2015 Green Bond Market Update

Diversity in green bonds

Green bond market is growing more diverse in terms of geography and type of issuer.

An important development in 2015 came with a spike in green bond issuance from emerging market domiciled issuers. First to market was India’s Yes Bank, followed quickly by Export-Import Bank of India and then development bank IDBI.

Next, China waded in with an off-shore corporate green bond from Goldwind and the first on-shore green bond from Agricultural Bank of China. Partly driving these issuances are the positive public sector support in India and China and commitment to growing a large robust domestic green bond market.

Before 2014 the green bond market was dominated by AAA issuance from development banks, as expected in an early stage market. Since then, corporates, typically with lower ratings (though still largely investment grade), are having a much larger share of the green bond accounting for 36% of issuance in 2015. Municipalities occupy a larger market share with 15%, followed by Banks at 12%.

Large liquid universe of climate bonds already exists

Our annual flagship report, Bonds and Climate Change; State of Market Report 2015, identifies the full investment opportunity in labeled green bond and unlabeled climate-aligned bonds*.

Benefits of labelling

Grow and diversify the investor base
Labelling bonds as green attracts broader ESG/sustainable investor base.

Improve discoverability
Serve as a simple means to allocate funds to climate or environmental investment.

Re-packaging kickstarts a market and leads to additionality
Labelling existing eligible assets will increase investor buy-in, allowing bonds to expand towards lower ratings and future assets to achieve additionality.

1st Chinese RMB offshore GB: $994.5m by Agricultural Bank of China
1st Mexican GB, Climate Bond Certified: $500m by National Financiera (Nafin)
1st Japanese Corp GB: $500m by Sumitomo Mitsui Banking Corp
1st India GB: $161.5m by Yes Bank
1st Brazilian GB: €500m by BRF SA, a food producer
Largest municipal bond: $942.8m by Puget Sound Transit
Biggest month ever for GB issuance: $7.4bn issued in November 2015
Flurry of billion $ GB commitments from investors: KfW, Zurich Insurance, ACTIAM, Barclays, Deutsche Bank, HSBC, Credit Agricole.

Growing momentum in green bond issuance

<table>
<thead>
<tr>
<th>Year</th>
<th>Asset-backed securities</th>
<th>Bank</th>
<th>Corporate</th>
<th>Development Bank</th>
<th>Municipal</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2013</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2014</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2015 YTD*</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

*Year-to-date as of Nov 27, 2015

2015 YTD* vs 2014

USD Billions

Asset-backed securities Bank Corporate Development Bank Municipal

Growing momentum in green bond issuance

Benefits of labelling

Grow and diversify the investor base
Labelling bonds as green attracts broader ESG/sustainable investor base.

Improve discoverability
Serve as a simple means to allocate funds to climate or environmental investment.

Re-packaging kickstarts a market and leads to additionality
Labelling existing eligible assets will increase investor buy-in, allowing bonds to expand towards lower ratings and future assets to achieve additionality.

1st Chinese RMB offshore GB: $994.5m by Agricultural Bank of China
1st Mexican GB, Climate Bond Certified: $500m by National Financiera (Nafin)
1st Japanese Corp GB: $500m by Sumitomo Mitsui Banking Corp
1st India GB: $161.5m by Yes Bank
1st Brazilian GB: €500m by BRF SA, a food producer
Largest municipal bond: $942.8m by Puget Sound Transit
Biggest month ever for GB issuance: $7.4bn issued in November 2015
Flurry of billion $ GB commitments from investors: KfW, Zurich Insurance, ACTIAM, Barclays, Deutsche Bank, HSBC, Credit Agricole.

Large liquid universe of climate bonds already exists

Our annual flagship report, Bonds and Climate Change; State of Market Report 2015, identifies the full investment opportunity in labeled green bond and unlabeled climate-aligned bonds*.

Benefits of labelling

Grow and diversify the investor base
Labelling bonds as green attracts broader ESG/sustainable investor base.

Improve discoverability
Serve as a simple means to allocate funds to climate or environmental investment.

Re-packaging kickstarts a market and leads to additionality
Labelling existing eligible assets will increase investor buy-in, allowing bonds to expand towards lower ratings and future assets to achieve additionality.

1st Chinese RMB offshore GB: $994.5m by Agricultural Bank of China
1st Mexican GB, Climate Bond Certified: $500m by National Financiera (Nafin)
1st Japanese Corp GB: $500m by Sumitomo Mitsui Banking Corp
1st India GB: $161.5m by Yes Bank
1st Brazilian GB: €500m by BRF SA, a food producer
Largest municipal bond: $942.8m by Puget Sound Transit
Biggest month ever for GB issuance: $7.4bn issued in November 2015
Flurry of billion $ GB commitments from investors: KfW, Zurich Insurance, ACTIAM, Barclays, Deutsche Bank, HSBC, Credit Agricole.
Growing number of Certified green bonds

The Climate Bonds Certification Scheme provides a robust approach to verifying that funds are financing projects that deliver a low carbon and climate resilient economy.

Certification allows investors to make quick decisions about whether an investment is “green”.

National Australia Bank (NAB), ANZ Bank, ABN Amro, Big60million, and Nacional Financiera all chose to have their inaugural green bonds certified against the Climate Bond Standard and there are more in the pipeline.

Example action points for governments

1. Strengthening planning and pipeline transparency of green projects
   This allows potential issuers, investors and regulators to plan ahead and develop improved expertise in relevant investment areas.

2. Strategic public demonstration issuance
   Initial issuance can come from national treasuries, municipalities and other city-affiliated entities and development banks.

3. Market integrity: Supporting standards development
   Support efforts to establish common green definitions, standards, verification, certification and enforcement processes for green bond market.

4. Strategic public green bond investment
   Initial investment can come from public pension funds, sovereign wealth funds and public sector treasuries, as well as through establishing a specific public investment fund for green infrastructure.

5. Improving the risk-return profile of green bonds: credit enhancement
   Selective credit enhancement (e.g. partial guarantees, subordinate debt and insurance) can make green bonds fit institutional investors’ credit requirements.

Check out our public sector guide for scaling green bond markets for more actions for governments and best practice examples.

*Climate Bonds has over 40 Partner organizations as of November 2015. These range from Institutional Investors, Green Bond Issuers, Underwriting Banks, Financial sector service providers and NGOs. For more information about the Partners Scheme check out www.climatebonds.net/about-us/partners.