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Second Party Opinion

Region Stockholm's Green Bond Framework

Jan. 23, 2025

Location: Sweden

Sector: Government

Alignment With Principles

Aligned = ✓ Conceptually aligned = ○ Not aligned = ✗

✓ Green Bond Principles, ICMA, 2021 (with June 2022 Appendix 1)

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

Electric rail transport and zero tailpipe emissions are essential for achieving the 2050 climate goals. Region Stockholm will allocate most of the proceeds to electric railway projects. While these projects inherently provide clear climate benefits, it is particularly noteworthy that Region Stockholm looks for opportunities to further reduce emissions, for example by setting project-level emission reduction targets.

We consider the issuer's environmental requirements for its suppliers and contractors to be a strength. The issuer demonstrates strong environmental risk management through ambitious environmental policies, including those related to its supply chain and impacts on biodiversity. For example, a previous project required that new trains be made of 98% recyclable materials.

Weaknesses

No weakness to report.

Areas to watch

While Region Stockholm is working to improve its understanding of scope 3 emissions, these are not yet fully incorporated into its climate strategy. It has been mandated to set a new scope 3 target in 2025, which will be subject to political approval.



Eligible Green Projects Assessment Summary

Over the three years following the issuance of the financing, Region Stockholm expects to allocate 95% of the proceeds to clean transportation and the remaining 5% to green buildings.

Region Stockholm expects 63% of proceeds to be allocated to refinancing projects, while 37% of proceeds will be directed toward financing new projects.

Based on the project category Shades of Green detailed below, the expected allocation of proceeds, and consideration of environmental ambitions reflected in Region Stockholm’s Green Bond Framework, we assess the framework Dark green.

Eligible projects under Region Stockholm’s Green Bond Framework are assessed based on their environmental benefits and risks, using Shades of Green methodology.

Clean transportation	 Dark green
Public transport	
Infrastructure for rail transport	
Infrastructure for low-carbon road transport and public transport	
Green buildings	 Medium green
Existing buildings	

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

EU Taxonomy Assessment Summary

Region Stockholm is responsible for public transport in Stockholm, Sweden, and is planning to finance different public transportation projects under activities 6.1, 6.3, 6.14, and 6.15. We assess that these projects align with the EU Taxonomy’s technical screening criteria (TSC) for substantial contribution and do no significant harm. Further, it may finance extension projects of two hospital buildings that are eligible under activity 7.7, where we also assess that the buildings align with the TSC for substantial contribution and do no significant harm.

Economic activity	Technical screening criteria (TSC)			Overall alignment
	Substantial contribution	Do no significant harm	Minimum safeguards (Issuer level)	
6.1 Passenger interurban rail transport - NACE code: H49.10, N77.39	✓	✓		✓
6.3 Urban and suburban transport, road passenger transport- NACE code: H49.31, H49.3.9, N77.39 and N77.11	✓	✓	✓	✓

6.14 Infrastructure for rail transport - NACE code: C25.99, C27.9, C30.20, F42.12, F42.13, M71.12, M71.20, F43.21, and H52.21	✓	✓	✓
6.15 Infrastructure enabling low-carbon road transport and public transport- NACE code: F42.11, F42.13, M71.12, and M71.20	✓	✓	✓
7.7 Acquisition and ownership of buildings - NACE code: L68	✓	✓	✓

Aligned = ✓ Not aligned = ✗ —

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.

Company Description

Region Stockholm is responsible for healthcare, public transport, regional development, and planning in Stockholm. With a population of 2.5 million citizens, Stockholm is one of the fastest growing metropolitan regions in Europe. Region Stockholm employs 46,000 people and is governed by the regional assembly, the highest decision-making body at the regional level. More than 90% of Region Stockholm's debt portfolio consists of green financing. Region Stockholm issued its inaugural green bond in 2014 and have since become one of the largest regional and municipal issuers in the Swedish green bond market.

Material Sustainability Factors

Climate transition risks

The responsibilities of Region Stockholm leave it exposed to high emission sectors such as transportation and real estate. The Swedish government aims to become net zero by 2045 and has a strategy that addresses environmental issues relevant to Region Stockholm.

