



Green Bonds – what, why, how? Opportunities for banking

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Disposition

- **Intorduction** to Green Bonds
- The **five pillars** of Green Bonds
- **Summing up**
 - Key documents
 - Key steps in a typical Green Bond issuance process
- **Market update**
- **SEB – how we did it**

Carbon & Climate Change: Why Does it Matter to the Finance Industry?

- Climate change – the slowly ongoing crisis

“Climate Risk is more complex and longer-term than most investment risks”

“Managing climate risk is outside the average investor focus areas”

“Government & Investor Action Mounts to mitigate risks

The Paris Agreement entered into force globally in 2015 ratified by 131 countries.

- Financial risk implications of climate change: Stranded assets and credit ratings
- What do we need for the transition to a more resource efficient, lower carbon world?
- Over the next 15 years, approximately \$93 trillion will be needed for investment in low carbon infrastructure across the world

Clean Energy

Waste Reduction/Recycling

Low Carbon Transport Infrastructure

Smart Technology

Water Efficiency

Sustainable Agriculture

Green Bonds born




INTERNATIONAL BANK FOR
WORLD BANK
RECONSTRUCTION AND DEVELOPMENT

Launches its first Green Bonds
SEK 2,325,000,000
6-year 3.5% Green Bonds
Investing to reduce global warming

Sole Lead Manager
SEB

Key Investors

 **Länsförsäkringar**
Bank & Försäkring

 **Andra AP-fonden**
Third Swedish National Pension Fund

skandia : 
Second Swedish National Pension Fund - AP2

Senior Co-Manager
CREDIT SUISSE 

Co-Manager
LB&BW

SEB



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**.

Green Bonds – in response to investor demand

1714 investors with AUM of USD 73.5 trillion aim to integrate ESG in their investment decisions

Increasing number of investors signing off on the 6 Principles for Responsible Investments (PRI) ⁽¹⁾

- 1 Incorporate ESG⁽²⁾ into investment analysis and decision making process
- 2 Incorporate ESG into ownership policies and practices
- 3 Seek appropriate disclosure on ESG by entities in which we invest
- 4 Promote acceptance and implementation of the Principles within the industry
- 5 Work together to enhance our effectiveness in implementing the Principles
- 6 Report our activities and progress towards implementing the Principles



Source: Unpri.org

(1) PRI is an investor driven initiative in partnership with UNEP Finance Initiative and the UN Global Compact

(2) ESG=Environmental, Social & Governance

Broadly endorsed by global leaders

- "For investors, green bond markets offer a stable, rated and liquid investment with long duration. For issuers, green bonds are a way to tap the huge US\$100 trillion pool of patient private capital managed by global institutional fixed-income investors."
- "The development of this new global asset class is an opportunity to advance a low carbon future while raising global investment and spurring growth."

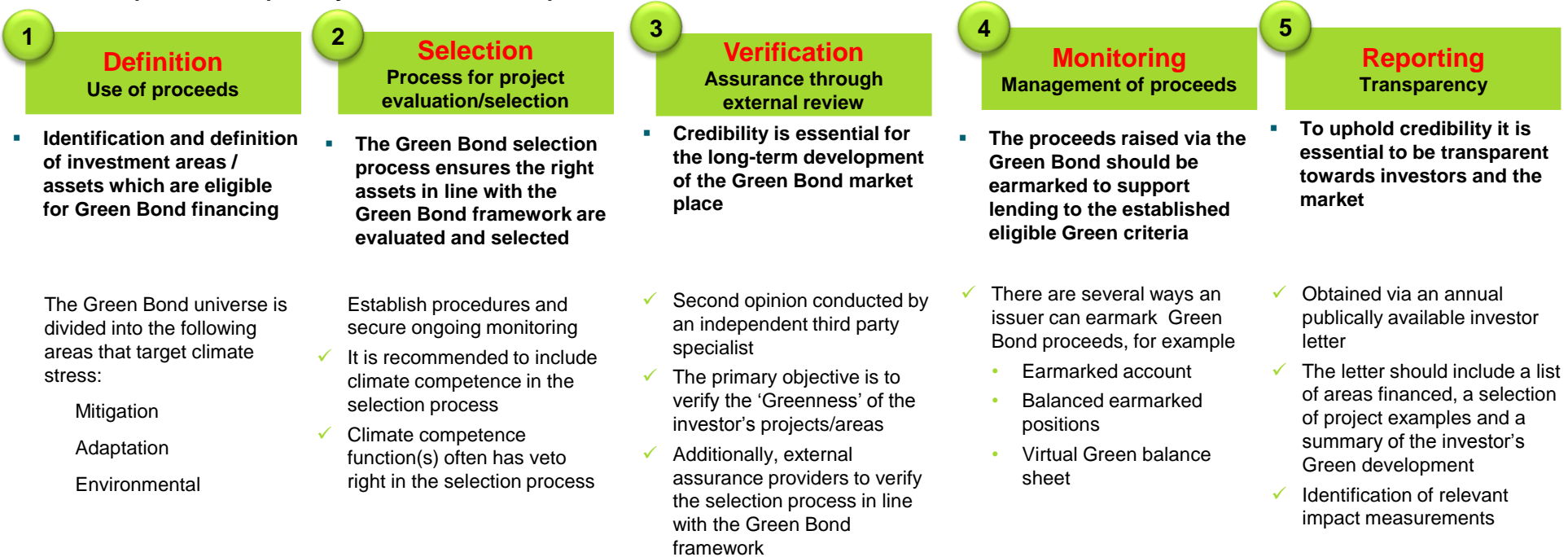


Mark Carney

Governor of the Bank of England

The five pillars of Green Bonds

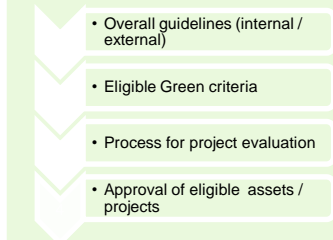
A concept of simplicity built on five pillars



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

Overview of selection process



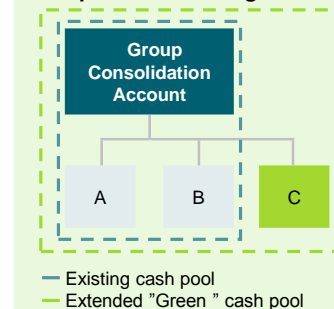
Who provides second opinions?

- 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

Example of earmarking



The investor letter



The broad value proposition of Green Bonds

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
 - Enhanced issuance flexibility
- Dialogue between Finance and Sustainability → enhanced risk management
- Live your values - competitiveness

Society

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

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”.

- ▶ These were updated in March 2015, June 2016, June 2017 and continue to evolve.

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:

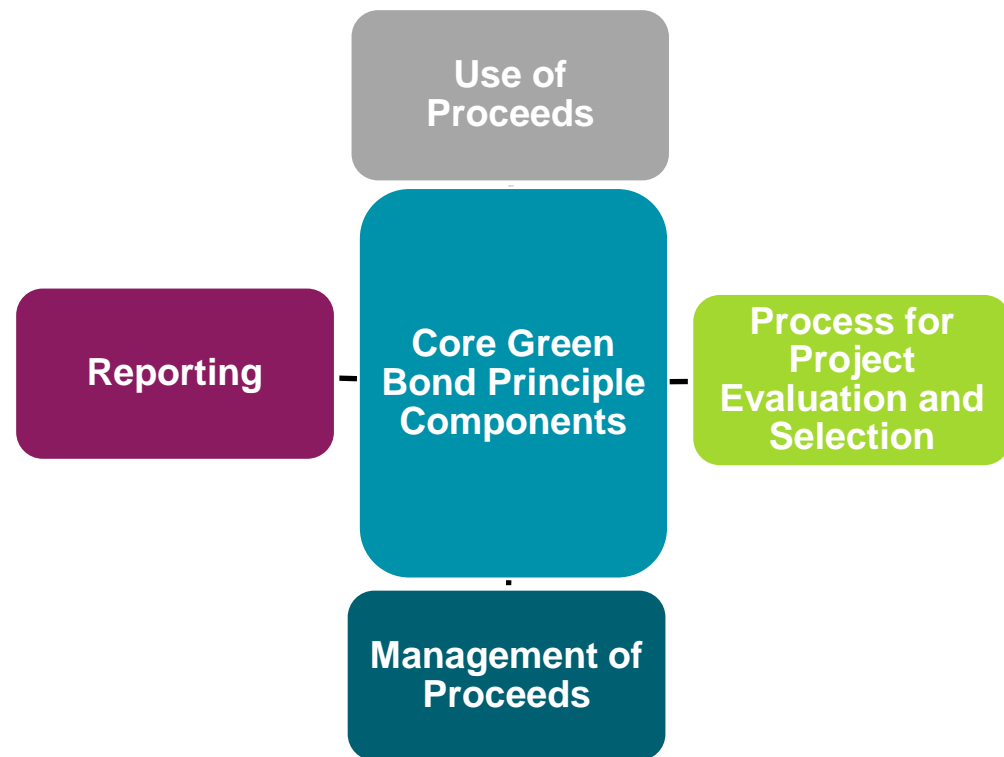
- ▶ Funds should be segregated or otherwise tracked.

4. Reporting:

- ▶ Issuers should report at least annually on the use of proceeds, allocated amounts and expected impact.

Recommendations - External Reviews:

- ▶ The GBP encourage a high level of transparency and recommended that an issuer’s process for project evaluation and selection be supplemented by and external review.



