Green Finance Expands to Support China's Transition to Low Carbon Emissions

Green-Bond Standards to Converge with International Norms; Banks Lead the Way

"China's green-finance market continues to grow, supported by government policies and initiatives, with banks playing a dominant role. Domestic and foreign investors will drive standardisation and ESG integration in onshore green bond markets."

Jingwei Jia, Sustainable Finance, Fitch Ratings

Green Finance Important to Policymakers

Fitch Ratings expects China's green finance market to be an important tool for policymakers to achieve the country's pledge to reach net-zero carbon emissions by 2060. New policies and incentives have continued to emerge despite the coronavirus pandemic, with financial regulators setting policy goals to address climate change through investment and financing in China's next Five-Year Plan.

More initiatives are on the horizon as policymakers take the lessons learnt from regional green-finance pilot schemes to construct a national framework.

Foreign Investors to Drive Standardisation

The onshore green bond market currently operates on local guidelines that have some differences from commonly accepted global standards, such as the eligibility of certain projects and the percentage of proceeds allowed to be allocated to general working capital.

The latest green bond guidelines issued by the People's Bank of China (PBOC) in 2020 have reduced the gap with international standards on eligible projects, and we expect the desire to open the onshore market to foreign investors to drive further standardisation.

However, Fitch expects divergences with international standards in new areas, such as transition bonds and sustainability-linked instruments, even as other standards converge.

Banks' Dominant Role to Continue

Banks play a larger role in China's onshore green bond market than in other markets in other parts of the world, both as issuers and investors in green instruments.

We expect the inclusion of green banking performance indicators into macro-prudential assessments and investors' growing focus on climate risk to support demand for green assets, although broader policy priorities, such as deleveraging of the banking system, could act as a constraint.

We expect the role of both domestic and foreign investors in onshore green bond markets to expand as ESG becomes more integrated into the investment process, but banks will continue their dominant role as government policy remains the key driver of demand.

Related Research

Corporates ESG Relevance Dashboard – 3Q20 (October 2020)
Financial Sector Faces Up to Deforestation (September 2020)
Utilities - Long-Term ESG Vulnerability Scores (October 2020)

Analysts

Jingwei Jia
+852 2263 9843
jingwei.jia@fitchratings.com

Mervyn Tang
+852 2263 9633
mervyn.tang@fitchratings.com

Andrew Steel
+44 20 3530 1596
andrew.steel@fitchratings.com

Green Finance Tool for Policy Push to Cut Carbon Emissions

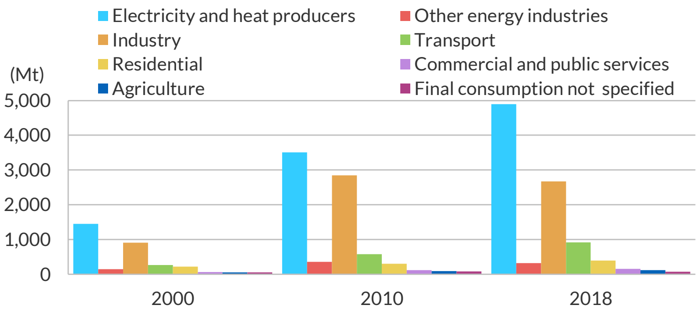
The Chinese government is taking more aggressive steps to tackle climate change, marked by a pledge in September 2020 to reach carbon neutrality by 2060. This is a step up in ambitions from the previous target made under the 13th Five-Year Plan (FYP13) covering 2016-2020, when China committed to a 60% reduction in the power sector's carbon emissions per unit of GDP by 2020 from 2005 levels, and for overall emissions to peak by 2030.

We expect further announcements on how this pledge would be achieved after FYP14 is unveiled, including the country's plan for the coal sector and economic recovery.

A national emissions trading scheme (ETS) is likely to be a key part of the country's strategy to transition to a low-carbon economy. The Chinese government announced plans for a national ETS in 2017, with the aim of a full launch by the end of 2020. Prior to 2017, several regional carbon markets successfully launched separately. The national ETS is expected to first cover coal- and gas- fired power plants, with emission allowances allocated depending on a plant's output and technological mix.

The ETS is set to expand to seven other sectors covering around 30% of China's emissions in the next stage, and will become the world's largest emissions trading system. The seven sectors will eventually include petrochemicals, chemicals, building materials, iron and steel, non-ferrous metals, paper and domestic aviation.

China's CO2 Emissions by Sector, 2000-2018



Source: Fitch Ratings, International Energy Agency

A comprehensive national ETS will increase carbon prices in China, and spur investment in low-carbon technologies. Chinese policymakers are seeking to develop green financial markets to support the necessary investments. Establishing a green financial market was part of FYP13, along with other measures, such as nationwide reporting of emissions and deepening international dialogue on climate issues.