Public transportation is a core responsibility of Region Stockholm. The transport sector accounts for 54% of the total greenhouse gas emissions in the Stockholm region, with passenger cars alone contributing 36%. While the Swedish government aims to decrease the transport sector's carbon footprint by 2030, including a 70% reduction in emissions compared to 2010 levels, recent national policy changes in Sweden--such as reduced biofuel blending requirements, lower taxes on gasoline and diesel, and the removal of electric vehicle purchase bonuses--are expected to increase transport sector emissions. This creates additional challenges for Region Stockholm in meeting its climate goals.

Construction projects contribute to global climate change largely via embedded carbon in key materials such as steel and concrete, as well as greenhouse gases emitted during the operational phase of building. Embodied emissions from building materials are a major source of emissions when assessing the carbon footprint of a building over its life cycle. As a member of the EU, Sweden implements EU rules on energy efficiency in buildings and has more advanced regulations than most European countries regarding embodied emissions.

Physical climate risks

Physical climate risks can affect many economic activities and increased greenhouse gas emissions will lead to more frequent and severe climate hazards, absent adaptation. While the physical impacts of climate change and extreme weather will continue

to play out globally, the direct effects--including (but not limited to) heat waves, flooding, and wildfires--are more localized. The indirect impacts of such events will affect different channels (such as the volume and pricing of traded goods and services), going beyond administrative borders and cascading through multiple sectors.

Over the past century, Sweden has experienced a noticeable rise in average temperatures. A significant increase in recent decades has influenced its ecosystems and weather patterns. Stockholm is exposed to physical climate risks such as alterations in precipitation, including increased flooding, changing snow and ice patterns, and generally more storms and extreme weather.

Other environmental factors

When building infrastructure and new developments, Region Stockholm is exposed to risks related to water, land use and biodiversity, and pollution. Human activities, such as infrastructure development, have increased its exposure to pollution risks and biodiversity loss. Preserving natural carbon stocks is key to meeting climate goals since many habitats, such as bogs and organic soils, store large amounts of carbon. Disturbing these can lead to significant emissions. Nature 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 certain changes are irreversible.

Issuer And Context Analysis

We consider that eligible projects directly address sustainability factors that are material to Region Stockholm's activities, notably climate transition. The framework's emphasis on zero tailpipe public transportation is highly relevant to the region's efforts to reduce overall emissions. Further, the framework allows for financing hospital buildings that meet green building criteria. Both the transportation sector and buildings are exposed to the impacts of climate change, making the management of physical climate risks a key consideration in our analysis.

Region Stockholm has a proven track record of emission reductions and strong environmental governance to mitigate climate risks, but its climate strategy is constrained by incomplete scope 3 data. Region Stockholm aims to halve its emissions by 2030 compared to 2019 and to reach climate neutrality by 2035 at the latest. Its targets encompass direct (scope 1), indirect (scope 2), and certain aspects of consumption-based emissions (scope 3). Since 1990, the region has reduced greenhouse gas emissions by 75%, including a 20% reduction since 2019, achieving an annual decrease of approximately 5% from 2019 to 2023. The results are driven by an increase in the use of renewable fuels, such as all rail traffic being powered by renewable energy, buses primarily running on biofuels, and tripling hydrotreated vegetable oil in maritime traffic. Region Stockholm recognizes the need to further strengthen scope 3 reporting and targets and is working to further refine and develop scope 3 reporting. It has been mandated to set a new scope 3 target in 2025, which will be subject to political approval.

Region Stockholm aims to be a leader in Europe in setting sustainability requirements for public procurement, recognizing that a significant portion of its environmental impact arises from the goods and services it uses. It is committed to establishing high procurement standards to mitigate this impact and uphold human rights throughout its supply chains. It plans to enhance circularity in purchased goods and services. A climate action plan is being developed with prioritized measures, including: 1) Electrification of the vehicle fleet, 2) Increased energy efficiency in vehicle support systems, 3) Transition to fossil-free fuels for non-electrifiable boat transport, 4) Reduction of material usage in healthcare, 5) Decreased purchase volumes, and 6) Transition to lower climate impact products.

Region Stockholm has different approaches to assessing physical climate risks depending on the activity. For hospital buildings, Region Stockholm works with climate adaptation plans that include all care buildings to identify physical climate-related risks. For transportation projects, physical risks are assessed through mandatory environmental impact assessments (EIAs). All financed projects will be aligned to the Do No Significant Harm (DNSH) criteria for climate change adaptation, which we view as a robust approach to assessing physical climate risks.

