



# Green Bond market

**Klas Eklund**

Mumbai

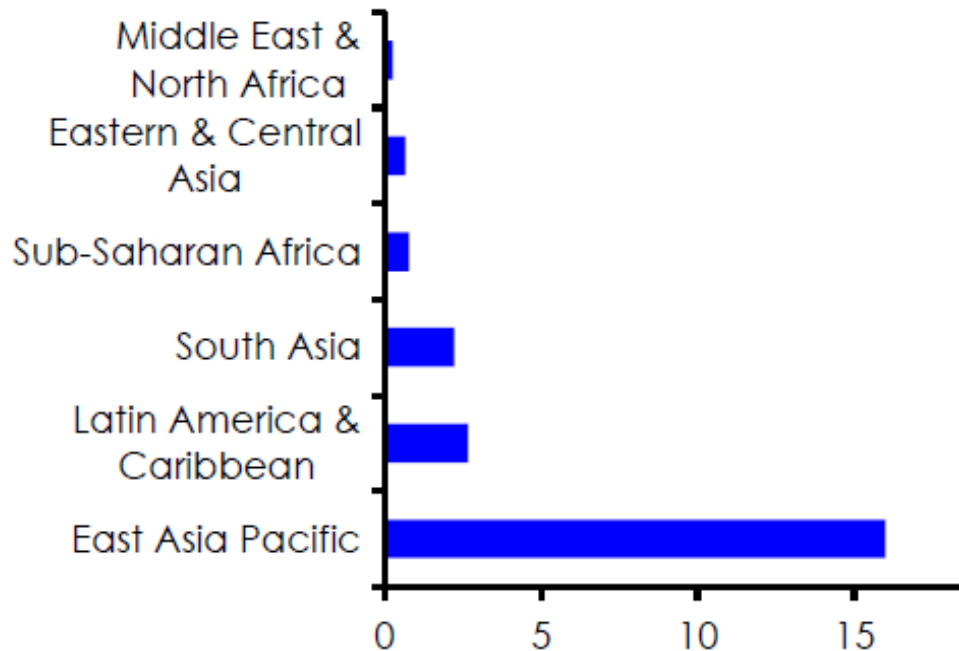
November 17, 2017

# Huge potential market

Green bonds can play an important role in many sectors

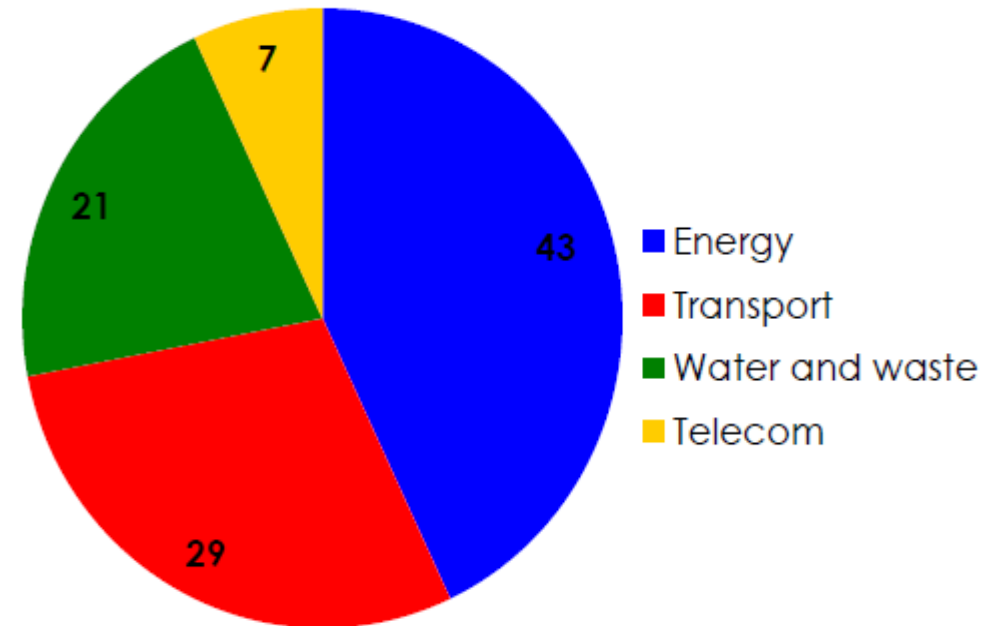
Identified Green Investment Potential, 2016-2030

