

Akademiska Hus

Green Bond Investor Report 2019

APRIL 2020



AKADEMISKA HUS

Green Bond Investor Report

In 2019 Akademiska Hus issued its inaugural green bond of a total volume of SEK 1 500 million. The bond was issued under the Green Bond Framework established in April 2019, a framework that received a Dark Green rating from the second opinion provider CICERO Green, a subsidiary of the climate research institute CICERO.

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The establishment of the Green Bond Framework has a clear ambition to demonstrate Akademiska Hus' sustainability agenda and to leverage on the strong and extensive portfolio of existing and planned projects and assets within the company. Green financing has enabled a platform for deepened dialogue with investors about the collective responsibility to manage the shift towards a more sustainable society.

CICERO Green stated that Akademiska Hus' Green Bond Framework provides a strong and forward-thinking approach to green financing for emission reduction and climate resilience initiatives.

In 2018 Akademiska Hus outlined ambitious targets to enable us as a company to contribute to a climate neutral society. In summary, we have set the following targets related to climate neutrality:

The target towards 2025 is to reach climate neutrality in our building operations as well as for our internal operations. In 2045 our target is to achieve climate neutral project operations. During 2019 we have taken several important steps towards fulfilment of these targets. Following steps are some of the most powerful yet implemented to accelerate our work towards a climate neutral operation:

- Implementation of a large amount of energy efficiency projects in the existing building stock.
- Proactive negotiations with energy suppliers to reduce the use and impact of fossil based fuel in the energy system.
- Climate-footprint calculations introduced throughout the building process for all new constructions.

The framework includes five categories of eligible investments. The green net proceeds have been allocated to all five

of the categories, with the category Green Buildings being the largest. The majority of the net proceeds, 60 %, have been allocated to new projects, i.e. financed within one year of completion. All data have been compiled as of 31 December 2019.

Table 1: Green Bond issuance, SEKm

ISIN	Volume	Issue date	Tenor
XS2015238269	500	2019-06-20	5 years
XS2015238855	1000	2019-06-20	5 years

Table 2: Disclosure of allocation

Category	Allocated Net proceeds	Proportion of tot. %
Clean Transportation	30,7	2
Green Buildings	1063	71
Energy Efficiency	262,2	18
Renewable Energy	41,85	3
Environmentally Sustainable Management of Living Natural Resources	100	7
Sum allocated net proceeds	1498	
Sum of green bond net proceeds	1498	
Green account balance	0	



Charging stations on campus. Photo: Ola Kjelbye



Super bike path in Umeå. Photo: Edel Puntonet

CLEAN TRANSPORTATION

Akademiska Hus has more than 35 campuses in different parts of Sweden, which plays an important role in the local communities. With high ambitions to contribute towards the shift for a fossil-free society we see supportive infrastructure for clean transportation as a part of our business and therefore this category is included in the Green Bond Framework.

CASE: Sustainable infrastructure through electric charging stations

Adding electric charging stations on campus is one way to enable a more sustainable commuting to our customers and everyone spending time at and around campus. Akademiska Hus have installed electric charging stations on most campuses and the expansion continues.

Number of electric charging stations financed: 197
Greenhouse gas savings: 275,8 tonnes.

CASE: Bicycle commuting made possible in the arctic

The super bike path is a cycle path located on the campus of Umeå University. It is straighter and wider than a traditional cycle path and the bicycle has priority over other vehicles. The investment is a part of the Swedish governmental initiative "Klimatklivet" and the ambition has been to improve the situation for the more than 4.000 people commuting with bicycle on campus every day, and at the same time provide solutions for a sustainable future.

"The goal is simply to get safer and more environmentally friendly walking and cycling routes."

**Olov Bergström,
Real Estate Developer**



A Working Lab, Gothenburg. Photo: Sören Håkanlind

GREEN BUILDINGS

Both Akademiska Hus and many of our customers have high aspirations in sustainability. Our role as a long-term property owner provides an excellent opportunity to build sustainably and forward-thinking. Our goal is always to deliver the highest possible customer value through resource efficiency and good cost management. At the same time, Akademiska Hus constantly strives to minimise environmental impact through a sustainable construction processes and carefully considered material choices. As a consequence of a new strategic decision

in 2019 all new construction projects shall meet Gold rating in the Miljöbyggnad environmental certification system. The target for major renovations remains at a Silver rating, as a minimum. A building process that meet these high ambitions in the Miljöbyggnad standards assure important qualities in a building in terms of energy, indoor environment and material choices. Akademiska Hus currently have 47 certified buildings whereof eight to date are certified at Gold level.

