Akademiska Hus

Green Bond Investor Report 2024

APRIL 2025



Green Bond Investor Report

The real estate industry accounts for a large part of society's climate footprint. In order to achieve the radical climate transition that society needs, the industry must change fundamentally. As one of Sweden's largest real estate companies, we want to take the lead. In the autumn of 2024, we raised our level of ambition further with stricter and industry leading climate targets, and by 2040 we will have achieved a 90 percent reduction in greenhouse gas emissions compared to 2019. The remaining ten per cent will be neutralised through negative emissions. The targets have been validated by the Science Based Targets initiative (SBTi), Net-Zero Standard and are in line with the Paris Agreement and what research requires to limit global warming to 1.5 degrees.

The Green Bond Framework has a clear ambition to demonstrate Akademiska Hus sustainability agenda and to leverage on the strong and extensive project portfolio and existing 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.

Akademiska Hus original Green Bond Framework was established in April 2019 and was updated in June 2023. In June 2024 Akademiska Hus issued its third green bond overall, and the first one under the updated framework. This report will cover investments and projects related to both the Green Bond Framework published in 2019 (GBFW19) and the framework published in 2023 (GBFW23). If investment categories are included in both frameworks and share the same reporting requirements, the reporting is presented as an aggregate. If the reporting indicators for a category differ between the frameworks, the indicators will be presented separately. Investments financed only under the GBFW19 will be presented in Appendix 1.

The updated framework includes four categories of eligible investments. The green net proceeds from the issuance in 2024 have been allocated to three out of four categories. The majority of the net proceeds, 65 per cent, have been allocated to new projects, i.e. financed within one year of completion.

The investments related to GBFW23 are all aligned with the EU Taxonomy technical screening criteria. Furthermore, we have determined that the DNSH (do no significant harm) requirement for climate change adaptation is met through the climate risk analysis conducted for all of our properties and buildings regarding risks related to temperature, water, solid mass and wind. The climate risk analysis was conducted in 2022 and in 2023 the analysis regarding the potential vulnerability of the buildings with medium and high exposure to climate risk was initiated. The combination of exposure and vulnerability will provide us with a final climate risk level and an order of priority for which buildings to address first. The proposals for measures to be taken will be phased in to our maintenance plans for our buildings and outdoor environments.

Table 1: Green Bond issuance, SEK m

ISIN	Volume	Issue date	Tenor	Framework
XS2241799365	1 500	2020-10-07	7 years	2019
XS2836709456	1 500	2024-06-07	5 years	2023
	3 000			

Table 2: Disclosure of allocation

Category	Allocated Net proceeds	Proportion of tot. %					
Green Buildings	2 301,5	77%					
Renewable Energy	137,3	4%					
Energy Efficiency	534,9	18%					
Clean Transportation*	20,9	1%					
Sum allocated net proceeds	2 994,6						
Sum of green bond net proceeds	2 994,6						
Green account balance	0						
*only allocated from GBFW19							

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 effiency and good cost management. At the same time, Akademiska Hus constantly strive to minimise environmental impact through sustainable construction processes and carefully considered choices of systems and materials. All new construction projects shall

meet Gold rating in the Miljöbyggnad environmental certification system, with the exception of student housing which is to aim for Gold but at least achieve the Silver level. The target for major renovations is set to 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 materials. Akademiska Hus currently have 61 certified buildings whereof 14 to date are certified at Gold level.

Table 3: Investments and Metrics Green Buildings GBFW23, New building

Property	Location	Certification	MWh/year	PED	Savings %*	CO ₂ (tonnes)	CO ₂ Scope 2 kg/m ²	CO ₂ Scope 3 kg/m ²
Natrium	Gothenburg	Gold	1 941	78	32%	68	2,1	363
Aurora	Umeå	Gold	403	42	40%	14	1,6	281
*PED in relation to NZEB	1							

Table 4: Investments and Metrics Green Buildings GBFW23, Existing buildings

Property	Location	Certification	MWh/year	PED	Threshold Top 15	CO ₂ (tonnes)	CO ₂ kg/m ²
Undervisningshuset	Stockholm	Gold	178	60	89	6,2	1,8
ABE-skolan	Stockholm	Gold	243	54	89	8,5	1,7

Table 5: Investments and Metrics Green Buildings GBFW19

Property	Location	Category	Certification	MWh/ year	CO ₂ (tonnes)	Savings MWh	Savings %*	kWh/ m²	CO ₂ kg/m ²
Humanisten	Gothenburg	New	Gold	630	32	333	35%	43	2,1
Humanisten	Gothenburg	Renovation	Silver	739	37	383	34%	51	2,5
Studenthuset	Linköping	New	Gold	678	39	486	42%	46	3,0
A Working Lab	Gothenburg	New	Gold	380	12	369	49%	34	1,0
Samhällsbyggnad 1 & 2	Gothenburg	Renovation	Silver	1 425	62	462	25%	60	2,6
*kWh/m2 in relation to national building regulations (BBR)									



Aurora, Umeå. Illustrated image by LINK Arkitektur.

AURORA – FLEXIBLE PREMISES FOR INCREASED USE AND REDUCED CLIMATE FOOTPRINT

Aurora, the new building on Umeå University's main campus constitutes a new hub in the middle of campus. The 9,500 square meter building consists of seven floors and contains teaching facilities, offices, study spaces and a café, as well as examination halls with space for up to 540 people. Aurora connects Universum, Aula Nordica and the Natural Sciences Building and strengthens Campus Umeå's physical identity.