\$ trillion



Demand for Infrastructure by Sector, 2015-2030

percent



Source: IFC, IIF

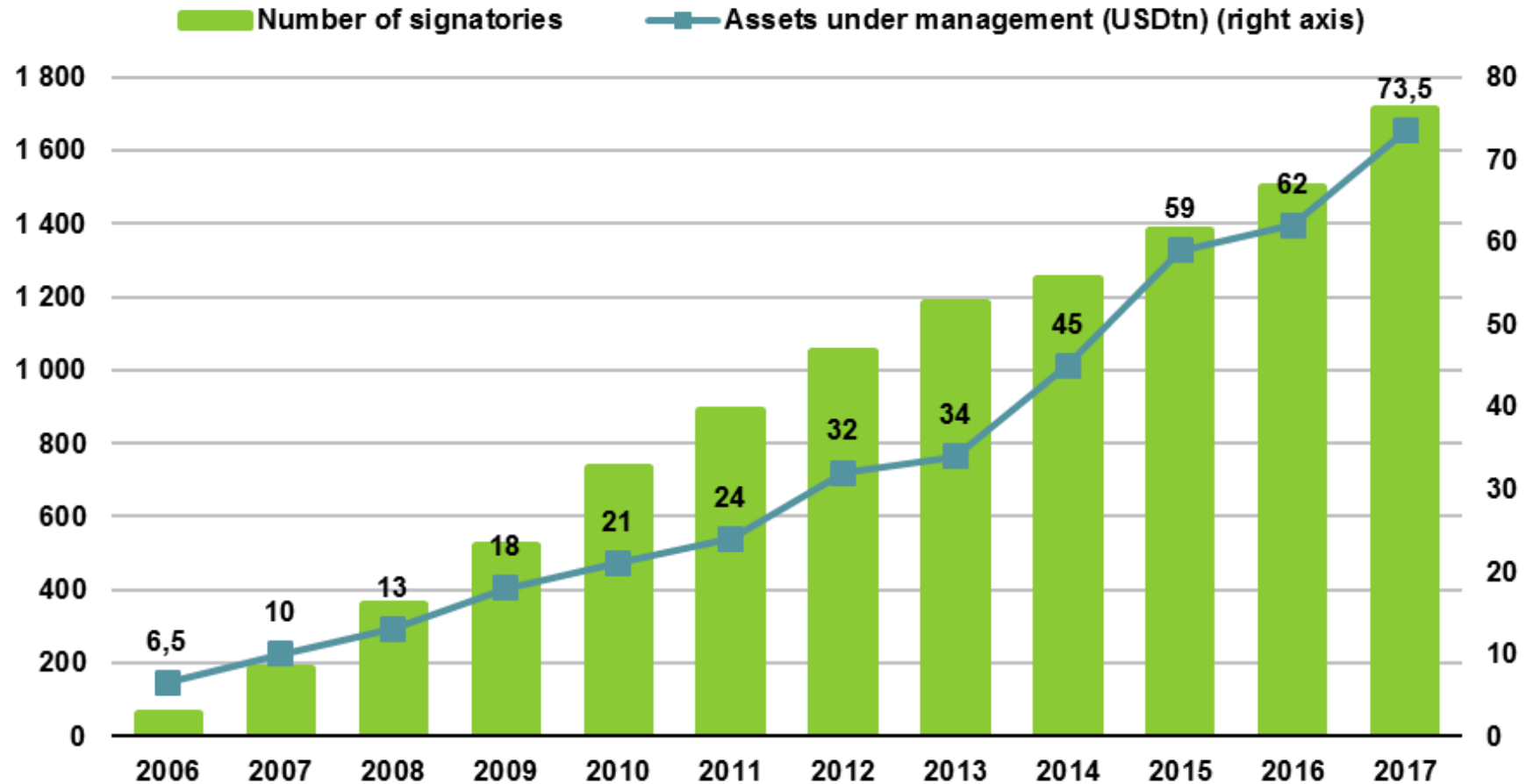
# Definition of Green Bonds



**Green Bonds are any type of **bond instrument** where the **proceeds** will be **exclusively** applied to finance or re-finance new and/or existing **eligible Green Projects****

