Cumulative green bond issuance: JPY1875.2bn (USD17bn), 9th in global country rankings
2019 green bond issuance: JPY786.7bn (2018: JPY464.4bn), 7th in 2019 country rankings
Green bond market growth expected from renewable energy and public transport projects

2019 marks record issuance for Japan

Buildings dominate use of proceeds

90% of issuance has an external review

Sustainalytics is the top SPO provider

The Japanese green bond market has an exceptional record of external reviews: 60% of deals by volume benefit from a Second Party Opinion (SPO), 21% from at least a green bond rating and 8% from Certification under the Climate Bonds Standard. To date, DNV GL is the sole Approved Verifier for Certified Climate Bonds to provide verification services in Japan. JRTT has obtained the largest number of Certified bonds: four in total for a cumulative amount of JPY152.3bn.

Buildings dominate cumulative proceed allocations at 38%. This has mainly come from non-financial and financial corporates (28% and 35%, respectively). Significant contributions in the sector came from the Development Bank of Japan (cumulative JPY188.3bn), while Japan Housing Finance Agency (JPY70bn) represented the largest green buildings issuer in 2019.

Energy (29%) and transport (25%) follow, with financial corporate Mitsubishi UFG Financial Group (JPY216.3bn) and government-backed entity JRTT (JPY197bn) representing the top issuers in the respective sectors. The Tokyo Metropolitan Government is the first issuer to allocate proceeds to adaptation and resilience, with cumulative JPY 13.5 bn earmarked towards flood prevention mechanisms.

Sustainalytics is the largest SPO provider by both volume and number of deals reviewed (86% and 71%, respectively). DNV GL comes in second with 7% of volumes and just below 10% of number of deals. Green bond ratings are also widely used in the Japanese market, with the Japan Credit Rating Agency (JCR) and Rating & Investment Information (R&I) being, so far, the only two rating providers active in the market. CBI will publish additional research on external reviews and overall transparency in the green bond market later in 2020.
**The Development Bank of Japan’s USD1bn (JPY113bn) green bond issued in 2017 remains the largest to date in Japan. It is also the only deal in the 1bn or more size bracket. Medium-sized deals come from all issuer types, with government-backed entities taking up the largest share at 42%. Financial institutions, including Mitsubishi UFG and Sumitomo Mitsui Banking Corp have issued 10 deals of USD500m or more.**

Deals falling within the USD 500m-1bn size bracket are the most frequent by volume with 37% of the total, while 70% of the deals by number fall into the USD up to 100m (77 bonds). In 2019, the USD 100-500m was the most popular size bucket by volume, while the highest share of the deals by number fall in the USD up to a 100m bucket (52 bonds).

**Most issuers favour tenors up to 10 years**

Japanese issuers prefer shorter tenors: 57% of bonds have a tenor of up to five years, while 27% fall in the ‘five-to-ten years’ category. Only 10% of volumes have a tenor of more than 20 years, with examples from non-financial corporate Renewable Japan (five bonds) and financial corporate AEON Product Finance (two bonds).

Issuer from the Development Bank of Japan and around 50% of non-financial corporates volumes have tenors of up to five years. The same tenor bucket is also the most popular amongst financial corporates, with almost 60% (JPY178.7bn) of proceeds from Mitsubishi UFG maturing within five years.

Government-backed entities have a preference for slightly longer tenors: they dominate the ‘ten-to-twenty’ tenor bucket, and feature issuance from JRTT, Japan Housing Finance Agency and Konan Ultra Power.

**Spotlight: Corporate issuers**

Half of the proceeds from financial institutions go towards energy, while buildings account for just under a third (30%). The remaining proceeds are earmarked towards a variety of sectors: this reflects the nature of commercial banks, non-bank lenders and asset managers, which usually own diversified loan and/or project portfolios. Mitsubishi UFG is the top financial corporate issuer, with JPY216.3bn and JPY87.6bn allocated to energy and buildings, respectively.

