

# Second-Party Opinion

## Mitsubishi Heavy Industries, Ltd.

### Green Bond Framework



## Evaluation Summary

Sustainalytics is of the opinion that the Mitsubishi Heavy Industries, Ltd. Green Bond Framework is credible and impactful and aligns with the four core components of the Green Bond Principles 2021. This assessment is based on the following:



**USE OF PROCEEDS** The eligible category for the use of proceeds, Renewable Energy/Clean Energy, is aligned with those recognized by the Green Bond Principles 2021. Sustainalytics considers that the eligible category will lead to positive environmental impacts and advance the UN Sustainable Development Goals, specifically SDG 7 - Affordable and Clean Energy.



**PROJECT EVALUATION / SELECTION** Mitsubishi Heavy Industries, Ltd.'s business divisions will evaluate and select projects, and the Finance department then confirms that the projects are aligned with the eligibility criteria. Mitsubishi Heavy Industries, Ltd.'s CSR Framework are applicable to all allocation decisions made under the Framework. Sustainalytics considers this risk management systems to be adequate. Sustainalytics considers the Company's project evaluation and selection process in line with market practice.



**MANAGEMENT OF PROCEEDS** The Finance department will track the amount of allocated and unallocated green bond proceeds regularly, at least once a year, using the Company's internal management system. Unallocated proceeds will be held in a form of cash or cash equivalents. The Company's management of proceeds is in line with market practice.



**REPORTING** Mitsubishi Heavy Industries, Ltd. intends to report on the allocation of proceeds and environmental impacts, on its website on an annual basis. Allocation reporting will include the amount of allocated proceeds, amount or share of, allocation schedule for, and method to manage, unallocated proceeds, as well as the overview of projects for which the proceeds were allocated to the extent practicable. Impact reporting will include, the annual amount of power generated (MWh) and the annual amount of CO<sub>2</sub> emissions reduced (tons) by the renewable energy/clean energy facilities funded by the green bond proceeds, as well as the progress in R&D to the extent practicable. The Company is also committed to obtaining annual reviews from an independent reviewer after the issuance of green bonds. Sustainalytics views that Mitsubishi Heavy Industries, Ltd.'s commitment on reporting and annual reviews as aligned with market practice.

**Evaluation date** July 30, 2021

**Issuer Location** Tokyo, Japan

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## Alignment with Japan's Green Bond Guidelines 2020

Sustainalytics is of the opinion that the Mitsubishi Heavy Industries, Ltd. Green Bond Framework is in line with Green Bond Guidelines 2020 (Elements described with the word "should") developed by the Ministry of the Environment, Japan.

## Introduction

Mitsubishi Heavy Industries, Ltd. (hereinafter “MHI” or the “Company”) is a comprehensive heavy machinery manufacturer headquartered in Tokyo, engaged in engineering, manufacture, sales and services in a wide range of areas, including power generation systems, ships, transportation systems, aircraft, space systems, and defense-related products. Operating in a number of markets worldwide ranging from Japan to Asia, North and Central Americas, South America, Europe, Middle East, and Africa, the Company generates more than half of its revenue overseas.

MHI<sup>1</sup> has developed the Mitsubishi Heavy Industries, Ltd. Green Bond Framework (the “Framework”) under which it intends to issue green bonds and use the proceeds to finance and/or refinance projects that provide environmental benefits. The Framework defines eligibility criteria in the following area.

1. Renewable Energy/Clean Energy
  - a. Wind power
  - b. Geothermal power
  - c. Hydrogen power

MHI engaged Sustainalytics to review the Framework, dated July 2021, and provide a Second-Party Opinion on the Framework’s environmental credentials and its alignment with the Green Bond Principles 2021 (GBP)<sup>2</sup> and Japan’s Green Bond Guidelines 2020.<sup>3</sup> A summary overview of the Framework has been provided in Appendix 1.

### Scope of work and limitations of Sustainalytics Second-Party Opinion

Sustainalytics’ Second-Party Opinion reflects Sustainalytics independent<sup>4</sup> opinion on the alignment of the reviewed Framework with the current market standards and the extent to which the eligible categories are credible and impactful.

As part of the Second-Party Opinion, Sustainalytics assessed the following:

- The Framework’s alignment with the GBP and Japan’s Green Bond Guidelines 2020;
- The credibility and anticipated positive impacts of the use of proceeds;
- The alignment of the issuer’s sustainability strategy and performance and sustainability risk management in relation to the use of proceeds.

For the use of proceeds assessment, Sustainalytics relied on its internal taxonomy, version 1.9.2, which is informed by market practice and Sustainalytics’ expertise as an ESG research provider.

As part of this engagement, Sustainalytics held conversations with various members of MHI’s Finance department to understand the sustainability impact of their business processes and planned use of proceeds, as well as management of proceeds and reporting aspects of the Framework. MHI representatives have confirmed (1) they understand it is the sole responsibility of MHI to ensure that the information provided is complete, accurate or up to date; (2) that they have provided Sustainalytics with all relevant information and (3) that any provided material information has been duly disclosed in a timely manner. Sustainalytics also reviewed relevant public documents and non-public information.

