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## Second Party Opinion

# Akademiska Hus Green Bond Framework

May 20, 2026

**Location:** Sweden

**Sector:** Real estate

## Alignment Summary

Aligned = ✓ Conceptually aligned = ○ Not aligned = ✗

✓ Green Bond Principles, ICMA, 2025

See [Alignment Assessment](#) for more detail.

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**Medium green**

Activities that represent significant steps towards a low-carbon climate resilient future but will require further improvements to be long-term low-carbon climate resilient solutions.

Our [Shades of Green Analytical Approach](#) >

## Strengths

**We view Akademiska Hus' four-step screening process positively.** This approach aims to reduce the need for new construction, for which emissions can be about three times higher than those from renovations, according to research by Ramboll et al.

**Akademiska Hus prioritizes energy efficiency through annual "Energy plans"**, with 58% of revenue aligning with the EU Taxonomy in 2025. Renovations are assigned a Dark green shade, supported by criteria ensuring high energy savings, no fossil fuel heating, reduced emissions from materials, and climate risk management.

**New construction projects must meet an ambitious embodied emission threshold**, which in our view is more ambitious than the local market practice.

## Weaknesses

No weakness to report.

## Areas to watch

**New construction is associated with high emissions and biodiversity risks.** Akademiska Hus is introducing a cap on embodied emissions as part of its eligibility criteria. It also has strategies to address biodiversity impacts that exceed regulatory requirements, where current national practices may not fully account for the complexities of biodiversity.

## Shades of Green Projects Assessment Summary

Over the three years following issuance of the financing, Akademiska Hus expects to allocate 85% of proceeds to green buildings, 10% to energy efficiency and the remaining 5% to renewable energy and climate change adaptation.

The issuer expects to allocate 70% of proceeds toward refinancing projects and 30% toward financing new projects.

Based on the project categories' Shades of Green detailed below, the expected allocation of proceeds, and consideration of environmental ambitions reflected in Akademiska Hus Green Bond Framework we assess the framework Medium green.

### Green buildings

  Dark to Medium green

New buildings

Existing buildings

Renovations

### Energy efficiency

 Dark green

Investments in the installation, development, or replacement of technologies that reduce energy consumption or improve energy efficiency.

### Renewable energy

 Dark green

Investments in installation, maintenance and repair of renewable energy technologies.

### Climate change adaptation

 Dark green

Investments aimed at mitigating the adverse effects of climate change and strengthening the resilience of real estate assets against physical climate risks such as flooding, rising sea levels, extreme precipitation, and increasing temperatures.

See [Analysis Of Eligible Projects](#) for more detail.

## Issuer Sustainability Context

This section provides an analysis of the issuer's sustainability management and the embeddedness of the financing framework within its overall strategy.

## Issuer Description

Akademiska Hus is wholly owned by the Swedish state and is one of Sweden's largest property companies, focused on developing and managing campuses for universities and colleges across the country. Akademiska Hus manages approximately 3.4 million square meters of lettable area across university locations in Sweden. It operates on a commercial basis with long-term leases to creditworthy public-sector customers, primarily universities and colleges. Its portfolio stretches from northern to southern Sweden and spans 15 student cities. At year-end 2025, the market value of its property portfolio was SEK 116,724 million, comprising a mix of teaching facilities, laboratories, offices, and student and researcher housing.

## Material Sustainability Factors

### Climate transition risk

Increased energy use in buildings has been a major contributor to climate change, representing about one-third of global greenhouse gas emissions on a final-energy-use basis, according to the International Energy Agency (IEA). Building occupiers and operators could face higher energy bills as power prices rise and higher capital expenditure because upgrades are required to accommodate the energy transition. In addition, low-carbon properties can achieve higher cost efficiencies and attract premium rents, enhancing their value. Embodied emissions from building materials are a major source of emissions in terms of a building's total carbon footprint. We think Sweden has more advanced regulations on embodied emissions than most European peers.

### Physical climate risk

The fixed nature of real estate assets exposes them to physical climate risks. While varying by location, these could include acute risks--such as wildfires, floods, and storms--that are becoming more frequent and severe; and chronic risks such as long-term changes in temperature and precipitation patterns, and sea level rise. These risks could damage properties or place the health and safety of tenants at risk, as well as require investments to manage potential effects or, in severe cases, the relocation of tenants. While the total impact is moderate--since the type, number, and magnitude of these risks vary by region--highly exposed regions could face material physical climate risks. Most owners have some insurance coverage, but it could become more difficult to secure insurance for the most exposed assets without adaptation measures. For the Nordic building sector, the most severe physical impacts will likely come from increased flooding, snow loads, urban overflow, and a higher incidence of storms and extreme weather.