Source – ICMA, SEB



The Five Pillars of Green Bonds

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Definition - Use of Proceeds - the Green Bond universe

Examples of the Green Bond universe*		
Mitigation & Environmental preservation	✓ Renewable Energy	<ul style="list-style-type: none"> ▪ Wind, solar etc. ▪ Related infrastructure
	✓ Energy Efficiency	<ul style="list-style-type: none"> ▪ Energy storage and recovery, district heating/cooling, smart grids
	✓ Green Buildings	<ul style="list-style-type: none"> ▪ Building efficiency incl. environmental certification systems such as LEED, BREEAM or equivalent
	✓ Pollution Prevention and Control	<ul style="list-style-type: none"> ▪ Waste water management ▪ Recycling and waste-to-energy
	✓ Environmentally Sustainable Management of Living Natural Resources and Land Use	<ul style="list-style-type: none"> ▪ Sustainable agriculture ▪ Sustainable forest management
	✓ Terrestrial and Aquatic Biodiversity Conservation	<ul style="list-style-type: none"> ▪ Protection of coastal, marine and watershed management ▪ Nature reserve management
	✓ Clean Transportation	<ul style="list-style-type: none"> ▪ Public transportation and related infrastructure ▪ Alternative fuel vehicles
	✓ Sustainable Water and Waste-water Management	<ul style="list-style-type: none"> ▪ Infrastructure for clean and / or drinking water ▪ Energy recovery from waste water
	✓ Eco-efficient Products, Production Technologies and Processes	<ul style="list-style-type: none"> ▪ Eco labelled and certified products ▪ Resource efficient packaging and distribution
Adaptation	✓ Climate Change Adaptation	<ul style="list-style-type: none"> ▪ Flood protection ▪ Disaster early warning systems

* As outlined in the Green Bond Principle June 2017

Definition – Exemplified by Volvofinans Bank AB



Volvofinans Bank AB (publ)

Green Bonds Framework

Final version

17 March 2017

1. EARMARKED ACCOUNT

An amount equal to the net proceeds of the green bonds ("**Green Bonds**") issued by

2. ELIGIBLE PROJECTS

"Eligible Projects" means a selected pool of loans and leases to vehicles that are funded, in whole or in part, by Volvofinans Bank and that promote the transition to low carbon and climate resilient growth, as determined by Volvofinans Bank.

Such vehicles shall represent sustainable transportation defined as passenger vehicles which:

- meet the criteria as specified by Paragraph 11 a of Chapter 2 of the Swedish Road Traffic Tax Act (Sw. *Vägtrafikskattelag (2006:227)*) ("**Environmental Friendly Cars**") (Sw. *Miljöbilar*)¹, and;
- can be powered entirely or partially by non-fossil fuels, i.e.:
 - electric vehicles
 - fuel cells vehicles
 - electric/petrol hybrid vehicles
 - electric/diesel hybrid vehicles
 - ethanol/petrol hybrid vehicles
 - biogas/natural gas vehicles
 - biogas/natural gas/petrol vehicles

Selection – safe guarding environmental integrity

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”.

- ▶ These were updated in March 2015, June 2016, June 2017 and continue to evolve

Use of Proceeds:

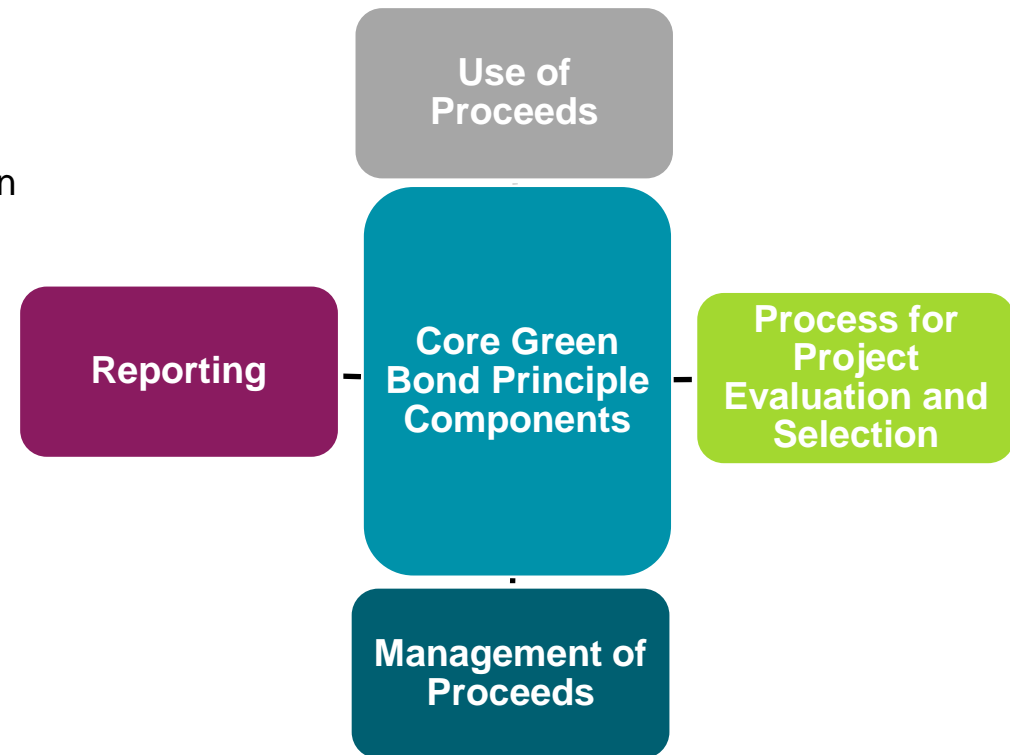
Process of Selection:

- ▶ The issuer of a Green Bond should outline:
 - a process to determine how the projects fit within the eligible Green Projects categories identified above;
 - the related eligibility criteria; and
 - the environmental sustainability objectives.

Management of Proceeds:

Reporting:

External Review:



Selection – Exemplified by Municipality Finance Plc



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

SELECTION OF ELIGIBLE PROJECTS

Eligible Projects will, on an ongoing basis, be:

1. identified and verified by Municipality Finance's customers and potential customers. Customers and potential customers include municipalities, municipal federations, companies owned and controlled by the municipalities as well as housing corporations.

Eligible Loans will, on an ongoing basis, be:

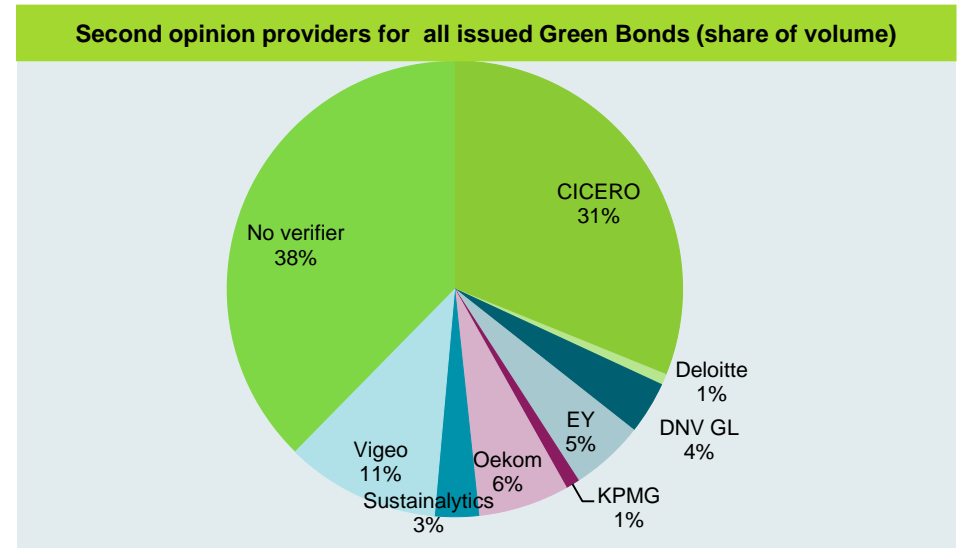
2. approved by Municipality Finance's Lending department

and, on a quarterly basis:

3. reviewed and finally approved in consensus by Municipality Finance's Green Loan Committee. Each loan and leasing will be analysed independently by the Green Loan Committee and will only be approved if the longer term net environmental impact is positive. The Green Loan Committee consists of two or more members from the environmental functions of Municipality Finance's customers and/or other environmental experts from relevant public sector entities/organisations.

Verification - Quality assurance through Second Opinions

- ▶ Recommendation in the GBP
- ▶ 2/3 of the Green issuers have a Second Opinion
- ▶ Frequently used Second Opinion providers include:
 - CICERO
 - Vigeo
 - Oekom
 - EY
 - DNV GL
 - Sustainalytics



Source: Bloomberg & SEB, as at H1 2016

CICEROs has introduced Shades of Green

Dark Green	Implementing a 2050 climate solution today Example: Investments in renewable energy such as solar or wind
Medium Green	On the way to a 2050 climate solution Example: Investments in sustainable buildings with good energy efficiency ratings
Light Green	Short-term gains but not a long-term climate solution Example: Energy efficiency improvements in industry that result in short-term reductions of greenhouse gas emissions but do not shift away from a fossil fuel-based economy

Monitoring – Management of Proceeds – the GBP

3. Management of proceeds:

- The **net proceeds of the Green Bond, or an amount equal to these net proceeds, should be credited to a sub-account, moved to a sub-portfolio or otherwise tracked by the issuer in an appropriate manner**, and attested to by the issuer in a formal internal process linked to the issuer's lending and investment operations for Green Projects.
- As long as the Green Bond is outstanding, the balance of the tracked proceeds should be **periodically adjusted** to match allocations to eligible Green Projects made during that period.
- The issuer should **make known to investors the intended types of temporary placement** for the balance of unallocated proceeds.
- The GBP encourage a high level of transparency and **recommend** that an issuer's management of proceeds be supplemented by the use of an **auditor, or other third party, to verify the internal tracking method and the allocation of funds** from the Green Bond proceeds.