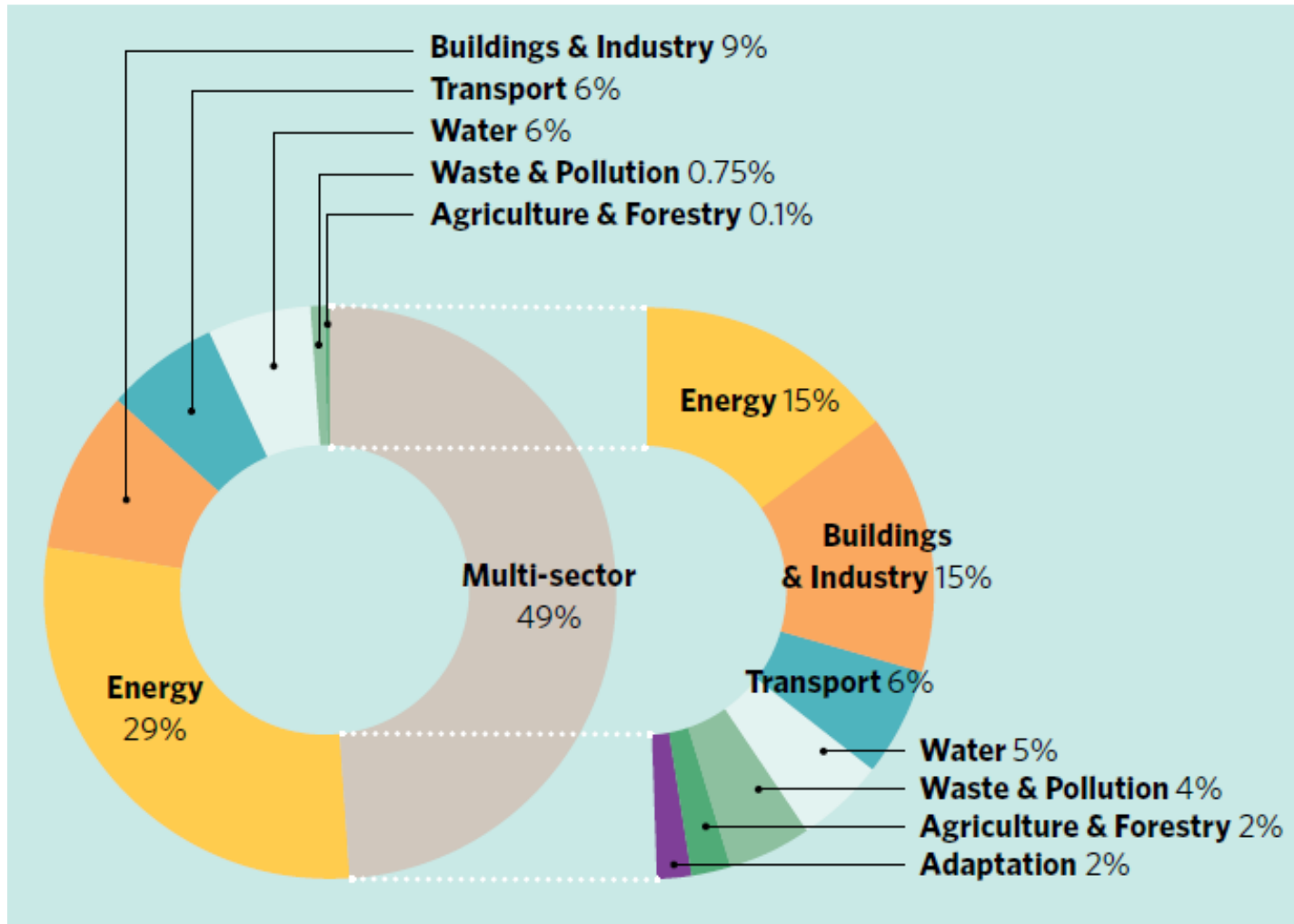
# Green Bonds driven by investor demand

## PRI signatories and their assets



Source: Unpri.org  
ESG = Environmental, Social & Governance

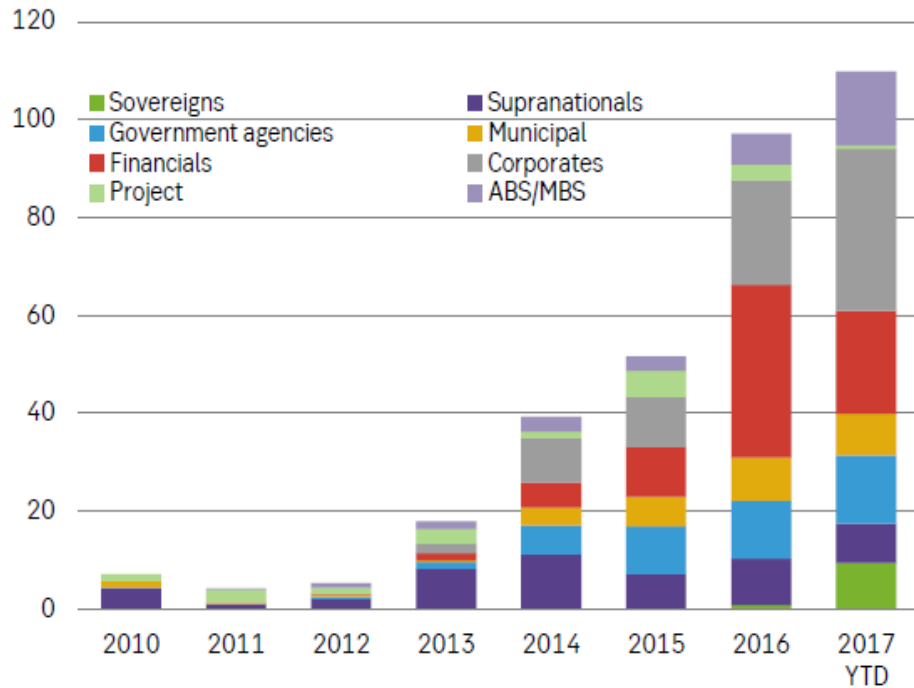
# Where is Green Bond money used?



