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Second Party Opinion

Jernhusen AB's Green Financing Framework

Nov. 12, 2025

Location: Sweden

Sector: Real estate

Alignment Summary

Aligned = ✓ Conceptually aligned = ○ Not aligned = ✗

- ✓ Green Bond Principles, ICMA, 2025
- ✓ Green Loan Principles, LMA/LSTA/APLMA, 2025

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

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Dark green

Activities that correspond to the long-term vision of a low-carbon climate resilient future.

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

Strengths

Jernhusen's framework combines ambitious building criteria with strong support for Sweden's highly electrified railway network.

The investments in modern stations, depots, and intermodal hubs are key to decarbonizing land transportation and will reinforce the country's transition toward low-carbon mobility.

Jernhusen has achieved 100% green financing for the second consecutive year, demonstrating a full alignment of its funding strategy with its sustainability objectives.

The company also reported that 82% of its turnover was aligned with EU Taxonomy criteria in 2024.

Weaknesses

No weaknesses to report.

Areas to watch

Embodied emissions remain a key challenge for Jernhusen, reflected by the recent spike in absolute emissions driven by intensive construction activity as the company expands and modernizes its portfolio.




While Jernhusen systematically integrates climate calculations into all its projects and has set ambitious emission reduction targets, the carbon intensity of materials such as concrete and steel continues to pose a challenge. Achieving deeper emission cuts will depend on the wider availability of low-carbon materials and innovative construction methods.

Shades of Green Projects Assessment Summary

Over the three years following the issuance of the financing, Jernhusen expects to allocate 65% of proceeds to clean transportation, 33% to green buildings, and the remaining 2% to renewable energy.

The issuer expects 63% of proceeds to be allocated to refinancing projects, while 37% of proceeds will be directed to 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 Jernhusen's green financing framework, we assess the framework as Dark green.

Clean transportation	 Dark green
Infrastructure for rail transport	
Green buildings	 Medium green
Construction of new buildings	
Acquisition and ownership of buildings	
Renewable energy	 Dark green
Installation, maintenance, and repair of renewable energy technologies	

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

EU Taxonomy Assessment Summary

We consider the projects to be aligned with the substantial contribution criteria for the EU environmental objective of climate change mitigation and with the do no significant harm (DNSH) criteria. We also think that Jernhusen's procedures meet the four elements of the minimum safeguards. The issuer's green investment forum oversees the selection of eligible projects, ensuring alignment with the EU Taxonomy's technical criteria. The projects will support Sweden's national goal of achieving net-zero greenhouse gas emissions by 2045. As an interim target, emissions will be reduced by at least 50% by 2030, compared to 2020 levels. To support this transformation, Jernhusen has developed a net-zero emissions roadmap that defines targets and measures, which are integrated into business planning and investment decisions.

Economic activity	Technical screening criteria (TSC)			Minimum safeguards (Issuer level)	Overall alignment
	Expected allocation	Substantial contribution	Do no significant harm		
6.14 Infrastructure for rail transport--NACE codes: L68, F42*	65%	✓	✓	✓	✓
7.1 Construction of new buildings--NACE codes: L68, F41, F43*	10%	✓	✓		✓

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7.6 Installation, maintenance, and repair of renewable energy technologies--NACE codes: F42, F43*	2%	✓	✓	✓
7.7 Acquisition and ownership of buildings: NACE code: L68*	23%	✓	✓	✓

*For activities not included in the EU Taxonomy, we use our "[Analytical Approach: Shades Of Green Assessments](#)," July 27, 2023 to assess whether the activity is making a substantial contribution, without significantly harming any of the other objectives.

Aligned = ✓ Not aligned = ✗ Not covered by the technical screening criteria = — Not applicable = N.A.

See [EU Taxonomy Assessment](#) 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

Jernhusen AB is a Swedish state-owned real estate company that owns, develops, and manages properties connected to the national railway network. Its portfolio includes station areas, maintenance depots, freight terminals, offices, and one hotel. While Jernhusen owns properties across Sweden, the majority of its market value--and most assets eligible for financing under the framework--are concentrated in Stockholm, Gothenburg, and Malmö. The company also manages certain railway track and siding infrastructure. Jernhusen was established in 2001, following the restructuring of Swedish Railways, and is wholly owned by the Swedish government through the Ministry of Finance. Its operations focus on the long-term management and development of transport-linked real estate assets.