### Biodiversity and resource use

When building new developments, Akademiska Hus is exposed to risks related to water, land use, pollution, and biodiversity loss. It faces the challenge of mitigating the impacts of these risks and safeguarding Sweden's natural environment. Preserving natural carbon stocks is key to meeting climate goals, and many habitats, such as bogs and organic soils, store large amounts of carbon. Disturbing these can lead to significant emissions. The natural environment also absorbs carbon dioxide, so conserving 30%-50% of land, sea, and fresh water (as the Intergovernmental Panel on Climate Change recommends) is central to reducing greenhouse gases and adapting to climate change. Some ecosystems, including bogs and topsoil, take a long time to recover, and some changes are irreversible.

## Issuer And Context Analysis

**The eligible project categories address climate transition risk and physical climate risk**, which we consider the most material sustainability factors for Akademiska Hus. Investments in green buildings and energy efficiency are important in mitigating climate transition risk. In addition, physical climate risk is relevant in the context of the financing framework, since the building sector is generally highly exposed to the impacts of climate change.

**Akademiska Hus has a climate budget to monitor emissions from different activities and forecast future emissions.** In 2025, Akademiska Hus achieved its intermediate target, reducing emissions by 64% since its baseline year of 2019. This was a result of energy efficiency improvements, reduced construction, and increased use of fossil-free energy. Achieving net zero emissions by 2040 will become more difficult, where it will continue with these efforts but also be dependent on the sector to decarbonize and for innovation to happen.

**Akademiska Hus applies a four-step process to reduce resource use and prioritize refurbishment over new construction.** For example, after applying this tool, Akademiska Hus chose to pause and reassess the Kunskapens Fyr project for a new library for the University of Gothenburg. Instead of proceeding with its plan involving demolition and new construction, it is exploring alternative solutions and making better use of existing buildings to meet the university's needs with a significantly lower climate impact.

**Akademiska Hus continues to prioritize energy efficiency through annual Energy Plans (Energiplaner),** contributing to 58% of revenue aligning with the energy efficiency criteria in the EU Taxonomy in 2025. The Energy Plans compile prioritized energy efficiency measures and projects required to meet its long-term energy reduction targets. Energy efficiency projects typically include upgrades and optimization of technical building systems, such as ventilation, heating and cooling, heat recovery, energy-efficient lighting, building automation and control systems, as well as other targeted efficiency improvements in existing buildings.

**Akademiska conducted a physical climate risk assessment of its full portfolio.** In terms of mitigating actions, the most important resilience measures for Akademiska Hus primarily address increased precipitation and cloudburst risk. This includes measures such as improved stormwater management, protection against water intrusion in buildings and technical spaces, and adaptations in land and outdoor environments. Measures are implemented as part of ordinary management and maintenance planning, where climate adaptation is increasingly identified, categorized and prioritized in a more structured and systematic way, within existing maintenance and investment processes.

**Akademiska Hus plans to only build on brownfield land, reducing biodiversity risks.** Nature value assessments are systematically carried out on campuses to map and classify biological values, also when deciding where to build. The results are used to identify and protect areas with high nature values and govern initiatives for preserving and strengthening biodiversity. The company adheres to legal requirements for environmental impact assessments, and the regulatory context in Sweden mitigates biodiversity risks. However, national practices might not fully account for the complexities of biodiversity and climate risks.

# Alignment Assessment

This section provides an analysis of the framework's alignment to Green Bond principles.

## Alignment Summary

Aligned = ✓    Conceptually aligned = ○    Not aligned = ✗

✓ Green Bond Principles, ICMA, 2025

### ✓ Use of proceeds

We assess all the framework's green project categories as having a green shade, and the issuer commits to allocating the net proceeds issued under the framework exclusively to eligible green projects. Please refer to the [Analysis Of Eligible Projects](#) section for more information on our analysis of the environmental benefits of the expected use of proceeds.

### ✓ Process for project evaluation and selection

Projects eligible for financing through green bonds are identified as part of Akademiska Hus' ongoing operations. All potential eligible projects are subject to review by the Green Business Council (GBC). Akademiska Hus' treasury department will keep an update list of all projects that meet the green terms, and it will use the list as a tool to determine if there is a current or expected capacity to issue a green bond. The GBC is responsible for evaluating nominated projects to ensure alignment with the green terms outlined in this framework. The assessment includes a review of relevant projects documentation and an evaluation of environmental impact, including life cycle considerations, potential rebound effects, and resilience. The assessment also includes a screening of social and environmental risks. All projects must also be compliant with applicable national laws and regulations, as well as policies and guidelines at Akademiska Hus.