Source: Climate Bonds Initiative. The State of the Market in 2016

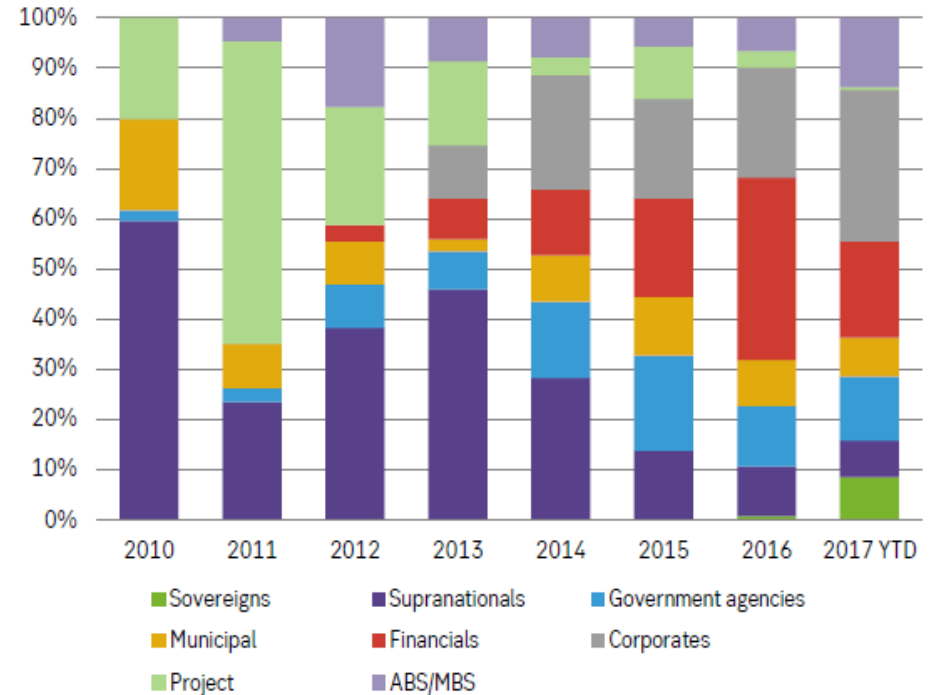
# Global market growth and issuance by sector

Figure 11. Issuance evolution by sector 2010-2017



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

Figure 12. Sector shares, issuance 2010-2017

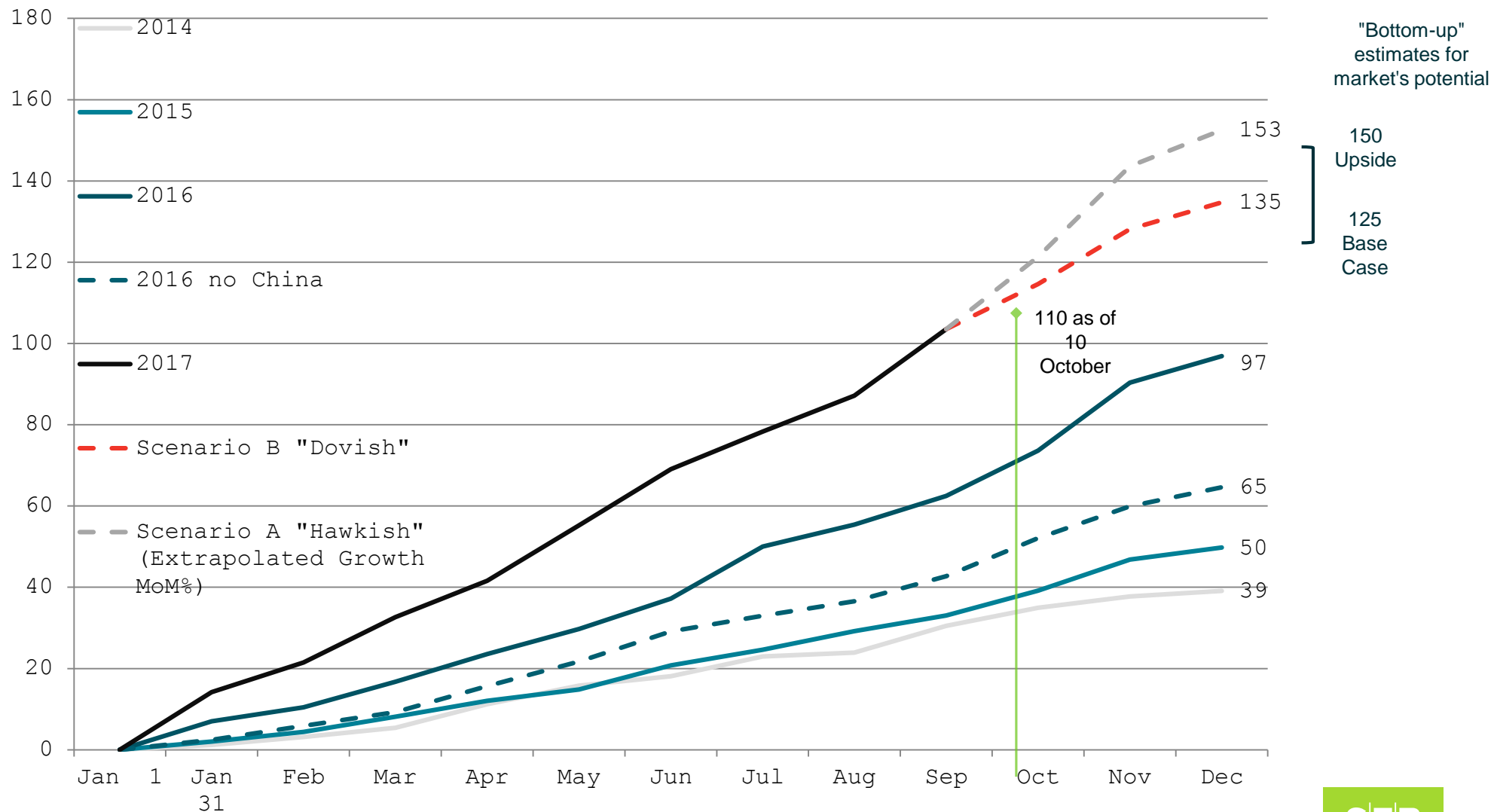


Source: SEB analysis based on Bloomberg/BNEF and SEB data. YTD through October 10.

