

‘Second Opinion’ on Uppsalahem’s Green Bond framework

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Summary

Overall, Uppsalahem's Green Bond framework and environmental policies provide a progressive, clear and sound framework for climate-friendly investments. The green bond framework lists eligible projects 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 in Uppsalahem. The main component of Uppsalahem's Green Bond framework is energy efficiency projects in the buildings sector. Energy efficiency improvements in buildings are important building blocks towards reaching the 2°C goal. Strategies and plans supporting low carbon and climate resilient growth in particular, and sustainable development in general, are well developed by Uppsalahem both at a general and a more detailed level. Procedures for monitoring and measurement of activities are well documented. Uppsalahem's policies support regular and transparent updates to investors and the public.

Based on an overall assessment of the project types that will be financed by the green bond, and governance and transparency considerations, Uppsalahem's Green Bond Framework gets a medium green shading. To reach a Dark Green level, Uppsalahem would have to take off-site impacts of their projects more into account and also increase the classification level of their projects to the equivalent of Miljöbyggnad Gold (up from Silver).

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 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 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. CICERO 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 for the outcome of investments in eligible projects.

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

Climate change will have a significant impact on economic development, both from the perspectives of sustainable future development pathways and from the perspective of adapting to changing circumstances. The recently released Intergovernmental Panel on Climate Change report (IPCC, 2013) on the physical science of climate change highlighted the seriousness of human-induced climate effects. The report can be viewed as an immediate call to action on the challenge of reducing greenhouse gas (GHG) emissions. The 195 countries that have ratified the United Nations Framework Convention on Climate Change (UNFCCC) have agreed to reduce GHG emissions to limit global temperature increase to below 2°C above pre-industrial level. Reaching this target requires shifting development pathways towards low- or zero-emitting economies without delay, and avoiding locking-in high-emitting capital.

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. 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 Uppsalahem:

- 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).

The grading is primarily defined by the project type that will be financed by the green bond. 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 Uppsalahem's Green Bond framework and environmental policies

Uppsalahem is a leading housing company owned by and located in the city of Uppsala close to Stockholm. Uppsala is the capital of Uppsala County and the fourth largest city in Sweden, after Stockholm, Gothenburg and Malmö. It had 207 350 inhabitants in 2014, and the two universities in the city have together approximately 40 000 students. The company owns and manages approximately 15 000 apartments of which 3 352 are student flats. In total, Uppsalahem owns about 14 per cent of the homes in the municipality.

Uppsalahem participates in the Uppsala Climate Protocol, a collaboration between the municipality of Uppsala and 29 local businesses and organizations

Uppsalahem's investment framework includes a Green Bond framework lending to Eligible Projects that target mitigation of climate change, including investments in low-carbon and clean technologies, such as energy efficiency and renewable energy programs. Uppsalahem's Green Bonds can be used to finance new projects and to refinance Eligible Projects. The ambition is to use the majority of the Green Bond proceeds to finance new projects (finalized within one year before the time of issuance).

Eligible Projects include those listed in Table 1.

Table 1 Eligible projects

Eligible projects
<ul style="list-style-type: none">• Certified new projects of residential and commercial properties with certification from:<ul style="list-style-type: none">- Miljöbyggnad Silver or- Svanen
<ul style="list-style-type: none">• New projects of residential and commercial properties with at least 25% less energy usage than required by applicable codes and regulations (Boverkets byggregler, BBR¹). Uppsalahem verifies the energy use in each project in accordance to the Sveby methodology
<ul style="list-style-type: none">• Major renovation of residential and commercial properties leading to a reduced energy use per m² and year of at least 40%
<ul style="list-style-type: none">• Renewable energy (wind and solar power).

This second opinion is based on documents received from Uppsalahem listed in Table 2, and conversations and discussions with representatives from the company.

¹ <http://www.boverket.se/sv/lag--ratt/forfattningssamling/gallande/bbr---bfs-20116/>

Table 2 Documents and information received from Uppsalahem.

