

Sustainalytics Second Party Opinion

Norrköping Green Bond Framework

19 September 2025

Framework owner and location:
Norrköping kommun
Norrköping, Sweden

Sector:
Government

Overall Assessment

Sustainability Contribution



Principles Alignment

✓ Aligned

Green Bond Principles 2025

Contribution to SDGs



Assessment Summary

Norrköping has developed the Green Bond Framework dated September 2025 under which it intends to issue green bonds to fund projects in Sweden in eight environmental categories.

We have assessed the overall Sustainability Contribution of the Framework as **Strong**, based on the average Sustainability Contribution of the Framework's eight use of proceeds categories. As per our methodology, we have applied equal weighting across categories.

Investments in zero-emission vehicles and related infrastructure under Clean Transportation are expected to strongly support the decarbonization of the transportation sector. Projects under Climate Adaptation are expected to substantially enhance resilience to physical climate impacts in Norrköping. Under Energy Efficiency, financing of electricity storage, distribution of district heating and cooling, production of heating and cooling from waste heat, electric heat pumps and data driven solutions is expected to strongly contribute to reducing energy use. Under Environmentally Sustainable Management of Living Natural Resources and Land Use, tree plantation using local tree species is expected to contribute strongly to ecosystem resilience.

Under Green Buildings, Norrköping will finance the best energy-performing residential and commercial buildings in Sweden. All newly developed buildings beginning 2024 will be zero-emission ready in relation to producing on-site carbon emissions and are expected to strongly support the sector's decarbonization. Financing under Pollution, Prevention and Control focuses on waste management and rehabilitation of contaminated land and is expected to strongly improve waste management practices and reduce greenhouse gas emissions. Under Renewable Energy, Norrköping will finance low-carbon electricity generation from solar, bioenergy, and geothermal, and battery energy systems connected to these sources, which are critical to decarbonizing energy systems. Additionally, Sustainable Water and Wastewater Management projects will reduce leakages and improve infrastructure for water collection, treatment, distribution and reuse, making a strong contribution to water resource efficiency.

We have assessed the Framework as **Aligned** with the Green Bond Principles 2025.

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Breakdown per Use of Proceeds Category

We have assessed the overall Sustainability Contribution of the Framework as **Strong**, based on the average Sustainability Contribution of the Framework's use of proceeds categories. As per our methodology, we have distributed weight equally across categories, as shown below.

Category	Sustainability Contribution Level	Weight
Clean Transportation	<p>Neutral Moderate Significant Strong</p>	12.5%
Climate Change Adaptation	<p>Neutral Moderate Significant Strong</p>	12.5%
Energy Efficiency	<p>Neutral Moderate Significant Strong</p>	12.5%
Environmentally Sustainable Management of Living Natural Resources and Land Use	<p>Neutral Moderate Significant Strong</p>	12.5%
Green Buildings	<p>Neutral Moderate Significant Strong</p>	12.5%
Pollution Prevention and Control	<p>Neutral Moderate Significant Strong</p>	12.5%
Renewable energy	<p>Neutral Moderate Significant Strong</p>	12.5%
Sustainable Water and Wastewater Management	<p>Neutral Moderate Significant Strong</p>	12.5%

Issuer Overview & Sustainability Strategy

Norrköping kommun is a Swedish municipality located in Östergötland County, which delivers municipal services through line departments and 10 municipal companies that together manage water and wastewater, public housing, port and airport infrastructure, tram assets, science-park facilities and cultural venues.¹ In 2024, Norrköping reported SEK 2.19 billion (EUR 196.97 million) in operating revenue, SEK 13.26 billion (EUR 1.19 billion) in total assets and 629 permanent employees.²

Norrköping has structured its environmental approach into four pillars: i) fossil-free operations; ii) energy efficiency and local renewable energy deployment; iii) waste minimization and circular material flows; and iv) climate adaptation of land use and infrastructure.

Norrköping uses municipality-wide climate mapping completed in 2024 as the baseline for decarbonization. Norrköping targets at least a 30% improvement in energy efficiency by 2030, from a 2005 baseline. Hyresbostäder, Norrköping's housing company that owns and manages residential dwellings, had already achieved an electricity-use efficiency gain of nearly 30% in 2024. To expand local electricity generation, Port of Norrköping intends to install rooftop solar panels at its head office. Additionally, Norrköping Airport participates in the national Green Airport 2.0 programme (2024–2028), which focuses on renewable energy, LED conversion, high-capacity charging and preparation for electric aviation. Additionally, Norrköping invests in climate adaptation measures, such as stormwater retention, flood plain restoration or other waterworks. Capital expenditures in adaptation projects amounted to SEK 15.76 million (EUR 1.42 million) in 2023 and SEK 3.84 million (EUR 0.35 million) in 2024.³

In 2024, Norrköping entered a contract to secure electricity generated from nuclear sources. Nodra, Norrköping's integrated water, wastewater, broadband and waste-management utility company, operates its four-compartment collection fleet on HVO100 renewable diesel or biogas and has committed to transitioning to 100% renewable fuels by 2030. The Port of Norrköping and Norrköping Airport have reported that all on-site vehicles and work machines run on renewable diesel or electricity, raising the share of renewable fuels in the municipal group to over 80% in 2024.⁴

Strategic oversight of environmental performance rests with the Municipal Council and the board of Norrköping Rådhus AB, the parent company that runs the business of Norrköping. They are supported by a central corporate department that coordinates implementation across subsidiaries through regular chief-executive forums and annual ownership dialogue. Norrköping publishes an integrated Annual and Sustainability Report. The 2024 edition consolidates all subsidiary data.⁵

¹ Norrköping, "Municipal Companies", at: <https://norrkoping.se/organisation/sa-fungerar-norrkopings-kommun/kommunala-bolag>

² Norrköping Rådhus AB, "Årsredovisning och Hållbarhetsrapport 2024", (2025), at: https://norrkoping.se/download/18.7f33d9fe1969f5e06fab80a/1747727382318/%C3%85rsredovisning_H%C3%A5llbarhetsrapport_R%C3%A5dhus_AB_2024-%C3%A5gupppl%C3%B6st.pdf

³ Norrköping Rådhus AB, "Årsredovisning och Hållbarhetsrapport 2024", (2025), at: https://norrkoping.se/download/18.7f33d9fe1969f5e06fab80a/1747727382318/%C3%85rsredovisning_H%C3%A5llbarhetsrapport_R%C3%A5dhus_AB_2024-%C3%A5gupppl%C3%B6st.pdf

⁴ Ibid.

