

‘Second Opinion’  
on  
SKB’s Green Bond Framework

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## Contents

<b>Summary .....</b>	<b>3</b>
<b>1. Introduction and Background .....</b>	<b>3</b>
<b>Expressing concerns with ‘shades of green’ .....</b>	<b>4</b>
<b>2. Brief Description of SKB’s Green Bond Framework and Rules and Procedures for Climate-Related Activities.....</b>	<b>5</b>
<b>3. Assessment of SKB’s Green Bond framework and environmental policies.....</b>	<b>7</b>
<b>Use of proceeds: Eligible projects under the Green Bond Framework .....</b>	<b>7</b>
<b>Strengths.....</b>	<b>9</b>
Use and Management of Proceeds .....	9
Process for Project evaluation and Selection .....	9
Transparency, monitoring, reporting and verification .....	9
<b>Weaknesses .....</b>	<b>10</b>
<b>Pitfalls .....</b>	<b>10</b>
Impacts beyond the project boundary .....	10
Rebound effects .....	10
<b>Appendix: About CICERO .....</b>	<b>11</b>

## Summary

Overall, SKB's Green Bond Framework provides a clear and sound framework for climate-friendly investments. The framework lists eligible categories of projects and assets, basically certified as Miljöbyggnad "Silver" or equivalent as a minimum, that are supportive of the objective of promoting a transition to low-carbon and climate-resilient growth and is supported by a strong reporting and governance structure.

We note that Miljöbyggnad "Silver" and the other criteria used for selecting eligible projects are not representing best available solutions. For instance, Miljöbyggnad has a top classification of "Gold".

On the other hand, SKB shows a clear ambition to improve the environmental and climate friendliness of their portfolio of buildings that over sufficient time will lead to acceptable standards as seen from an environmental point of view. SKB has ambitious quantitative targets for energy efficiency and use of electricity for the year 2019. All electricity should come from renewable sources. SKB also has the ambition to produce a passive house in the near future. No quantitative targets beyond 2019 are set.

SKB takes responsible actions both within environmental and social areas. For example, SKB jointly discuss environmental matters with other real estate companies in the development of new housing areas. SKB is also part of the Skåneinitiativet that aims at reducing energy consumption by 20 percent over a 10-year period.

CICERO is encouraged by the level of details in SKB green bond reporting and finds the reporting to be transparent and comprehensive and will provide investors a solid information platform. SKB will provide an annual report to investors including a list of all Eligible Projects and Assets that have been financed with Green Bonds, a description of each project's adherence to the Applicable Criteria, and a comprehensive list of energy related impact indicators. The SKB's auditor of the annual report, or a similar third party appointed by SKB with the relevant expertise and experience, will review and report whether the Green Bond proceeds have been allocated according to the criteria stated in the Green Bond Framework. Their conclusions will be provided in a signed statement on SKB's website.

Based on the overall assessment of the project types that will be financed, as well as governance, reporting and transparency considerations, SKB's Green Bond Framework gets a Medium Green shading despite strong governance and reporting procedures at SKB. A Dark Green shading, reflecting the long term vision for the building sector, would require both ambitions and actions towards achieving passive house standards. CICERO recognizes that this is near impossible with the existing building portfolio managed by SKB and is encouraged to see SKB strive for essential steps towards the long term solution.

## 1. Introduction and Background

As an independent, not-for-profit, research institute, CICERO (Center for International Climate and Environmental Research - Oslo) provides Second Opinions on institutions' framework and guidance for assessing and selecting eligible projects for green bond investments, and assesses the framework's robustness in meeting the institutions' environmental objectives.

CICERO is independent of the entity issuing the bond, its directors, senior management and advisers, and is remunerated in a way that prevents any conflicts of interests arising as a result of the fee structure.

CICERO has established the global Expert Network on Second Opinions (ENSO), a network of independent non-profit research institutions on climate change and other environmental issues, to broaden the technical expertise and regional experience for Second Opinions. CICERO works confidentially with other members in the network to enhance the links to climate and environmental science, building upon the CICERO model for Second Opinions. In addition to CICERO, ENSO members currently include Basque Center for Climate Change (BC3), International Institute for Sustainable Development (IISD), Stockholm Environment Institute (SEI), and Tsinghua University's Institute of Energy, Environment and Economy. A more detailed description of CICERO can be found at the end of this report.

