



Green Bond market

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Mumbai

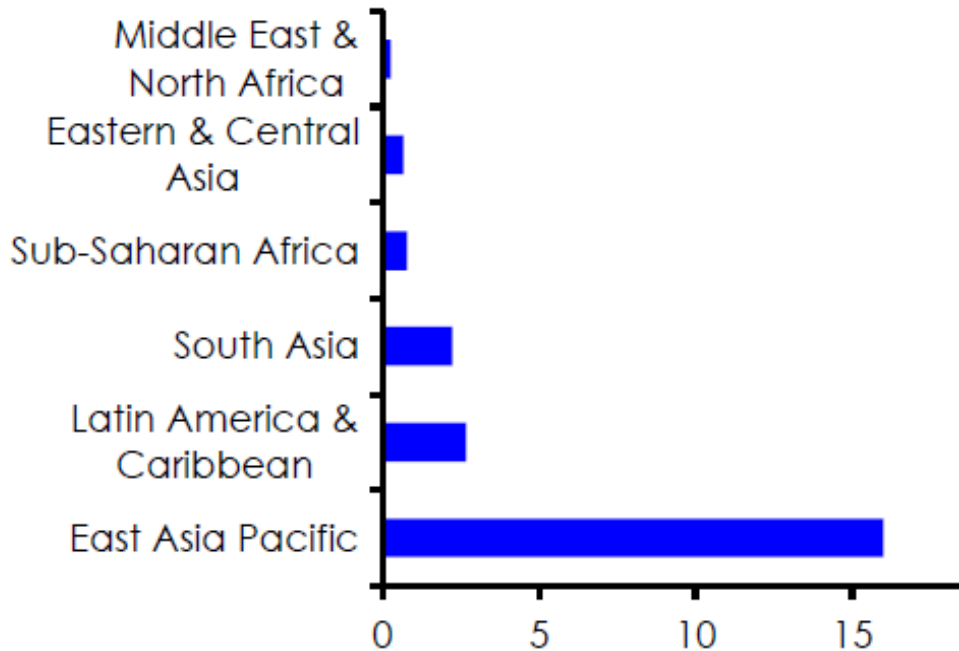
November 16, 2017

Huge potential market

Green bonds can play an important role in many sectors

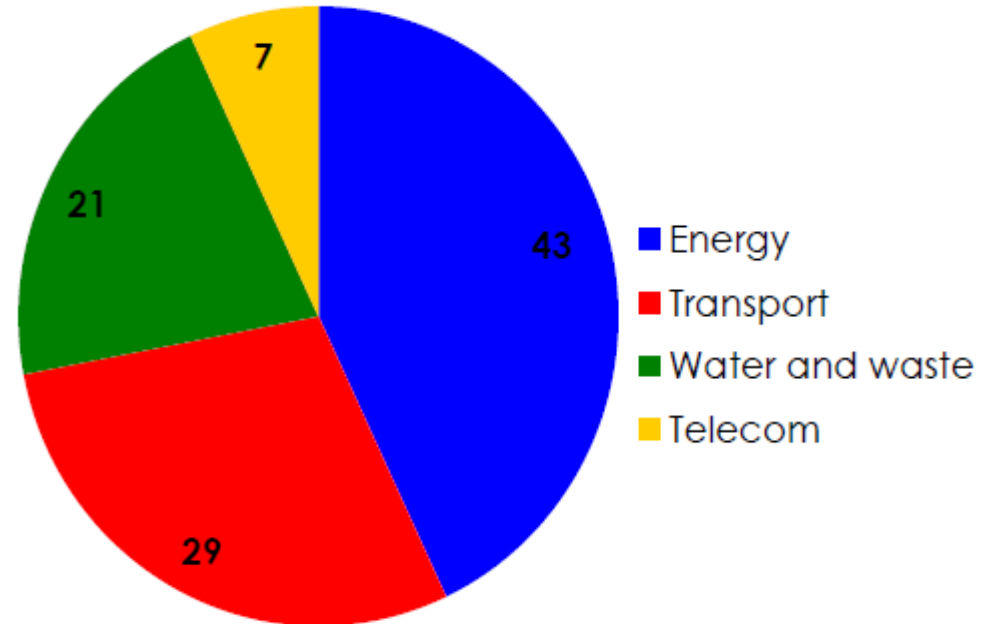
Identified Green Investment Potential, 2016-2030