Material Sustainability Factors

Climate transition risk

Increased energy use in buildings significantly contributes to climate change, accounting for about one-third of global greenhouse gas emissions, according to the International Energy Agency (IEA). This places the sector under pressure to align with climate goals, driven by public, political, legal, and regulatory demands. Rising power prices could lead to higher energy costs for building occupants and operators, requiring capital investments to meet stricter efficiency standards. These higher prices could affect household budgets and the competitiveness of commercial and industrial properties. While climate-related investments might require substantial capital, they could mitigate risks associated with regulatory changes and enhance the value of properties. Infrastructure can be designed in a way to emit lower emissions, such as electrified rail lines, but infrastructure development emits greenhouse gas emissions through land development and the use of carbon-intensive materials like steel and cement. Embodied emissions from building materials are a major source of emissions when looking at the carbon footprint of a building over its life cycle. Sweden, as a member of the EU, is implementing EU rules on the energy efficiency of buildings, and it also has more advanced regulations on embodied emissions than most European peers.

Physical climate risk

Real estate assets are vulnerable to physical climate risks due to their fixed location. These risks, which differ by area, encompass events such as flooding, storms, and heavy rainfall, of which the frequency and intensity are increasing, and chronic changes such as rising sea levels, temperature shifts, and altered precipitation patterns. These risks can damage properties, disrupt operations, endanger tenants and passengers, and require significant investments in adaptation or, in extreme cases, relocation. While many entities maintain insurance coverage, securing adequate protection for the most exposed assets may become challenging without preventive measures. In Sweden, the building and infrastructure sector is particularly vulnerable to urban and coastal flooding, storm damage, and freeze-thaw cycles that stress materials and drainage systems. Prioritizing climate resilience in the planning, construction, and maintenance of assets is therefore critical to reducing physical risk exposure and ensuring long-term operational continuity.

Biodiversity and resource use

The construction and 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 related 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 recommended by the Intergovernmental Panel on Climate Change) is central to reducing greenhouse gas emissions 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

Affordability is especially relevant for residential tenants, because rents can account for a large share of household income. But limited accessibility and affordability of commercial premises can also impede the sustainable development of local communities. Accessibility to stations and public buildings for people with disabilities is a key priority in Sweden, governed by legislation such as the Discrimination Act (Diskrimineringslagen) and the Planning and Building Act (Plan- och bygglagen), which require barrier-free access in new and renovated properties. Emphasizing universal design principles, alongside affordability considerations, strengthens inclusivity and ensures that urban spaces and transport hubs remain accessible for all users.

Issuer And Context Analysis

The framework's project categories are designed to address the key sustainability factors relevant to the company's operations. Investments in rail transport infrastructure, green buildings, and renewable energy help mitigate transition risks, because these projects support the decarbonization of the transportation and real estate sectors. Physical climate risks are also material, given the high exposure of buildings and transport assets to climate-related impacts. Furthermore, issues of accessibility and affordability, and their broader social effects on surrounding communities, are considered highly relevant across most projects within the framework.

Jernhusen's long-term climate strategy is central to its business model, since both its property portfolio and transport-linked assets are directly affected by Sweden's low-carbon transition.

The company aims to achieve net-zero emissions by 2045 and to halve its total emissions by 2030, from a 2020 base year, guided by its roadmap Fardplan for ett klimatneutralt Jernhusen (updated in 2024). To support this objective, Jernhusen has committed to the Science Based Targets initiative and aims to submit its science-based emission reduction targets for validation before the end of 2025. The company's total market-based emissions in 2024 reached 31,353 metric tons of CO₂ equivalent (t CO₂e), up 85% from 2020, mainly due to material-intensive project development, while property-management emissions fell 14%. Scope 3 emissions make up 96% of the total, reaching 30,176 t CO₂e in 2024, driven by materials, transport, and construction processes.

The company manages about 150 properties, focusing on reducing embodied carbon through life cycle assessment-based material choices (low-carbon concrete, recycled steel, reuse of structures) and operational emissions via energy-efficiency and digitalization measures. Large single developments can cause temporary spikes in emissions, leading to fluctuations depending on the stage and intensity of construction activity. However, all projects remain subject to the issuer's overarching decarbonization targets. It targets a 50% cut in energy intensity by 2030 from 2008 and 15% of its electricity to be self-produced by 2030. Jernhusen has achieved 100% green financing, and reports that in 2024, 92% of capex, 95% of opex, and 82% of turnover were assessed as aligned with the EU Taxonomy.

The issuer has developed a structured and systematic approach to managing physical climate risks, guided by the Task Force on Climate-related Financial Disclosures' recommendations and aligned with EU Taxonomy requirements. It conducts annual scenario analyses using the Intergovernmental Panel on Climate Change (IPCC) Representative Concentration Pathways (RCP) 2.6 and RCP 8.5 to identify both acute and chronic risks across its property portfolio. Under the high-emissions scenario, the main risks include heavy rainfall, storms, and rising temperatures, which can cause flooding, material degradation, and operational disruptions at stations, depots, and terminals. In 2022, a comprehensive portfolio-wide climate risk screening was completed, followed by vulnerability assessments for exposed assets. The results are integrated into investment and maintenance planning, with adaptation measures such as

drainage improvements and resilient material use implemented at several sites. According to the company, none of its properties are expected to face permanent flooding by 2050, though more frequent extreme weather events could increase costs. Financial simulations suggest potential impacts from higher repair, energy, and insurance costs, as well as lost revenue from disruptions.