⁵ Ibid.

Principles Alignment

We have assessed the Norrköping Green Bond Framework as follows:

Green Bond Principles 2025 - **Aligned**

Norrköping intends to issue green unsecured bonds under the Framework.

Principles Alignment Detailed Evaluation

Use of Proceeds

Aligned

Alignment with core requirements

- ▶ The Framework describes eligibility criteria appropriately.
- ▶ All expenditures are expected to provide clear environmental benefits.

Project Evaluation and Selection

Aligned

Alignment with core requirements

- ▶ The Framework describes a governance process for the evaluation and selection of eligible projects.
- ▶ The Framework communicates the environmental sustainability objectives of eligible projects.
- ▶ The Framework describes a process to identify and manage perceived environmental and social risks associated with eligible projects.

Additional considerations

- ▶ Norrköping has committed to the following practices, which go beyond the core requirements:
 - ▶ Norrköping describes how eligible projects support its overarching sustainability objectives and strategy.
 - ▶ Norrköping states that it intends to align projects under the Framework with the EU Taxonomy's technical screening criteria for substantial contribution in the Climate Delegated Act (December 2021) on a best effort basis.
 - ▶ Norrköping indicates the SDGs to which it expects to contribute through eligible projects.
 - ▶ The Framework excludes investments related to fossil fuels energy generation, research or development within weapons and defence, environmentally negative resource extraction, gambling, or tobacco.

Management of Proceeds

Aligned

Alignment with core requirements

- ▶ The Framework describes a governance structure for the management of proceeds.
- ▶ The Framework describes the processes and systems that will be used to track the proceeds.
- ▶ The Framework describes the intended temporary placement for the balance of unallocated proceeds.

Additional considerations

- ▶ Norrköping will manage the proceeds from the financing using a portfolio approach.
- ▶ Norrköping has committed to the following practices, which go beyond the core requirements:
 - ▶ Norrköping will allocate the proceeds, at the latest, 36 months after bond issuance.
 - ▶ Pending full allocation, the proceeds will be held in cash.
 - ▶ Norrköping will obtain external verification for its allocation of proceeds on an annual basis.

Reporting

Aligned

Alignment with core requirements

- ▶ Norrköping will provide an annual allocation report until there are no more bonds outstanding.

Additional considerations

- ▶ Norrköping has committed to the following practices, which go beyond the core requirements:
 - ▶ Norrköping will publish a Green Bond Report containing category-level allocation and impact information on its website.
 - ▶ Norrköping will report on the qualitative and quantitative impacts of projects using relevant metrics, where feasible.
 - ▶ The Framework indicates at least one impact metric for each category.
 - ▶ Norrköping intends to align its impact reporting with the standards set out in the Nordic Public Sector Issuers' Position Paper on Green Bonds Impact Reporting⁶ on a best effort basis.

⁶ Nordic Public Sector Issuers, "Position Paper on Green Bonds Impact Reporting", (2024), at: https://www.kuntarahoitus.fi/wp-content/uploads/2024/05/NPSI_Position_Paper_2024.pdf

Sustainability Contribution

Norrköping intends to use the proceeds from instruments issued under the Framework to finance and refinance projects expected to lead to environmental benefits primarily in Sweden.

We have assessed the overall Sustainability Contribution of the Framework as **Strong** based on the average Sustainability Contribution of the Framework’s use of proceeds categories. As per our methodology, we have distributed weight equally across categories.

Sustainability Contribution



Sustainability Contribution per Use of Proceeds Category

Clean transportation



We have assessed the Sustainability Contribution of the Clean Transportation category as **Strong**.

Expenditures under this category include zero-emission vehicles and related infrastructure, as well as infrastructure dedicated to pedestrian and cycling in Norrköping. These expenditures are expected to strongly support the decarbonization of the transportation sector and contribute to achieving the long-term goal of zero emissions transportation.

Category Expenditures

Expenditure	Description
Zero emission vehicles	<ul style="list-style-type: none"> ► Purchase of public and personal mobility transport on rail and road with zero direct tailpipe CO₂ emissions (electric or green hydrogen) such as passenger cars, bicycles, trucks, trains and buses. ► Trucks and trains will not be intended or designed for the transportation of fossil fuels.
Infrastructure supporting clean transportation	<ul style="list-style-type: none"> ► Construction, modernisation, operation and maintenance of infrastructure enabling: i) zero-emissions road transport, such as electric charging stations (installed on roads or attached to buildings) and battery exchange and swapping stations; ii) rail transport infrastructure related to zero-emissions rail systems; and iii) water transport, infrastructure for Alternative Maritime Power (AMP), such as shore-side electricity for vessels at berth, and modernization of existing infrastructure to support modal shift and make it suitable for zero-emissions vessels.
Infrastructure for personal mobility	<ul style="list-style-type: none"> ► Construction, modernization, operation and maintenance of infrastructure enabling low carbon personal mobility such as bike lanes and pedestrian walks.

Analytical Commentary

The transport sector accounted for 37% of CO₂ emissions from end-use sectors in 2022 and relied on oil products for nearly 91% of its final energy use.^{7,8} Road transport was the largest contributor, generating 73% of global transport emissions in 2022, followed by aviation, shipping and rail. To

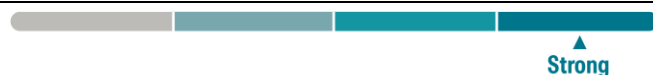
⁷ UN Environment Programme Finance Initiative, “Climate Risks in the Transportation Sector”, (2024), at: <https://www.unepfi.org/wordpress/wp-content/uploads/2024/05/Climate-Risks-in-the-Transportation-Sector-1.pdf>

⁸ IEA, “Transport”, (2023), at: <https://www.iea.org/energy-system/transport>

achieve climate neutrality by 2050, emissions from transport must decline by 25% by 2030, which will require scaling up the electrification of vehicles and the use of low emission fuels. In 2022, the transport sector was responsible for 43% of total energy-related CO₂ emissions in Sweden.⁹ With transport volumes projected to double by 2050, investments in zero emission vehicles and related infrastructure are critical to decarbonizing the transport sector.¹⁰

Norrköping may finance zero direct tailpipe CO₂ emissions vehicles and infrastructure that enable personal mobility and zero emissions transport across road, rail and water. This includes projects such as the installation of charging stations, rail electrification systems and infrastructure supporting pedestrian and cycling networks. Collectively, expenditures in this category are expected to accelerate the adoption of zero emissions transport and strongly contribute to the decarbonization of the transport sector in Sweden.