According to research by the Ministry of Ecology and Environment and the China Council for International Cooperation on Environment and Development, at least CNY3 trillion-4 trillion (USD448-597 billion) in green investment was needed each year from 2015-2020 to meet the goals of FYP13. China's Belt and Road Initiative (BRI) has also been an important source of green bonds, sustainability-linked loans, green loans and green insurance products, as banks looked to finance green infrastructure projects under the initiative.

In 2019, China was the largest source of labelled green bonds, with total domestic and overseas issuance of USD55.8 billion (CNY386.2 billion), according to Climate Bond Initiative. At the end of 2019, the total outstanding amount in China's domestic green bond market was USD140 billion.

Regulatory Framework Continues to Evolve

Policymakers in China have been developing the necessary regulatory infrastructure to support the green financial market over the years. The China Banking Regulatory Commission (CBRC) first issued the "Notice on Issuing Green Credit Guidelines" in 2012, which promoted greening of banking sector to identify and monitor environmental and social risks in credit businesses activities. The PBOC and the National Development and Reform Commission (NDRC) then published the "Green Bond Endorsed Project Catalogue" in 2015, outlining eligible use of proceeds.

Seven Chinese ministries (PBOC, CBRC, MEE, CSRC, CIRC, NDRC and MOF[1]) published the "Guidelines for Establishing the Green Financial System" in 2016, which outlined multiple financial tools to mobilise private capital to invest in clean industries, while restricting the investment in highly pollutive sectors, The "Green Industry Guiding Catalogue" from NDRC, published in 2019, clearly defines "green" and promotes mutual understanding among participants in the energy efficiency, clean energy, environmental protection, infrastructure, third-party verification and consulting services industries.

Policies have continued to develop despite the coronavirus pandemic, keeping pace with evolving industry and global practices.

The PBOC released a new edition of the "Green Bond Endorsed Project Catalogue" in 2020, updating previous guidelines to exclude "clean utilisation of fossil fuels" from eligible projects, better aligning with commonly accepted international standards. Coal washing plants or technologies to remove impurities are now excluded from the catalogue. Projects related to hydrogen, sustainable agriculture, green consumer finance and green services and manufacturing were added, expanding the range of projects eligible for green financing.

The latest "Guidelines on Climate Change Investment and Finance" from five Chinese ministries (MEE, NDRC, PBOC, CBIRC, CSRC), released in late October 2020, set clear policy goals to address climate change mitigation and adaption through financial tools. Chinese regulators aim to build a comprehensive regulatory framework to provide relevant financial incentives and encourage broader participation of the private sector in the market.

Bringing existing investment guidelines closer to international standards, such as disclosure, third-party verification and consideration of ESG risks in the credit rating process, have been outlined in the recent guidelines. Promoting international investors' role in China's onshore market to diversify yuan-

[1] PBOC: People's Bank of China; CBRC: China Banking Regulatory Commission; MEE: Ministry of Ecology and Environment; CSRC: China Securities Regulatory Commission; CIRC: China Insurance Regulatory Commission; NDRC: National Development and Reform Commission; MOF: Ministry of Finance. CBRC and CIRC merged in 2018 to form the China Banking and Insurance Regulatory Commission (CBIRC)

denominated green finance activities is also part of China's efforts to open up its domestic capital markets.

One unique feature of the Chinese green financial market is the use of pilot green finance zones in designated provinces to test a specific policy area, offering insights into how green financial incentives work in practice. The goals are to expand the current range of green credit, green bond and green insurance; and establish an environmental rights trading market under a supportive regulatory framework. Policies, innovations and practices that have been tested in the pilot zones are expected to be applied nationwide for unified green finance standards over the next few years.

China Green Finance Pilot Zones, As of 2019

City	Province/ autonomous region	Date approved	Specific focus
Huzhou Quzhou	Zhejiang	2017	Support transformation of traditional industries
Ganjiang New District	Jiangxi	2017	Establish fully operational green finance system with numerous products and services
Guangzhou	Guangdong	2017	Develop a pilot green finance reform and innovation zone, and establish an innovative futures exchange that takes carbon emission as its first trading commodity
Gui'an New District	Guizhou	2017	Build infrastructure for big-data information sharing, ecological, environmental protection and poverty alleviation through green finance
Hami City Karamay City Changji Prefecture	Xinjiang Uyghur Autonomous Region	2017	Support modern green agriculture, manufacturing, industries and clean energy development through green financing tools
Lanzhou	Gansu	2019	Transform traditional agriculture and industrial sectors through green financing tools to develop pollution control, clean energy, water conservation and green agriculture. Deploy new financial technology for a new green finance platform.

