



Green Bond Workshop II: Monitoring, Reporting & Market Aspects – Latest Green Bond Market Development
Mexico City, 1 March 2017

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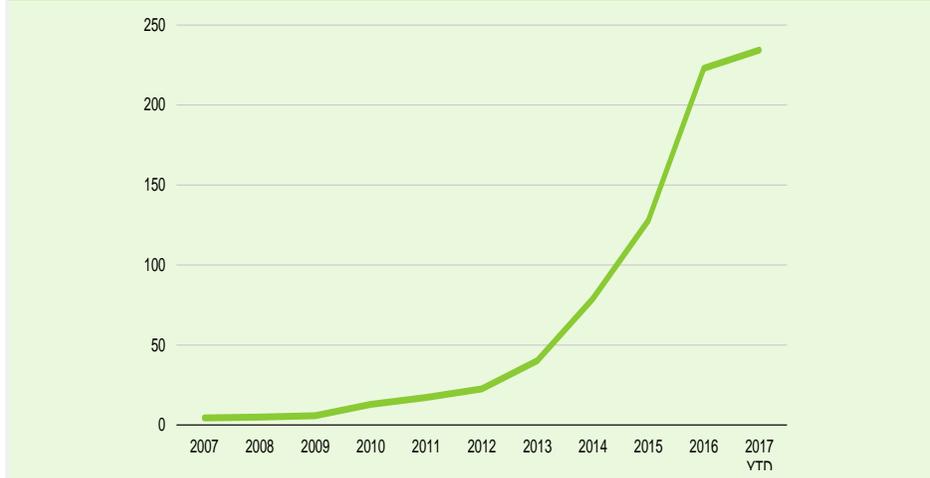
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Global market update

Total cumulative issuance (USD bn)



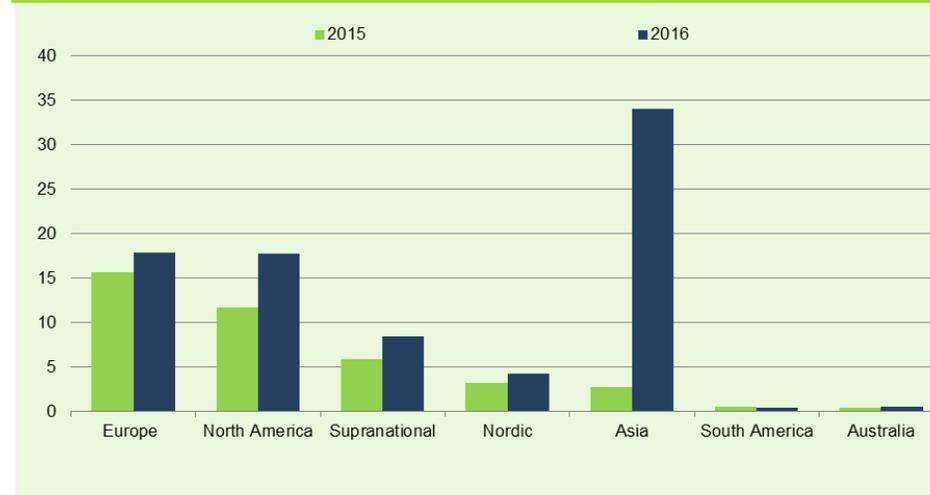
Source: Bloomberg/BNEF

Amount issuance per year and sector (USD bn)



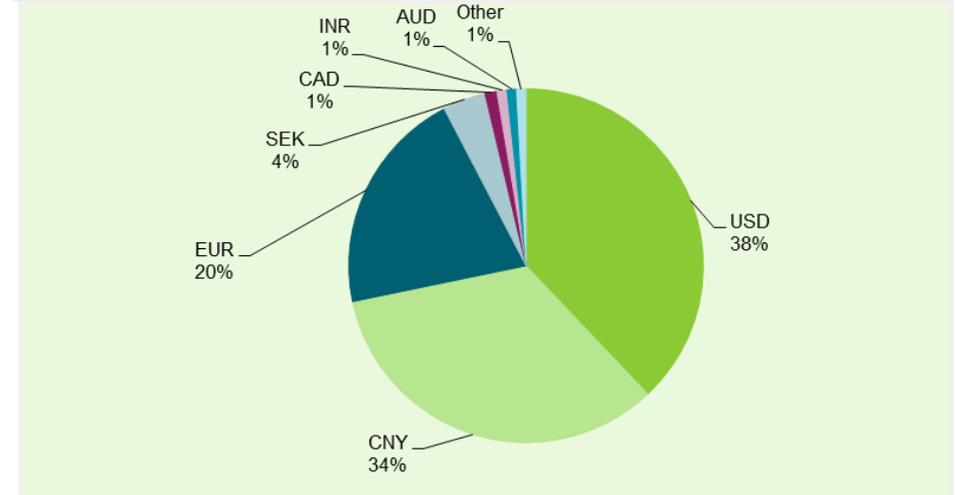
Source: Bloomberg and SEB (excluding ABS and project bonds due to data availability)