Monitoring

Sound and simple:

- Starting point:
 - If you promise that use of proceeds exclusively shall be allocated to certain green project...
 - ...obviously, you must keep track of these specific funds.
- How to do it - two general guidelines:
 - Keep it simple
 - Be prudent
- Alternatives:
 - Separate account at the house bank
 - Separate account in the internal accounting structure
- Make allocations to Eligible Green Projects periodically - according to your Selection criteria
- Inform on how unallocated proceeds will be used
- Recommendation – independent, transparent assurance of tracking method and the allocation of funds

Reporting – the GBP

4. Reporting

- Issuers should make, and keep, readily available up to date **information on the use of proceeds** to be renewed **annually** until full allocation, and as necessary thereafter in the event of material developments.
 - This should include a **list of the projects** to which Green Bond proceeds have been allocated,
 - as well as a **brief description of the projects and the amounts allocated**,
 - and their **expected impact**.
- Where **confidentiality** agreements, **competitive considerations**, or a large number of underlying projects limit the amount of detail that can be made available, the GBP recommend that information is presented in **generic terms or on an aggregated portfolio basis** (e.g. percentage allocated to certain project categories).

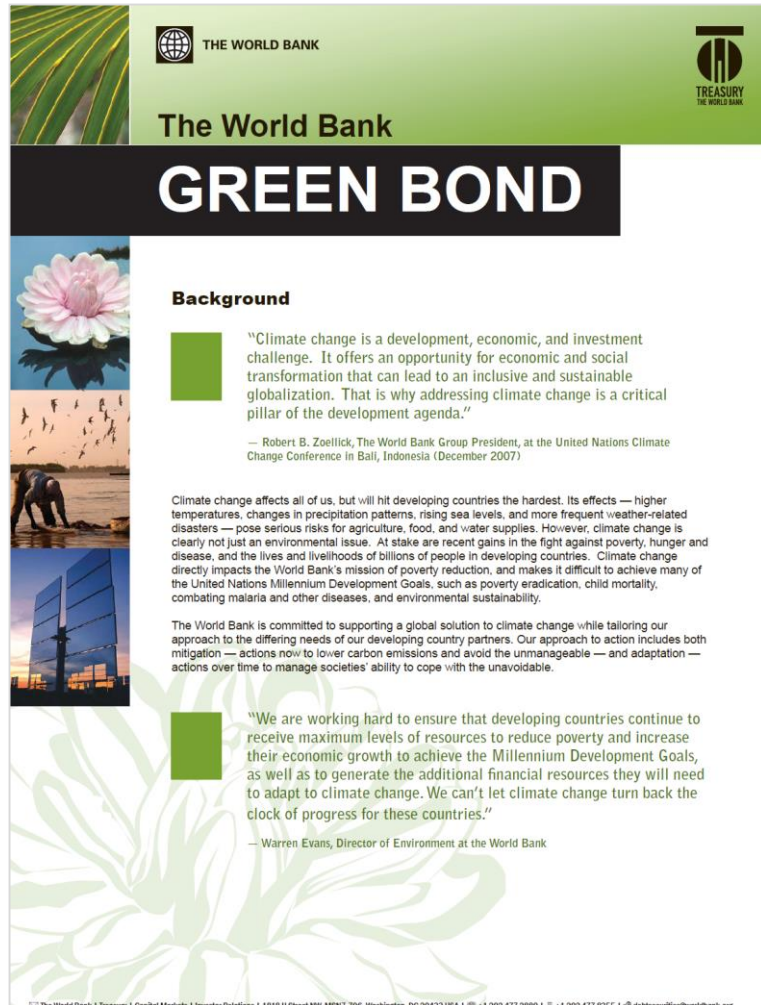
Impact Reporting – the GBP

4. Reporting (continued)

- **Transparency is of particular value in communicating the expected impact** of projects. The **GBP recommend** the use of
 - **qualitative** performance indicators
 - and, **where feasible, quantitative** performance measures (e.g. energy capacity, electricity generation, greenhouse gas emissions reduced / avoided, number of people provided with access to clean power, decrease in water use, reduction in the number of cars required, etc.)
 - disclosure of the key underlying **methodology and / or assumptions** used in the quantitative determination.
 - Issuers with the ability to monitor **achieved impacts** are encouraged to include those in their regular reporting.
- Leading **International Financial Institutions** have developed a **reference framework for impact reporting** (“**Working towards a harmonized framework for Green Bond impact reporting**” available at www.icmagroup.org/greenbonds) that outlines
 - core principles and recommendations and puts forward core indicators for two sectors: energy efficiency and renewable energy.
- **Nordic public sector issuers** of Green Bonds are engaged in a joint work on establishing a **common approach to Green Bonds impact reporting**.

Reporting – Evolution

2009



2016



Reporting

- Requirement and recommendation
- Diversity of issuers
 - Sector
 - Size
 - Capacity
 - History
 - Competitive landscape
 - Regulatory framework
- Trade-off: strength of commitment – capacity to deliver

Reporting

- Impact reporting – the devil is in the details
 - Numerous new trade-offs lined up
- Harmonization is encouraged
- Reporting synergies and multiple benefits from knowing what you're doing
- General guidelines:
 - Honour transparency
 - Better to under promise and over deliver
 - Clear direction – one step at a time

Summing up - Key documents

Green Bond Framework

NACIONAL FINANCIERA S.N.C. GREEN BOND

FRAMEWORK OVERVIEW AND SECOND-PARTY
REVIEW BY SUSTAINALYTICS

October 7th, 2015

Second Opinion

23 November 2015

'Second Opinion' on IFC's Green Bond Framework

Contents

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Expressing concerns with 'shades of green'	3
2. Brief Description of IFC's Green Bond Framework and Rules and Procedures for Climate-Related Activities	4
3. Assessment of IFC's Green Bond Framework and Environmental Policies	8

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.

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.

Strong media attention



Swedish bank SEB tops green bond league table

A Swedish bank is beating major global players as top underwriter to the green bond market

SEB remains biggest green bond underwriter in first quarter of 2014



Cicero, SEB to broaden exclusive relationship

Cicero, the Oslo-based climate research institute, is to end its exclusive relationship with SEB in the green bond market. Talks are under way that would enable other banks — probably starting with one or a few — to start using Cicero's services as an adviser. SEB hopes this will involve creating a wider certification platform for green bonds.

Skanska sells first green bond to strong demand



Bonds Tied to Green Investments are Booming
March 22, 2014

Source: The Economist

Bond 'Infrastructure' to Aid Clean Energy: SEB

BY ANGUS MCCRONE,
BLOOMBERG NEW ENERGY FINANCE

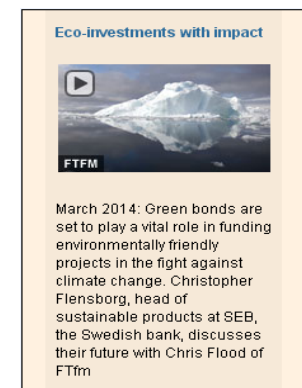


World politics Business & finance Economics Science & technology

Green bonds

Green grow the markets, O

The market for green bonds is booming. But what makes a bond green?



Green bonds grow with SCA deal, Skanska expected tomorrow



KfW enters green bond arena with aplomb

Investors keen to be seen in public advertisements

...for example in connection to the **World Bank's** issue in August 2013...



