

Sustainalytics Second Party Opinion

CTP N.V. Green Bond Framework

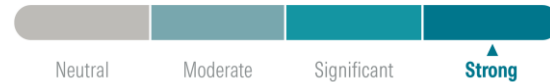
13 June 2025

Framework owner and location:
CTP N.V.
Czechia

Sector:
Commercial Real Estate

Overall Assessment

Sustainability Contribution



Principles Alignment

✓ **Aligned**

Green Bond Principles 2021

Contribution to SDGs



Assessment Summary

CTP NV has developed the CTP NV Green Bond Framework, dated June 2025, under which it intends to issue green bonds to fund projects primarily in Europe, in three environmental categories.

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

CTP intends to finance environmental expenditures in Green Buildings, Renovation and Renewable Energy. Under the Green Buildings category, CTP intends to develop and acquire buildings that achieve BREEAM, DGNB, LEED or Energy Performance Certificate (EPC) labels. The selected certification levels and labels are expected to place the eligible buildings among the most energy efficient in their regions, with the exception of certain certification levels and EPC labels that reflect comparatively lower energy efficiency standards. Overall, the criteria do not require the buildings to be fossil fuel-free in relation to energy generation, a key consideration for achieving net zero emissions in the building sector by 2050. Nevertheless, the financed expenditures are expected to significantly reduce emissions from the buildings sector and support the sector's decarbonization. CTP's investments under the renovation category, including projects that reduce primary energy demand by 30%, are expected to make a strong contribution to reducing buildings' energy consumption.

CTP also intends to finance onsite solar power, onshore wind power and battery storage systems directly connected to renewables. These assets enable buildings to generate and store renewable electricity onsite, enhancing energy self-sufficiency. We expect the above investments to overall strongly support the long-term goal of decarbonizing buildings.

We have assessed the Framework as **Aligned** with the Green Bond Principles 2021.

Contacts:

Maliha Taj
Senior Analyst
maliha.taj@morningstar.com




Stefan Spataru
Analyst
stefan.spataru@morningstar.com

Shreeya Garg
EMEA Regional Lead
Shreeya.Garg@morningstar.com

This Second Party Opinion provides our point-in-time independent opinion of the Framework as at the Evaluation Date above and serves as an update to our previous Second Party Opinion dated August 2020. Our assessments of Sustainability Contribution and Principles Alignment are based on our Assessment Framework for Use of Proceeds Instruments (also see Annex 1: Assessment Framework Overview). Our opinion also considers additional information that the Framework owner provided up to the Evaluation Date, as well as public and non-public information.

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
Green Buildings – Development, Acquisition	 Neutral Moderate Significant Strong	33%
Renovation	 Neutral Moderate Significant Strong	33%
Renewable Energy	 Neutral Moderate Significant Strong	33%

Issuer Overview & Sustainability Strategy

CTP N.V. is a real estate company, headquartered in Prague, Czechia. Founded in 1998, CTP owns, develops and manages industrial and logistics parks in Austria, Bulgaria, Czechia, Germany, Hungary, the Netherlands, Poland, Romania, Serbia and Slovakia. As of December 2024, CTP manages 13.3 million m² of gross lettable area (GLA) across more than 250 locations in 10 countries. It has a portfolio occupancy rate of 93% and a gross asset value of EUR 16.0 billion. At year-end 2024, CTP employed 889 people.¹

CTP's overarching ESG strategy is based on four pillars: i) striving to be climate positive; ii) stimulating social impact and well-being; iii) conducting business with integrity; and iv) embedding parks in communities.² The Group has set the goal of becoming carbon-neutral across its property portfolio by 2050, in line with the Paris Agreement. Additionally, CTP intends to submit its emissions reduction pathway to the Science Based Targets initiative for validation, however, specific timelines for this submission have not yet been disclosed.³

CTP's environmental roadmap focuses on: i) expanding the supply and use of renewable energy across its portfolio; ii) driving energy efficiency and lowering both operational and embodied GHG emissions in its buildings; and iii) embedding green building standards in development and asset management. Using 2023 as the baseline, the roadmap sets five objectives to be achieved by 31 December 2030: i) reduce scope 1 and 2 emissions revenue intensity by 30%; ii) reduce embodied carbon intensity by 20%; iii) increase the share of renewable electricity to 90% of CTP's and tenants' electric energy mix; iv) install 400 MWp of rooftop photovoltaic capacity; and v) ensure 90% of GLA is covered by an EPC of class C or higher. As of the end of 2024: i) rooftop photovoltaic capacity increased from 38 MWp in 2022 to 138 MWp, with renewables supplying 62% of the electricity in its building portfolio; and ii) 72% of GLA is covered by EPC class C or higher, and all buildings completed since 2010 feature solar-ready roofs and have achieved at least a BREEAM "Very Good" rating.