Jernhusen recognizes biodiversity and ecosystems as a material sustainability topic, particularly in relation to its external environmental impact from development activities. The company's projects are primarily located on brownfield sites along existing rail infrastructure, inherently limiting land-use change and reducing harm to high-value ecosystems. Biodiversity considerations are integrated into project design and planning, including through project-specific greenery plans and building certification criteria.

The company's approach to managing accessibility and affordability risks is consistent with its public mandate. Its projects around railway stations aim to connect fragmented urban areas, creating mixed-use environments where people can live and work close to public transport, thereby supporting inclusive and sustainable growth. Accessibility requirements are embedded in project design in accordance with the Discrimination Act and Planning and Building Act, ensuring barrier-free access in new and renovated properties.

Alignment Assessment

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

Alignment Summary

Aligned = ✓ Conceptually aligned = ○ Not aligned = ✗

✓ Green Bond Principles, ICMA, 2025

✓ Green Loan Principles, LMA/LSTA/APLMA, 2025

✓ Use of proceeds

All the framework's green asset categories have been assigned a Green shade, and the issuer commits to allocate the net proceeds issued under the framework exclusively to finance or re-finance new and existing eligible green assets. All financed assets will be located in Sweden. Opex is stated to qualify with a lookback period of three years with none for capex. Jernhusen could issue a variety of green financing instruments under the framework, encompassing bonds and loans including commercial paper. The issuer specifies that it considers commercial paper, in particular, as a key component of its overall long-term financing plan. Currently, Jernhusen has approximately Swedish krona 2 billion in outstanding commercial papers, a volume that is continuously rolled over in line with market conditions. When the volume of commercial papers is reduced, it is typically offset by new issuances to maintain a balanced and diversified financing structure. Finally, the issuer will disclose the proportion of financing versus refinancing in its allocation reporting.

✓ Process for project evaluation and selection

The framework outlines the process to select and approve eligible green assets. Jernhusen has a green investment forum, comprising of the CFO and the head of sustainability, among others. The forum assesses and confirms that eligible green assets, proposed by the investment team, meet the framework's criteria. Once pre-qualified by the forum, senior management provides final approval for all eligible green assets. Jernhusen's treasury department will maintain a list of all green assets. Furthermore, the asset's perceived environmental and social risks are assessed by their alignment with the technical screening criteria (TSC) for a substantial contribution to climate change mitigation, as well as DNSH criteria and the minimum social safeguards of the EU Taxonomy. Other sustainability-related risks are managed through internal policies such as the sustainable business policy and the suppliers code of conduct, as well as adherence to the ownership policy for state-owned companies.

✓ Management of proceeds

Jernhusen's treasury department is responsible for managing the net proceeds from green financing instruments. Furthermore, the issuer commits to replacing assets, which either cease to comply with the framework's eligibility criteria or are divested or lost with another eligible asset, unless restricted by the terms in any loan documentation. The issuer will ensure that the value of the green asset portfolio is equal to the value of outstanding green instruments. Unallocated proceeds will be managed by the treasury in line with its financial policy. With respect to the additional requirements of the Green Loan Principles, we understand that Jernhusen will not issue a facility that includes non-green tranches.

✓ Reporting

Jernhusen commits to report and publish annually on its website the allocation of net proceeds and relevant environmental impact metrics through its investor report until full allocation of proceeds or, in case of material changes. The allocation report will include information on the amount and the description of the issued green financial instruments, breakdown of green assets by category, financing versus refinancing, and the amount of unallocated proceeds. The impact report will include the environmental objectives the assets contributes to, in addition to the actual and estimated metrics. Jernhusen will provide estimated impact metrics on a best-effort basis for assets that are yet to become operational. Furthermore, the issuer will share information on the methodologies and the assumptions used to calculate the key indicators, adding transparency over the

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impact of the financed asset. The allocation report will be externally verified. Jernhusen has stated that it will include information on green commercial papers in its allocation and impact reporting.

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 a consideration of environmental ambitions reflected in Jernhusen's green financing framework, we assess the framework as Dark green.



Activities that correspond to the long-term vision of a low-carbon climate resilient future.
Our [Shades of Green Analytical Approach](#) >

Green project categories

Clean transportation

Assessment

 Dark green

Description

6.14 Infrastructure for rail transport

Projects financed under this category must comply with the substantial contribution criteria for (a) electrified trackside infrastructure, (b) infrastructure dedicated to the transshipment of freight, or (c) infrastructure dedicated to the transfer of passengers.

