Roundtable Discussion – Strategic Alliance Green Financial Solutions in Mexico – How to Move from Niche to Mainstream Mexico City - 18 October 2017

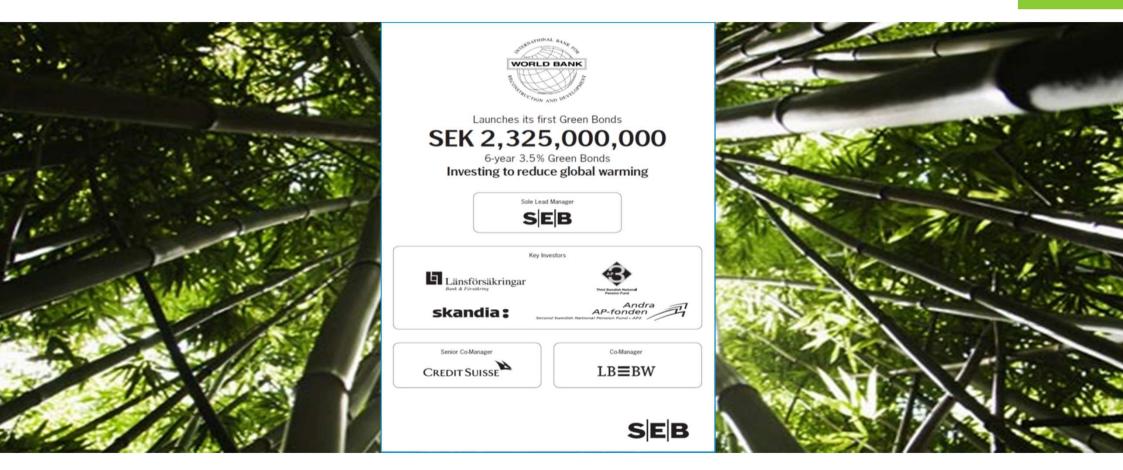
SEB

# **Green Bond Market Update**

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# A decade of Green Bonds



# Green Bond market ecosystem and investor sentiment

### **Drivers overview**

#### Economic

- Climate stress a financial risk
- Action vs. business as usual
- Allocation to resource efficiency

### **Regulatory environment**

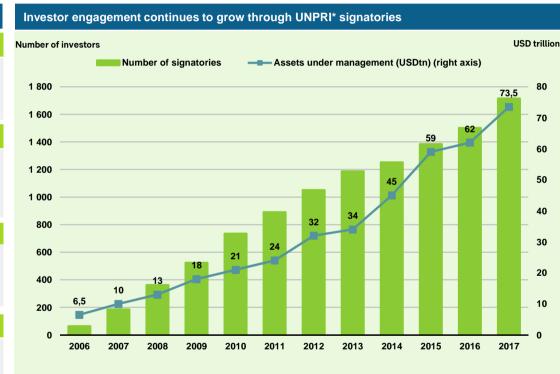
- Increasing focus on the need of climate financing
- Recognition of financial stability risk
- Market incentives

### **Regional benchmarks**

- Challenges and opportunities differ
- Regions are at different stages in the transition

### International initiatives

- UNPRI
- ✓ COP21
- ✓ G20 Green Finance Study Group



#### **Green Bond Funds - examples** SSgA BlackRock AXA Allianz ۰. Calvert Amundi ж. Mirova Colombia Threadneedle . Storebrand / SPP Erste AM . SEB NN **Green Bond listings** Oslo . Amsterdam Nasdag Stockholm Borsa Italia London Johannesburg

| <ul><li>Luxembourg</li><li>Shenzhen</li><li>Paris</li></ul> | ļ                  | Mexico City<br>Riga<br>Lisbon |  |  |
|---|--------------------|-------------------------------|--|--|
| Green Bond indices  | Green Bond indices |                               |  |  |
| <ul><li>Solactive</li><li>Bloomberg/ MSCI</li></ul>         |                    |                               |  |  |