Regional issuance (USDbn)



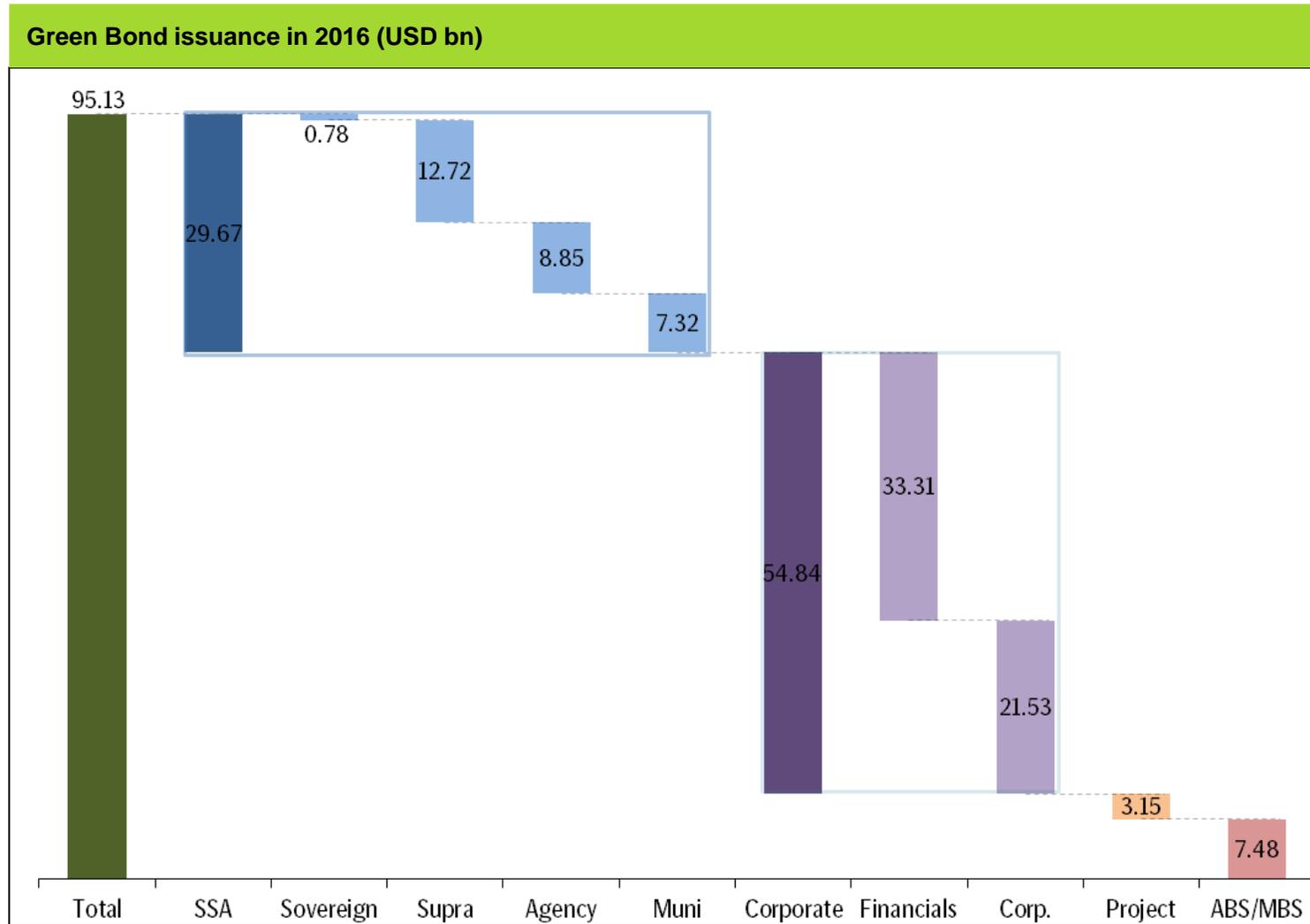
Source: Bloomberg

Currency split 2016 (USDbn)



Source: Bloomberg and SEB (excluding ABS and project bonds due to data availability)