USD 550,000,000 World Bank Green Bond

Investing for a better global climate

Proceeds for climate investments within fiduciary mandates



Joint Lead Managers: Skandinaviska Enskilda Banken and Morgan Stanley

For further information seb.se/greenbonds
This is for information purposes only





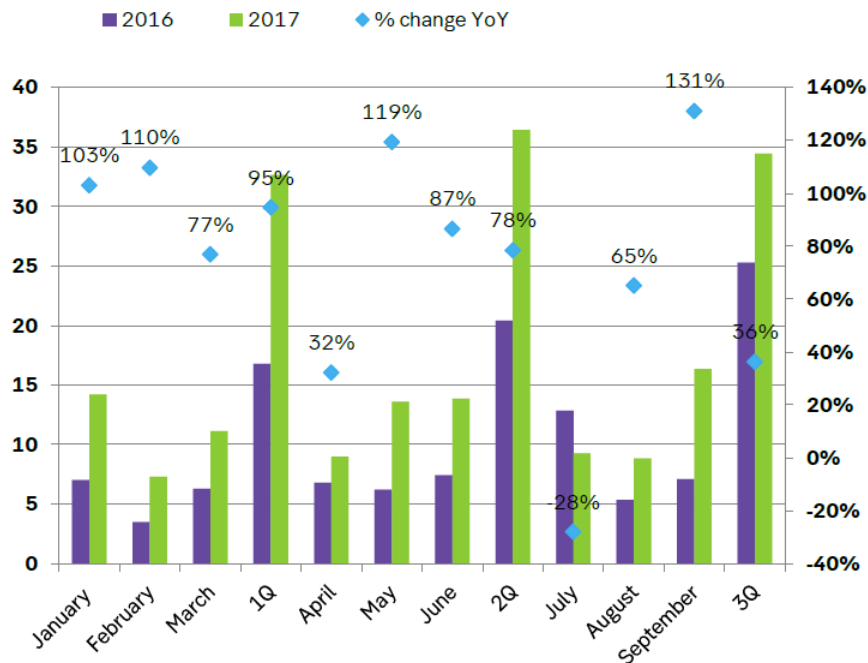
Green Bond Market Update

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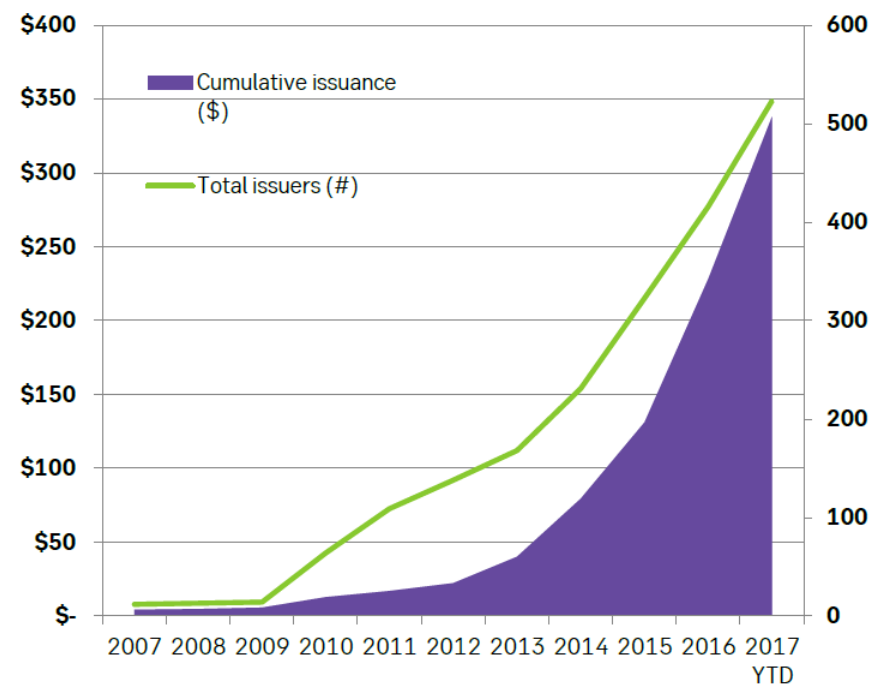
Green Bonds issuance: 2017 (YTD) and cumulative

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



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

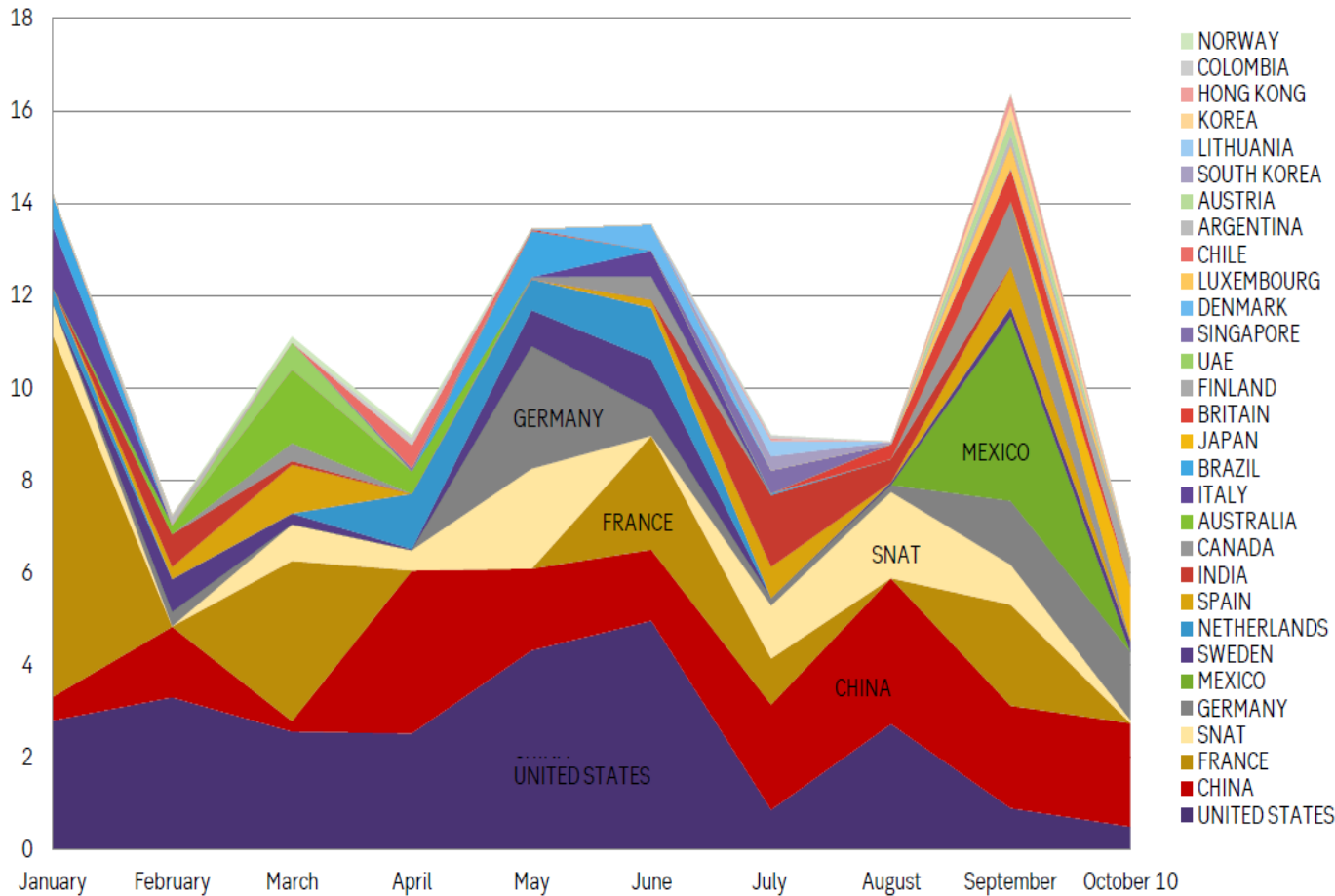
Figure 2. Total cumulative issuance (USD Bn) and # of issuers



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

Country league table 2017

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



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.

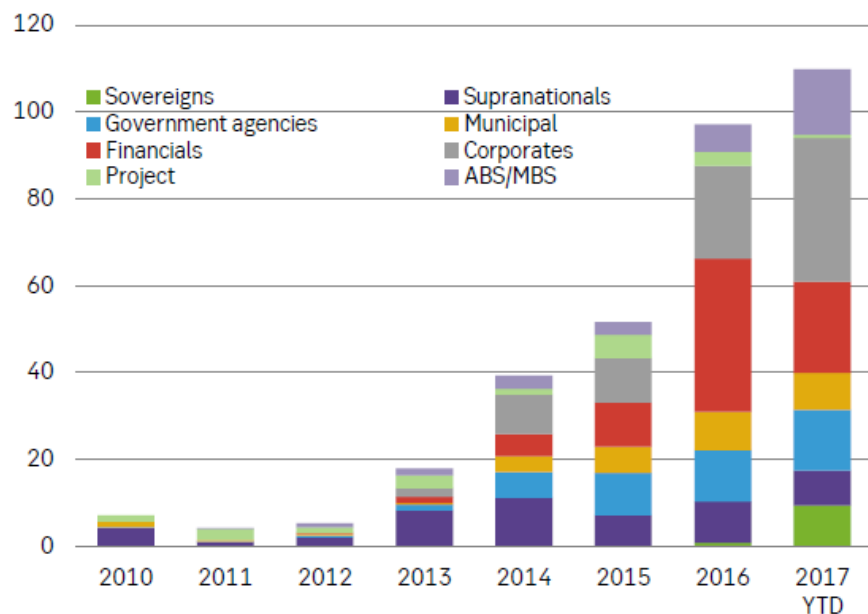
Figure 3. Top 10 countries in 2017, incl. Supranational (USD Bn)

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.

