



Green Bond advisory

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Mumbai

November 17, 2017

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****

What kind of projects?

Energy efficiency and renewables are driving the market at the moment. Some areas are excluded despite low environmental impact (e.g nuclear power is not Green Bond eligible)

✓ Renewable Energy	<ul style="list-style-type: none">▪ Wind, solar etc.▪ Related infrastructure
✓ Energy Efficiency	<ul style="list-style-type: none">▪ Building efficiency incl. environmental certification systems▪ Smart Grids
✓ Pollution Prevention and Control	<ul style="list-style-type: none">▪ Waste water management▪ Recycling and waste-to-energy
✓ Sustainable Management of Living Natural Resources	<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 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
✓ Climate Change Adaptation	<ul style="list-style-type: none">▪ Flood protection▪ Disaster early warning systems

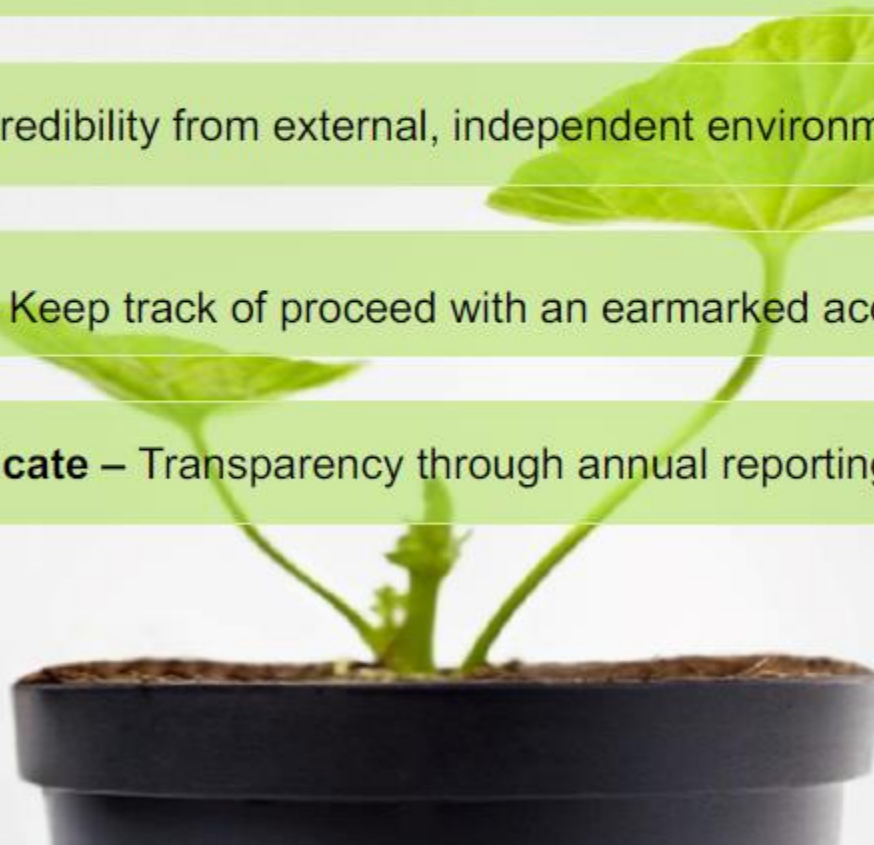
Strength of the Green Bond framework

- 1 **Simplicity – Scalability**
- 2 **Governance – selection process**
- 3 **Credibility – vetting of Green**
- 4 **Traceability – earmarked account**
- 5 **Transparency – reporting**