A. Construction of new infrastructure

Train stations and depots:

- Have or will receive (i) a design stage certification or (ii) a post-construction certification of at least BREEAM-SE excellent or an equivalent environmental scheme, and
- Primary energy demand is, or will be, 20% lower than the threshold for nearly zero-energy buildings (NZEBS) according to the applicable national building code.

Intermodal terminals:

- New terminals with electrified infrastructure operated by 100% fossil-free energy.

B. Renovations and capacity improvements of infrastructure

Train stations and depots:

- Renovated existing infrastructure that has or will receive (i) a design stage certification, (ii) a post construction certification, or (iii) an in-use certification of at least BREEAM-SE very good, BREEAM In-Use very good, or an equivalent environmental scheme, or
- Projects that improve functionality or capacity so that i.e. more trains can be handled.

Intermodal terminals:

- Renovated terminals with electrified infrastructure operated by 100% fossil-free energy, or
- Projects that improve the functionality or capacity so that i.e. more units can be handled.

C. Acquisition and ownership of infrastructure

Train stations and depots:

- Have or will receive a certification of at least BREEAM-SE very good, BREEAM in-use very good, or an equivalent scheme.

Intermodal terminals:

- Terminals with electrified infrastructure operated by 100% fossil-free energy.

D. Energy-related improvements and initiatives

Installation, maintenance, and repair of energy efficiency equipment, charging stations, devices for measuring, regulating, and controlling energy performance, and renewable energy technologies:

- If applicable, the effect of the project will be verified by an energy calculation

Analytical considerations

- Mitigating greenhouse gas emissions from transportation will be crucial to meeting global decarbonization goals, because the transport sector accounts for 23% of global energy-related greenhouse gas emissions, according to the IPCC. Electric rail transport is key to decarbonizing land transportation.
- We assess Jernhusen's investments in rail transport infrastructure as Dark green, since they directly contribute to the decarbonization of Sweden's transport sector. The projects include railway stations, depots, maintenance facilities, and intermodal freight terminals nationwide, with major allocations to Stockholm, Gothenburg, and Malmö Central Stations, as well as the Hagalund depot and Varberg's new station. These investments support the modernization, expansion, and construction of railway infrastructure to improve capacity, efficiency, and intermodality of passenger and freight transport.
- A small portion of the investments in stations or terminals will consist of multiuse buildings with commercial activities and restaurants. Although these elements are not strictly rail-related and lean more toward a Medium green characteristic, we understand from the issuer that they are solely intended for the convenience of travelers, tenants, and visitors, enhancing the overall functionality and accessibility of the station areas. Such components represent only a minor share of total floor area and are subject to the same robust green project selection criteria as the rest of the portfolio.
- Projects within this category also include specific energy-related improvements and initiatives. The issuer has a structured and measurable approach to energy efficiency, supported by long-term targets and continuous operational optimization. Its primary goal is to halve energy intensity by 2030 relative to 2008; it had achieved a 39% reduction by 2024, driven by ongoing upgrades to lighting, ventilation, and window systems. The issuer states that energy management is increasingly supported by digitalization initiatives, including the installation of remote monitoring and control systems and advanced metering across the portfolio.
- While the projects under this category are designed and certified under BREEAM-SE, the certification alone does not fully ensure climate-neutral outcomes. The climate impact of the finance projects remains significant, given the high embodied emissions associated with large-scale construction, particularly from concrete, steel, and foundation work near rail infrastructure. As such, we view particularly favorably that the issuer takes active steps to reduce embodied emissions from construction materials and processes, while the financed infrastructure supports Sweden's electrified rail network and promotes low-carbon mobility. To address embodied emissions, all ongoing projects at Jernhusen include climate calculations of embodied carbon from the early design phase, with project-specific targets often agreed contractually with contractors. The targets include the use of climate-classified concrete, recycled steel, and bio-based materials, and reuse.

The company aims to halve embodied emissions from 2020 to 2030, integrating climate performance into investment decisions and requiring quarterly reporting, forecasting, and approval at each project stage. Jernhusen states that its climate calculation method aligns with industry guidelines and evolves alongside best practices. The company applies a target threshold of 300 kilograms (kg) of CO₂e per square meter of built total area, inspired by the BREEAM-SE v6.0 reference value for office buildings as well as benchmarks from peers with comparable climate ambitions. However, the company acknowledges that ground conditions and railway proximity can significantly influence project-level outcomes.

