

Westinghouse Air Brake Technologies Corporation

PRE-ISSUANCE VERIFICATION LETTER

LOW CARBON TRANSPORT CRITERIA OF THE CLIMATE BONDS STANDARD

Type of engagement: Assurance Engagement

Period engagement was carried out: April 2021

Approved verifier: Sustainalytics

Contact address for engagement: 125 Maiden Lane, Suite 602, New York NY 10038, U.S.A.

Pre-issuance Engagement Team:

Zach Margolis, zach.margolis@sustainalytics.com, (+1) 647 695 4341

Tina Ghaemmaghmi, tina.ghaemmaghmi@morningstar.com, (+1) 647 264 6680

Flora Mile, flora.mile@sustainalytics.com, +3120 205 0087

Scope and Objectives

Westinghouse Air Brake Technologies Corporation (“Wabtec” or the “Company”) has engaged Sustainalytics to review and verify that Wabtec’s green bond meets the requirements under the Low Carbon Transportation criteria of the Climate Bonds Standard.¹

Wabtec provides technology products and services for the rail industry globally through two main business segments: freight, and transit rail. The Company manufactures a range of products for locomotives, freight, cars, and passenger transit vehicles. Wabtec’s approach to sustainability is focused on the development of clean and innovative products that enable fuel-efficient and low-carbon land transportation and enable the reduction of emissions. Wabtec plans to use the proceeds raised under the Green Finance Framework for the research, development, manufacturing, and distribution of products which improve the efficiency of freight rail, passenger, and other transport, as well as the provision of energy-efficient customer solution services.

Climate Bonds Standard Criteria

Pre-issuance requirements under Version 3.0:²

- Low Carbon Transportation
 - Criteria 3.2.3: Exclusion of dedicated fossil fuel transport
 - Criteria 3.6: Passenger rail rolling stock
 - Criteria 3.7: Railway networks and freight rail rolling stock
 - Criteria 3.9: Requirements for infrastructure for low carbon transport

Issuing Entity’s Responsibility

Wabtec was responsible for providing information and documents relating to:

- The details concerning the selection process for the Nominated Projects
- The details of the Nominated Projects
- The management systems for internal processes and controls for Nominated Projects, including: tracking of proceeds, managing unallocated proceeds and Earmarking funds to Nominated Projects
- The details of commitments for reporting prior to issuance, including: investment areas, management of unallocated proceeds and frequency of periodic Assurance Engagements

¹ Climate Bonds Standard, Low Carbon Transport Criteria under the Climate Bonds Standard. See more, at: https://www.climatebonds.net/files/files/standards/Land%20transport/CBI%20Transport%20Criteria%20document_Jan2020%281%29.pdf

² Climate Bonds Standard, Climate Bonds Standard Version 3.0. See more, at: https://www.climatebonds.net/files/files/Climate%20Bonds_Standard_Version%203_0_December%202017.pdf

Independence and Quality Control

Sustainalytics, a leading provider of ESG and corporate governance research and ratings to investors, conducted the verification of Wabtec's green bond, issued to finance eligible assets – manufacturing of components for freight rail rolling stock, and provided an independent opinion informing Wabtec as to the conformance of the green bond with the Pre-Issuance requirements and Low Carbon Transportation criteria of the Climate Bonds Standard.

Sustainalytics has relied on the information and the facts presented by Wabtec. Sustainalytics is not responsible if any aspect of the Nominated Projects referred to in this opinion including estimates, findings, opinions, or conclusions are incorrect. Thus, Sustainalytics shall not be held liable if any of the information or data provided by Wabtec's management and used as a basis for this assessment were not correct or complete.

Sustainalytics makes all efforts to ensure the highest quality and rigor during its assessment process and enlisted its Sustainability Bonds Review Committee to provide oversight over the assessment of the bond.

Verifier's Responsibility

The work undertaken as part of this engagement included conversations with relevant Wabtec employees and review of relevant documentation to confirm the green bond's conformance with the Climate Bonds Certification Pre-Issuance Requirements, which include:

- Conformance of Wabtec's green bond with the Climate Bonds Standard Version 3.0;
- Conformance with the Low Carbon Transportation Technical Criteria;
- Conformance with the Internal Processes & Controls requirements;
- Conformance with Reporting Prior to Issuance requirements

Basis of the Opinion

Sustainalytics conducted the verification in accordance with the Climate Bonds Standard Version 3.0 and with International Standard on Assurance Engagements 3000 – Assurance Engagements other than Audits or Reviews of Historical Information.