Source SEB (2017) *The Green Bond 4Q(1)*



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

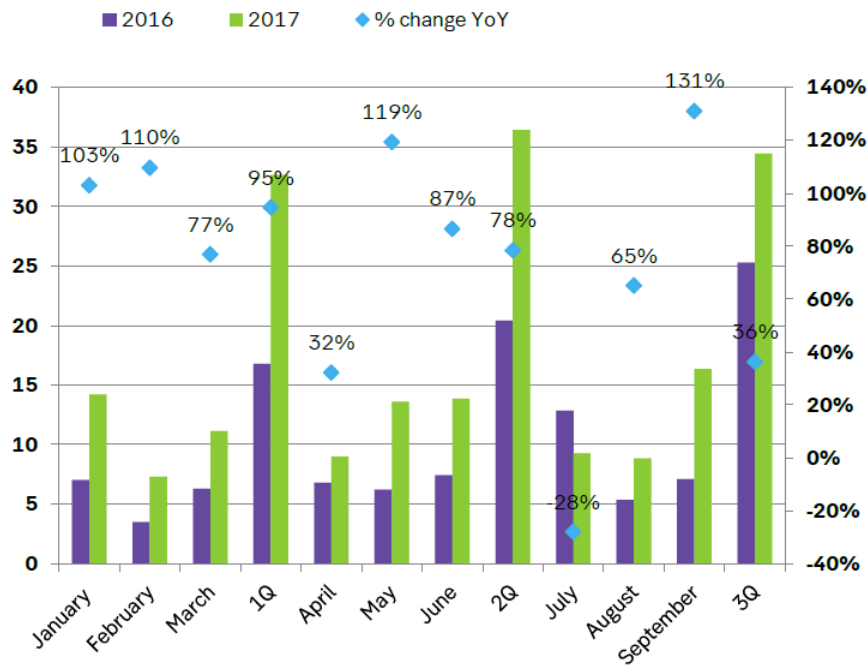


Source: SEB analysis based on Bloomberg and SEB data



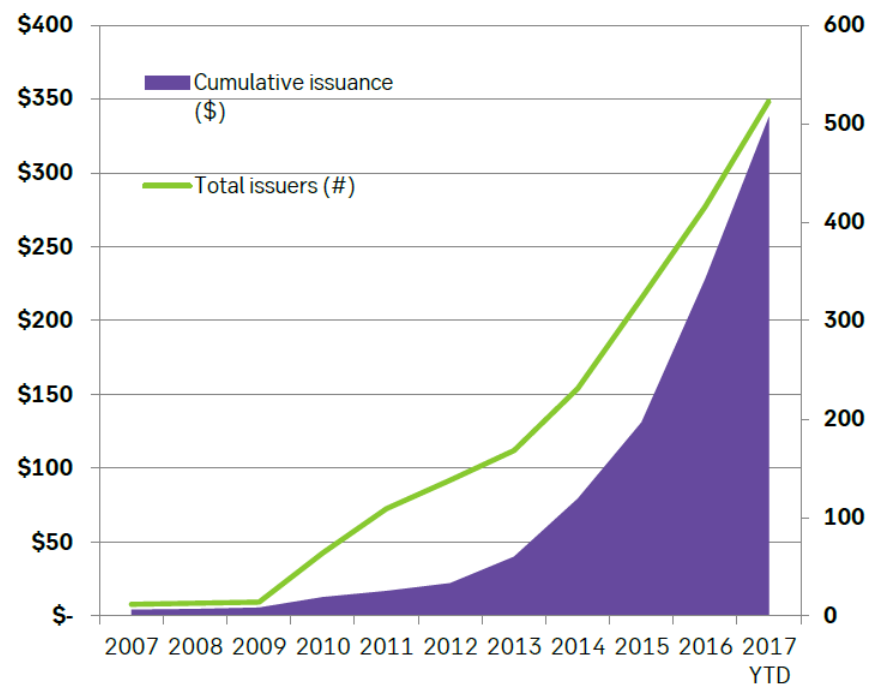
# Cumulative issuance

Figure 1. Periodic issuance (USD Bn) and % change YoY



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

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