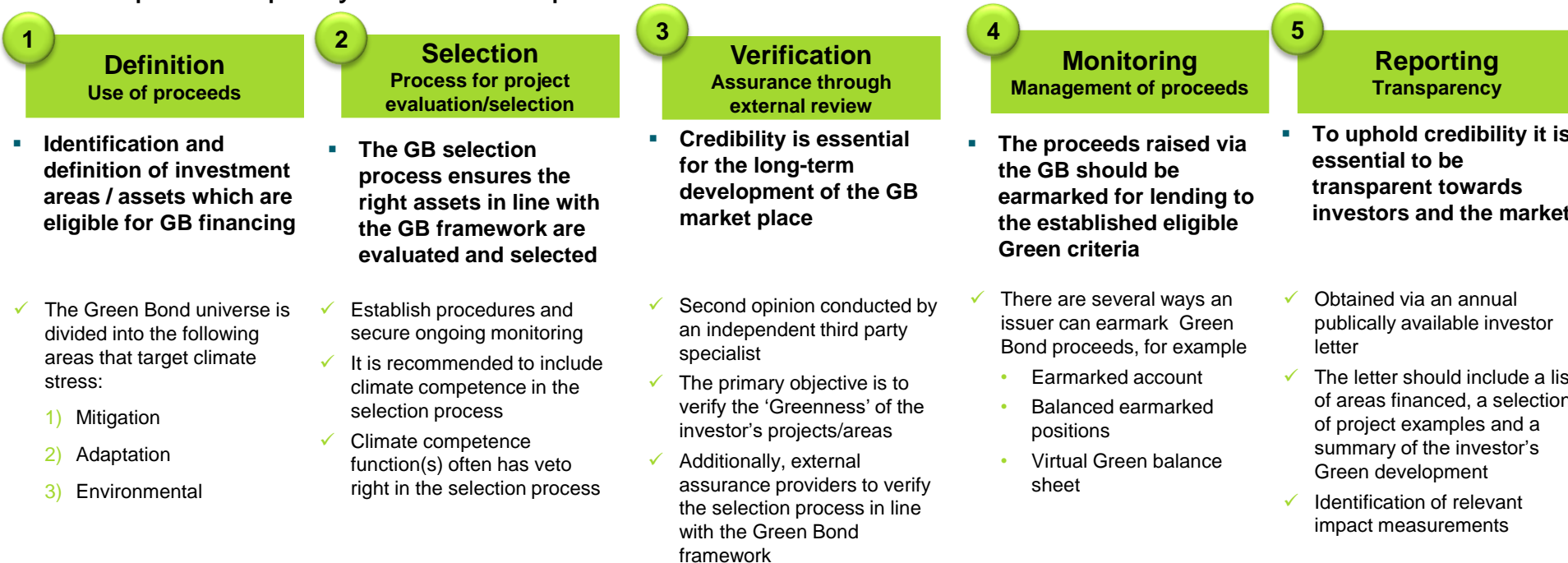
Five steps

- 1 **Define** – What is Green
- 2 **Select** – Who decides
- 3 **Verify** – Credibility from external, independent environmental experts
- 4 **Monitor** – Keep track of proceed with an earmarked account
- 5 **Communicate** – Transparency through annual reporting to investors



The five steps of the Green Bonds

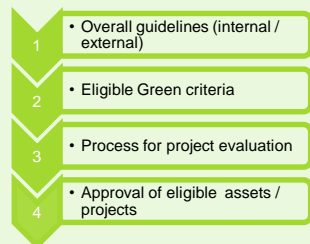
A concept of simplicity built on five pillars



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



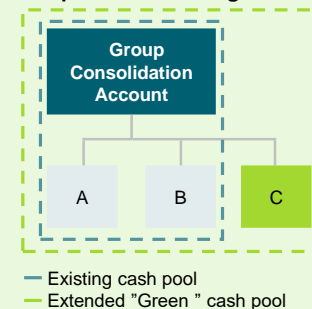
Who provides second opinions?