- Physical climate risks are a material consideration for all infrastructure projects. Jernhusen conducts a comprehensive assessment across its portfolio, including both RCP 2.6 (low emissions) and RCP 8.5 (high emissions) scenarios. Subsequent vulnerability analyses are conducted for risk-exposed properties to identify necessary adaptation measures, which are then integrated into maintenance plans. The assessment process follows BREEAM-SE, EU Taxonomy, and Fastighetsägarna guidelines, and it is integrated into the company's technical standards. Identified risks, primarily related to flooding, extreme precipitation, and heat waves, are assigned risk levels, and adaptation measures are developed and implemented where needed. Examples include relocating technical rooms above flood levels or using digital geomodelling to evaluate drainage and resilience needs, as implemented at the Hagalund depot.
- Financed projects are also subject to biodiversity risks, given the land use impacts of construction and maintenance activities. To mitigate these impacts, Jernhusen has adopted a biodiversity plan that integrates biodiversity management into all business areas, following the mitigation hierarchy of avoiding, minimizing, restoring, and compensating for ecological losses. The company aims to preserve and strengthen biodiversity across its portfolio by 2030 and reduce negative impacts in its supply chain by 2035, supported by nature-based solutions and collaboration with municipalities to enhance ecological connectivity. Current construction projects in the pipeline are all located on brownfield sites adjacent to existing railway infrastructure, which limits encroachment onto undeveloped land.

Green buildings

Assessment

 Medium green

Description

7.1 Construction of new buildings

- That have or will receive (i) a design stage certification or (ii) a post-construction certification of at least BREEAM-SE outstanding or an equivalent scheme. For buildings where the design stage commenced before Dec. 31, 2020, BREEAM-SE excellent is required, and
- Primary energy demand is, or will be, 20% lower than the threshold for NZEBs according to the applicable national building code, and
- The global warming potential (GWP) must be assessed in accordance with the Swedish climate declaration law and must be lower than 300 kg of CO₂e for the gross floor area.

7.7 Acquisition and ownership of buildings

- Buildings that have or will receive (i) a design stage certification, (ii) a post-construction certification or (iii) an in-use certification of at least BREEAM-SE very good, BREEAM In-Use very good or an equivalent scheme, and
- Primary energy demand is 20% lower than the threshold for NZEBs in accordance with the national building code.

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 cut emissions from building

materials and construction. Additionally, addressing physical climate risks is crucial for strengthening climate resilience across all buildings.

- We assign a Medium green shade to this project category, reflecting our view that the framework criteria and the issuer's policies ensure that financed buildings have strong energy performance and lower associated embodied emissions. The issuer expects to allocate 38% of proceeds within this category towards new buildings, and 62% to existing buildings. Given the large share of allocation to existing buildings, we view particularly favorably the issuer's commitment to only finance buildings which are 20% lower than the threshold for NZEBs. Projects included within this category include offices, hotels, and mixed-use commercial buildings located adjacent to railway infrastructure, such as Park Central and Grand Central in Gothenburg and Foajen in Malmö.
- The issuer confirms that no properties within its portfolio will have any direct heating or cooling from fossil fuels. If that were the case in the future, the asset would be excluded from the framework.
- As outlined in the assessment of the previous project category, Jernhusen implements a comprehensive physical risk assessment across all assets in its portfolio. The issuer also considers biodiversity risks and the topic of embodied emissions across the development of its properties.

Renewable energy

Assessment

 Dark green

Description













7.6 Installation, maintenance, and repair of renewable energy technologies

- If applicable, the effect of the project will be verified by an energy calculation.

Analytical considerations

- Renewable energy projects such as solar photovoltaic (PV) are key elements in limiting global warming to well below 2 C, provided their negative effects on the local environment and physical risks are sufficiently mitigated.
- We assign a Dark green shade to this project category, reflecting our view that investments in renewable energy technologies directly support the issuer’s decarbonization objectives and contribute to a low-carbon energy system. In 2024, solar installations were completed at several sites, including a new 30 kilowatt-peak facility in Lund, with additional panels integrated into the renovation of Gamla Vagnhallen in Hagalund and the modernization and expansion of the Savenas depot in Gothenburg. Total self-produced renewable energy reached 479 megawatt-hours, and the company’s solar strategy targets 15% self-produced electricity by 2030, further strengthening energy autonomy and operational sustainability.
- Renewable energy sources like solar can have a negative impact on local biodiversity. Mitigating environmental risks requires adherence to Swedish legislation, which mandates that environmental impact assessments, including biodiversity impact assessments, are carried out. The issuer implemented a new biodiversity plan in 2025 to enhance biodiversity across its properties by 2030, integrating these efforts throughout the entire value chain.
- There are carbon-emission considerations at various stages of the life cycle of solar PV panels. These stages include the sourcing of materials, the manufacture and transportation of the equipment, and the management of the equipment at the end of its life. According to Jernhusen, sustainability requirements are integrated into solar PV project contracts, which are monitored by the issuer to reduce any negative impacts.

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).

EU Taxonomy Assessment

In our EU Taxonomy assessment, we opine on whether an eligible project to be financed aligns with the EU Taxonomy in cases when the economic activity is covered by technical screening criteria (TSC), which is incorporated into European law via delegated acts. (see [“Analytical Approach: EU Taxonomy Assessment”](#)).

