Market overview

Green bond market boom in H1 2019
Both China and global green bond markets were active in the past six months. The total amount of global green bonds that are aligned with international definitions reached USD117.8bn in H1 - an 48% increase from the same period last year.

Chinese green bond market saw a 62% surge in H1 2019
The USD21.8bn worth of green bonds from China represent a 62% surge year-on-year. However, only 49% (or USD10.7bn) of H1 volume from Chinese issuers is in line with international green bond definitions. Another 49% has been excluded in accordance with CBI Green Bond Database Methodology.

The first Certified Climate Bond from China’s domestic market
Closed in April, the CNY1bn (USD148.9m) deal from Jiangsu Financial Leasing became the first Certified Climate Bond issued domestically (see more on page 4). CCX is the verifier of this deal. Jiangsu Financial Leasing provides loans to a range of businesses in China. International Finance Corporation (IFC) is one of its shareholders and has provided the impetus for the Issuer to apply for Certification under the Climate Bonds Standard. It is also the first Certified Climate Bond to support floating solar farms on freshwater bodies.

There are 5 deals on the Pending list, and they account for 2% (USD395.3m) of H1 issuance. These include green ABS from each of Geely Technology Group, Fujian Zhangzhou Long-distance Transportation Group and Shenzhen Guofubaoli/Guofu Factoring, where neither the collateral nor proceeds allocation disclosure is sufficient for us to determine alignment.

The private placement deal from Chongqing Nanzhou Water (Group) is also in the pending list due to the limited information on use of proceeds. Further analysis is needed for Bank of Liuzhou as funds raised by its green bond might be linked to a fossil fuel-based CHP project.

At a glance

Total H1 Chinese issuance: USD21.8bn/RMB143.9bn
Onshore issuance: USD18.6bn/RMB125.2bn
Offshore issuance: USD3.2bn/RMB18.7bn
Issuance that meets international definitions: USD10.7bn/CNY71.8bn
Largest issuer: ICBC at USD2.7bn
Certified Climate Bond: Jiangsu Financial Leasing
Largest issuing sector: Low Carbon Transport

Proceeds for general use remains primary reason for exclusion
By amount issued, 70% of the overall excluded bonds in H1 fail to meet best practice as they allocate more than 5% of proceeds to general corporate purposes, not necessarily linked to green assets or projects. For example, MLS Co. Ltd. allocated 50% of bond proceeds to finance eligible LED manufacturing, while using the rest to supplement general corporate working capital.

28% was excluded for projects that are not in line with international green definitions. For example, ‘replacing the small coal powered plants with the bigger ones’ is eligible in China’s local context, but is not considered as green by international investors. The remaining 2% fail to provide sufficient information.

Green bonds on Pending list
In some cases, use of proceeds details are not available at issuance. Thus we cannot make an immediate judgement on the green credentials of the bond, the bond is marked as Pending and further research is needed. The investigation process is carried out by the end of the next quarter. If no further information is made available or the information obtained does not show alignment with taxonomy, the bond is added to the excluded bond list.
Most Chinese green bonds are issued domestically
In H1 2019, 85% of all Chinese issuance was issued domestically. Specifically, 48% were placed on the China Interbank Bond Market, followed by listing on Shanghai Stock Exchange with USD7.12bn (CNY47.88bn), or 33% of the H1 total. The remaining 4% were listed on the Shenzhen Stock Exchange.

Singapore Stock Exchange (SGX) was the most popular offshore venue, where both ICBC’s 3-tranche green bond and Rongshi International Finance’s inaugural deal were listed.

Financial corporates were active issuers

Financial corporates remained the largest issuer type with 41% (USD8.9bn) of the overall issuance in H1. This is mainly due to ICBC Singapore’s three-tranche deal (EURS00m, CNY1bn, USD1.5bn) and Bank of Jiangsu (CNY10bn/USD1.49bn).

Non-financial corporate is the 2nd largest issuer type with 34% of the total issued amount, up 6% from H1 2018. 28 issuers have brought a total of USD7.4bn worth of green bonds, but only 8.6% (USD640m) is aligned with CBI green definition, mainly due to large proportion of proceeds being earmarked for working capital.

Issuance from government-backed entities totalled USD2.7bn, accounting for 12.3% of the H1 total. All the 15 issuers are local government financing vehicles (LGFVs). Except for Huzhou Municipal Construction Investment Group as a LGFV of a prefectural-level city, all the others are backed by provinces or provincial-level cities.