\$ trillion



Demand for Infrastructure by Sector, 2015-2030

percent



Source: IFC, IIF

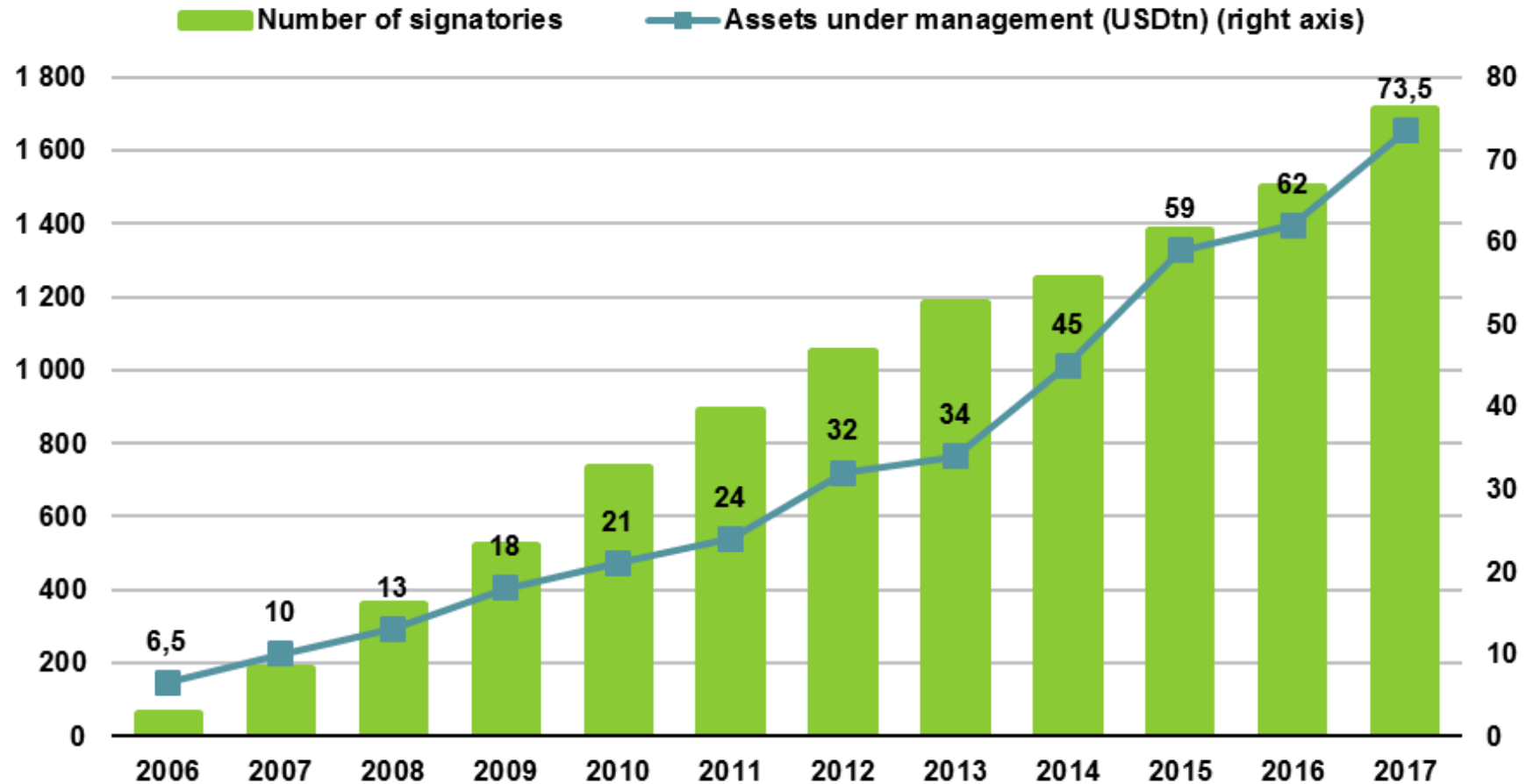
Definition of Green Bonds



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****