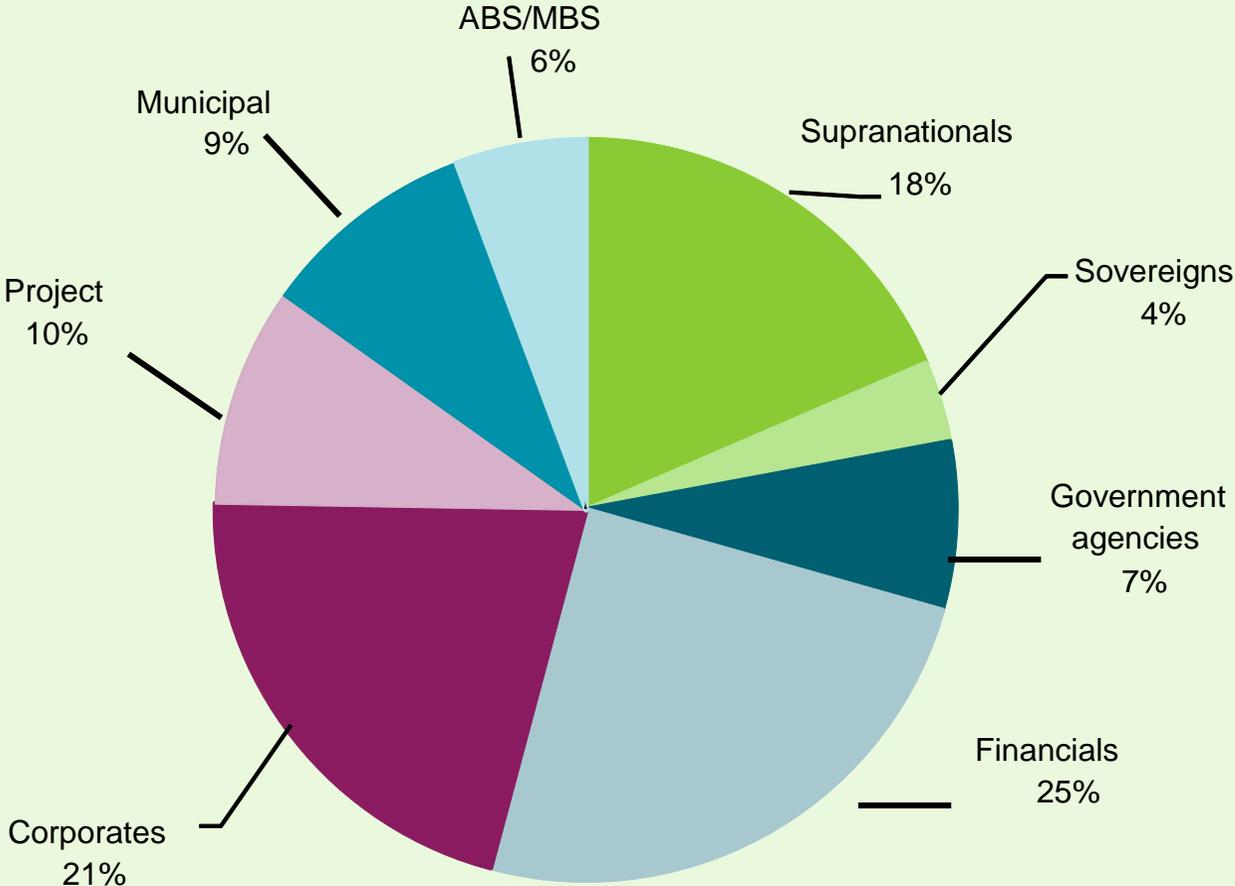
Record issuance of Green Bonds in 2016



Source, SEB analysis based on Bloomberg/BNEF; Climate Bonds Initiative and Environmental Finance data

Who has issued Green Bonds?