Climate change adaptation



Industry, Innovation and Infrastructure

9

Sustainable Cities and Economies

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Climate Action

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We have assessed the Sustainability Contribution of the Climate Change Adaptation category as **Strong**.

Expenditures under this category include the financing of climate change adaptation projects, such as those related to water management infrastructure and heat mapping. The projects will be supported by a climate risk assessment to identify potential hazards and an adaptation plan to guide strategic responses and are expected to substantially enhance resilience to physical climate impacts in Norrköping.

Category Expenditures

Expenditure	Description
Climate change adaptation measures	<ul style="list-style-type: none"> ▶ Adaptation of buildings, infrastructure, parks and green areas to climate risks such as increased rainfall, flooding, landslides, rising temperatures or sea level rise. ▶ Adaptation measures may include both structural measures such as water management infrastructure for stormwater, and non-structural measures such as heat mapping sensors. ▶ Norrköping will evaluate the project's environmental and social impact before financing. Eligible projects will not support assets that could obstruct other environmental objectives. ▶ Norrköping will conduct a vulnerability assessment and implement adaptation plans for potential climate risks.

Analytical Commentary

Between the 1970s and 2010s, the annual economic losses from climate-related extreme events increased from USD 198 billion to USD 1.6 trillion globally.¹¹ These extreme events, including flooding, droughts and heatwaves, are expected to become more frequent, intense and longer, threatening energy and food security, ecosystems, infrastructure, water resources, financial

⁹ IEA, "Sweden", at: <https://www.iea.org/countries/sweden/emissions>

¹⁰ World Economic Forum, "7 Reasons Why Global Transport is so Hard to Decarbonize", 2021, at: <https://www.weforum.org/agenda/2021/11/global-transport-carbon-emissions-decarbonise/>

¹¹ OECD, "Infrastructure for a Climate-Resilient Future", (2024), at: https://www.oecd.org/en/publications/infrastructure-for-a-climate-resilient-future_a74a45b0-en.html

stability and human health.¹² Due to warmer weather each year, Sweden is experiencing more frequent and intense heavy rainfall, often leading to urban flooding, causing widespread damage and disruption. Flooding is often worsened by saturated ground from successive rain events or intense local thunderstorms that overwhelm stormwater systems and strain infrastructure.¹³ Climate resilient infrastructure plays a key role in supporting communities and businesses to continue functioning.¹⁴ In addition, data-driven and digital technologies, including earth observation tools and Internet of Things, provide data and tools for long-term physical climate risk management.¹⁵ Approximately USD 387 billion in annual investment is needed to implement domestic adaptation priorities globally.¹⁶

Expenditures in climate change adaptation projects are supported by relevant assessments to ensure that they effectively address applicable climate risks. Eligible projects are also subject to monitoring and reassessment throughout their lifetime to adapt to evolving needs and climate conditions. Norrköping's financing of climate change adaptation solutions, such as climate-resilient infrastructure, including the reinforcement of building structures and upgrades to stormwater drainage systems, are expected to support the specific adaptation efforts. In addition, climate adaptation and risk management technologies such as heat mapping sensors are essential tools for managing physical climate risks and supporting effective adaptation strategies. Overall, expenditures in this category are expected to make a strong contribution to the climate change adaptation efforts in various sectors.

Energy efficiency



We have assessed the Sustainability Contribution of the Energy Efficiency category as **Strong**.

Norrköping will finance energy efficiency measures that result in a 30% reduction in energy use across municipal operations. Eligible expenditures include storage of electricity and thermal energy, distribution of district heating and cooling, production of heating and cooling from waste heat, installation, operation and maintenance of electric heat pumps and data driven solutions. Collectively, expenditures under this category are expected to strongly contribute to advancing energy efficiency and accelerating the transition to a low carbon economy.

Category Expenditures

Expenditure	Description
Energy efficiency measures	<ul style="list-style-type: none"> ▶ Energy efficiency measures that result in a 30% reduction in energy use across municipal operations. ▶ Building improvements including: i) LED lighting; ii) energy efficient windows; and iii) advanced HVAC solutions. ▶ LED lighting in streetlights. ▶ Storage of solar electricity.

¹² European Environment Agency, "Climate change impacts, risks and adaptation", (2025), at: <https://www.eea.europa.eu/en/topics/in-depth/climate-change-impacts-risks-and-adaptation>

¹³ UNFCCC, "Sweden's Adaptation Communication", (2022), at: https://unfccc.int/sites/default/files/ACR/2022-11/ADCOM_Sweden_November_221114.pdf

¹⁴ OECD, "Infrastructure for a Climate-Resilient Future", (2024), at: https://www.oecd.org/en/publications/infrastructure-for-a-climate-resilient-future_a74a45b0-en.html

¹⁵ World Economic Forum, "Innovation and Adaptation in the Climate Crisis: Technology for the New Normal", (2024), at: https://www3.weforum.org/docs/WEF_Innovation_and_Adaptation_in_the_Climate_Crisis_2024.pdf

¹⁶ UNEP, "Adaptation Gap Report 2023", (2023), at: <https://www.unep.org/resources/adaptation-gap-report-2023>

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- ▶ Storage of thermal energy in alignment with the applicable EU Taxonomy technical screening criteria for substantial contribution to climate change mitigation.¹⁷
 - ▶ District heating or cooling distribution facilities that align with the applicable EU Taxonomy technical screening criteria for substantial contribution to climate change mitigation.¹⁸ Excludes cogenerated heat from fossil fuel powered plants.
 - ▶ Installation, operation and maintenance of electric heat pumps that have global warming potential (GWP) below 675 and a refrigerant management system in place.
 - ▶ Production of heat/cool using waste heat that align with the applicable EU Taxonomy technical screening criteria for substantial contribution to climate change mitigation.¹⁹ Excludes waste heat recovery facilities dedicated to carbon-intensive sectors.
 - ▶ Data-driven solutions for GHG emissions reductions that align with the applicable EU Taxonomy technical screening criteria for substantial contribution to climate change mitigation.²⁰
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Additional details

- ▶ The Framework excludes financing of energy efficient equipment or technologies that are dedicated to buildings or facilities designed for the purpose of extraction, storage, transportation or manufacture of fossil fuels, or intended for processes that are inherently carbon intensive, primarily driven or powered by fossil fuels.
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Analytical Commentary

Global energy efficiency improved by only 1% between 2023 and 2024. Accelerating energy efficiency improvements across various sectors can reduce CO₂ emissions by more than one third by 2030 compared to 2024 and significantly contribute to achieving net zero emissions (NZE) by 2050. The NZE scenario requires an average annual improvement of 4% in global energy intensity until 2030, which could result in avoiding 10 gigatonnes of CO₂ emissions each year.²¹ Achieving the NZE scenario will also require 120 GW of additional energy storage capacity annually by 2030 and 80 million kilometres of new or upgraded grids by 2040.^{22,23} The widespread adoption of energy-efficient technologies, including heat pumps, electric and thermal energy storage and data-driven solutions, are therefore essential to improving operational energy efficiency across sectors.