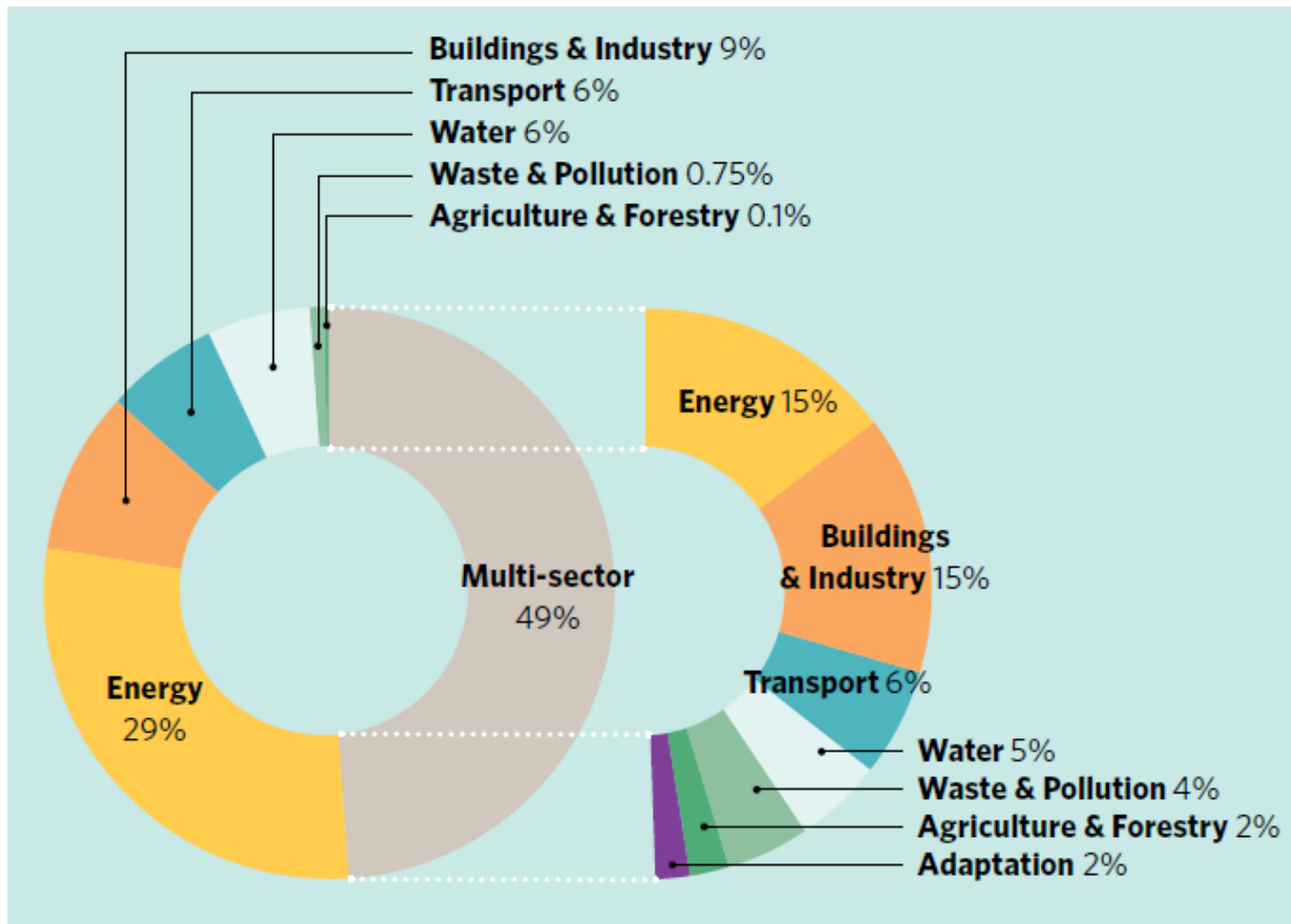
Green Bonds driven by investor demand

PRI signatories and their assets



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

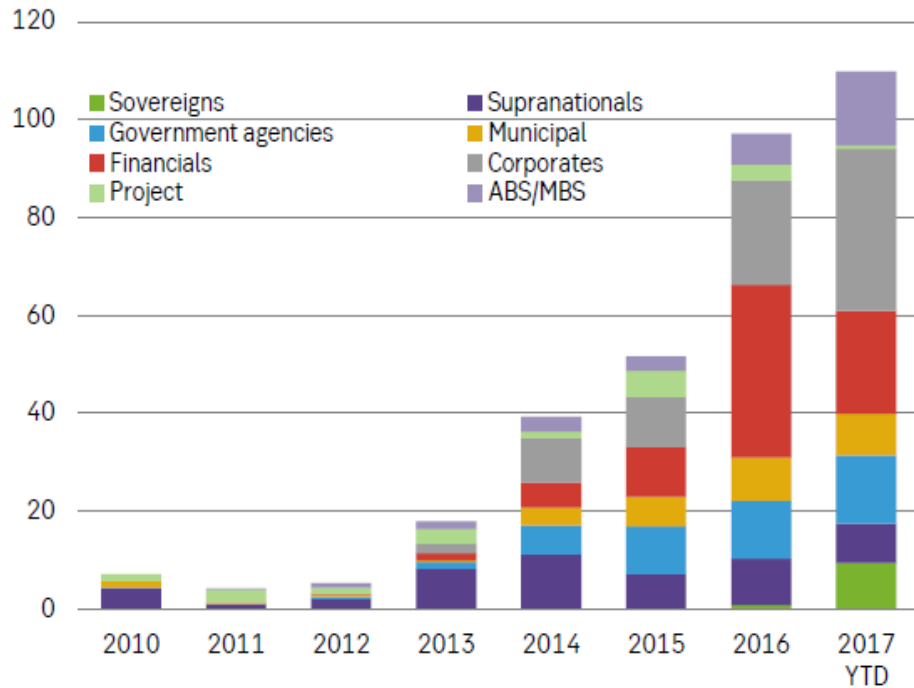
Where is Green Bond money used?