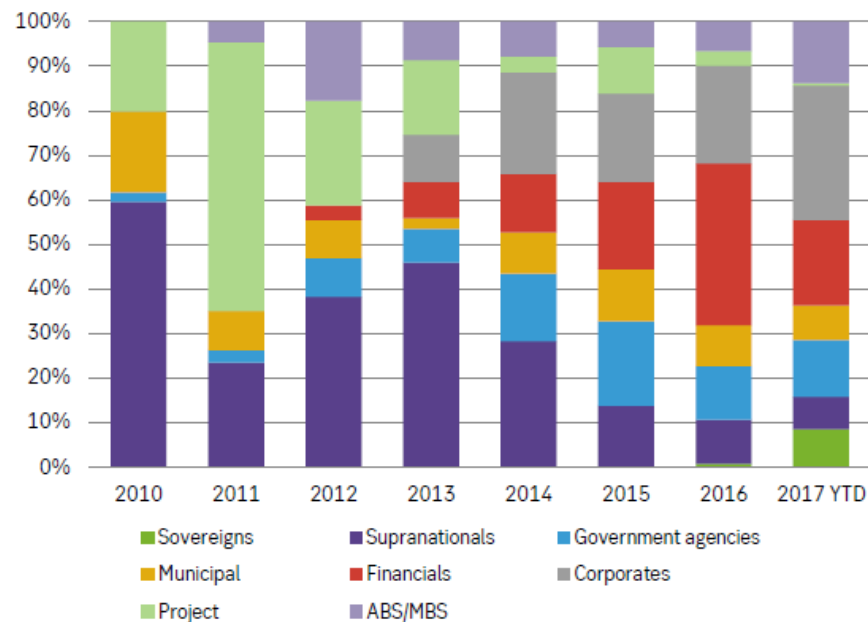
Issuance by year and by sector

Figure 11. Issuance evolution by sector 2010-2017



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

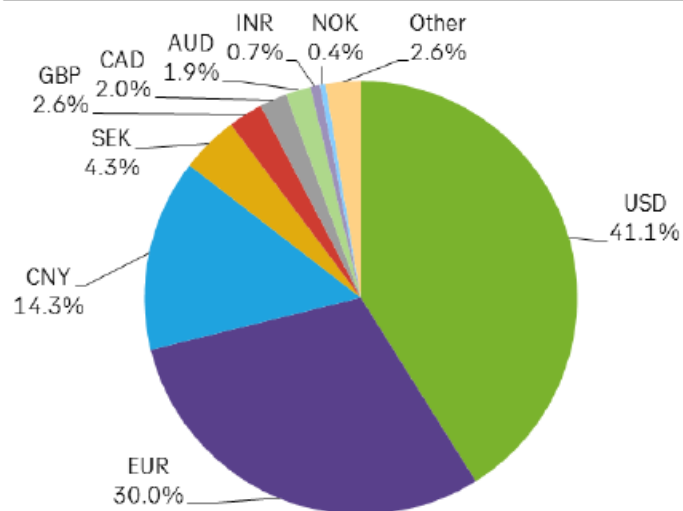
Figure 12. Sector shares, issuance 2010-2017



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

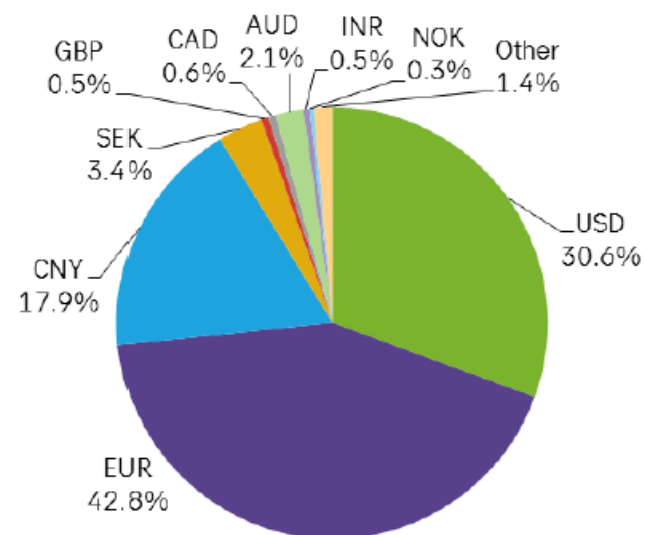
Green bonds by currency

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.

League table for global 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
NEDERLANDSE INTERSCHAKELING B.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

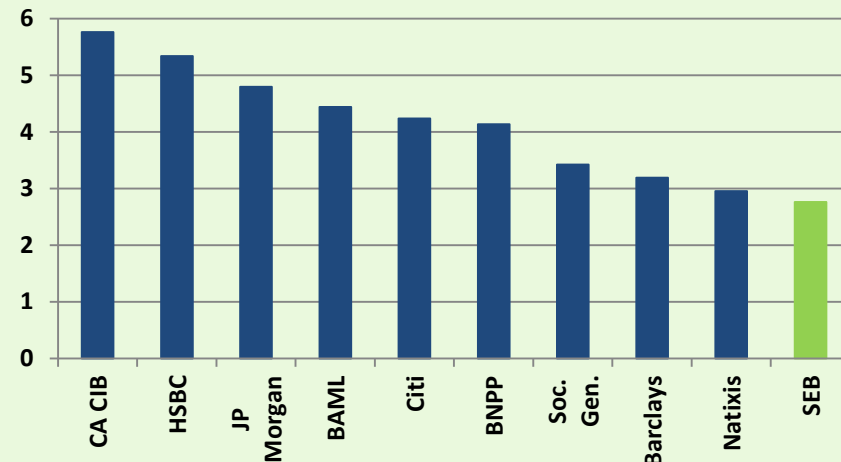
NiB
5 year SEK 1 billion
0.625%
January 2021
Sole Lead
SEB

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

EDC
USD 300m
0.875% fixed bond
January 2017
Joint Lead
SEB

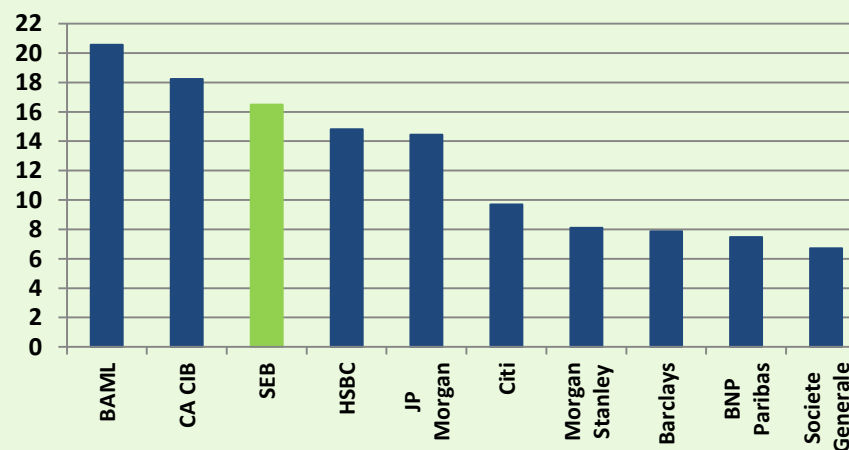
Korea Eximbank
USD 500m
1.750% fixed bond
February 2018
Joint Lead
SEB

Top 10 Green Bond Underwriters Q1 – Q3 2017 (USD bn)



Source: Bloomberg

Top 10 Green Bond underwriters Q1 2007 – Q3 2017 (USDbn)



Source: Bloomberg

The Green Bond market – deepening and broadening

Green Bond Indices

- Solactive
- Barclays/MSCI
- S&P/Dow Jones
- BAML

Green Bond Funds

- SSgA
- Nikko AM World Bank
- Calvert
- Mirova
- Storebrand/SPP
- SEB

Green Bond Listings

- Oslo Stock Exchange
- Nasdaq Stockholm Sustainable Bond List
- London Stock Exchange
- Mexican Stock Exchange
- + another 8 Stock Exchanges

Dedicerad research



Green Bond market ecosystem and investor engagement

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

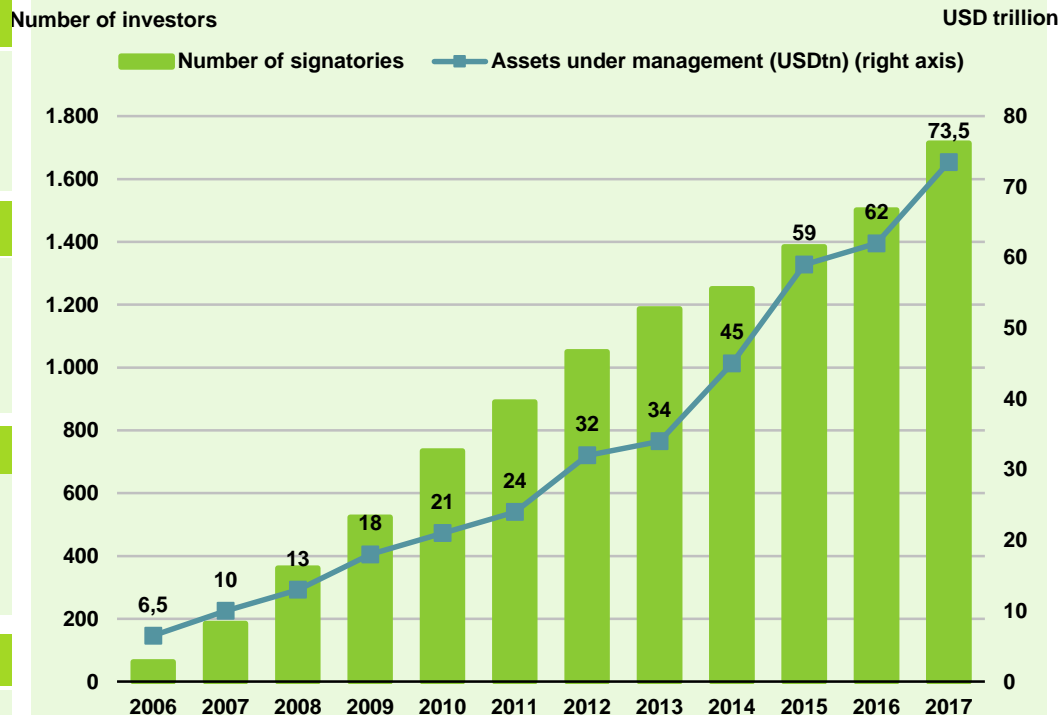
Regional benchmarks

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

International initiatives

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

Investor engagement continues to grow through UNPRI* signatories



Source:
www.unpri.org

Green Bond Funds - examples

- SSgA
- AXA
- Calvert
- Mirova
- Storebrand / SPP
- SEB
- BlackRock
- Allianz
- Amundi
- Colombia Threadneedle
- Erste AM
- NN

Green Bond listings

- Oslo
- Nasdaq Stockholm
- London
- Luxembourg
- Shenzhen
- Paris
- Amsterdam
- Borsa Italia
- Johannesburg
- Mexico City
- Riga
- Lisbon