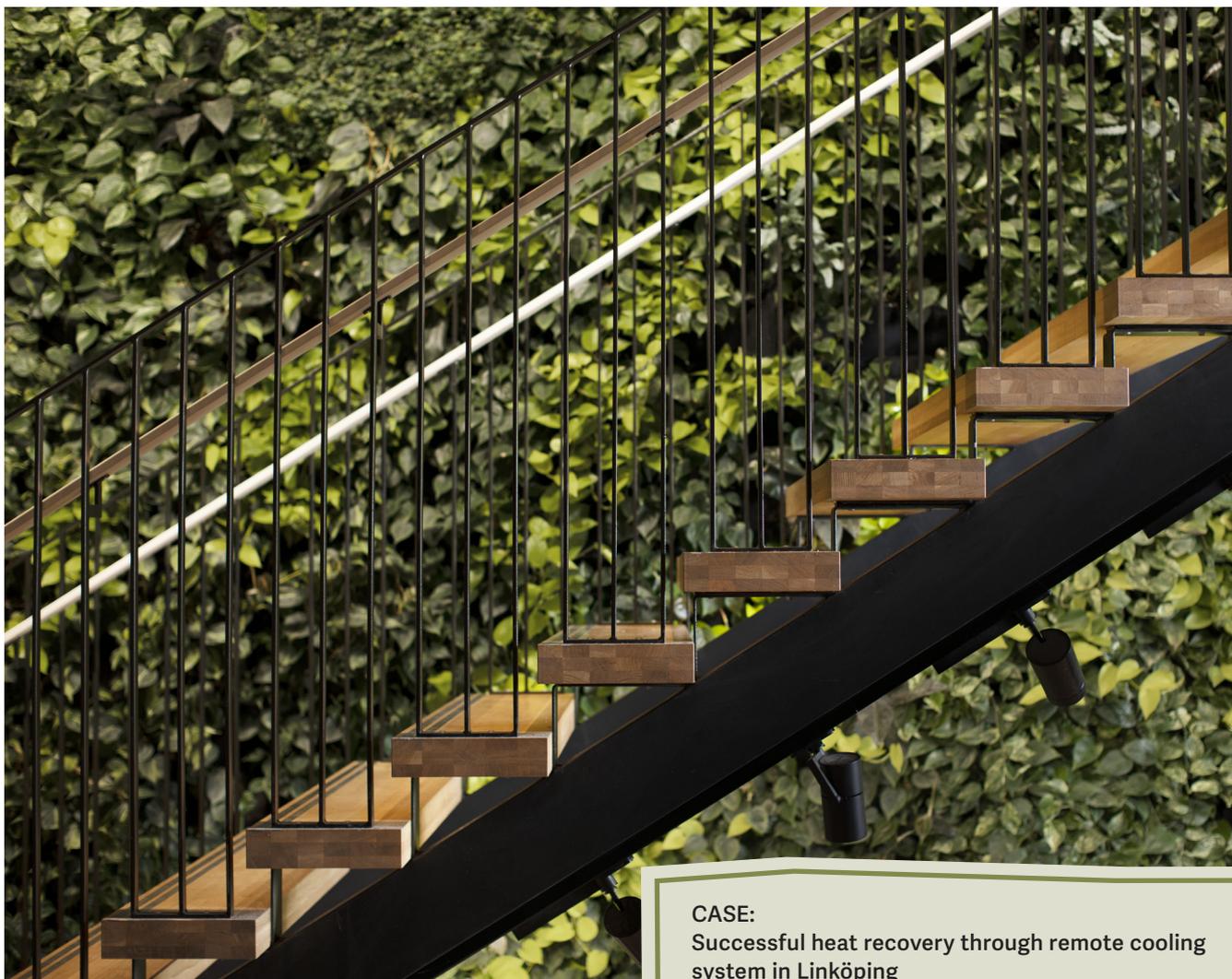
Table 1: Investments and metrics in the category Green Buildings

Property	Location	Renovation/New	Certification	MWh/year	CO ₂ (tonnes)	Savings MWh	Savings %	kWh/m ²	CO ₂ kg/m ²
Studenthuset	Linköping	New	Guld	678	39,0	486	42	46	3,0
A Working Lab	Gothenburg	New	Guld	380	12,0	369	49	34	1,0
Samhällsbyggnad 1 & 2	Gothenburg	Renovation	Silver	1 425	61,6	462	25	60	2,6
Humanisthuset	Umeå	Renovation	Silver	1 277	78,0	557	30	84	5,1
Eden	Lund	Renovation	Silver	265	0,6	122	31	53	0,1
Matteanexet	Lund	Renovation	Guld	293	0,5	307	57	58	0,1

CASE:**A Working Lab – an innovation arena for future solutions**

The office building A Working Lab on Campus Johanneberg at Chalmers in Gothenburg was finalized during 2019. One important environmental objective within the project was to reduce climate impact from the construction phase as well as from the operations.

