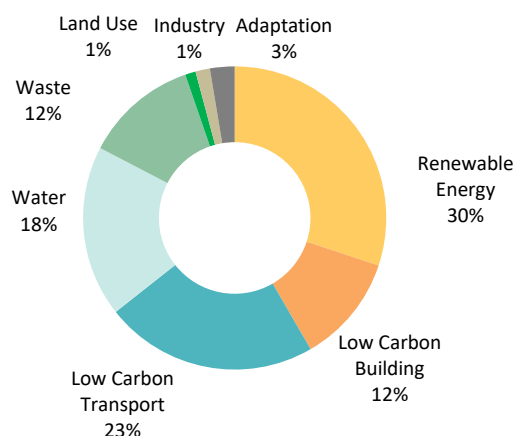
## Diverse use of proceeds is a trend

The largest proportion of Q3 proceeds were allocated to **Renewable Energy**, as defined by CBI. CGNPC International and CECEP Wind-Power Corp, both non-financial corporates, raised green bond funds to be exclusively allocated to wind farms.

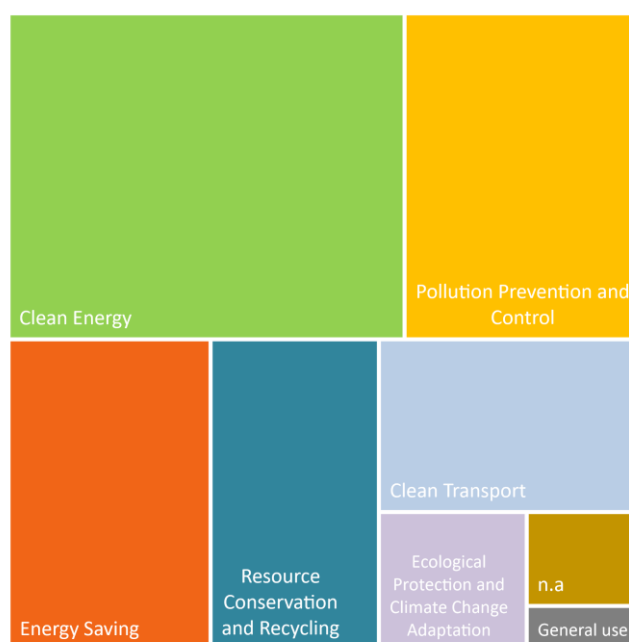
**Low carbon transport remains in the top 3 climate themes.** Financed eligible assets in Q3 include metro and bus infrastructure. For example, Urumqi City Urban Investment Group's CNY1.5bn (USD220m) deal is expected to finance bus lane construction, bus stations/terminals, a bus signalling system, BRT, and bus parking facilities. Beijing Infrastructure Investment and Wuhan Metro, are using green bonds to support metro construction in their regions.

**The proportion allocated to Water has been increasing** since the beginning of this year, from 7% in Q1 to 18% in Q3. Proceeds will be used for a variety of project types, ranging from wastewater treatment to stormwater collection and water distribution. With increased extreme rainfall events, we see more urban pluvial flooding and precipitation incidents. The proper design and management of stormwater drainage systems and infrastructure are encouraged to ensure that the infrastructure is climate-resilient.