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

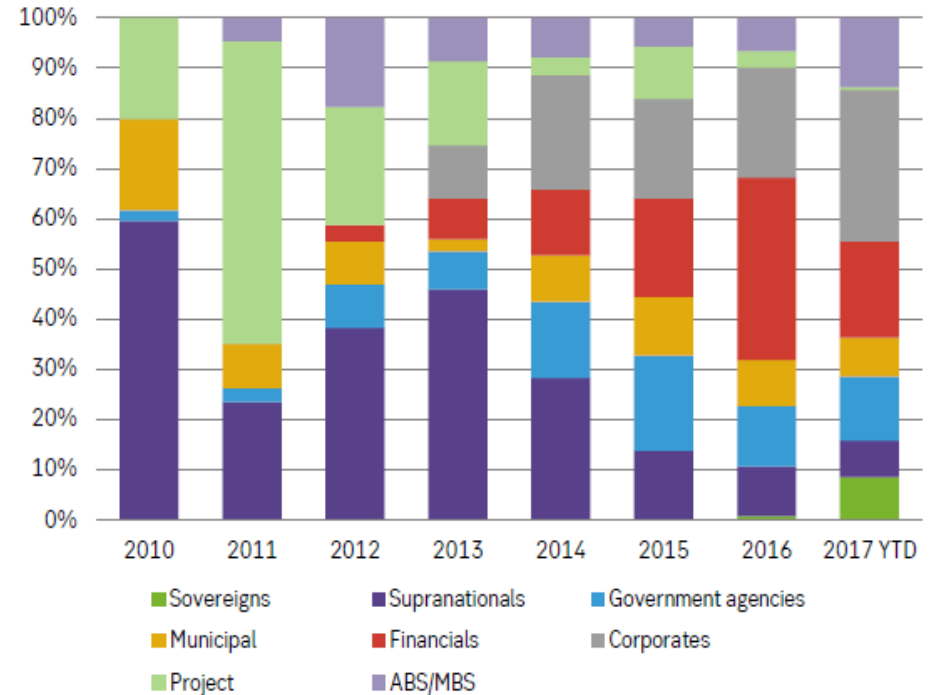
Global market growth and issuance by sector

