International Cooperation on Green Bond

Claire Liu

Shanghai Stock Exchange
Green Bond Issuance Landscape

Source: CBI, HSBC 2018

<table>
<thead>
<tr>
<th>Region</th>
<th>Outstanding bonds (USD)</th>
<th>Number of bonds</th>
<th>Number of issuers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>1.29bn</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Asia-Pacific</td>
<td>35.45bn</td>
<td>251</td>
<td>162</td>
</tr>
<tr>
<td>Europa</td>
<td>146.34bn</td>
<td>397</td>
<td>953</td>
</tr>
<tr>
<td>Global</td>
<td>43.05bn</td>
<td>216</td>
<td>10</td>
</tr>
<tr>
<td>Latin America</td>
<td>6.17bn</td>
<td>23</td>
<td>20</td>
</tr>
<tr>
<td>North America</td>
<td>108.11bn</td>
<td>1999</td>
<td>145</td>
</tr>
</tbody>
</table>
National/Regional Green Bond Guidelines

Source: CBI, HSBC 2018
Exchange Traded Green Bonds

- **London Stock Exchange**
  - Launch date: 2015.7
  - Type: Green bond

- **Oslo Stock Exchange**
  - Launch date: 2015.1
  - Type: Green bonds

- **Mexico Stock Exchange**
  - Launch date: 2016.8
  - Type: Green bonds

- **Luxembourg Stock Exchange**
  - Launch date: 2016.9
  - Type: Green bonds

- **Borsa Italiana**
  - Launch date: 2017.3
  - Type: Green and Social Bonds

- **Johannesburg Stock Exchange**
  - Launch date: 2017.10
  - Type: Green bonds

- **Shanghai Stock Exchange**
  - Launch date: 2016.3
  - Type: Green bonds

- **Stockholm Stock Exchange**
  - Launch date: 2015.6
  - Type: Sustainability Bonds

- **Luxembourg Stock Exchange**
  - Launch date: 2016.9
  - Type: Luxembourg Green Exchange

- **Taipei Stock Exchange**
  - Launch date: 2017.5
  - Type: Green bonds

- **Japan Exchange Group**
  - Launch date: 2018.1
  - Type: Green and Social Bonds
No. of exchanges-related sustainability initiatives have been rising
SSE Green Finance Action Plan

HOW STOCK EXCHANGES CAN GROW GREEN FINANCE

A VOLUNTARY ACTION PLAN

1. **Promote green products and services**
   - 1. Product offering and partnerships
   - 2. Visibility
   - 3. Terminology

2. **Greening financial markets**
   - 1. Market education
   - 2. Standards
   - 3. Benchmarking

3. **Strengthen environmental disclosure**
   - 1. Written guidance
   - 2. Training
   - 3. Leading by example

4. **Grow green dialogue**
   - 1. Green financial centres
   - 2. Standards and policy dialogues
   - 3. Investor-issuer dialogue

**PARTNERSHIPS**
How securities regulators can support the Sustainable Development Goals
A sharing of experiences

Regulators Green Finance Guidelines

Strengthen disclosure
- Improve the quality and quantity of disclosure of environmental and social data.

Clarify duties
- Guide investors on the integration of sustainability into their decisions.

Strengthen governance
- Introduce board responsibilities related to environmental and social factors.

Build capacity
- Facilitate training of market participants on sustainability topics.

Facilitate investment
- Aid investment flows towards achieving the SDGs via financial products.

Analysis
- Analyse the factors that influence the ability of market actors to support the SDGs.

Roadmaps
- Produce or support the development of national or regional plans for sustainable finance.

Sharing
- Exchange experiences with other securities regulators, and learn from the experiences and practices of others.

Collaboration
- Work with other relevant organisations to align efforts in support of the SDGs.

Standards
- Work with relevant international or regional bodies to implement standardised guidelines or frameworks.