## Use of proceeds (CBI definition)

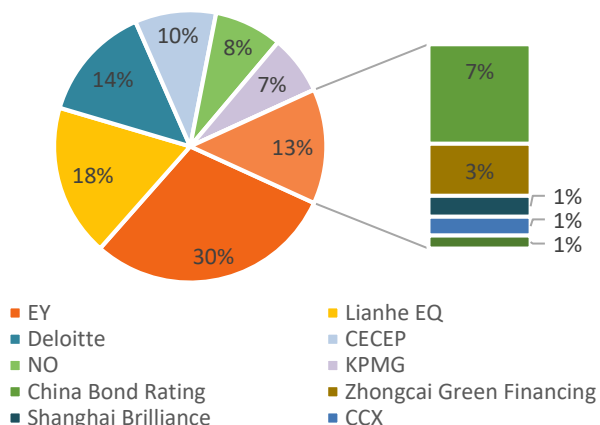


## Use of proceeds (China's local definition)

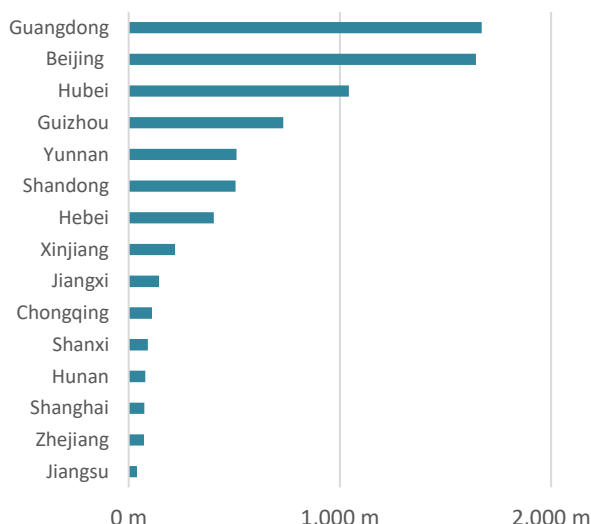


## 92% of aligned issuance carries an external review

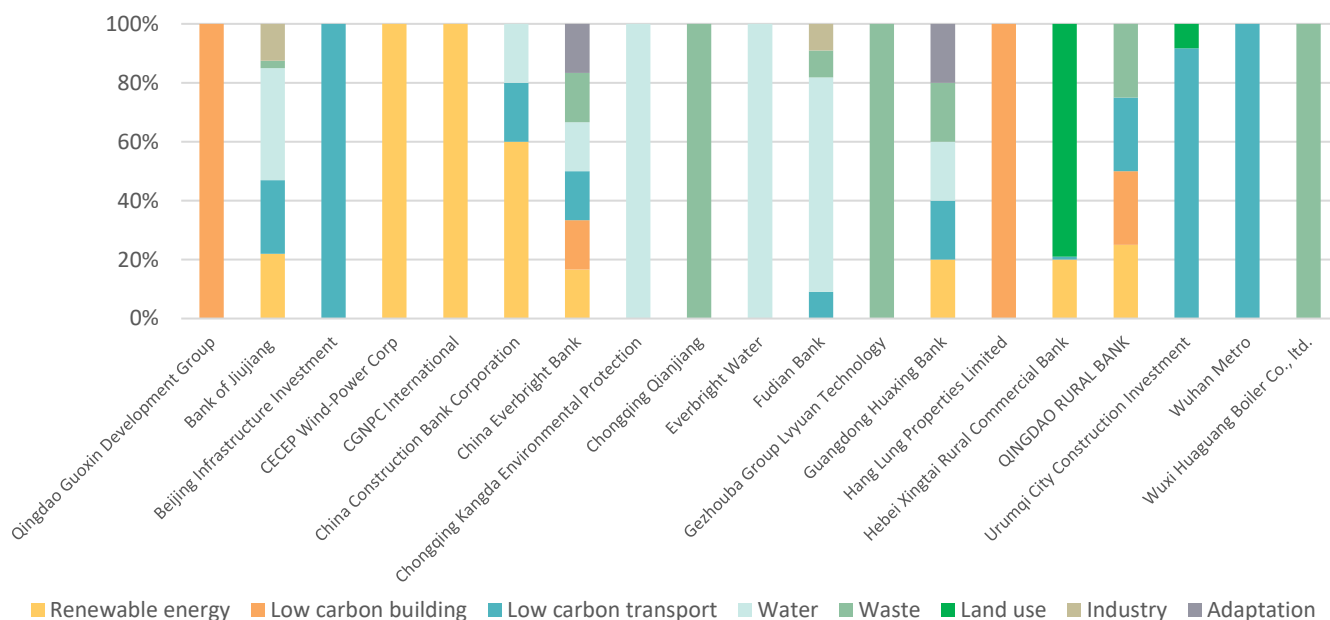
EY remains the largest external reviewer for Chinese issuance, followed by Lianhe Equator, Deloitte and CECEP Consulting. China Construction Bank's USD500m deal was the only Certified Climate Bond from a Chinese issuer in Q3.



## Guangdong and Beijing led the growth



## Use of proceeds by Q3 2018 aligned issuers



## News and events

### CCDC's three green bond indices list on Luxembourg Stock Exchange

On 12 September, China Central Depository and Clearing (CCDC) and the Luxembourg Stock Exchange held a signing ceremony for the listing of CCDC's Green Bond Index Series on the bourse. The three green bond indices include "ChinaBond - China Green Bond Index", "ChinaBond - China Green Bond Select Index" and "ChinaBond - China Climate-Aligned Bond Index". Since the launch of China's first green bond index in 2016, CCDC has compiled a series of green bond indices, one of which was co-launched with CBI and CECEP Environmental Consulting Group Ltd. to develop the world's first China climate-aligned bond index. The index was rolled out in September 2016.