Non-financial corporations allocated half of their proceeds to buildings and 30% to energy. Sumitomo Forestry Co., Ltd is the only non-financial corporation earmarking proceeds towards the acquisition of FSC certified timberlands. Tokyo Tatemono is the top non-financial issuer, with JPS0bn allocated to buildings certified with top level of industry certification schemes, i.e. DBJ Green Building and BELS (4 stars or more) and A in or higher in CASBEE.

**JPY-denominated deals prevail at 53% of total issuance. Green bond issuance in local currency started 2016, with Nomura Research Institute’s JPY10bn debut green bond. The second most popular currency is EUR, including Japan’s very first green bond from the Development Bank of Japan (EUR250m/JPY34.2bn) in October 2017. Financial institutions issue in the largest number of different currencies: for example, Mitsubishi UFG has issued two thirds of its cumulative volume in EUR, with the remaining amounts in JPY, USD and AUD. In 2019, JPY remained the most popular currency with 88% of total annual issuance; EUR and AUD follow with 8% and 5% of market share, respectively. Green bonds in USD have not been issued in 2019.**
Japan – Green finance state of the market 2019 Climate Bonds Initiative

Top 5 underwriters for Japanese GB

<table>
<thead>
<tr>
<th>Underwriters</th>
<th>Number of deals</th>
<th>Amount (JPY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mitsubishi UFJ Morgan Stanley Securities</td>
<td>38</td>
<td>449.6bn</td>
</tr>
<tr>
<td>Mizuho Securities</td>
<td>26</td>
<td>219.5bn</td>
</tr>
<tr>
<td>SMBC NIKKO Securities</td>
<td>18</td>
<td>160.5bn</td>
</tr>
<tr>
<td>Nomura Securities</td>
<td>17</td>
<td>130.4bn</td>
</tr>
<tr>
<td>Mitsubishi UFJ Financial Group</td>
<td>5</td>
<td>120.5bn</td>
</tr>
</tbody>
</table>

Source: Refinitiv; exchange rate as of 31 December 2019.

All the underwriters of Japanese deals are headquartered in Japan. Mitsubishi UFJ Morgan Stanley Securities (MUMSS) ranks first, accounting for around 26% of underwritten volumes and with participation in 38 deals. Apart from Nomura Securities, the other top underwriters based in Japan have entered the country’s green bond market issuers as well.

Top 5 trading venues for Japanese GB

<table>
<thead>
<tr>
<th>Trading venue</th>
<th>Number of deals</th>
<th>Amount (JPY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LuxSE</td>
<td>9</td>
<td>193.7bn</td>
</tr>
<tr>
<td>LSE</td>
<td>5</td>
<td>111.6bn</td>
</tr>
<tr>
<td>All German SE</td>
<td>4</td>
<td>108.5bn</td>
</tr>
<tr>
<td>Berlin</td>
<td>5</td>
<td>81.1bn</td>
</tr>
<tr>
<td>Frankfurt</td>
<td>5</td>
<td>64.2bn</td>
</tr>
</tbody>
</table>

Source: Bloomberg, EIKON. Note: Amount is split equally among venues

Cumulatively, JPY868.4bn worth of Japanese green bonds have been listed on a variety of trading venues. This accounts for around 46% of total issuance. Luxembourg Stock Exchange tops trading venue rankings followed by LSE. Four deals are listed on all German Stock Exchanges, while five deals have been listed on both Berlin and Frankfurt Stock Exchange.

Other labelled bonds

Only bonds with at least 95% proceeds dedicated to green projects that are aligned with the Climate Bonds Taxonomy are eligible for inclusion in the CBI Green Bond Database. If more than 5% of proceeds are used for general corporate purposes, working capital, social projects or projects that do not align with the Taxonomy, or if there is insufficient information, the bond will be classified as excluded.

Two Japanese green labelled deals have been excluded for the following reasons:

- One issuer allocated over 5% of the deal’s proceeds to energy efficiency in buildings targeting a 10% improvement. Such target falls short of the KPIs in the Climate Bonds’ Taxonomy, which require a minimum 20% improvement in energy efficiency.
- The other entity earmarked green bond proceeds to finance methanol-fuelled ships. The envisaged CO₂ emission savings have been identified at 8%. Unfortunately, the target is not compliant with the eligibility metrics set out in the Climate Bonds Taxonomy.