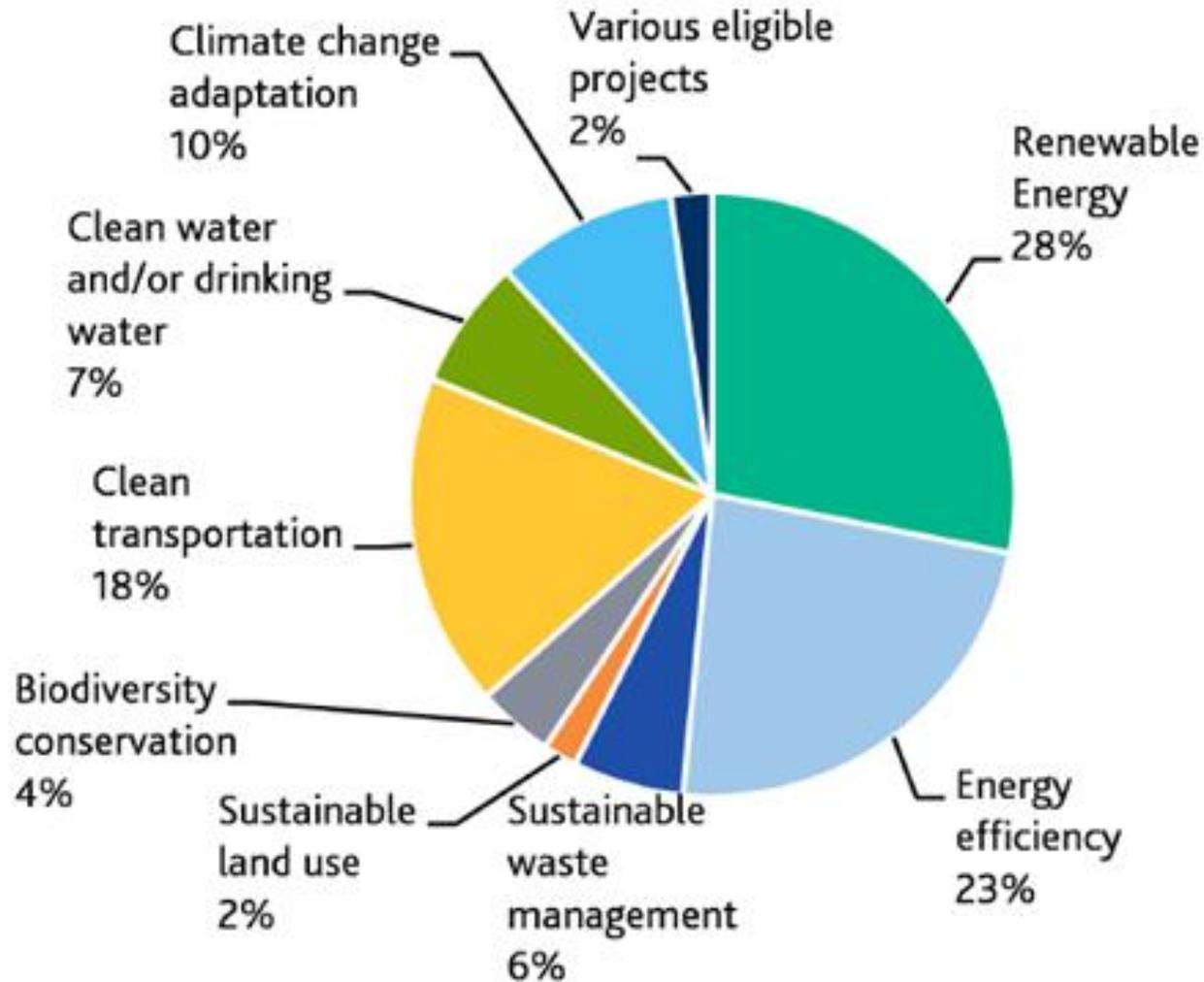
Total amount issued by sector and share, 2007-2017



Source: Bloomberg and SEB

Where is Green Bond money used?

Total amount issued by sector and share, 2016



Source: Moody's (2017)

League table for Green Bond underwriting

Selected Green Bond issues underwritten by SEB

KFW
Bank für Sozialwirtschaft

5 year EUR 1.5 billion
0.375%
July 2019
Joint Lead

SEB

NWB BANK
NEERLANDSE INTERESCHAP BANK N.V.

5 year EUR 500m
0.625%
July 2019
Joint Lead

SEB

ING

5 yr EUR 500mm / 3 yr USD 800m
0.75% / 2.00%
Nov 2020 / Nov 2018
Joint Lead Manager

SEB

HSBC

5 year EUR 500m , 0.625%
Dec 2020
Joint Green Structuring Advisor
Joint Lead Manager (no books)

