

Second Opinion on Klövern's Green Bond Framework

21. March 2018

Summary

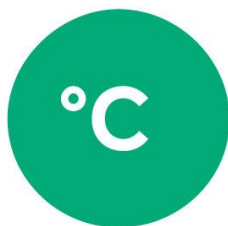
Klövern's Green Bond Framework provides a clear and sound framework for climate-friendly investments, and is supported by a strong governance structure.

Eligible project categories are green buildings projects that are important for low-carbon and climate change resilient growth. Green bonds can be used to finance both new projects as well as refinance existing eligible projects. The green bond framework explicitly excludes fossil fuel energy generation and the issuer has informed us that no buildings with fossil fuel heating will be financed under this framework.

In a low carbon 2050 perspective the energy performance of buildings is expected to be improved, with zero emission houses becoming mainstream and the energy performance of existing buildings greatly improved through refurbishments. Voluntary environmental certifications cover many important sustainability issues. However, of the building certifications included in the framework, only Miljöbyggnad has specific energy efficiency requirements for each level of certification. The inclusion of an energy efficiency requirement for buildings certified under LEED and BREEAM is a strength. Overall, Klöver is taking good steps on energy efficiency and certifications. CICERO is also encouraged by the inclusion of detailed impact reporting in the green bond framework.

The issuer is systematically working to improve the sustainability of its building and reduce energy usage; however, lacks long-term energy and climate related goals. The lack of long-term targets makes it difficult to determine how the issuer is positioning itself in relation to the necessary transition to a low carbon and climate resilient future.

CICERO finds Klöver's Green Bond Framework to be in accordance with the Green Bond Principles. Based on the overall assessment of the assets and project types that will be financed, governance and transparency considerations, Klöver's Green Bond Framework is rated Medium Green.



°CICERO
Medium Green

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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. The Second Opinion is based on documentation of rules and frameworks provided by the institutions themselves (the client) and information gathered during meetings, teleconferences and e-mail correspondence with the client.

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. 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.

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.

This note provides a Second Opinion of Klöver Green Bonds Framework and policies for considering the environmental impacts of their projects. The aim is to assess Klöver's Green Bonds Framework as to its ability to support Klöver's stated objective of promoting the transition to low-carbon and climate resilient growth.

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 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 Second Opinions are graded dark green, medium green or light green, reflecting the climate and environmental ambitions of the bonds and the robustness of the governance structure of the Green Bond Framework. The grading is based on a broad qualitative assessment of each project type, according to what extent it contributes to building a low-carbon and climate resilient society. The shading methodology also aims at providing transparency to investors when comparing green bond frameworks exposure to climate risks. A dark green project is less exposed to climate risks than a lighter green investment.

This Second Opinion will allocate a ‘shade of green’ to the green bond framework of Klövern:

- **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).
- **Brown** for projects that are irrelevant or in opposition to the long-term vision of a low carbon and climate resilient future.

The project types that will be financed by the green bond primarily define the overall grading. However, governance and transparency considerations are also important because they 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. Investments in all shades of green projects are necessary in order to successfully implement the ambition of the Paris agreement. The overall shading reflects an ambition of having the majority of the project types well represented in the future portfolio, unless otherwise expressed by the issuer.

2 Brief Description of Klöver's Green Bond Framework and rules and procedures for climate-related activities

Klöver is a Swedish real estate company that owns and manages over 400 properties. Klöver's portfolio consists primarily of office spaces, but includes other commercial real estate, health care and education facilities. In addition, the company is developing residential real estate.

Klöver's overarching sustainability goal is to provide environmentally adapted premises, developed and managed with the minimum possible use of resources and the least possible environmental impact. To support this aim, Klöver has set sustainability targets and taken steps to integrate these into the organizations. Klöver is a signatory of the UN Global Compact and is certified according to the Swedish standard Svensk Miljöbas, the national environmental standard adapted for smaller businesses and organizations. As per the requirements of this standard, an environmental audit is carried out each year by an external body.