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

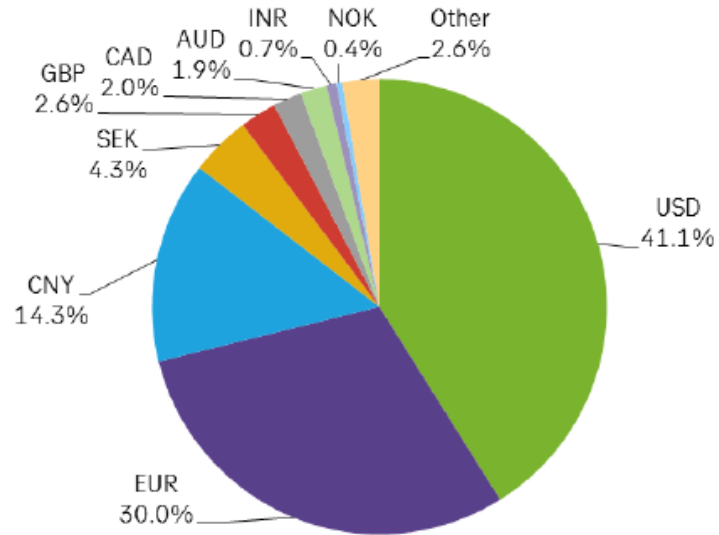
Source: SEB (2017) The Green Bond 4Q(1)





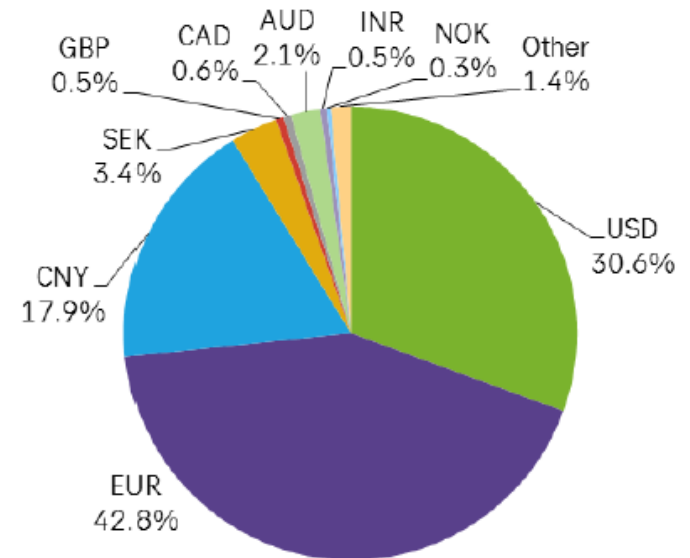
# Green bonds by currency

Figure 9. Currency split, cumulative issuance 2007-2017



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

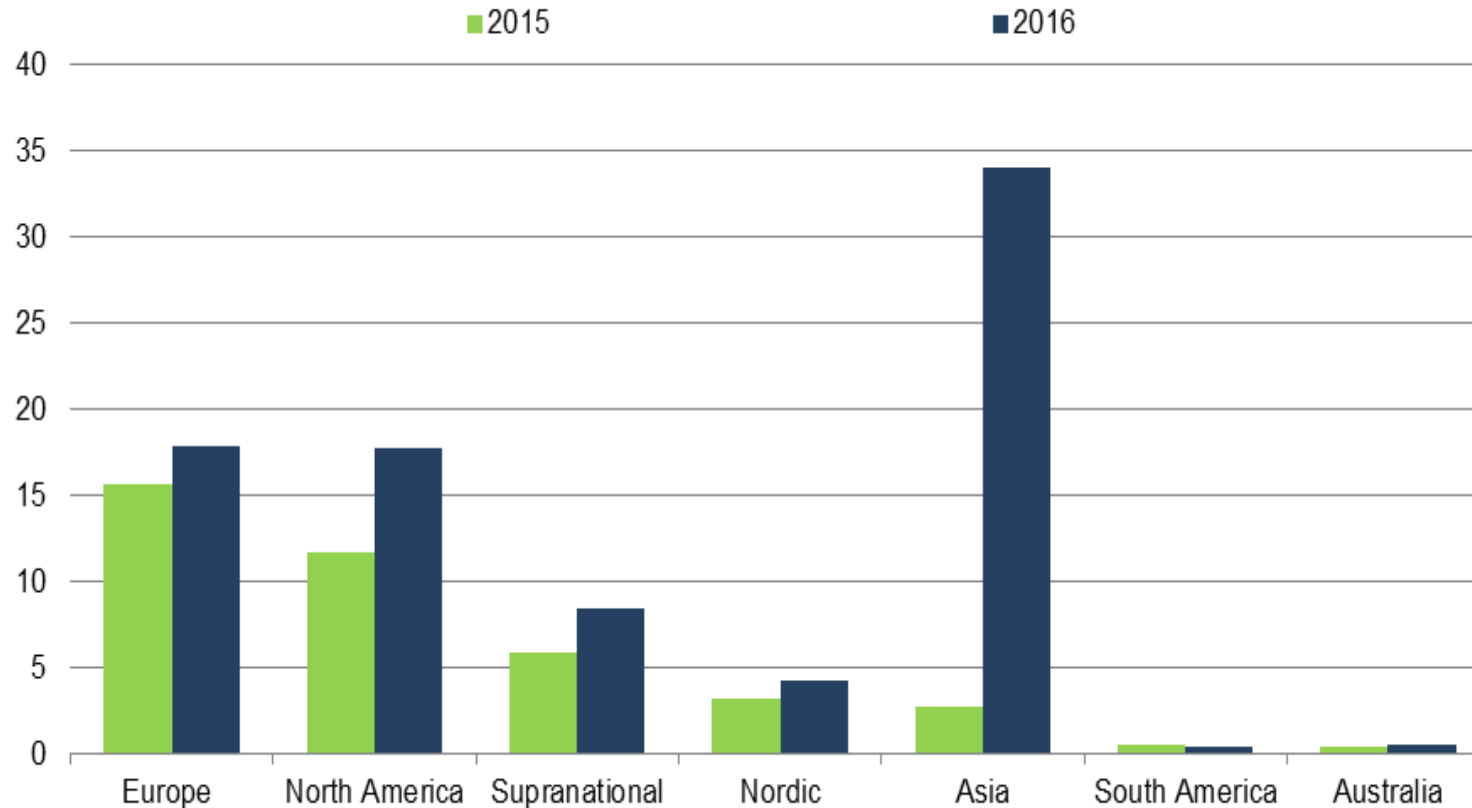
Figure 10. Currency split of issuance in 2017 YTD