SEB

IFC

USD 1 billion
0.625% fixed bond
November 2016
Joint Lead

SEB

IFC

USD 500m
0.750% fixed bond
October 2016
Joint Lead

SEB

THE WORLD BANK

SEK 3,250m
3.500% fixed bond
November 2014
Sole Lead

SEB

European Bank
for Reconstruction and Development

USD 250m
1.625% fixed bond
April 2018
Joint Lead

SEB

SKANSKA

5 year SEK 850m
FRN
April 2019
Sole Bookrunner

SEB

SCA
Care of Life

5 year SEK 1bn/500m
2.500% / FRN
April 2019
Sole Bookrunner

SEB

KBN Kommunalbanken
Norway

USD 500m
0.750% fixed bond
Nov 2016
Joint Lead

SEB

European Investment Bank

SEK 2,100m
3.000% fixed bond
April 2019
Joint Lead

SEB

NiB

5 year SEK 1 billion
0.625%
January 2021
Sole Lead

SEB

VASAKRONAN

SEK 1,300m
1.774% / FRN
May 2016
Sole Lead

SEB

EDC

USD 300m
0.875% fixed bond
January 2017
Joint Lead

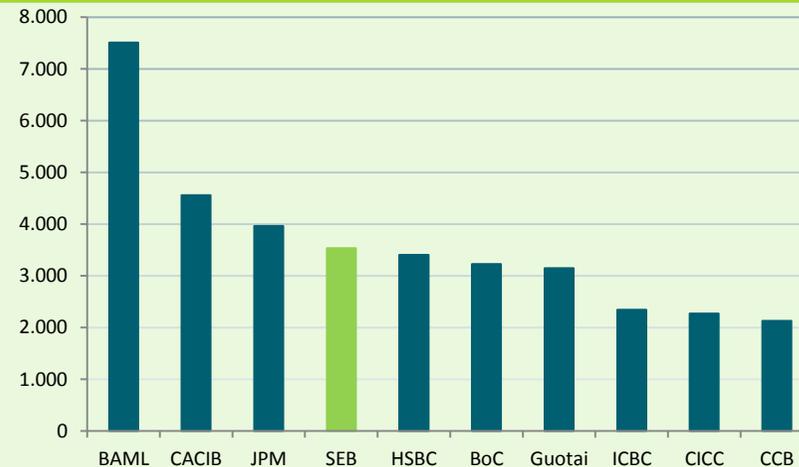
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Korea Eximbank

USD 500m
1.750% fixed bond
February 2018
Joint Lead

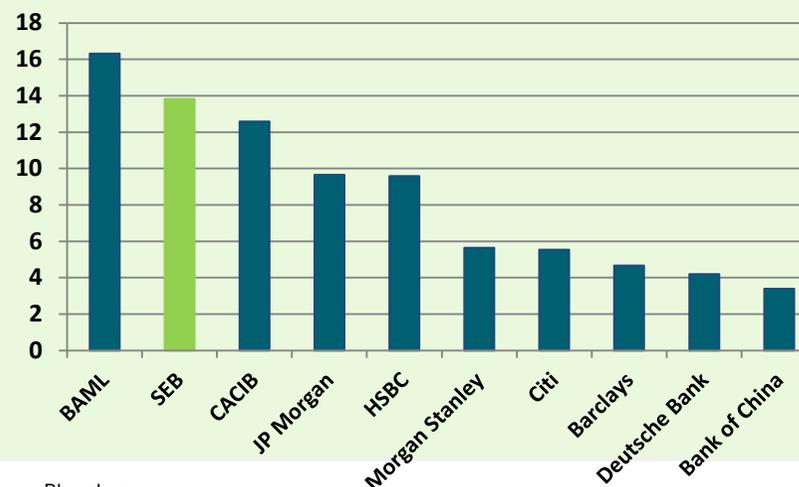
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Top 10 Green Bond Underwriters 2016 (USD bn)