Energy efficiency measures that lead to a minimum 30% reduction in energy use across municipal operations and expenditures related to the replacement of street lighting with alternatives, such as LED lighting, will result in energy-efficiency gains. Norrköping's financing of energy efficient equipment, such as electric heat pumps using refrigerants with a GWP below 675, and energy-

¹⁷ European Commission, "EU Taxonomy Navigator - Storage of thermal energy, Substantial Contribution Criteria", at: <https://ec.europa.eu/sustainable-finance-taxonomy/activities/activity/297/view>

¹⁸ European Commission, "EU Taxonomy Navigator - District heating/cooling distribution, Substantial Contribution Criteria", at: <https://ec.europa.eu/sustainable-finance-taxonomy/activities/activity/301/view>

¹⁹ European Commission, "EU Taxonomy Navigator - Production of heat/cool using waste heat, Substantial Contribution Criteria", at: <https://ec.europa.eu/sustainable-finance-taxonomy/activities/activity/311/view>

²⁰ European Commission, "EU Taxonomy Navigator - Data-driven solutions for GHG emissions reductions, Substantial Contribution Criteria", at: <https://ec.europa.eu/sustainable-finance-taxonomy/activities/activity/358/view>

²¹ IEA, "Energy Efficiency", (2024), at: <https://iea.blob.core.windows.net/assets/f304f2ba-e9a2-4e6d-b529-fb67cd13f646/EnergyEfficiency2024.pdf>

²² IEA, "Grid-scale Storage", at: <https://www.iea.org/energy-system/electricity/grid-scale-storage>

²³ IEA, "Electricity Grids and Secure Energy Transitions", (2023), at: <https://iea.blob.core.windows.net/assets/ea2ff609-8180-4312-8de9-494bcf21696d/ElectricityGridsandSecureEnergyTransitions.pdf>

efficient ventilation systems, will enable reducing energy consumption in the building stock. Storage of electricity connected to solar power and thermal energy are expected to support energy transition. Additionally, heating and cooling production from waste heat and district heating systems provide an alternative low carbon source of heat. Finally, financing data-driven solutions that are dedicated to reducing GHG emissions will enable energy efficiency improvements across sectors. Overall, these expenditures contribute strongly to advancing energy efficiency and accelerating the transition to a low carbon economy.

Environmentally sustainable management of living natural resources and land use



We have assessed the Sustainability Contribution of the Environmentally Sustainable Management of Living Natural Resources and Land Use category as **Strong**.

Norrköping may finance tree plantation with a focus on planting older, robust trees that benefit diversity and climate adaptation. Financing will also include biodiversity preservation projects and ecosystem services focused on the preservation of biodiversity and habitats. Overall, these expenditures will contribute substantially to ecosystem resilience and biodiversity preservation.

Category Expenditures

Expenditure	Description
Conservational activities	<ul style="list-style-type: none"> ▶ Protection and preservation of natural environment, including nature conservation, biodiversity enhancement, and the promotion of non-toxic environments. ▶ Planting trees in urban areas that are well-adapted to local conditions. ▶ Biodiversity preservation through ecosystem services such as management of parks and green areas, protecting the root system of trees, and water management. This includes wetland restoration and conservation projects having a restoration plan that is in line with the overall objectives of Ramsar Convention principles. ▶ Preservation efforts are part of a greater conservation plan/programme approved by the government. ▶ Use of agrochemicals follow a management plan targeting only affected areas and preventing impact on non-target species. ▶ Hunting, trapping or poisoning of vertebrate pests follow a management plan to avoid or minimize animal suffering. ▶ Excludes financing of roads, bridges and other infrastructure dedicated to road transport.

Analytical Commentary

Global biodiversity is rapidly declining due to land-use change, pollution, overexploitation of natural resources, invasive species and climate change. Wildlife populations decreased by 69% between 1970 and 2018, and approximately one million species are threatened with extinction.^{24,25}

²⁴ IPBES, "2019 Global Assessment Report on Biodiversity and Ecosystem Services", (2019) at: https://files.ipbes.net/ipbes-web-prod-public-files/inline/files/ipbes_global_assessment_report_summary_for_policymakers.pdf.

²⁵ WWF, "WWF's Living Planet Report: Devastating 69% drop in wildlife populations since 1970", (2022), at: <https://www.wwf.eu/?7780966/WWF-Living-Planet-Report-Devastating-69-drop-in-wildlife-populations-since-1970>.

Deforestation persists at a rate of 10 million hectares annually, largely due to the conversion of forests for agricultural land and unsustainable logging.²⁶ The loss of nature poses growing financial risks, as more than half of global GDP is reliant on ecosystem services.²⁷ With food production projected to increase by over 50% by 2050 compared to 2010, pressure on land, resources and ecosystems is expected to further intensify.²⁸ Achieving the 2030 targets to protect 30% of land and sea, and restore 30% of degraded ecosystems, while meeting the demands of a growing global population, will require increased investments in nature protection and sustainable forestry.^{29,30}

The planting of tree species that are well adapted to local conditions will improve the stability and resilience of ecosystems. In addition, Norrköping will finance ecosystem services to ensure that resources are managed responsibly to maintain biodiversity, productivity and regeneration capacity. These projects will be conducted in partnership with Norrköping's Municipal committees as part of a long-term action plan which is supported by an environmental impact assessment. Wetland restoration projects are implemented through technical solutions such as purification wetlands, nature conservation projects and by the formation of nature reserves. Although the Municipality does not have areas with official application of the Ramsar Convention, the expenditures are expected to be implemented in line with the overall objectives of the principles. Collectively, expenditures under this category are expected to make a strong contribution to enhancing ecosystem resilience and supporting local biodiversity conservation.

Green buildings



We have assessed the Sustainability Contribution of the Green Buildings category as **Strong**.

Residential and commercial buildings financed will meet strong energy performance standards. Additionally, new buildings will be fossil fuel-free in relation to energy use. In conjunction with renovations that either lead to a 30% reduction in primary energy demand (PED) or meet the requirements for major renovations in Sweden under Directive 2010/31/EU³¹, these expenditures are expected to strongly support the decarbonization of building stock.

