

# Second-Party Opinion

## BTSG Green Bond Framework

### Evaluation Summary

Sustainalytics is of the opinion that the BTSG Green Bond Framework is credible and impactful and aligns with the four core components of the Green Bond Principles 2018 and ASEAN Green Bond Standards 2018. This assessment is based on the following:



**USE OF PROCEEDS** The eligible category for the use of proceeds – Clean transportation and supporting infrastructure – is aligned with those recognized by the Green Bond Principles and ASEAN Green Bond Standards 2018. Sustainalytics considers that the development of public clean transportation and related infrastructure will lead to positive environmental impacts by supporting low carbon mobility in Bangkok. Sustainalytics considers that the eligible projects will advance the UN Sustainable Development Goals (SDGs), especially SDG 11.



**PROJECT EVALUATION / SELECTION** BTSG's eligible projects are evaluated and selected by its dedicated Green Bond Working Group (GBWG) based on the established eligibility criteria. The GBWG consists of cross-functional representatives from the Treasury Department, Corporate Communication Department, Service Planning and MIS Department and Finance team of the project(s). The selected projects are then approved by the company's Executive Committee. This process is aligned with market practices



**MANAGEMENT OF PROCEEDS** The proceeds of the bonds will be segregated into separate accounts within BTSG's finance and reporting system and tracked using BTSG's internal information systems, which is managed by its Accounting team. Pending full allocation, the unallocated proceeds will be invested in cash and cash equivalents according to BTSG's liquidity management policies. This process is in line with market practices.



**REPORTING** BTSG intends to report annually on the allocation and impact of proceeds on the company's website until full allocation of the bonds. Allocation reporting will include the balance amount of allocated and unallocated net proceeds as well as the summary of projects while the impact reporting will include relevant impact metrics, i.e. number of passengers per year and amount of CO<sub>2</sub> emission reductions per year. The scope and frequency of allocation and impact reporting is aligned with market practice.

<b>Evaluation date</b>	April, <sup>1</sup> 2019
<b>Issuer Location</b>	Bangkok, Thailand

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### Alignment with the ASEAN Green Bond Standards

The ASEAN Green Bond Standards provide guidance to issuers and communicate more specifically what an issuer should do to issue a credible green bond within Southeast Asia. Sustainalytics is of the opinion that the green categories under the BTSG Green Bond Framework align with the ASEAN Green Bond Standards.

<sup>1</sup> This SPO is a slightly revised version of a previous SPO (dated xxx 2019). It has been updated to incorporate corrected information on the sustainability strategy of BTSG. The changes are in no way material to Sustainalytics' opinion regarding the benefits of the intended use of bond proceeds or the Framework's alignment with the GBP.

## Introduction

BTSG Group Holdings PCL (“BTSG” or the “Company”) operates mass transit, media, property and service businesses in Thailand. BTSG’s mass transit unit, which accounts for the majority of the group’s revenues, operates and maintains the Sky Train system, an elevated trackwork in Bangkok, covering 36 kilometers of train tracks, and the Bus Rapid Transit system with 12 stations through 15 kilometers of dedicated bus lane. BTSG was founded in 1968 and is headquartered in Bangkok, Thailand.

BTSG has developed the BTSG Green Bond Framework (the “Framework”) under which it intends to issue green bonds and use the proceeds to finance or refinance, in whole or in part, existing and future projects that contribute to development of electrified transportation services and related-infrastructures while supporting the company’s strategy and vision. The Framework defines one eligibility criterion:

1. Clean transportation and supporting infrastructure

BTSG engaged Sustainalytics to review the BTSG Green Bond Framework, dated April 2019 and provide a second-party opinion on the Framework’s environmental credentials and its alignment with the Green Bond Principles 2018 (GBP)<sup>2</sup> and the ASEAN Green Bond Standards 2018 (the “AGBS”)<sup>3</sup>. This Framework has been published in a separate document.<sup>4</sup>

As part of this engagement, Sustainalytics held conversations with various members of BTSG’s management team to understand the sustainability impact of their business processes and planned use of proceeds, as well as management of proceeds and reporting aspects of BTSG’s green bond. Sustainalytics also reviewed relevant public documents and non-public information.