Definition:

Proceeds raised under Klöver's green bond framework will go towards green building projects. Project categories include certified green buildings, major renovations leading to green certification and energy efficiency improvements in existing buildings. The framework includes both new projects and refinancing

Eligible assets can be owned by Klöver, its subsidiaries or joint ventures (JVs). The issuer has confirmed that its sustainability related policies are applicable for all Klöver subsidiaries, and that these entities follow Klöver's internal procedures, including those in the environmental management system. The governance structure of JVs depends on ownership stake. If Klöver has above 50 percent ownership, the JV will adhere to Klöver's policies, procedures and systems. However, if the ownership stake is less than 50 percent, the JVs will follow their own policies. The issuer has stated that the only current JV of significant size is the construction of the ÅBY Mässan, where the ownership stake is 70 percent.

Nuclear and fossil fuel energy generation are explicitly excluded from the green bond framework.

The issuer has informed us that risk assessment is an integrated part of all projects and that all eligible projects must adhere to country specific environmental regulations and Klöver's commitments under the UN global compact.

Selection:

A dedicated group manages the selection of Eligible Green Assets. This group includes members of the Sustainability and Finance department. The Head of the Sustainability team has a veto in all decisions connected to the selection of the Eligible Green Assets.

The Finance Department will maintain a list of Eligible Green Assets. The list of Eligible Green Assets is monitored by the Finance Department during the term of the Green Bond to ensure that the proceeds are sufficiently allocated to Eligible Green Assets on a regular basis.

Management of proceeds:

Net proceeds from Klöver's Green Bonds will be transferred to a designated account. All Green Bonds issued by Klöver will be managed on a portfolio level. This means that a Green Bond will not be linked directly to Eligible Green Assets. Klöver will ensure there are sufficient Eligible Green Assets in the portfolio. To this end, the issuer has informed us that they have already identified a pool of existing, ongoing and approved projects that meet the criteria in the green bond framework.

Assets can, whenever needed, be removed from or added to the Eligible Green Assets portfolio. The issuer has informed us that they will analyze use of proceeds on a quarterly basis, in addition to the annual external verification. Klöver will document all transfers to and from the designated account in order to ensure transparent tracking and control.

The Finance Department is responsible for ensuring that the net proceeds are financing Eligible Green Assets in accordance with the green bond framework.

Unallocated proceeds will be placed in Klöver's bank account or in the short-term money market.

Transparency and Accountability:

The issuer has informed us that they will report on use of proceeds and environmental impacts on an annual basis. The report will include a list of Eligible Green Assets and cover the following areas:

Use of Proceeds

- Total amount of Green Bonds issued
- Total amount of unallocated proceeds
- Share of proceeds used for financing/re-financing as well as share of proceeds used for category I (new construction and major renovations) and category II (existing buildings)
- Examples of the relevant Eligible Green Assets

Impact Reporting (to the extent data is available and not of a sensitive nature)

- Type of certification and degree of certification for buildings
- Energy performance (kWh/m²) for buildings
- Estimated annual greenhouse gas emissions reduced or avoided (tCO₂e) for buildings
- Distribution capacity (megawatt) and storage capacity (megawatt) for onsite arrangements such as solar energy

The report will be publically available on Klöver's website. The issuer has informed us that green bond reporting will be subject to external review.