The premises can be used flexibly with exam halls that can be converted into classrooms, and vice versa, as needed. Flexibility is one of the many climate-smart aspects of Aurora, which is built with sustainability as a watchword. This includes everything from environmentally friendly material choices and carefully evaluated system choices, to energy efficient functions such as demand-controlled ventilation and lighting.

By collecting data via booking systems and analysing how the university's existing premises could be used more efficiently, Akademiska Hus and Umeå University were able to reduce their initial need for new spaces. This resulted in less demand for new construction than originally intended, and thereby a reduced climate footprint.

ENERGY EFFICIENCY

A key component of our aspiration to achieve net-zero emissions 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 the base year. Considerable effort is also being dedicated to influence the energy system to shift towards more sustainable energy and to demand and create new renewable energy.

Our energy strategy, established in 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 was further developed during 2020 to enable more accurate analysis of a building's energy performance which also support 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 the following savings:

Yearly reduction:

94 834 MWh/year 2 741 CO₂/year



EXTENSIVE ENERGY UPGRADES AS BMC IN UPPSALA IS MODERNISED

Akademiska Hus is modernising its largest building in Uppsala – the Biomedical Centre (BMC), where the university conducts cutting-edge research and education at the forefront. BMC, which is located in the southern parts of central Uppsala, was built in stages from the late 1960s until 1985. The building has since been equipped with several extensions and today consists of over 105,000 square meters, which predominantly contains laboratory and teaching premises with associated offices and student areas. Approximately 1,500 employees and 4,500 students are active in the building.

BMC currently has about 10,000 windows that are almost 40 years old and thus needs to be improved for increased energy performance and indoor comfort. Instead of switching to new windows, Akademiska Hus has chosen a method where the old windows are retained but supplemented with extra energy glass, in cases where this is missing. Over a 30-year period, reuse generates a lower climate impact comprising over 650,000 kg of carbon dioxide equivalents (CO_2e) compared to if new windows had been purchased.

The outer roofs have also been overhauled and given new coating and insulation. The roofs are also equipped with solar cells and a total of almost 1,200 panels are installed, which are estimated to produce 440,000 kWh of sustainable electricity annually.

A laboratory building like BMC has high ventilation flows and is ventilated around the clock to maintain the right levels. An airflow optimisation has been made that aims to reduce the ventilation's "stand-by losses" when the premises are not used during nights and weekends. All in all, the energy optimisations carried out in BMC contribute to reducing the need for district heating by almost 3.2 GWh per year, corresponding to the heating needs of approximately 320 single family homes.

OPTIMISATION OF VENTILATION UNITS CAN LEAD TO SIGNIFICANT ENERGY SAVINGS

In buildings with high technical complexity, such as laboratory environments, liquid-coupled ventilation units are often used. Over time, these systems may lose efficiency, affecting both energy consumption and indoor climate. To ensure long-term optimal operation, a new methodology has been developed. It is based on strengthening internal expertise within the company and investments in control measures. By combining competence enhancing initiatives and targeted investments, we ensure that resources are used in a more sustainable manner, which in turn contributes to reduced climate emissions.

The methodology is currently being tested in our environments in Gothenburg, Stockholm, and Lund. Overall, the initiative is estimated to achieve significant savings for Akademiska Hus, up to 30,000 MWh per year.



BMC, Uppsala. Photo: Johan Wahlgren.



As part of efforts to reduce delivered energy and shift towards fossil-free energy sources, Akademiska Hus has, in collaboration with Örebro University, installed solar panels across Örebro campus in several stages since 2008. The latest installations, completed in 2024, are located on the Entréhuset building and the School of Music, Theatre and Art. Together, they have a production capacity of just over 280,000 kWh per year and represent an investment of approximately SEK 8 million.

As one of the few campuses in Sweden, the solar installations also produce more electricity during sunny summer months than Örebro University consumes. The surplus is sold to an energy supplier, but Akademiska Hus is currently exploring various solutions for making use of this excess energy within the campus area in the future.

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's Green Bond Investor Report 2024 ("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 Allocation of Proceed, page 9) of the *Akademiska Hus Green Bond Framework* dated June 2023 and (section Green Terms, 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.

Gothenburg, 2025-04-28 Öhrlings PricewaterhouseCoopers AB

> Konstantin Belogorcev Authorized Public Accountant



CLEAN TRANSPORTATION (GBFW19)

Electric charging stations*



Number of electric charging stations financed: 60 Greenhouse gas savings, tonnes: 84

*Only related to GBFW19



Appendix 2 – definitions

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 cases where this number is unknown, estimations from the specific projects have been used.

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

CARBON DIOXIDE

Emissions consist of CO_2 from purchased electricity, heating and cooling. CO_2 calculations are primarily based on input data provided by suppliers. The CO_2 data used comprises the total greenhouse effect, i.e. CO_2 e.

 $Source: Energif\"{o}retagens fj\"{a}rrv\"{a}rmestatistik$ Link: https://www.energiforetagen.se/statistik/fjarrvarmestatistik/miljovardering-av-fjarrvarme

 $\rm CO_2$ emissions from purchased electricity is location-based for year 2024: 21 grams $\rm CO_2/kWh$

CLEAN TRANSPORTATION

Greenhouse gas savings connected to electric charging stations for vehicles has been set to 1 400 kg CO $_2e$ / charging point.

Source: Swedish Environmental Protections Agency

