

# Workshop Green Bonds

Mexico City, October 2016  
Senior Adviser Harald Francke Lund

# °CICERO

Center for International  
Climate and Environmental  
Research - Oslo



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

<http://www.cicero.uio.no/en/posts/news/green-bonds-and-environmental-integrity>



# Expert Network on Second Opinions



## 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

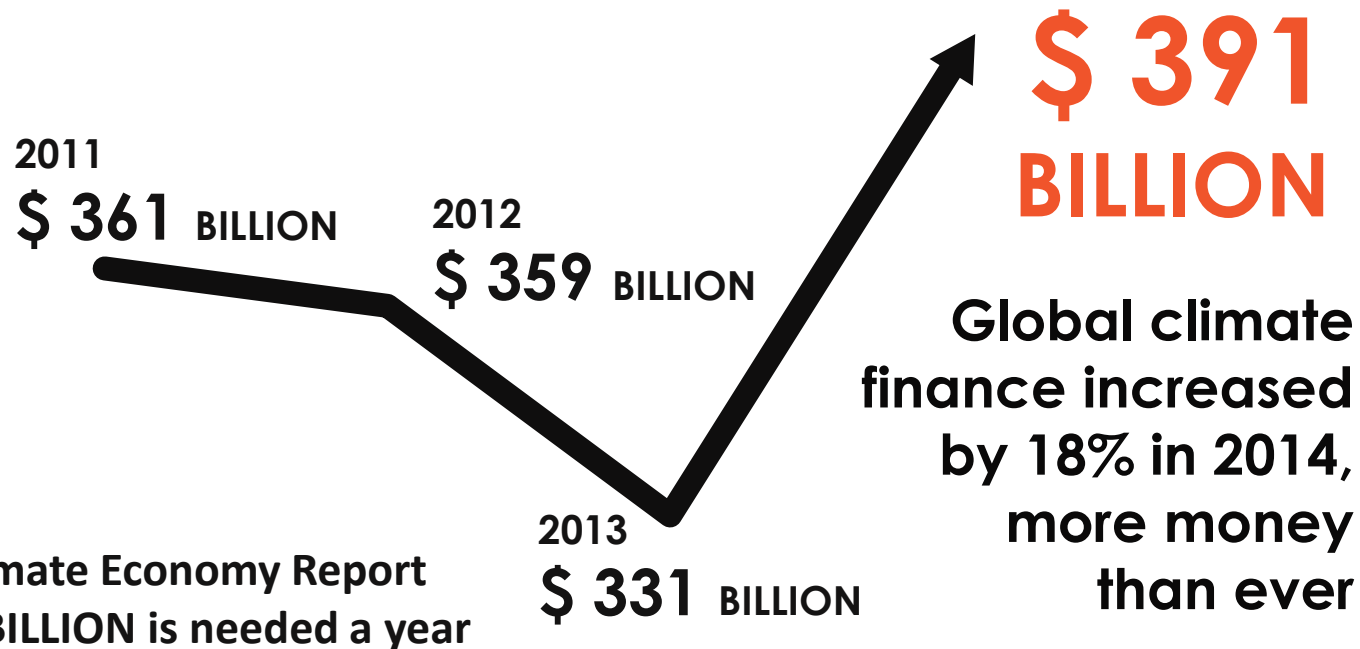
- World Bank

CICERO was able to interpret our needs as an investor and help us understand and evaluate environmental metrics