For projects requiring building on greenfield land, Region Stockholm has additional policies and procedures that go beyond regulatory requirements for mitigating biodiversity risks. When building on greenfield areas, there are biodiversity risks as well as climate risks. In all locations where Region Stockholm might build infrastructure for public transport, there are legal requirements that mandate EIAs. The regulatory context of operating in Sweden mitigates these risks to an extent. However, all deforestation negatively affects climate, and current practices might not sufficiently consider biodiversity and climate risks, even in stringent regulatory environments. Considerations of biodiversity and ecosystem services are included in various initiatives integrated into its infrastructure and planning and go beyond local regulation. Some examples on how Region Stockholm preserves and enhances biodiversity include conserving larger trees, repurposing felled trees as wildlife habitats, and adapting ventilation towers to host birdhouses and insect hotels. In public transport projects, such as the Green Rail Embankment along Roslagsbanan, tree conservation and replanting support local ecosystems. Noise reduction and sustainable water management are also prioritized.

Alignment Assessment

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

Alignment With Principles

Aligned = ✓

Conceptually aligned = ○

Not aligned = ✗

✓ Green Bond Principles, ICMA, 2021 (with June 2022 Appendix 1)

✓ Use of proceeds

We assess all green project categories under the framework as having a green shade, and Region Stockholm 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.

The project category consists of clean transportation and green buildings, aimed at contributing to climate change mitigation. All financed projects are in Sweden. Under Swedish law, local governments can only borrow for investments, therefore, all financed assets are classified as capital expenditures, for which the issuer does not specify a look-back period.

✓ Process for project evaluation and selection

The framework outlines the process to select and approve eligible projects and assets. Region Stockholm's treasury department will identify and select the eligible green projects, which are then approved by consensus from the steering group. The steering group comprises the sustainability director (chair), the head of treasury, a representative from the communications department, and relevant executive managers from Region Stockholm's property company, Locum AB, and Region Stockholm's transport administration. They meet every six months or as required.

Environmental and social risks are identified and managed through Region Stockholm's internal policies and EIAs. The framework includes a relevant exclusion list.

✓ Management of proceeds

Region Stockholm has a bank account to track the allocation of net proceeds using a bond-by-bond approach. The treasury department is responsible for managing these proceeds. If a project fails to meet the eligibility criteria, it will be removed from the green register. Unallocated proceeds will be held as liquidity reserve. The framework's exclusion criteria also apply to these temporary holdings, which we consider good practice. The issuer aims to allocate all net proceeds from green bonds within 12 months of issuance.

✓ Reporting

The issuer commits to disclosing the allocation and impact of proceeds annually in its Green Bond Impact Report on its website. The allocation report will include a summary of green bond developments, the total outstanding green bonds, a breakdown of green projects, financing versus refinancing, and the amount of unallocated proceeds. Region Stockholm will also report on the environmental impact of eligible projects financed by green bonds. To the extent possible, the issuer will report in line with the impact reporting principles stated in "Nordic Public Sector Issuers: Position Paper on Green Bonds Impact Reporting", a paper developed by a group of Nordic issuers, including Region Stockholm. Furthermore, Region Stockholm commits to obtaining annual post-issuance verification of the allocation of proceeds.

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 Region Stockholm's Green Bond Framework, we assess the framework Dark green.

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

Public transport

Public transport (e.g., trains, metro, buses, trams) with zero direct (tailpipe) carbon dioxide emissions.

Infrastructure – rail transport

Railway and subway infrastructure, including associated subsystems such as bridges and tunnels, stations, terminals, rail service facilities, signaling systems, safety, and traffic management, must meet one of the following criteria:

- Electrified trackside infrastructure and associated subsystems; or
- New and existing trackside infrastructure and associated subsystems with a plan for electrification of line tracks and, as necessary for electric train operations regarding sidings, or where the infrastructure will be fit for use by zero (tailpipe) CO2 emission trains; or
- Infrastructure for the transfer of passengers from rail to rail or from other modes of transport to rail.

Infrastructure – low-carbon road transport and public transport

Infrastructure dedicated to the operation of vehicles with zero tailpipe carbon dioxide emissions (i.e. electric charging points, electricity grid connection upgrades, or electric road systems).