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

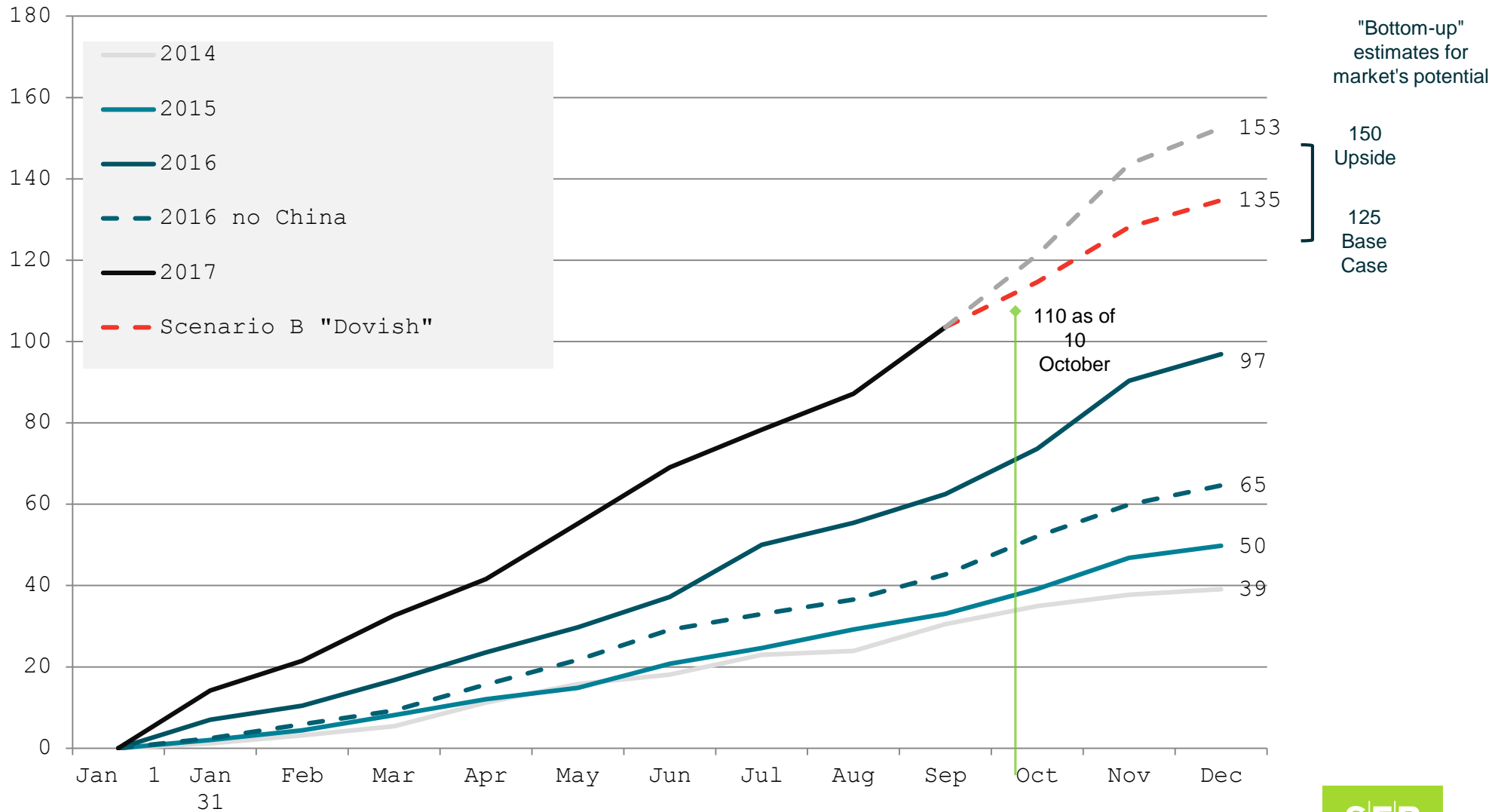


Source: SEB analysis based on Bloomberg/BNEF and SEB data. YTD through October 10.

