Workshop Green Bonds

Mexico City, October 2016
Senior Adviser Harald Francke Lund
Independent non-profit climate change research center

Link between climate science and financial community
CICERO’s involvement and motivations

World-leading provider of second opinions on green bonds

What makes a bond green?

“The market has grown so fast that CICERO has just announced a partnership with four other academic institutions, including Tsinghua University, to increase capacity.”
A big green thanks from issuers...and investors

Reaching out to CICERO is a great first step
- TIAA-CREF

We attracted many new investors...
a BIG GREEN THANKS!

CICERO's second opinion was a key part...which has helped the market diversify with integrity
- World Bank

CICERO was able to interpret our needs as an investor and help us understand and evaluate environmental metrics
- BlackRock
Climate finance flows in last five years have been significant despite economic crisis

Global climate finance increased by 18% in 2014, more money than ever

New Climate Economy Report
$ 6000 BILLION is needed a year

Source CPI
Green Bond Market

Corporate and muni bonds make up a growing proportion of issuance

Source CBI
What type of projects could qualify?

- renewable energy (including production, transmission, appliances and products);
- energy efficiency (such as in new and refurbished buildings, energy storage, district heating, smart grids, appliances and products);
- pollution prevention and control (including waste water treatment, greenhouse gas control, soil remediation, recycling and waste to energy, value added products from waste and remanufacturing, and associated environmental monitoring analysis);
- sustainable management of living natural resources (including sustainable agriculture, fishery, aquaculture, forestry and climate smart farm inputs such as biological crop protection or drip-irrigation);
- terrestrial and aquatic biodiversity conservation, (including the protection of coastal, marine and watershed environments);
- clean transportation (such as electric, hybrid, public, rail, non-motorized, multi-modal transportation, infrastructure for clean energy vehicles and reduction of harmful emissions);
- sustainable water management (including sustainable infrastructure for clean and/or drinking water, sustainable urban drainage systems and river training and other forms of flooding mitigation);
- climate change adaptation (including information support systems, such as climate observation and early warning systems);
- eco-efficient products, production technologies and processes (such as development and introduction of environmentally friendlier, eco labelled or certified products, resource efficient packaging and distribution).
**Green Bond Framework**

1. Use of proceeds (definitions)
2. Selection process (governance)
3. Management of proceeds
4. Reporting
2. Process for Project Evaluation and Selection

For a project to be included in the Eligible Projects pool, it shall comply with a) the categories listed in section 1 above and in the "KBN Green Bonds: Supplementary guidelines for project selection, documentation and reporting", b) the Municipality’s Environmental Plan and c) Norway's Intended Nationally Determined Contributions (INDCs) according to the Paris Agreement. Applicants are required to declare eligibility by filling in a designated section in the loan document. Additionally, relevant documents indicating the Project's estimated environmental performance shall be provided. A project's eligibility is assessed by the Lending Department and approved by two Climate controllers. Approved Green Projects are entitled to KBN's Green Lending Discount and included in the bank’s portfolio of Green Projects.

Green Bond Project Selection Process Flowchart

Applications
- Norwegian Law
- KBN Articles of Association
- KBN Guidelines as laid down by the Board of Directors
- KBN Green Bond Framework

Project screening and selection:
- Municipalities' Environmental plans
- Norway’s INDCs
- ICMA Green Bond Principles
- KBN Green Bond Framework: Eligible Projects criteria
- KBN Green Bonds: Supplementary guidelines for project selection, documentation and reporting
- Lending Department and Climate controller

Initial screening of projects in accordance with the Green Bond Framework

Specific Green Bond Framework defined projects
- Management of Proceeds
- Reporting

3. Management of Proceeds

An amount equal to the net proceeds of the issue of the Notes will be credited to a special budget account that will support KBN’s Eligible Projects, according to section 3 in the GE. KBN will carefully manage the balance between green funding outstanding and green lending to make sure the green funding is disbursed in a timely manner. KBN aims to direct the predominant part of net proceeds to new projects. However, refinancing of selected projects with particularly high environmental or climate benefits is considered if in line with this framework.