Category Expenditures

Expenditure	Description
Construction and acquisition of new buildings	<ul style="list-style-type: none"> ▶ Construction of new residential or commercial buildings built on or after 31 December 2020 that have a PED at least 10% lower than the local requirements for nearly zero-energy buildings (NZEBs).³² ▶ Buildings constructed from 2024 onwards will be zero-emission ready, producing zero on-site carbon emissions.

²⁶ FAO, "The state of the World's Forest", (2020), at: <https://www.fao.org/state-of-forests/en/>.

²⁷ World Economic Forum, "Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Business and the Economy", (2020), at: https://www3.weforum.org/docs/WEF_New_Nature_Economy_Report_2020.pdf.

²⁸ World Resources Institute, "Executive Summary (Synthesis)", at: <https://research.wri.org/wrr-food/executive-summary-synthesis>.

²⁹ Convention on Biological Diversity, "Kunming-Montreal Global Biodiversity Framework: 2030 Targets (with Guidance Notes)", at: <https://www.cbd.int/gbft/targets>.

³⁰ FAO, "Conservation Agriculture", at: <http://www.fao.org/conservation-agriculture/en/>.

³¹ European Parliament, "Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings (recast)", (2010), at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32010L0031>

³² NZEB: https://energy.ec.europa.eu/topics/energy-efficiency/energy-efficient-buildings/nearly-zero-energy-and-zero-emission-buildings_en

Acquisition and ownership of existing buildings	<ul style="list-style-type: none"> ► Acquisition and ownership of residential or commercial buildings built before 31 December 2020 with an energy performance certificate³³ (EPC) A or a PED within the top 15% of the national or regional building stock. The top 15% will be determined using an external benchmark and will be updated continuously.
Renovation of existing green buildings	<ul style="list-style-type: none"> ► Renovation of buildings that results in either an overall reduction in PED by at least 30% against the performance of the building prior to renovation or complies with the applicable requirements for major renovations, as set in the applicable national and regional building regulations for major renovations implementing Directive 2010/31/EU.³⁴ ► If the building fulfils the criteria for an existing building after a renovation, the value of the whole building will be financed, otherwise only the renovation costs will be financed. ► Improvements will be achieved within three years.
Additional details	
	<ul style="list-style-type: none"> ► The Framework excludes the financing of buildings dedicated to the storage, transportation and exploration of fossil fuels, weapons, defence, other environmentally negative resource extraction, gambling, tobacco, prostitution, or any other activity deemed harmful for the environment or society.

Analytical Commentary

Buildings operations accounted for 30% of global final energy consumption and 26% of energy-related GHG emissions in 2022.³⁵ To reduce emissions from this sector, many countries are strengthening building energy codes and performance standards and accelerating the adoption of energy-efficient systems and renewable energy technologies. However, decarbonization in the sector must accelerate to achieve net zero emissions by 2050. As of 2020, only 5% of new buildings worldwide were zero-carbon-ready, while this share must increase to 100% by 2030 to keep pace with internationally agreed-upon climate goals.³⁶ Investments in zero-emission-ready buildings are critical to bridging this gap and decarbonizing the buildings sector.

The Framework's eligibility criteria for the construction and acquisition of residential and commercial buildings meet strong energy performance standards and would position the eligible buildings among the most energy-efficient within the target region. Moreover, the Framework requires new buildings constructed after 2024 to be zero-emissions ready in relation to on-site carbon emissions.

Building renovations that meet the 30% energy savings threshold or comply with the requirements for major renovations will also notably reduce emissions from the building stock. Sweden's national implementation of Directive 2010/31/EU requires buildings that undergo a major renovation to achieve energy efficiency improvements depending on the building type and climate zones.³⁷ However, it does not include a specific time frame and minimum reduction percentage in primary energy demand in which buildings are expected to achieve these energy efficiency

³³ EPC: <https://www.gov.uk/energy-performance-certificate-commercial-property>

³⁴ European Commission, "Energy performance of buildings", (2010), at: <https://eur-lex.europa.eu/eli/dir/2010/31/oj/eng>

³⁵ IEA, "Tracking Buildings", (2023), at: <https://www.iea.org/energy-system/buildings>

³⁶ IEA, "Technology and Innovation Pathways for Zero-carbon-ready Buildings by 2030", (2022), at: <https://www.iea.org/reports/technology-and-innovation-pathways-for-zero-carbon-ready-buildings-by-2030>

³⁷ Boverket, "Energiguiden", at: <https://www.boverket.se/sv/energiguiden/>

improvements, as per the EU Taxonomy³⁸ and Climate Bonds Initiative recommendations³⁹. Sweden's national implementation plan is expected to be updated by May 2026.⁴⁰

Overall, expenditures under the category are expected to collectively strongly contribute to the decarbonization of the building sector.

Pollution, prevention and control



We have assessed the Sustainability Contribution of the Pollution Prevention and Control category as **Strong**.

Norrköping may finance anaerobic digestion and composting of bio-waste, separate collection, transportation, material recovery and recycling of non-hazardous waste, supported by appropriate environmental and social risk management systems. Expenditures will also include rehabilitation of contaminated land based on a remediation, pollution monitoring and restoration plan. Collectively, these expenditures are expected to strongly contribute to the improvement of waste management practices and the reduction of greenhouse gas emissions.

Category Expenditures

Expenditure	Description
Waste management	<ul style="list-style-type: none"> ▶ Facilities and related infrastructure for the treatment of separately collected bio-waste. ▶ Anaerobic digestion of bio-waste excluding use of animal manure from non-industrial scale farms as feedstock. ▶ Composting of bio-waste. ▶ Recycling and reuse. ▶ Initiatives to minimize waste such as material recovery from non-hazardous waste where the waste received by the facility is source segregated. ▶ Supporting infrastructure for separate waste collection and transportation of non-hazardous waste such as ISO (intermodal) containers, green/garden containers, recycling bins, wheeled bins, transport vehicles and similar equipment; this includes the acquisition of zero direct emissions or hybrid vehicles.
Contaminated land rehabilitation	<ul style="list-style-type: none"> ▶ Construction, upgrades and the operation of facilities, equipment and related infrastructure for the remediation of contaminated areas. ▶ Remediation, pollution monitoring and a restoration plan is in place. ▶ Hazardous or non-hazardous waste or contaminated soils extracted or otherwise produced by the remediation activity is subject to appropriate collection, transport, treatment, recovery or disposal by an authorized operator, in accordance with legal requirements, and care is taken to prevent any mixing of excavated contaminated soils and non-contaminated soils.