In our view, Jernhusen’s eligible economic activities under the EU Taxonomy meet both the substantial contribution and do no significant harm (DNSH) criteria, and its procedures are aligned with the minimum safeguards. For more information see our EU Taxonomy Assessment section below.

EU Taxonomy alignment analysis

Aligned = ✓

Not aligned = ✗

6.14 Infrastructure for rail transport – L68, F42

Jernhusen is a Swedish public limited company that primarily owns properties related to railway network, including stations, maintenance depots, and freight terminals. The activity being financed is the construction, acquisition, and renovation of infrastructure as well as energy related improvements and initiatives.

Opinion	Key findings
Substantial contribution: TSC assessment	
✓	<ul style="list-style-type: none">The issuer confirms that assets to be financed under the framework include electrified infrastructure for rail transport, such as depots, as well as intermodal freight terminals and train stations. The issuer further confirms that no infrastructure will be dedicated to the transport or storage of fossil fuels.

DNSH: TSC assessment	
According to the EU Taxonomy, this activity must not harm EU climate adaptation, water, circular economy, pollution prevention, and biodiversity objectives. We consider this activity as aligned with the DNSH TSC for all the remaining and applicable EU objectives (see the generic DNSH table for the analysis of the DNSH criteria on climate adaptation and water).	
✓	<ul style="list-style-type: none">We think Jernhusen meets the criteria for managing construction and demolition waste in line with the EU Construction and Demolition Waste Management Protocol. For all eligible projects, at least 70% of non-hazardous construction and demolition waste is directed toward reuse, recycling, or material recovery, excluding incineration for energy recovery. The issuer prioritizes resource reduction and waste minimization in its project development. Jernhusen has embedded the TSC criteria in project performance requirements and this is monitored on-site by project management, contractors, and waste operators. Additionally, the issuer provides instruction for material use and waste in its projects and detailed guidelines for circularity and waste management.Jernhusen does not manufacture constituents, therefore, such criteria under the circular economy and pollution prevention control are considered to be non-applicable.With respect to the requirements on pollution and prevention control, we assess Jernhusen as meeting the criteria for reducing noise, dust, and pollutant emissions during construction and maintenance works as well as meeting the criteria for community impact from the use of infrastructure due to its compliance with relevant Swedish legislation.We understand from the issuer that it does not currently own any properties eligible for financing under the framework that are located near Natura 2000 protected sites. Nevertheless, Jernhusen has criteria in place which includes screening of projects for biodiversity risks as part of the development plan. Additionally, adherence to the BREEAM certification scheme helps it to address potential biodiversity risks associated with the infrastructure.

7.1 Construction of new buildings – L68, F41, F43

The activity being financed is the construction of new buildings located in Sweden.

Opinion Key findings

Substantial contribution: TSC assessment

- We consider Jernhusen’s construction of new buildings activity as aligned with the TSC for a substantial contribution to the EU’s climate mitigation objective.
- ✓

 - The primary energy demand criteria established in the framework (at least 20% lower than threshold for NZEBs) exceeds the TSC’s 10% requirement for this activity. Additionally, financed buildings will have an energy performance certificate post-construction. For buildings exceeding 5,000 square meters, the TSC criteria are incorporated into the technical guidelines and sustainability performance requirements and are also a component of BREEAM certification. Furthermore, the issuer specifies that this would be within the standard practice norms for construction projects in Sweden. Any deviations from TSC requirements will be approved by project management and documented. All deviations will be assessed and managed considering the building’s long-term ownership and management. Additionally, Jernhusen requires all new buildings to achieve BREEAM-SE certification, necessitating climate calculations for at least stages A1-A5. The framework requires a post-construction certification of at least BREEAM-SE outstanding or an equivalent scheme, and BREEAM-SE excellent for buildings where the design stage commenced before Dec. 31, 2020.
 - A full life cycle assessment is carried out for all projects in line with Jernhusen’s sustainability requirements, ensuring compliance with both BREEAM-SE certification and the EU Taxonomy. In Sweden, climate declarations quantifying the GWP of the construction phase have been mandatory since January 2022, and Jernhusen’s framework specifies a GWP threshold of below 300 kg of CO₂e per square meter of gross floor area for new buildings. The issuer specifies that life cycle assessments are typically conducted by contractors or external consultants using the OneClick life cycle assessment tool, which is approved for both BREEAM and Level(s) and enables consistent internal monitoring and benchmarking of embodied emissions.