The Group's Board of Directors have established the Sustainability Committee, which comprises non-Executive Directors, while the Group Head of ESG attends as guest. The committee convenes regularly to integrate sustainability considerations into the Group's overarching strategy and ensure compliance with climate-related objectives.⁴

CTP reports on its GHG emissions annually,⁵ and aligns its disclosures with TCFD, GRI, IIRC and the European Public Real Estate Association's sustainability best practice recommendations.

¹ CTP N.V., "Annual Report 2024", at: <https://ctp.eu/wp-content/uploads/2025/03/CTP-N.V.-AR-2024.pdf>.

² CTP N.V., "Annual Report 2024", at: <https://ctp.eu/wp-content/uploads/2025/03/CTP-N.V.-AR-2024.pdf>.

³ CTP N.V., "Base Listing Particulars", (2025), at: <https://ctp.eu/files/2025/03/CTP-FMTN-2025-Update-Base-Listing-Particulars-2025.pdf>.

⁴ Ibid.

⁵ In accordance with the GHG Protocol Corporate Accounting and Reporting Standard and ISO 14064-1:2006.

Principles Alignment

We have assessed the company's Green Bond Framework as follows:

Green Bond Principles 2021 – **Aligned**

CTP intends to issue green 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.

Additional considerations

- ▶ The Framework limits refinancing to capex associated with the acquisition and renovation of buildings.

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 or social 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

- ▶ CTP has committed to the following practices, which go beyond the core requirements:
 - ▶ CTP describes how eligible projects support its overarching sustainability objectives and strategy.
 - ▶ CTP intends to align the Framework with the EU Taxonomy.

Management of Proceeds

Aligned

Alignment with core requirements

- ▶ The Framework describes a governance structure, including assigning responsibility 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

- ▶ CTP has committed to the following practices, which go beyond the core requirements:
 - ▶ CTP intends to allocate all proceeds to eligible projects within 24 months of issuance.

- ▶ Pending full allocation, temporary proceeds will be held in cash, cash equivalents or similar instruments.
 - ▶ The Group will obtain third party assurance for the allocation of proceeds annually until full allocation.
-

Reporting

Aligned

Alignment with core requirements

- ▶ CTP will provide an annual allocation report until the full allocation of the proceeds and renew it in case of material changes until maturity.

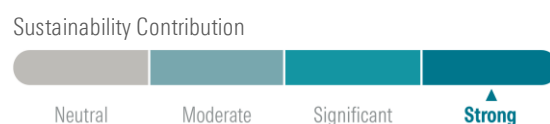
Additional considerations

- ▶ CTP has committed to the following practices, which go beyond the core requirements
 - ▶ The Group 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.
 - ▶ CTP will publish allocation and impact reports on its website.

Sustainability Contribution

CTP intends to use the proceeds from instruments issued under the Framework to finance projects and activities and refinance capex related to the projects and activities, which is expected to lead to environmental benefits in Europe.

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 per Use of Proceeds Category

Green Buildings –
Development, Acquisition



We have assessed the Sustainability Contribution of the Green Buildings category as **Significant**. Commercial buildings financed under the Framework will achieve levels of certification and EPC labels that are expected to place the eligible buildings among the most energy efficient in their regions, with the exception of those certified as BREEAM Very Good, which lacks minimum requirement on energy use reductions, and DGNB Silver and, in some jurisdictions, those with EPC Label B, which contain lower energy efficiency standards. Although certifications and labels identified in the Framework do not require the buildings to be fossil fuel-free in relation to energy generation (which is particularly relevant for new buildings), these expenditures are expected to significantly support the decarbonization of the buildings sector.

