

‘Second Opinion’ on Humlegården’s Green Bond Framework

02 June 2017

Summary

Overall, Humlegården's Green Bond Framework provides a clear and sound framework for climate-friendly investments. The framework lists eligible categories of assets that are supportive of the objective of promoting a transition to low-carbon and climate-resilient growth and is supported by a strong governance structure.

The framework assessed stipulates a LEED "Gold", BREEAM-SE "Very Good" or a Miljöbyggnad "Silver" level for new constructions and BREEAM in-use "Very Good" for refurbishment of properties. Voluntary environmental certifications such as LEED, BREEAM, or equivalents provide some level of measurement of the environmental footprint of a building, usually including energy efficiency measures. In a low carbon 2050 perspective the energy performance of buildings is expected to be improved, with passive and plus house technologies becoming mainstream and the energy performance of existing buildings greatly improved through refurbishments. Humlegården is not quite there yet, but is taking valuable steps towards this long-term vision. Thus, new building is required to have energy intensities at least 40% below the current building standards (BBR requirements). Energy efficiency investments are required to yield 'high' energy savings with at least 30% reductions in energy use and to minimize long-term negative climate impacts. The long-term targets of Humlegården are that all properties should be classified as minimum BREEAM In-use "Very good" at the latest. In addition, the total energy for heating each year should be at least 60% below the national average level as measured the year before.

Humlegården is a member of Sweden Green Building Council (SGBC), an ideal organization working for green buildings and a green building sector. Humlegården subscribe to the UN Global Compacts principles.

Humlegården's green bond framework also lists renewable energy projects and projects related to environmentally friendly transport (electrical charging stations, support for bicycles) and these projects are clearly aligned with a long-term zero emission future vision. Proceeds from Humlegården's green bonds will not be used to finance any fossil fuel or nuclear power projects.

Managing of proceeds and reporting are of high standards and includes impact reporting. CICERO is very encouraged by this. Overall, Humlegården's Green Bond Framework is in accordance with the Green Bond Principles.

Based on the overall assessment of the assets and project types that will be financed by the Humlegården's Green Bond and governance and transparency considerations, Humlegården's Green Bond Framework gets a strong **Medium Green shading**. Stricter standards of long lasting assets like buildings would have been required for a darker shading.



°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.

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 because 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 and ENSO 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.

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 regarding 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 Humlegården's Green Bonds Framework and policies for considering the environmental impacts of their projects. The aim is to assess Humlegården's Green Bonds Framework as to its ability to support Humlegården's stated objective of promoting the transition to low-carbon and climate resilient growth.

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 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.

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

- 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 also factor 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.

2 Brief Description of Humlegården's Green Bond Framework and Rules and Procedures for Climate-Related Activities

Humlegården Fastigheter AB (Humlegården) is a property company within the Länsförsäkringar Alliance. They build, acquire, refine, renovate and manage office buildings in Stockholm. The company owns and manages properties with a market value of 17.8 billion SEK. In addition, Humlegården manages properties with a market value of 4.8 billion SEK on behalf of Länsförsäkringar Liv, Länsförsäkringar Sak and Länsförsäkringar AB. Humlegården is owned by 19 regional insurance companies and Länsförsäkringar Sak. Risk-taking is to be prudent and form part of the long-term management of the assets of the insurance companies. By the end of 2016, 22 properties were environmentally certified, representing approximately 75% of total market value.

Humlegården is a member of Sweden Green Building Council (SGBC), an ideal organization working for green buildings and a green building sector. Humlegården subscribe to the UN Global Compacts principles. The long-term targets of Humlegården are that all properties should be classified as minimum BREEAM In-use "Very good". Also, the total energy for heating should be at least 60% below the national average level in the year before the target year. This applies up to year 2021.

2016 was the first year Humlegården reported on sustainability issues in accordance with Global Reporting Initiative (GRI). The results of Humlegården's sustainability work will be reported in the annual reports and are available on the company's web page. Energy performance, CO₂ emissions, and use of waste materials are reported.

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

Table 1: Documents Reviewed

Document Number	Document Name	Description
1	Humlegården Fastigheter AB Green Bonds Framework. Dated May, 2017	Green Bonds Framework official version
2	Humlegården's annual and sustainability report 2016	https://humlegarden.se/om-humlegarden-fastigheter/finansiell-information/rapporter/
3	Fastighetsbranschens uppförandekod för leverantörer version 2016-04-22	Code of conduct for the building sector
4	Fortum miljööredovisning 2016	AB Fortum Värme Environmental report 2016
5	Humlegårdens-miljopolicy	The environmental policy of Humlegården

6	Humlegårdens Fastigheter AB Uppförandekod	Code of Conduct for Humlegården
7	Sammanställning miljöcertifieringar 2017	A list of Humlegården's certified buildings
8	Miljoprestanda_norrenergi_2016_slutgiltig	Composition of fuel etc. for Norrenergi's district heating 2016
9	Info till Cicero 170601.pdf	Quantified targets for new and refurbished buildings to 2021.