Source: SSE.
WFE Sustainability Principles

- Launched at the 58th WFE Annual Meeting in Athens on 4th October 2018.

- A formal declaration by the WFE and its membership to take on a leadership role in promoting the sustainable finance agenda.

- Demonstrate that WFE members - while recognizing they are at different stages of market development with different opportunities and constraints - will seek to promote the Principles progressively in accordance with their circumstances and priorities.

- Initiated and promoted by WFE Chairman Wu Qing; Shanghai Stock Exchange, along with B3, Bolsa de Santiago, Borsa Istanbul, BSE Ltd, Luxembourg Exchange worked as subgroup of WFE’s SWG in drafting this document.
**Principle 1:** Exchanges will work to educate participants in the exchange ecosystem about the importance of sustainability issues

**Principle 2:** Exchanges will promote the enhanced availability of investor-relevant, decision-useful ESG information

**Principle 3:** Exchanges will actively engage with stakeholders to advance the sustainable finance agenda

**Principle 4:** Exchanges will provide markets and products that support the scaling-up of sustainable finance and reorientation of financial flows

**Principle 5:** Exchanges will establish effective internal governance and operational processes and policies to support their sustainability efforts
Principle 4: Exchanges will provide markets and products that support the scaling-up of sustainable finance and reorientation of financial flows

- Creating frameworks for the listing of green, social and sustainability bonds
- The development of sustainability indices
- Supporting qualified green and/or social enterprises in obtaining financing via IPO and secondary offerings
- Working with third parties to develop sustainability ratings
SSE Vision and Action Plan

Objective and Principles

Development Background

Action Plan

1. Green finance is necessary to implement the green development concept
2. Green finance has become a common concept in global economic development and financial cooperation
3. The Exchange has actively participated in green finance practices

SSE Vision and Action Plan

**Action Plan**

**Enabling the stock market to support green development**
1. Providing more support and services for the listing of green companies
2. Enhancing environmental information disclosures by listed companies

**Devoting great efforts to develop green bonds**
1. Developing green bonds further
2. Developing green asset-backed securities
3. Lowering the financing costs of green bonds and green asset-backed securities
4. Reinforcing first-line supervision and risk management

**Making more efforts to promote green investment**
1. Developing green securities indices and relevant products
2. Guiding investors to invest into the green financial products listed on the Exchange
3. Enhancing the presentation, study and analysis of information on green financial products

**Enhancing international cooperation on green finance**
1. Actively participating in the green finance development initiatives of relevant international organizations
2. Intensifying bilateral communication and cooperation with foreign exchanges on green finance
3. Promoting the opening-up of China’s green securities market

**Strengthening research and publicity on green finance**
1. Conducting in-depth research and statistics on green finance
2. Strengthening publicity and training on green finance
By the end of September 2018, 49 green corporate bonds and 15 green ABS have been issued successfully.
## Cross-border Issuance of Green Bond

<table>
<thead>
<tr>
<th>Issuer</th>
<th>Listing Type</th>
<th>Public Issue</th>
<th>Private Placement</th>
<th>Public Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Issued Amount*</td>
<td>RMB 0.7 Billion</td>
<td>RMB 1.3 Billion</td>
<td>RMB 1.8 Billion (1+0.4+0.4)</td>
</tr>
<tr>
<td></td>
<td>Tenor</td>
<td>8 years (5+3)</td>
<td>5 years (3+2)</td>
<td>5 years (3+2)</td>
</tr>
<tr>
<td></td>
<td>Coupon Rate</td>
<td>3.25%</td>
<td>5.2%</td>
<td>4.55%, 4.58%, 4.6%</td>
</tr>
<tr>
<td></td>
<td>Credit Rating^</td>
<td>AAA/AAA</td>
<td>AAA/-</td>
<td>AAA/AAA</td>
</tr>
<tr>
<td></td>
<td>Sector</td>
<td>Water Affairs</td>
<td>Water Affairs</td>
<td>Water Affairs</td>
</tr>
</tbody>
</table>