- 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

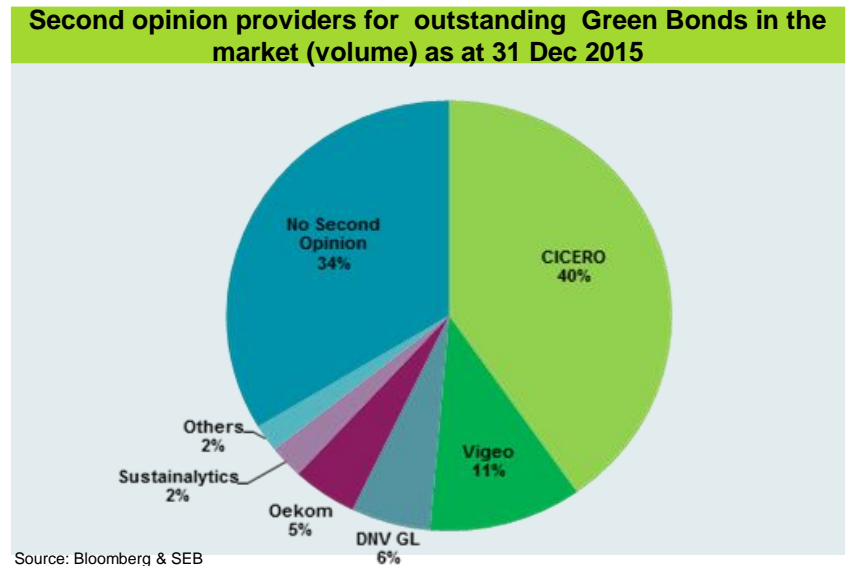


The investor letter



Quality assurance through Second opinions

- The Second opinions are done by scientists within climate research
- CICERO (Center for International Climate and Environmental Research in Oslo) has introduced “Shades of Green” for their Second opinions to enhance transparency around their evaluation
- CICERO remains the largest second opinion provider to Green Bond frameworks in the market



CICERO's Shades of Green

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

A typical Green Bond issuance process

Steps 1-4

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 join forces?
- Volume vs. quality, broad and comprehensive or narrow and quick, level of specification?

3. **Select** eligible projects

- Integrate environmental competence in the decision process
- If needed, in-source environmental competence

4. Secure **verification** – get a **Second Opinion**

- Choice of Second Opinion provider – most demanding/quickest/cheapest?
- Adjust Framework based on critical feedback from external environmental experts

A typical Green Bond issuance process

Steps 5-8

5. Safeguard **monitoring** by establishing an **earmarked account** for proceeds/allocation
 - Practical but prudent
6. Commit to **transparency** with regards to use of proceeds
 - Impact reporting
 - Additional work or synergies with other reporting and communication?
7. Coordinate **communication**, internal as well as external
 - Press release, web page and intra net, business papers, conferences and events
8. Prepare the **transaction** to maximize beneficial impact
 - Maximize investor diversification, road show, maturity etc.

Indicative timeline of the Green structuring process

Step	Action	Responsibility	Timeline
1	<ul style="list-style-type: none"> Start-up meeting with all relevant colleagues (finance, environment/sustainability, legal, communication) 	SEB and Issuer	Week 1
2	<ul style="list-style-type: none"> Draft Green Bond framework for the issuer 	SEB	Week 1
3	<ul style="list-style-type: none"> Adjust and tailor-make the framework to match the ambitions of Issuer 	Issuer/SEB	Week 2
4	<ul style="list-style-type: none"> Prepare information package to CICERO <ul style="list-style-type: none"> ✓ Issuer's green ambitions and targets ✓ Environmental policies and strategies (external and internal) ✓ Internal working guidelines ✓ Information on technologies ✓ Description of selection process and follow up procedures ✓ Routines for impact measurements ✓ Other documents that may be relevant from climate perspective 	Issuer/SEB	Week 2
5	<ul style="list-style-type: none"> The framework and guidelines are sent to CICERO for review 	SEB	Week 2

Indicative timeline of the Green structuring process (continued)

Step	Action	Responsibility	Timeline
6	<ul style="list-style-type: none"> • A set of questions and draft version of the second opinion arrives 	CICERO	Week 4
7	<ul style="list-style-type: none"> • Response on the second opinion <ul style="list-style-type: none"> – Answers to the questions (+extra material and/ clarifications if needed) – Adjustments to framework (if desired) 	Issuer (with guidance from SEB)	Week 5
8	<ul style="list-style-type: none"> • A call is arranged with CICERO and Issuer 	SEB	Week 5
9	<ul style="list-style-type: none"> • Final Second Opinion is delivered 	CICERO	Week 5
10	<ul style="list-style-type: none"> • Prepare investor presentation, communication strategy, transaction strategy and open a separate account 	Issuer/SEB	Weeks 3-5
11	<ul style="list-style-type: none"> • Investor lunch + bilateral meetings followed by inaugural Green Bond transaction 	Issuer (with guidance from SEB)	Week 6

