

# BTSG Group Holdings

## PRE-ISSUANCE VERIFICATION LETTER

### LOW CARBON TRANSPORT CRITERIA OF THE CLIMATE BONDS STANDARD

**Type of engagement:** Assurance Engagement

**Period engagement was carried out:** October 2020

**Approved verifier:** Sustainalytics

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### Scope and Objectives

BTSG Group Holdings (“BTSG”) has engaged Sustainalytics to review and verify that BTSG’s green bond meets the requirements under the Low Carbon Transport criteria of the Climate Bonds Standard.

BTSG, engages in mass transit, media, property and service businesses in Thailand, particularly Bangkok. The company’s main business line, mass transit, operates and maintains the Sky Train system, an elevated trackwork covering 36 kilometers of train tracks, and the Bus Rapid Transit system with 12 stations through 15 kilometers of dedicated bus lanes in Bangkok. BTSG was founded in 1968 and is headquartered in Bangkok, Thailand.

- In line with Government of Thailand’s environmental goals of reducing the country’s GHG emissions by 20% from the projected business-as-usual level by 2030 or the reduction of approximately 555 MtCO<sub>2e</sub>, compared to 2005 levels, BTSG has committed to reduce overall energy consumption for its mass transit low-carbon rail system. In addition, BTSG reports that it reduced its scope 1 GHG emissions, by approximately 40% in 2019/20 compared to 2018/19 levels and decreased the fuel consumption from its rapid bus system by 26% in the same period.<sup>1</sup>

BTSG intends to issue green bonds in order to finance or refinance, in whole or in part, existing and future projects that improve mobility services and related infrastructure, namely in:

- (i) Clean transportation
- (ii) Infrastructure supporting the clean transportation operations

### Climate Bonds Standards Criteria

Pre-issuance requirements under Version 3.0:

- Low Carbon Transport
  - Public Passenger Transport

### Issuing Entity’s Responsibility

BTSG 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

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<sup>1</sup> BTSG Sustainability Report 2019/2020 pg. 92: <http://www.btsgroup.co.th/storage/download/sustainability/sr/bts-sd201920-en.pdf>

### **Independence and Quality Control**

Sustainalytics, a leading provider of ESG and corporate governance research and ratings to investors, conducted the verification of BTSG's green bond, issued to finance electric mass transportation and related infrastructure, and provided an independent opinion informing BTSG as to the conformance of the green bond with the Pre-Issuance requirements and Low Carbon Transport criteria of the Climate Bonds Standard.

Sustainalytics has relied on the information and the facts presented by BTSG. 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 BTSG'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 BTSG 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 BTSG's green bond with the Climate Bonds Standard Version 3.0;
- Conformance with the Low Carbon Transport 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 BTSG's green bond meets the requirements of the Climate Bonds Standard. Upon reviewing evidence and other information, Sustainalytics is of the opinion that BTSG will ensure compliance with Climate Bonds Standard requirements.

### **Conclusion**

BTSG's green bond will finance and refinance electric mass transportation, electric feeder transportation and infrastructure related to Low Carbon Transport (clean transportation and infrastructure supporting the clean transportation operations). Based on the limited assurance procedures conducted of BTSG's green bond under the Low Carbon Transport criteria of the Climate Bonds Standard, nothing has come to Sustainalytics' attention that causes us to believe that, in all material aspects, BTSG's green bond is not in conformance with the Low Carbon Transport of the Climate Bonds Standard's Pre-Issuance Requirements.

## Schedule 1: Detailed Overview of Nominated Projects and Assets

Details of the Nominated Projects are provided below:

BTSG, Sino-Thai Engineering and Construction (STEC) and Ratchaburi Electricity Generating Holding (RATCH) established two subsidiary companies, Northern Bangkok Monorail Company Limited (NBM) and Eastern Bangkok Monorail Company Limited (EBM) with a share proportion of 75%, 15% and 10% respectively. These two companies were established for the Pink line (Khae Rai to Min Buri; 34.5 km, 30 stations) and Yellow line (Lad Prao to Samrong; 30.4 km, 23 stations) concessions. NBM and EBM were successfully awarded the concessions and signed the concession agreement from MRTA on 16 June 2017. The 30-year concession is a public private partnership with governmental subsidy covering THB 47bn out of the total THB 96bn project costs.