The CICERO-led ENSO provides second opinions on institutions' framework and guidance for assessing and selecting eligible projects for green bond investments, and assesses the framework's robustness in meeting the institutions' environmental objectives. The second opinion is based on documentation of rules and frameworks provided by the institution themselves (the client) and information gathered during meetings, teleconferences and email correspondence with the client. ENSO encourages the client to make this Second Opinion publically available. If any part of the Second Opinion is quoted, the full report must be made available.

This Second Opinion is based on the green bond framework presented to CICERO by the issuer. Any amendments or updates to the framework require that CICERO undertake a new assessment.

CICERO's Second Opinions are normally restricted to an evaluation of the mechanisms or framework for selecting eligible projects at a general level. CICERO does not validate or certify the climate effects of single projects, and thus, has no conflict of interest in regard to single projects. CICERO is neither responsible for how the framework or mechanisms are implemented and followed up by the institutions, nor the outcome of investments in eligible projects.

CICERO takes a long-term view on activities that support a low-carbon climate resilient society. In some cases, activities or technologies that reduce near-term emissions result in net emissions or prolonged use of high-emitting infrastructure in the long-run. CICERO strives to avoid locking-in of emissions through careful infrastructure investments, and moving towards low- or zero-emitting infrastructure in the long run. Proceeds from green bonds may be used for financing, including refinancing, new or existing green projects as defined under the mechanisms or framework. CICERO assesses in this Second Opinion the likeliness that the issuer's categories of projects will meet expectations for a low carbon and climate resilient future.

### **Expressing concerns with 'shades of green'**

CICERO's Second Opinions are graded dark green, medium green and light green, reflecting the climate and environmental ambitions of the bonds, the robustness of the governance structure and the reporting procedures of the Green Bond Framework. The project types that will be financed by the green bond primarily define the overall grading. However, governance and transparency considerations also factored in, as they can give an indication whether the institution that issues the green bond will be able to fulfil the climate and environmental ambitions of the investment

framework. This covers topics such as environmental competencies in selection of projects to be financed by the green bond, veto power of environmental experts, auditing of use of proceeds, reporting, etc.

This Second Opinion will allocate a 'shade of green' to the green bond framework of SKB:

- Dark green for projects and solutions that are realizations today of the long-term vision of a low carbon and climate resilient future. Typically, this will entail zero emission solutions and governance structures that integrate environmental concerns into all activities.
- Medium green for projects and solutions that represent steps towards the long-term vision, but are not quite there yet.
- Light green for projects and solutions that are environmentally friendly but do not by themselves represent or is part of the long-term vision (e.g. energy efficiency in fossil based processes).

## **2. Brief Description of SKB's Green Bond Framework and Rules and Procedures for Climate-Related Activities**

This section is based on the Green Bond framework from SKB and received supporting documentation as shown in Table 1 below.

Stockholms Kooperative Bostadsförening ("SKB") is a cooperative membership-owned housing association established in 1916 that builds, manages and rents residential properties to its members. Owing 7,865 apartments and having 87,000 members, SKB is the largest private housing association in Stockholm. The majority of the properties are located in the city of Stockholm and approximately half of them in the city centre. SKB also owns property in six other municipalities around Stockholm. The association has no political affiliation and is open to everyone. Members of the association are private individuals.

SKB can be described as an "eternal property manager"; apartments cannot be bought or sold. When an apartment becomes available, it is rented to the member who has been on the waiting list the longest. SKB therefore have a diversified portfolio of buildings and apartments. Since SKB takes care of both the construction and maintenance of its properties, the organization is able to work on long-term sustainability, improving both existing buildings and new constructions. This creates a solid platform to integrate sustainability throughout the asset life cycle.

