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Second Party Opinion

Stockholm Kooperativa Bostadsforening Green Financing Framework

March 25, 2025

Location: Sweden

Sector: Real estate

Alignment Summary

Aligned = ✓ Conceptually aligned = ○ Not aligned = ✗

- ✓ Green Bond Principles, International Capital Market Association (ICMA), 2021 (with June 2022 Appendix 1)
- ✓ Green Loan Principles, LMA/LSTA/APLMA, 2023

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

Primary contact

Maria Myrvoll Knudsen

Oslo
+47-9414-3562
Maria.knudsen
@spglobal.com

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

Stockholm Kooperativa Bostadsforening's (SKB's) green building criteria represent important steps toward a low-carbon, climate resilient future (LCCR). They address the most material climate risks for buildings, namely energy use, embodied emissions, and physical climate risk.

Weaknesses

No weakness to report.

Areas to watch

New construction projects entail high emissions via construction materials. SKB has an embodied emissions threshold in its criteria for most new projects. The knowledge needed to reduce these emissions are evolving, and a large reduction will be needed before 2050.

Building on greenfield land can entail biodiversity and climate risks. While Sweden mandates assessments of these risks, all deforestation negatively affects climate, and current practices might not consider biodiversity and climate risks sufficiently. SKB has developed a biodiversity plan for new development projects.

Reporting on commercial paper (CP), which can be issued under the framework, can be difficult because of the instrument's short-term tenure. The issuer has committed that the value in the green asset pool will always at least equals the green finance outstanding.

Shades of Green Projects Assessment Summary

Over the three years following the financing's issuance, SKB expects to allocate 93% of proceeds to projects that meet eligibility criteria for green buildings category, 5% to renewable energy category, and 2% to the clean transportation category.

The issuer expects 70% of proceeds will refinance projects, while 30% will finance new projects.

Based on the project categories' Shades of Green detailed below, the expected allocation of proceeds, and a consideration of environmental ambitions reflected in SKBs green financing framework, we assess the framework Medium green.

Green buildings	<div><div></div><div></div></div> Medium to Light green
New buildings	
Renovation of an existing building	
Existing building	
Renewable energy	<div><div></div></div> Dark green
Installation of renewable sources of energy, including wind power, solar power, or geothermal energy, either as stand-alone installations or in the property portfolio	
Clean transportation	<div><div></div></div> Dark green
Electric vehicles and bicycles and supporting infrastructure	

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.

Company Description

SKB is a Swedish housing cooperative that builds, manages, and leases residential properties to its members. Founded in 1916 and still owned by its members, SKB has grown and is established in Stockholm and six adjacent municipalities. At the end of 2024, Its portfolio consisted of 8,484 rental apartments (Swedish krona 26.73 billion [€2.42 million] market value) with about 1,500 apartments to be completed by 2033.

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 (GHG) 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 as upgrades are

required to accommodate the energy transition and meet more stringent efficiency standards. In addition, low-carbon properties can achieve higher cost efficiencies or attract premium rents, enhancing their value. Embodied emissions from building materials are a major source of emissions when looking at the carbon footprint of a building over its lifecycle. Sweden, as a member of the EU, is implementing European rules on buildings' energy efficiency, while having more advanced regulations on embodied emissions than most European peers.

Physical climate risk

The geographically fixed nature of real estate assets exposes them to physical climate risks. These could include acute risks--such as wildfires, floods, and storms--which are becoming more frequent and severe; and chronic risks such as long-term changes in temperature, precipitation patterns, and sea levels. For the Nordic building sector, the most severe physical impacts will likely come from increased flooding, greater snow loads, urban overflow, and a higher frequency of extreme weather. Acute and chronic risks could damage properties or put tenants' health and safety at risk, as well as require investment to manage the potential effects of these risk or, in severe cases, relocate tenants. While the overall impact is moderate--given that the type, number, and magnitude of these risks vary by region--highly exposed regions may be subject to material physical climate risk exposure. Most participants have some insurance coverage, but it could become more difficult to secure insurance for the most exposed assets.