### Official launch of Hong Kong Green Finance Association

On 21 September, the Hong Kong Green Finance Association (HKGFA) was officially launched. The kick-off ceremony and the 2018 Green Finance Forum were held at the Hong Kong Stock Exchange. In

addition to HKGFA members, over 300 delegates from the government, corporates, non-profit organisations and academia attended the event. HKGFA aims to mobilise private sector resources and talents, assist the government in formulating green finance policies, promoting green finance businesses and product innovation in financial institutions. The association is looking to provide greater access and opportunities for Hong Kong's financial institutions to participate in green financing transactions locally, in Mainland China and in markets along the Belt & Road, thereby seeking to position Hong Kong as a leading international green financial centre. So far, HKGFA has 90 members, comprising Hong Kong financial institutions, environmental organizations, service providers and other key stakeholders.

### Green Finance Standards Working Group holds first meeting in Beijing

On 26 September, the PBoC announced that the first plenary meeting of the National Financial Standardization Technical Committee Green Finance Standards Working Group was held in Beijing. The meeting reviewed and approved the "Green Finance Standards Working Group Charter", which

includes the basic framework of the green financial standards system and 6 working groups. The meeting pointed out that the development of green finance in China has achieved remarkable progress, yet it remains urgent to build a unified and complete green finance standard system.

#### **China GFC's Ma Jun proposes to reduce the risk weight of green assets**

On 29 September, Ma Jun, member of the Monetary Policy Committee of the PBoC and Chairman of China Green Finance Committee,

mentioned at a conference in Beijing that a green finance network has been established by PBoC and other central banks. So far, 18 central banks and financial regulatory authorities have come on board. Regulatory discussion highlights on whether the risk weight of green assets should be reduced. Ma Jun believes that China is well positioned to take the lead in reducing the risk weight of green assets, through which the funding cost of green loans can be significantly brought down, and banks would be incentivised to step up efforts in giving green loans.

## Policy update

#### **AMAC launches consultation on Green Investment Guidelines**

On 12 July, the Asset Management Association of China (AMAC) released the "Green Investment Guidelines (Trial)" for consultation, in which it suggests that fund managers should provide financial services to support environmental improvement, address climate change, resource conservation and efficient resource use; and should, as a matter of principle, prioritise allocations to green industry and corporates in the investment process. In addition to defining green investment, the Guidelines detail the scope of application, objectives and principles, basic methods, supervision and management.

#### **PBOC to include Green Credit Performance evaluation results in banks' MPA**

On 27 July, the People's Bank of China (PBoC) issued the "Notice on Launching the Evaluation of Green Credit Performance of Deposit-Type Financial Institutions in the Banking Industry". According to PBoC's requirements, the evaluation of green credit performance is conducted quarterly. The quantitative indicators of green credit performance evaluation include the proportions of green loan balance, green loan balance market share and green loan increment, the growth rate of green loan balance, and the green loan non-performing rate. The results of the green credit performance evaluation are included in the bank's macro-prudential assessment.

#### **SSE implements optimized supervision for bond financing, including green bonds**

In late July, the Shanghai Stock Exchange (SSE) issued guidelines for optimised supervision of corporate bond financing and guidelines for supervision of continuous financing. To allow quality issuers to be more easily financed through the corporate bond market, the SSE has implemented a simplified review process. Eligible issuers may submit one single set of documentation for different bond types such as green bonds, poverty alleviation bonds and exchangeable bonds, and then declare later the specific bond type, issuance approach, use of proceeds for each issue at the issuance filing stage. As such, the uncertainty of the issuance window caused by challenges around use of proceeds could be mitigated.

#### **SSE discloses green corporate bonds and green asset-backed securities regulatory requirements**

In August, the SSE issued a Q&A explaining the regulatory requirements for green corporate bonds and green asset-backed securities. The SSE allows issuers with more than 50% of operating revenue generated from green industry to issue green corporate bonds without specifying the underlying green projects.

That said, the SSE also stipulates that at least 70% of the funds raised by green corporate bonds should be used primarily for business development within the issuer's green industry. For green asset-backed securities, the SSE requires that the underlying green industry assets should account for no less than 70% of the total assets pool.

The change is important, as in mainland China, enterprise bonds (mainly issued by state-owned enterprises) and corporate bonds are regulated by NDRC and the stock exchanges respectively.