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



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

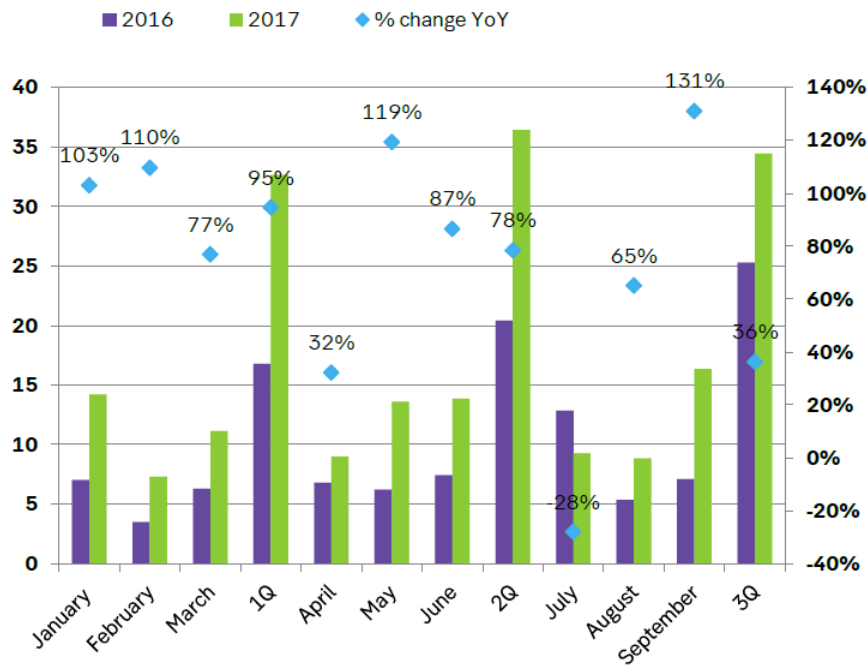


Source: SEB analysis based on Bloomberg and SEB data



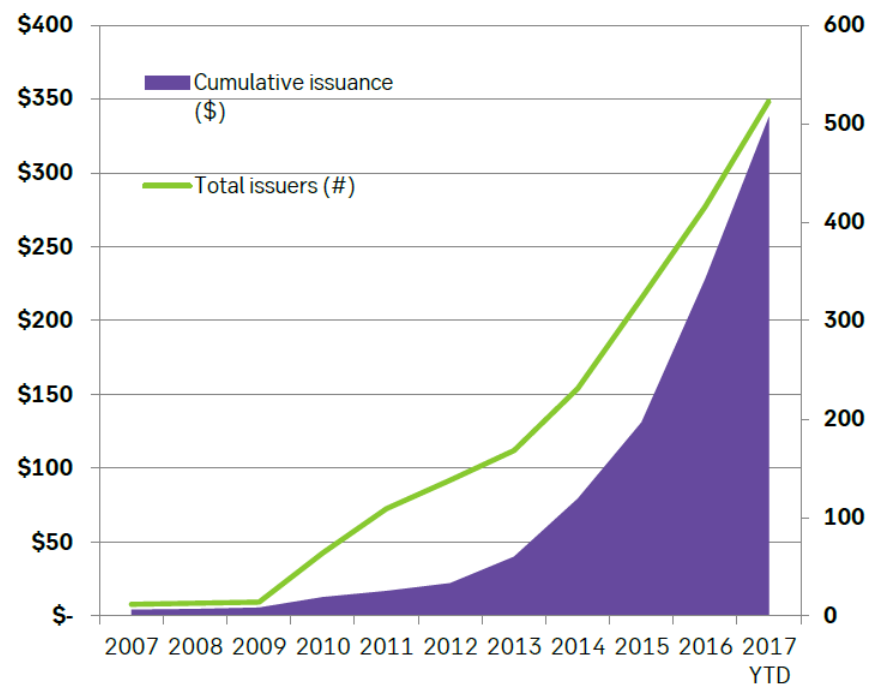
Cumulative issuance

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



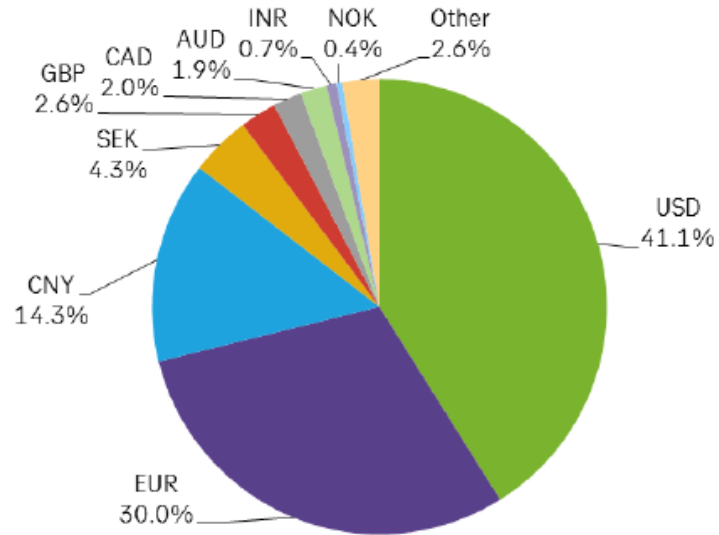
Source: SEB analysis based on Bloomberg/BNEF and SEB data. YTD through October 10.