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

# Recent regional development

Regional issuance 2016 vs 2015 (USD bn)



Source: SEB analysis based on Bloomberg data

# Top 10 countries 2017 (through October)

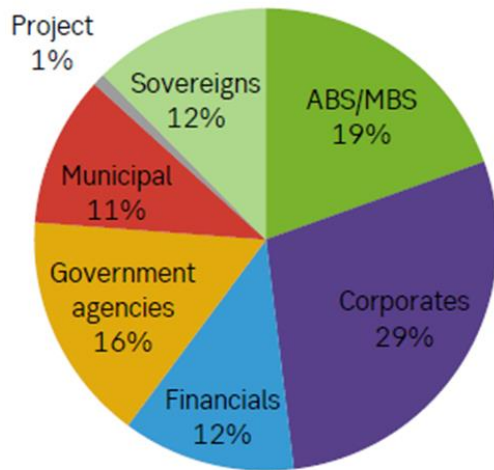
Figure 3. Top 10 countries in 2017, incl. Supranational (USD Bn)

| 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.

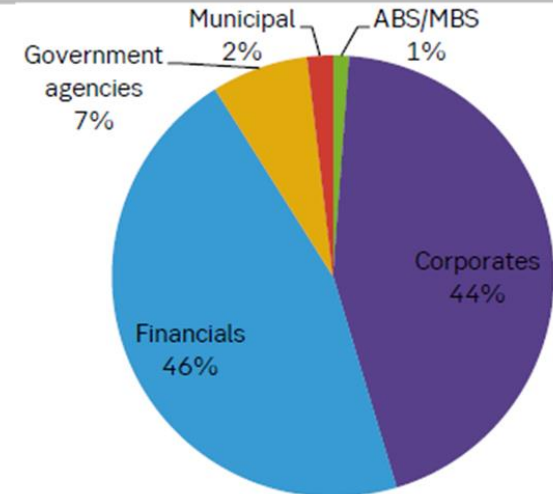
# Issuer types in OECD and EMDE<sup>(1)</sup>

Figure 6. USD 76 bn issued in OECD markets in 2017



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

Figure 7. USD 26 bn issued in EMDE in 2017



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

Note 1: IMF definition: Emerging markets and Developing Economies (153 countries)  
Source SEB (2017) The Green Bond 4Q(1)

# Who buys green bonds?

## Five main groups of investors

**Opportunistic:** Mainstream fixed income investors who are mainly interested in fiduciary performance but also like to have environmental benefit

**Discretionary Mandates:** Mainstream asset managers that have a mandate to invest in a certain type of green bond

**Dedicated:** Mainstream broad market fixed income investors who also have a dedicated SRI/Green portfolio or target

**Specialist:** Investors that exclusively focus on green bonds

**Incidental:** Purchasers who may not have a specific environmental preference, but like the risk/return profile of a green bond