Green Bond indices

- Solactive
- Bloomberg/ MSCI
- S&P/Dow Jones
- BAML
- Shenzhen / Luxembourg
- Various China Green Bond indices

Market drivers

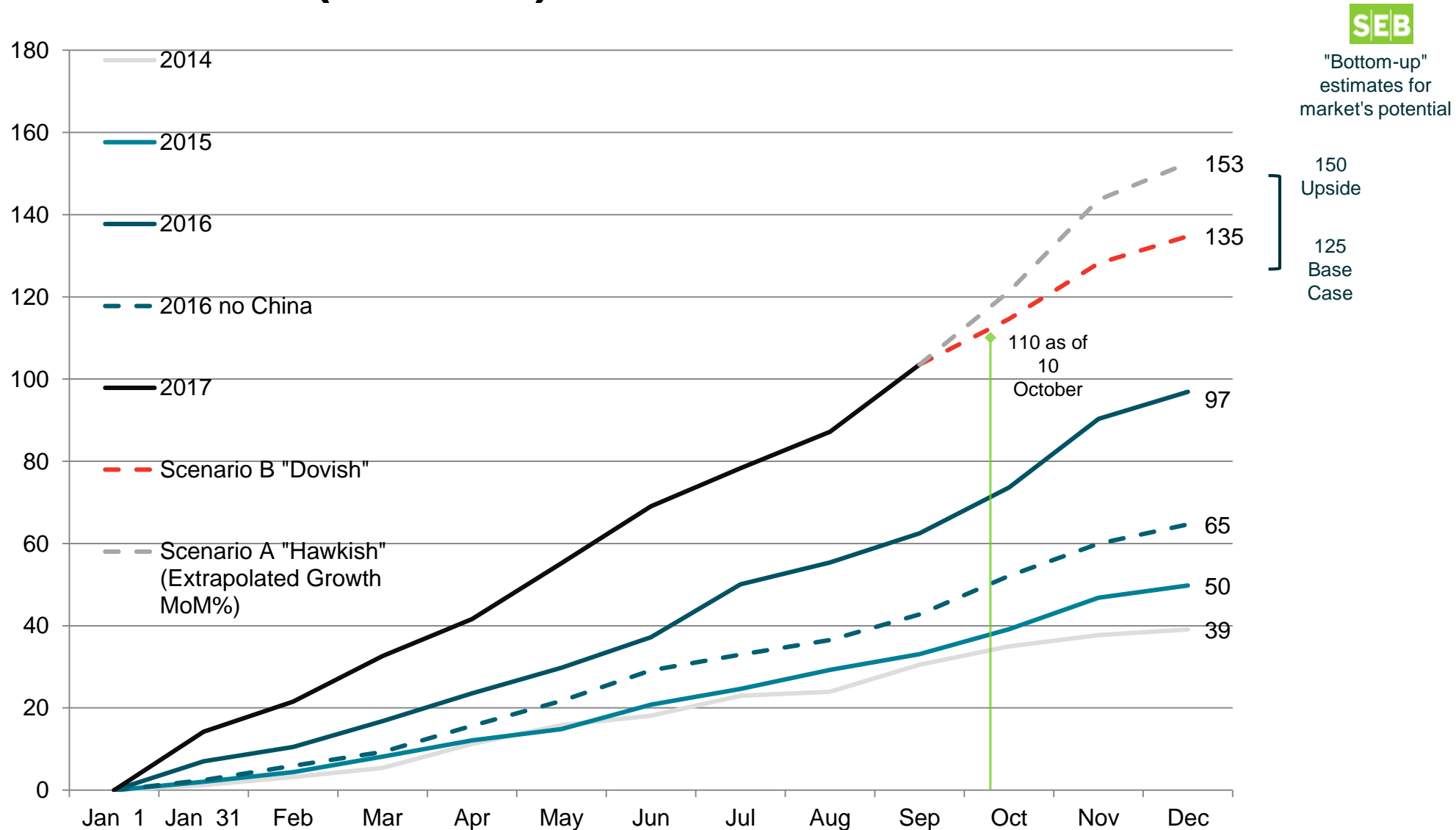
Drivers of green infrastructure investments and green bond financing

Investors	<ul style="list-style-type: none"> ▪ ESG integration and sustainable investments demand ▪ Risk-adjusted return (alpha, beta, or hedging strategies)
Economic Forces	<ul style="list-style-type: none"> ▪ Local air and water pollution across Emerging and Developing Economies as well as OECD ▪ Avoided health care costs, labour market and productivity benefits, fuel savings, trade benefits
Technology Forces	<ul style="list-style-type: none"> ▪ Cost-down curves in renewables, batteries, IT, fintech ▪ Scaling up of electric vehicles and enabling infrastructure (smart grid, HDVC, charging, storage, etc.)
Security	<ul style="list-style-type: none"> ▪ Energy security (investing in renewables to lessen import needs or to protect military supply chains) ▪ National security (climate stress as a threat multiplier)
Bankable Pipelines	<ul style="list-style-type: none"> ▪ Green infrastructure investment demand to meet challenges of the 21st century (population growth, growth of middle class, rural to urban, resource efficiency and circular economy) ▪ Green investment policy frameworks (price on CO₂, removal of Fossil Fuel subsidies, support for green projects, green infrastructure banks)
Policy Alignment	<ul style="list-style-type: none"> ▪ Green infrastructure policies driven by national interest – bottom up (NDCs, 114 countries have renewable energy policies, 66 for transport) ▪ Top down environmental agreements COP21, SDGs, ICAO, Montreal Protocol ▪ Attention to climate risk and green finance from Financial Stability Board, Central Banks, G20, Finance Ministries, ▪ EU High Level Expert Group report on Sustainable Finance
Social Forces	<ul style="list-style-type: none"> ▪ Sustainability preferences of millennials ▪ Divestment movement and Civil society initiatives and pressure
Green Bond Specific	<ul style="list-style-type: none"> ▪ Market-led or government initiatives (ICMA, CBI, G20, EC + China, India, Japan, Indonesia, Singapore, etc.) ▪ Financial sector innovation (investors, banks, ratings agencies, issuers, data providers, market ecosystem)

EU High Level Expert Group report on Sustainable Finance

1. **The creation of a **classification system for sustainable assets**, coordinated by the European Investment Bank**
Aim to help identify projects that support EU environmental policy goals, with a view to broadening into social areas in the future
2. **The creation of “official green bonds standards” and incentives for financial products**
The standards, and corresponding label, would be based on the classification system above, once defined, as well as the GBP
3. **The creation of shared fiduciary duty principles which include sustainability considerations**
Clarification should be made in upcoming reviews of legislation and regulation – such as Mifid II, PRIIPs and rules that govern credit ratings agencies – that ESG and **long-term sustainability must be considered as part of fiduciary duty throughout investment and lending chains**
4. **Heightened disclosure around sustainability**
Governance, strategy, risk management and metrics/targets should all be considered in disclosure, and forward-looking information such as scenario analysis should be encouraged.
5. **A sustainability test in financial legislation**
The report calls for the Directorate-General for Financial Stability, Financial Services and Capital Markets Union (DG Fisma) to improve its impact assessments for proposed legislation and policies. It recommends that DG Fisma takes more seriously its commitment to include “a description of the environmental, social and economic impacts and an explicit statement if any of these are not considered significant”
6. **The creation of a matchmaking body to stimulate green infrastructure development**
“A dedicated advisory and match-making facility between public authorities and private investors” that would give guidance on structuring and developing sustainable infrastructure projects and finding appropriate investors to finance them
7. **The positioning of European Supervisory Agencies on sustainability**
The current review of European Supervisory Agency (ESA) operations should include clarification and enhancement of their role in assessing ESG-related risks in the context of long-term financial stability. The ESAs should encourage participation from experts in sustainability, too
8. **The creation of **accounting standards for energy efficiency****
To boost the flow of effective energy efficiency projects – much needed in order to meet EU climate goals – a better interpretation of accounting standards needs to be developed by Eurostat

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





SEB – how we did it

STRICTLY CONFIDENTIAL

SEB

SEB Green Bonds at a glance



Issued by SEB

- A Nordic bank with well diversified business
- Strong capital base composition and credit ratings
- Solid financial development with stable profit growth



Sustainability is embedded in SEB's strategy & integrated in everyday work

- SEB aspires to be a role model in sustainability within the financial industry
 - SEB is included in Dow Jones Sustainability Index as the only Nordic bank.
- SEB has the ambition to create long-term financial value from a social, ethical and environmental perspective



SEB has a robust Green Bond Framework and is committed to responsible lending

- The Green Loan Portfolio is worth SEK 11.8bn and is expected to grow
- SEB's Green Bond Framework gets a dark green shading by Cicero
- SEB developed the Green Bond Market together with the World Bank and a number of forward-thinking investors in 2007/2008

Sustainability at SEB

SEB aspires to be a role model in sustainability within the financial industry

Our conviction

We are convinced that companies that include sustainability in their operations are more successful in the long term.



Our responsibility

We take responsibility for how our business affects our customers, employees, shareholders and society at large.



Our ambition

We shall create long-term value from a financial, ethical, social and environmental perspective.