4. Reporting

To enable investors to follow the development and provide insight into prioritized areas KBN will provide an annual SRI report linked to the annual financial results report. The SRI report will include a section on the progress of the Green Bond program. KBN will also keep the dedicated Green Bond webpage continuously updated with: 1) a list of projects financed; 2) a selection of project examples "Green Bond Stories" and; 3) a summary of the KBN Green Bond development including statistics on our Green Bond portfolio with impact reporting, aiming to comply with the issuer group ‘Harmonized Framework for Impact Reporting’ (Dec 2016).

KBN has appointed an advisory board, "The Green Committee", whose mandate will be to provide advice and guidance in matters related to the Bank's Green Bond Framework. The committee will primarily draw on external expertise in related fields, but will also include members of the KBN staff. Our Green Bond process will be audited by KBN's internal auditor, currently KPMG.

---

Source: World Bank Group
Flexible Frameworks vs. Standards

1. How to capture that both science and green bond market are dynamic in nature?

2. Could issuer specific frameworks be combined with international and regional standards with more fixed definitions (building standards etc.)?
Review of Green Bonds

59% - 66% of green bonds have received an external review

www.climatebonds.net
15 percent certified their green bonds against CBI standards.

Source: CBI
Second Opinion Process

**Issuer’s information**
- Green bond framework
- Sustainability reports
- Information on selection & reporting

**CICERO’s assessment criteria**
- Use of Proceeds
  - Technologies and project types
  - Consideration of macro-impacts
- Management of proceeds
- Governance
  - Project selection and evaluation
  - Transparency
  - Reporting

**CICERO recommendations and rating**
- Light green
- Medium green
- Dark green
**Shades of Green**

Do the selected project categories meet expectations for a low-carbon and climate-resilient future?

<table>
<thead>
<tr>
<th>Color</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dark green</td>
<td>Projects and solutions that realise the long-term vision of a low-carbon and climate-resilient future already today. Typically, this will entail zero-emission solutions and governance structures that integrate environmental concerns into all activities. Example projects include renewable energy projects such as solar or wind.</td>
</tr>
<tr>
<td>Medium green</td>
<td>Projects and solutions that represent steps towards the long-term vision, but are not quite there yet. Example projects include sustainable buildings with good (but not excellent) energy efficiency ratings.</td>
</tr>
<tr>
<td>Light green</td>
<td>Projects and solutions that are environmentally friendly but are not by themselves a part of the long-term vision. Example projects include energy efficiency improvements in fossil-based industry that result in short-term reductions of greenhouse gas emissions, and diesel-fuelled buses.</td>
</tr>
<tr>
<td>Brown</td>
<td>Projects that are in opposition to the long-term vision of a low carbon and climate-resilient future.</td>
</tr>
</tbody>
</table>
Typical questions CICERO asks

- What are the issuer’s climate and environmental polices (goals) and achievements
- To what extent are projects that includes fossil fuel elements eligible under the framework?
- Does the issuer have any policies that make sure that mitigation and adaptation activities are well coordinated?
- Will there be assessments of projects that include rebound effects and lifecycle analysis?
- Any policies towards subcontractors?
- Eligible Projects are selected by whom? To what extent are climate and environmental expertise involved in the selection?
- What kind of information will be available to investors and the public and how?
- Will there be any impact reporting?
Figure 4: Number of CICERO second opinions by Shade of Green for each project type
Emerging Best Practice

- Improved internal dialogue between finance and environmental experts
- Increased focus on supply chains
- Impact reporting – beyond emission reductions

Looking forward: further harmonization or regionalization of second opinions and standards?
Harald Francke Lund
Senior Advisor
Climate Finance
CICERO