SKB utilizes a five-year environmental plan that defines environmental goals and ambitions. In the latest plan, for the period 2015-2019, the following areas have been deemed key areas: sustainable energy use, sustainable water use, sound indoor environment, resource and environmentally efficient waste treatment, environmentally sound chemical use and environmentally sound and efficient transports. When it comes to energy use, SKB has the following short and long term targets:

- Annual energy use for heating should be no more than 141 kWh/m<sup>2</sup> BOA by 2016 and should be reduced to less than 135 kWh/m<sup>2</sup> BOA by 2019. The target for 2016 is likely to be met.
- Use of electricity per year should be below 23 kWh/m<sup>2</sup> BOA by 2016 and below 22 kWh/m<sup>2</sup> BOA in 2019. The target for 2019 is already met.

- Annual total energy use in new buildings should be below 55 kWh per m<sup>2</sup> A<sub>temp</sub>. This target is already fulfilled.
- All electricity should be from hydro, solar, wind or wave power.
- The ambition is further to produce a passive house in the near future.

In addition, there are stringent quantitative targets on indoor environment, waste handling, own transport, etc.

SKB takes responsible actions both within environmental and social areas. For example, SKB jointly discuss environmental matters with other real estate companies in the development of new housing areas. SKB is also part of the Skåneinitiativet that aims at reducing energy consumption by 20 percent over a 10-year period. Above this, SKB also gives various consultation responses to, for example, governmental agencies in environmental matters.

Eligible project for green bond funding are categorized as follows by SKB:

1. **Certified properties:** Development, acquisition or completed residential and commercial properties with the following environmental certifications: a) Miljöbyggnad Silver (or better) or, b) Svanen
2. **Energy efficient properties:** Development, acquisition or completed residential and commercial properties with at least 25% less total energy use per square meter and year (kWh) than required by applicable national building codes and regulations (Boverkets byggregler, BBR)
3. **Energy efficiency investments:** Energy efficiency projects in existing residential and commercial properties leading to a reduced total energy use per square meter and year (kWh) of at least 25%.
4. **Renewable energy production:** Installation of renewable wind and solar power, either as stand-alone installations or in the property portfolio.

Table 1 below lists the documents that formed the basis for this Second Opinion:

**Table 1: Documents Reviewed**

Doc. No.	Document Name	Description
1	SKB Green Bond Framework October 28 <sup>th</sup> , 2016	A description of the Green Bond Framework
2	SKB långsiktiga affärsplan 2015-2019	Business plan 2015-2019
3	SKB affärsplan 2016	Business plan 2016
4	SKBs hållbarhetsplan	Sustainability plan 2015-2019
5	SKB Miljöplan 2015-2019	Environmental plan 2015-2019

6	SKB Miljöplan 2015-2019, delmål og aktiviteter 2016	Environmental plan 2015-2019, interim targets and activities 2016
7	Ansvar tillsammans	Responsible together. Article from the Annual report 2015 pages 33-37
8	Sustainable development	Web page: <a href="https://www.skb.org/om-oss/verksamheten/miljo/">https://www.skb.org/om-oss/verksamheten/miljo/</a>
9	Miljöprogram. Nya Lillsjönäs, Bromma, Stockholm	An example of environmental requests from SKB to acting entrepreneur.
10	Miljöprogram för nybyggnadsprojekt. Kv Basaren, Kungsholmen, Stockholm	An example of environmental requests from SKB to acting entrepreneur.

### 3. Assessment of SKB's Green Bond framework and environmental policies

Overall, SKB's green bond framework provides a sound framework for climate-friendly investments. The framework and procedures for SKB's green bond investments are assessed and their strengths and weaknesses are discussed in this section. The strengths of an investment framework with respect to environmental impact are areas where it clearly supports low-carbon projects, whereas the weaknesses are typically areas that are unclear or too general. Pitfalls are also raised in this section to note areas where issuers should be aware of potential macro-level impacts of investment projects.

#### Use of proceeds: Eligible projects under the Green Bond Framework

At the basic level, the selection of eligible project categories is the primary mechanism to ensure that projects deliver environmental benefits. Through selection of project categories with clear environmental benefits, green bonds aim to provide certainty to investors that their investments deliver environmental returns as well as financial returns. The Green Bonds Principles (GBP)<sup>1</sup>, state that the "overall environmental profile" of a project should be assessed and that the selection process should be "well defined".

Eligible projects include projects that target mitigation of climate change, including investments in low-carbon and clean technologies, such as energy efficiency and renewable energy programs.