Sustainalytics planned and performed the verification by obtaining evidence and other information and explanations that Sustainalytics considers necessary to give limited assurance that Wabtec's green bond meets the requirements of the Climate Bonds Standard. Upon reviewing evidence and other information, Sustainalytics is of the opinion that Wabtec will ensure compliance with Climate Bonds Standards requirements.

Conclusion

Wabtec intends to use the proceeds raised by its green bond to finance investments, including rolling stock components that support a rail network that is compliant with the emission threshold for dedicated freight railway lines and that is not intended to transport fossil fuels. See Schedule 1A: Detailed Findings.

Based on the limited assurance procedures conducted of Wabtec's green bond under the Low Carbon Transportation criteria of the Climate Bonds Standard, nothing has come to Sustainalytics' attention that causes us to believe that, in all material aspects, Wabtec's green bond is not in conformance with the Low Carbon Transportation of the Climate Bonds Standard's Pre-Issuance Requirements.

Schedule 1A: Detailed Findings

Sustainalytics has analyzed the projects which may be financed by Wabtec's green bond, and has determined that they comply with the following criteria of the CBI Low Carbon Land Transport criteria

Criteria 3.2.3: Exclusion of dedicated fossil fuel transport

Wabtec's Framework excludes projects where the primary objective is the transportation of fossil fuels or that transport greater than 25% fossil fuels. Wabtec has confirmed that assets destined for use by operators that are not in compliance with the fossil fuel threshold will be excluded from the asset portfolio. The Company will assess operators based on confidential data provided on the commodities transported. In the event that company-level data is not available, Wabtec may rely on national freight volume data. Sustainalytics has assessed the methodology proposed by Wabtec and is of the opinion that it credibly ensures compliance with the fossil fuel exclusion.

Criteria 3.6 and 3.7: Requirements for passenger rail rolling stock and railway networks and freight rail rolling stock

Wabtec's Framework expressly excludes freight rail projects with an emissions intensity above 25g CO₂ per tonne-km (t-km) and passenger transport with emissions intensity above 50g CO₂ per passenger-km (p-km). Wabtec has confirmed that it has the ability to remove from the eligible asset portfolio any spend related to rail assets, or components used in assets, that do not meet the required emissions thresholds. The Company has further disclosed that it will rely on actual operational information captured by locomotive event recorders to ensure that vehicles, or projects related to vehicles, are threshold-compliant.

Criteria 3.9: Requirements for infrastructure for low carbon transport

Wabtec's Framework includes investments in dedicated infrastructure which aims to improve the efficiency of eligible rolling stock, railway lines and networks, including ICT solutions and applications related to optimization of operations and asset monitoring. The Company has disclosed anticipated emissions savings for these solutions, which are in all cases substantial. It is further noted that such infrastructure is essential to enabling more efficient operations of trains and train networks which achieve the defined emissions threshold outlined in 3.6 and 3.7.

Note on key components

The Nominated Projects include financing of both rail rolling stock and components for such vehicles. Sustainalytics considers that the components to be financed are key components of the eligible rail vehicles, and as such views the financing of these components to be in line with the intent of the CBI Low Carbon Transport sector criteria.

Schedule 1B: Detailed Overview of Nominated Projects and Assets

Wabtec has provided details on its current portfolio of eligible projects, from which it will select project for financing. A summary of examples and estimated impact is provided in the table below:

| Examples of Eligible Green Assets | Rationale for Listed Examples | Expected Amount (USD million) |
|---|---|-------------------------------|
| Energy efficiency (e.g. trip optimizer, HVAC) | <ul style="list-style-type: none"> Wabtec's Trip Optimizer™, an intelligent cruise control system for trains, that is EPA-certified and reduces locomotive emissions by roughly 10%. Trip Optimizer is installed on over 11,000 locomotives globally, saving 400 million gallons of fuel. It reduces carbon emissions by over 500,000 tons per year – the equivalent of removing 100,000 cars from the road. Smart temperature offset (saves 20% energy) | 93.33 |
| Train Capacity/Network Optimization (e.g. Port Optimizer, Movement Planner, RailConnect) | <ul style="list-style-type: none"> At the Port of Los Angeles, Port Optimizer software enhances supply chain performance and predictability by delivering real time data-driven insights through a single portal to partners across the supply chain. Marine terminal operators, trucking companies and chassis providers monitor and respond to dynamic conditions, align people and resources, and proactively communicate across functions – enabling maximum port throughput and delivery performance – with 8-12% efficiency gains as the solution scales across the entire port. By combining Movement Planner with Pacing, which redistributes the meet slack on the line, railroads can pace trains across the network to achieve 3-4% incremental fuel savings with no network velocity impact (based on POC). RailConnect™ Transportation Management System is the backbone operational system for short-line and regional railroads that advances network optimization. This solution enables the efficient movement of over nine million carloads of freight annually, lowering greenhouse gas emissions by up to 75% on average when compared to truck transport. | 94.14 |
| Electric (e.g. brake controllers, power collection products, battery electric engines, including their components and infrastructure) | <ul style="list-style-type: none"> Reduce pneumatic weight by 50%, less maintenance, more electric, 95% recyclability, reduce braking distance by 15% | 159.68 |
| Equipment or material reduction (e.g. PIS TFT displays, components produced with additive technology) | <ul style="list-style-type: none"> Reduce energy consumption (-40% vs market) Less material needed, efficient usage, and reduces direct material transportation | 58.90 |

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| <p>Particle, fuel and emission reduction, and energy storage (e.g. Tier 4 locomotive and marine engines, HVACs)</p> | <ul style="list-style-type: none"> • 70% reduction in emissions (NOx and PM) vs. Tier 3 engine • Up to 95% of braking energy reused for heating, 20% saving on heating • Energy Saving through advanced air intake management, 26% energy saving • HVAC systems – with low global warming impact – that deliver the same level of performance as traditional units. When combined with Wabtec’s intelligent management system, they can reduce energy use on a train by up to 30%. | <p>119.00</p> |
| <p>Condition Monitoring/Extending Life (e.g. Railbam, FleetONE)</p> | <ul style="list-style-type: none"> • Extend life of railcar components by 30%, by identifying “bad actors” that are rapidly wearing (Wheel Profile Monitor – wheels, Brake Monitor – Pads, shoes, disks). • Ensure railway network efficiency is maintained by preventing up to 90% of network delays (stoppage/derailment) due to defective railcar components (RailBAM, All machine Vision systems, HBD, ThermalCAM). • Extend life of railcar components by 30%, by identifying “bad actors” that are rapidly wearing (Wheel Profile Monitor – wheels, Brake Monitor – Pads, shoes, disks). • Ensure railway network efficiency is maintained by preventing up to 90% of network delays (stoppage/derailment) due to defective railcar components (RailBAM, All machine Vision systems, HBD, ThermalCAM). | <p>158.11</p> |

