Second Opinions – what, why, when & how?

CICERO’s approach and methodology for Second Opinions – practical experiences in the case of Modern Land

Beijing, March 2nd 2017
Knut H. Alfsen, Senior Researcher, CICERO
Outline

- I, me, mine – who am I and what is CICERO?
- CICERO/ENSO’s second opinions – what are they?
- The future – what to expect?
We have a problem!
Knut H. Alfsen

• Education:
  – PhD theoretical physics
  – 25 years as economist
• Former:
  – Research Director, Statistics Norway
  – Director, CICERO
  – Research Director, Institute for Energy
  – Head Research Director, CICERO
• Current:
  – Chief Advisor’s Group, CCICED
  – Senior Researcher, CICERO
Independent non-profit climate change research center

- Approximately 70 people
- Located in Oslo, Norway
- Trans-disciplinary climate research:
  - Climate system
  - Climate economics & finance
  - Climate policy
  - Climate solutions
CICERO’s motivation for ”doing climate finance”

Creating a bridge from science to finance through:

1. Research
2. Platform for Dialogue: CICERO Climate Finance Center
3. Market actions: Green Bonds
   Second Opinions

How can investors better secure the value of their portfolios against climate change risk?
Key Messages from Climate Risks report

- Physical impacts observed in all regions today with abrupt consequences
- Likely to continue in next 10-20 years, regardless of the scenario
- 2°C is not the most likely scenario
Climate finance research

Some examples:

- Leveraging private capital
- Investor motivations
- Soil remediation finance
- Disinvestment in fossil fuels
- ...
There was a broad range of use of proceeds in 2016

- **Energy**: 38%
- **Transport**: 16%
- **Building & Industry**: 18%
- **Water**: 14%
- **Waste Management**: 6%
- **Agriculture and Forestry**: 2%
- **Adaptation**: 6%

**Green bond issuance by region**

- **African**
- **Europe**
- **North America**
- **Supranationals**
- **Asia**
- **Latin America**
- **Oceania**

USDbn issued

Source: CBI
Green Bonds: What is Green – Who Decides?

Voluntary Principles
Recommends external review

Funds & Indices

Standards

Second Opinions

Stock Exchanges
Require independent second opinions

°CICERO
Climate Finance
Expert Network on Second Opinions (ENSO)
CICERO/ENSO have provided Second Opinions to almost 60 issuers since 2007

Key words: Low cost and flexibility while preserving integrity

CICERO Second Opinions on Green Bonds

28 Second Opinions with shades of green

- 36% dark
- 64% medium
Environmental Finance: Cicero is biggest second opinion provider in 2016

<table>
<thead>
<tr>
<th>Second Opinion Provider</th>
<th>Total Value of issuances for second opinions provided over 2016 ($billions)</th>
<th>Number of issuances in 2016</th>
<th>Value of new second opinions provided in 2016 ($billions)</th>
<th>Number of new issuers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cicero</td>
<td>14.106</td>
<td>56</td>
<td>2.762</td>
<td>10</td>
</tr>
<tr>
<td>Sustainalytics</td>
<td>11.234</td>
<td>21</td>
<td>10.728</td>
<td>19</td>
</tr>
<tr>
<td>Vigeo-Eiris</td>
<td>7.430</td>
<td>14</td>
<td>3.391</td>
<td>8</td>
</tr>
<tr>
<td>Oekom</td>
<td>6.301</td>
<td>10</td>
<td>1.850</td>
<td>3</td>
</tr>
<tr>
<td>DNV</td>
<td>0.640</td>
<td>4</td>
<td>0.592</td>
<td>3</td>
</tr>
</tbody>
</table>
The role of Second Opinions

Green Bond Framework
1. Use of proceeds (definitions)
2. Selection process (governance)
3. Management of proceeds
4. Reporting
Green Bond Framework

Four sections:

1. Use of Proceeds
2. Process for Project Evaluation and Selection
3. Management of Proceeds
4. Reporting & verification

Supporting documents
Standard structure of a second opinion report (~10 pages)

- Summary and recommendations (a concise overview for investors)
- Introduction and background (aim and approach of the second opinion)
- Disclaimer (CICERO is not liable for specific project validation)
- List of documents and brief description of the green bond framework
- Assessment of framework in terms of
  - Strengths
  - Weaknesses
  - Pitfalls (areas where issuer should be aware of potential challenges)
- References

©CICERO
‘Second Opinion’ on Modern Land’s Green Bond Framework

Based on the overall assessment of the project types that will be financed by the green bond and governance and transparency considerations, Modern Land’s Green Bond Framework gets a Medium Green shading. We recommend that Modern Land (China) seek the highest building certification ratings possible to further support climate-friendly buildings.

<table>
<thead>
<tr>
<th>Eligible project types</th>
<th>Specific requirements</th>
<th>Likelihood of Meeting Objective</th>
</tr>
</thead>
</table>
| Energy efficient commercial and residential buildings | • New construction and renovation of existing buildings meeting one of two following standards:  
  - Chinese Green Building Label (minimum 2-Star for Green Design Building Label or Green Building Operation Label)  
  - LEED (minimum “Gold”),  
  - Or any other equivalent green building label, that is an equivalent of the standard as above  
  • New construction must additionally have energy saving / performance data evidenced through 3rd party energy reports, or equivalent sources and provide at least:  
    - For new construction of buildings, 15% energy performance improvement or greater  
    - For renovation of existing buildings: 30% energy performance improvement, depending on location and other justifiable building benefits | Medium – Dark Green. Those certifications include aspects important for energy efficiency improvement and greenhouse gas mitigation, e.g. carbon emissions calculation. Modern Land (China), as the pacesetter of energy efficiency buildings in China, has already established internal procedures for optimizing the energy systems, with carbon emissions as one of the major considerations in investment decision making. However, the highest possible ratings are not always sought by Modern Land (China). |
| Research and development on energy efficiency design and technologies for housing and construction | Medium Green. Research and development on energy efficiency design and technologies will indirectly facilitate the use of such technologies in the building and facilitate energy efficiency improvement and GHG mitigation. These project types are limited to 10% of the bond financing. |
CICERO’s 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
<table>
<thead>
<tr>
<th>Color</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dark green</td>
<td>Implementing the long-term solutions</td>
</tr>
<tr>
<td>Medium green</td>
<td>On the way to the long-term solutions</td>
</tr>
<tr>
<td>Light green</td>
<td>Short-term benefits, but not long-term solutions</td>
</tr>
</tbody>
</table>

CICERO’s Shades of Green
The Future: Emerging Best Practice

• Improved internal dialogue between finance and environmental experts
• Increased focus on supply chains and life cycle analysis
• Impact reporting – also beyond emission reductions

Looking forward: further harmonization or regionalization of second opinions and standards?
The future: Disclosure recommendations

**Governance**
The organization's governance around climate-related risks and opportunities

**Strategy**
The actual and potential impacts of climate-related risks and opportunities on the organization’s businesses, strategy, and financial planning

**Risk Management**
The processes used by the organization to identify, assess, and manage climate-related risks

**Metrics and Targets**
The metrics and targets used to assess and manage relevant climate-related risks and opportunities
For Discussion: 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.)?
Thank you for your attention!

Knut H. Alfsen  
www.cicero.oslo.no/greenbonds