### ✓ Management of proceeds

Akademiska Hus will manage net proceeds using a portfolio approach and tracked through a green register. If an eligible green project no longer meets the green terms, or if the underlying eligible green project is divested or lost, it will re-credit an amount equal to the funds originally allocated to that project to the green register until it can be reassigned to other eligible green projects. Net proceeds may be reallocated to other eligible green projects by the treasury department at any time during the term of a green bond. Akademiska Hus treasury department will keep a record of the purpose of any change in the green register. Pending allocation of the net proceeds and while the green register has a positive balance, including the unlikely event there are no eligible green projects, the proceeds may be invested or utilized by the treasury following Akademiska Hus financial policy and be subject to exclusion criteria set out in the framework.

### ✓ Reporting

Akademiska Hus will publish an annual report on its website, prepared by the treasury department, as long as any bonds are outstanding and in the event of any material developments, which will detail the allocation of net proceeds and adherence to the green terms. The allocation report will include the nominal amount of outstanding green bonds, a list of green projects that have been financed with the net proceeds, the proportion of net proceeds allocated per eligible green project category and geographical distribution, the share of new financing and refinancing, and the amount of unallocated proceeds, if any. The impact report will disclose the environmental impact of the financed green projects, based on Akademiska share of each project. Akademiska Hus will on best effort basis align the impact reporting with ICMA's Harmonized Framework for Impact Reporting and provide details of the methodology used to calculate the green indicators.

# Analysis Of Eligible Projects

This section provides details of our analysis of eligible projects, based on their environmental benefits and risks, using the "[Analytical Approach: Shades Of Green Assessments](#)."

## Overall Shades of Green assessment

Based on the project category shades of green detailed below, the expected allocation of proceeds, and consideration of environmental ambitions reflected in Akademiska Hus' Green Bond Framework, we assess the framework Medium green.

**Medium green**

Activities that represent significant steps towards a low-carbon climate resilient future but will require further improvements to be long-term low-carbon climate resilient solutions.

Our [Shades of Green Analytical Approach](#) >

## Green project categories

### Green buildings

#### Assessment

 Dark to Medium green

#### Description

##### New buildings

Buildings that comply or, upon completion will comply with all of the following criteria:

- Achieve a primary energy demand (PED) that is at least 25 % lower than the threshold set for nearly zero-energy buildings (NZEB) as defined by national building regulation
- Undergo screening of material climate risks and implement measures where necessary to ensure resilience
- Obtain a design-stage certification, a post-construction certification or an in-use certification of Miljöbyggnad "Guld"
- Conduct a life-cycle analysis of the global warming potential (GWP), allowing for a maximum amount of embodied carbon in the building phase of 266 kg CO2e/GFA
- Comply with the DNSH criteria for protection and restoration of biodiversity and ecosystems listed in the EU Taxonomy Delegated Act, ensuring no development on high-quality arable land, high biodiversity value land or forest land, and that required environmental assessments and mitigation measures are implemented
- Undergo a screening of Akademiska Hus four-step principle for reduced new construction

##### Renovations

- The renovation results in either an overall reduction in PED of at least 30%, or complies with the applicable requirements for major renovations
- Undergo a screening of material climate risks and implement measures where necessary to ensure resilience

- Conduct a life-cycle analysis of the GWP, allowing for a maximum amount of embodied carbon in the building phase of 112 kg CO<sub>2</sub>e/GFA

**Existing buildings**

- Achieve an Energy Performance Certification (EPC) demonstrating class A or have a PED within the top 15% of the national or regional building stock
- Undergo a screening of material climate risks and implement measures where necessary to ensure resilience