DNSH: TSC assessment

- According to the EU taxonomy, this activity must not harm EU climate adaptation, water, circular economy, pollution prevention, and biodiversity objectives. We consider this activity as aligned with the DNSH TSC for all the remaining and applicable EU objectives (see the generic DNSH table for the analysis of the applicable DNSH requirements across different activities).
- ✓

 - To meet the water DNSH criteria Jernhusen has embedded the TSC into its sustainability performance requirements. Furthermore, the issuer states that any deviation from the technical specifications is documented. Please see more information in the generic DNSH table.
 - For the pollution prevention and control DNSH assessment, Jernhusen ensures compliance by systematically applying the Byggarubedomningen system across all projects to evaluate construction materials based on their chemical content and environmental impact. Products that do not meet requirements or cannot be assessed are managed through a formal deviation procedure requiring justification and approval by project management. The company also confirms that building on contaminated land is prohibited under Swedish law, and that all projects implement measures to minimize noise, dust, and pollutant emissions during construction and maintenance in line with national regulations and the EU Taxonomy’s TSC.
 - To meet the circular economy DNSH, the issuer commits to ensure that at least 70% (by weight) of non-hazardous construction and demolition waste generated on-site is prepared for reuse, recycling, or other material recovery, in line with the EU Construction and Demolition Waste Management Protocol. Furthermore, Jernhusen’s suppliers are guided by codes of conduct that align with BREEAM certification and circular design principles. The issuer confirms that all eligible building designs and construction techniques support circularity and are aimed to be resource efficient, adaptable, flexible, and dismantlable to enable reuse and recycling, in line with the TSC.
 - The issuer primarily develops new buildings on brownfield sites and addresses environmental risks in compliance with the Swedish regulations ensuring alignment with the biodiversity DNSH criteria for new buildings.

7.6 Installation, maintenance, and repair of renewable energy technologies – F42, F43

The activity being financed is the installation, maintenance, and repair of renewable energy technologies.

Opinion	Key findings
Substantial contribution: TSC assessment	

✓	We consider Jernhusen's financing related to the installation, maintenance, and repair of renewable energy technologies to be aligned with the TSC for a substantial contribution to the EU's climate mitigation objective. The issuer specifies that eligible activities under the framework primarily focus on the installation, maintenance, and repair of solar PV systems.
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DNSH: TSC assessment

✓	According to the EU Taxonomy, these activities must not harm the climate adaptation EU objectives. We consider this issuer's activity as aligned with the DNSH TSC for climate adaptation (see the generic DNSH table for the analysis of the DNSH criteria on climate adaptation).
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7.7 Acquisition and ownership of buildings – L68

The activity being financed is the acquisition and ownership of buildings. These assets are located in Sweden

Opinion	Key findings
Substantial contribution: TSC assessment	

✓	We consider Jernhusen's activity related to the acquisition and ownership of buildings to be aligned with the TSC for substantial contribution to the EU's climate mitigation objective. The issuer specifies that it does not own any residential buildings. For assets where an environmental performance certificate rating of class A is achieved, this serves as the benchmark for eligibility; otherwise, energy performance is assessed through the company's energy management system, which identifies buildings meeting the required efficiency threshold. The top 15% threshold for energy performance in Sweden is defined by the real estate association Fastighetsägarna, and for buildings constructed after Dec. 3, 2020, Jernhusen applies the EU Taxonomy's Section 7.1 criteria as previously assessed. All buildings eligible under the framework have been integrated into Jernhusen's digitalization program, ensuring comprehensive monitoring through an implemented energy management system.
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DNSH: TSC assessment

✓	According to the EU Taxonomy, this activity must not harm the EU's climate adaptation objectives. We consider this issuer's activity as aligned with the DNSH TSC for climate adaptation (see the generic DNSH table for the analysis of the DNSH criteria on climate adaptation).
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Analysis of the generic DNSH Aligned = ✓ Not aligned = ✗

Opinion	Environmental objective	Key findings
✓	Climate adaptation	<p>For Jernhusen's construction projects, climate risk and vulnerability assessments are systematically conducted in accordance with the EU Taxonomy, BREEAM-SE, and the guidelines issued by Fastighetsägarna. These assessments ensure that all relevant physical climate risks are identified and managed proportionately, based on the nature and scale of the activity.</p> <p>For Jernhusen's entire property portfolio, climate risk assessments have been performed on a building-by-building basis. Within the property management organization, vulnerability analyses are carried out, and appropriate adaptation measures are selected and implemented. For assets eligible</p>