Biodiversity and resource use

Construction and the production of related materials can have significant resource-use issues. Key issues are biodiversity risks, energy consumption, and the overuse of materials. New buildings require land, so there are climate risks over to site selection. Preserving natural carbon stocks is key to meeting climate goals as many habitats, like bogs and organic soils, store large amounts of carbon. For similar reasons, conserving 30%-50% of land, sea, and fresh water (as the Intergovernmental Panel on Climate Change recommends) is central to reducing GHGs and adapting to climate change. Some ecosystems, like bogs and topsoil, take a long time to recover, and some changes are irreversible. Resource-intensive materials and practices pose risks to finite resources. Addressing these problems through resource-efficient design, alternative materials, and resource management will help reduce the industry's local and global impact.

Access and affordability

Housing affordability remains a pressing issue globally, due to the shortage of housing supply and high rental costs. In Sweden, despite policies to address housing access and affordability, living conditions for low- and middle-income individuals remain a pressing issue. Cooperative housing, where residents purchase a share in the cooperative and receive the right to live in a specific apartment, plays a significant role in addressing these challenges.

Issuer And Context Analysis

The framework's eligible project categories address the most material sustainability factors we identified for SKB. Its investment in green buildings, renewable energy, and clean transportation seek to mitigate its climate transition risk. Green buildings focus on the company's physical climate risks and may be exposed to biodiversity issues.

SKB's most material climate impact stems from embodied emissions owing to materials and construction, which accounted for 26% of its emissions in 2023. As part of its sustainability strategy, the issuer is committed to reducing its GHG emissions and achieve carbon neutrality to 2045. In 2025, SKB plans to align its near- and medium-term emission reduction targets with Sweden's Allmännyttan Klimatinitiativ (Climate Program), which will be revised this year. The company intends to align its targets with those of the program once they are updated following a review of the Science Based Targets initiative to determine appropriate emission reduction goals. If SKB decides not to follow the updated Climate Initiative, it will adopt its own climate targets. Therefore, we expect the issuer to introduce targets for embodied emissions in the near term. To reduce the emissions from construction, SKB is introducing embodied carbon thresholds for new buildings, in line with the Miljöbyggnad Silver certification. It is also targeting to further reduce

emissions from development projects to meet scope 3 emission reduction targets. As well, the company is working to reduce emissions across its operations through initiatives such as installation of solar panels and enhancing sustainable transportation infrastructure, including EV charging stations and bicycle storage.

SKB commits to finance only green buildings that will be screened for physical climate risks by the end of 2025 and plans to review its full portfolio by 2030. The issuer has begun identifying physical climate risks to its real estate portfolio, starting with a pilot project in 2024 that analyzed four properties using external consultants. This effort aimed to increase understanding of and develop a process for assessing risks, particularly related to torrential rain, heat, flooding, and potential impacts from sea-level rise in Stockholm. While there has been flooding from heavy rain, the damage has been minimal due to the buildings' resilience. The company's focus was to first screen buildings it expected to be at highest risk. SKB has not yet experienced significant climate-related impacts. In 2025, the focus will shift to properties within the green framework, with a full review of the portfolio planned by 2030. Climate risk assessments are based on EU taxonomy guidelines, climate scenarios (RCP 4.5 and 8.5), and data from municipal, regional, and national authorities.

SKB's development projects could affect biodiversity, particularly the greenfield projects given their potential to disturb local ecosystems. The company has developed a biodiversity plan for new development projects that includes building biotope roofs with higher biological value than traditional sedum roofs. In line with local requirements, SKB incorporates detailed plans, environmental impact assessments (EIAs), and natural value inventories in new construction. A plant list guides the selection of species that support biodiversity, applied both in new developments and ongoing property management. In addition, SKB encourages local biodiversity initiatives in existing properties, such as cultivating meadows; installing birdhouses, bat houses, and insect hotels; and leaving behind dead wood to support local wildlife.

SKB's mandate to enhance housing considerations focuses on sustainability improving access to affordable housing. The company adheres to a not-for-profit operating model and reinvests all profits. For new apartments, it aims to have rental prices 5% below the market price of new units in the area.

