Workshop Green Bonds

São Paulo, December 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

Expert Network on Second Opinions
How can investors better secure the value of their portfolios against climate change risk?
Climate Risk for Investors

**Physical risks**
- Flooding
- Drought
- Sea level rise
- Heat stress
- Wind
- Extreme weather

**Transition risks**
- Policy
- Liability
- Technology

**Potential financial impacts**
- Production / operation disruptions (e.g., power, transportation, worker availability)
- Supply chain disruptions
- Physical damage to assets (and raising insurance costs)
- Changes in resource / input prices (e.g., water, energy, food)
- Changes in demand for products / services
Mark Carney head of FSB – Michael Bloomberg head of TCFD

• The Task Force on Climate-related Financial Disclosures (TCFD) will develop voluntary, consistent climate-related financial risk disclosures for use by companies in providing information to investors, lenders, insurers, and other stakeholders.

• Launches its report today
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

TOTAL CLIMATE FINANCE IN 2014

2011: $361 BILLION
2012: $359 BILLION
2013: $331 BILLION
2014: $391 BILLION
Green bonds use of proceeds 2012-2016ytd

USD BILLIONS

- Adaptation
- Sustainable Land Use and Forestry
- Waste Management
- Water Management
- Low Carbon Transport
- Energy Efficiency/Low Carbon Buildings
- Renewable Energy

Source: Climate Bonds Initiative
What is Green – and Who Decides?

Voluntary Principles

Recommends external review

Second Opinions

Stock Exchanges

Require independent second opinions

Funds & Indices

Standards
Green Bond Framework
1. Use of proceeds (definitions)
2. Selection process (governance)
3. Management of proceeds
4. Reporting
KBN GREEN BOND FRAMEWORK

The purpose of this document is to describe KBNs Green Bond Framework built on KBNs overall environmental strategy: KBN is a member of ICMA’s Green Bond Principles (GBP) and is also aiming to comply with the “Harmonized Framework for Impact Reporting” developed by 11 Multilateral Development Banks in December 2019.1

The framework has four components:
1. Use of Proceeds
2. Process for Project Evaluation and Selection
3. Management of Proceeds
4. Reporting

1. Use of Proceeds

"Eligible Projects" means a selected pool of projects determined as eligible according to this Framework. Projects might be funded in whole or in part by KBN. Eligible Projects promote the transition to a low-carbon and climate-resilient Public Sector. Such projects may target (a) mitigation of climate change through reduction of emissions from buildings, transportation and energy production, (b) adaptation to climate change, including investments in climate-resilient infrastructure, or (c) to a smaller extent (limited to 10%), projects related to a sustainable environment on a local scale.

Eligible Project categories

Please refer to "KBN Green Bonds: Supplementary guidelines for project selection, documentation and reporting"2 for detailed criteria and requirements of the Eligible Project categories.

- **Renewable energy** (a): to reduce the use of fossil fuel, KBN is financing installations for production of renewable energy. Please note that if the installation is part of a new construction it will fall under the "Green buildings" category.

- **Energy efficiency** (a): KBN is promoting projects aiming to lower emissions from energy production and energy bills for the municipal sector by upgrading to higher energy standards or installing climate-friendly technology such as heating or control systems.

- **Green buildings** (a): new buildings or additions to buildings with an energy performance superior to current energy standards according to the supplementary guidelines may qualify for KBN’s green lending rate.

- **Waste management** (a/b): sustainable waste management is an important environmental initiative as it both reduces emissions and returns scarce resources to the value chain. KBN finances either new or upgrading of plants.

- **Land use** (b): projects including sustainable re-development of recreational and other areas.

- **Low carbon transportation** (a): low emission or emission free public transportation. The category also includes pedestrian and bicycle lane projects.

- **Water and wastewater management** (b): a robust water and sewage infrastructure is important to handle increased pressure on existing systems due to heavier rainfall and population growth. Projects include replacing and upgrading of water and sewage pipes in addition to financing equipment of handling sludge and contaminated discharge.

- **Climate change adaption** (b): natural disaster warning systems, landslide security systems, climate research and education programs.

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 Bond Principles: 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.

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 1. In the GBP, 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 ESR report linked to the annual financial results report. The ESR report will include sections on the progress of the Green Bond program. KBN will also keep the dedicated Green Bond webpages 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 Project portfolio with impact reporting, aiming to comply with the issuer group’ "Harmonized Framework for Impact Reporting" (Dec 2019).

KBN has 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.

---

3 http://www.kommunaltbanken.no/greencriteria
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.)?
Part II
Review of Green Bonds

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

- $50 bn
- $40 bn
- $30 bn
- $20 bn
- $10 bn
- $0 bn

2013 | 2014 | 2015 | 2016 YTD

www.climatebonds.net
External Reviews

- Second Opinions
- Certifications
- Verifications
- Ratings

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
CICERO’s Shades of Green

<table>
<thead>
<tr>
<th>Color</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dark green</td>
<td>Implementing a long-term solution</td>
</tr>
<tr>
<td>Medium green</td>
<td>On the way to a long-term solution</td>
</tr>
<tr>
<td>Light green</td>
<td>Short-term benefits, but not a long-term solution</td>
</tr>
</tbody>
</table>
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?