The 12 green ABS deals in H1 accounts for 12.5% (USD2.7bn) of the total, and reached the highest share in a quarterly volume, excluding the three ABS deals still on the Pending list. Collateral types further expanded as two leasing companies joining the market with deals backed by lease receivables.

Low Carbon Transport remains the dominant theme
By Climate Bonds definition, Low Carbon Transport has been the largest climate sector since Q4 2018, representing 37% of total issued volume in H1 followed by Renewable Energy (26%) and Water (20%).

Transport: In addition to dedicated regional railway and urban transit operators such as Guangzhou Metro, Chengdu Rail Transit, Sichuan Railway Investment, and Nanjing Metro who have brought a total of USD1.9bn green bonds, commercial banks have also contributed to the sector with USD1.6bn worth of proceeds allocated to passenger rail and metro line projects. ICBC, Bank of Jiangsu, and Guangdong Nanhai Rural Commercial Banks are among the largest issuers.

Energy: ICBC, with a third of its USD2.7bn overseas deals allocated to renewable energy, ranked the largest issuer in the climate sector. However, ABC Financial Leasing and Jiangsu Financial Leasing are the top issuers in China’s domestic market, using green bond proceeds to purchase solar and wind equipment for leasing.

Water: Rongshi International Finance joined the market in Q2. As a financing vehicle of State Development & Investment Corporation, Rongshi’s USD500m deal listed on SGX is going to finance for sustainable water and wastewater management projects.

According to China’s local green bond definitions, the top three categories are Clean Energy at USD6.2bn, Clean Transport at USD5.1bn, and Pollution Prevention and Control at USD3.1bn.
74% of all issuance carries an external review
EY was the largest external reviewer in H1 with 27% market share. CICERO ranks 2nd with USD2.2bn worth of green bonds issued from the Singapore branch of ICBC and a green loan made by the bank under the same framework. Lianhe Equator, China Bond Rating and CCX made their way into the top 5 external reviewers. 26% of green bonds did not carry any form of external review. Most of these were NDRC-regulated green bonds.

Top 3 regions: Guangdong, Shandong and Jiangsu
There are noticeable clusters in terms of issuance. East China (led by Jiangsu, Jiangxi, Zhejiang), Central North China (led by Shandong, Beijing, Hebei), as well as Guangdong province in South China and Sichuan province in Central West China dominate volumes. Guangdong, Shandong and Jiangsu provinces rank at the top with USD1.8bn (75% increase over H1 2018), USD0.8bn (+157%) and USD 0.7bn (-7%) respectively.

News and events
Shenzhen city to release green fund standards in 2020
At the Sustainable Finance Forum held in Shenzhen on 14th July, the president of China Emissions Exchange, Ge Xing'an, revealed that Shenzhen is developing green finance sub-standards, including green funds and carbon finance products, environmental equity products, green guarantees and environmental information disclosure, etc., of which the green fund standard has been drafted and may be officially released next year.

China to open up finance sector to more foreign investment in 2020
According to a statement released by Financial Stability and Development Committee on 23rd July, shareholding limits on foreign ownership of securities, insurance and fund management firms will be removed in 2020. Foreign investors will be encouraged to set up wealth management firms, currency brokerages and pension management companies.

Foreign-owned credit rating agencies will also be allowed to evaluate a greater number of bond and debt types, the statement said. The announcement signals accelerated inter-country green capital flows between China and the rest of the world.

Launch of CSI-Zhongcai Shanghai and Shenzhen 100 ESG Leading Index
The new ESG index will create a localised assessment system, making up for some of the shortcomings in the existing ESG assessment methodology for Chinese shares. Internationally, as Chinese A-shares have been included in the MSCI Emerging Market Index and thus gained wider, more direct exposure in portfolios, the new CSI-Zhongcai Shanghai Shenzhen 100 ESG Leading Index will work as a potential verification tool for ESG conscious investors.

If everything goes according to plan the index will also be tradeable on the Luxembourg Stock Exchange that already hosts the China green bond connect program.