The table below lists the documents that formed the basis for this Second Opinion:

Document Number	Document Name	Description
1	KLÖVERN GREEN BOND FRAMEWORK	Green bond framework dated 21 March, 2018
2	UPPFÖRANDEKOD OCH HÅLLBARHETSPOLICY	Code of conduct and sustainability policy
3	HÅLLBARHETSREDOVISNING 2016	Sustainability Report for 2016
4	https://www.klovern.se/sv/om-klovern/hallbarhet/	Sustainability pages on Klöveren's website
5	https://www.klovern.se/sv/om-klovern/detta-ar-klovern/bolagsstyrning/	Corporate Governance pages on Klöveren's website
6	https://www.klovern.se/sv/om-klovern/projekt/pagaende-projekt/	Overview of ongoing projects on Klöveren's website
7	https://www.klovern.se/sv/om-klovern/fastigheter/	Real Estate Assets on Klöveren's website
8	FASTIGHETSFÖRTECKNING 2017-12-31	Building list 2017-12-31
9	Samtliga fastigheter total energi per m2 180221	List of 2017 energy usage by building
10	HÅLLBARHETSREDOVISNING 17	2017 Sustainability report (forthcoming)

Table 1. Documents reviewed

3 Assessment of Klöverns Green Bond framework and environmental policies

The framework and procedures for Klöverns 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.

Overall shading

Based on the overall assessment of the assets and project types that will be financed, governance and transparency considerations, Klöverns Green Bond Framework is rated Medium Green. In a low carbon 2050 perspective the energy performance of buildings is expected to be improved, with zero emissions technologies becoming mainstream and the energy performance of existing buildings greatly improved through refurbishments. The issuer is taking steps towards this long-term vision; however, more stringent criteria would have been required for a darker shading.

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) state that the “overall environmental profile” of a project should be assessed and that the selection process should be “well defined”.

Category	Eligible project types	Green Shading and some concerns
New construction and major renovations	<ul style="list-style-type: none"> • New construction that has received or has the objective to receive, after completed construction, at least: <ul style="list-style-type: none"> ○ Miljöbyggnad Silver <i>Or</i> ○ LEED Gold, BREEAM SE Very Good, or BREEAM Very Good, with an energy performance at least 25 % 	<p>Medium green</p> <ul style="list-style-type: none"> ✓ The building criteria are good, but do not represent the highest standard levels. ✓ In addition to climate issues, Miljöbyggnad, LEED and BREEAM cover a broader set of issues, which is important

	<p>below the current building regulation (Swedish BBR code)</p> <ul style="list-style-type: none"> • All major renovations with the objective to receive a certification after the completed renovation corresponding to the categories mentioned above. 	<p>to overall sustainable development. Miljöbyggnad also has specific energy efficiency requirements for each certification level.</p> <ul style="list-style-type: none"> ✓ Through the inclusion of energy efficiency criteria for LEED and BREEAM the issuer is taking important steps towards low carbon and carbon neutral buildings ✓ The issuer has informed us that they expect buildings to achieve certification within 24 months of being added to the pool of eligible assets
Existing buildings	<ul style="list-style-type: none"> • Existing buildings having certification obtained during the construction period (see certifications mentioned in category I) • Improvements conducted for existing buildings resulting in energy performance under 100 kWh/m² or reducing energy use by at least 25 %. Improvements may include some of the following: <ul style="list-style-type: none"> ○ Onsite renewables energy including solar panels that generate electricity or geo - thermal energy installations that can be used for both heating and cooling ○ Energy retrofits such as installing heat pumps, converting to LED lights or improvements in the ventilation system ○ Activities enabling clean transportation such as installing charging stations for electric cars ○ Improved waste management by offering recycling opportunities ○ Terrestrial and aquatic biodiversity conservation such 	<p>Medium green</p> <ul style="list-style-type: none"> ✓ The building criteria are good, but do not represent the highest standard levels. ✓ The issuer is taking important steps towards low carbon and carbon neutral buildings. ✓ This category also includes some dark green projects, including onsite renewables and charging stations for electric cars

as beehives on the roofs in a city environment that benefits pollination in the urban environment

Table 2. Eligible project categories

Strengths

Overall, Klöver's green bond framework provides a detailed and sound framework for climate-friendly investments. CICERO finds the framework to be in accordance with the 2017 Green Bond Principles¹.

Klöver's green bond framework lists eligible categories of assets that are supportive of the objective of promoting a transition to low-carbon and climate-resilient growth. The green bond framework explicitly excludes fossil fuel energy generation and the issuer has informed us that no buildings with fossil fuel heating will be financed under this framework.