MEMBER OF

**Dow Jones
Sustainability Indices**

In Collaboration with RobecoSAM

SEB's sustainability journey



Governance of SEB's sustainability work

Sustainability is embedded in SEB's strategy and integrated in everyday work

Board of Directors

- Decides on SEB's Strategy, including the Corporate Sustainability Strategy
 - Adopts the framework for sustainability in SEB, the Corporate Sustainability Policy

President and
Chief Executive Officer

- Decides on the development and the execution of the Corporate Sustainability approach
 - Adopts supplementary policies e.g. the Human Rights Policy & Environmental Policy

Corporate Sustainability
Committee

- An operational steering group assigned by the President
- Responsible for proposing the sustainability agenda, ambitions, and targets – which are formally approved by the President
- Monitors the development of SEB's sustainable business priorities

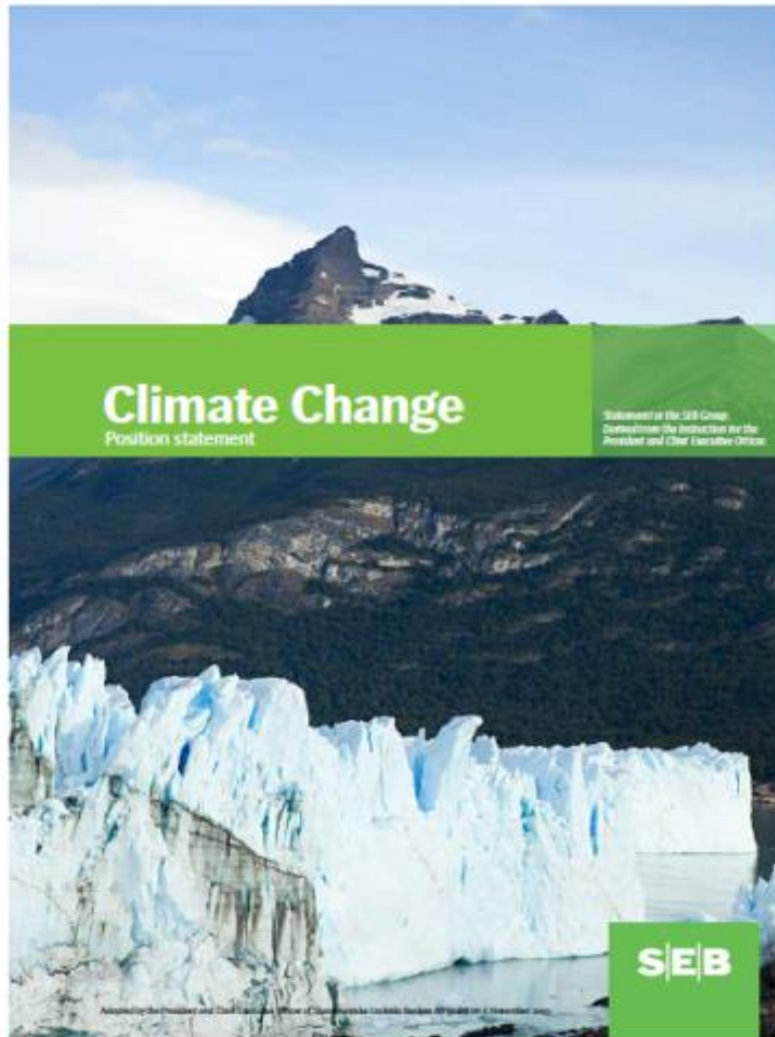
Group Corporate
Sustainability

- Responsible for reporting annual progress
- Coordinates and drives the overall sustainability agenda within SEB

Local sustainability
committees, managers and
employees

- Manage sustainability work on daily basis within SEB's divisions
 - Local sustainability committees e.g. Green Products Steering Committee

Example: The Climate Change Position statement

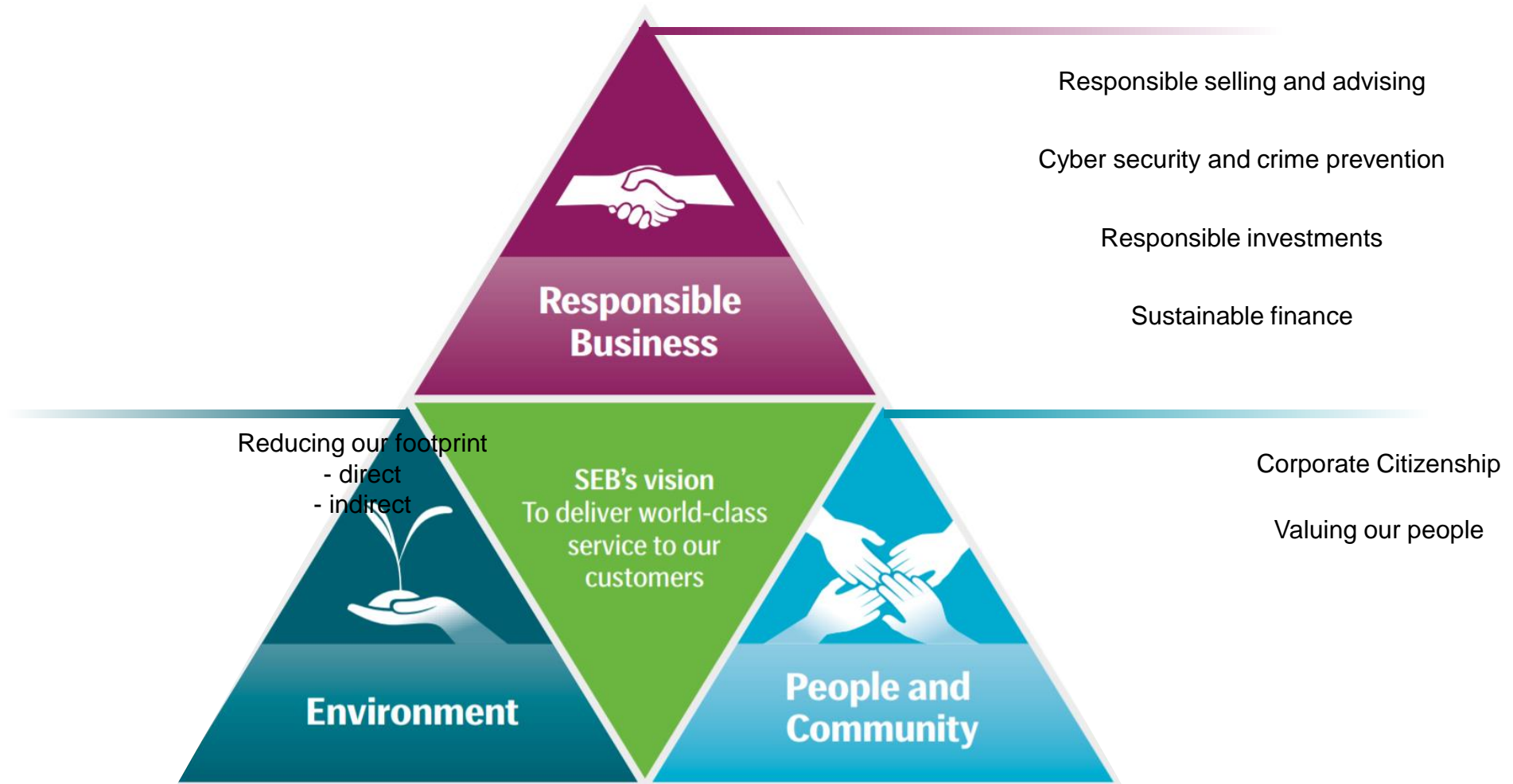


The Climate Change Position statement has lead to the following actions:

- Gradual shift away from coal
 - No financing of greenfield coal power generation plants
 - No new business relations with companies with major business in coal mining
 - Can support legacy clients in their transformations away from coal
-
- Development of a tool for client executives to influence clients through dialogues
-
- Support investments in climate friendly solutions
-
- Encourage clients to measure and disclose climate impact

SEB's sustainability approach

Three areas of responsibilities with focus on eight business priorities



Why does SEB issue a Green Bond?

Strengthening SEB's financial position while making an impact on the ground

Deepens SEB's sustainability commitment



SEB recognizes the economic and social importance of climate stress.

Issuing a Green Bond:

- Contributes to a greener asset allocation
- Closes the gap - green capital finances green asset
- Recognizes the financial sector's importance when integrating sustainable goals

Increases customer satisfaction



SEB sees deepening client relations when increasing green product portfolio

Issuing a Green Bond:

- Supports customers environmental values
- Helps our clients include Green Finance in their profile
- Improves risk management for our clients

Strengthens SEB's financial position



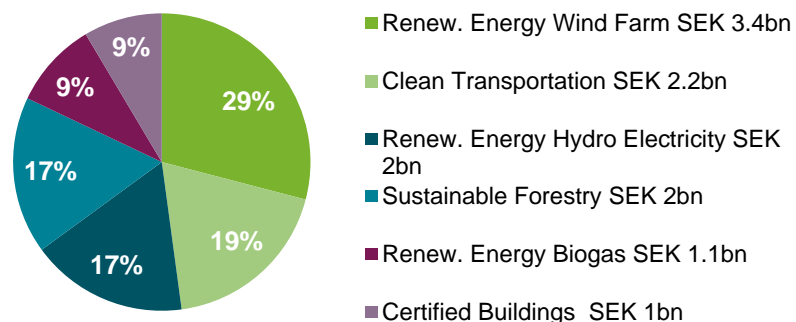
SEB sees an increasingly strong investor demand

Issuing a Green Bond:

- Broadens and diversifies investor base
- Deepens investor relationships
- Encourages a dialogue where Climate intelligence is used to identify financial risk/return issues

SEB's initial Green Loan Portfolio

Overview of the Green Loan Portfolio



The Green Loan Portfolio Composition SEK 11.8bn

Status of the Green Loan Portfolio



- The portfolio consists of 27 different counterparties.
- Diversified in 6 different eligible project categories