This document contains Sustainalytics’ opinion of the BTSG Green Bond Framework and should be read in conjunction with that Framework.<sup>5</sup>

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<sup>2</sup> The Green Bond Principles are administered by the International Capital Market Association and are available at <https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/>

<sup>3</sup> The ASEAN Green Bond Standards are administered by the ASEAN Capital Markets Forum and are available at <http://www.theacmf.org/ACMF/upload/GREENBONDACMF.pdf>

<sup>4</sup> The BTSG Green Bond Framework is available on BTSG’s website at: <http://www.btsgroup.co.th/en/home>

<sup>5</sup> This SPO is a slightly revised version of a previous SPO (dated xxx 2019). It has been updated to incorporate corrected information on the sustainability strategy of BTSG. The changes are in no way material to Sustainalytics’ opinion regarding the benefits of the intended use of bond proceeds or the Framework’s alignment with the GBP.

## Sustainalytics' Opinion

### Section 1: Sustainalytics' Opinion on the BTSG Green Bond Framework

Sustainalytics is of the opinion that the BTSG Green Bond Framework is credible and impactful, and aligns with the four core components of the Green Bond Principles 2018. Sustainalytics highlights the following elements of BTSG's Green Bond Framework:

- Use of Proceeds:
  - The eligible use of category of the BTSG Green Bond Framework - Clean transportation and supporting infrastructure - is recognized as impactful by the Green Bond Principles 2018. Sustainalytics believes BTSG's electrified mass transportation projects contribute to a reduction in Bangkok's GHG footprint through assisting the shift towards public and low carbon mobility.
  - Sustainalytics views BTSG's two-year look-back period for refinancing activities as aligned with market practices. In addition, BTSG confirmed that at least half of the proceeds will be allocated within one year while full allocation will be completed after two years from the issuance. In accordance with Climate Bond Standard version 2.1,<sup>6</sup> Sustainalytics considers BTSG's settlement period of net proceeds as being aligned with market best practice.
  - BTSG confirmed that the eligibility criteria for clean transportation and supporting infrastructure include investments in electric-powered vehicles only.
- Project Evaluation and Selection:
  - According to BTSG's three-step project evaluation and selection process, a pool of eligible candidate projects is identified and evaluated by its Green Bond Working Group (GBWG) based on the established eligibility criteria. The GBWG consists of cross functional representatives from Treasury Department, Corporate Communication Department, Service Planning and MIS Department and Finance team of the project(s). After the evaluation process, final candidate projects are reviewed and approved by the company's Executive Committee. Following the approval, the Executive Committee notifies BTSG's Board of Directors regarding the selected projects. This process is aligned with market practice.
- Management of Proceeds:
  - BTSG will segregate the green bond proceeds into separate accounts within BTSG's finance and reporting system, under the management of its accounting team. Pending full allocation, the unallocated proceeds will be invested in cash and cash equivalents according to BTSG's liquidity management policies. This process is in line with market practice.
- Reporting:
  - BTSG has committed to report allocation of proceeds on the company's website on an annual basis until full allocation. BTSG's allocation reporting will include the balance amount of allocated and unallocated net proceeds as well as a summary of projects and the portion of proceeds use for financing vs refinancing.
  - In addition, BTSG committed, where possible, to report on impact including relevant impact metrics such as number of passengers using the financed electric transportation per year and the reduction of CO<sub>2</sub> emissions per year.

#### Alignment with ASEAN Green Bond Standards 2018

The ASEAN Green Bond Standards provide guidance to issuers and communicate more specifically what an issuer should do to issue a credible green bond within Southeast Asia. Sustainalytics is of the opinion that the BTSG Green Bond Framework aligns with the ASEAN Green Bond Standards 2018. See Appendix 1: Alignment to the ASEAN Green Bond Standards.

#### Alignment with Green Bond Principles 2018

Sustainalytics has determined that BTSG's green bond aligns to the four core components of the Green Bond Principles 2018. For detailed information please refer to Appendix 2: Green Bond/Green Bond Programme External Review Form.