To minimize climate impact during the construction phase Akademiska Hus made deliberate material choices and considerations and performed climate footprint calculations to track the progress. Climate calculations included impact from the foundation, framework and building envelope during construction phase. The efforts paid off and the footprint of the building is estimated to a carbon footprint about 15-20% lower than a conventional building.



A Working Lab, Gothenburg. Photo: Jonatan Fernström

ENERGY EFFICIENCY

A key component of our aspiration to achieve climate neutrality involves reducing the energy needs in our buildings. Our goal is to reduce the quantity of delivered energy by 50 percent to 2025, with 2000 as base year. Considerable effort is also being dedicated to influence the energy system to shift towards a more sustainable energy supply and to demand and create new renewable energy.

Our energy strategy, established during 2016, has led to an ambitious energy process where prioritization of energy reduction activities is simplified and where focus is set on implementation to reach the energy goal. Our database for energy, the Energy Portal, was further developed to enable more accurate analysis of a building's energy performance and to support in the investment process to accelerate the energy reduction activities to provide greater benefit, both financially and environmentally.

The investments connected to energy-reduction have contributed to following savings:

Yearly reduction:	56 270 MWh/year
	281 tonnes CO ₂ /year

CASE:

Successful heat recovery through remote cooling system in Linköping

Akademiska Hus have succeeded in creating a system that utilizes low-grade heat from server rooms. By using existing infrastructure the system takes advantage of the low-grade heat and, consequently, the local district heating company can decrease the use of fossil fuels and emit less carbon dioxide. The peak-load production is also reduced in the district heating system with an estimated reduction of 144 tonnes of CO₂.

CASE:

Careful renovation leads to saved energy and improved indoor climate

The buildings located in the English Park in Uppsala is of cultural-historical value. Through the exchange to new and energy-efficient glass in around 500 window frames, energy savings as well as improvement in the indoor environment were obtained. The project saved resources by keeping the old window frames and at the same time cultural-historical value was preserved favouring the local environment. In total, the measure is estimated to reduce the need for district heating equivalent to 185 MWh/year, corresponding to 41 tonnes of CO₂.



Solar panels at Ultuna Campus.

RENEWABLE ENERGY

Our investment in solar energy is one contribution in the shift towards a fossil free society. We currently have 50 solar parks on our campuses which generate 4 million kWh renewable electricity annually for Swedish centres of education. We are in the process of installing additional solar power facilities which, when they are ready, will produce over 6 million kWh per year in total.

The investments connected to Renewable energy have contributed to following savings:

Yearly production capacity:	3 873 MWh/year
Prevented emissions:	19 tonnes CO ₂ /year

CASE: Solar panels provides electricity to Ultuna Campus

At Ultuna Campus in Uppsala the majority of the rooftops are covered with solar panels, equivalent to an area of about 6,700 square metres. The installations generate close to 1 million kWh of renewable electricity per year and, as a consequence, several buildings at the Swedish University of Agricultural Science are supplied with electricity generated from solar energy.



Albano, Stockholm. BSK Arkitekter.

ENVIRONMENTALLY SUSTAINABLE MANAGEMENT OF LIVING NATURAL RESOURCES

This category contains investments that include for example green roofs, green walls, urban biotopes, parks and trees or other investments that contribute positively to a sustainable and attractive local environment as well as contributing positively to climate related issues such as noise levels, risk of flooding, air particulate pollution and ecological values.

“Albano will be a vibrant and competitive campus of international proportions that will benefit Stockholm, the region and Sweden in its role as an attractive nation of knowledge. It goes without saying that we will do our utmost to make this campus as sustainable as possible.”

**Hayar Gohary,
Project Director**

CASE: The overbuild of Värtabanan enables socio-ecological development of Albano

The Albano Campus in Stockholm is developed to be a modern and competitive university environment in harmony with nature and with the objective of becoming a role model in sustainable urban development. Campus Albano is the first campus environment in Sweden to qualify for certification according to Citylab standards, thereby standing out as an urban development project at the absolute forefront of sustainability. Citylab standards, unlike other sustainability certification initiatives, do not only apply to buildings, but also covers the entire urban development project.

A vast number of sustainable initiatives are included in the project. We have strengthened the potential for increased biodiversity for bees, birds and insects, the aquatic systems are being designed to take care of surface water and improve the microclimate, while outdoor environments are being designed to strengthen the distribution pathways for plants and animals. The sustainability initiatives also include material choice, sustainable design of bicycle paths and many other perspectives.