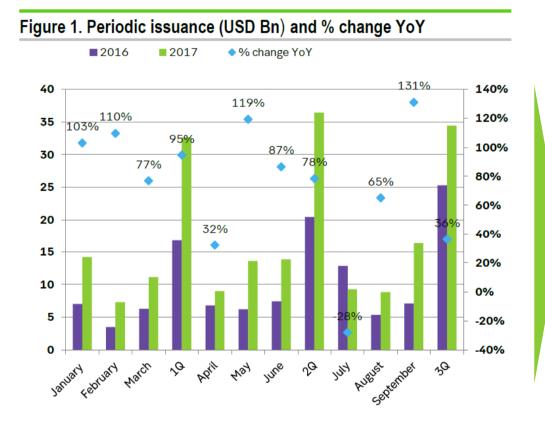
S&P/Dow Jones

BAML

Source: www.unpri.org

- Shenzhen / Luxembourg
- Various China Green Bond indices

# **Global Green Bonds issuance: 2017 (YTD) and cumulative**



\$400 600 Cumulative issuance \$350 (\$) 500 \$300 Total issuers (#) 400 \$250 \$200 300 \$150 200 \$100 100 \$50 Ś-0 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 YTD

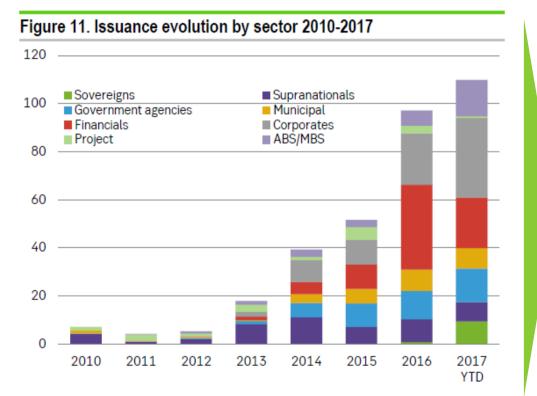
Source: SEB analysis based on Bloomberg/BNEF and SEB data. YTD through October 10.

Source: SEB analysis based on Bloomberg/BNEF and SEB data

Cited in: SEB (2017) The Green Bond 4Q(1)

Figure 2. Total cumulative issuance (USD Bn) and # of issuers

# Issuance by year and by sector



Source: SEB analysis based on Bloomberg/BNEF and SEB data. YTD through October 10.

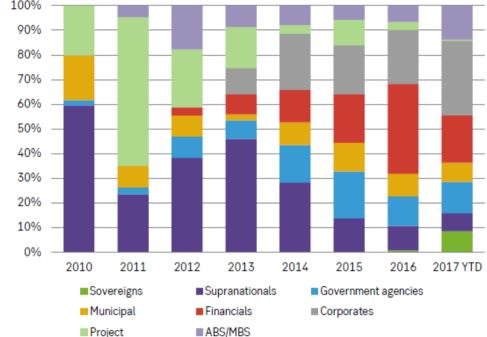


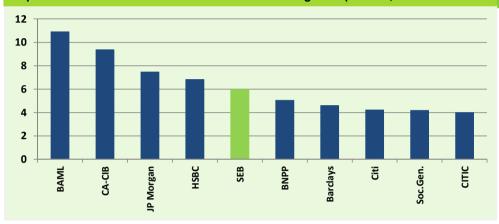
Figure 12. Sector shares, issuance 2010-2017

Source: SEB analysis based on Bloomberg/BNEF and SEB data. YTD through October 10.