Klöver has strong sustainability governance. In 2017, the Sustainable Brand Index B2B ranked Klöver as Sweden's second most sustainable real estate company and number one among the listed real estate companies².

The issuer considers broader sustainability issues in building projects. Green Building certifications are an integral part of Klöver's sustainability strategy. The total area that is certified by a green building standard is almost 200 000 m², 7 percent of Klöver's total lettable area. Voluntary building environmental certifications cover many important sustainability issues, but fall short of guaranteeing zero emissions buildings. Of the building certifications included in the framework, only Miljöbyggnad has specific energy efficiency requirements for each level of certification. The inclusion of an energy efficiency requirement for buildings certified under LEED and BREEAM is a strength. CICERO is also encouraged by the issuer's systematic work with energy efficiency. Klöver carried out a materiality assessment in 2014, which continued stakeholder dialogue has confirmed. Energy usage and smart energy solutions are among the most material issues. Klöver has two related energy targets, to reduce heat consumption by at least 6 percent, and electricity consumption by at least 8 percent, in the period 2016-2018. Klöver is making strides towards these goals, as of year-end 2017, heat consumption had been reduced by 5 percent and electricity consumption by 5 percent. Klöver also offers green leases to its tenants, as of 2017, 8 percent of total contract value was managed under green leases.

CICERO is encouraged by the inclusion of detailed impact reporting in the green bond framework, and that this reporting will be externally reviewed and publically available. The issuer has informed us that they will use a commonly acceptable methodology that will be made available on request.

Weaknesses

There are no obvious weaknesses in Klöver's green bond framework.

Pitfalls

In a low carbon 2050 perspective the energy performance of buildings is expected to be improved, with zero emissions technologies becoming mainstream and the energy performance of existing buildings greatly

¹ At the time of this report, the 2017 GBP were the most recent available version

² For details of the ranking see <https://www.sb-index.com/b2b-results/>

improved through refurbishments. Klövern's framework is not quite there yet, but is taking valuable steps towards this long-term vision.

The issuer has strong sustainability governance; however, lacks long-term energy and climate related goals. The Board of Directors evaluates Klövern's policies annually; they will set targets for the next period once the target achievement for 2018 is measured. The lack of long-term targets makes it difficult to determine how the issuer is positioning itself in relation to the necessary transition to a low carbon and climate resilient future.

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 energy efficiency in buildings. Klövern 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 Research is Norway's foremost institute for interdisciplinary climate research. We deliver new insight that helps solve the climate challenge and strengthen international climate cooperation. We collaborate with top researchers from around the world and publish in recognized international journals, reports, books and periodicals. CICERO has garnered particular attention for its work on the effects of manmade emissions on the climate and the formulation of international agreements and has played an active role in the UN's IPCC since 1995.

CICERO is internationally recognized as a leading provider of independent reviews of green bonds, since the market's inception in 2008. CICERO received a Green Bond Award from Climate Bonds Initiative for being the biggest second opinion provider in 2016 and from Environmental Finance for being the best external review provider (2017).

CICERO Second Opinions are graded dark green, medium green and light green to offer investors better insight in the environmental quality of green bonds. The shading, introduced in spring 2015, reflects the climate and environmental ambitions of the bonds in the light of the transition to a low-carbon society.

CICERO works with both international and domestic issuers, drawing on the global expertise of the Expert Network on Second Opinions. Led by CICERO, ENSO is comprised of trusted research institutions and reputable experts on climate change and other environmental issues, including the Basque Center for Climate Change (BC3), the Stockholm Environment Institute, the Institute of Energy, Environment and Economy at Tsinghua University and the International Institute for Sustainable Development (IISD). ENSO operates independently from the financial sector and other stakeholders to preserve the unbiased nature and high quality of second opinions.

cicero.oslo.no/greenbonds