**Analytical considerations**

- The IEA emphasizes that reaching net zero emissions in the buildings sector demands major strides in energy efficiency and phasing out fossil fuel. All properties must achieve high energy performance and new properties need to cut emissions from building materials and construction. Addressing physical climate risks is also a key goal.
- We expect about 80% of proceeds to go to existing buildings, 10% to new construction projects, and 10% to renovations. We assign a shade of Dark to Medium green to the project category because Akademiska Hus' framework effectively addresses all the environmental factors we consider important for real estate. New construction, existing buildings we view as Medium green, and renovation projects we view as Dark green. These factors are energy use, heating sources, embodied emissions, and physical climate risks. The company will not invest in buildings that use direct fossil fuel heating.
- Given the fixed nature of buildings, improving their resilience to physical climate risk is crucial in the transition to a low-carbon real estate sector. All eligible projects and buildings have been screened for physical climate risks.
- We view the company's criteria for existing buildings to be in the top 15% of the national or regional building stock in terms of energy performance as a strong commitment to the transition to a low-carbon society.
- In the transition to a low-carbon society, it is essential to renovate and improve existing properties. According to the International Energy Agency, reducing energy use in buildings cut global sector emissions up to 50%. We assign a Dark green shade to renovations, as framework criteria ensure high energy savings, commitment to reducing emissions from materials used, the absence of fossil fuel heating, and the management of physical climate risks.
- We also consider Akademiska's requirement for new buildings to be screened using its four-step process as a positive factor. This approach aims to reduce the need for new construction when not absolutely necessary. This is important because emissions from new buildings can be about three times higher than those from renovations, according to research by Ramboll et al.
- The largest source of climate impacts for new construction projects is embodied emissions from materials used such as cement and steel. We view the threshold set forward in the framework as sufficient to help reduce embodied emissions, therefore supporting the Medium green shade. The threshold in our view is more ambitious than what we have observed in the local market because it includes a larger share of building emissions than what is typically included, and the threshold itself is lower. However, the knowledge and technologies required for zero-emission buildings are still evolving, leading to the Medium green shade. The framework criteria also have ambitious requirements for the energy performance of new construction projects, which will need to have 25% lower PED than what is mandated by building regulations
- Akademiska Hus requires certification by the Miljöbyggnad New Construction "Guld", which we view positively. The latest version of the certification comprehensively addresses all key shade drivers for real estate, setting robust minimum requirements on energy, embodied emissions, and physical climate risks. The certification may partly mitigate the climate and environmental impacts of buildings, namely energy efficiency, biodiversity, and waste and water management.
- New buildings will only be constructed on brownfield land, which limits biodiversity risks. Nature value assessments are systematically carried out on campuses to map and classify biological values, also when deciding where to build.

## Energy efficiency

### Assessment

 **Dark green**

### Description

Investments in the installation, development, or replacement of technologies that reduce energy consumption or improve energy efficiency.

Eligible projects include

- Installation of geothermal heating and cooling systems
- Development and implementation of digital and IT-based solutions for energy monitoring and optimization
- Installation or replacement of energy efficient windows
- Upgrades to ventilation and climate control systems

### Analytical considerations

- Improving the energy performance of buildings is important in the transition to a low-carbon future. According to the IEA's net zero pathway, energy efficiency and electrification are the main decarbonization levers for the building sector. We view the building energy efficiency measures eligible as Dark green as they represent key decarbonization levers for the real estate sector.
- Akademiska Hus expects to allocate about 10% of proceeds to energy efficiency in the short-term. It reports on energy efficiency investments in its annual reporting, where it reports that investments in 2025 allowed for 25,734 MWh of energy savings. The energy intensity of its portfolio decreased by 5.8% in 2025, as a result of energy measures implemented and systematic energy initiatives.

## Renewable energy

### Assessment

 **Dark green**

### Description

Investments in installation, maintenance and repair of renewable energy technologies including:

- Emissions-free geothermal heating and cooling
- Heat pumps and heat exchangers
- Battery storage solutions
- On-site solar power installations or stand-alone solar farms, including thermal solar panels, as well as related infrastructure investments such as grid connections, electric substations, networks or foundations

### Analytical considerations

- Renewable energy sources, when local environmental impacts are adequately addressed, are key elements in limiting global warming to below 2 degrees Celsius. We therefore assess such projects as Dark green.
- While Akademiska Hus expects to allocate minor share of green proceeds to renewable energy (estimated to represent 2.5% over the next three years), solar photovoltaic (PV) investments are expected to continue over the coming years as part of Akademiska Hus' broader energy and climate work. The focus will be on a gradual expansion of installed solar capacity where projects are technically feasible and aligned with long-term campus and building development.

## Second Party Opinion: Akademiska Hus Green Bond Framework

- Delivered electricity from the company's solar panels currently corresponds to 4% of their total electricity use, and has an installed capacity of 20,765 kW.
- Since solar projects are only planned as on-roof installments, planned projects have low exposure to biodiversity risks.