# League table for global Green Bond underwriting

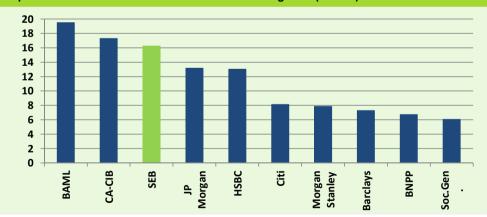


### Top 10 Green Bond Underwriters 1 Jan 2016 - 31 Aug 2017 (USD bn)



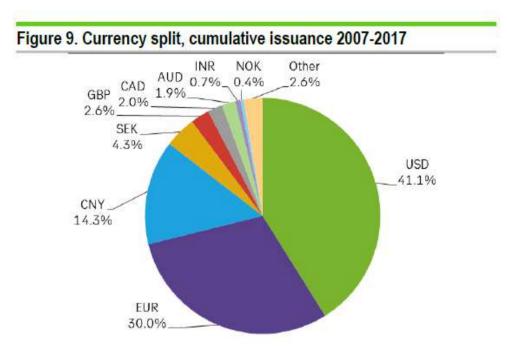
#### Source: Bloomberg

### Top 10 Green Bond underwriters 1 Jan 2007 - 31 Aug 2017 (USDbn)

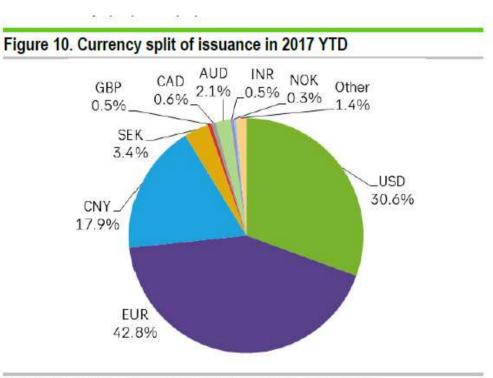


Source: Bloomberg

# **Green Bond issuance by currency**



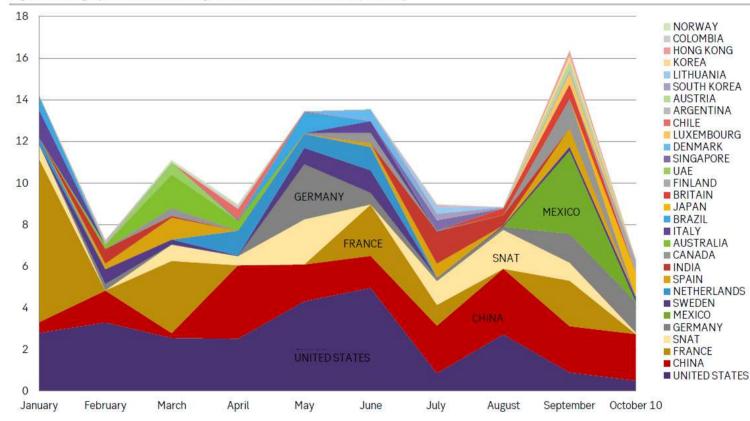




Source: SEB analysis based on Bloomberg/BNEF and SEB data. YTD through August.

# **Country league table 2017**

### Figure 5. Geographic distribution of green bond issuance in 2017 (USD Bn)



### Figure 3. Top 10 countries in 2017, incl. Supranational (USD Bn)

| Rank | Region        | Issuance | 2017 Trajectory YTD |
|------|---------------|----------|---------------------|
| 1    | UNITED STATES | 25.4     |                     |
| 2    | CHINA         | 19.0     | ~~~                 |
| 3    | FRANCE        | 17.0     | \                   |
| 4    | SNAT          | 8.0      | ~~~                 |
| 5    | GERMANY       | 6.7      |                     |
| 6    | MEXICO        | 4.0      |                     |
| 7    | SWEDEN        | 3.3      | ~~~                 |
| 8    | NETHERLANDS   | 3.3      |                     |
| 9    | SPAIN         | 3.1      |                     |
| 10   | INDIA         | 2.8      | ~~~~                |

Source: SEB analysis based on Bloomberg/BNEF and SEB dat. YTD through October 10.

Note: Country of Domicile classifications and terminology from Bloomberg used. SUPRANAT = Supranational; Taiwan = Chinese Taipei. Top issuers labelled in chart for illustration.