<sup>6</sup> Climate Bond Standards 2.1: [https://www.climatebonds.net/files/files/Climate%20Bonds%20Standard%20v2\\_1%20%20January\\_2017.pdf](https://www.climatebonds.net/files/files/Climate%20Bonds%20Standard%20v2_1%20%20January_2017.pdf)

## Section 2: Sustainability Strategy and Performance of the Issuer

### Contribution of framework to issuer's sustainability strategy and performance

BTSG has implemented a sustainable corporate strategy, *The City Solutions Concept*, as a guideline to the company's operations and business model. The strategy includes a commitment to execute energy efficiency management as well as the conservation and reduction of natural resources<sup>7</sup> as well as the following initiatives and targets:

- BTSG has conducted a four-step assessment to identify material sustainability topics regarding the company's operations. Under the environmental aspects, the company has identified several key subjects such as energy efficiency and the environmental footprint for further improvement, including developing policies, objectives and goals.<sup>8</sup>
- BTSG developed an environmental policy in which it commits to a sustainable and environmentally friendly operating railway,<sup>9</sup> i.e. electrified railways as well as initiatives such as a washing plant that reduces water, soap and disinfectants used, and managing significant environmental impacts in a proactive manner through implementing energy consumption measures, as well as promoting environmental impact awareness amongst its employees.<sup>10</sup>
- Bangkok Mass Transit System PCL (BTSC) established an Energy Management System Committee in 2014/15 to focus on energy related issues, which includes oversight by the Chief Executive Officer serving as head of the committee. Moreover, a third-party audit and certification of the energy related data is conducted on an annual basis.<sup>11</sup>
- BTSG's Supplier Code of Business Conduct defines environmental, social and governance commitments required from suppliers to ensure sustainable business throughout the company's supply chain. Moreover, BTSG conducts suppliers' risk assessment on an annual basis to identify potential environmental risks resulting from critical suppliers,<sup>12</sup> indicating that the company's sustainability efforts go beyond its own operations.
- Although BTSG has not set quantitative energy reduction targets, the company has defined energy-related thresholds, such as not exceeding total electricity consumption of 2.80 kWh/car-km, and 50 kWh/1,000 passengers-km/month traction power<sup>13</sup> by 2017/18.<sup>14</sup>
- In addition, BTSG provides disclosure on its progress of environmental efforts. Its scope 1 GHG emissions, direct emissions from owned or controlled sources,<sup>15</sup> were reduced by 33%, and rapid bus fuel consumption was decreased by 26% in 2017/18 compared to 2017/16 levels.<sup>16</sup>

Based on BTSG's sustainability policies, strategy and initiatives, Sustainalytics believes that BTSG is well positioned to issue green bonds and that the eligible projects will help the company advance its sustainability strategy as well as the overall climate ambitions of the Government of Thailand.

### Well positioned to address common environmental and social risks associated with the projects

While the eligible category is recognized as impactful by the Green Bond Principles 2018, Sustainalytics also recognizes that development of clean transportation and infrastructure might entail environmental risks related to infrastructure constructions, including waste disposal, loss of biodiversity and land use change as well as social risks such as workers' health and safety risks, and community opposition. Sustainalytics highlights the following measures of BTSG and relevant regulation that mitigate related risks:

<sup>7</sup> Sustainability at BTSG: <http://www.btsigroup.co.th/en/sustainability/sustainability-guidelines>

<sup>8</sup> BTSG Materiality Assessment: <http://www.btsigroup.co.th/en/sustainability/sustainable-performances/materiality-assessment>

<sup>9</sup> BTSG identifies environmentally friendly operating railways in terms of CO<sub>2</sub> emissions generated and energy consumption

<sup>10</sup> BTSG Company Policies: [https://bts.podrealm.com/website/eng/info/info-company\\_policies.html](https://bts.podrealm.com/website/eng/info/info-company_policies.html)

<sup>11</sup> BTSG Green Bond Framework

<sup>12</sup> BTSG Sustainability Report 2017/2018 pg. 43: <http://www.btsigroup.co.th/storage/download/sustainability/sr/bts-sd201718-en.pdf>

<sup>13</sup> The track electrification refers to the type of source supply system that is used while powering the electric locomotive systems. It can be Alternating Current (AC), or Direct Current (DC) or a Composite Supply.