- BlackRock

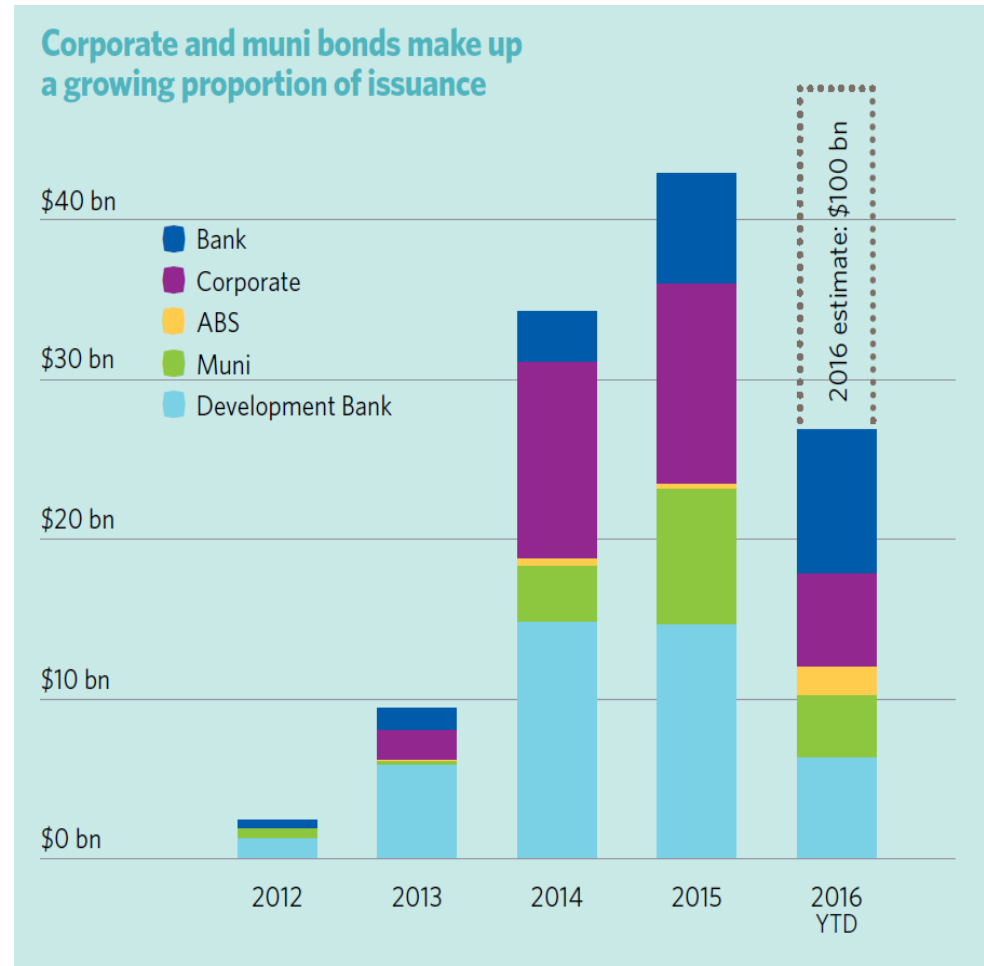
# Climate finance flows in last five years have been significant despite economic crisis