After signing the contract, BTSG provided equity investment to support the Pink and Yellow lines total amount of THB 17.85 billion to support Civil works, Guideway Structure Contract, M&E works, etc. during June 2017 – present.

BTSG confirmed that the new assets that will be funded by BTSG's 2020 green bond issuance differ from those that were funded by the net proceeds of BTSG's 2019 green bond issuance. The net proceeds of the 2020 green bond issuance will be used to finance different expenditures in the Pink Line and Yellow Line as outlined below.

Project Name	Project Description	Type of Infrastructure	Contribution rate (%)		Investment (THB)
			May 2019 (First Green bond)	October 2020 (Second Green bond)	October 2020 (Second Green bond)
Pink Line	The Pink Line monorail project is a mass transit system in Bangkok being developed from the Nonthaburi Government Center near Khae Rai junction along Tiwanon and Chaeng Watthana roads to the eastern district of Min Buri.	Civil works	36%	63%	2,350mn
		Mechanical & Electrical	23%	57%	
Yellow Line	The Yellow Line monorail project is a mass transit system in Bangkok being developed from the Ratchada-Lat Phrao intersection southeast to the Samrong area of Samut Prakan province.	Civil works	36%	64%	2,500mn
		Mechanical & Electrical	23%	58%	

## Schedule 2A: Pre-Issuance General Requirements

<p>1. Use of Proceeds</p>	<p>1.1 The Issuer shall document the Nominated Projects &amp; Assets which are proposed to be associated with the Bond and which have been assessed as likely to be Eligible Projects &amp; Assets. The Issuer shall establish a list of Nominated Projects &amp; 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 &amp; Assets, or the relevant proportion of the total Market Value of the proposed Nominated Projects &amp; Assets which are owned or funded by the Issuer.</p> <p>1.3 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:</p> <p>1.3.1 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,</p> <p>1.3.2 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.</p>
<p>2. Process for Evaluation and Selection of Projects &amp; Assets</p>	<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 &amp; 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 &amp; 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 &amp; 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</p>

	<p>Nominated Projects &amp; Assets;</p> <p>2.2.2 any green standards or certifications referenced in the selection of Nominated Projects &amp; Assets.</p> <p>2.3 The Issuer shall assess that all proposed Nominated Projects &amp; 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>
<p>3. Management of Proceeds</p>	<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 &amp; Assets: An earmarking process can be used to manage and account for funding to the Nominated Projects &amp; Assets and enables estimation of the share of the Net Proceeds being used for financing and refinancing.</p>
<p>4. Reporting</p>	<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> <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.;</p> <p>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;</p> <p>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;</p> <p>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 &amp; 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.</p> <p>4.1.5 A summary of the approach to the management of unallocated Net Proceeds in accordance with Clause 3.1;</p> <p>4.1.6 The intended approach to providing Update Reports to reaffirm conformance with the Climate Bonds Standard while the Bond remains outstanding;</p> <p>4.1.7 The list of proposed Nominated Projects &amp; Assets associated with the Bond and the investment areas, as provided in Clause 9.1, into which the Nominated Projects &amp; Assets fall. Where there are limits on the amount of detail that can be made available about specific Nominated Projects &amp; Assets, information shall be presented on the investment areas which the Nominated Projects &amp; Assets fall into, as provided in Clause 9.1, and the Issuer shall provide an explanation of why detail on Nominated Projects &amp; Assets is limited;</p> <p>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</p>

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;
- 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;
- 4.2.5 The Climate Bonds Initiative Disclaimer provided in the Certification Agreement.