Alignment Assessment

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

Alignment Summary

Aligned = ✓ Conceptually aligned = ○ Not aligned = ✕

- ✓ Green Bond Principles, ICMA, 2021 (with June 2022 Appendix 1)
- ✓ Green Loan Principles, LMA/LSTA/APLMA, 2023

✓ Use of proceeds

We assess all the framework's green project categories as having a green shade, and the issuer commits to allocating the amount equivalent to net proceeds from issued green bonds to eligible green projects. Refer to the Analysis Of Eligible Projects section for more information on our analysis of the environmental benefits of the expected use of proceeds. Funds may finance and refinance eligible projects and have the market value of fixed assets, capital expenditure, or operational expenditure. We view positively that the framework is transparent about the look-back period of three years.

✓ Process for project evaluation and selection

SKB established a green finance committee (GFC) consisting of the CFO, sustainability manager, and property development manager. The GFC's responsibilities include identifying eligible projects that comply with the criteria in the framework, evaluating their environmental and social impacts and compliance with national laws and SKB's policies, and updating its green finance framework. GFC's decisions regarding project allocation must be made in consensus. The framework's exclusion list covers fossil-based and nuclear energy, research and development of weapons and defense systems, and the extraction of resources with potentially negative environmental impacts.

✓ Management of proceeds

SKB will track the allocation of proceeds to eligible projects using its green register following a portfolio approach. For new and existing building projects, the allocation will correspond to the project's market value. If a project no longer qualifies or is divested, the allocated funds will be recredited to the register or redirected to other green projects. The finance department will track reallocations to ensure total funding does not exceed the project's value. As long as the register has a positive balance, funds may be invested in approved local securities or savings accounts, with the goal of fully allocating proceeds within one year of issuance.

✓ Reporting

SKB commits to disclosing its allocation of proceeds, the impacts of its financed projects, and summaries of its yearly activities with examples on its website annually and while instruments are outstanding. The allocation report will include a list of financed Green Projects, the nominal amount of outstanding Green Financing Instruments, the share of new financing and refinancing, unallocated proceeds (if any), and the total balance of Green Eligible Projects. Reporting on CP can be difficult for issuers because of the instruments' short tenure. If there is CP outstanding, SKB will report the value of green projects and green financing on its website. The issuer's impact report will disclose project-level performance indicators, estimate future performance for nonoperational projects, and follow the ICMA's Harmonised Framework for Impact Reporting Handbook, including methodology and relevant green impact metrics.

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 SKB's green financing 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	Description
<div><div></div><div>Medium to Light green</div></div>	<p>New buildings built after Dec. 31, 2020, must have or will receive after completion the following criteria to be eligible:</p> <ul style="list-style-type: none">A Primary Energy Demand (PED) of at least 20% lower than the threshold set for nearly zero-energy building (NZEB) requirements or have an energy performance certificate (EPC) demonstrating class A or B.An environmental certification in any of the following building certification schemes at the defined threshold or better, or an equivalent building certification:<ul style="list-style-type: none">Miljöbyggnad “Silver”The Nordic Swan EcolabelA screening of material climate risks in accordance with the EU Taxonomy Assessment and the national regulation on climate declarations. <p>In addition, buildings with a submitted permit application after Jan. 1, 2025, must:</p> <ul style="list-style-type: none">Undergo testing for airtightness and thermal integrity accordance with the EU Taxonomy.Conduct a life-cycle analysis of the building's GWP of the building in accordance with the EU Taxonomy, with a threshold for embodied carbon in accordance with the current version of Miljöbyggnad Silver. <p>Renovation of an existing building must have or will receive the following criteria to be eligible:</p> <ul style="list-style-type: none">An overall reduction in PED of at least 30% or a meeting of the applicable requirements for major renovations.A screening of material climate risks in accordance with the EU Taxonomy.