Market drivers ahead

Drivers of green infrastructure investments and green bond financing

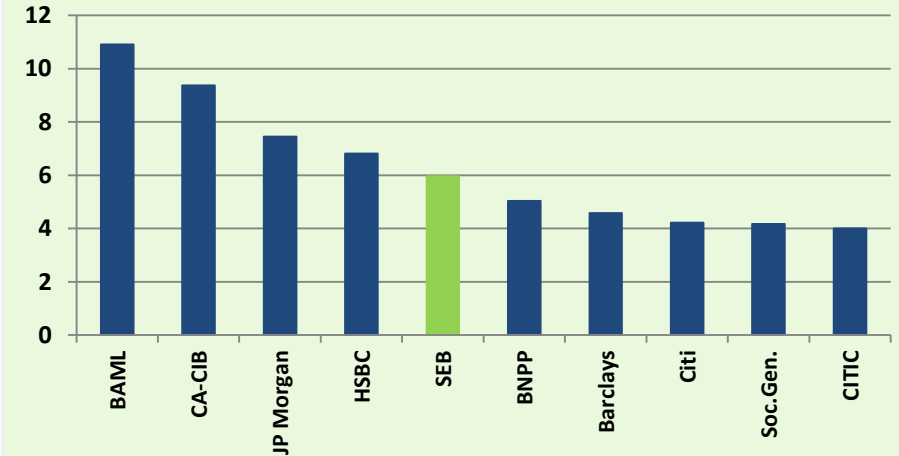
Investors	<ul style="list-style-type: none"> ▪ ESG integration and sustainable investments demand ▪ Risk-adjusted return (alpha, beta, or hedging strategies)
Economic Forces	<ul style="list-style-type: none"> ▪ Local air and water pollution across Emerging and Developing Economies as well as OECD ▪ Avoided 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)

Global Green Bond underwriting

Selected Green Bond issues underwritten by SEB

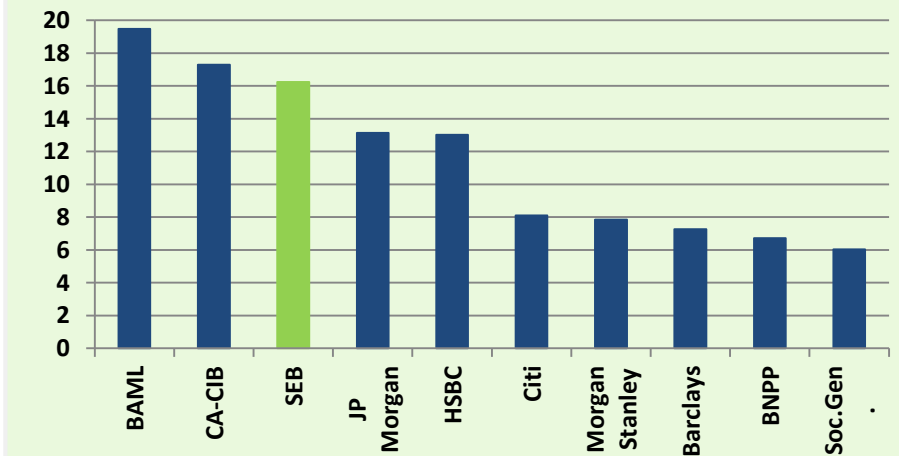
<p>KFW Bank für Sozialwirtschaft</p> <p>5 year EUR 1.5 billion 0.375% July 2019 Joint Lead</p> <p>SEB</p>	<p>NWB BANK NEERLANDSE INTERESCHAP BANK N.V.</p> <p>5 year EUR 500m 0.625% July 2019 Joint Lead</p> <p>SEB</p>	<p>ING</p> <p>5 yr EUR 500mm / 3 yr USD 800m 0.625% 0.75% / 2.00% Nov 2020/ Nov 2018 Joint Lead Manager</p> <p>SEB</p>	<p>HSBC</p> <p>5 year EUR 500m , 0.625% Dec 2020 Joint Green Structuring Advisor Joint Lead Manager (no books)</p> <p>SEB</p>
<p>IFC</p> <p>USD 1 billion 0.625% fixed bond November 2016 Joint Lead</p> <p>SEB</p>	<p>IFC</p> <p>USD 500m 0.750% fixed bond October 2016 Joint Lead</p> <p>SEB</p>	<p>THE WORLD BANK</p> <p>SEK 3,250m 3.500% fixed bond November 2014 Sole Lead</p> <p>SEB</p>	<p>European Bank for Reconstruction and Development</p> <p>USD 250m 1.625% fixed bond April 2018 Joint Lead</p> <p>SEB</p>
<p>SKANSKA</p> <p>5 year SEK 850m FRN April 2019 Sole Bookrunner</p> <p>SEB</p>	<p>SCA Care of Life</p> <p>5 year SEK 1bn/500m 2.500% / FRN April 2019 Sole Bookrunner</p> <p>SEB</p>	<p>KBN Kommunalbanken Norway</p> <p>USD 500m 0.750% fixed bond Nov 2016 Joint Lead</p> <p>SEB</p>	<p>European Investment Bank</p> <p>SEK 2,100m 3.000% fixed bond April 2019 Joint Lead</p> <p>SEB</p>
<p>NiB</p> <p>5 year SEK 1 billion 0.625% January 2021 Sole Lead</p> <p>SEB</p>	<p>VASAKRONAN</p> <p>SEK 1,300m 1.774% / FRN May 2016 Sole Lead</p> <p>SEB</p>	<p>EDC</p> <p>USD 300m 0.875% fixed bond January 2017 Joint Lead</p> <p>SEB</p>	<p>Korea Eximbank</p> <p>USD 500m 1.750% fixed bond February 2018 Joint Lead</p> <p>SEB</p>