ADBC & Climate Bonds Initiative sign MoU on developing green agriculture in China
Agricultural Development Bank of China (ADBC) and the Climate Bonds Initiative have signed a Memorandum of Understanding (MoU) signifying a mutual consensus on the importance of developing green agriculture projects and green bonds in China, and the need to direct private capital to support China’s transition towards a green economy.

Green bond proceeds allocation of the top 20 aligned issuers

<table>
<thead>
<tr>
<th>Issuer</th>
<th>Energy</th>
<th>Buildings</th>
<th>Transport</th>
<th>Water</th>
<th>Waste</th>
<th>Unallocated A&amp;R</th>
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</thead>
<tbody>
<tr>
<td>ICBC</td>
<td>26%</td>
<td>4%</td>
<td>27%</td>
<td>13%</td>
<td>5%</td>
<td>40%</td>
</tr>
<tr>
<td>Bank of Jiangsu</td>
<td>5%</td>
<td>7%</td>
<td>7%</td>
<td>8%</td>
<td>26%</td>
<td>3%</td>
</tr>
<tr>
<td>Guangzhou Metro</td>
<td>7%</td>
<td>13%</td>
<td>5%</td>
<td>7%</td>
<td>1%</td>
<td>40%</td>
</tr>
<tr>
<td>Rongji International Finance</td>
<td>8%</td>
<td>10%</td>
<td>6%</td>
<td>7%</td>
<td>4%</td>
<td>36%</td>
</tr>
<tr>
<td>Bank of Hubei</td>
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<td>13%</td>
<td>3%</td>
<td>5%</td>
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</tr>
<tr>
<td>ABC Financial Leasing</td>
<td>13%</td>
<td>5%</td>
<td>5%</td>
<td>7%</td>
<td>7%</td>
<td>40%</td>
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<tr>
<td>Bank of Lanzhou</td>
<td>15%</td>
<td>7%</td>
<td>7%</td>
<td>5%</td>
<td>5%</td>
<td>40%</td>
</tr>
<tr>
<td>Shanghai Pharmaceutical</td>
<td>17%</td>
<td>26%</td>
<td>8%</td>
<td>5%</td>
<td>5%</td>
<td>40%</td>
</tr>
<tr>
<td>Jiangsu Financial Leasing</td>
<td>17%</td>
<td>7%</td>
<td>7%</td>
<td>5%</td>
<td>5%</td>
<td>40%</td>
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<tr>
<td>Jiangsu Pudong Construction</td>
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<td>7%</td>
<td>7%</td>
<td>5%</td>
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</tr>
<tr>
<td>Shenzhen Energy Engineering</td>
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<td>5%</td>
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<tr>
<td>China Merchants Bank</td>
<td>24%</td>
<td>7%</td>
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<td>7%</td>
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<td>40%</td>
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<tr>
<td>Suntien Green Energy</td>
<td>26%</td>
<td>7%</td>
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<td>7%</td>
<td>5%</td>
<td>40%</td>
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<tr>
<td>Guangxi Xijiang</td>
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<td>7%</td>
<td>5%</td>
<td>7%</td>
<td>5%</td>
<td>40%</td>
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<tr>
<td>Yancheng Haining</td>
<td>28%</td>
<td>7%</td>
<td>5%</td>
<td>7%</td>
<td>5%</td>
<td>40%</td>
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</tbody>
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Climate Bonds discussion: Green bonds from financial leasing companies

What is financial leasing?
Financial Leasing is an alternative way of financing whereby a leasing company purchases an asset and leases it to its customer(s). The leasing company (the ‘Lessor’) maintains ownership of the purchased assets and receives lease payments from the customer (the ‘Lessee’), while the Lessee enjoys the use of the asset for the duration of the lease agreement, usually accompanied by an option to buy the asset at the end of the leasing contract.

Financial leasing in low carbon sectors
The cost of purchasing, installing and maintaining low carbon infrastructure is usually high and beyond the reach of most consumers or even operators. Low carbon equipment such as solar photovoltaic (PV), wind turbine, water and waste treatment facilities, and even an EV fleet can be arranged in a leasing contract where the lessor purchase the equipment and, in some cases, provides installation, setup, training and/or maintenance services to lessee, including solar farm or wind farm operators, water or waste treatment companies.

Green bonds issued by financial leasing corporates
There are 13 green bond issuers among Chinese financial leasing companies. Issuance incudes 23 green bonds and green ABS. The total amount issued has reached to CNY21.9bn (USD3.4bn).