TOTAL CLIMATE FINANCE IN 2014



Source CPI

# Green Bond Market

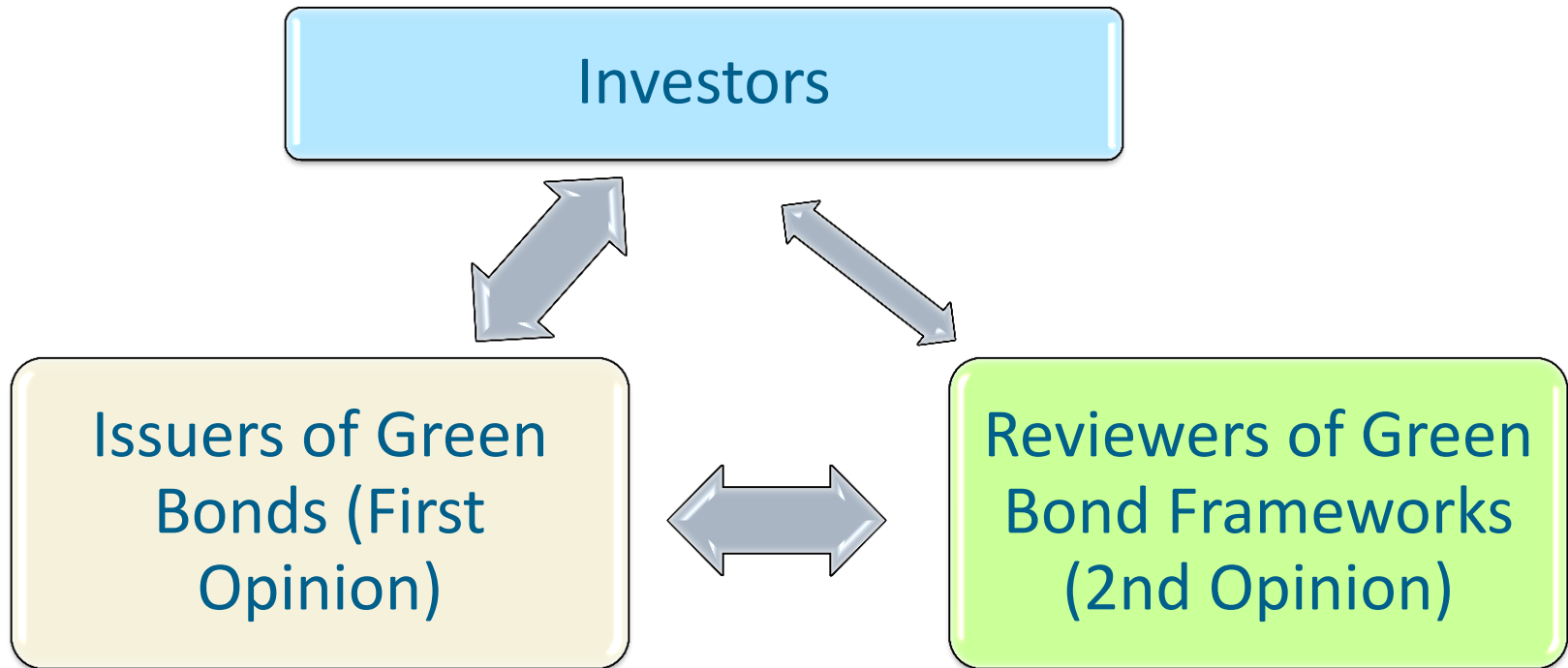


Source CBI

## 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



June 2016

## KBN GREEN BOND FRAMEWORK

The purpose of this document is to describe KBN's Green Bond Framework built on KBN's overall environmental strategy. KBN is a member of ICMA's Green Bond Principles<sup>1</sup> (GBP) and is also aiming to comply with the "Harmonized Framework for Impact Reporting" developed by 11 Multilateral Development Banks in December 2015<sup>2</sup>.

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

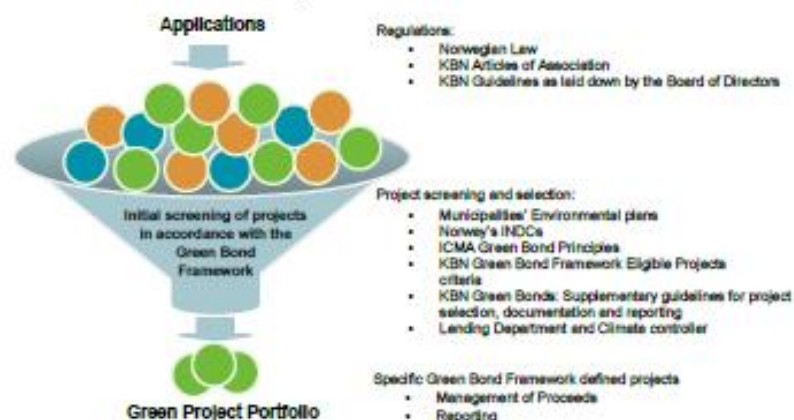
Please refer to "KBN Green Bonds: Supplementary guidelines for project selection, documentation and reporting"<sup>3</sup> for detailed criteria and requirements of the Eligible Project categories.