<sup>14</sup> BTSG Sustainability Report 2017/2018 pg. 48: <http://www.btsigroup.co.th/storage/download/sustainability/sr/bts-sd201718-en.pdf>

<sup>15</sup> Green House Gas Protocol: [https://ghgprotocol.org/sites/default/files/standards\\_supporting/FAQ.pdf](https://ghgprotocol.org/sites/default/files/standards_supporting/FAQ.pdf)

<sup>16</sup> BTSG Sustainability Report 2017/2018 pg. 92: <http://www.btsigroup.co.th/storage/download/sustainability/sr/bts-sd201718-en.pdf>

- According to Thailand's Notification of Ministry of Natural Resources and Environment regarding the types and specifications of projects that require an Environmental Impact Assessment (EIA) Report, land allocation and construction activities related to roads, highway and train lines is subject to the EIA Report requirement.<sup>17</sup>
- In line with its risk management policy, BTSG's risk management working group conducts risk assessments which include the environmental impact of the company's operations. BTSG's Environmental Management System is aligned with ISO 14001<sup>18</sup> and OHSAS 18001<sup>19</sup> standards, providing additional assurance that BTSG's environmental and occupational health and safety management systems are aligned with international standards.
- BTSG has established a safety policy to manage occupational health and safety through identifying hazards, minimizing risks and implementing risk reduction and control measures together with regular reviews of safety related processes.<sup>20</sup> Moreover, BTSG provides disclosure on the implementation of the policy including frequency of trainings and number of accident, such as zero employee accident in the workplace in 2017/18.
- BTSG has identified engagement channels, and disclosure of information for each stakeholder, including communities to voice their interests and provide feedback during decision making processes.<sup>21</sup> BTSG confirmed to Sustainalytics that public consultation had been conducted for the projects financed by the green bonds.

Based on the regulatory requirements in Thailand, BTSG initiatives on environmental protection and community engagement, Sustainalytics believes that BTSG is well positioned to mitigate the main environmental and social risks associated with the eligible use of proceeds category.

### Section 3: Impact of Use of Proceeds

The use of proceed category is recognized as impactful by Green Bond Principles.

#### Importance of the shift towards mass and low carbon transit in Bangkok

Thailand's transportation sector relies 85% on road transportation,<sup>22</sup> mainly using private cars and motorcycles, increasing urban air pollution, decreasing safety, and increasing GHG emissions.<sup>23</sup> In addition, the transport sector accounts for more than one-third of final energy consumption,<sup>24</sup> and accounts for 19.2% of total GHG emission in Thailand<sup>25</sup> and 38% of GHG emissions in Bangkok.<sup>26</sup> The rapid development of the Thai economy and its extensive rice-producing capacity<sup>27</sup> made the Bangkok Metropolitan Region (BMR) the country's most significant urban hub, accounting for almost 80% of the total urban area<sup>28</sup> and 22% of the total population<sup>29</sup> in Thailand. Population increase, and land use change have led to a rapid motorization in BMR, reaching a high level of motorcycle and car ownership before a mass transit systems were

<sup>17</sup> Notification of Ministry of Natural Resources and Environment: [https://www.jetro.go.jp/ext\\_images/thailand/pdf/iee\\_chonburi.pdf](https://www.jetro.go.jp/ext_images/thailand/pdf/iee_chonburi.pdf)

<sup>18</sup> The OHSAS 18001 an international standard designed to enable organisations to control risks and improve performance in the area of occupational health and safety.

<sup>19</sup> ISO 14001 is an international standard that specifies requirements for an effective environmental management system (EMS)

<sup>20</sup> BTSG Safety Policy <http://www.btsgroup.co.th/en/sustainability/sustainable-performances/relevant-policies>

<sup>21</sup> BTSG Sustainability Report 2017/2018 pg. 89: <http://www.btsgroup.co.th/storage/download/sustainability/sr/bts-sd201718-en.pdf>

<sup>22</sup> Transportation Infrastructure in Thailand: Go Green or Go Grey, ACTS: <http://www.uncrd.or.jp/content/documents/5602Presentation%205%20-%20Module%202%20-%20Mr.%20Surachet%20Pravinongvuth.pdf>