Schedule 2A: Pre-Issuance General Requirements

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| <p>1. Use of Proceeds</p> | <p>1.1 The Issuer shall document the Nominated Projects & Assets which are proposed to be associated with the Bond and which have been assessed as likely to be Eligible Projects & Assets. The Issuer shall establish a list of Nominated Projects & Assets which can be kept up-to-date during the term of the Bond.</p> <p>1.2 The expected Net Proceeds of the Bond shall be no greater than the Issuer’s total investment exposure to the proposed Nominated Projects & Assets, or the relevant proportion of the total Market Value of the proposed Nominated Projects & Assets which are owned or funded by the Issuer.</p> <p>1.3 Nominated Projects & Assets shall not be nominated to other Certified Climate Bonds, Certified Climate Loans, Certified Climate Debt Instruments, green bonds, green loans or other labelled instruments (such as social bonds or SDG bonds) unless it is demonstrated by the Issuer that:</p> <p>1.3.1 distinct portions of the Nominated Projects & Assets are being funded by different Certified Climate Bonds, Certified Climate Loans, Certified Climate Debt Instruments, green bonds , green loans or other labelled instruments; or,</p> <p>1.3.2 the existing Certified Climate Bond, Certified Climate Loan or Certified Climate Debt Instrument is being refinanced via another Certified</p> |
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| | Climate Bond, Certified Climate Loan or Certified Climate Debt Instrument. |
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| 2. Process for Evaluation and Selection of Projects & Assets | <p>2.1 The Issuer shall establish, document and maintain a decision-making process which it uses to determine the eligibility of the Nominated Projects & Assets. The decision-making process shall include, without limitation:</p> <p>2.1.1 A statement on the climate-related objectives of the Bond;</p> <p>2.1.2 How the climate-related objectives of the Bond are positioned within the context of the Issuer’s overarching objectives, strategy, policy and/or processes relating to environmental sustainability;</p> <p>2.1.3 The Issuer’s rationale for issuing the Bond;</p> <p>2.1.4 A process to determine whether the Nominated Projects & Assets meet the eligibility requirements specified in Part C of the Climate Bonds Standard.</p> <p><i>Note to 2.1: A wide variety of climate-related objectives are possible. These can vary from increasing the installed capacity of low carbon assets, such as solar power facilities, to having a specific objective focused on the operations or indirect effects of the projects & assets, such as emissions reductions.</i></p> <p><i>The climate-related objectives of the Bond, as stated by the Issuer, have implications for the reporting requirements under the Climate Bonds Standard. See Clauses 2.3, 5.2, 5.8, 6.1.1 and 8.4.</i></p> <p>2.2 The Issuer should include under Clause 2.1 further aspects of the decision-making process, including:</p> <p>2.2.1 related eligibility criteria, including, if applicable, exclusion criteria or any other process, applied to identify and manage potentially material environmental, social or governance risks associated with the Nominated Projects & Assets;</p> <p>2.2.2 any green standards or certifications referenced in the selection of Nominated Projects & Assets.</p> <p>2.3 The Issuer shall assess that all proposed Nominated Projects & Assets to be associated with the Bond meet the documented objectives as stated under Clause 2.1.1 and are likely to conform to the relevant eligibility requirements under Part C of the Climate Bonds Standard.</p> |
| 3. Management of Proceeds | <p>3.1 The systems, policies and processes to be used for management of the Net Proceeds shall be documented by the Issuer and disclosed to the Verifier, and shall include arrangements for the following activities:</p> <p>3.1.1 Tracking of proceeds: The Net Proceeds of the Bond can be credited to a sub-account, moved to a sub-portfolio, or otherwise tracked by the Issuer in an appropriate manner and documented.</p> <p>3.1.2 Managing unallocated proceeds: The balance of unallocated Net Proceeds can be managed as per the requirements in Clause 7.3.</p> <p>3.1.3 Earmarking funds to Nominated Projects & Assets: An earmarking process can be used to manage and account for funding to the Nominated Projects & Assets and enables estimation of the share of the Net Proceeds being used for financing and refinancing.</p> |
| 4. Reporting | <p>4.1 The Issuer shall prepare a Green Bond Framework and make it publicly available prior to Issuance or at the time of Issuance. The Green Bond Framework shall include, without limitation:</p> |

- 4.1.1 Confirmation that the Bonds issued under the Green Bond Framework are aligned with the Climate Bonds Standard. This may include statements of alignment with other applicable standards, such as the EU Green Bond Standard, the ASEAN Green Bond Standard, Chinese domestic regulations, Japanese Green Bond Guidelines, etc.;
- 4.1.2 A summary of the expected use of proceeds, as defined under Clause 1.1, and the expected contribution of the relevant sectors or sub-sectors to the rapid transition required to achieve the goals of the Paris Climate Agreement;
- 4.1.3 A description of the decision-making process, as defined under Clause 2.1, with particular reference to the requirements in Clause 2.1.2;
- 4.1.4 Information on the methodology and assumptions to be used for: confirming, where required by relevant Sector Eligibility Criteria, the characteristics or performance of Nominated Projects & Assets required to conform to the relevant eligibility requirements under Part C of the Climate Bonds Standard; and any other additional impact metrics that the issuer will define.
- 4.1.5 A summary of the approach to the management of unallocated Net Proceeds in accordance with Clause 3.1;
- 4.1.6 The intended approach to providing Update Reports to reaffirm conformance with the Climate Bonds Standard while the Bond remains outstanding;
- 4.1.7 The list of proposed Nominated Projects & Assets associated with the Bond and the investment areas, as provided in Clause 9.1, into which the Nominated Projects & Assets fall. Where there are limits on the amount of detail that can be made available about specific Nominated Projects & Assets, information shall be presented on the investment areas which the Nominated Projects & Assets fall into, as provided in Clause 9.1, and the Issuer shall provide an explanation of why detail on Nominated Projects & Assets is limited;
- 4.1.8 Where a proportion of the Net Proceeds are used for refinancing, an estimate of the share of the Net Proceeds used for financing and refinancing, and the relevant Nominated Projects & Assets or investment areas which may be refinanced. This may also include the expected look-back period for refinanced Nominated Projects & Assets.