Category Expenditures

Expenditure	Description
Development and acquisition of commercial green buildings	<ul style="list-style-type: none"> Buildings, which meet at least one of the following: i) BREEAM⁶ Very Good or better; ii) DGNB⁷ Silver or better; iii) LEED⁸ Gold or better; and/or iv) EPC⁹ A or B. Excludes buildings dedicated for the storage, transportation or exploration of fossil fuels.

Analytical Commentary

In 2022, buildings consumed 30% of the world's final energy consumption and generated 26% of energy-related greenhouse gas (GHG) emissions.¹⁰ To reduce emissions and enhance sustainability in the buildings sector, many countries are strengthening building energy codes and performance standards while accelerating the adoption of energy efficient systems and renewable energy technologies. Only 5% of new buildings met zero carbon ready standards in 2020, while the target is to have 100% of new buildings comply with zero carbon ready standards

⁶ BREEAM: <https://bregroup.com/products/breeam/>.

⁷ DGNB: <https://www.dgnb.de/en>.

⁸ LEED: <https://www.usgbc.org/leed>.

⁹ EPC: <https://www.gov.uk/energy-performance-certificate-commercial-property>.

¹⁰ IEA, "Building", at: <https://www.iea.org/energy-system/buildings>.

by 2030 to stay on track with achieving net zero emissions by 2050.¹¹ Highly energy-efficient buildings that avoid onsite fossil fuel energy generation play a vital role in closing this gap and are essential to decarbonizing the global buildings sector.

The Framework's eligibility criteria for commercial properties built before 2024, incorporate levels of green building certifications such as LEED Gold or above which are expected to place the eligible buildings among the most energy-efficient in their regions. Similarly, in most target countries, the criteria for buildings with EPC A or B labels indicate strong energy performance. However, some certification levels, such as BREEAM Very Good and DGNB Silver, either lack minimum requirements for reducing energy use and carbon emissions or have lower energy use requirements. In some target countries, an EPC B label does not represent top-tier energy performance as it falls below the top 15% of the building stock in terms of energy performance.

Additionally, the Framework does not require buildings constructed after 2024 to be fossil fuel-free in their energy generation, creating a risk of fossil fuel lock-in. Despite the absence of net zero readiness, the expenditures outlined in the Framework are expected to make a significant contribution to the decarbonization of the buildings sector.

Renovation



Strong

We have assessed the Sustainability Contribution of the Renovation category as **Strong**. Eligible projects will reduce the primary energy demand (PED) of renovated buildings by at least 30%. Investments under this category are expected to make a strong contribution to reducing buildings' energy consumption and support the decarbonization of the sector.

Category Expenditures

Expenditure	Description
Renovation of existing commercial buildings	Projects that lead to at least a 30% reduction in PED compared to the energy performance before the renovation. The improvements will be achieved within three years. Financing will be limited to retrofits.

Analytical Commentary

Renovating existing building stock to achieve a zero carbon-ready performance is a critical enabler for aligning the real estate sector with global decarbonization pathways for 2030 and 2050.¹² With over 40% of buildings' floor area in developed economies constructed before 1980 (prior to the introduction of thermal regulations), retrofitting poses a significant challenge. An annual energy savings of more than 2% through renovations is essential to achieving the key milestone of upgrading 20% of the existing stock by 2030 under the International Energy Agency's net zero emissions by 2050 scenario.¹³

The Framework aims to finance buildings that will achieve at least a 30% reduction in PED within three years, as compared to energy performance before renovation. These expenditures are

¹¹ IEA, "Tracking Buildings", (2023), at: <https://www.iea.org/energy-system/buildings>.

¹² IEA, "Renovation of near 20% of existing building stock to zero-carbon-ready by 2030 is ambitious but necessary", at: <https://www.iea.org/reports/renovation-of-near-20-of-existing-building-stock-to-zero-carbon-ready-by-2030-is-ambitious-but-necessary>.

¹³ IEA, "Net Zero Emissions by 2050 Scenario (NZE)", at: <https://www.iea.org/reports/global-energy-and-climate-model/net-zero-emissions-by-2050-scenario-nze>.

expected to contribute strongly to performance improvements that align with international climate goals.

Renewable Energy



Strong

We have assessed the Sustainability Contribution of the Renewable Energy category as **Strong**. Eligible renewable energy generation projects include wind and solar projects, as well as energy storage solutions connected to renewables. By generating low-emission electricity and storing surplus output for later use, the investments directly support the long-term goal of achieving zero emission energy generation in buildings.