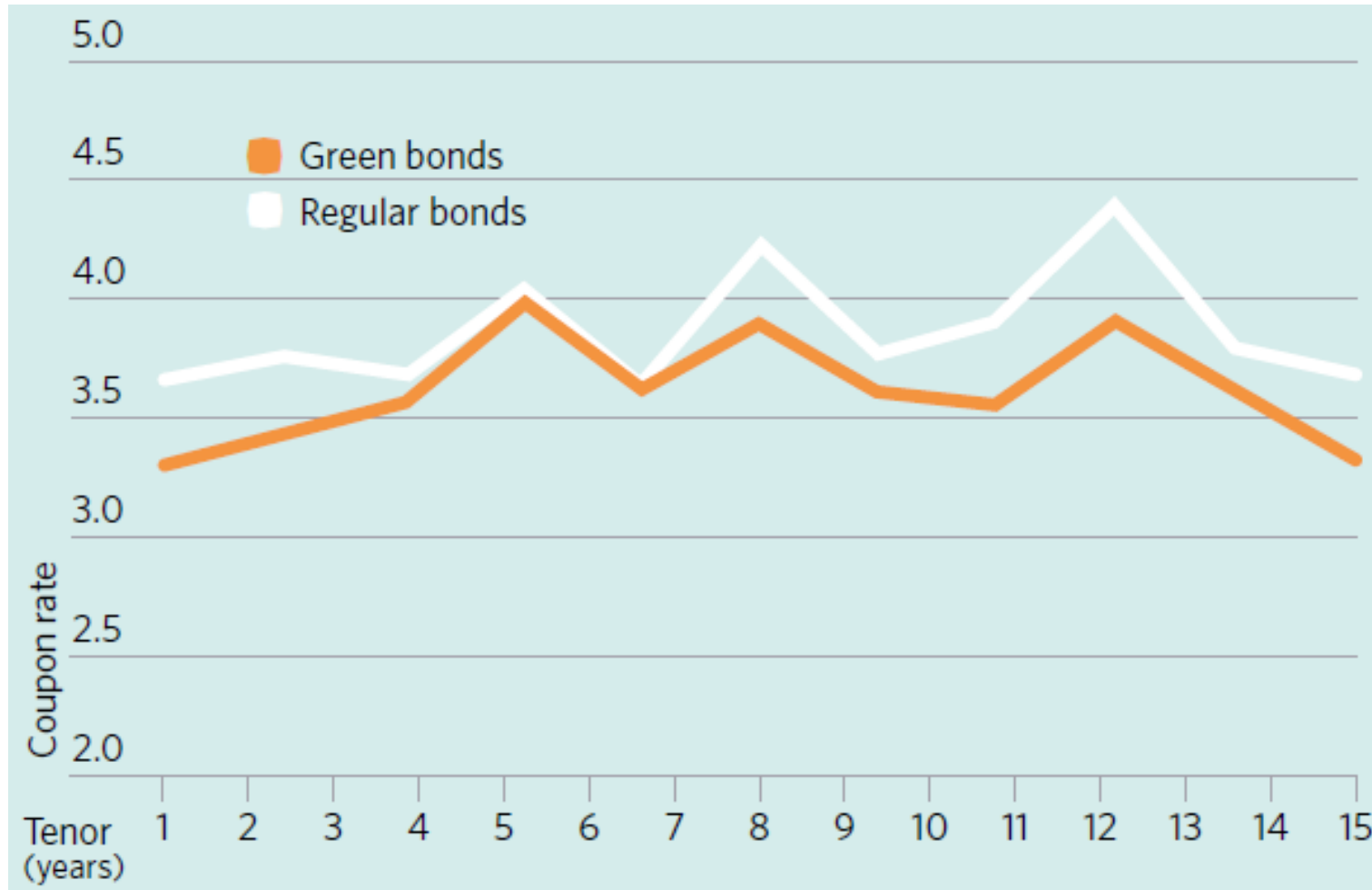
Source: SEB

# Pricing of Green Bonds

- Created for mainstream investors on the basis of equal pricing
- Law of supply and demand
- Anecdotal evidence in a world of unique transactions
- Bloomberg report (feb 2017): “Investors are willing to pay a “green premium”. 25pbs lower yield for green bonds issued by supranationals in EUR. Apart from that, no consistent premium for green securities
- Three reasons price premiums aren’t more common:
  - Use-of-proceeds green bonds are still tied to corporate risk
  - Green bond governance as a whole is too weak
  - It is nearly impossible to attribute differentials to the green credentials (too small sample to analyse and separate effects)
- Potential effect from increasing climate risk awareness: *“...as investors increasingly price environmental risks into models, non-green bonds would require a higher risk-adjusted return.”*

# Primary issuance pricing in China

For bonds with the same ratings, coupon rates of green bonds are lower than regular bonds



# SEB and the Green Bond market

## A reliable partner and a global leader in Green Bonds

### Investor relations

- SEB has met with nearly 1200 investors worldwide in dedicated Green Bond meetings
- SEB has placed Green Bonds to around 800 investors
- SEB has been and is advising a large amount of investors on how to implement Green Investment strategies

### Issuer relations

- SEB is advising issuers of all types globally
  - ✓ Advice on establishing Green Bond frameworks
  - ✓ Coordinating second opinions
  - ✓ Developing issuance strategies

### International engagement

- ✓ SEB is active in the reference group created to support the UN Climate Fund
- ✓ SEB is interacting with a number of governments to develop mechanisms to engage private capital in climate investments
- ✓ SEB and GIZ have a strategic alliance on Green Bond market development in G20 emerging markets
- SEB has been invited and been a speaker in high profile event such as
  - ✓ UN General Assembly
  - ✓ UN Foundation / INCR Investor Summit
  - ✓ OECD Roundtable
  - ✓ Environmental Finance Conference
  - ✓ US State Department

## SEB & GIZ Strategic Alliance on Green Bond Market Development in G20 Emerging Markets



Green Bonds and Green Finance in China  
中国绿色债券与绿色金融

7 April 2016, Beijing  
2016年4月7日 北京

Organized by  
The People's Bank of China, Research Bureau  
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH  
Green Finance Committee, China Society for Finance and Banking

Industry-Partner  
The Swedish Skandinaviska Enskilda Banken

Academic-Partner  
Chong Yang Institute for Financial Studies, Renmin University of China