Westinghouse Air Brake Technologies Corporation

POST-ISSUANCE VERIFICATION LETTER

Low Carbon Transportation CRITERIA OF THE CLIMATE BONDS STANDARD

Type of engagement: Assurance Engagement
Period engagement was carried out: June-August 2022
Approved verifier: Sustainalytics
Contact address for engagement: 215 Spadina Ave, Toronto, ON, M5T 2C7, Canada
Post-Issuance Engagement Leader:
Daniel Sanchez, daniel.sanchez@morningstar.com, (+1) 647 264 6644
Post-Issuance Engagement Support:
Anchal Verma, anchal.verma@morningstar.com; Stefan Spataru, stefan.spataru@morningstar.com

Scope and Objectives

In July 2021, Westinghouse Air Brake Technologies Corporation ("Wabtec" or the "Company") issued a Certified Climate Bond (the "green bond") aimed at financing the development, distribution and innovation of freight and transit rail to enable fuel-efficient and low-carbon land transportation. In June 2022, Wabtec engaged Sustainalytics to review the projects funded through the issued green bond and provide an assessment as to whether the projects financed between April 2021 to May 2022 met the Post-Issuance Requirements under the Low Carbon Transportation¹ of the Climate Bonds Standard Version 3.0.²

Green bond projects include:

- Energy efficiency, (e.g. trip optimizer, HVAC)
- Train Capacity/ Network Optimization (e.g. Port Optimizer, Movement Planner, RailConnect)
- Electric (e.g. brake controllers, power collection products, battery electric engines, including their components and infrastructure)
- Equipment or material reduction (e.g. PIS TFT displays, components produced with additive technology)
- Particle, fuel and emission reduction, and energy storage (e.g. Tier 4 locomotive and marine engines, HVACs)
- Condition Monitoring/Extending Life (e.g. Railbam, FleetONE)

Schedule 1 provides details of the Nominated Projects & Assets and disbursement of proceeds.

Post-Issuance Evaluation Criteria

Post-issuance Requirements of the Climate Bonds Standard Version 3.0:

- Use of Proceeds
- Evaluation and Selection of Projects & Assets
- Management of Proceeds
- Reporting

Issuing Entity’s Responsibility

Wabtec is responsible for providing accurate information and documentation relating to the details of the projects that have been funded, including description of projects, total development cost of each project, and disbursed amounts.

² Climate Bonds Initiative, 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 the development, distribution and innovation of freight and transit rail to enable fuel-efficient and low-carbon land transportation, and provided an independent opinion informing Wabtec as to the conformance of the green bond with the Post-Issuance Requirements and Low Carbon Transportation criteria of the Climate Bonds Standard.

Sustainalytics has relied on the information and the facts presented by Wabtec with respect to the Nominated Projects & Assets. Sustainalytics is not responsible nor shall it be held liable if any of the opinions, findings, or conclusions it has set forth herein are not correct due to incorrect or incomplete data provided by Wabtec.

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**

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

The work undertaken as part of this engagement included conversations with relevant Wabtec employees and review of relevant documentation to confirm the conformance of Wabtec’s green bond with the Post-Issuance Requirements of the Climate Bonds Standard Version 3.0.

**Exceptions**

No exceptions were identified. All projects aligned with the Post-Issuance Requirements of the Climate Bonds Standard Version 3.0 and were in conformance with the Low Carbon Transportation criteria.

**Conclusion**

Based on the limited assurance procedures conducted and evidence obtained, nothing has come to Sustainalytics’ attention that causes us to believe that, in all material respects, the allocation of ~USD 598 million (EUR 523 million) from the Wabtec Certified Climate Bond, issued to fund eligible green projects, is not in conformance with the Post-Issuance Requirements of the Climate Bonds Standard.
Schedule 1: Detailed Overview of Nominated Projects and Assets

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 requirements of the CBI Low Carbon Transport sector criteria.

Details of the Nominated Projects & Assets are provided below:

<table>
<thead>
<tr>
<th>Examples of Eligible Green Assets</th>
<th>Rationale for Listed Examples</th>
<th>Allocated Amount (USD million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy efficiency (e.g. trip optimizer, HVAC)</td>
<td>• 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)</td>
<td>87,834,433</td>
</tr>
<tr>
<td>Train Capacity/Network Optimization (e.g. Port Optimizer, Movement Planner, RailConnect)</td>
<td>• 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.</td>
<td>93,903,655</td>
</tr>
<tr>
<td>Electric (e.g. brake controllers, power collection products, battery electric engines, including their components and infrastructure)</td>
<td>• Reduce pneumatic weight by 50%, less maintenance, more electric, 95% recyclability, reduce braking distance by 15%</td>
<td>170,081,994</td>
</tr>
</tbody>
</table>
| Equipment or material reduction (e.g. PIS TFT displays, components produced with additive technology) | • Reduce energy consumption (-40% vs market)  
• Less material needed, efficient usage, and reduces direct material transportation | 77,005,570 |
| --- | --- | --- |
| Particle, fuel and emission reduction, and energy storage (e.g. Tier 4 locomotive and marine engines, HVACs) | • 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%. | 75,110,030 |
| Condition Monitoring/Extending Life (e.g. Railbam, FleetONE) | • 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 the 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). | 93,903,655 |
| Total: | | 596,889,719 |
## Schedule 2A: Post-Issuance Requirements of the Climate Bonds Standard