3 Assessment of Humlegården's Green Bond framework and environmental policies

Overall, Humlegården's green bond framework provides a detailed and sound framework for climate-friendly investments. The framework and procedures for Humlegården'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.

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". Table 2 lists the eligible projects under Humlegården's green bond framework.

Table 2 Eligible assets categories

Category	Eligible project types	Green Shading and some concerns
1. Development, acquisition, major renovation or otherwise completed residential and commercial properties	Buildings that have, or will, receive (i) a design stage certification, (ii) a post-construction certification or (iii) an in-use certification in any of the following building certification schemes at the defined threshold level or better: <ul style="list-style-type: none"> • a) Miljöbyggnad "Silver", • b) BREEAM-SE "Very Good", • c) BREEAM in-use "Very Good" or • d) LEED "Gold" and have an energy use intensity at least 40% below current building standards (BBR requirements).	Medium Green <ul style="list-style-type: none"> ✓ Building criteria are good, but not the best. ✓ In addition to climate issues, BREEAM and LEED cover a broader set of issues, which is important to overall sustainable development. These certification levels alone, however, do not ensure improved energy efficiency, passive or plus housing. Additional energy requirements are therefore important.
2. Energy efficiency investments	Investments in the existing portfolio of properties that target a substantial lower overall energy use and an improved environmental footprint. This could include, for instance, the installation of geothermal heating/cooling, district heating/cooling based on close to 100% renewable energy sources, energy-	Medium to Dark Green <ul style="list-style-type: none"> ✓ Quantified energy efficiency requirements in the framework is good. ✓ Be aware of possible rebound effects.

	<p>efficient lighting, IT- technology (monitoring, efficiency management and remote operation), energy efficient windows or an upgraded ventilation system. Only directly associated expenditure (e.g. material, installation and labour) is eligible for financing. Humlegården will ascertain the following:</p> <ul style="list-style-type: none"> • High estimated energy savings in the targeted area. • Minimize long-term negative climate impact and potential rebound effects. • Minimal negative climate impact from the technology used. • All energy efficiency projects should at least reduce energy intensity by 30%. 	
3. Renewable energy	Investments in solar power or geothermal power, either on an existing building or as a stand-alone investment.	Dark Green
4. Clean transportation	Investments in supportive infrastructure for clean transportation, for example charging stations for electric vehicles, bicycling garages and other investments that support and emphasize the use of clean transportation solutions.	Dark Green

Proceeds from Humlegårdens's green bonds will mainly cover new investments and only occasionally cover refinancing. They will not be used to finance any fossil fuel or nuclear power projects.

Strengths

Use of Proceeds

The Green Bond framework includes a comprehensive list of project and asset categories that are important for low-carbon and climate change resilient growth. CICERO takes a long-term view on climate change, and thus recommends excluding projects that support prolonged use of fossil fuel-based infrastructure that will contribute to greenhouse gas emissions in the long run. Humlegården's exclusion of fossil fuel projects is a clear strength in this perspective. Also, the criteria used for classification of buildings is a strength, although the criteria are not the strictest in use. Voluntary environmental certifications such as Miljöbyggnad, LEED, and BREEAM provide some level of measurement of the environmental footprint of a building, usually including energy efficiency measures. Humlegården's quantitative targets for both new constructions and refurbishment of older buildings are important in this regard and a clear strength. In a low carbon 2050 perspective the energy performance of buildings is expected to be improved, with passive or plus house technologies becoming mainstream and the energy performance of existing buildings greatly improved through refurbishments. Humlegården is not quite there yet, but is through its focus on energy efficiency and annual improvements taking important steps towards this long-term vision.

Process for Project evaluation and Selection

The Sustainability Committee, an existing steering group within the organization consisting of the CEO, the CFO, the Head of Sustainability, the Head of Real Estate and the Head of Operation and Technology, will select eligible projects and assets. A decision to allocate net proceeds will require a consensus decision by the committee, whereby the Head of Sustainability will effectively hold a veto. The decision will be documented by the committee and a record will be kept. To ensure legitimacy in this process, a list of all eligible projects and assets that meet the eligibility criteria will be kept by Humlegården. The list will be used as a tool to determine if there is a current or expected capacity to issue a Green Bond. The Finance Department will be responsible for the allocation of the net proceeds from the issuance of Green Bonds to the relevant and approved eligible projects and assets.

CICERO finds that Humlegården has a good structure for approval of projects and assets in place. However, a dark green shading would require stricter considerations of life cycle concerns and supply chain impacts.