SKB's Green Bonds can be used to finance Eligible Projects in accordance with the Green Bonds Framework. The Green Bond proceeds will finance existing properties, major renovation projects, and new projects and acquisitions with characteristics shown in Table 2.

**Table 2 Eligible assets categories**

Category	Eligible project types	Green Shading and
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<sup>1</sup>see: <http://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/green-bonds/green-bond-principles>

		<b>some concerns</b>
1. <b>Certified properties:</b> Development, acquisition or completed residential and commercial properties with the following environmental certifications	<ul style="list-style-type: none"> <li>• Miljöbyggnad Silver (or better) or,</li> <li>• Svanen</li> </ul>	<p><b>Medium Green</b></p> <ul style="list-style-type: none"> <li>✓ Building criteria are considered adequate but do not reflect best available technology nor the highest level of standards possible.</li> <li>✓ In addition to energy and climate issues, Miljöbyggnad and Svanen cover a broader set of issues, which is important to overall sustainable development.</li> </ul>
2. <b>Energy efficient properties:</b> Development, acquisition or completed new residential and commercial properties	<ul style="list-style-type: none"> <li>• At least 25% less total energy use per m<sup>2</sup> and year (kWh) than required by applicable national building codes and regulations (Boverkets byggregler, BBR).</li> </ul>	<b>Medium Green</b>
3. <b>Energy efficiency investments:</b> Energy efficiency projects in existing residential and commercial properties	<ul style="list-style-type: none"> <li>• Reducing total energy use per m<sup>2</sup> and year (kWh) of at least 25%. This could be a major renovation with energy savings in existing real estate assets or a sum of projects that are being undertaken at the same time which have a combined positive impact on the energy performance as stated above. Examples are energy-efficient lighting, facade insulation and heat recovery installations</li> </ul>	<b>Medium Green</b>
4. <b>Renewable energy production:</b> Either as stand-alone installations or in the property portfolio	<ul style="list-style-type: none"> <li>• Wind or solar power</li> </ul>	<b>Dark Green</b>

We note that Miljöbyggnad “Silver” is adequate but do not reflect best available technology nor the highest level of standards possible (“Gold” is best). On the other hand, SKB shows a clear ambition to improve the environmental and climate friendliness of their buildings that over time will lead to acceptable standards as seen from an environmental point of view.

## Strengths

### Use and Management of Proceeds

According to the SKB's Green Bond Framework an amount equal to the net proceeds of the issue of the Green Bond will be credited to a separate account in SKB's name at a financial institute and will only support SKB's financing of Eligible Projects and Assets or to repay a Green Bond. SKB will keep a record of all transactions on the account. If the separate account has a positive balance any unallocated funds may be invested according to SKB's financial policy. That is, liquidity may be held on saving accounts and/or invested in securities of approved counterparties such as the Swedish government, municipalities/county councils and well known banks. Investments can only be done in local currency (Swedish krona). Investments in shares are not permitted. If a Project or Asset no longer qualifies according to the Green Terms the funds will be reallocated to projects and assets that meet the Green Terms. The ambition is to fully allocate the Green Bond proceeds within one year from the time of issuance. CICERO finds this to be fully in accordance with the Green Bond Principles.

### Process for Project evaluation and Selection

According to the SKB's Green Bond Framework eligible projects and assets are evaluated and selected by a committee consisting of the Finance department and Technical/Environmental department. A decision to allocate net proceeds will require a consensus decision by the committee as well as compliance with the Green Terms. The selection will be documented and a record will be filed. A list of all Eligible Projects and Assets will be kept by SKB as a tool to determine the Green Bond borrowing capacity, which is defined as the value of Eligible Projects and Assets less any existing debt encumbrance. CICERO is satisfied that this will ensure the environmental consistency of the selected projects.

### Transparency, monitoring, reporting and verification

The Green Bond framework outlines a procedure for providing a detailed investor report. To enable investors to follow the development and provide insight to prioritized areas, SKB will publish an annual disclosure on the use of proceeds and adherence to the Green Terms as a part of its annual financial reporting. The first such reporting is expected to take place in April 2017 and will be available in Swedish on SKB's website. The reporting will contain a list of all Eligible Projects and Assets that have been financed with Green Bonds and a description of each project's adherence to the Applicable Criteria according to the category that the project belongs to. Furthermore, the total proportion of net proceeds allocated to new projects and assets as well as refinancing will be disclosed.