<sup>23</sup> Private Motorized Transport, Bangkok, Thailand, Natcha Tulyasuwan, 2013 [https://unhabitat.org/wp-content/uploads/2013/06/GRHS.2013.Case\\_Study\\_Bangkok.Thailand.pdf](https://unhabitat.org/wp-content/uploads/2013/06/GRHS.2013.Case_Study_Bangkok.Thailand.pdf)

<sup>24</sup> Thailand: Clean Energy for Green Low-Carbon Growth: <http://documents.worldbank.org/curated/en/576401468120848097/pdf/662200WP0p12440e0Clean0Energy0all07.pdf>

<sup>25</sup> OTP and GIZ Strengthen the Movement on Low Carbon Mobility: <https://www.transportandclimatechange.org/2019/01/31/otp-and-giz-strengthen-the-movements-on-low-carbon-mobility/>

<sup>26</sup> Private Motorized Transport, Bangkok, Thailand, Natcha Tulyasuwan, 2013 [https://unhabitat.org/wp-content/uploads/2013/06/GRHS.2013.Case\\_Study\\_Bangkok.Thailand.pdf](https://unhabitat.org/wp-content/uploads/2013/06/GRHS.2013.Case_Study_Bangkok.Thailand.pdf)

<sup>27</sup> Private Motorized Transport, Bangkok, Thailand, Natcha Tulyasuwan, 2013 [https://unhabitat.org/wp-content/uploads/2013/06/GRHS.2013.Case\\_Study\\_Bangkok.Thailand.pdf](https://unhabitat.org/wp-content/uploads/2013/06/GRHS.2013.Case_Study_Bangkok.Thailand.pdf)

<sup>28</sup> Urbanization in Thailand is Dominated by the Bangkok Urban Area: <http://www.worldbank.org/en/news/feature/2015/01/26/urbanization-in-thailand-is-dominated-by-the-bangkok-urban-area>

<sup>29</sup> Capital Facts for Bangkok, Thailand: <https://www.worldscapitalcities.com/capital-facts-for-bangkok-thailand/>

established.<sup>30</sup> To mitigate mobility challenges and foster a shift towards mass and low carbon transit, the Government of Thailand adopted several transportation targets in its 12<sup>th</sup> National Economic and Social Development Plan (2017-2021)<sup>31</sup> such as raising the proportion of passengers using public transportation systems, fostering the construction of mass-transit city-rail projects in the BRM, and expanding the mass rapid transit lines in BRM. In addition, the Government of Thailand set its Intended Nationally Determined Contribution in 2015,<sup>32</sup> aiming to reduce GHG emissions by 20% from the projected business-as-usual (BAU) level by 2030 or a reduction of approximately 555 MtCO<sub>2e</sub>, compared to 2005 levels. Moreover, the Bangkok Action Plan on Global Warming Mitigation (2013-2023)<sup>33</sup> includes a set of climate change mitigation and adaptation measures including environmentally sustainable transport and green urban planning.

Since BTSG intends to use its green bond proceeds to invest in clean transportation assets, including electrified mass transit, and supporting infrastructure, Sustainalytics considers that BTSG's investments will contribute to Thailand's mobility and GHG emissions targets and foster a shift towards electrified mass transit in Bangkok.

#### Alignment with/contribution to SDGs

The Sustainable Development Goals (SDGs) were set in September 2015 and form an agenda for achieving sustainable development by the year 2030. This green bond advances the following SDG goal and targets:

Use of Proceeds Category	SDG	SDG targets
Clean transportation and supporting infrastructure	11. Sustainable Cities and Communities	<p>11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.</p> <p>11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management</p>

## Conclusion

BTSG developed the BTSG Green Bond Framework under which it intends to issue green bonds to finance clean transportation projects including electric mass transit and infrastructure supporting clean transportation operations which will reduce Bangkok's environmental footprint through assisting the shift towards public and low carbon mobility and positively contribute to Thailand's GHG reduction and clean transportation goals. Sustainalytics assessed the framework and found that it aligns with the Green Bond Principles 2018, and the ASEAN Green Bond Standards 2018.

BTSG's processes for project selection and evaluation, management of proceeds and reporting are in alignment with market practice. Based on the above, Sustainalytics considers the BTSG Green Bond Framework to be credible, robust and transparent.