- **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 both 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/c):** projects including sustainable redevelopment 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/c):** 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 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



## 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 lending for Eligible Projects, according to section 3 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

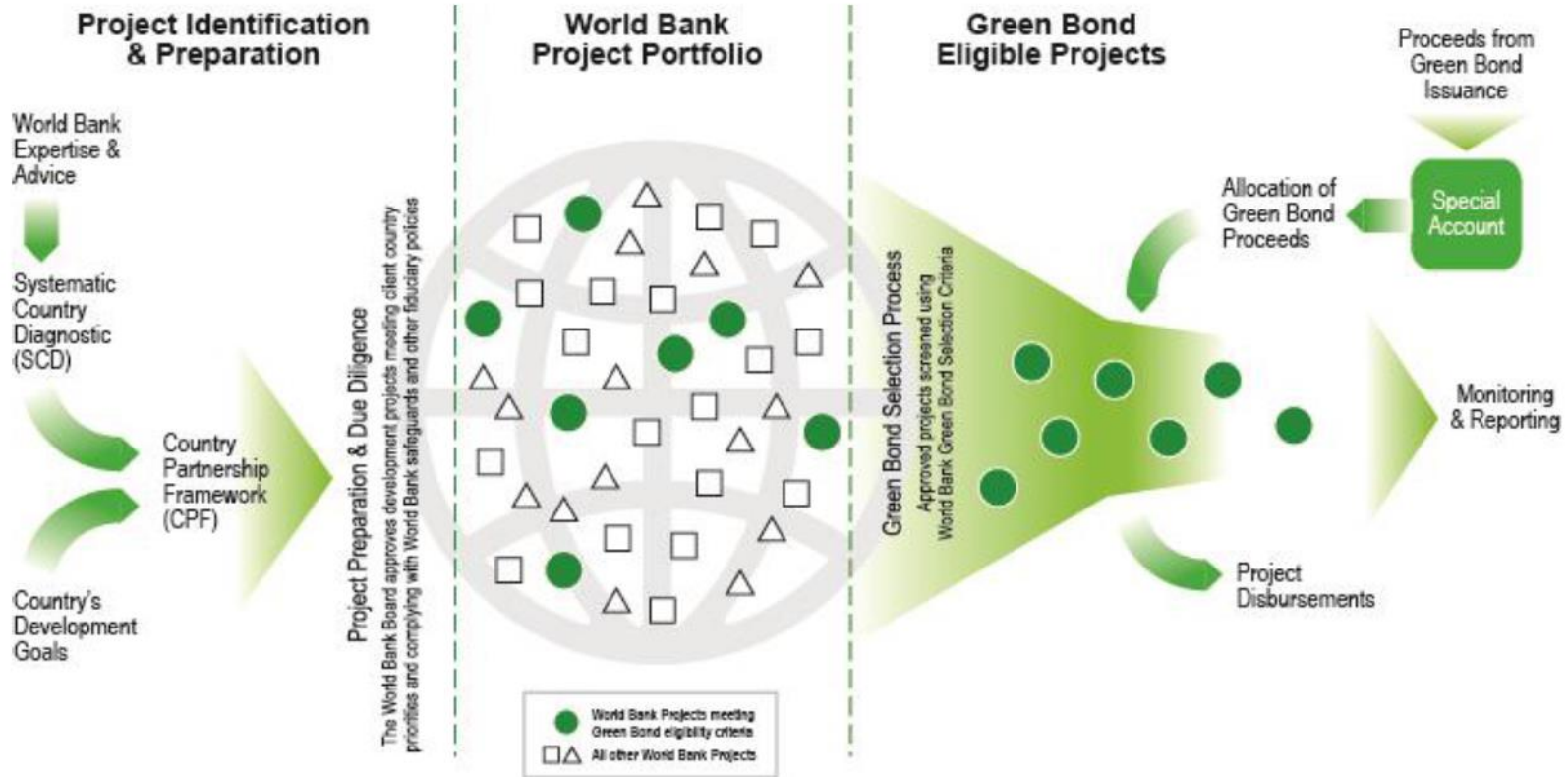
To enable investors to follow the development and provide insight into prioritized areas KBN will provide an annual SRI report linked to the annual financial results report. The SRI report will include a section on the progress of the Green Bond program. KBN will also keep the dedicated Green Bond webpages 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 2015).