Climate-aligned companies

The climate-aligned universe highlights investment opportunities to finance low-carbon assets and includes:

- bonds from fully-aligned issuers that derive 95% or more of revenues from ‘green’ business lines
- bonds from strongly-aligned issuers that derive 75-95% of revenue from ‘green’ business lines; and
- labelled green bonds.

Climate-aligned issuers are discovering the value of the green label: some have already entered the green bond market, including Sumitomo Forestry Co Ltd. However, the green label can be even more powerful for companies looking to transition to low-carbon business lines to signal their sustainability aspirations. For example, Suncor Energy Inc., a top Canadian emitter from the oil and gas sector, generated 1% of its 2017 revenues from ethanol and wind production. Sustainable biofuels are aligned to the Climate Bonds Taxonomy.

Potential green bond issuers

There are substantial opportunities for scaling up the Japanese green bond market. Many companies operating in the transport sector could issue green bonds to finance rail infrastructure. Tokyo Metro Co Ltd is an example of a strongly-aligned issuer, which could enter the green bond market to finance railway projects. Future green bond market entrants could also include strongly-aligned companies Central Japan Railway Co, Tobu Railway Co Ltd and Kansai Rapid Railway Co Ltd. Opportunities for green labelling exist also across other sectors: for example Stanley Electric Co Ltd manufactures LED-related products for use in buildings and transport, and is also a fully-aligned bond issuer. Many Japanese climate-aligned issuers operate in the land use sector: fully-aligned companies Japan Pulp & Paper Co Ltd, Hokueutsu Corp and Wood One Co Ltd have not issued green labelled bonds yet, while companies such as Sumitomo Forestry Co Ltd and Daio Paper Corp entered the green bond market in 2018 with JPY10bn and JPY20bn deals, respectively.
Companies in transition

In the aftermath of the Paris Agreement, pressure has been mounting for companies to manage, limit and eventually halt their impact on climate change. This calls for companies to understand and evaluate the risks posed by climate change on their business activities, assets and liabilities. In 2017, the Task Force on Climate-Related Financial Disclosures (TCFD) developed recommendations on corporate disclosure with respect to climate-related physical and transitional risks. The initiative is aimed at providing investors and other stakeholders with information which enables the formulation of informed investment strategies while allowing companies to identify and act on their risk exposure.

The Transition Pathway Initiative (TPI) has developed a methodology to assess companies’ readiness to transition to a low-carbon economy. In Japan, companies such as Oji Holdings and Toyota rank high in the ‘management quality’ assessment; they are also both evaluated by TPI as ‘aligned with the Paris Pledges’ according to their carbon performance. Companies issuing green bonds also signal their commitment to fight climate change as well as their willingness to transition. Toyota Finance, for example, has already come to the market with one deal financing low-carbon vehicles. However, there are still opportunities for green bond issuance especially for strongly-aligned issuers such as Oji Holdings, which could refinance itself with a green bond and signal to the market its commitment to transition.

Japan Green Finance Policy Landscape

Green Bond Guidelines

In 2017, The Ministry of the Environment (MOEJ) launched the Japanese Green Bond Guidelines6. Green bond guidelines support the expansion of issuance and seek to promote market integrity and transparency through disclosure. The Japanese guidelines comply with the ICMA Green Bond Principles (GBP), and cover identification of eligible categories, project evaluation and selection, monitoring and reporting. MOEJ released Green Bond Guidelines 2020 Revised Version9 in March 2020 in order to reflect the revision of the Green Bond Principles and green finance trend. The new guidelines broaden its scope to sustainability bond, adds examples of the use of proceeds, clarify matters related to external review and expectations to investors for sound development of green bond market. In addition, MOEJ released the Green Loan and Sustainability Linked Loan Guidelines in March 2020. The latter set the process for issuance of sustainability-linked loans.

Market Development Committee

In 2018, MOEJ established the ESG Finance High Level Panel7 in order support business and the government to integrate ESG principles in their investments. In 2020, the Panel established a taskforce for ESG regional finance and impact finance.

References

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