The reporting will contain a list of:

- 1. Certification:** The environmental building certification will be disclosed for certified properties.
- 2. Energy in new properties:** The energy use will be disclosed by absolute consumption (kWh per year), intensity (kWh per m<sup>2</sup> and year) and a relative comparison (percent) to levels set out by applicable national building codes and regulations (Boverkets byggregler, BBR) for certified properties and energy efficient properties. An estimation will be used for ongoing projects, until actual data becomes available.

- 3. Energy in renovated properties:** The energy use will be disclosed by absolute consumption (kWh per year), intensity (kWh per m<sup>2</sup> and year) and the energy use reduction relative to historical performance (percent) for energy efficiency investments in existing properties. An estimation will be used for ongoing projects, until actual data becomes available.
- 4. Renewable energy production:** The total renewable energy production (kWh per year) will be disclosed as well as (a) the share (percent) of a property's total energy use provided by an on-site installation and (b) the share (percent) of the total energy use in SKB by a stand-alone installation (for instance a wind turbine).

**Third party annual review:** SKB's auditor of the annual report, or a similar third party appointed by SKB with the relevant expertise and experience, will be appointed to investigate and report whether the Green Bond proceeds have been allocated according to the Green Terms stated in the Green Bond Framework. Their conclusions will be provided in a signed statement, which will be published on SKB's website.

Impact reporting is an important tool to enhance transparency in regard to the projects economic risk from climate change and the environmental effectiveness of the projects. Thus, it is important to verify that projects perform as intended with respect to mitigation of greenhouse gas emissions and enhancing climate change resilience, as well as avoiding significant unwanted external effects. Overall, CICERO is encouraged by the level of details in the reporting and finds the reporting to be transparent and comprehensive and will provide investors a solid information platform.

## Weaknesses

We find no obvious weaknesses in SKB's Green Bond framework.

## Pitfalls

Energy efficiency improvements in buildings are important building blocks for reaching the 2-degree or lower climate change goal. Voluntary environmental certifications such as Miljöbyggnad or equivalent are required by issuer to qualify for green bond financing. These certifications provide some level of measurement of the environmental footprint of a building, including energy efficiency measures. The Green Bond framework would however benefit from a clearer requirement that best environmental technology is used in eligible green bond building projects. In a low carbon 2050 perspective the energy performance of buildings is expected to be improved with passive house technology becoming mainstream and the energy performance of existing buildings greatly improved through refurbishments.

## Impacts beyond the project boundary

Due to the complexity of how socio-economic activities impact the climate, a specific project is likely to have interactions with the broader community beyond the project borders. These interactions may or may not be climate-friendly, and thus need to be considered with regards to the net impact of climate-related investments.

## Rebound effects

Efficiency improvements may lead to rebound effects. When the cost of an activity is reduced there will be incentives to do more of the same activity. From the project categories in Table 2 an example is improved energy efficiency, which in part may lead to more energy use. SKB should be aware of such effects and possibly avoid Green Bond funding of projects where the risk of rebound effects is particularly high.

## Appendix: About CICERO

CICERO (Center for International Climate and Environmental Research – Oslo) is Norway’s foremost institute for interdisciplinary climate Research. We deliver new insight that help solve the climate challenge and strengthen international climate cooperation.

We help to solve the climate problem and strengthen international climate cooperation by predicting and responding to society’s climate challenges through research and dissemination of a high international standard. Our researchers collaborate with top researchers from around the world, and publish their work in recognized international journals, reports, books and periodicals.

CICERO has garnered particular attention for its research on the effects of manmade emissions on the climate, society’s response to climate change, and the formulation of international agreements. We have played an active role in the IPCC since 1995. In recent years we have also developed considerable expertise in climate financing and is currently a lead provider of Second Opinions on Green Bonds.

CICERO has a national role in promoting knowledge about climate change and is internationally recognised as a driving force for innovative climate communication. We are in constant dialogue about the responses to climate change with public and private decision makers, government administration and civil society.

See: <http://www.cicero.uio.no/en/posts/news/cicero-grades-climate-friendly-bonds-with-shades-of-green>