Source: Fitch Ratings, Paulson Institute

Local governments including Beijing, Guangdong and Gui'an New Area have set up green finance task forces led by senior municipal government officials, and released relevant policy and development plans. The "Green Bond Endorsed Project Catalogue" from PBOC in 2019 encourages the launch of debt-financing tools in the inter-bank market, such as private placement notes (PPN) and green asset-backed securities (ABS), in the green finance pilot zones to finance eligible assets.

Besides the green finance pilot zones that are in place, local governments elsewhere have also introduced policies, such as supporting fiscal incentives to encourage the diversification of green financial tools at the local level. Jiangsu province announced that every green bond issued by non-financial corporates will be eligible for a subsidy up to 30% of interest payment capped at CNY2 million or USD290,000 a year. Guangzhou and Shenzhen have also promised cash subsidies to green bond issuers. The policy incentives from local governments are likely to continue and expand across various financing tools to cover different areas of green finance.

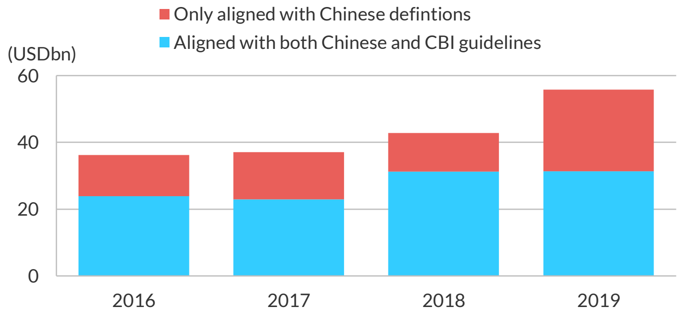
Policymakers have also focused on improving disclosure to support green activities. The CSRC announced a plan to require all issuers listed on the Shanghai and Shenzhen stock exchanges to disclose environmental information by 2020, expanding requirements already in place for key polluting industries. Work is ongoing to support ESG disclosure more broadly, with both stock exchanges issuing guidelines on corporate social responsibility and sustainability-related indices.

Onshore and Offshore Markets Diverge

A notable feature of the Chinese green bond market is the stark difference between onshore and offshore markets, with different practices, regulations and investor bases. Onshore issuance made up 78% of Chinese green bonds outstanding at the end of 2019, but, unlike offshore issuance, often did not comply with commonly accepted global standards, which differ somewhat from Chinese guidelines).

The Climate Bond Initiative (CBI) noted that only 56% of labelled Chinese green bonds issued in 2019 are aligned with both Chinese and CBI definitions. Labelled green bonds that did not align with CBI standards typically funded ineligible projects (such as "clean" utilisation of coal or large hydropower) or too much of the proceeds are allocated to general working capital (Chinese guidelines allow up to 50% to be allocated, compared to 5% for CBI).

China's Labelled Green Bond Issuance, 2016-2019

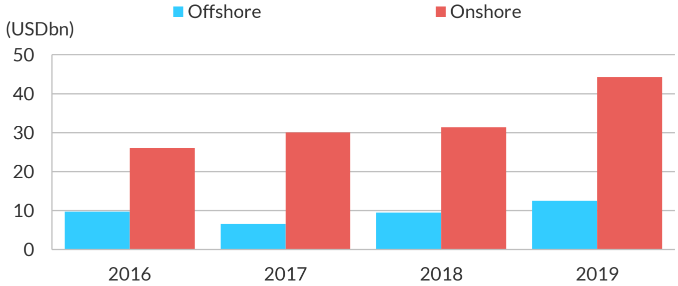


Source: Fitch Ratings, Climate bond initiatve

The PBOC's new green bond guidelines issued in 2020 bring Chinese definitions of eligible projects closer to international standards, but working-capital requirements have not yet changed. Of the Chinese green bonds not aligned to global standards, 60% of the bonds were due to general working capital requirements in

2019, up from just over 20% in 2017. We expect Chinese guidelines to converge with global standards in the long term as China attempts to open up the USD13.5 trillion onshore bond market to foreign investors.