Infrastructure dedicated to urban and suburban public passenger transport, including associated signaling systems for metro, tram, and rail systems.

Analytical considerations

- Mitigating greenhouse gas emissions from transportation will be crucial for meeting global decarbonization goals. Fossil fuel-powered vehicles and vessels also create air pollution, such as nitrogen oxides and sulfur oxides. Electric road and rail transportation are key to decarbonizing land transportation. The decarbonization of all modes of transport will require a significant expansion of low-carbon transport infrastructure. In infrastructure projects, value chain emissions and environmental impacts can be significant and should be carefully managed--for example, by choosing low-carbon construction materials. Physical climate risks also are a material consideration for all infrastructure projects.
- Region Stockholm is mainly planning to finance three projects within the next three years, all of which have zero tailpipe emissions, and are viewed as Dark green. First project is Roslagsbanan, which aims to increase the capacity of a historic railway line. Minimizing the environmental impact of construction was prioritized under the project, where Region Stockholm set environment requirements for suppliers and implemented measures such as storing and reusing shaft masses to decrease transport needs. The second project is a tramline to Kista, which is being expanded by eight kilometers from Norra Ulvsunda to Helenelund. The third project is the expansion of the subway, with Region Stockholm being commissioned to add 18 stations to the Stockholm metro.
- During the planning phase, Region Stockholm's public transport projects assess the climate impact of energy use over the life cycle to select energy supply and energy-efficient solutions. For newer projects, Region Stockholm sets specific emission reduction targets for transportation projects. One example is the expansion of the subway, which targets a 25% greenhouse gas reduction compared to an established baseline. The goal applies for the entire project period, which is expected to end in 2030. For future projects, Region Stockholm expects to set even higher reduction targets, with some projects targeting a 50% reduction.
- For all projects, Region Stockholm assesses environmental risks, such as biodiversity and pollution risks, and physical climate risks. We assess that the projects align with all relevant DNSH criteria regarding climate change adaptation, pollution, water, and biodiversity (see the EU taxonomy assessment below).
- Region Stockholm has confirmed it will only finance investments in stations that are essential for public transport. Under the framework, it will not finance investments related to shopping malls, retail stores, or restaurants that may form part of the stations.

Green buildings

Assessment

 Medium green

Description

Existing buildings

Buildings with an Energy Performance Certificate (EPC) A or those qualifying within the top 15% of the national building stock, as measured by operational primary energy demand and demonstrated by adequate evidence.

In addition, Region Stockholm works with comprehensive climate adaptation plans that include all care buildings and identify physical climate-related risks associated with them. If needed, Region Stockholm will make the buildings more climate resilient.













Analytical considerations

- The IEA emphasizes that achieving net-zero emissions in buildings demands major strides toward energy efficiency. Existing buildings need to achieve high energy performance, furthermore, addressing physical risks is important to enhance climate resilience across all buildings.