*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.*

## Schedule 2B: Conformance to the Pre-Issuance Requirements

Procedure Performed	Factual Findings	Error or Exceptions Identified
1. Use of Proceeds	<p>1.1 BTSG has developed a list of proposed Nominated Projects &amp; Assets which comply with the Low Carbon Transport sector criteria of the Climate Bonds Standard. BTSG intends to keep this list updated with all the financed projects that fall within the scope of BTSG's green bond program and Framework. The proposed Nominated Projects and Assets include:</p> <ul style="list-style-type: none"> <li>• Clean transportation</li> <li>• Infrastructure supporting the clean transportation operations</li> </ul> <p>1.2 BTSG'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 &amp; Assets.</p> <p>1.3 BTSG's management confirms that the Nominated Projects &amp; 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 BTSG that distinct portions of the Nominated Projects &amp; 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 Green Bond Framework states that the intention of the green bonds is to reduce CO<sub>2</sub> and greenhouse gas emissions associated with the global transportation sector, as well as to reduce overall energy consumption.</p> <p>2.1.2. BTSG's environmental objectives are summarized in the Green Bond Framework.</p> <p>2.1.3. BTSG's rationale for issuing green bonds is to finance or refinance investments purchases, modernization, maintenance and refurbishments of Eligible Green Assets used by BTSG and/or its affiliates.</p> <p>2.1.4. The Green Bond Framework includes a process for project evaluation and selection where BTSG's internal Green Bond Working Group will review proposed projects against the eligibility criteria and present Eligible Green Assets to BTGS's Executive Committee to review and approve. In the event that the proposed project is approved, the Executive Committee then notifies BTGS's Board of Directors of the allocation of proceeds.</p> <p>2.2.1. BTSG 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. The Green Bond Framework references the Climate Bonds Standard version 3 and also adheres to the Green Bond Principles, 2018 ("GBP").</p> <p>2.2.3. BTGS's Green Bond Working Group, comprised of representatives from Treasury, Corporate Communication, Service Planning, Management Information System (MIS)</p>	But not sure about 2.2.2

	and Finance, will verify that all proposed Nominated Projects & Assets conform to the Climate Bonds Taxonomy and Low Carbon Transport sector criteria.	
3. Management of Proceeds	<p>3.1.1 The Green Bond Framework outlines a process by which proceeds will be tracked.</p> <p>3.1.2 Issuer will manage unallocated net proceeds by: (i) holding it in cash or cash equivalents; (ii) investing in short and liquid marketable securities which are not inconsistent with the delivery of a low carbon and climate resilient economy; or (iii) applied to temporarily reduce indebtedness of a revolving nature, where the original loan of which is not inconsistent with the delivery of a low carbon and climate resilient economy.</p> <p>3.1.3 The Green Bond Framework details the process BTSG 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>	None
Reporting Prior to Issuance	<p>4.1.1. Bonds issued under the Green Bond Framework are intended to align with the Climate Bonds Standard.</p> <p>4.1.2. The Green Bond 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 Green Bond Framework provides detail on its decision-making process, in which BTSG will engage its Executive Committee and Board of Directors during the process to ensure alignment with the eligibility criteria.</p> <p>4.1.4. BTSG's Nominated Projects &amp; Assets will conform with the Low Carbon Transport sector criteria. BTSG may report on the following impact metrics: number of passengers using electric transportation and/or the amount of CO<sub>2</sub> emissions reduction per year.</p> <p>4.1.5. BTSG will manage unallocated net proceeds in accordance with Clause 3.1.2.</p> <p>4.1.6. BTSG will issue a Green Bond report within one year of issuance and will update it annually until the green bond is fully allocated.</p> <p>4.1.7. BTSG's Nominated Projects &amp; Assets fall under Low Carbon Transport sector criteria. BTSG will report on the investment areas which the Nominated Projects &amp; Assets fall into by providing a summary of projects financed by the green bond; a summary of the allocation proceeds raised via a green bond to finance and/or refinance green projects and a summary of unallocated proceeds raised via a green bond issuance.</p> <p>4.1.8. BTSG will provide more details regarding the amount used for financing and refinancing in the annual report.</p> <p>4.2.1. BTSG's Nominated Projects &amp; Assets will conform with the Low Carbon Transport 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. No third-party verifier has been appointed yet to conduct the Post-Issuance assurance exercise. Post-issuance will be</p>	None

	<p>carried out 12 months after issuance. However, conducting periodic Assurance Engagements over the term of the bond is at the discretion of the bond issuer, as per CBI guidelines.</p> <p>4.2.4. BTGS will issue a green bond report within one year of issuance and will update it annually under the green bond is fully allocated. The report will provide an overview of the assets financed through each green bond issuance. BTGS will also report a qualitative summary of the specific measures, planned and carried out, to reduce energy consumption and greenhouse gas emission.</p> <p>4.2.5. Sustainalytics notes that under the terms of its certification, BTGS must include the CBI Disclaimer provided in the Certification Agreement in disclosure documentation.</p>	
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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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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](http://www.sustainalytics.com).

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Climate Bonds Initiative

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**GlobalCapital**  
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Named

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



The  
**Green Bond**  
Principles