### Climate change adaptation

#### Assessment

 **Dark green**

#### Description













Investments aimed at mitigating the adverse effects of climate change and strengthening the resilience of real estate assets against physical climate risks such as flooding, rising sea levels, extreme precipitation, and increasing temperatures. Example of eligible projects include:

- Site grading adjustments to improve water runoff
- Enhanced drainage and stormwater management solutions, such as retention basins and stormwater ponds
- Flood protection measures, including temporary or permanent barriers

#### Analytical considerations

- Even under the most optimistic climate scenarios, some degree of climate change is likely inevitable. Consequently, it is essential to plan for and mitigate potential physical climate risks to minimize their financial and environmental effects.
- Projects will likely be small in scope, and we therefore view the risk of high emissions during construction as low, contributing to the Dark green shade. Under the green bond framework, multiple smaller, proportionate adaptation measures may be aggregated and financed together, where they collectively contribute to reducing identified physical climate risks. Measures are implemented where climate risk levels are assessed as medium or high and aim to reduce risk, limit future damage, and safeguard the long-term functionality and value of the property portfolio.
- Measures primarily focus on managing increased precipitation, cloudbursts and flood risk, including roof and facade measures, improved stormwater management, and land and outdoor environment adaptations. Campus outdoor environments are a key component of the adaptation strategy, where nature-based solutions and ground measures are used to delay runoff, reduce vulnerability and strengthen long-term resilience.

S&P Global Ratings' Shades of Green

Assessments					
 Dark green	 Medium green	 Light green	 Yellow	 Orange	 Red
<b>Description</b>					
Activities that correspond to the long-term vision of an LCCR future.	Activities that represent significant steps towards an LCCR future but will require further improvement to be long-term LCCR solutions.	Activities representing transition steps in the near-term that avoid emissions lock-in but do not represent long-term LCCR solutions.	Activities that do not have a material impact on the transition to an LCCR future, or, Activities that have some potential inconsistency with the transition to an LCCR future, albeit tempered by existing transition measures.	Activities that are not currently consistent with the transition to an LCCR future. These include activities with moderate potential for emissions lock-in and risk of stranded assets.	Activities that are inconsistent with, and likely to impede, the transition required to achieve the long-term LCCR future. These activities have the highest emissions intensity, with the most potential for emissions lock-in and risk of stranded assets.
<b>Example projects</b>					
 Wind power	 Certified forestry	 New energy efficient buildings	 Fossil fuel buses	 Conventional steel production	 Oil and gas exploration






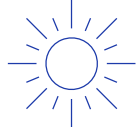

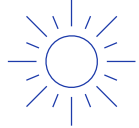



Note: For us to consider use of proceeds aligned with ICMA Principles for a green project, we require project categories directly funded by the financing to be assigned one of the three green Shades.

LCCR--Low-carbon climate resilient. An LCCR future is a future aligned with the Paris Agreement; where the global average temperature increase is held below 2 degrees Celsius (2 C), with efforts to limit it to 1.5 C, above pre-industrial levels, while building resilience to the adverse impact of climate change and achieving sustainable outcomes across both climate and non-climate environmental objectives. Long term and near term--For the purpose of this analysis, we consider the long term to be beyond the middle of the 21st century and the near term to be within the next decade. Emissions lock-in--Where an activity delays or prevents the transition to low-carbon alternatives by perpetuating assets or processes (often fossil fuel use and its corresponding greenhouse gas emissions) that are not aligned with, or cannot adapt to, an LCCR future. Stranded assets--Assets that have suffered from unanticipated or premature write-downs, devaluations, or conversion to liabilities (as defined by the University of Oxford).

# Mapping To The U.N.'s Sustainable Development Goals

Where the financing documentation references the Sustainable Development Goals (SDGs), we consider which SDGs it contributes to. We compare the activities funded by the financing to the International Capital Markets Association (ICMA) SDG mapping and outline the intended linkages within our SPO analysis. Our assessment of SDG mapping does not affect our alignment opinion.

This framework intends to contribute to the following SDGs:

Use of proceeds	SDGs				
Green buildings	 <b>4. Quality education</b>	 <b>11. Sustainable cities and communities*</b>	 <b>12. Responsible consumption and production</b>	 <b>13. Climate action</b>	 <b>15. Life on land</b>
Energy efficiency	 <b>7. Affordable and clean energy*</b>		 <b>13. Climate action</b>		
Renewable energy	 <b>7. Affordable and clean energy*</b>		 <b>13. Climate action</b>		
Climate change adaptation	 <b>11. Sustainable cities and communities</b>	 <b>13. Climate action*</b>			

\*The eligible project categories link to these SDGs in the ICMA mapping.

## Related Research

- [Sustainability Insights: Behind The Shades: Real Estate](#) March 31, 2025
- [Analytical Approach: Second Party Opinions](#), March 6, 2025
- [FAQ: Applying Our Integrated Analytical Approach For Second Party Opinions](#), March 6, 2025
- [Analytical Approach: Shades Of Green Assessments](#), July 27, 2023

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## Second Party Opinion: Akademiska Hus Green Bond Framework

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