Second Party Opinion: Region Stockholm's Green Bond Framework

- The focus of this category is on hospital buildings and their related facilities. These buildings will be in the top 15% of the building stock in terms of energy performance and have undergone a comprehensive climate risk screening. No buildings will be using direct fossil fuel heating. Further, all hospitals have good access to public transport, which we view favorably. Based on the selection criteria, we assess these buildings as Medium green, given their emphasis on high energy performance and the assessment of physical climate risks.
- Region Stockholm anticipates minimal allocation to green buildings but may refinance green bonds for new extensions of two existing hospitals--Södersjukhuset and Danderyds sjukhus--if they meet the framework criteria at issuance. Södersjukhuset, a hospital in central Stockholm, is part of Region Stockholm's future healthcare plans. In 2020, Region Stockholm completed an extension of Södersjukhuset, which included a service area, an emergency department, a care building with single patient rooms, and a treatment building with surgery rooms. All buildings were built at the same time, with two of them financed by green bonds. These buildings were constructed under Miljöbyggnad 2.2 standards, achieving a preliminary gold rating and exceeding BBR21 building standards, which were in effect when the permits were obtained. Sweden's current building code is BBR29. Danderyd, located in northern Stockholm, is one of Sweden's largest emergency hospitals. In 2019, an emergency and treatment building was built. Certified gold under Miljöbyggnad 2.2 in 2023, it exceeded BBR20 building standards. The project emphasized energy efficiency by utilizing waste heat from sterilization processes to preheat tap water and implementing heat recovery from cooling systems to support heating.
- To identify the top 15%, Region Stockholm expects to use the common definition in the Swedish market developed by Fastighetsägarna. The analysis has identified the appropriate threshold value for hospital buildings. Due to their specialized functions of hospital buildings--including 24/7 operations, advanced medical equipment, and strict climate control requirements--they are inherently energy-intensive, meaning even highly energy-efficient hospitals can have substantial energy consumption.
- While Region Stockholm will not finance new building construction under this framework, the hospital buildings that may receive financing are newer properties. Given the significant climate impacts associated with new construction projects, particularly in terms of embodied carbon, we regard the use of low-emission materials in newer buildings to be crucial. While buildings are certified, Miljöbyggnad 2.2 has few criteria that address the reduction of embodied emissions.
- For all buildings we consider exposure to physical climate risks as a relevant factor for their climate resilience. For hospital buildings, property company Locum--owned by Region Stockholm--will perform an overall climate, risk, and vulnerability analysis (Sw. klimat - , risk - , och sårbarhetsanalys [KRSA]) every four years. This is reviewed annually and updated, if necessary, in between.

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](#)").

Under its framework, the project categories have been mapped to applicable EU Environmental Objectives, and the framework criteria consider the TSC set out in the EU Taxonomy Delegated Act on climate change mitigation. Region Stockholm also takes into account the Do No Significant Harm (DNSH) criteria to the extent possible.

Region Stockholm is responsible for public transport in Stockholm, Sweden, where it is planning to finance different public transportation project under activities 6.1, 6.3, 6.14, and 6.15. We assess the projects are aligned with the TSC's substantial contribution criteria and aligned with the DNSH criteria of the EU taxonomy. Further, it may finance extension projects of two hospital buildings that are eligible under activity 7.7, where we also assess that the buildings align with the TSC's substantial contribution criteria and the DNSH criteria of the EU taxonomy.

Region Stockholm's procedures are aligned with the EU Taxonomy's requirements for minimum safeguards.

EU Taxonomy – Detailed analysis

6.1 Passenger interurban rail transport– H49.10, N77.39

Region Stockholm is responsible for public transport in Stockholm, Sweden, where it is planning to finance electric train projects under this activity. For more details on these projects, see analytical considerations under the assessment of clean transportation.

Opinion Key findings

Substantial contribution: Technical screening criteria assessment

- ✓ We consider Region Stockholm's activity of passenger interurban rail transport to be aligned with the TSC for substantial contribution to the EU's climate mitigation objectives.
- Criteria included in the framework ensures alignment with the TSC.

Do no significant harm (DNSH): Technical screening criteria assessment

- ✓ We consider Region Stockholm's activity of passenger interurban rail transport to be aligned with the DNSH TSC for all remaining applicable EU objectives.
- For alignment with DNSH regarding climate change adaptation, see the analysis of alignment for the generic DNSH below.
 - For the circular economy, we assess Region Stockholm meets the criteria for managing waste in accordance with the waste hierarchy. The organization emphasizes resource efficiency and circularity by prioritizing the reuse and recycling of materials in the procurement process for acquiring trains. For the use phase, compliance is assured through the Transport Agreement, which requires operators to follow waste hierarchy principles, supported by prohibited material lists and circular economy guidelines.
 - Environmental audits ensure compliance with waste management requirements, including inspections of waste container contents, proper placement of sorting containers, and analysis of unsorted waste fractions. These audits also monitor progress toward achieving environmental waste targets, confirming a systematic approach to responsible waste handling. The criteria under pollution prevention control are viewed as non-applicable since combustion engines are not within the scope for Region Stockholm's activities, which will only finance electric trains.

6.3 Urban and suburban transport, road passenger transport – H49.31, H49.3.9, N77.39, N77.11

Region Stockholm is responsible for public transport in Stockholm, Sweden, where it is planning to finance electric tram and subway projects under this activity. For more details on these projects, see analytical considerations under the assessment of clean transportation.