- Ambition to grow the portfolio to SEK 20bn by 2020

Fabege (Arenastaden)

– A Breeam Excellent building



- SEK 730 million
- 5000 square meter sedum roof to decrease storm water
- 400 square meter solar cells for production of electricity for electrical vehicles
- Well insulated house with sun screening to minimise cooling need
- Optimised ventilation with effective heat recycling
 - Low energy lighting
- 55 % lower energy use compared to Swedish building norms
- Low water use in showers, toilets and kitchen equipment
- Optimised recycling facilities for waste
- On line monitoring of water and energy

Mullberget wind park

- The 78 MW wind farm is situated in north west Sweden
- The site is equipped with 26 Siemens SWT 113-3,0 MW turbines
- Production 2015: 279 GWh, corresponding to annual consumption of 13,000 electricity heated family houses. Saving ~ 28,000 tonnes CO₂*
- Owners: Skanska Infrastructure Development and Jämtkraft
- SEB financing SEK 820 million



* 100 gCO₂e/kWh

Reference projects of eligible assets

Eligible Projects

Eligible projects are classified and can have different shades of green

Eligible project category	Description	Shade of Green by ENSO/Cicero
Renewable energy	<ul style="list-style-type: none"> Wind, solar, small scale hydro, tidal, geothermal, bio energy + related infrastructure 	Dark
Energy efficiency	<ul style="list-style-type: none"> District heating, smart grids, energy recovery leading to energy efficiency gains of at least 25% 	Dark
Green buildings	<ul style="list-style-type: none"> Energy use at least 25% below regulation and certain certifications (outside of Sweden) Renovation with energy efficiency gains > 35% 	Medium
Clean transportation	<ul style="list-style-type: none"> Non-fossil or hybrid transportation solutions/systems + infrastructure 	Medium
Waste management	<ul style="list-style-type: none"> Methane capture, waste-to-energy 	Medium
Emission reduction	<ul style="list-style-type: none"> Reduced emissions of CO₂, SO_x, NO_x, particulates, heavy metals and dioxins 	Medium
Sustainable forestry	<ul style="list-style-type: none"> Forestry with FSC/equivalent certification or at an advanced stage of the certification process 	Dark
Water & waste-water management	<ul style="list-style-type: none"> Drinking water production, wastewater treatment, management of water resources 	Dark

Mitigation projects

Environmental projects

Adaptation projects

Define

Select

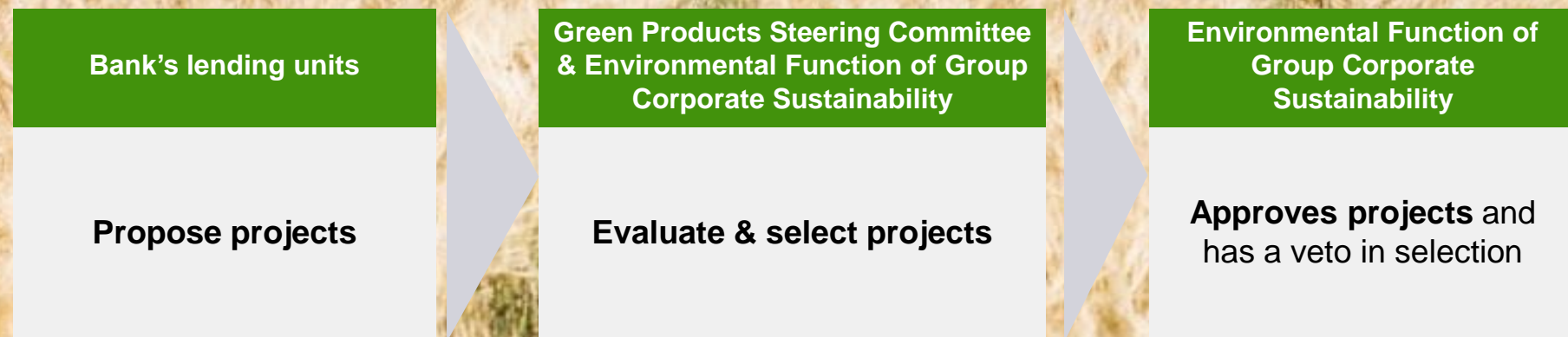
Verify

Monitor

Communicate

SEB

Selection process of Eligible Projects



Define

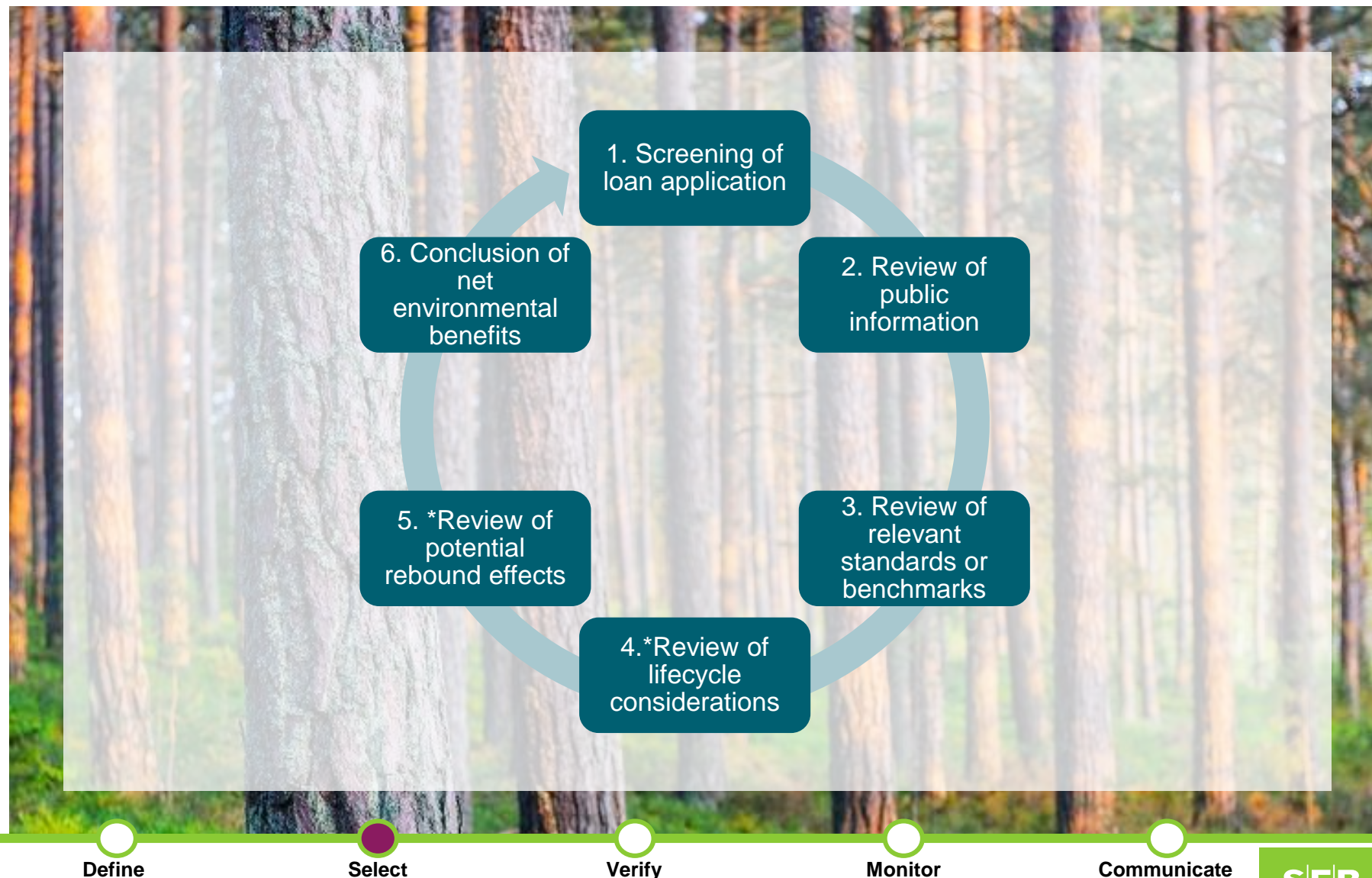
Select

Verify

Monitor

Communicate

SEB Green Loan evaluation process



conclude that the longer term net environmental effects will be positive

Monitoring Eligible Assets & Green Bond proceeds

Processes and systems are in place to control the Green Loan portfolio

Responsible units

Large Corporates and Financial Institutions secure and monitor the Green Loan Portfolio

Treasury is monitoring the asset and liability management of the Green Loan Portfolio

Green Product Steering Committee remove assets from SEB's Green Loan Portfolio, if, for any reason, an Eligible Asset ceases to meet the environmental criteria in SEB's Green Bond Framework

Systemic solutions

- All Green assets are flagged and traceable in electronic systems
- Only systems where such flagging can be easily done are approved to qualify for Green Bond financing
- All Green assets can be aggregated on a daily basis



Communication

Transparency through annual reporting and public information

Green Bond information

Information is available on SEB's public webpage incl. links to:

- Green Bond Framework
- Green Bond Strategy
 - Second Opinion
 - Investor Reports

Investor Reports

The investor report will be published annually covering

1. a list of the different categories of Eligible Assets financed and the percentage distribution to each such category
2. a description of a selection of Eligible Assets, as examples of the Eligible Assets financed in that year
3. a summary of the Bank's green financing activities, project examples, a review of Green lending categories and an update of SEB's Green lending

The Bank encourages environmental impact reporting and works towards a portfolio impact reporting



Define



Select



Verify



Monitor



Communicate

SEB

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Thank you!

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