*by the end of September 2018

^Credit rating for both the issuer and the bond
# Cross-border Issuance of Green Bond

<table>
<thead>
<tr>
<th><strong>Issuer</strong></th>
<th>China Development Bank (CDB)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Issuer’s Rating</strong></td>
<td>A1 / A+ / A+ (Moody’s / S&amp;P / Fitch)</td>
</tr>
<tr>
<td><strong>Listing Type</strong></td>
<td>Public Issue</td>
</tr>
<tr>
<td><strong>Currency</strong></td>
<td>USD, EUR</td>
</tr>
<tr>
<td><strong>Tenor</strong></td>
<td>5 years (USD)</td>
</tr>
<tr>
<td></td>
<td>4 years (EUR)</td>
</tr>
<tr>
<td><strong>Green Certification</strong></td>
<td>Aligned with <em>Green Bond Principles</em> (2017); Certified by CBI; Green Bond Assessment by EY.</td>
</tr>
<tr>
<td><strong>Amount, Coupon Rate</strong></td>
<td>USD 500 Million, 2.75% EUR 1 Billion, 0.375%</td>
</tr>
</tbody>
</table>
Bond Connect

- A new mutual market access scheme that allows investors from Mainland China and overseas to trade in each other's bond markets through connection between the related Mainland and Hong Kong financial infrastructure institutions.
- Northbound Trading commenced on 3 July 2017, allowing overseas investors from Hong Kong and other regions to invest in the China interbank bond market (CIBM). Southbound Trading will be explored at a later stage.

Northbound Operating Model

Source: Hong Kong Stock Exchange
By the end of September 2018, a total of 445 international institutional investors had joined Bond Connect for access to Chinese interbank bond market.

Investors come from diverse jurisdictions across the globe, such as Hong Kong SAR (50%), US, Singapore

Trading volume of Bond Connect was RMB 64.8 billion in September 2018.

**Bond Connect Green Bond Issuance**

<table>
<thead>
<tr>
<th>Issuer</th>
<th>ADBC</th>
<th>CDB</th>
<th>ADBC</th>
<th>ADBC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tender Date</td>
<td>2017.11.16</td>
<td>2017.12.22</td>
<td>2018.04.27</td>
<td>2018.06.28</td>
</tr>
<tr>
<td>Amount</td>
<td>RMB 3 Billion</td>
<td>RMB 2 Billion</td>
<td>RMB 4 Billion</td>
<td>RMB 3 Billion</td>
</tr>
<tr>
<td>Coupon Rate</td>
<td>4.48%</td>
<td>4.68%</td>
<td>3.8766%</td>
<td>3.86%</td>
</tr>
<tr>
<td>Tenor</td>
<td>2 years</td>
<td>3 years</td>
<td>2 years</td>
<td>2 years</td>
</tr>
</tbody>
</table>
Green Bond Channel

- Information channel bridging the information gap between Chinese issuers and international investors.
- All bonds displayed on the Chinese domestic Green Bond Channel are registered on LuxSE Securities Official List (SOL) where admission to trading is not a prerequisite.
- Trading via existing channels.
On June 8, 2018, Green Bond Channel officially launched.

18 green corporate bonds publicly issued and listed on the SSE (RMB23.1 billion) are included on launch date.

On September 12, 2018, SSE, LuxSE and Bank of China (BOC) signed the MOU on the Green Bond Channel. BOC will serve as primary partner to facilitate capital flow on green bonds.

- Increased transparency of bond information via free access to security cards
- Increased investor base
- Comprehensive information in English available to offshore investors
- Enhanced visibility of securities
- Better connectivity among China and international investors
In May 2017, SSE and China Securities Index Company issued SSE green corporate bond index and SSE green bond index.

Since June 19, 2017, SSE green index series has been displayed on SSE and Luxembourg Stock Exchange.
Thank you!