By CBI definition, bond proceeds are used to finance four types of green assets. Renewable energy is the dominant theme, representing 80%, and funds are used primarily for solar and wind equipment. Transport is the second largest theme with 10% share in the mix. Hebei Financial Leasing, Shenzhen BYD international Financial Leasing and Jiangsu Financial Leasing have all issued green bonds financing for low carbon transport such as electric vehicles.

The Waste and Water sectors represent 7% and 3%, respectively. For example, Huarong Financial Leasing used its CNY2bn (USD291m) green bonds to purchase wastewater treatment facilities to serve its clients in a sale-leaseback contract.

Certified Climate Bond from Jiangsu Financial Leasing
Jiangsu Financial Leasing has issued a CNY1bn (USD149m) Certified Climate Bond, making the transaction the first Certified one in China’s domestic market. The deal supports floating solar farms on freshwater bodies. In this case, two solar facilities are built on land above abandoned and collapsed coal mines, which have since been filled with rainwater and become ponds and lakes.

One solar PV facility is built over a freshwater fishpond. It has a total installed capacity of 150MW and became fully operational in 2018. This solar park was developed by Three Gorges New Energy, a subsidiary of Three Gorges Corporation. The issuer has established a dedicated department to manage green assets, conduct due diligence, and review lessee’s operation in the post-rental stage.

Trends to expect
Financial leasing provides easier access to equipment for renewable energy operators or vendors entering the market, while green bonds give financial leasing companies the ability to finance the purchase of low carbon assets. Coupled with the increase in China’s infrastructure spending and the surge of the low carbon sector, we believe this serves as a strong catalyst to drive the demand in green bond issuance.
Policy update

Guizhou province released the Standards and Assessment Methods for Green Finance Programmes

Issued by Guizhou Local Financial Supervision and Management Bureau and Management Committee of Gu’an New District, the Assessment Methods consists of the Guiding Standards for the selection of green projects that can be included in a green finance database in Guizhou Province. It formulates assessment methods for projects in seven sectors, namely eco-utilization, green energy, clean transport, building energy efficiency and resource recycling, urban and park green upgrading and bio-diversity protection.

In addition to assessment standards and procedures for eligible green projects, the document also includes a tracking and management mechanism for green finance programmes in order to enhance post-investment supervision and track the impact.

Shanghai to promote green finance for green agriculture

Shanghai Municipal Office for Financial Work and another five departments released an implementation Opinions on Promoting Financial Innovation to Support Rural Rejuvenation in Shanghai.

Aiming at promoting financial innovation and supporting the rural rejuvenation strategy in Shanghai, the policy reinforces the importance of green finance and green agriculture development.

Measures include supporting policy banks, commercial banks and financial leasing companies to issue green financial bonds, exploring integrated soil fertility index insurance to promote green agricultural production; enhancing financial support for the development of a world-class ecological zone in Chongming district, providing integrated financial service for the pilots of the green agricultural control system and facilitating full-course supervision of agricultural means of production.

Notice of the PBoC on supporting green financial reform and innovation pilot zones to launch green debt financing tools

The notice supports non-financial enterprises in the five green finance pilot zones to launch debt financing tools in the inter-bank market, based on the green bond endorsed project catalogue. The notice supports enterprises operating in urban infrastructure development sectors to use green debt financing tools such as green bonds and green ABS.

The National Association of Financial Market Institutional Investors (NAFMII) will open a green channel to facilitate the service. The notice also encourages the pilot zones to establish a market-based credit enhancement mechanism and a green project database where eligible green projects are given priority to in bond issuance. It also encourages local government to promulgate financial incentives.

Implementation Plan on the National Eco-civilization Pilot Zone (Hainan), issued by the Central Committee of the Communist Party of China and the State Council

Key tasks of the plan include the implementation of carbon sink pilot projects related to the maritime ecological system and build Hainan as a demonstration zone of low carbon development.

It also studies the blue carbon standard system and trading system and attempts to establish a global carbon emission right transaction place.

By 2020, it aims to reduce energy consumption per unit of gross domestic product by 10% and decrease carbon dioxide emissions per unit of gross regional product by 12%, relative to 2015.

Key tasks of the plan also include establishing a green financial support and guarantee system and supporting Hainan to carry out green financial reform and innovation pilot programs.

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* 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.

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