Opinion	Key findings
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Substantial contribution: Technical screening criteria assessment	
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| ✓ | <p>We consider Region Stockholm's activity of urban and suburban transport, as well as road passenger transport, to be aligned with the TSC for substantial contribution to the EU's climate mitigation objective.</p> <ul style="list-style-type: none">• Criteria included in the framework ensures alignment with the TSC. |
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Do no significant harm (DNSH): Technical screening criteria assessment	
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| ✓ | <p>We consider Region Stockholm's activity of urban and suburban transport, as well as road passenger transport, to be aligned with the DNSH TSC for all the remaining applicable EU objectives.</p> <ul style="list-style-type: none">• For alignment with DNSH climate change adaptation, see the analysis of alignment for the generic DNSH below.• For the circular economy, we assess Region Stockholm fulfills the criteria for managing waste in accordance with the waste hierarchy during both the use (maintenance) and end-of-life phases of its fleet. For the use phase, compliance is assured through the Transport Agreement, where operators are required to follow waste hierarchy principles, supported by prohibited material lists and circular economy guidelines. For the end-of-life phase, compliance is ensured through setting requirements in the purchasing phase. Region Stockholm performs supplier follow-ups, including dialogues, document reviews, and on-site audits. For pollution prevention control, the criteria are viewed as non-applicable since only electric trains are within the scope of financing. |
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6.14 Infrastructure for rail transport– C25.99, C27.9, C30.20, F42.12, F42.13, M71.12, M71.20, F43.21, H52.21

Region Stockholm is responsible for public transport in Stockholm, Sweden, where it is planning to finance the expansion of trains in the Stockholm region under this activity. For more details on these projects, see analytical considerations under the assessment of clean transportation.

Opinion	Key findings
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Substantial contribution: Technical screening criteria assessment	
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| ✓ | <p>We consider Region Stockholm's activity of infrastructure for rail transport to be aligned with the TSC for substantial contribution to the EU's climate mitigation objective.</p> <ul style="list-style-type: none">• Criteria included in the framework ensures alignment with the TSC. |
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Do no significant harm (DNSH): Technical screening criteria assessment	
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| ✓ | <p>We consider Region Stockholm's activity of infrastructure for rail transport to be aligned with the DNSH TSC for all remaining applicable EU objectives.</p> <ul style="list-style-type: none">• For alignment with DNSH climate change adaptation and water, see the analysis of alignment for the generic DNSH below.• We assess Region Stockholm meets the criteria for managing construction and demolition waste in line with the waste hierarchy and EU protocols. 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 organization enforces waste minimization through an environmental annex in procurement contracts, requiring contractors to follow industry guidelines such as the |
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Second Party Opinion: Region Stockholm's Green Bond Framework

"Resource and Waste Guidelines for Construction and Demolition." Additionally, its policy documents emphasize reducing virgin raw material use, optimizing material recycling, and promoting circular economy practices to ensure sustainable waste management.

- For pollution and prevention control, we assess Region Stockholm meets the criteria for reducing noise, dust, and pollutant emissions during construction and maintenance works. Systematic noise reduction efforts include noise investigations, mapping, and the implementation of measures such as wheel dampers to minimize train noise. By 2030, the goal is to ensure train noise is not perceived as disturbing. Dust control measures include maintaining clean workplaces, washing vehicles, and watering during dry conditions to reduce dust spread. Emissions of particles and nitrogen oxides from public transport are targeted for a 75% reduction by 2030. These efforts reflect Region Stockholm's commitment to minimizing environmental and health impacts.
- Region Stockholm does not manufacture constituents, therefore, some criteria under the circular economy and pollution prevention control are viewed as non-applicable, such as criteria meant for the manufacturing of constituents.
- Region Stockholm ensures compliance with conservation objectives under Natura 2000 and related directives. Before construction near Natura 2000 areas, detailed EIAs are conducted to identify and mitigate potential effects on habitats and species. Projects require permits under the Environmental Code, reviewed by the County Administrative Board of Stockholm, to ensure no significant disturbances or degradation occur. Protective measures, such as seasonal activity restrictions and buffer zones, are implemented. Post-construction, monitoring ensures the effectiveness of these measures. Collaboration with stakeholders ensures comprehensive planning, safeguarding the favorable conservation status of species and habitats in the region. For more detail on alignment with DNSH Biodiversity, see analysis below.