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.

<sup>1</sup> <http://www.icmagroup.org/Regulatory-Policy-and-Market-Practices/green-bonds/green-bond-principles/>

<sup>2</sup> <http://treasury.worldbank.org/cmd/pdf/InformationonImpactReporting.pdf>

<sup>3</sup> <http://www.kommunalbanken.no/greencriteria>



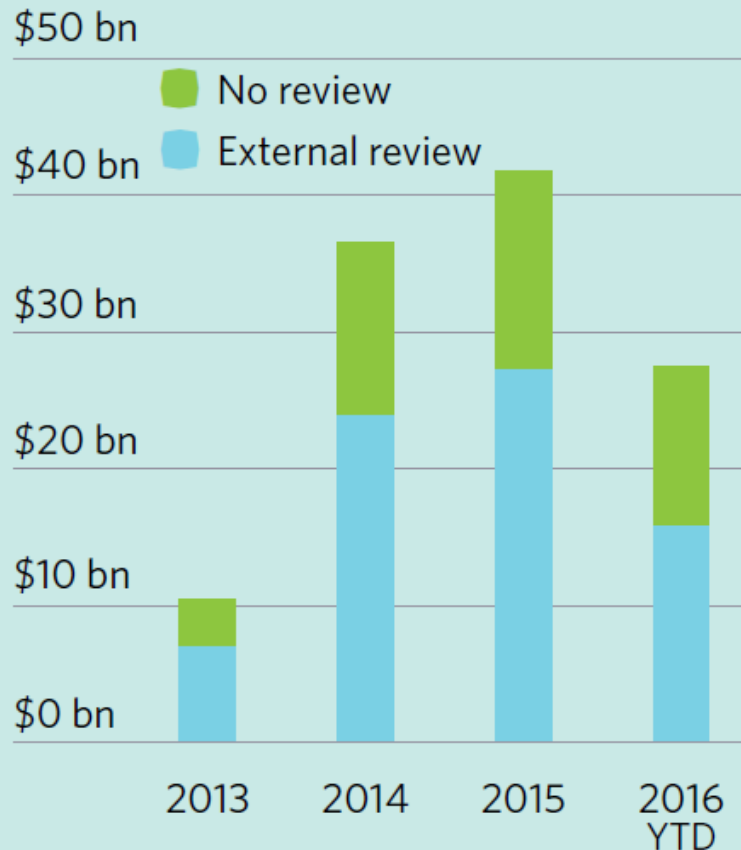
Source: World Bank Group

# 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.)?

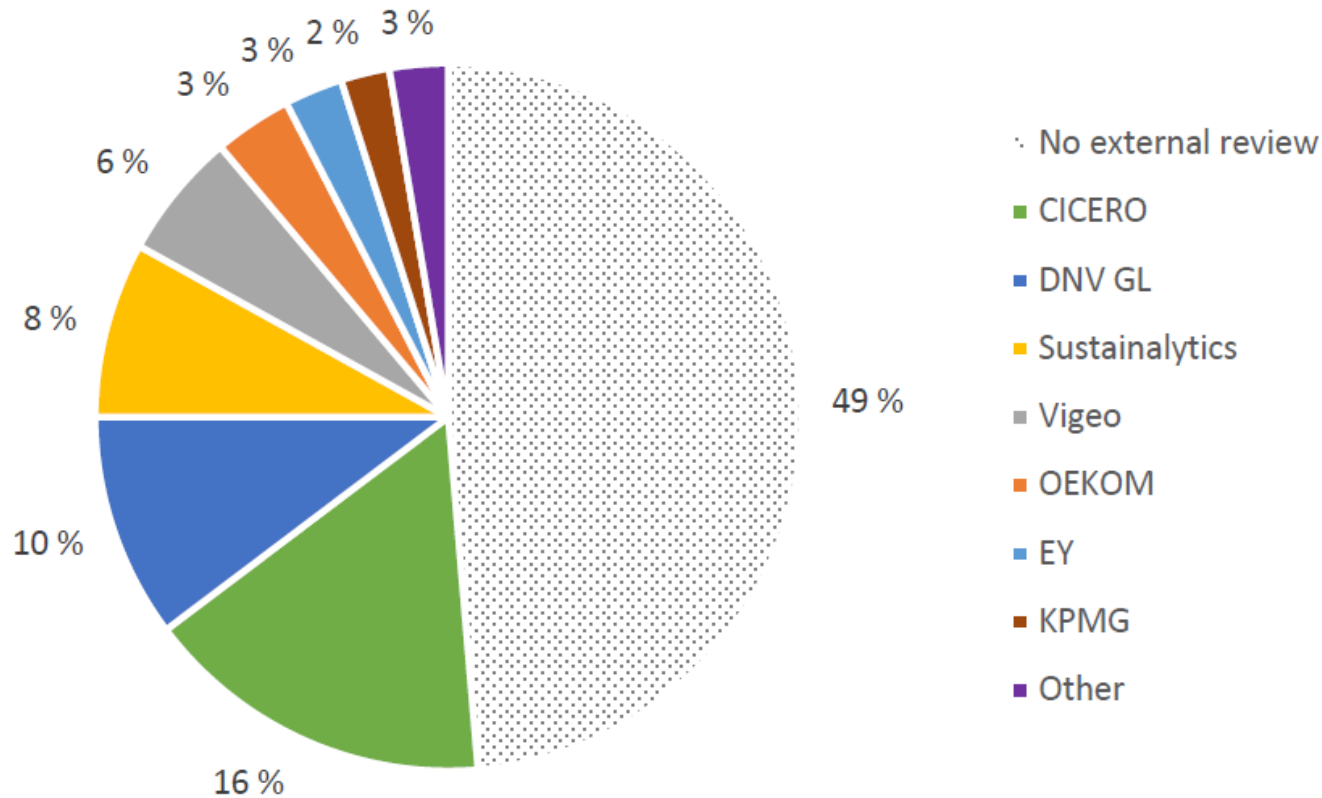
# Review of Green Bonds

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



[www.climatebonds.net](http://www.climatebonds.net)

# Review, Verification, Certification, Rating



- **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?

Dark green	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.
Medium green	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.
Light green	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.
Brown	Projects that are in opposition to the long-term vision of a low carbon and climate-resilient future.



# Typical questions CICERO asks

- What are the issuer's climate and environmental policies (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?