Ref. number	Document name	Content
Policies and guidelines		
1	Uppsalahem Green Bond Framework	Brief memo on the Uppsalahem Green Bond framework
2	Uppsalahem miljöpolicy	General description of Uppsalahem's environmental policy and some examples of goals and achievements.
3	Uppsalahem årsredovisning	The 2014 annual report from Uppsalahem
4	Uppsalahem energistrategi	A Power Point presentation of the energy strategy of Uppsalahem
5	Uppsala Kommun Miljö och klimatprogram 2014-2023	The environmental and climate strategy of the municipality of Uppsala
Manuals and standards		
6	Kriteriedokument Svanen flerbostadshus	Criteria document for the 'Svanen' label for multi-household buildings (Nordic Swan Scheme or Nordic ecolabelling)
7	Manual miljöbyggnad nyproduktion	Manual 2.2 for new buildings from Sweden Green Building Council (Miljöbyggnad)
8	Sveby standard - Standardisera och verifiera energiprestanda i byggnader	A standard for construction and verification of energy savings in buildings (www.sveby.org)
Certificates Uppsalahem		
9	Uppsalahem ISO 14001 certifikat	ISO 14001:2004 certificate from 2014
10	Svanen certifikat Frodeparken	Svanen certificate for Frodeparken project
11	Miljöbyggnad silver Holmfrid	Miljöbyggnad silver certificate for Holmfrid project
12	Miljöbyggnad silver Linnéhuset	Miljöbyggnad silver certificate for Linnéhuset project
Projects Uppsalahem		
13	Projekt Klimaträtt i Frodeparken	Description of Klimaträtt (Climate right) in Frodeparken, see also www.klimatratt.se
14	Vindkraftverk	Description of wind power project "Nötåsen"
15	Solceller Frodeparken	Description of sun cells in Frodeparken
16	Rapport Holmfrid lågenergihus	Report from the Holmfrid low energy housing
17	Miljöbyggnad silver Holmfrid och Linnéhuset	Report on Miljöbyggnad silver in Holmfrid and Linnéhuset
18	Svanen/solceller Frodeparken	Descriptions of the use of sun cells in Frodeparken and the Svanen certificate.
19	Frodeparken	Brief description of Frodeparken, https://www.upsalahem.se/sok-ledigt/vara-omraden/frodeparken/
20	Linnéhuset	Brief description of Linnéhuset, https://www.upsalahem.se/sok-ledigt/vara-omraden/linnehuset/
21	Holmfrid	Brief description of Holmfrid, https://www.upsalahem.se/sok-ledigt/vara-omraden/holmfrid/
Rewards/prices to Uppsalahem		
22	Skanskas Gröna framtidspris 2014	Skanska's Green Future price 2014
23	Svensk solenergis hedersomnämning 2014	Swedish sun energy's honourary remarks 2014
Miscellaneous		
24	Information om Uppsalahems hållbarhetsarbete	Information on Uppsalahem's work on sustainability
25	Partiell LCA för Frodeparken	A partial life cycle analysis (LCA) of Frodeparken
26	Checklista miljökrav vid upphandling	A check list for procurements

The environmental policy of Uppsalahem, as stated in document 2, emphasizes long-term sustainable development and steadily reduced environmental impacts of their housing projects. Furthermore, environmental considerations are to be included in all aspects of the company's operations, and it is clearly stated that requirements in laws and regulations are to be considered as minimum standards for Uppsalahem.

The environmental and climate program for Uppsala municipality (document 5) includes targets like:

- 50% reduction in greenhouse gas (GHG) emissions from 1990 to 2020. GHG equals the so-called Kyoto gases.
- In 2050 emissions should be down to ½ tonnes GHG measured per capita and year.
- In 2020 the electricity production should be wholly renewable or climate compensated.
- 30 MW solar in 2020, 100 MW in 2030.
- Fossil free transport by 2020.
- Other machines etc. to be fossil free by 2030.

These targets are both forward looking, ambitious and clear. Uppsalahem as a company wholly owned by the Uppsala municipality must clearly contribute positively and pro-actively to the fulfillment of these targets. Further targets related to energy use (heat and electricity), use of water and energy efficiency is contained in the energy strategy (document 4). Uppsalahem verifies the energy use in each project in accordance to the Sveby methodology (document 8).

The annual report for 2014 (document 3) states that Uppsalahem's CO₂ emissions have been reduced by 33% since 2004, thus contributing to the overall target for Uppsala municipality. Other key numbers related to the environmental impact of Uppsalahem are also reported.

The rest of the documents are certificates, rewards and descriptions of various projects, including a description of a wind mill park (document 14) where Uppsalahem owns a 2MW wind mill, mainly producing electricity for own consumption. Document 26 is a checklist for environmental impacts from sub-contractors, a valuable extension securing climate and environmental integrity through the supply chain.

Selection of Eligible projects

The Treasury department together with the Environment and Energy department and the Housing Development department selects eligible projects for Uppsalahem's green bond.

Transparency

To enable investors to follow the development and provide insight to prioritised areas, Uppsalahem will provide an annual investor letter to investors including 1) a list of projects financed, 2) a selection of project examples, and 3) a summary of Uppsalahem's Green Bond development. The investor letter will be made publically available on Uppsalahem's web page.

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

A brief note on environmental certification systems for buildings

Several voluntary environmental certification systems provide some level of measurement of the environmental footprint of a building, including energy efficiency measures. One of the most widely used certification system is Leadership in Energy and Environmental Design (LEED), although many other country-specific systems exist, see LEED (2009a, b, c) for a description.

Another similar system originating in the United Kingdom is the BREEAM ratings. BREEAM SE (BREEAM, 2013) is the Swedish adaptation of this system. BREEAM also includes a comprehensive consideration of environmental and energy issues associated with buildings, including a category on land use and site selection. A rating is issued based on points earned, similar to LEED, with minimum requirements for some environmental issues.