6.15 Infrastructure enabling low-carbon road transport and public transport – F42.11, F42.13, M71.12, M71.20

Region Stockholm is responsible for public transport in Stockholm, Sweden, where it is planning to finance the expansion of public transport in the Stockholm region under this activity. For more details on these projects, see analytical considerations under the assessment of clean transportation.

Opinion Key findings

Substantial contribution: Technical screening criteria assessment



We consider Region Stockholm's activity of infrastructure enabling low-carbon road transport and public transport to be aligned with the TSC for substantial contribution to the EU's climate mitigation objective.

- Criteria included in the framework ensures alignment with the TSC.

Do no significant harm (DNSH): Technical screening criteria assessment

We consider Region Stockholm's activity of infrastructure for rail transport to be aligned with the DNSH TSC for all remaining applicable EU objectives.



- For alignment with circular economy and pollution and prevention control, see the analysis under activity 6.14 above. For alignment with DNSH climate change adaptation and water, see the analysis of alignment for the generic DNSH below.
- For biodiversity, Region Stockholm has implemented effective measures to mitigate wildlife collisions as part of its project planning and execution processes. During the planning phase, projects assess potential impacts on biodiversity and propose actions to preserve, enhance, or compensate for affected natural values. Specific wildlife preservation measures from the Roslagsbanan expansion program include 12 fauna passages under the railway, two nature passages, and fauna depots to facilitate safe wildlife movement. Additional measures include preserved woodland habitats, insect hotels, a salamander hotel, and relocated trees to prevent logging. These actions demonstrate Region Stockholm's commitment to minimizing wildlife disturbances and collisions. Criteria regarding roads are viewed as non-applicable since they fall outside the scope of Region Stockholm's activities. For more detail on alignment on DNSH Biodiversity, see the analysis below.

7.7 Acquisition and ownership of buildings – L68

Region Stockholm has recently built extensions to two hospitals in Stockholm. For more details on these projects, see the analytical considerations under the assessment of green buildings.

Opinion Key findings

Substantial contribution: Technical screening criteria assessment

We consider Region Stockholm's acquisition and ownership of buildings activity to be aligned with the TSC for substantial contribution to the EU's climate mitigation objective.

- ✓
 - The criteria included in the framework ensure alignment with the TSC. The issuer expects to use the common definition developed by Fastighetsägarna, the Swedish property federation, to identify the top 15%, in the Swedish market.

Do no significant harm (DNSH): Technical screening criteria assessment

We consider Region Stockholm's activity of acquisition and ownership to be aligned with the DNSH TSC for all remaining applicable EU objectives.

- ✓
 - For alignment with DNSH climate change adaptation, see the analysis of alignment for the generic DNSH below.

Aligned = ✓ Not aligned = ✗

Analysis of the generic DNSH

Opinion Environmental objective Key findings

✓ Climate adaptation

All projects are subject to an analysis of potential physical climate impacts toward the end of this century, using scenarios such as the Intergovernmental Panel on Climate Change's (IPCC's) RCP4.5 and RCP8.5, and other global climate models following the Appendix A of the EU Taxonomy regulation. The analysis performed will depend on the project. For hospital buildings, Region Stockholm has commissioned its own property company, Locum, to perform an overall climate, risk, and vulnerability analysis of operations every four years. This is reviewed annually and updated, if necessary, in between. Based on the analysis, measures are identified, prioritized, and implemented to reduce the risk of operational disruptions. The results of KRSA are implemented in the long-term development of the strategic care properties. Various investigations are carried out to address all aspects, with some aimed at managing risks related to a changing climate. Examples of this could include analyzing data from the Swedish Meteorological and Hydrological Institute (SMHI) to draw conclusions about temperatures and precipitation to be used when designing technical systems. For example, storm water and rainfall investigations are based on SMHI's data for dimensioning stormwater systems. Rain dimensioning is based on extreme events expected to take place every 20 years. Additional areas investigated during the detailed planning process include humidity and its management, geotechnical conditions, ground environment, wind speed to dimension wind load, and snow amounts for calculating snow load.