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

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

A Green Bond database for climate financing

- Overview of Green Bond issuers with a second opinion
- Create your own Green universe with the help of academic experts
- Investors can create their Green Bond universe
- Market tool to create Green framework and Second Opinion application

Select Green Profile:	Reporting	Exempted Account	Homepage	2nd Opinion	2nd Opinion Document	Issuers
SICA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Website	CICERO	2nd opinion	View issuer
World Bank	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Website	CICERO	N/A	View issuer
European Investment Bank (EIB)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Website	N/A		View issuer
International Finance Corporation (IFC)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Website	CICERO	available for investors	View issuer
Korea Export Import Bank (KEXIM)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Website	CICERO	available for investors	View issuer
Vopakrosen	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Website	CICERO	2nd opinion	View issuer
African Development Bank (ADB)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Website	CICERO	2nd opinion	View issuer
Asian Semi Conductor (ASE)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Website	CICERO	Not available	
BBK	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Website	CICERO	2nd opinion	View issuer
State of California	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Website	-None-		
Export Development Canada (EDC)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Website	CICERO	2nd opinion	View issuer
European Bank for Rec. and Dev.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Website	CICERO	2nd opinion	View issuer
Forsvaretsbank	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Website	CICERO	2nd opinion	View issuer
City of Copenhagen (Copenhagen Swan)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Website	CICERO	2nd opinion	View issuer
Nordic	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Website	Vipac	2nd opinion	
Kommunalbanken Norway (KBN)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Website	CICERO	2nd opinion	View issuer
NTV	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Website	CICERO	2nd opinion	View issuer
Nordic Investment Bank (NIB)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Website	CICERO	2nd opinion	View issuer
NWIF Bank	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Website	system research	2nd opinion	View issuer
Nederlandse Waterschapsbank N.V. (NWB Bank)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Website	CICERO	2nd opinion	View issuer
Credito Municipality (Credito Kommune)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Website	CICERO	2nd opinion	View issuer
Province of Ontario (OFA)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Website	CICERO	2nd opinion	View issuer
Hilbert	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Website	CICERO	2nd opinion	View issuer

Issuers can create a Green Bond framework in line with market guidelines

[Explore the Green Library](#)
The Green Library provides an exhaustive guide to Green Bond investments.

[Create the Green Bond Framework document](#)
The Green Bond Framework document is a starting point for issuing a Green Bond. [Click here](#) to login if you have already saved a draft.

[Apply for a 2nd Opinion](#)
2nd Opinion assessment is provided by CICERO. [Click here](#) to login if you have already saved a draft.

Online application for Second Opinions with step-by-step guidance

Green Bond Framework Template

Name of issuer:

City of Residence:

Homepage URL:

Business of issuer:

1. USE OF PROCEEDS

1. General Description

2. Eligible Assets

3. Green Categories and Technologies

4. Other assets relevant for use of Proceeds

5. PROCESS FOR ASSETS EVALUATION AND SELECTION

1. Selection of Eligible Assets

2. Eligible Asset Selection Process/Procedure

CICERO

Application For Green Bond 2nd Opinion

Issue Name:

Reporting: Exempted Account: No fossil energy generation: No nuclear:

Please write an introduction letter to the issuer to ensure we understand the objective of the application.

1. Add New Eligible Project Type

2. Short description of search criteria and environmental process (goals and achievements)

3. To what extent are projects that include fossil fuel activities eligible under the framework? Please indicate in which category?

4. Does the issuer have any policies that ensure that the eligible and selection activities are well coordinated?

5. Will there be assessments of the projects that include nuclear reactors and recycle projects?

Summary: The benefits 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
- Establish a targeted dialogue between operations (projects), Finance and Management
- Live your values - competitiveness

Society

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