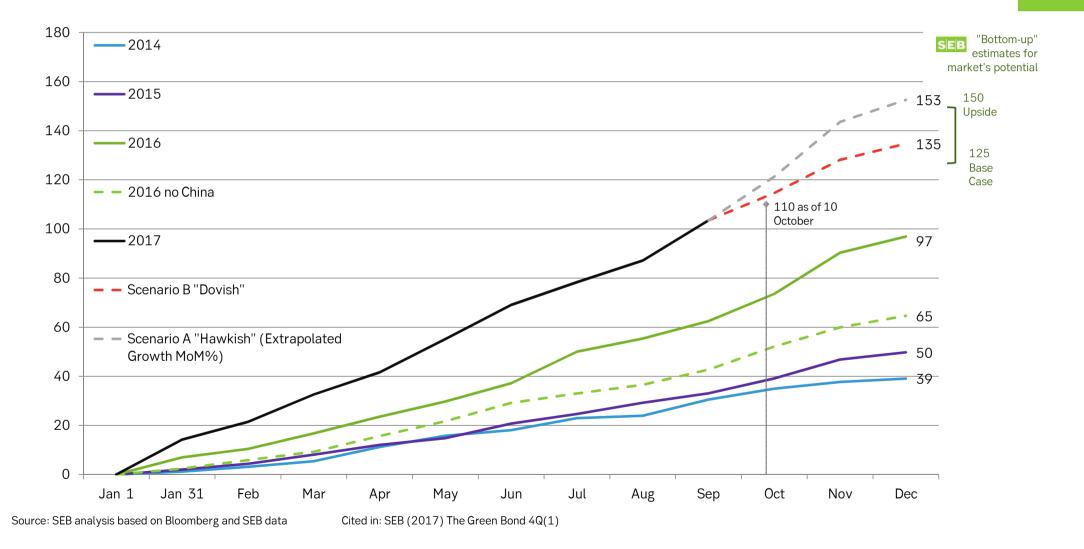
Source: SEB analysis based on Bloomberg/BNEF and SEB data. YTD through October 10.

Cited in: SEB (2017) The Green Bond 4Q(1)

# **Market drivers**

| Drivers of green infrastructure investments and green bond financing |   |  |  |  |  |
|--|---|--|--|--|--|
| Investors  | • | ESG integration and sustainable investments demand   |  |  |  |
|  | • | Risk-adjusted return (alpha, beta, or hedging strategies)  |  |  |  |
| Economic Forces  | • | Local air and water pollution across Emerging and Developing Economies as well as OECD   |  |  |  |
| Economic Forces  | - | Avoided health care costs, labour market and productivity benefits, fuel savings, trade benefits   |  |  |  |
| Technology Forces  | • | Cost-down curves in renewables, batteries, IT, fintech   |  |  |  |
| recimology Forces  | - | Scaling up of electric vehicles and enabling infrastructure (smart grid, HDVC, charging, storage, etc.)  |  |  |  |
| C it.  | • | Energy security (investing in renewables to lessen import needs or to protect military supply chains)  |  |  |  |
| Security   | • | National security (climate stress as a threat multiplier)  |  |  |  |
|  | • | Green infrastructure investment demand to meet challenges of the 21st century  |  |  |  |
| Bankable<br>Pipelines  |   | (population growth, growth of middle class, rural to urban, resource efficiency and circular economy)  |  |  |  |
| •  | - | Green investment policy frameworks (price on CO <sub>2</sub> , removal of Fossil Fuel subsidies, support for green projects, green infrastructure banks) |  |  |  |
|  | • | Green infrastructure policies driven by national interest – bottom up (NDCs, 114 countries have renewable energy policies, 66 for transport)             |  |  |  |
| Policy Alignment   | - | Top down environmental agreements COP21, SDGs, ICAO, Montreal Protocol   |  |  |  |
| roacy Augminent  | - | Attention to climate risk and green finance from Financial Stability Board, Central Banks, G20, Finance Ministries, Departments of Defense               |  |  |  |
|  | • | EU High Level Expert Group report on Sustainable Finance   |  |  |  |
|  | - | Sustainability preferences of millennials  |  |  |  |
| Social Forces  | • | Divestment movement  |  |  |  |
|  | • | Civil society initiatives and pressure   |  |  |  |
| Green Bond   | - | Market-led or government initiatives (ICMA, CBI, G20, EC + China, India, Japan, Indonesia, Singapore, etc.)  |  |  |  |
| <b>Specific</b><br>Source: SEB analysis                              | • | Financial sector innovation (investors, banks, ratings agencies, issuers, data providers, market ecosystem)  |  |  |  |

## Global Green Bond Market Evolution & Scenarios for Q4 2017 (USD Bn)



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