³⁸ EU Taxonomy Navigator, "Renovation of Existing Buildings", at: <https://ec.europa.eu/sustainable-finance-taxonomy/activities/activity/351/view>

³⁹ Climate Bond Initiative, "Building Criteria: The Buildings Eligibility Criteria of the Climate Bonds Standard & Certification Scheme", (2023), at: https://www.climatebonds.net/files/documents/Climate-Bonds_Buildings-Criteria_Criteria-document_December-2023_2025-07-01-111616_hdmg.pdf

⁴⁰ Boverket, "Energy Performance of Buildings Directive, EPBD", (2025), at: <https://www.boverket.se/sv/byggande/uppdrag/direktiv-for-byggnaders-energiprestanda/>

Analytical Commentary

In 2020, 2.1 billion tonnes of municipal solid waste were generated globally, with the amount projected to rise by 56%, reaching 3.8 billion tonnes by 2050, driven by population and economic growth. Of the total waste generated, 19% was directed to recycling centres, 30% was sent to landfills and 13% was processed in waste-to-energy facilities, while the remaining portion was either dumped or openly burned.⁴¹ In 2023, households and businesses in Sweden generated approximately 4,100,000 tonnes of municipal waste. Approximately 39% of this waste was recycled and 59% was turned into energy.⁴²

Land degradation has far-reaching consequences, impacting agricultural productivity, environmental quality, and the socio-economic wellbeing of communities. The loss of nature poses growing financial risks, as more than half of global GDP is reliant on ecosystem services.⁴³ Rehabilitation of contaminated land faces the dual challenge of cleaning up degraded land and recovering the loss in land value.⁴⁴

Expenditures in anaerobic digestion or composting of bio-waste, material recovery from non-hazardous waste, collection and transportation of waste, including the procurement of zero-emission waste collection vehicles, can help reduce the disposal of waste in landfills, enhance waste management practices and reduce dependence on virgin raw materials.

Norrköping may also finance the rehabilitation of contaminated land in accordance with a remediation, pollution monitoring and restoration plan, and legal requirements to prevent any mixing of excavated contaminated soils and non-contaminated soils. These expenditures are expected to support the restoration of degraded ecosystems.

Overall, expenditures under this category are expected to support the transition to a circular economy, mitigate GHG emissions from new material production and support biodiversity conservation.

Renewable energy



We have assessed the Sustainability Contribution of the Renewable Energy category as **Strong**.

Norrköping intends to finance the construction and operation of electricity generation facilities from solar, biomass and geothermal, and battery energy systems connected to these sources. By generating low emissions electricity and storing surplus output for later use, these investments substantially support the long-term goal of achieving zero-emission energy generation.

Category Expenditures

Expenditure	Description
Energy generation from solar power	► Construction, operation, maintenance, repair of electricity generation facilities that produce solar photovoltaics (PV) energy.

⁴¹ United Nations Environment Programme, "Global Waste Management Outlook 2024", (2024), at: <https://wedocs.unep.org/handle/20.500.11822/44939>

⁴² Sweden, "Swedish recycling and beyond", "Sweden is aiming for zero waste, through laws and encouragement. This is how.", at: <https://sweden.se/climate/sustainability/swedish-recycling-and-beyond>

⁴³ United Nations Convention to Combat Desertification, "Global Land Outlook, Second Edition", (2022), at: https://www.unccd.int/sites/default/files/2022-04/UNCCD_GLO2_low-res_2.pdf

⁴⁴ United Nations Convention to Combat Desertification, "Global Land Restoration Economy", (2024), at: <https://g20land.org/wp-content/uploads/2025/02/Global-Land-Restoration-Economy-report.pdf>

Energy generation from bioenergy	<ul style="list-style-type: none"> ▶ Construction and operation of facilities generating electricity from biogas, achieving at least 80% GHG emissions savings compared to the fossil-fuel baseline. ▶ Eligible feedstock will be sludge from wastewater treatment and grease traps, and food waste from commercial kitchens. ▶ Excludes wastewater from fossil fuel operation, manure from industrial scale livestock operations; animal fats, oil and other animal processing by-products, and waste from non-certified RSPO palm oil operations, such as palm oil mill effluents.
Energy generation from geothermal energy	▶ Construction, operation, maintenance, repair of electricity generation facilities that produce geothermal energy with a life cycle GHG emissions intensity below 100 gCO ₂ e/kWh.
Energy storage systems and related technologies	▶ Construction and operation of battery energy storage systems connected to renewable energy sources.

Analytical Commentary

Investments in low carbon energy are critical for the global energy transition, as electricity and heat generation were responsible for approximately 44% of global CO₂ emissions from fuel combustion in 2022.⁴⁵ Meanwhile, unabated fossil fuels continue to account for more than 60% of global electricity generation. To limit global temperature rise at 1.5°C, the share of renewable energy generation must increase to 90% by 2050.^{46,47}

Investments in solar and geothermal projects that have life cycle GHG emissions intensities below the technology-agnostic threshold of 100 gCO₂e/kWh are aligned with limiting global temperature rise at 2°C.⁴⁸ Electricity generation from bioenergy is crucial for the energy transition, given their substantial GHG emissions reductions compared to fossil fuel baselines and the use of sustainably sourced feedstock. Battery energy storage systems support the integration of intermittent renewable energy.

Collectively, investments in this category are expected to strongly contribute to the decarbonization of the energy sector.

Sustainable Water and Wastewater Management



We have assessed the Sustainability Contribution of the Sustainable Water and Wastewater Management category as **Strong**.

Expenditures under this category will include the construction of water supply systems, and infrastructure and technology for the collection and treatment of water and wastewater. All projects will be accompanied by water leakage assessments to identify and reduce water loss. Overall, through the reuse, recycling and maintenance of water quality, these investments are

⁴⁵ IEA, "Greenhouse Gas Emissions from Energy Data Explorer", (2024), at: <https://www.iea.org/data-and-statistics/data-tools/greenhouse-gas-emissions-from-energy-data-explorer>

⁴⁶ IEA, "Electricity - Tracking", (2023), at: <https://www.iea.org/energy-system/electricity>

⁴⁷ IEA, "Net Zero by 2050", (2021), at: <https://www.iea.org/reports/net-zero-by-2050>

⁴⁸ IEA, "Energy Technology Perspective", (2017), at: https://iea.blob.core.windows.net/assets/a6587f9f-e56c-4b1d-96e4-5a4da78f12fa/Energy_Technology_Perspectives_2017-PDF.pdf.

expected to strongly enhance water and wastewater management infrastructure and the services that Sweden provides.