Category Expenditures

Expenditure	Description
Solar power generation	Acquisition, development, construction and installation of solar photovoltaic systems.
Wind power generation	Acquisition, development, construction and installation of onshore wind projects.
Energy storage	Acquisition, development, construction and installation of energy storage solutions, such as batteries, directly connected to renewable electricity sources.

Analytical Commentary

As previously outlined, the majority of the emissions resulting from the operation of buildings stem from electricity consumption for heating and cooling purposes. This underscores the importance of transitioning building energy supply toward low-carbon renewable sources. In 2021, around 10% of the energy demand in buildings was met by renewable electricity and the renewable energy share of heat consumed in buildings was 11.5%.¹⁴ As per the IEA's net zero pathway estimates, this share will need to increase to 43% by 2050.¹⁵

The financing of rooftop and ground-mounted solar PV and onshore wind turbines will contribute strongly to the goal of zero emission energy systems as they have life cycle GHG emissions intensities below the technology-agnostic threshold of 100 gCO₂e/kWh, which is consistent with limiting global temperature rise to 2°C.^{16,17} Batteries charged by onsite renewables mitigate intermittency and reduce peak-demand stress.^{18,19} These expenditures can be expected to deliver a strong sustainability contribution by supplying zero carbon electricity where it is consumed.

¹⁴ REN21, "Renewables 2024 Global Status Report", at: https://www.ren21.net/gsr-2024/modules/energy_demand/02_renewables_in_buildings/.

¹⁵ IEA, "Net Zero by 2050 A Roadmap for the Global Energy Sector", at: https://iea.blob.core.windows.net/assets/deebef5d-0c34-4539-9d0c-10b13d840027/NetZeroBy2050-ARoadmapfortheGlobalEnergySector_CORR.pdf.

¹⁶ EU Technical Expert Group on Sustainable Finance, "Taxonomy Report Technical Annex", (2020), at: https://finance.ec.europa.eu/system/files/2020-03/200309-sustainable-finance-teg-final-report-taxonomy-annexes_en.pdf.

¹⁷ IEA, "Energy Technology Perspective", 2017, at: https://iea.blob.core.windows.net/assets/a6587f9f-e56c-4b1d-96e4-5a4da78f12fa/Energy_Technology_Perspectives_2017-PDF.pdf

¹⁸ Coccato, S. et al., "A Review of Battery Energy Storage Optimization in the Built Environment", (2025), at: <https://www.mdpi.com/2313-0105/11/5/179>.

¹⁹ IEA, "More efficient and flexible buildings are key to clean energy transitions", at: <https://www.iea.org/commentaries/more-efficient-and-flexible-buildings-are-key-to-clean-energy-transitions>.

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; waste, effluents and emissions; occupational health and safety; and community relations. CTP has policies and processes in place to identify and mitigate such risks.

E&S Risk identified	Applicable policies, procedures and measures
Land use and biodiversity, waste, effluents and emissions	<ul style="list-style-type: none"> ▶ CTP's Environmental Policy²⁰ governs its land use, biodiversity, waste, effluents and emissions management. It outlines the Group's approach to environmental issues at a high level while identifying the different teams responsible for ensuring adherence to the policy. ▶ CTP incorporates waste management practices into its construction activities to manage construction waste. Additionally, CTP has implemented management systems certified to ISO 14001, which requires robust processes to enable the effective mitigation of negative environmental impacts of business activities, such as waste and emissions. ▶ CTP complies with the European Union (EU) Environmental Impact Assessment (EIA)²¹ Directive for development projects within the EU. The EIA Directive ensures that projects that are likely to have a significant impact on the environment are adequately assessed before approval. With respect to biodiversity, the directive states that measures must be taken to "avoid, prevent, reduce and, if possible, offset significant adverse effects on the environment, in particular on species and habitats."
Occupational health and safety	<ul style="list-style-type: none"> ▶ CTP does not disclose policies pertaining to occupational health and safety however it is required to comply with local regulations in the areas it operates. Additionally, the EU Directive on Worker Health and Safety²² ensures minimum safety and health requirements throughout Europe. ▶ The Group's Code of Conduct²³ outlines its commitment to respecting human rights, as defined under the UNGPs, OECD Guidelines for Multinational Enterprises, and the ILO Conventions.
Community relations	<ul style="list-style-type: none"> ▶ The Group engages with its stakeholders through a structured approach outlined in its Sustainability Stakeholder Engagement and Materiality Assessment Policy²⁴, aligned with the AA1000 Stakeholder Engagement Standard²⁵ and the European Sustainability Reporting Standards (ESRS).²⁶ The Group identifies key stakeholders—including local communities, employees, clients, investors, and regulators—and actively involves them through consultations, surveys, meetings, and feedback channels.