Existing buildings built before Dec. 31, 2020, must have or will receive the following criteria to be eligible:


- An EPC demonstrating class A or are within top 15% of the of the national or regional building stock, expressed as Primary Energy.
- A screening of material climate risks in accordance with the EU Taxonomy.

Analytical considerations

- The IEA emphasizes that reaching net-zero emissions in buildings demands major energy efficiency strides and fossil fuel abandonment. All properties must achieve high energy performance. New properties should also cut emissions from building materials and construction. Addressing physical climate risks is key to strengthening climate resilience across all buildings.
- From 2025-2027, SKB anticipates that the majority of proceeds will fund construction of residential properties (with building permits submitted after Jan. 1, 2025). A significant portion will also fund ongoing residential construction projects (with building permits submitted before 2025), while approximately 7% will be for renovation projects. We assign a shade of Medium to Light green to the project category to reflect the inclusion of energy use and efficiency thresholds, physical climate risk assessments, and green building certifications, while also highlighting that some construction projects do not have criteria ensuring embodied emissions are reduced.
- All new construction projects have a solid energy performance (at least lower than the requirement of 20% of BBR), which we view as a strong ambition.
- New construction projects that must meet the threshold for embodied emissions are assigned a Medium green shade. Embodied emissions thresholds levels correspond to the requirements of Miljöbyggnad Silver, currently at 290 kilograms of carbon dioxide equivalent per square meter, which we think represents significant steps to an LCCR future. When Miljöbyggnad updates the criteria to be more stringent, SKB will follow the new guidelines. The issuer informs us that to achieve the threshold, it must use low-carbon concrete and materials and reduce the volume of materials used, which it plans to do via design choices. Still, while these efforts will help decrease the lifecycle emissions of SKB's property portfolio, they will not render new construction carbon neutral. Most of SKB's emissions comes from its new construction projects, so the issuer is planning to gradually reduce the emission intensity of its projects to go beyond the ambition in the framework, to meet companywide emission reduction targets.
- The criteria for embodied emissions only apply to projects where building permits were submitted after Jan. 1, 2025. SKB acknowledges that due to a backlog of projects started before awareness of embodied emissions, only newer projects will meet the threshold. While most proceeds will finance projects with reduced embodied emissions, and the issuer expects all proceeds to do so by 2028, short-term some financed projects may still have a high climate impact from embodied emissions. These represent only a few projects, and SKB informs us it has implemented measures to reduce climate emissions for such projects, for example by choosing bricks and concrete with lower emissions. Furthermore, the projects are certified and have a solid energy performance. We allocate these projects a Light green shade.
- The green building certifications listed in the framework, namely Miljöbyggnad, could mitigate the climate and environmental impacts associated with the construction and operations of buildings. This is because they cover a broad set of issues such as energy efficiency, biodiversity, and waste and water management. The certificates' robustness and ambition depend on the version used and points obtained during the process. SKB targets Miljöbyggnad Silver for all projects, but specifically set requirements for level silver for the individual indicator climate emissions.
- Given the fixed nature of buildings, improving their resilience to physical climate risk is crucial. For new construction, acquisitions, and renovation projects, SKB commits to a material climate risk assessment that will identify actions needed to make assets more resilient. It will undertake assessments in accordance with the EU taxonomy, which specifies that relevant climate scenarios should be used. This has not been done for its full portfolio, but the issuer has confirmed that all eligible buildings will have had a climate risk assessment performed by end of year 2025.
- About 70% of SKB's projects are planned on unused natural land or parkland. Building on greenfield land presents biodiversity and climate risks, although the regulatory context of Nordic countries mitigates this. The company's property portfolio is in areas covered by legislation that requires EIAs and building permits. However, all deforestation has negative climate impacts and current practices might not sufficiently mitigate the risk, even in stringent regulatory environments.
- The issuer confirms that the framework excludes buildings with access to direct fossil-fuel heating or cooling.

- Some finances will fund renovation projects. In the transition to a low-carbon society, renovating and improving existing properties is key. Therefore, we view as favorable the framework's inclusion of criteria for renovations, including the 30% reduction in energy consumption. We therefore assess these projects as Medium green.