<table>
<thead>
<tr>
<th>Use of Proceeds</th>
<th>5.1 The Net Proceeds of the Bond shall be allocated to the Nominated Projects &amp; Assets.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5.2 All nominated Projects &amp; Assets shall meet the documented objectives of the Bond as stated under Clause 6.1.1 and shall be in conformance with the requirements of Part C of the Climate Bonds Standard.</td>
</tr>
<tr>
<td></td>
<td>5.3 The Issuer shall allocate the Net Proceeds to Nominated Projects &amp; Assets within 24 months of issuance of the Bond, or the Issuer shall disclose in post-issuance reporting as per clause 8.3 the estimated timeline for allocation of net proceeds to Nominated Projects &amp; Assets. Net proceeds may be reallocated to other Nominated Projects &amp; Assets at any time while the Bond remains outstanding.</td>
</tr>
<tr>
<td></td>
<td>5.4 Nominated Projects &amp; 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:</td>
</tr>
<tr>
<td></td>
<td>5.4.1. distinct portions of the Nominated Projects &amp; 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;</td>
</tr>
<tr>
<td></td>
<td>5.4.2. the existing Certified Climate Bond, Certified Climate Loan or Certified Climate Debt Instrument is being refinanced via another Certified Climate Bond, Certified Climate Loan or Certified Climate Debt Instrument.</td>
</tr>
<tr>
<td></td>
<td>5.5 Where a proportion of the Net Proceeds of the Bond are used for refinancing, the Issuer shall track the share of the Net Proceeds used for financing and refinancing and identify which Nominated Projects &amp; Assets may be refinanced. This may also include the expected look-back period for refinanced Nominated Projects &amp; Assets.</td>
</tr>
<tr>
<td></td>
<td>5.6 The Net Proceeds of the Bond shall be tracked by the Issuer following a formal internal process which is documented in accordance with Clause 3.1.</td>
</tr>
<tr>
<td></td>
<td>5.7 The Net Proceeds of the Bond shall be no greater than the Issuer’s total investment exposure or debt obligation to the Nominated Projects &amp; Assets, or the relevant proportion of the total Market Value of the Nominated Projects &amp; Assets which are owned or financed by the Issuer.</td>
</tr>
<tr>
<td></td>
<td>5.8 Additional Nominated Project &amp; Assets may be added to, or used to substitute or replenish, the portfolio of Nominated Project &amp; Assets as long as the additional Nominated Project &amp; Assets are eligible under Part C of the Climate Bonds Standard and are consistent with the Bond’s objective as set out in Clause 6.1.1.</td>
</tr>
<tr>
<td></td>
<td>5.8.1. Where additional Nominated Projects &amp; Assets are covered by Sector Eligibility Criteria which were not included in the scope of either the Pre-Issuance Verification or the Post-Issuance Verification engagements, the Issuer shall engage a Verifier to provide a Verifier’s Report covering at least the conformance of the additional Nominated Projects &amp; Assets with the relevant Sector Eligibility Criteria under Part C of the Climate Bonds Standard.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Process for Evaluation and Selection of Projects &amp; Assets</th>
<th>6.1 The Issuer shall document and maintain a decision-making process which it uses to determine the continuing eligibility of the Nominated Projects &amp; Assets. This includes, without limitation:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6.1.1. A statement on the climate-related objectives of the Bond;</td>
</tr>
</tbody>
</table>
| **Management of Proceeds** | 6.1.2. 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;  
6.1.3. The Issuer’s rationale for issuing the Bond;  
6.1.4. A process to determine whether the Nominated Projects & Assets meet the eligibility requirements specified in Part C of the Climate Bonds Standard;  
6.1.5. Other information provided by the Issuer as described in Clause 2.2  

| **7.1** The Net Proceeds of the Bond shall be credited to a sub account, moved to a sub-portfolio or otherwise identified by the Issuer in an appropriate manner, and documented.  
7.2 The Issuer of the Bond shall maintain the earmarking process to manage and account for allocation of Net Proceeds to the Nominated Projects & Assets as described in Clause 3.1.3  
7.3 While the Bond remains outstanding, the balance of the tracked Net Proceeds shall be reduced by amounts allocated to Nominated Projects & Assets. Pending such allocations to Nominated Projects & Assets, the balance of unallocated Net Proceeds shall be:  
7.3.1. Held in temporary investment instruments that are cash, or cash equivalent instruments, within a Treasury function; or  
7.3.2. Held in temporary investment instruments that do not include greenhouse gas intensive projects which are inconsistent with the delivery of a low carbon and climate resilient economy; or  
7.3.3. Applied to temporarily reduce indebtedness of a revolving nature before being redrawn for investments or disbursements to Nominated Projects & Assets.  

| **Reporting – Post-issuance** | 8.1 The Issuer shall prepare an Update Report at least annually while the Bond remains outstanding.  
8.1.2. The Update Report shall be made available to holders of the Bond and to the Climate Bonds Standard Board.  
8.1.3. The Issuer should provide an Update Report to holders of the Bond on a timely basis in case of material developments.  