Category Expenditures

Expenditure	Description
Construction, extension, renewal and operation of water collection, treatment and supply systems	<ul style="list-style-type: none"> ▶ Development of facilities, technologies and related infrastructure for renewing, treating and collecting water. ▶ Eligible projects will undergo a water leakage level assessment to identify potential areas for improvement in water leakage reduction. ▶ Expenditures exclude projects dedicated to emissions intensive or controversial activities.
Construction, extension, renewal and operation of wastewater collection and treatment systems	<ul style="list-style-type: none"> ▶ Development of facilities, technologies and related infrastructure for wastewater collection and treatment. ▶ Eligible projects will i) undergo a water leakage level assessment and monitoring to identify potential areas for improvement in water leakage reduction; ii) have a management plan in place to monitor the discharge into receiving waters and adhere to local or national laws and regulations on pollutant levels to prevent adverse impact to the environment; and iii) further treat the by-product of wastewater treatment through anaerobic digestion or other treatment methods. ▶ Expenditures exclude projects dedicated to emissions intensive or inherently harmful activities.

Analytical Commentary

According to UNESCO, approximately 26% of the global population lacks access to safe drinking water, and around one-quarter experiences extremely high levels of water stress, consuming more than 80% of the annual renewable freshwater supply in their region.⁴⁹ Additionally, approximately 20% to 50% of distributed water is lost due to leakages and ageing infrastructure.⁵⁰ In 2022, an estimated 268 billion m³ of household wastewater was generated globally, of which only 58% was safely collected, treated and discharged. The remaining wastewater was released untreated, contaminating water bodies and endangering human health, highlighting the importance of investing in efficient and sustainable water and wastewater management systems, and infrastructure.^{51,52}

Norrköping will finance projects that reduce water leakages and improve water quality, collection, storage, treatment and distribution. Water leakage assessments are required for all eligible projects to identify and address water losses, which are expected to reduce the volume of water that must be extracted, treated and pumped.

Expenditures will also include the development of facilities and infrastructure for wastewater treatment and efficient reuse. All eligible facilities will have a management plan in place for monitoring discharges into receiving waters that comply with the national legislation on pollutant

⁴⁹ UNESCO, "Imminent risk of a global water crisis, warns the UN World Water Development Report 2023", at: <https://www.unesco.org/en/articles/imminent-risk-global-water-crisis-warns-un-world-water-development-report-2023>

⁵⁰ AbuEltayef H. et al., "Addressing non-revenue water as a global problem and its interlinkages with sustainable development goals", The International Water Association, 2024, at: <https://iwaonline.com/wpt/article/18/12/3175/98008/Addressing-non-revenue-water-as-a-global-problem>

⁵¹ UN Water, "Progress on the proportion of domestic and industrial wastewater flows safely treated", (2024), at: https://www.unwater.org/sites/default/files/2024-08/SDG6_Indicator_Report_631_Progress-on-Wastewater-Treatment_2024_EN_0.pdf

⁵² UNESCO, "The United Nations World Water Development Report 2024: water for prosperity and peace", (2024), at: <https://www.unesco.org/reports/wwdr/en/2024/s>

thresholds and treat sewage sludge. Overall, these expenditures are expected to strongly improve the efficient treatment of the water supply and wastewater.

Environmental and Social Risk Management

We have identified the following areas of environmental and social risk associated with the expenditures eligible under the Framework: land use and biodiversity loss; emissions, effluents and waste; occupational health and safety; and community relations. Norrköping relies on the following policies and processes in place to identify and mitigate such risks.

E&S Risk identified	Applicable policies, procedures and measures
Land use and biodiversity loss	<ul style="list-style-type: none"> ▶ Projects financed are expected to comply with the Environmental Impact Assessment (EIA) Directive 2014/52/EU,⁵³ which requires projects that are likely to have significant environmental effects to be adequately assessed before approval. It also requires such projects to have in place adequate measures to avoid, prevent, reduce and, if possible, offset significant adverse effects on the environment, in particular on species and habitats. For land-intensive projects, the directive mandates land use-related impacts to be identified, described and assessed through an environmental impact assessment. Large-scale projects must also limit impacts on land and soil, including organic matter, erosion, compaction and sealing. ▶ Projects must follow the EU Habitats Directive and Birds Directive,⁵⁴ which are part of the EU's Biodiversity Strategy for 2030⁵⁵ and require EU Member States to conserve the diversity of their wild flora and fauna, with a special focus on threatened and endemic species.
Emissions, effluents and waste	<ul style="list-style-type: none"> ▶ Norrköping follows the applicable EU guidelines and regulations, such as the EU Construction and Demolition Waste Protocol and Guidelines,⁵⁶ the EU Waste Framework Directive,⁵⁷ the Waste Electrical and Electronic Equipment Directive⁵⁸ and the European Waste Shipment Regulation.⁵⁹ These regulations and directives aim to ensure that waste management is carried out without endangering human health or negatively impacting the environment. ▶ In addition, Norrköping complies with the Swedish regulation for waste management⁶⁰ and waste deposition⁶¹ which includes requirements for tracking, treatment and the disposal of electrical waste and hazardous waste.
Occupational health and safety	<ul style="list-style-type: none"> ▶ Sweden's Work Environment Act (1977:1160) and supplementary regulations issued by the Swedish Work Environment Authority⁶² set out minimum safety and health requirements. These are aligned with the EU Directive on Worker Health and Safety,⁶³ which requires employers to

⁵³ European Parliament, "Directive 2014/52/EU", at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014L0052>

⁵⁴ European Parliament, "Directive 2009/147/EC of the European Parliament and of the Council", at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02009L0147-20190626>

⁵⁵ European Commission, "Biodiversity strategy for 2030", at: https://environment.ec.europa.eu/strategy/biodiversity-strategy-2030_en

⁵⁶ European Commission, "EU Construction and Demolition Waste Protocol and Guidelines", (2018), at: https://single-market-economy.ec.europa.eu/news/eu-construction-and-demolition-waste-protocol-2018-09-18_en

⁵⁷ European Parliament, "Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives", (2008), at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32008L0098>

⁵⁸ European Parliament, "Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE)", (2012), at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012L0019>

⁵⁹ European Parliament, "Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste", (2006), at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32006R1013>

⁶⁰ Sveriges Riksdag, "Avfallsförordning (2020:614)", (2020), at:

https://www.riksdagen.se/sv/dokument-och-lagar/dokument/svensk-forfattningssamling/avfallsforordning-2020614_sfs-2020-614/#K9

⁶¹ Sveriges Riksdag, "Förordning (2001:512) om deponering av avfall", (2001), at:

https://www.riksdagen.se/sv/dokument-och-lagar/dokument/svensk-forfattningssamling/forordning-2001512-om-deponering-av-avfall_sfs-2001-512/

⁶² Sveriges Riksdag, Arbetsmiljölöslag (1977:1160), at: https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/arbetsmiljolag-19771160_sfs-1977-1160

⁶³ European Commission, "Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work", (1989), at:

<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:01989L0391-20081211&qid=1691606114488>

implement necessary measures to prevent occupational risks, improve working conditions, and provide instructions and training, among other workplace health and safety provisions.