<sup>30</sup> Transport, urban structure and 'lock-in' in the Kuala Lumpur Metropolitan Area [https://lkyspp.nus.edu.sg/docs/default-source/faculty-publications/paul-a-barter/barter-lockin-in-kl-idpr-paper.pdf?sfvrsn=9230940b\\_2](https://lkyspp.nus.edu.sg/docs/default-source/faculty-publications/paul-a-barter/barter-lockin-in-kl-idpr-paper.pdf?sfvrsn=9230940b_2)

<sup>31</sup> The 12<sup>th</sup> National Economic and Social Development Plan of Thailand: [https://www.nesdb.go.th/nesdb\\_en/ewt\\_w3c/ewt\\_dl\\_link.php?nid=4345](https://www.nesdb.go.th/nesdb_en/ewt_w3c/ewt_dl_link.php?nid=4345)

<sup>32</sup> Intended Nationally Determined Contribution and Relevant Information:

[https://www4.unfccc.int/sites/submissions/INDC/Published%20Documents/Thailand/1/Thailand\\_INDC.pdf](https://www4.unfccc.int/sites/submissions/INDC/Published%20Documents/Thailand/1/Thailand_INDC.pdf)

<sup>33</sup> Bangkok Master Plan on Climate Change 2013-2023

[http://www.mayorsforpeace.org/english/whatsnew/activity/data/2018/Bangkok\\_Master\\_Plan\\_on\\_Climate\\_Change.pdf](http://www.mayorsforpeace.org/english/whatsnew/activity/data/2018/Bangkok_Master_Plan_on_Climate_Change.pdf)

## Appendices

### Appendix 1: Alignment to the ASEAN Green Bond Standards

ASEAN Green Bond Standards' Criteria	Alignment with ASEAN GBS	Sustainalytics' comments on alignment with the ASEAN Green Bond Standards.
Eligibility	Yes	The AGBS requires that issuers must be located in or that the proceeds be directed to assets in an ASEAN country. As a Thailand-based institution, BTSG Corporation qualifies.
Use of Proceeds	Yes	The AGBS offers specific clarification that fossil fuel power generation projects are excluded; BTSG only invests in electric transportation and supporting infrastructure.
Process for Project Evaluation and Selection	Yes	The AGBS specifies information that must be clearly communicated to investors before issuance regarding project selection. Within its framework, BTSG has described that an internal committee comprising representatives from the company's Treasury Department, Corporate Communication Department, Service Planning and MIS Department and Finance team will select projects, and that its Executive Committee will make the final approval.
Management of Proceeds	Yes	The AGBS mandates that proceeds must be appropriately tracked and that temporary investments be disclosed. Within its framework, BTSG disclosed that the green bond proceeds will be segregated into separate accounts within BTSG's finance and reporting system. Pending full allocation, the unallocated green bond proceeds will be held in cash or cash equivalents.
Reporting	Yes	The AGBS requires annual reporting on the allocation of funds and the expected impacts. BTSG states that it will provide an annual allocation report until full allocation and commits to report on the impact of the use of proceeds, depending on data availability, on an annual basis.
Annual Review	Yes	The AGBS encourages, but does not require, annual reviews. The BTSG commits to have a CBI post-issuance assurance report or verification statement as well as the annual review.



## Appendix 2: Green Bond / Green Bond Programme - External Review Form

### Section 1. Basic Information

Issuer name:	BTS Group Holdings PCL
Green Bond ISIN or Issuer Green Bond Framework Name, if applicable: <i>[specify as appropriate]</i>	BTS Group Holdings Green Bond Framework
Review provider's name:	Sustainalytics
Completion date of this form:	April 2019
Publication date of review publication: <i>[where appropriate, specify if it is an update and add reference to earlier relevant review]</i>	

### Section 2. Review overview

#### SCOPE OF REVIEW

The following may be used or adapted, where appropriate, to summarise the scope of the review.

The review assessed the following elements and confirmed their alignment with the GBPs:

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Use of Proceeds        | <input checked="" type="checkbox"/> Process for Project Evaluation and Selection |
| <input checked="" type="checkbox"/> Management of Proceeds | <input checked="" type="checkbox"/> Reporting                                    |

#### ROLE(S) OF REVIEW PROVIDER

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Consultancy (incl. 2 <sup>nd</sup> opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification   | <input type="checkbox"/> Rating        |
| <input type="checkbox"/> Other <i>(please specify)</i> :                        |  |

Note: In case of multiple reviews / different providers, please provide separate forms for each review.

#### EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW *(if applicable)*

Please refer to Evaluation Summary above.



## Section 3. Detailed review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.

### 1. USE OF PROCEEDS

Overall comment on section *(if applicable)*:

The eligible use of category of the BTSG Green Bond Framework - Clean transportation and supporting infrastructure - is recognized as impactful by the Green Bond Principles 2018. Sustainalytics believes BTSG's electrified mass transportation projects contribute to a reduction in Bangkok's GHG footprint through assisting the shift towards public and low carbon mobility.

Sustainalytics views BTSG's two-year look-back period for refinancing activities as aligned with market practices. In addition, BTSG confirmed that at least half of the proceeds will be allocated within one-year while full allocation will be completed after two-year from the issuance. In accordance with Climate Bond Standard version 2.1, Sustainalytics considers BTSG's settlement period of net proceeds as aligned with best market practice.

BTSG confirmed that the eligibility criteria for clean transportation and supporting infrastructure include investments in electric-powered vehicles only.

#### Use of proceeds categories as per GBP:

- |  |  |
|--|--|
| <input type="checkbox"/> Renewable energy  | <input type="checkbox"/> Energy efficiency   |
| <input type="checkbox"/> Pollution prevention and control  | <input type="checkbox"/> Environmentally sustainable management of living natural resources and land use |
| <input type="checkbox"/> Terrestrial and aquatic biodiversity conservation   | <input checked="" type="checkbox"/> Clean transportation   |
| <input type="checkbox"/> Sustainable water and wastewater management   | <input type="checkbox"/> Climate change adaptation   |
| <input type="checkbox"/> Eco-efficient and/or circular economy adapted products, production technologies and processes                             | <input type="checkbox"/> Green buildings   |
| <input type="checkbox"/> Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBPs | <input type="checkbox"/> Other <i>(please specify)</i> :   |

If applicable please specify the environmental taxonomy, if other than GBPs:

### 2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section (if applicable):

According to BTSG's three-step project evaluation and selection process, a pool of eligible candidate projects is identified by and evaluated by its Green Bond Working Group (GBWG) based on the established eligibility criteria. The GBWG will consist of cross functional representatives from Treasury Department,

Corporate Communication Department, Service Planning and MIS Department and Finance team of the project(s). After the evaluation process, final candidate projects are reviewed and approved by the company's Executive Committee. Following the approval, the Executive Committee notifies BTSG's Board of Directors regarding the selected projects. This process is aligned with market practices.

#### Evaluation and selection

- |  |  |
|--|--|
| <input type="checkbox"/> Credentials on the issuer's environmental sustainability objectives                       | <input type="checkbox"/> Documented process to determine that projects fit within defined categories               |
| <input checked="" type="checkbox"/> Defined and transparent criteria for projects eligible for Green Bond proceeds | <input type="checkbox"/> Documented process to identify and manage potential ESG risks associated with the project |
| <input type="checkbox"/> Summary criteria for project evaluation and selection publicly available                  | <input type="checkbox"/> Other ( <i>please specify</i> ):  |

#### Information on Responsibilities and Accountability

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Evaluation / Selection criteria subject to external advice or verification | <input type="checkbox"/> In-house assessment |
| <input type="checkbox"/> Other ( <i>please specify</i> ):  |  |

### 3. MANAGEMENT OF PROCEEDS

Overall comment on section (*if applicable*):

BTSG will segregate the green bond proceeds into separate accounts within BTSG's finance and reporting system, under the management of its Accounting team. Pending full allocation, the unallocated proceeds will be invested in cash and cash equivalents according to BTSG's liquidity management policies. This process is in line with market practices.