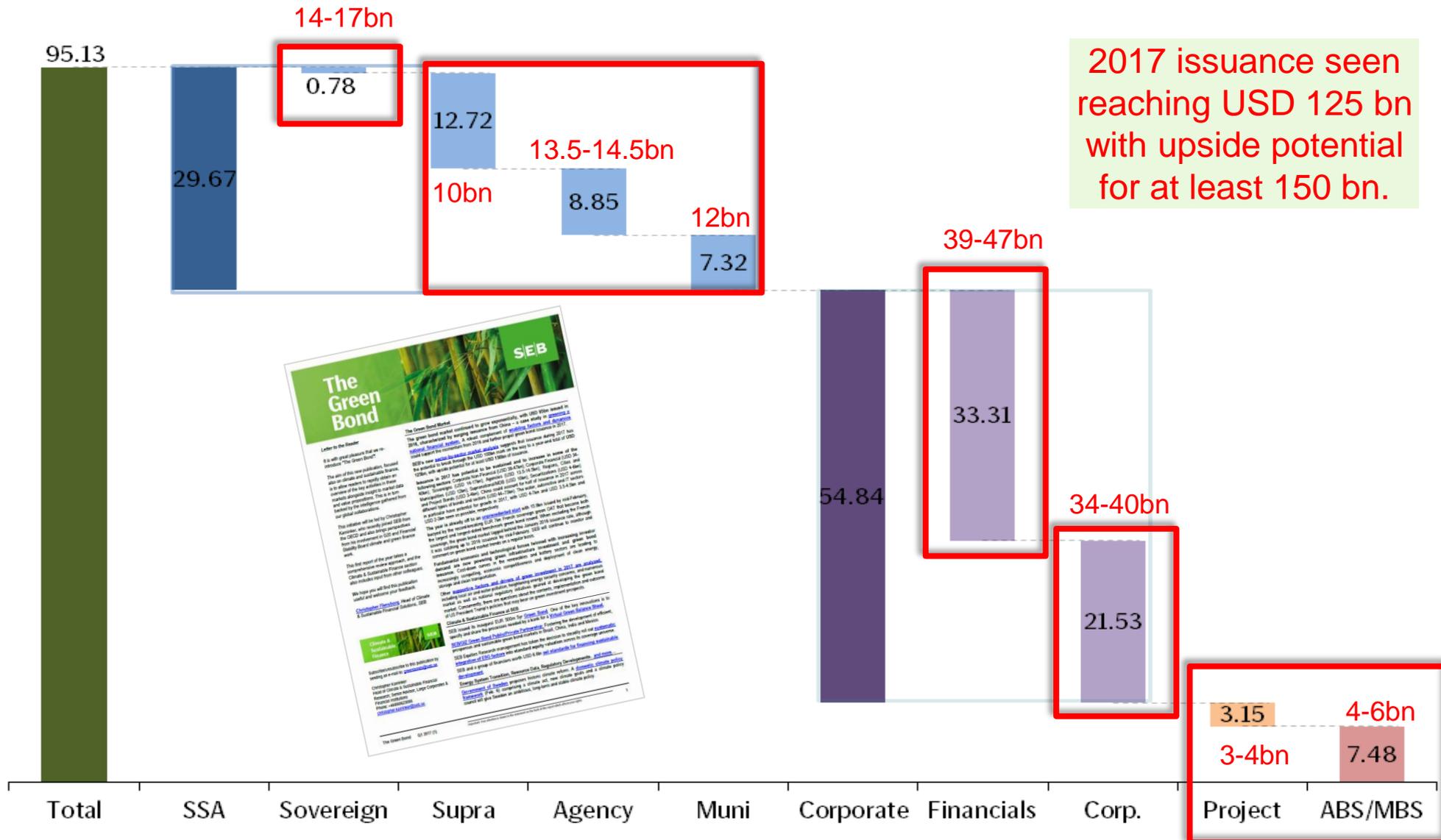
Source: Bloomberg

Top 10 Green Bond underwriters 2007 - 2016 (USDbn)



Source: Bloomberg

Green Bond issuance in 2016 and potential in 2017 (USD Bn)



Note: ABS/MBS = Asset Backed Securities/Mortgage Backed Securities; SSA = Sovereign, Sub-Sovereign, Supranational and Agency

Source: SEB analysis based on Bloomberg/BNEF data



Green Bond Workshop II: Monitoring, Reporting & Market Aspects – Recap of Workshop I: Define, Select & Verify
Mexico City, 1 March 2017

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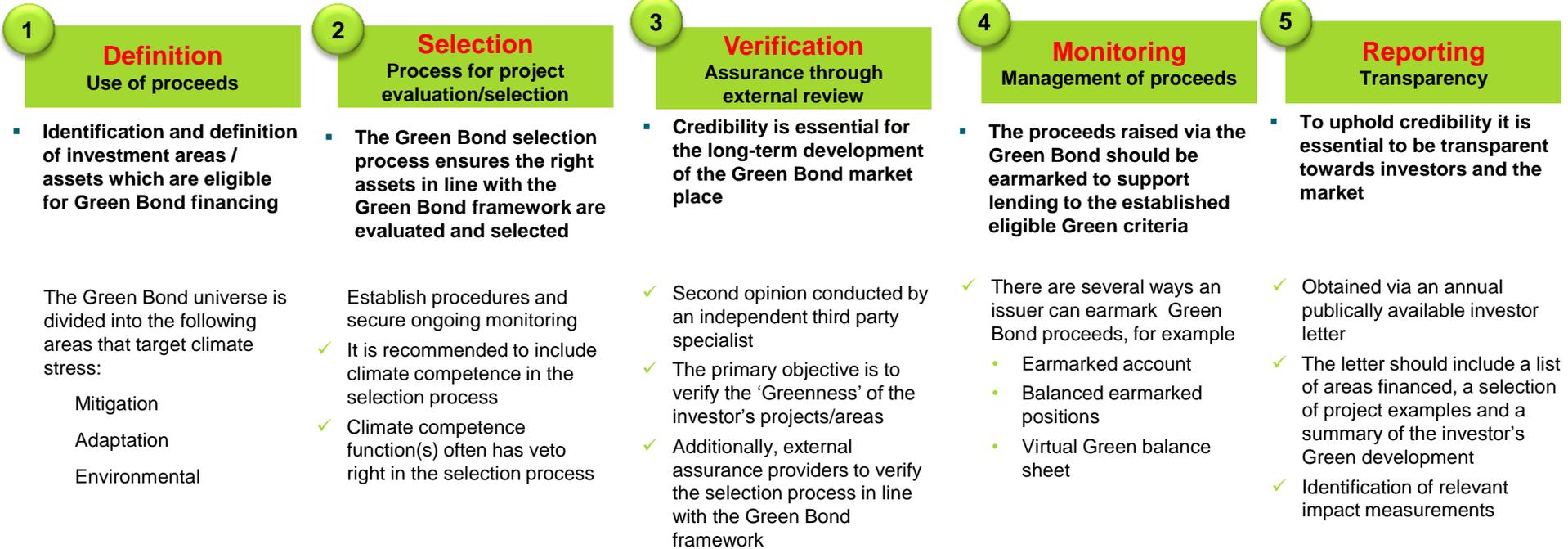
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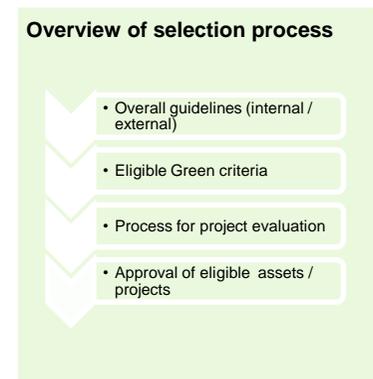
The five pillars of the Green Bond framework in short