In all public transport projects, EIAs are carried out, which include risk assessments. These serve as a basis for the project's EIA. These risk assessments address various climate-related risks. Flooding--a future climate scenario according to the IPCC characterized by higher average temperatures, increased precipitation, and rising water levels--must be considered and include adaptation measures to if necessary. Examples of measures taken in the Roslagsbanan project include water drums under the railway and other water and sewage facilities along the route to accommodate future increases in rainfall. Increased risks of landslides must be considered in public transport projects. Geotechnical measures should also be implemented to minimize these risks before starting the building process. In accordance with the Swedish Planning and Building law (Sw. Plan- och bygglagen), buildings must be located on land suitable for its intended purpose, considering the risk of accidents, flooding, and erosion.

Second Party Opinion: Region Stockholm's Green Bond Framework

As a result of assessments performed above, Region Stockholm is implementing appropriate adaptation solutions in line with the EU Taxonomy's TSC to avoid harm to the climate adaptation objective.

✓	Sustainable water	Region Stockholm addresses environmental degradation risks related to water quality and water stress through comprehensive assessments and planning. All eligible projects under its framework conduct EIAs and, where necessary, stormwater investigations and water activity permits. An external party approves the EIA, ensuring that all applicable legislation is taken into account. For example, the Roslagsbanan project includes water reservoirs designed to purify water. Region Stockholm has also developed a regional water supply plan in collaboration with the County Board of Stockholm, ensuring long-term drinking water security. This plan aligns with the EU Water Framework Directive and is integrated into the region's development planning.
✓	Pollution prevention	No activity under the framework is subject to the generic DNSH under pollution prevention.
✓	Biodiversity protection	We think Region Stockholm meets the TSC by conducting EIAs for all projects in accordance with Directive 2011/92/EU334, including compensation measures as required by Appendix D of the EU Taxonomy Regulation. Further, all projects must carry out sustainability analyses that go beyond EIA requirements. According to Region Stockholm, the sustainability analysis and EIAs ensure necessary mitigation measures are carried out where applicable.

Aligned = ✓ Not aligned = ✗

Minimum safeguards assessment at issuer level

Opinion **Key findings**

We consider the issuer to be aligned with the EU Taxonomy requirements for minimum safeguards.

We consider Region Stockholm to be a sub-sovereign entity and have therefore assessed how Sweden aligns with the relevant criteria. The criteria related to taxation and fair competition are not applicable. We conclude that Region Stockholm is aligned with the human rights and anti-corruption components of the minimum safeguards.

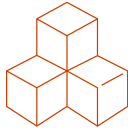






- | | |
|---|--|
| ✓ | <ul style="list-style-type: none"> Sweden receives strong scores from Freedom House, the ITUC global Rights Index, and the Enabling Environment Index from Civicus, indicating strong performance in the respect of political rights, workers' rights, and the state of civil society and civic freedoms. Further, as a member of the Council of Europe, Sweden has ratified the European Convention on Human Rights and is subject to the jurisdiction of the European Court of Human Rights. All regions in Sweden cooperate in setting requirements for sustainable supply chains in procurement and have a common code of conduct for suppliers. This code of conduct is based on the UN's Global Compact, the UN's Universal Declaration of Human Rights and its associated conventions (Bill of Human Rights), the International Labor Organization's Declaration on Fundamental Principles and Rights at Work, as well as the OECD's guidance for multinational companies regarding responsible business. We view Region Stockholm to be aligned with the minimum safeguards against bribery and corruption since Sweden has a very low corruption perception level. According to the 2023 Corruption Perceptions Index of Transparency International, Sweden scored 82 on a scale of 0 (highly corrupt) to 100 (very clean). |
|---|--|

Aligned = ✓ Not aligned = ✗

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 impact our alignment opinion.

This framework intends to contribute to the following SDGs:

Use of proceeds	SDGs			
Clean transportation	 9. Industry, innovation and infrastructure	 11. Sustainable cities and communities*	 13. Climate action	
Green buildings	 7. Affordable and clean energy	 11. Sustainable cities and communities*	 12. Responsible consumption and production	 13. Climate action

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

Related Research

- [Analytical Approach: Second Party Opinions: Use of Proceeds](#), July 27, 2023
- [FAQ: Applying Our Integrated Analytical Approach for Use-of-Proceeds Second Party Opinions](#), July 27, 2023
- [Analytical Approach: Shades of Green Assessments](#), July 27, 2023

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Second Party Opinion: Region Stockholm's Green Bond Framework

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