#### Tracking of proceeds:

- ☒ Green Bond proceeds segregated or tracked by the issuer in an appropriate manner
- ☒ Disclosure of intended types of temporary investment instruments for unallocated proceeds
- ☐ Other (*please specify*):

#### Additional disclosure:

- |   |   |
|---|---|
| <input type="checkbox"/> Allocations to future investments only | <input checked="" type="checkbox"/> Allocations to both existing and future investments |
| <input type="checkbox"/> Allocation to individual disbursements | <input type="checkbox"/> Allocation to a portfolio of disbursements                     |

- ☐ Disclosure of portfolio balance of unallocated proceeds
- ☐ Other *(please specify)*:

#### 4. REPORTING

Overall comment on section (if applicable):

BTSG has committed to report allocation of proceeds on the company's website on an annual basis until full allocation. BTSG's allocation reporting will include the balance amount of allocated and unallocated net proceeds as well as the summary of projects and the portion of proceeds use for financing vs refinancing. In addition, BTSG committed, where possible, to report on impact including relevant impact metrics such as number of passengers using the financed electric transportation per year and amount of CO2 emission reduction per year.

#### Use of proceeds reporting:

- ☒ Project-by-project
- ☐ On a project portfolio basis
- ☐ Linkage to individual bond(s)
- ☐ Other *(please specify)*:

#### Information reported:

- ☒ Allocated amounts
- ☐ Green Bond financed share of total investment
- ☐ Other *(please specify)*:

#### Frequency:

- ☒ Annual
- ☐ Semi-annual
- ☐ Other (please specify):

#### Impact reporting:

- ☐ Project-by-project
- ☒ On a project portfolio basis
- ☐ Linkage to individual bond(s)
- ☐ Other (please specify):

#### Frequency:

- ☒ Annual
- ☐ Semi-annual
- ☐ Other (please specify): When available

#### Information reported (expected or ex-post):

- ☒ GHG Emissions / Savings
- ☐ Energy Savings
- ☐ Decrease in water use
- ☐ Other ESG indicators (please specify): Number of passengers using electric transportation of project financed

**Means of Disclosure**

- |   |   |
|---|---|
| <input type="checkbox"/> Information published in financial report  | <input type="checkbox"/> Information published in sustainability report         |
| <input type="checkbox"/> Information published in ad hoc documents  | <input checked="" type="checkbox"/> Other (please specify): <u>BTSG website</u> |
| <input type="checkbox"/> Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review): |   |

Where appropriate, please specify name and date of publication in the useful links section.

**USEFUL LINKS** (e.g. to review provider methodology or credentials, to issuer's documentation, etc.)

<http://www.btsgroup.co.th/en/home>

**SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE**

**Type(s) of Review provided:**

- |  |  |
|--|--|
| <input type="checkbox"/> Consultancy (incl. 2 <sup>nd</sup> opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification / Audit                        | <input type="checkbox"/> Rating        |
| <input type="checkbox"/> Other ( <i>please specify</i> ):            |  |

**Review provider(s):**

**Date of publication:**

#### ABOUT ROLE(S) OF INDEPENDENT REVIEW PROVIDERS AS DEFINED BY THE GBP

- i. Second Party Opinion: An institution with environmental expertise, that is independent from the issuer may issue a Second Party Opinion. The institution should be independent from the issuer's adviser for its Green Bond framework, or appropriate procedures, such as information barriers, will have been implemented within the institution to ensure the independence of the Second Party Opinion. It normally entails an assessment of the alignment with the Green Bond Principles. In particular, it can include an assessment of the issuer's overarching objectives, strategy, policy and/or processes relating to environmental sustainability, and an evaluation of the environmental features of the type of projects intended for the Use of Proceeds.
- ii. Verification: An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or environmental criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Also, evaluation of the environmentally sustainable features of underlying assets may be termed verification and may reference external criteria. Assurance or attestation regarding an issuer's internal tracking method for use of proceeds, allocation of funds from Green Bond proceeds, statement of environmental impact or alignment of reporting with the GBP, may also be termed verification.
- iii. Certification: An issuer can have its Green Bond or associated Green Bond framework or Use of Proceeds certified against a recognised external green standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.
- iv. Green Bond Scoring/Rating: An issuer can have its Green Bond, associated Green Bond framework or a key feature such as Use of Proceeds evaluated or assessed by qualified third parties, such as specialised research providers or rating agencies, according to an established scoring/rating methodology. The output may include a focus on environmental performance data, the process relative to the GBP, or another benchmark, such as a 2-degree climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material environmental risks.

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