		<p>for financing under the green framework, supplementary assessments are undertaken within the BREEAM In-Use certification process.</p> <p>For new construction projects, assessments are carried out using the methodology defined in BREEAM-SE. These assessments typically apply a long-term horizon aligned with the expected technical and economic lifespan of the building, often extending to 2100. For existing buildings, Jernhusen applies the BREEAM In-Use framework. These assessments typically apply a medium-term horizon extending to 2070</p> <p>For the portfolio of existing buildings Jernhusen has identified buildings with higher risk than others, which are prioritized with respect to adaptation measures. However, as part of Jernhusen's sustainability performance requirements for all property management projects, adaptation to climate change should be considered in every project to improve climate resilience when possible.</p> <p>For flooding events with a 100-year return period, a climate factor of 20%-25% is often used to simulate an event in the year of 2100.</p>
✓	Sustainable water	Environmental degradation risks related to preserving water quality and avoiding water stress are identified and addressed in line with Swedish legislation, which accounts for these risks. The issuer states that in case a detailed development plan had been decided before the applicability of the current legislation, the projects will map the risks and it will conduct a management plan and document the performed actions. An environmental impact assessment is also carried out in accordance with Directive 2011/92/EU
✓	Pollution prevention	Jernhusen demonstrates a structured and comprehensive approach to managing hazardous substances in line with EU Taxonomy Annex C. The company applies the Byggsäkerhetsordningen system across all projects to screen, approve, and document building materials, allowing only products rated as recommended or accepted. Materials flagged as to be avoided require a formal, justified exemption, which is rare and closely monitored. Through the use of a digital materials logbook and continuous updates to reflect new regulatory requirements, Jernhusen ensures full traceability and systematic compliance. This process effectively minimizes the risk of using products containing restricted substances in both new construction and renovation activities.
✓	Biodiversity protection	We think that Jernhusen meets the TSC by conducting environmental impact assessments for all projects, in accordance with Directive 2011/92/EU334 and Swedish legislation, where relevant risks to biodiversity and operations close to biodiversity-sensitive areas are evaluated and considered.

Minimum safeguards assessment at issuer level Aligned = ✓ Not aligned = ✗

Opinion	Key findings
✓	<ul style="list-style-type: none">Jernhusen has established a human rights due diligence process in its activities and supply chain to ensure the identification of actual and potential impacts on human rights and ensure mitigation measures are effective. Being a state-owned entity, the issuer's operations are aligned with the Swedish state ownership policy. Additionally, it is guided by key international frameworks, including the United Nations Global Compact, the UN Guiding Principles, and the Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises, which are embedded in Jernhusen's core policies and codes of conduct for employees and suppliers. To identify potential human rights risks in its operations and the value chain, annual risk reviews are carried out across all business areas and project operations. We understand from the issuer that ongoing assessments supported by a gap analysis carried out in 2025 have highlighted key risks, especially in the supply chain, and high risk activities. Jernhusen proactively manages these risks by implementing preventative measures, strengthening contracts, providing training, and establishing controls, with a particular emphasis on sustainable sourcing and responsible practices. The issuer's management team and board of directors are responsible for ensuring effective risk management. Implementation and results are tracked through regular reporting, audits, and further integration into business planning. Critical risks and actions are continuously reviewed, and human rights issues are publicly reported in compliance and sustainability reports. In the case of ascertained human rights violations, the issuer has established plans to remediate the adverse impacts. Jernhusen provides a whistleblower function for employees and related parties and is currently evaluating the implementation of broader grievance channels. The issuer is also a member of "Rättvist byggande" (Fair Construction), a Swedish non-profit organization dedicated to fighting workplace crime within the construction sector.To address the risks of corruption and bribery, Jernhusen maintains an internal anti-corruption guideline that provides guidance to employees and consultants on adhering to relevant laws and company policies. The issuer actively promotes anti-corruption practices in the value chain by requiring suppliers to follow the supplier's code of conduct and incorporating it into contractual agreements. We understand from Jernhusen that while currently, tenant agreements don't include similar requirements, the issuer is exploring ways to increase transparency within that part of the value chain. Jernhusen has a whistleblower function for

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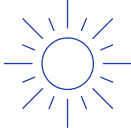


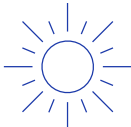


reporting suspected corruption, managed by a dedicated team that ensures all reports are properly investigated and addressed. Additionally, the issuer provides all employees with anti-corruption training, which uses diverse methods, is overseen by the legal department, and is regularly reviewed and updated.

- Jernhusen confirms that it follows responsible tax practices, adhering to OECD guidelines and industry standards. Tax compliance is consistently monitored with any issues reported to the board of directors. Furthermore, the issuer has indicated that there have been no cases or convictions found that would indicate a failure in its management of the risks related to human rights, corruption, taxation, and fair competition.
 - To ensure compliance with competition law, Jernhusen provides training and guidance to its employees through its legal department, especially for projects with potential competition concerns. The issuer also engages external experts for specialized advice and training, particularly for senior management and project teams.
-

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		
Clean transportation	<div> 11. Sustainable cities and communities*</div>		
Green buildings	<div> 7. Affordable and clean energy</div>	<div> 11. Sustainable cities and communities*</div>	<div> 12. Responsible consumption and production</div>
Renewable energy	<div> 7. Affordable and clean energy*</div>	<div> 8. Decent work and economic growth</div>	<div> 9. Industry, innovation and infrastructure*</div>

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

Related Research

- [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
- [Analytical Approach: EU Taxonomy Assessment](#), Oct. 31, 2024

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