Management of Proceeds

An amount equal to the net proceeds of the issue of the Green Bonds will be credited to an earmarked account (the “Green Account”) that will support Humlegården’s financing of eligible assets. The proceeds in the Green Account is kept separate from other bank accounts to ensure and enable separate monitoring and tracking of the Green Bond proceeds. A transfer from the Green Account is allowed in an amount corresponding to the financing or refinancing of eligible projects and assets that have met the eligibility criteria, or to repay a Green Bond. If a project or asset no longer qualifies as eligible, the funds will be reallocated to projects and assets that meet the eligibility criteria.

The Green Account ensures strong monitoring and tracking of the use of the proceeds. The Finance Department will keep a record of the purpose of any transfers on the Green Account. The allocation of net proceeds may not exceed the market value or investment expenditure, as applicable, of an Eligible Project/Asset less any external debt encumbering/financing such Project/Assets.

If the Green Account has a positive balance, the unallocated funds may be invested in short term interest bearing securities pending investment in Eligible Assets. Such allowed investments are Swedish treasury bills and highly rated short-term bank notes (A+ rating from Standard & Poor’s or an equivalent rating from Moody’s or Fitch).

CICERO finds the management of proceeds to be good and in accordance with the Green Bond Principles.

Reporting

The Green Bond framework outlines a procedure for providing a detailed investor report integrated into its annual financial reporting. The report will contain a list of all eligible projects and assets that have been financed with Green Bonds, a summary of Humlegården’s activities in the past year as pertains to Green Bonds as well as information regarding each eligible project and asset’s adherence to the relevant criteria.

For certified properties that have met the eligibility criteria and to which net proceeds have been allocated, the aggregate market value (or investment cost, as applicable) and the sum of other external debt financing such assets/projects will be reported. For the categories Energy Efficiency Investments, Renewable Energy and Clean Transportation, the total allocation of green net proceeds to each category will be disclosed. The reporting will also disclose the sum of outstanding Green Bonds and the sum of the Green Account balance (including any short-term investments). The data shall be from the last of December in the previous year. The report will also contain a select set of asset level indicators and measurements when available, as follows:

Impact metrics for Certified Properties:

- Environmental certification.
- Energy consumption¹ disclosed by absolute consumption (kWh) and intensity (kWh/m²).
- Calculated carbon footprint disclosed by absolute emissions (tonnes) and intensity (tonnes/m²). The greenhouse gas emissions are monitored annually by Humlegården in accordance with the Greenhouse Gas Protocol.
- Purchased renewable energy disclosed by absolute consumption (kWh), intensity (kWh/m²) and percent renewable energy of the total purchased energy.
- The share (%) of Green Fingerprint users, or equivalent technology based solution to monitor and improve the energy use via efficient IT-solutions, (based on total let area) implemented with tenants.

Impact metrics Energy Efficiency Investments: Each yearly report will include at least 2 examples of energy efficiency investments that have been financed with green net proceeds.

Impact metrics for Renewable Energy:

- For an installation of a renewable energy in a real estate asset, the percent of the assets total energy use supplied by the installation, the kWh/year and the estimated yearly greenhouse gas savings will be disclosed.
- For an investment in a stand-alone renewable energy project the kWh/year and the estimated yearly CO₂ savings will be disclosed.

Impact metrics for Clean Transportation:

- The number of charging stations for electric vehicles installed will be disclosed.
- The number of bicycles that a bicycle garage can accommodate will be disclosed.

If an impact metric is not yet available, for instance the energy use of a Certified Property that is under construction but not yet operational, Humlegården will strive to provide estimates of future performance levels once the project/asset is operational.

The auditor of Humlegården, or a similar third party appointed by Humlegården with the relevant expertise and experience, will investigate and report whether the Green Bond net proceeds have been allocated to the projects and assets that Humlegården has communicated in the Reporting and that the Certified Properties comply with the environmental certification criteria. The conclusions will be provided in a signed statement, which will be published either stand-alone or as a part of Humlegården's annual financial and sustainability report.

Humlegården will provide a dedicated webpage where investors can find information regarding Humlegården's Green Bonds.

¹ The energy consumption is measured in assets where Humlegården is responsible for the purchase of energy. In buildings where the tenant is responsible for the energy supply (approximately 55% of all tenants), Humlegården has no comprehensive picture of the actual energy consumption; hence, it is not accounted for and will not be disclosed.

CICERO welcome the transparency and comprehensiveness of the reporting and especially welcome the impact reporting of the green investments.

Weaknesses

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

Pitfalls

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. Humlegården should be aware of such effects and possibly avoid Green Bond funding of projects where the risk of rebound effects is particularly high. A program to work with tenants to help reduce energy use will counter any rebound effects.

Appendix: About CICERO and ENSO

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 inter-national 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 inter-national 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-car-bon 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