According to international guidelines, practically all proceeds from green bonds should be linked to green assets or projects. However, according to the "Guidelines on Green Bond Issuance" issued by National Development and Reform Commission (NDRC), bond issuers can use up to 50% of the bond proceeds to raise general working capital. So at present, some Chinese green bonds are considered non-compliant with international definitions. CBI will monitor if the bond issuers under SSE requirements are in line with the international definition in terms of use of proceeds.

#### **Hong Kong SFC unveils Strategic Framework for Green Finance**

On 21 September, the Hong Kong Securities and Futures Commission (SFC) announced the "Strategic Framework for Green Finance", which emphasises that the SFC would ensure that the green products sold in Hong Kong are credible by providing disclosure guidelines in line with international standards, hence unlocking more diverse green investment opportunities.

The SFC will also join forces with the Hong Kong Stock Exchange in exploring the ways to facilitate the listing and trading of green financial products, including bonds, indices and derivatives. Other strategic priorities include raising investors' awareness on green finance and enhancing related capabilities. The SFC also stresses that it will promote Hong Kong as a leading centre for green finance by participating actively in international initiatives.

#### **CSRC issues a newly revised guidelines to clarify ESG information disclosure requirements**

On 30 September, the China Securities Regulatory Commission (CSRC) issued the revised "Guidelines for Corporate Governance of Listed Companies". The focus of revision includes establishing the basic framework for environmental, social responsibility and corporate governance (ESG) information disclosure. The Guidelines also require listed companies to actively put the green development concept into practice and integrate ecological and environmental protection requirements into development strategies and corporate governance.

## Climate Bonds discussion: Utility tunnels and hydro projects

### Are utility tunnels an eligible green project?

Utility tunnels, also known as common service tunnels, utilidors or underground pipeline corridors, are passages built underground to house utility lines such as electricity, water supply and sewer pipes, as well as telecommunications such as fibre optics, TV and telephone cables.

The conventional method is to install pipelines and cables individually, each in its own space. Although it usually has lower initial construction costs, the conventional method causes increasing environmental damage and social disruption due to the frequent need to open corridors for repairs and maintenance, especially in urban areas.

As a long-term solution, a tunnel that carries multiple facilities could enable easier subsequent repair and renewal with limited need for surface excavation compared to the conventional infrastructure.

In PBoC's China Green Bond Endorsed Project Catalogue [2015], urban underground pipeline corridors are included as an eligible project type under Energy Saving. In fact, China aims to build a world-class utility tunnel network by 2020 to improve urban planning and achieve quality growth. The State Council Office's Guidance on Promoting the Construction of Integrated Urban Underground Pipeline Corridor (Document No. 2015 61)

indicates that the tunnels can help solve the problems of "road zippers" and the heat-island effect in urban areas. It has also been suggested that the tunnels have less impact on air, vegetation, landscape, and soil use in their life cycle.

### Classification in CBI Green Bond Database

We have seen several green bonds financing utility tunnel projects. With the release of the updated Climate Bonds Taxonomy, CBI green bond database is now aligned with PBoC catalogue on underground pipeline corridors. The three types projects allowed by PBoC will fall into the Buildings sector in the Taxonomy (see table below). Meanwhile, disclosure of energy efficiency improvements and the energy sources for heating is encouraged.

CBI has started reviewing previously excluded green bonds. A bond will be included retrospectively if the utility tunnel was the only exclusion reason. This reflects the evolution of scientific thinking and internal guidance on assets categories. However, a bond may not be reclassified if there are other projects/assets not aligned with the Taxonomy.

### Utility tunnels: the alignment between PBoC catalogue and Climate Bonds Taxonomy

	PBoC Catalogue	Climate Bonds Taxonomy
<b>Level-I Category</b>	Energy Efficiency	Buildings
<b>Level-II Category</b>	1.4 Urban and Rural Infrastructure Construction with Energy Saving Efficiency	Urban Development
<b>Level-III Category</b>	1.4.1 Facility Construction	Urban Planning
<b>Specification/ defining criteria</b>	<ul style="list-style-type: none"> <li>Urban underground pipeline corridor project;</li> <li>Construction and renovation projects which adjust the underground pipeline layout, route and buried depth, according to the situation of urban waterlogging and heat-island effect;</li> <li>Construction and renovation projects which adjust the district heating and water supply dispatching, or improve the pipeline standard of heat insulation and</li> </ul>	<ul style="list-style-type: none"> <li>District heating for residential and commercial applications fed primarily by renewable energy</li> <li>Building, maintaining or upgrading utility tunnels for cables or pipelines, if there are significant resource and energy efficiency improvements</li> </ul>

### Looking into the green credentials of hydropower project

The decision whether to include or exclude a green bond related to hydropower in the CBI Green Bond Database is always a tricky one.