Renewable energy

Assessment	Description
 Dark green	Installation of renewable sources of energy including wind power, solar power, or geothermal energy (ground and surface systems connected to buildings), either as stand-alone installations or in the property portfolio.

Analytical considerations

- Renewable energy generation from solar, wind, and geothermal sources plays a crucial role in limiting global warming to well-below 2°C above pre-industrial levels, provided local and value chain environmental impacts are adequately addressed. Eligible solar projects will primarily include rooftop installations on SKB's properties. We assess this category Dark green because the projects will reduce the climate footprint of the issuer's buildings when they become operational.
- Renewable energy technology carries environmental and social risks for the value chain. The company manages supply chain risks by enforcing a supply-chain code of conduct, which it is updating in 2025 to align with EU Taxonomy and the Corporate Sustainability Reporting Directive. Compliance is monitored through a self-assessment survey for major suppliers every three years.













Clean transportation

Assessment	Description
 Dark green	Electric vehicles and bicycles and supporting infrastructure (providing electric car and bicycle pools for tenants, installing charging stations for electric vehicles, using electric vehicles for SKB's fleet of service, and facilitating bicycle areas).

Analytical considerations

- Reducing the use of vehicles and switching to electric vehicles (EVs) are central to addressing road transport emissions and transitioning to a low-carbon future in accordance with the Paris Agreement. EVs offer substantial reductions in lifecycle emissions when compared to internal combustion engine vehicles, particularly when they are manufactured and powered by renewable electricity. Therefore, by increasing the availability of charging stations, the company will improve the accessibility of EVs and encourage their adoption. To reflect the role of the activities financed under this category in contributing to these aims in Sweden, we assign this category a Dark green shading.
- The degree of lifecycle savings from EVs depends on the energy mix that powers them. SKB purchases renewable energy, with 25% coming from wind and 75% from hydro power, which we view positively. Sweden is generally well-positioned in this regard because the majority of its electricity is from renewable sources, which results in a low grid factor. According to 2023 data from the IEA, renewables (hydropower, wind, and solar) accounted for 62% of electricity generation in Sweden, with nuclear contributing 29%, biofuels and waste 8%, and fossil fuels (natural gas, oil, and coal) only 1%.
- Charging technology and other types of infrastructure might be exposed to supply-chain environmental and social risks. SKB is working to address these issues through its supply-chain code of conduct, through which it monitors suppliers with a self-assessment every three years.

S&P Global Ratings' Shades of Green

Assessments					
 Dark green	 Medium green	 Light green	 Yellow	 Orange	 Red
Description					
Activities that correspond to the long-term vision of an LCCR future.	Activities that represent significant steps toward an LCCR future but will require further improvements 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.
Example projects					
 Solar power plants	 Energy efficient buildings	 Hybrid road vehicles	 Health care services	 Conventional steel production	 New oil 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/KPI]	SDGs			
Green buildings				
	7. Affordable and clean energy	11. Sustainable cities and communities	12. Responsible consumption and production	13. Climate action
Renewable energy				
	7. Affordable and clean energy	8. Decent work and economic growth	9. Industry, innovation and infrastructure	13. Climate action
Clean transportation				
	11. Sustainable cities and communities	13. Climate action		

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

Related Research

- [Analytical Approach: Second Party Opinions](#), Mar. 6, 2025
- [FAQ: Applying Our Integrated Analytical Approach For Second Party Opinions](#), Mar. 6, 2025
- [Analytical Approach: Shades Of Green Assessments](#), Jul. 27, 2023

Analytical Contacts

Primary contact

Maria Myrvoll Knudsen
Oslo
+47-9414-3562
Maria.knudsen
@spglobal.com

Secondary contacts

Irina Velieva
Stockholm
+ 49 5783 4071
Irina.velieva
@spglobal.com

Pierre-Brice Hellsing
Stockholm
+46-8440-5906
Pierre-brice.hellsing
@spglobal.com

Second Party Opinion: Stockholm Kooperativa Bostadsforening Green Financing Framework

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