Chinese Green Bond Market, Onshore vs. Offshore, 2016-2019



Source: Fitch Ratings, Climate bond initiatve

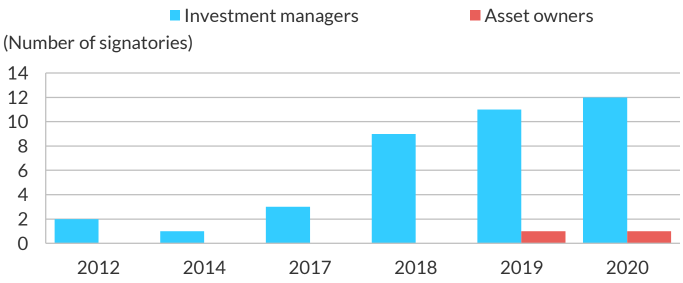
China has taken several steps to open up the market more broadly, such as the introduction of the Bond Connect scheme in 2017 that gives international investors access to the Chinese onshore bond market through the trading infrastructure in Hong Kong without quotas and lock-up periods. Investment limits were also increased for the Qualified Foreign Institutional Investor and Renminbi Qualified Foreign Institutional Investor schemes September 2019, which were the two alternative routes for foreign investors to access the Chinese market.

The Chinese onshore market has also seen innovative sustainability-themed products beyond the current landscape of green bonds. The three development banks started issuing poverty-alleviation bonds to grant loan relief to specific rural, impoverished areas. This bond market segment reached CNY31.6 billion (USD4.73 billion) by 2018 and continues to grow. Social and Coronavirus bonds came to the market earlier this year. Starting from February, more than 150 Chinese companies have raised money by selling Coronavirus bonds that devote proceeds for epidemic prevention and control in China.

Standardisation is also occurring at the same time as new regulations and standards are formed to keep up with a rapidly evolving market. Convergence of some standards could occur as new divergences are created, particularly in nascent markets like transition and sustainability-linked bonds. We expect growing interest from international investors to spur better ESG information disclosure overall, with many investors considering the ESG profile of issuers rather than just the sustainability features of securities.

Interest in ESG investment amongst domestic investors in China is low compared to other regions, but is starting to grow. The number of Chinese asset owners, asset managers and third-party service providers in China signing up for the United Nations Principles for Responsible Investments (UN PRI) reached 40 so far in 2020. This is partly driven by Chinese asset managers trying to meet demand from increasingly ESG-conscious foreign asset owners. However, Chinese asset owners have also started to integrate ESG considerations into investment strategies, with Ping An Insurance becoming the first Chinese UNPRI signatory in 2019.

Chinese Signatories of the UN PRI



Source: Fitch Ratings, United Nations Principles for Responsible Investments

Although many Chinese investment firms are still in the early stages of ESG integration, support from industry associations and policymakers is growing. In November 2018, the Asset Management Association of China (AMAC) issued guidelines to promote green investment in Chinese capital markets. The guidelines encourage fund managers to adopt responsible investment practices and to exercise their investors' rights to urge enterprises to improve their environmental performance and information disclosure.

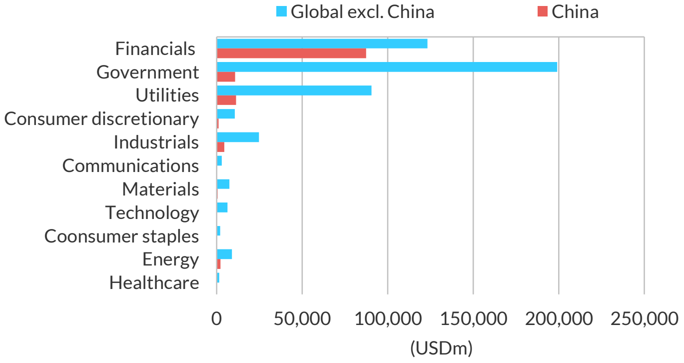
The range of local sustainable investment products is also growing. According to National Institute of Financial Research at Tsinghua University, there have been 781 green funds in China set up to provide access to environmental-related equity investments at the end of 2019. ESG-themed indices are emerging too across both equities and fixed income, supporting the launch of sustainable ETF products as well as structured securities and notes backed by green assets.[2]

Banks Play Dominant Roles as Investors and Issuers

Compared to international developed markets, Chinese banks play a bigger role in the China onshore green bond market, both as issuers and investors. Financial institutions, including state-owned commercial banks and policy banks, accounted for 37% of issuance in China from 2019, compared with 19% globally. Commercial banks hold more than half of Chinese green bonds, whereas institutional investors and central banks have a larger share of holdings in global markets.

[2] Ma, Jun; Cheng, Lin; Chen, Yunhan; and Wu, Yue. *China's Pioneering Green Finance*. Tsinghua University National Institute of Financial Research. March 2020.