²⁰ CTP, "Environmental Policy", at: <https://ctp.eu/files/2024/10/CTP-Environmental-Policy.pdf>.

²¹ European Commission, "Environmental Impact Assessment", at: https://environment.ec.europa.eu/law-and-governance/environmental-assessments/environmental-impact-assessment_en.

²² European Commission, "Health and Safety at Work", at: https://employment-social-affairs.ec.europa.eu/policies-and-activities/rights-work/health-and-safety-work_en.

²³ CTP, "Code of Conduct", at: <https://ctp.eu/files/2023/01/CTP-Group-Code-of-Conduct-ENG-12-2022.pdf>.

²⁴ CTP, "Sustainability Stakeholder Engagement and Materiality Assessment", at: <https://ctp.eu/files/2024/10/Sustainability-Stakeholder-Engagement-and-Materiality-Assessment-Policy.pdf>.

²⁵ AA1000 Stakeholder Engagement Standard, at: <https://www.accountability.org/standards/aa1000-stakeholder-engagement>

²⁶ European Sustainability Reporting Standards (ESRS), at: <https://www.unepfi.org/impact/interoperability/european-sustainability-reporting-standards-esrs/>

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.²⁷ 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.

²⁷ 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.

Disclaimer

Copyright ©2025 Sustainalytics, a Morningstar company. All rights reserved.

The information, methodologies, data and opinions contained or reflected herein (the "Information") are proprietary to Sustainalytics and/or its third-party content providers and may be made available to third parties only in the form and format disclosed by Sustainalytics. The Information is not directed to, nor intended for distribution to or use by India-based clients and/or users, and the distribution of Information to India resident individuals and entities is not permitted.

The Information is provided for informational purposes only and (1) does not constitute an endorsement of any product, project, investment strategy or consideration of any particular environmental, social or governance related issues as part of any investment strategy; (2) does not constitute investment advice nor recommends any particular investment, nor represents an expert opinion or negative assurance letter; (3) is not part of any offering and does not constitute an offer or indication to buy or sell securities, to select a project nor enter into any kind of business transaction; (4) is not an assessment of the economic performance, financial obligations nor creditworthiness of any entity; (5) is not a substitute for professional advice; (6) has not been submitted to, nor received approval from, any relevant regulatory or governmental authority. Past performance is no guarantee of future results.

The Information is based on information made available by third parties, is subject to continuous change and no warranty is made as to its completeness, accuracy, currency, nor the fitness of the Information for a particular purpose. The Information is provided "as is" and reflects Sustainalytics' opinion solely at the date of its publication.

Neither Sustainalytics nor its third-party content providers accept any liability in connection with the use of the Information or for actions of third parties with respect to the Information, in any manner whatsoever, to the extent permitted by applicable law.

Any reference to third party content providers' names is solely to acknowledge their ownership of information, methodologies, data and opinions contained or reflected within the Information and does not constitute a sponsorship or endorsement of the Information by such third-party content provider. For more information regarding third-party content providers visit <http://www.sustainalytics.com/legal-disclaimers>

Sustainalytics may receive compensation for its ratings, opinions and other services, from, among others, issuers, insurers, guarantors and/or underwriters of debt securities, or investors, via different business units. Sustainalytics maintains measures designed to safeguard the objectivity and independence of its opinions. For more information visit Governance Documents or contact compliance@sustainalytics.com.

This deliverable, in particular the images, text and graphics contained therein, and the layout and company logo of Sustainalytics are protected under copyright and trademark law. Any use thereof shall require express prior written consent. Use shall be deemed to refer in particular to the copying or duplication of the opinion wholly or in part, the distribution of the opinion, either free of charge or against payment, or the exploitation of this opinion in any other conceivable manner.

The issuer is fully responsible for certifying and ensuring the compliance with its commitments, for their implementation and monitoring.