A concept of simplicity built on five pillars



The Green Bond universe

- Energy efficiency and other energy related initiatives (e.g. renewables) are driving the market at the moment
- Other project types include energy efficiency, sustainable housing, water management and waste management

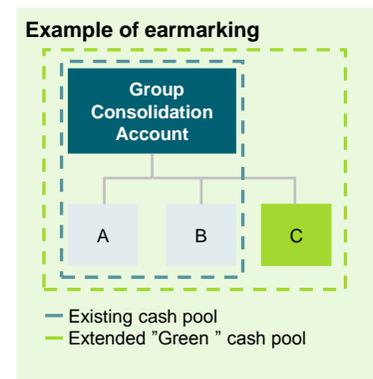


Who provides second opinions?

- Cicero, DNV, Oekom, Sustainalytics, Vigeo

Why does SEB use Cicero?

- It's a non for profit academic institution
- Cicero is broadly recognized, providing research for G8, OECD, UN and the World Bank
- They have a well developed international network of climate scientists which can be activated for regional development



The investor letter

Green Bonds defined



GREEN BOND DEFINITION



Green Bonds are any type of **bond instrument** where the **proceeds** will be **exclusively** applied to finance or re-finance in part or in full new and/or existing **eligible Green Projects** (see section 1 Use of Proceeds) and which are aligned with the **four core components of the GBP**.

The Green Bond Principles – a voluntary guideline

Overview

In efforts to develop standards for the green bond market, On January 13, 2014 a consortium of major banks developed a set of voluntary guidelines called the Green Bond Principles “GBP”.

1. Use of Proceeds:

- ▶ Issuer should declare the eligible green project categories upfront, providing clear environmental benefits.

2. Process for Project Evaluation and Selection:

- ▶ Issuer should outline the process of selection and work to establish impact objectives.

3. Management of Proceeds:

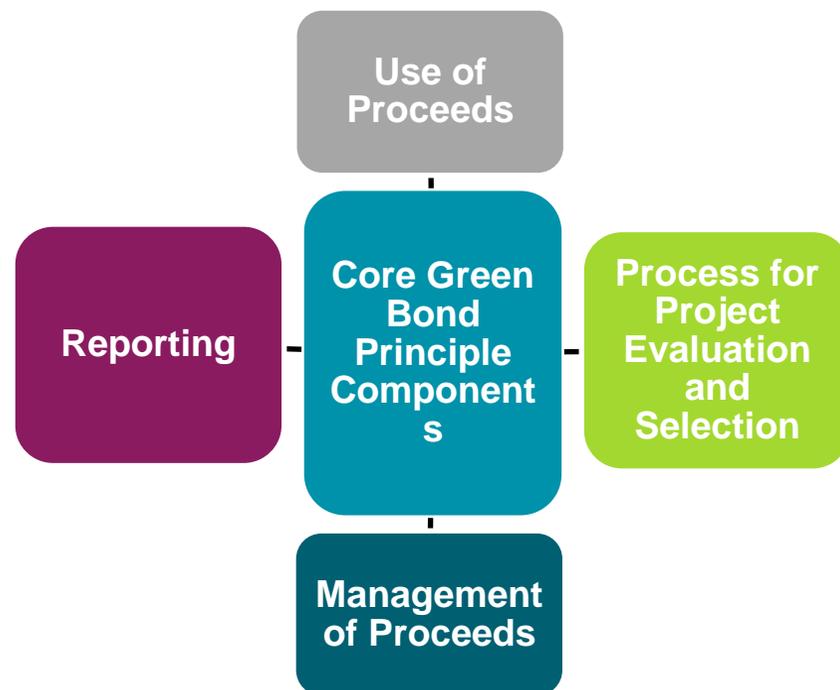
- ▶ Funds should be segregated or otherwise tracked.

4. Reporting:

- ▶ Issuers should report at least annually on projects and where feasible, the impact of the specific investment.