Despite being a source of renewable energy, research shows that large dam reservoirs in tropical regions could lead to a high level of methane emissions, a greenhouse gas that is much more potent than carbon dioxide. Emissions come from the accumulation of sediments rich in methane-producing organic material. Run of river projects are usually less problematic, in this respect.

However, another aspect we take into account are controversies around the climate and social impact that large dam reservoirs (anywhere) can create. Impacts could be net positive or net negative, depending on factors such as reservoir size, geographic location, vegetation at the

reservoir (tropical or non-tropical) and technology. Social aspects mainly relate to the displacement of people.

### Classification in CBI Green Bond Database

We previously based our green bond inclusion decision on whether a hydro project is run-of-river or dam in nature. We included run-of-river projects and small hydro facilities that require small or no reservoirs and existing large hydro projects, while excluding new large hydro projects with total capacity larger than 20MW.

As part of the CBI's Standards development programme, we convened a Technical Working Group, comprised of scientists and policy organisations, to develop Hydropower Criteria. While such Criteria has

not been published yet, the latest version of the Climate Bonds Taxonomy reflects the recommendations of TWG members.

Consequently, the following hydropower assets will be considered as eligible: run-of-river, existing reservoirs and new reservoirs with high power density (preferably 5W/sqm or higher) and low emissions of electricity generated (preferably up to 100gCO<sub>2</sub>e/kWh) *unless* the project is controversial due to loss of habitat/biodiversity and/or due to the displacement of people or with weak social /environmental impact assessment (if public available).

We have started reviewing previously excluded large hydro bonds, and some deals may consequently be included if there is sufficient information to draw conclusions under the new criteria. If the project names are given in the bond prospectus, investigations on controversies will be carried out on a best efforts basis. Power density and emission data will be gathered from the issuer's disclosure and open sources.

However, a bond will remain excluded if there is insufficient information for reclassification. New hydropower bonds will be screened using the new criteria.

### Hydro: the alignment between PBoC catalogue and Climate Bonds Taxonomy

	PBoC Catalogue	Climate Bonds Taxonomy
<b>Level-I Category</b>	5 Clean Energy	Energy
<b>Level-II Category</b>	5.6 Hydropower Generation	Electricity& Heat production
<b>Level-III Category</b>	5.6.1 Facility Construction and Operation	Hydropower
<b>Specification/ defining criteria</b>	Specific to hydropower construction and operation like reservoir dam, hydraulic tunnel, powerhouse, generator unit and etc.	<ul style="list-style-type: none"> <li>• Generation facilities: run of river, impoundment, pumped storage               <ul style="list-style-type: none"> <li>○ Proposed power density &gt; 5W/m<sup>2</sup> ; or emissions of electricity generated &lt; 100gCO<sub>2</sub> e/kWh AND Must perform an assessment, based on recognised best practice guidelines, of environmental and social risks and incorporate measures to address risks</li> <li>○ Only for pumped storage: facility will not be charged with carbon intensive energy or facility is contributing to a grid which has at least 20% share of intermittent renewables</li> </ul> </li> <li>• Supply chain facilities</li> <li>• Infrastructure</li> </ul>

#### CBI in China: Q4 2018

- Green Bond Environmental Information Disclosure Indicator System Seminar, Shanghai, Oct 31
- The Global Green Finance Leadership Program, Beijing, Nov 6-7
- Local Government Bond Issuance Conference, Beijing, Nov 8
- Green Panda Bond Guide launch event, Shanghai, Nov 30
- The Climate Bonds Taxonomy Workshop, Hong Kong, Dec 3
- China SIF (Sustainable Investment Forum) Annual Conference, Shenzhen, Dec 4

*\*Note on figures: Figures used in this report refer to both onshore and offshore green bonds issued by entities domiciled in mainland China, and green panda bonds unless otherwise stated. Internationally aligned green bonds are those aligned with both local and international definitions of green. Green bonds issued by Hong Kong and Taiwan domiciled entities are not included in the figures.*

This report produced by **Climate Bonds Initiative** in partnership with **China Central Depositing and Clearing Co. (CCDC)**

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