Note: Issuers are encouraged to disclose as much information as possible with respect to Nominated Projects & Assets. However, in many cases it is not possible for the Issuer to disclose detailed information about specific projects & assets prior to the issuance of the Bond. This limitation may be due to confidentiality arrangements with owners of projects & assets, the dynamic nature of the project portfolio, competitive considerations, or other legal provisions which limit the disclosure of detailed information.

4.2 The Issuer shall include in the Disclosure Documentation:

- 4.2.1 The investment areas, as provided in Clause 9.1, into which the Nominated Projects & Assets fall;
- 4.2.2 The intended types of temporary investment instruments for the management of unallocated Net Proceeds in accordance with Clause 7.3;
- 4.2.3 The Verifier engaged by the Issuer for the mandatory verification engagements;

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| | <p>4.2.4 The intended approach to providing Update Reports to reaffirm conformance with the Climate Bonds Standard while the Bond remains outstanding, including the location of the published documents;</p> <p>4.2.5 The Climate Bonds Initiative Disclaimer provided in the Certification Agreement.</p> <p><i>Note to 4.2.4: Issuers are encouraged to provide their Update Reports through existing reporting channels for the bond markets, such as the Electronic Municipal Market Access (EMMA) website for the US Municipality sector.</i></p> |
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Schedule 2B: Conformance to the Pre-Issuance Requirements

| Procedure Performed | Factual Findings | Error or Exceptions Identified |
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| 1. Use of Proceeds | <p>1.1 Wabtec has developed a list of proposed Nominated Projects & Assets which comply with the Low Carbon Transportation sector criteria of the Climate Bonds Standard Wabtec intends to keep this list updated with all the financed projects that fall within the scope of Wabtec's green bond program and Framework. The proposed Nominated Projects and Assets include:</p> <ul style="list-style-type: none"> • Manufacture of rolling stock components that support a rail network that is compliant with the emission threshold for dedicated freight railway lines and not intended to transport fossil fuels. Specifically, all projects financed are in relation to key components that comply with the criteria 3.2.3, 3.6, 3.7, and/or 3.9 of the Low Carbon Transportation sector criteria. • Projects may additionally entail additional environmental benefits, such as further improving the energy performance of eligible rail assets. <p>1.2 Wabtec's management confirms that the net proceeds of the future bond will not be greater than the total investment exposure to the proposed Nominated Projects & Assets.</p> <p>1.3 Wabtec's management confirms that the Nominated Projects & Assets will not be nominated to other Certified Climate Bonds, Certified Climate Loans, Certified Climate Debt Instrument, green bonds, green loans or other labelled instruments unless it is demonstrated by Wabtec that distinct portions of the Nominated Projects & Assets are being funded by different instruments or that the existing instrument is being refinanced via another labelled instrument.</p> | None |
| 2. Process for Evaluation and Selection of Projects & Assets | <p>2.1.1. The Wabtec Green Finance Framework states that the intention of the green bonds are to finance the manufacturing of freight rail components.</p> <p>2.1.2. Wabtec's environmental objectives are summarized in the Wabtec Green Finance Framework.</p> <p>2.1.3. Wabtec's rationale for issuing green bonds is defined in the Framework as to promote the transition to a low-carbon transportation future and meet the sustainable transportation needs of the growing cities around the world.</p> <p>2.1.4. The Wabtec Green Finance Framework includes a process for project evaluation and selection, establishing a Green Finance Committee.</p> <p>2.2.1. Wabtec has sufficient measures in place to manage and mitigate environmental and social risks that are commonly associated with the eligible category.</p> <p>2.2.2. N/A</p> <p>2.2.3. Wabtec' Green Finance Committee will verify that all proposed Nominated Projects & Assets conform to the</p> | None |