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



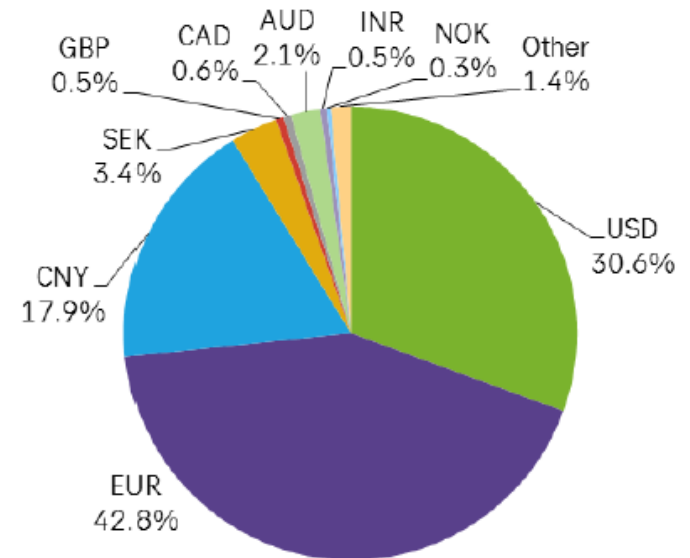
Green bonds by currency

Figure 9. Currency split, cumulative issuance 2007-2017



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

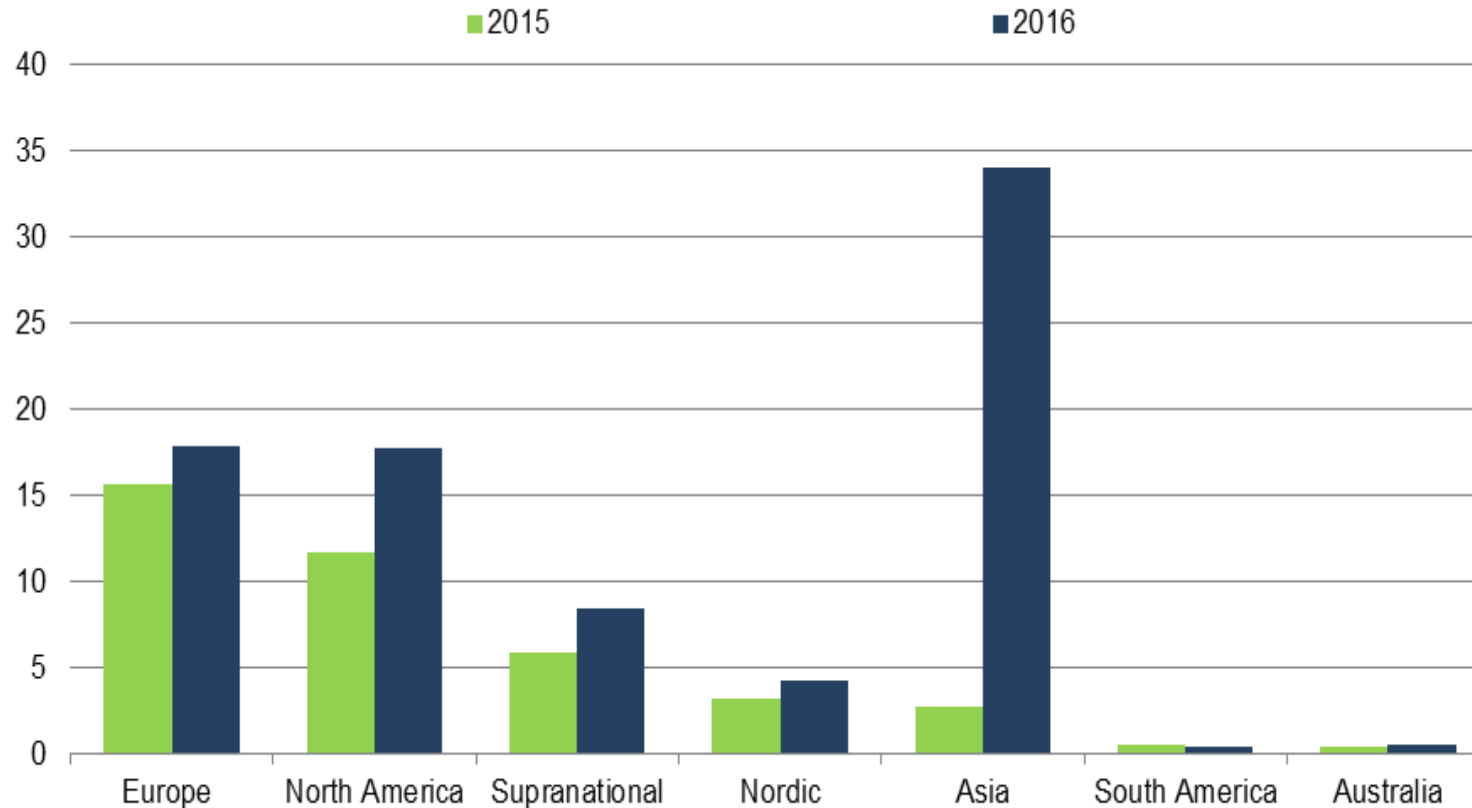
Figure 10. Currency split of issuance in 2017 YTD



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)

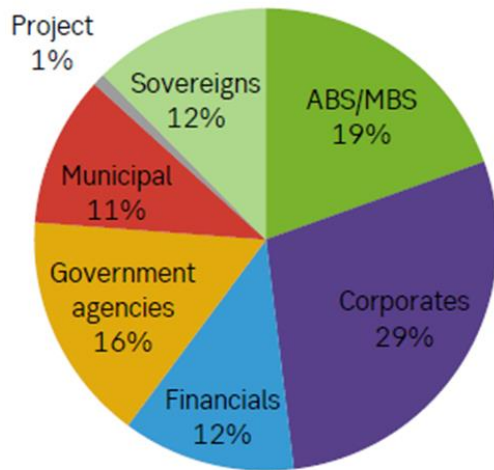
Figure 3. Top 10 countries in 2017, incl. Supranational (USD Bn)

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.