Global vs. China Green Bond Issuance by Sector, 2016-2019

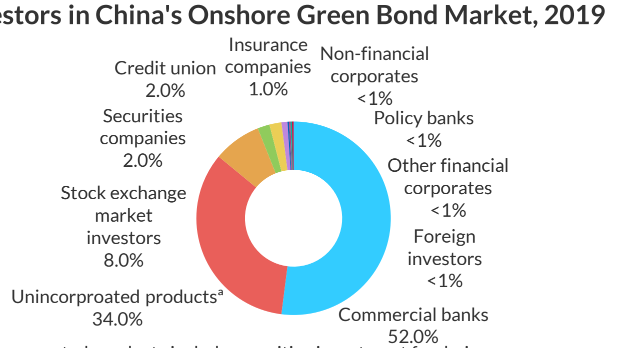


Source: Fitch Ratings, Bloomberg

Green bond issuance from non-financial corporates increased by 54% in 2019, but still makes up a low share of the market. Issuance from local government financing vehicles (LGFVs) has also grown, reaching a share of 22% of overall green bond issuance. Bonds issued by LGFVs largely reflect the ambitions of local governments to address climate issues and environmental targets.

Guangdong is the largest issuer of green bonds among the provinces, measured by cumulative LGFV issuance. This is in keeping with the release of the "Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area" from the State Council to support the establishment of an innovation hub for carbon trading and green finance.

Investors in China's Onshore Green Bond Market, 2019

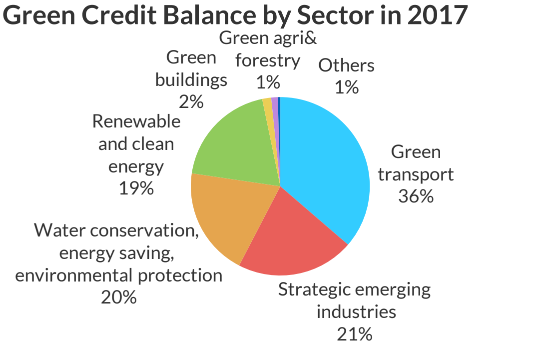


[a] Unincorporated products include securities investment funds, insurance company funds, and social securities funds.
Source: Fitch Ratings, Climate Bond Initiatve

The significance of banks partly reflects the role they played in the early development of the market, and the focus of regulations. The Green Credit Guidelines from the CBRC issued in 2012 required 24 major financial institutions, including commercial banks, policy banks, asset managers, credit unions and financial leasing companies, to "identify, measure, monitor and control environmental and social risks in credit businesses activities."

The amount of outstanding green loans extended by 21 major commercial banks increased to CNY9.66 trillion by the end of 2018, with the funds channeled into projects in low-carbon transport, renewable energy, water and energy conservation and environmental protection. Those green loans were often refinanced through green bonds as the latter market developed. The top-three use of proceeds from green bonds are clean transport, clean energy, and pollution prevention and control.

China Green Credit Balance by Sector in 2017



Source: Fitch Ratings, China Banking and Insurance Regulatory Committee

Banks have also been incentivised to increase the share of green lending in their loan books by regulators. PBOC and CBIRC have set up mechanisms to assess green banking performance for all banks in China as part of their macro prudential assessment. The PBOC has also supported the green finance market by expanding the scope of the Medium-term Lending Facility (MLF) to accept green bonds and loans as eligible collateral. The latest version of the PBOC's "Green Banking Guidelines" published in July 2020 also emphasises the new requirements for banks to consider green finance activities, risk management, and innovations of green financial products as part of their long-term strategies.

Guidelines published by CBIRC in 2020 asks Chinese banks and non-banking financial institutions to embed ESG risks into their credit analyses processes, and strengthen related disclosures and reporting systems. Increasing regulatory pressure has been a main driver overall of change in the lending behaviour of Chinese banks. Integrating green criteria into lending portfolios and credit analyses would become more common as banks increase their understanding of financial risks from high-emission sectors.

Growing consideration of climate risks in lending and asset portfolios could drive demand for green assets from Chinese banks. The Green Finance Committee of China has pushed for environmental stress testing on commercial banks' credit risks – with banks like Industrial and Commercial Bank of China Limited (A/Stable) conducting such stress tests since 2016. The growth of green assets could translate to greater green bond issuance, particularly as Chinese banks increase access to bond markets in place of deposit funding. However, this needs to be considered alongside the government's other goals of managing leverage and non-performing loans in the banking system, which may act as a counterweight for the expansion of green assets.

We expect the role of both domestic and foreign investors in the Chinese green finance market to grow, but banks will continue to be a dominant part of the market as policy remains the key driver of demand for green assets.