Community relations

- ▶ Norrköping embeds legally required and voluntary participation channels in its planning and service delivery processes. Residents aged 16 and above may post ideas and vote on proposals on the municipal portal. Proposals that receive at least 200 votes within 60 days are forwarded to the competence committee for formal handling.⁶⁴ Norrköping provides a standing channel for comments, suggestions, complaints and follow-ups, for two-way communication on municipal services outside formal consultations.⁶⁵
- ▶ Norrköping's draft land-use instruments are first circulated during a consultation stage for early input and then displayed during the exhibition stage for formal review. Throughout the process, stakeholders may submit written views and attend drop-in sessions at municipal venues before the plan proceeds to Council adoption.⁶⁶

⁶⁴ Norrköpings kommun, "E-förslag i Norrköpings kommun", at: <https://norrkoping.se/e-tjanster-och-blanketter/e-forslag>

⁶⁵ Norrköpings kommun, "Tyck till om kommunen", at: <https://norrkoping.se/kontakta-kommunen/tyck-till-om-kommunen>

⁶⁶ Norrköpings kommun, "Ny översiktsplan på granskning", at: <https://norrkoping.se/nyheter/2025/2025-02-03-ny-oversiktsplan-pa-granskning>

Annex 1: Assessment Framework Overview

The following is a brief overview of the [Assessment Framework](#) that we use to assess debt instruments and the frameworks that support them. Using this Assessment Framework, we provide two key signals in our Second Party Opinions: **Principles Alignment** and **Sustainability Contribution**.





Principles Alignment indicates a framework's alignment with the requirements of applicable sustainable debt market Principles.⁶⁷ This assessment is structured according to the four components of the Principles: Use of Proceeds, Project Evaluation and Selection, Management of Proceeds and Reporting. Principles Alignment is expressed at one of following levels:

- ▶ **Aligned:** Meets all requirements across the four components.
- ▶ **Partially Aligned:** Meets requirements on two or three of the four components.
- ▶ **Not Aligned:** Does not meet requirements on most or all of the four components.

In addition, we provide commentary on any shortcomings as well as best practices.

Sustainability Contribution provides a clear and comparable signal of the expected contribution of the use of proceeds to one or more environmental or social objectives. We assess each expenditure defined in a framework by looking at the activities, assets and projects that they finance. This assessment is carried out using a set of factors that we have identified as driving the expenditure's contribution to a primary objective as well as its avoidance of harm to other objectives. The assessment results in one of the four levels of Sustainability Contribution described in the table below.

We determine the average contribution of the expenditures within each use of proceeds category (as defined by the issuer) to produce an expected Sustainability Contribution for each category. We then aggregate across categories to determine the Sustainability Contribution of a framework overall. In most cases, weight is distributed equally across use of proceeds categories. However, we adjust the weighting if information regarding percentage allocation is provided by the issuer.

Level of Sustainability Contribution	Description
	The expenditure finances an activity that makes a strong contribution to an environmental or social objective. The activity is well aligned with credible standards; there are no significant lock-in risks; and the risk of negative impact to other sustainability objectives is low.
	The expenditure finances an activity that makes a significant positive contribution to an environmental or social objective while having minor shortcomings compared to a strong contribution. This is either because the activity falls somewhat short of credible standards; there is some risk of lock-in (in the case of some environmental activities); there is a risk of negative impact to other sustainability objectives; or there is some ambiguity in the criteria for the expenditure.
	The expenditure finances an activity that represents a step towards an environmental or social objective but has substantial shortcomings compared to expenditures that make a strong contribution. Although the activity will result in benefit over a relevant baseline, either it falls substantially short of credible standards; there is significant risk of lock-in; there is significant ambiguity in the criteria; or there is a risk of significant negative impact to other sustainability objectives.
	The expenditure finances an activity that entails no net positive contribution to environmental or social objectives. Even in cases where there is some positive contribution to an objective, this is offset by shortcomings in other areas. Alternatively, the eligibility criteria may be unclear to the extent that contribution cannot be determined.

⁶⁷ These primarily include the Green Bond Principles and the Social Bond Principles, published by the International Capital Market Association (ICMA); and the Green Loan Principles and the Social Loan Principles, published by the Loan Syndications and Trading Association, the Loan Market Association, the Asia Pacific Loan Market Association (LSTA-LMA-APLMA), and the Association of Southeast Asian Nations (ASEAN).

Scope of Work and Limitations

This Second Party Opinion provides a point-in-time independent opinion of the Framework as of the Evaluation Date. Our opinion may consider additional documentation and information that the Framework owner may have provided during the engagement, in addition to public and non-public information. The owner refers to the entity featuring as an issuer, borrower, special-purpose vehicle or any other entity as described in the Framework.

As part of this engagement, we communicated with representatives of the Framework owner, who acknowledge that: i) it is the sole responsibility of the Framework owner to ensure that the information provided is complete, accurate and up to date; ii) they have provided us with all of the relevant information; and iii) that all of the information has been provided in a timely manner.

This Second Party Opinion provides our opinion of the Framework and should be read in conjunction with that Framework. Any update of this Second Party Opinion will be conducted according to the agreed engagement conditions between Sustainalytics and the Framework owner.

Our Second Party Opinion provides our opinion on the alignment of the Framework with current market standards and practice but provides no guarantee of alignment nor warrants alignment with future versions of any such standards. In addition, it does not guarantee the realized allocation of proceeds towards eligible activities.

No information provided in this Second Party Opinion shall be considered as being a statement, representation, warrant or argument in favour or against the truthfulness, reliability or completeness of any facts or statements and related surrounding circumstances that the Framework owner may have made available to Sustainalytics for the purpose of this Second Party Opinion.

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