The Miljöbyggnad certification system is specific to Sweden. The system focuses on energy use, indoor climate and material in the buildings and involves a preliminary rating, which is then followed up and verified in the finished building. This system is more detailed than LEED or BREEAM SE in some aspects such as the calculation of energy efficiency, but do not cover subjects such as management, water use, waste handling, transport and siting impacts. See Miljöbyggnad (2012a, b, c) for elaboration on this framework and K. Johansson and A. Hedin (2011) and <http://www.sgbc.se/docman/presentationer/194-ws-a1-miljobyggnad-lindakjallen/file?Itemid=157> for a comparison of the different classification schemes.

The Nordic Swan scheme ("Svanen") resembles BREEAM but is focused on the buildings themselves and has a few more obligatory criteria than BREEAM. See Skoghøy (2012) for a comparison of the two classification schemes.

Governance capacity and structure

Uppsalahem documents through its environmental policy, the annual reporting, and the ISO 14001 classification that the company has a very solid governance capacity for selecting and carrying out projects under the green bond framework.

Eligible projects under the Green Bond framework

The eligible projects listed in the Green Bonds framework are supportive of Uppsalahem's identified objective of promoting a transition to low-carbon and climate-resilient growth. However, some of the criteria could have been more ambitious, see Table 3.

Table 3 Likelihood of meeting objectives of a low carbon and climate resilient future.

Eligible project types	Likelihood of meeting objective
<ul style="list-style-type: none"> • Certified new projects of residential and commercial properties with certification from: <ul style="list-style-type: none"> - Miljöbyggnad Silver or - Svanen 	<ul style="list-style-type: none"> • Medium Green. The building criteria are good, but do not represent best available technologies (e.g. Miljöbyggnad Gold).
<ul style="list-style-type: none"> • New projects of residential and commercial properties with at least 25% less energy usage than required by applicable codes and regulations (Boverkets byggregler, BBR). Uppsalahem verifies the energy use in each project in accordance to the Sveby methodology 	<ul style="list-style-type: none"> • Medium Green. The building criteria are good, but do not represent best available technologies (e.g. Miljöbyggnad Gold). It is good that Uppsalahem verifies the energy use in each project in accordance to the Sveby methodology.
<ul style="list-style-type: none"> • Major renovation of residential and commercial properties leading to a reduced energy use per m² and year of at least 40% 	<ul style="list-style-type: none"> • Dark/Medium Green. The building criteria are good, but may not realise a standard reflecting best available technologies depending on initial state of the building.
<ul style="list-style-type: none"> • Renewable energy (wind and solar power) 	<ul style="list-style-type: none"> • Dark Green, provided suitable siting is secured.

Transparency and monitoring, reporting and verification

The reporting and validation procedures are described well in the Green Bond framework and other documents. Uppsalahem’s policies support regular and transparent updates to investors and the public. Annual reports on green bond investments, a selection of project examples, and a summary of Uppsalahem’s Green Bond development will be made public on their website.

The energy use in new buildings are verified/controlled after two years according to the Sveby protocol. In addition comes the follow-up associated with the Miljöbyggnad classification scheme. Uppsalahem also have its own procedure to follow up on renovated buildings.

Strengths

- Uppsalahem’s strategies and procedures are wide-spanning, comprehensive and reasonably ambitious with clear and quantified target for the long and shorter term.
- Uppsalahem is ISO 14001 certified.
- Uppsalahem has a comprehensive system for monitoring and assessing progress on an annual basis.
- The main component of Uppsalahem’s Green Bond framework is energy efficiency projects in the buildings sector. The buildings sector consumes the most energy globally, accounting for over 40% of primary energy consumption in most International Energy Agency (IEA) member countries (IEA/UNDP, 2011). Energy efficiency improvements in buildings are thus important building blocks towards reaching the 2°C goal. Uppsalahem applies reasonably stringent criteria for both new buildings and in rehabilitation of existing buildings.
- Uppsalahem imposes environmental standards on suppliers, thus encouraging climate and environmental integrity in its supply chain.
- Reporting and transparency is at a high level.

Weaknesses

We find no great weaknesses in Uppsalahem's Green Bonds Framework.

Pitfalls

Beyond the consideration of specific project types, it is important to evaluate the potential for macro-level impacts of climate activities.

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 environmentally friendly, and thus need to be considered with regards to the net environmental impacts of investments.

Uppsalahem relies on standards where impacts of the siting of projects are disregarded. This will require extra considerations.

Rebound effects

Another macro-level concern is the potential for rebound effects. This can occur when emission reductions result in a net increase in emitting activities. For example, energy efficiency improvements that lower energy costs, inducing more energy use and partially offsetting energy savings. This can have the end result of lower reduction in emissions than anticipated. While these effects can never be entirely avoided, it is recommended to be aware of possible rebound effects and avoid investing in projects where the risk of such effects is particularly high. We cannot see that the risk for substantial rebound effects is high in the case of Uppsalahem's Green Bond framework.

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