One key component to secure the transformation of this urban area towards a new green and sustainable campus was the overbuild of the railway Värtabanan, which was vital to enable a strong socio-ecological design.



Auditor's Limited Assurance Report

To Akademiska Hus AB, Corporate identification number 556559-9156

Introduction and Scope

We have been engaged by the Executive Management of Akademiska Hus AB ("Akademiska Hus") to undertake a limited assurance engagement of selected information in Akademiska Hus' Green Bond Investor Report 2019 ("the Report").

The scope of our work was limited to assurance of "Table 1:Green Bond issuance" and "Table 2:Disclosure of allocation" on page 2 in the report.

Our assurance does not extend to any other information in the Report. We have not reviewed and do not provide any assurance over any individual project information reported, including estimates of sustainability impacts.

Responsibilities of the Executive Management

The Executive Management is responsible for evaluating and selecting eligible assets, for the use and management of bond proceeds, and for preparing an Investor Report that is free of material misstatements, whether due to fraud or error, in accordance with applicable criteria. The criteria are relevant parts (section one, page 11) of the *Akademiska Hus Green Bond Framework* dated April 2019 ("the Framework"), available on Akademiska Hus's website.

Responsibilities of the Auditor

Our responsibility is to express a limited assurance conclusion on the selected information specified above based on the procedures we have performed and the evidence we have obtained.

We have conducted our limited assurance engagement in accordance with ISAE 3000 *Assurance Engagements Other than Audits or Reviews of Historical Financial Information* issued by IAASB. A limited assurance engagement consists of making inquiries, primarily of persons responsible for the preparation of the selected information in the Report, and applying analytical and other limited assurance procedures. The procedures performed in a limited assurance engagement vary in nature from, and are less in extent than for, a reasonable assurance engagement conducted in accordance with IAASB's Standards on Auditing and other generally accepted auditing standards.

The procedures performed consequently do not enable us to obtain assurance that we would become aware of all significant matters that might be identified in a reasonable assurance engagement. Accordingly, we do not express a reasonable assurance conclusion.

The firm applies ISQC 1 (International Standard on Quality Control) and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements. We are independent towards Akademiska Hus in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

Our procedures are based on the criteria defined by the Executive Management as described above. We consider these criteria suitable for the preparation of the Report.

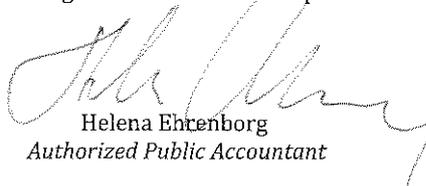
We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion below.

Conclusion

Based on the limited assurance procedures we have performed, nothing has come to our attention that causes us to believe that the selected information disclosed in the Report has not been prepared, in all material respects, in accordance with the reporting criteria.

Stockholm, 31 March 2020

Öhrlings PricewaterhouseCoopers AB



Helena Ehtenborg
Authorized Public Accountant

Appendix 1

ENERGY

Calculations on energy use and energy savings are based on the amount of energy used for heating and cooling as well as for electricity. Calculations are primarily based on the amount of delivered energy. In such cases where this number is unknown, estimations from the specific projects have been used.

Energy savings refer to the requirements in the national building code (BBR).

Energy production from solar panels are based on measurements from each installation.

CARBON DIOXIDE

Emissions consist of CO₂ from purchased electricity, heating and cooling. CO₂ calculations are primarily based on input data provided by suppliers for 2019. If these data were unavailable at the time of calculation, data from 2018 was used. The CO₂ data used comprises the

total greenhouse effect, i.e. CO₂e.

Source: Energiföretagens fjärrvärmestatistik.

Link:

[https://www.energiforetagen.se/statistik/fjarrvarmestatistik/miljovardering-av-fjarrvarme/CO₂ emissions from purchased electricity is set to 5 grams CO₂/kWh](https://www.energiforetagen.se/statistik/fjarrvarmestatistik/miljovardering-av-fjarrvarme/CO2-emissions-from-purchased-electricity-is-set-to-5-grams-CO2/kWh)

CLEAN TRANSPORTATION

Greenhouse gas savings connected to electric charging stations for vehicles has been set to 1.400 kg CO₂e / charging point. **Source:** Swedish Environmental Protections Agency.

Link:

<https://www.naturvardsverket.se/upload/stod-i-miljoarbetet/bidrag-och-ersattning/bidrag/klimatklivet/klimatvardering-av-publika-laddningsstationer.pdf>



AKADEMISKA HUS

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