Recommendations - External Reviews:

- ▶ The GBP encourage a high level of transparency and recommended that issuers use an external review to verify the green definitions/criteria and the processes and systems applied



Key steps in a typical Green Bond issuance process

1. **Internal decision** to finance Green Projects with Green Money
 - Who is the internal driver: treasury – sustainability – management?
2. Prepare a **Green Bond Framework - define what is green**
 - Can/will financial and environmental divisions must join forces?
 - Volume vs. quality, broad and comprehensive or narrow and quick, level of specification?
3. Establish a **process for selecting** eligible projects
 - Integrate environmental competence in the decision process
 - If needed, in-source adequate environmental competence
4. Secure **verification** - get a **Second Opinion**
 - Choice of Second Opinion provider – most demanding/quickest/cheapest?
 - Chance to adjust Framework based on critical feedback from external, environmental experts
5. Safeguard monitoring by establishing an **earmarked account** for proceeds/allocation
 - Practical but prudent
6. Commit to **transparency** with regards to use of proceeds
 - How much impact reporting can the issuer comit to?
 - Additional work or synergies with other reporting and communication?
7. Coordinate **communication**, internal as well as external
 - Press release, web page and intra net, add in business paper, conferences and events
8. Prepare the **transaction** to maximize beneficial impact
 - Maximize investor diversification, road show, maturity etc.

Break out session – two frameworks/second opinions

APPLE INC. GREEN BOND

FRAMEWORK OVERVIEW AND SECOND-PARTY OPINION BY SUSTAINALYTICS

February 16, 2016

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Municipality Finance Plc – Green Bonds Framework

4 April 2016

EARMARKED ACCOUNT

An amount equal to the net proceeds of the issue of the Notes will be credited to a special account that will support Municipality Finance's lending for Eligible Projects. As long as the Notes are outstanding and the special account has a positive balance, at the end of every fiscal quarter, funds will be deducted from the special account and added to Municipality Finance's lending pool in an amount equal to all disbursements from that pool made during such quarter in respect of Eligible Projects. Until disbursement to Eligible Projects, the special account balance will be placed



Second Opinion on the Municipality Finance Plc – Green Bonds Framework

15 April 2016

Contents

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Expressing concerns with "shades of green"	3
2. Brief description of the Municipality Finance Plc – Green Bonds Framework and environmental policies	4

Why do Green Bonds work - What's in it for You?

Investors

- Achieve intelligence on climate related issues inside existing management structure
 - Risk management
 - Climate stress
 - Regulations
 - Technology transition
- Live your values - competitiveness

Issuers

- Strengthen the financial position:
 - Investor diversification
 - Deepened dialogue
- Establish a targeted dialogue between operations (projects), Finance and Management
- Live your values - competitiveness

Society

- Activate (mobilize) human capital inside finance for society goals

Summing up - Key documents

Green Bond Framework



KOMMUNINVEST

Kommuninvest – Green Bonds Framework

12 January 2016

1. EARMARKED ACCOUNT

An amount equal to the net proceeds of the issue of the Notes will be credited to a special account that will support Kommuninvest's lending for Eligible Loans. As long as the Notes are outstanding and the special account has a positive balance, at the end of every fiscal quarter, funds will be deducted from the special account and added to Kommuninvest's lending pool in an amount equal to all disbursements from that pool made during such quarter in respect of Eligible Loans. An amount equal to the special account balance will be held in cash, Green Bonds, Swedish covered bonds, Municipality and/or Government risk with a minimum, average credit rating of A- by Standard & Poor's or corresponding credit rating by another rating agency approved by Kommuninvest.

Second Opinion

23 November 2015

'Second Opinion' on IFC's Green Bond Framework

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Annual investor reporting

Green Bond

IMPACT REPORT

JUNE 2016



The Green Bond Principles



Green Bond Principles, 2016 Voluntary Process Guidelines for Issuing Green Bonds

16 June 2016

INTRODUCTION

Green Bonds raise funds for new and existing projects with environmentally sustainable benefits. The Green Bond Principles (GBP) are voluntary process guidelines that recommend transparency and disclosure, and promote integrity in the development of the Green Bond market. They are intended for broad use by the variety of actors participating in the market and are designed to provide the information needed to increase capital allocation to environmentally sustainable purposes without any single arbiter.

Focus on pillars 4 & 5: Monitoring and Reporting

A few documents for reference:

- Green Bond Principles – sections 3 and 4
 - <http://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/green-bonds/green-bond-principles/>
- Green Bonds - Working Towards a Harmonized Framework for Impact Reporting by 11 Multilateral Development Banks
 - <http://treasury.worldbank.org/cmd/pdf/InformationonImpactReporting.pdf>
- Examples of Green Bond impact reports
 - The World Bank:
<http://treasury.worldbank.org/cmd/pdf/WorldBankGreenBondImpactReport.pdf>
 - IFC:
http://www.ifc.org/wps/wcm/connect/91ca0e7f-3819-4c0e-a929-f2753539e6fa/FY16+Green+Bond+Impact+Report_Final.pdf?MOD=AJPERES
 - Export Development Canada (EDC):
<http://www.edc.ca/en/investor-relations/documents/green-asset-portfolio-reporting.pdf>
 - City of Gothenburg:
<http://finans.goteborg.se/wpui/wp-content/uploads/2016/06/Impact-Report-2016.pdf>

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