## Schedule 2B: Conformance to the Post-Issuance Requirements of the Climate Bonds Standard

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Factual Findings</th>
<th>Error or Exceptions Identified</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Use of Proceeds</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.1</td>
<td>A list of Nominated Projects &amp; Assets is provided in Schedule 1.</td>
<td></td>
</tr>
<tr>
<td>5.2</td>
<td>The Nominated Project &amp; Assets meet the documented objectives of the finance and are in conformance with the requirements of Part C of the Climate Bonds Standard.</td>
<td></td>
</tr>
<tr>
<td>5.3</td>
<td>The Net Proceeds have been allocated to Nominated Projects &amp; Assets within 24 months of issuance of the bond.</td>
<td></td>
</tr>
<tr>
<td>5.4</td>
<td>Wabtec confirms that the Nominated Projects &amp; Assets have not been 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).</td>
<td></td>
</tr>
<tr>
<td>5.5</td>
<td>Wabtec confirms that it has tracked the share of the Net Proceeds used for financing and refinancing.</td>
<td></td>
</tr>
<tr>
<td>5.6</td>
<td>Wabtec’s Green Bond Framework documents that the Net Proceeds are tracked following a formal internal process.</td>
<td></td>
</tr>
<tr>
<td>5.7</td>
<td>Wabtec has confirmed that the Net Proceeds raised are no greater than the total investment exposure or debt obligation to the Nominated Projects &amp; Assets which are owned or financed by the issuer.</td>
<td></td>
</tr>
<tr>
<td>5.8</td>
<td>Additional Nominated Project &amp; Assets may be added to, or used to substitute or replenish, the portfolio of Nominated Project &amp; Assets as long as the additional Nominated Project &amp; Assets are eligible under Part C of the Climate Bonds Standard and are consistent with the bond’s objective as set out in Clause 6.1.1.</td>
<td></td>
</tr>
<tr>
<td>5.8.1</td>
<td>Where additional Nominated Projects &amp; Assets are covered by Sector Eligibility Criteria which were not included in the scope of either the Pre-Issuance Verification or the Post-Issuance Verification engagements, the issuer shall engage a Verifier to provide a Verifier’s Report covering at least the conformance of the additional Nominated Projects &amp; Assets with the relevant Sector Eligibility Criteria under Part C of the Climate Bonds Standard.</td>
<td>None</td>
</tr>
<tr>
<td><strong>Process for Evaluation and Selection of Projects &amp; Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.1</td>
<td>Wabtec’s Green Bond Framework documents a decision-making process which it uses to determine the continuing eligibility of the Nominated Projects &amp; Assets. This includes, without limitation:</td>
<td>None</td>
</tr>
<tr>
<td>6.1.1</td>
<td>A statement on the climate-related objectives of the financing;</td>
<td></td>
</tr>
<tr>
<td>6.1.2</td>
<td>How the climate-related objectives of the financing are positioned within the context of Wabtec’s overarching objectives, strategy, policy and/or processes relating to environmental sustainability;</td>
<td></td>
</tr>
</tbody>
</table>
6.1.3 Wabtec’s rationale for issuing the bond;
6.1.4 A process to determine whether the Nominated Projects & Assets meet the eligibility requirements specified in the Climate Bonds Standard;
6.1.5 Other information provided by Wabtec as described in Clause

<table>
<thead>
<tr>
<th>Management of Proceeds</th>
<th>7.1 Wabtec confirmed that the net proceeds of the bond were identified in an appropriate manner, and documented.</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7.2 Wabtec confirmed that it maintained an earmarking process to manage and account for allocation of net proceeds to the Nominated Projects &amp; Assets.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7.3 Wabtec has confirmed that while the financing remained outstanding, the balance of the tracked net proceeds were reduced by amounts allocated to Nominated Projects &amp; Assets. Pending allocation, the net proceeds were temporarily held in cash, or cash equivalent instruments, within a Treasury function.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reporting – Post-issuance</th>
<th>8.1. Wabtec is committed to preparing an Update Report at least annually while the financing remains outstanding.</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8.1.2. The Update Report will be made available to the lenders and to the Climate Bonds Standard Board.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8.1.3. Wabtec will provide an Update Report to the lenders on a timely basis in case of material developments</td>
<td></td>
</tr>
</tbody>
</table>
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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.
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