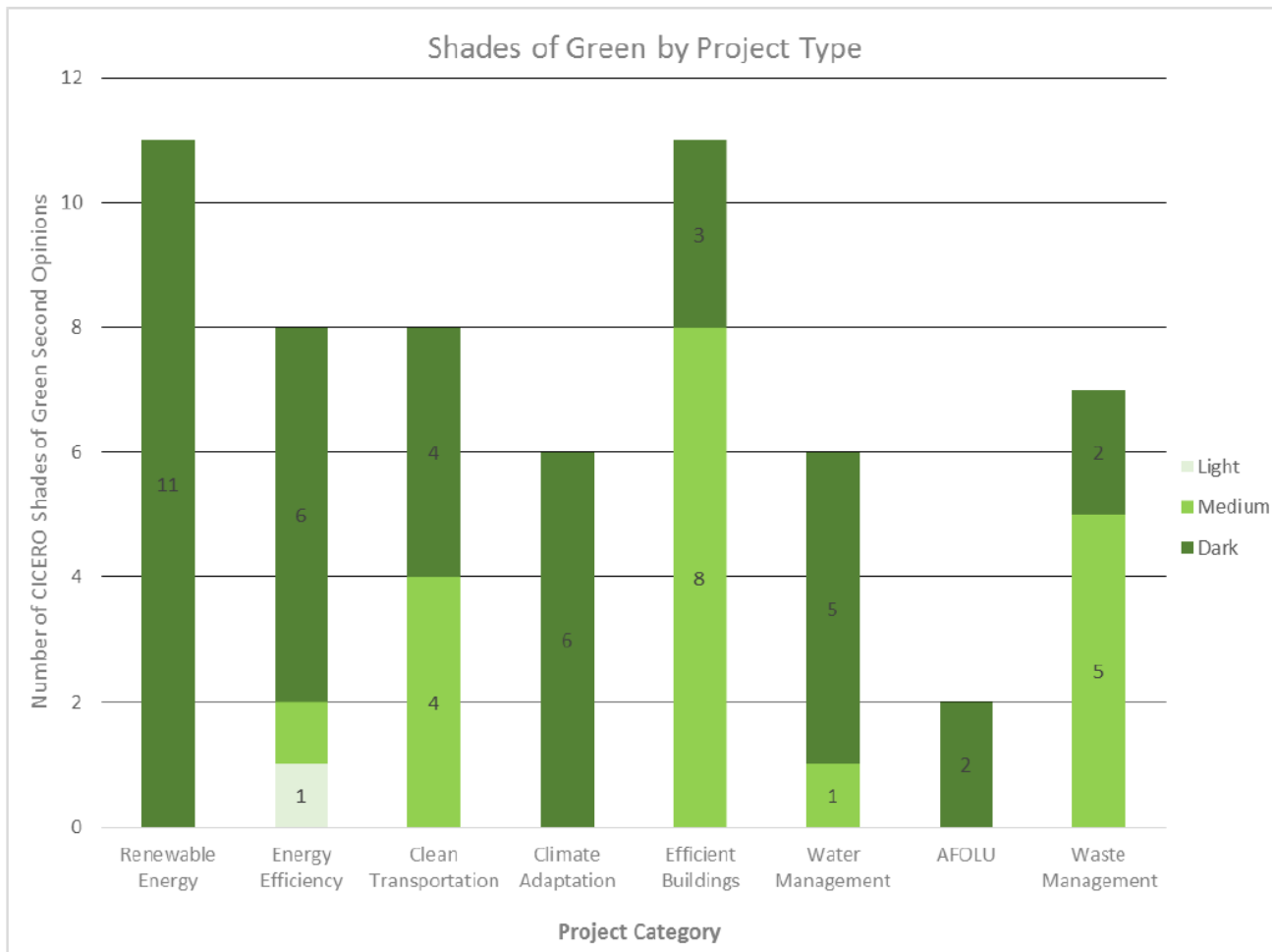
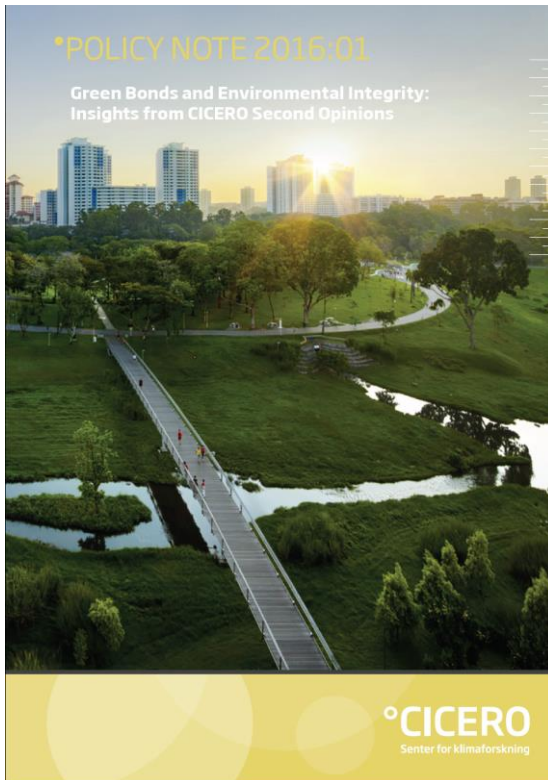


Figure 4: Number of CICERO second opinions by Shade of Green for each project type

# 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?*

**[www.cicero.oslo.no/greenbonds](http://www.cicero.oslo.no/greenbonds)**

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