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| | Climate Bonds Taxonomy and Low Carbon Transportation sector criteria. | |
| 3. Management of Proceeds | <p>3.1.1 The Wabtec Green Finance Framework outlines a process by which proceeds will be tracked.</p> <p>3.1.2 Issuer will manage unallocated net proceeds in its treasury liquidity portfolio in cash or other short-term and liquid instruments.</p> <p>3.1.3 The Wabtec Green Finance Framework details the process Wabtec will use to allocate and manage green bonds proceeds. This will enable the estimation of the share of the Net Proceeds being used for financing and refinancing.</p> | |
| Reporting Prior to Issuance | <p>4.1.1. Bonds issued under the Wabtec Green Finance Framework are intended to align with the Climate Bonds Standard.</p> <p>4.1.2. The Wabtec Green Finance Framework indicates that green bond proceeds will be used, as defined under Clause 1.1, and the expected contribution of the relevant sectors or sub-sectors to the rapid transition required to achieve the goals of the Paris Climate Agreement.</p> <p>4.1.3. The Wabtec Green Finance Framework provides detail on its decision-making process, which is overseen by the Green Finance Committee.</p> <p>4.1.4. Wabtec’s Nominated Projects & Assets will conform with the Low Carbon Transportation sector criteria. Wabtec may report on the following metrics to measure the environmental impact of these projects: annual CO₂ emissions saved and percentage reduction in fuel use.</p> <p>4.1.5. Wabtec will manage unallocated net proceeds in accordance with Clause 3.1.</p> <p>4.1.6. Wabtec will make a Green Finance Report available on its website on an annual basis, until full allocation</p> <p>4.1.7. Wabtec’s Nominated Projects & Assets fall under the Low Carbon Transportation sector criteria. Wabtec will report on the investment areas which the Nominated Projects & Assets fall into, the distribution of eligible asset categories financed as well as a description of the selected projects financed.</p> <p>4.1.8. Wabtec will use proceeds for both financing and refinancing and will report on the split between financed and refinanced assets.</p> <p>4.2.1. Wabtec’s Nominated Projects & Assets will conform with the Low Carbon Transportation sector criteria.</p> <p>4.2.2. The intended types of temporary investment instruments for the management of unallocated Net Proceeds are in accordance with Clause 7.3 of the Climate Bonds Standard.</p> <p>4.2.3. The Wabtec has confirmed that an approved third-party verifier will conduct periodic assurance within a year to reaffirm conformance of the bond with the Low Carbon Transportation criteria of the Climate Bonds Standard.</p> <p>4.2.4. Wabtec will make a Green Finance Report available on its website. The report will include information on the allocation of proceeds and relevant impact metrics.</p> | None |

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| | 4.2.5. Sustainalytics notes that under the terms of its certification, Wabtec must include the CBI Disclaimer provided in the Certification Agreement in disclosure documentation. | |
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The issuer is fully responsible for certifying and ensuring the compliance with its commitments, for their implementation and monitoring.

In case of discrepancies between the English language and translated versions, the English language version shall prevail.

About Sustainalytics, a Morningstar Company

Sustainalytics, a Morningstar Company, is a leading ESG research, ratings and data firm that supports investors around the world with the development and implementation of responsible investment strategies. The firm works with hundreds of the world's leading asset managers and pension funds who incorporate ESG and corporate governance information and assessments into their investment processes. The world's foremost issuers, from multinational corporations to financial institutions to governments, also rely on Sustainalytics for credible second-party opinions on green, social and sustainable bond frameworks. In 2020, Climate Bonds Initiative named Sustainalytics the "Largest Approved Verifier for Certified Climate Bonds" for the third consecutive year. The firm was also recognized by Environmental Finance as the "Largest External Reviewer" in 2020 for the second consecutive year. For more information, visit www.sustainalytics.com.



Named

2015: Best SRI or Green Bond Research or Rating Firm
2017, 2018, 2019: Most Impressive Second Opinion Provider