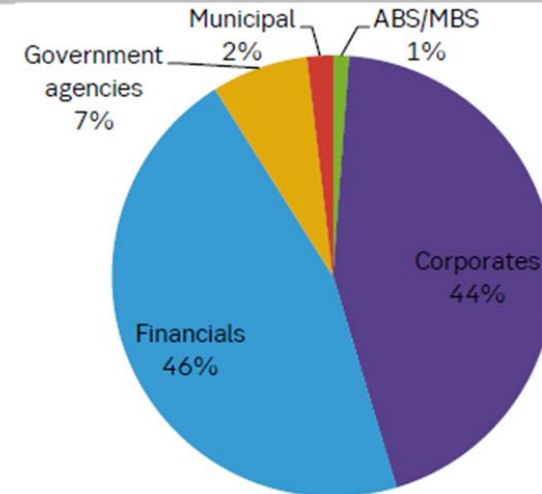
Issuer types in OECD and EMDE⁽¹⁾

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



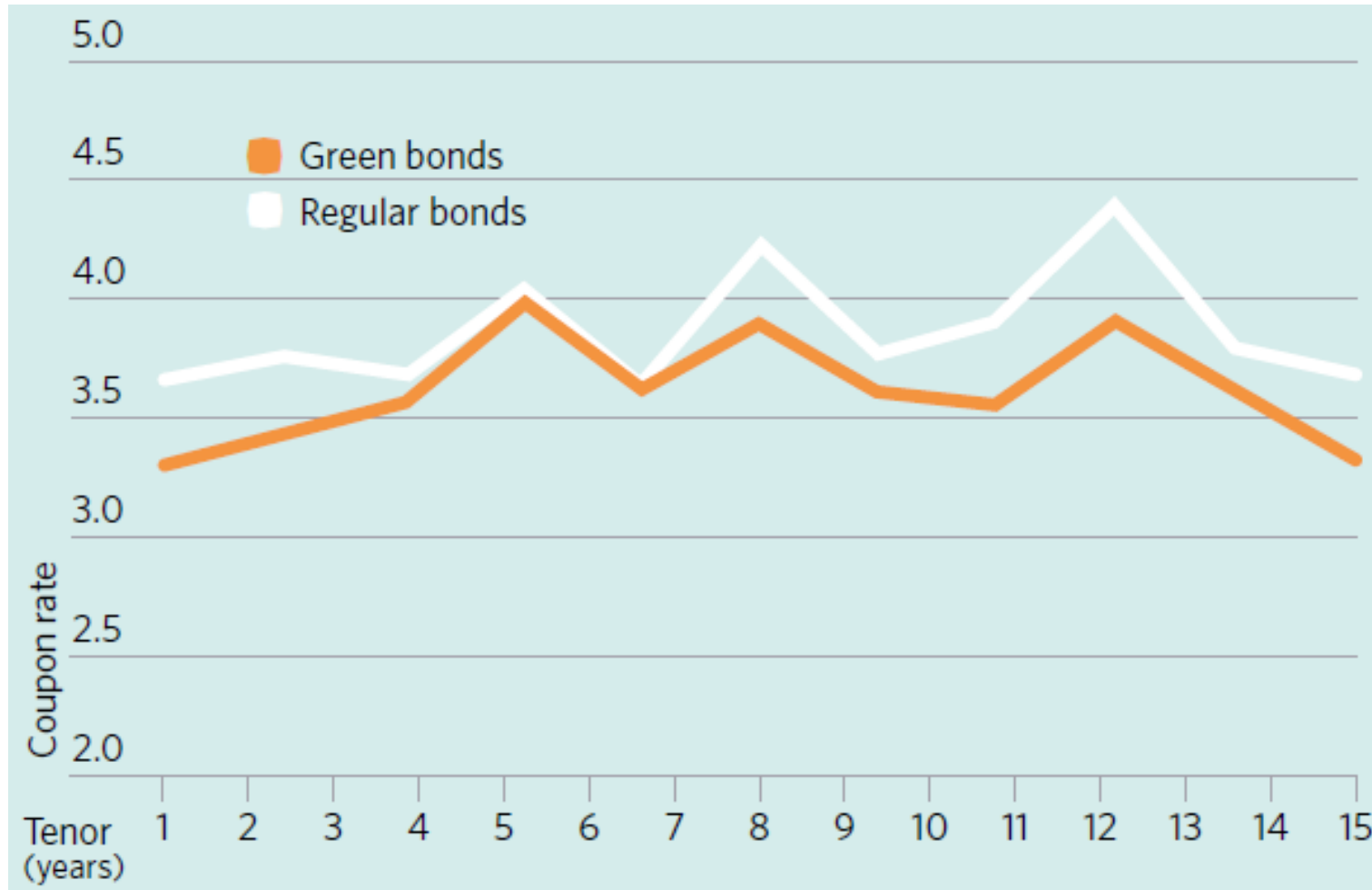
Source: SEB

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