This document contains Sustainalytics’ opinion of the Framework and should be read in conjunction with that Framework.

Any update of the present Second-Party Opinion will be conducted according to the agreed engagement conditions between Sustainalytics and MHI.

<sup>1</sup> “MHI” in this document includes the Company’s consolidated group companies.

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

<sup>3</sup> Ministry of the Environment, Japan, “Green Bond Guidelines, 2020”, at: [http://www.env.go.jp/policy/guidelines\\_set\\_version\\_with%20cover.pdf](http://www.env.go.jp/policy/guidelines_set_version_with%20cover.pdf)

<sup>4</sup> When operating multiple lines of business that serve a variety of client types, objective research is a cornerstone of Sustainalytics and ensuring analyst independence is paramount to producing objective, actionable research. Sustainalytics has therefore put in place a robust conflict management framework that specifically addresses the need for analyst independence, consistency of process, structural separation of commercial and research (and engagement) teams, data protection and systems separation. Last but not the least, analyst compensation is not directly tied to specific commercial outcomes. One of Sustainalytics’ hallmarks is integrity, another is transparency.

Sustainalytics' Second-Party Opinion, while reflecting on the alignment of the Framework with market standards, is no guarantee of alignment nor warrants any alignment with future versions of relevant market standards. Furthermore, Sustainalytics' Second-Party Opinion addresses the anticipated impacts of eligible projects expected to be financed with bond proceeds but does not measure the actual impact. The measurement and reporting of the impact achieved through projects financed under the Framework is the responsibility of the Framework owner.

In addition, the Second-Party Opinion opines on the intended allocation of proceeds but does not guarantee the realised allocation of the bond proceeds towards eligible activities.

No information provided by Sustainalytics under the present Second-Party Opinion shall be considered as being a statement, representation, warrant or argument either in favour or against, the truthfulness, reliability or completeness of any facts or statements and related surrounding circumstances that MHI has made available to Sustainalytics for the purpose of this Second-Party Opinion.

## Sustainalytics' Opinion

### Section 1: Sustainalytics' Opinion on the Mitsubishi Heavy Industries, Ltd. Green Bond Framework

Sustainalytics is of the opinion that the Mitsubishi Heavy Industries, Ltd. Green Bond Framework is credible and impactful, and aligns with the four core components of the GBP. Sustainalytics highlights the following elements of the Framework:

- Use of Proceeds:
  - Renewable Energy/Clean Energy, in which MHI intends to use the green bond proceeds, is a category and project with clear environmental benefits as recognized by the GBP. MHI's investments through the green bond will contribute to the development of renewable energy/clean energy and the energy sector's decarbonization, and will facilitate the Company's initiative to "provide energy solutions to enable a carbon neutral society." Please refer to Section 3 for Sustainalytics' in-depth assessment of environmental benefits expected from the use of proceeds.
  - For the Renewable Energy/Clean Energy category, MHI intends to allocate the proceeds to (i) manufacturing of onshore and offshore wind power generation, geothermal power generation, and hydrogen power generation facilities as well as business development, investment and operation of such power plants, (ii) R&D for onshore and offshore wind power generation, geothermal power generation. Sustainalytics positively views the Company's use of proceeds, considering the following elements:
    - For the geothermal power generation, MHI limits eligible projects for the use of proceeds to the facilities with the direct emission amount of 100 g CO<sub>2</sub>/kWh or less.
    - With regards to the hydrogen power generation, MHI has committed to Sustainalytics that it will restrict allocation of the proceeds to (i) production of hydrogen produced from 100% renewable energy ("green hydrogen"), (ii) manufacturing and supply of 100% hydrogen power generation facilities, (iii) operation of power plants fueled by 100% hydrogen.
    - When investing in a renewable energy/clean energy (wind, geothermal, and hydrogen power) business, the Company allocates the proceeds to the pure players who engage exclusively in, or generates at least 90% of their sales from renewable energy or clean energy that meets the eligibility criteria shown in the Framework.
  - MHI also intends to allocate the proceeds to existing projects. For such projects, the Company defines a lookback period of seven years prior to the green bond issuance date for capital expenditure (CAPEX) and three years prior to the green bond issuance date for operating expenditure (OPEX) within the Framework. Sustainalytics considers MHI's look-back periods to be aligned with market expectation.
- Project Evaluation and Selection:

- MHI's business divisions will evaluate and select projects, and the Finance department will confirm that the projects meet the eligibility criteria. Final decisions will be made by the Chief Financial Officer.
- MHI's CSR Framework encompassing a range of policies such as occupational health and safety, environmental preservation and other matters, is applicable to all allocation decisions made under the Framework. Furthermore, MHI has committed to Sustainalytics that it will confirm that environmental impact assessments required by local laws and regulations have been carried out for power plants for which proceeds will be allocated. Sustainalytics considers these risk management systems to be adequate.
- Sustainalytics considers the Company's process to evaluate and select projects to be in line with market practice.
- Management of Proceeds:
  - MHI's Finance department is assigned to manage the green bond proceeds and track the amount of allocated and unallocated green bond proceeds regularly, at least once a year, using the Company's internal management system, until the maturity of the green bond. Pending allocation, unallocated funds will be held in cash or cash equivalents. Sustainalytics considers the Company's management of proceeds to be in line with market practice.
- Reporting:
  - MHI is committed to reporting the allocation of proceeds and environmental impacts on its public website on an annual basis.
  - Allocation reporting will be conducted until the proceeds are fully allocated, on an aggregated basis, including the amount of allocated proceeds, amount or share of, allocation schedule for, and method to manage, unallocated proceeds, as well as, to the extent practicable, the overview of projects with up-to-date progress for which the proceeds were allocated. Impact reporting will be conducted until the maturity of the green bonds, on an aggregated basis, including, to the extent practicable, the annual amount of power generated (MWh) and the annual amount CO<sub>2</sub> reduced (tons) by the renewable energy/clean energy facilities funded by the green bond proceeds, as well as their progress in R&D. Moreover, the Company is committed to providing timely disclosure in the event of significant changes.
  - In addition to the allocation and impact reporting, the Company is committed to obtaining an annual review from an independent reviewer after the issuance. Sustainalytics views that MHI's commitment on reporting and annual reviews as aligned with market practice.

### Alignment with Green Bond Principles 2021

Sustainalytics has determined that the Mitsubishi Heavy Industries, Ltd. Green Bond Framework aligns to the four core components of the GBP. For detailed information please refer to Appendix 3: Green Bond/Green Bond Programme External Review Form.

### Alignment with Japan's Green Bond Guidelines 2020

Sustainalytics is of the opinion that the Framework is in line with Japan's Green Bond Guidelines 2020 developed by the Ministry of the Environment, Japan. The guidelines communicate what an issuer is expected to do to issue a credible green bond. Sustainalytics assessed the alignment between the Framework and the 'should' items outlined in Japan's Green Bond Guidelines 2020. For detailed information please refer to Appendix 2: Alignment with Japan's Green Bond Guidelines 2020.

## Section 2: Sustainability Strategy of MHI

### Contribution of framework to MHI's sustainability strategy

In line with its corporate principles, MHI sets out a company-wide CSR policy<sup>5</sup> aimed at contributing toward solutions for global scale issues by delivering products and technologies as a diversified manufacturer. MHI is committed to ensuring sustainability through its business activities in accordance with the following policies and goals:

- As one of its five Materiality Targets, MHI has identified the "provision of energy solutions to enable a carbon neutral world," and set the following four goals: 1) Contribute to building up energy infrastructure toward a carbon neutral world by 2050; 2) Contribute to decarbonization in the energy demand sector by

<sup>5</sup> Mitsubishi Heavy Industries Group, "CSR Framework", at: <https://www.mhi.com/csr/management/flame.html>

2050; 3) Contribute to building a circular economy; and 4) Decarbonize MHI Group's business activities by 2050.<sup>67</sup> The Company included these Materiality Targets in its Medium-Term Business Plan (MTBP),<sup>8</sup> which spans a three-year period from FY2021, and set "Energy Transition (a transition to environmentally harmonious energies)" as its growth area and has disclosed its plan to prioritize investment in the area.

- In the area of Energy Transition, the Company has positioned the decarbonization of thermal power generation as the first step in its strategy for the achievement of a carbon-neutral society, and is working on the use of hydrogen fuel for power generation.<sup>9</sup> In 2018, MHI demonstrated hydrogen co-firing technology at a co-firing rate of 30 vol% in a natural gas-fired gas turbine. MHI is currently engaged in the development of 100% hydrogen mono-fuel combustion technology towards 2025.<sup>1011</sup> The Company declared its commitment<sup>12</sup> to the development of the technology to contribute to the achievement of a decarbonized society, through the participation in "Challenge Zero,"<sup>13</sup> an initiative led by Japan Business Federation. In the US, MHI participates in the Advanced Clean Energy Storage project, which is designed to generate and store renewable hydrogen, and intends to supply the hydrogen generated there to the hydrogen-fired gas turbine power generation project, for which the Company has been awarded a contract.<sup>14</sup> The Company also offers and operates renewable energy-sourced (wind, geothermal, hydro, and solar) power generation facilities. It places a particular focus on offshore wind power generation and has developed a strategy to strengthen relevant production systems and technical/geographical support to expand business scale.<sup>15</sup>
- Based on its Basic Policy on Environmental Matters,<sup>16</sup> MHI is committed to the reduction of environmental loads in all business activities. Under its Long-Term Environmental Target<sup>17</sup>, MHI aims to decarbonize the Group's business activities by FY2050. Furthermore, through the establishment of the Fifth MHI Group Environmental Targets<sup>18</sup> as medium-term targets, the Company aims to reduce, by FY2023 from the FY2014 level, the unit CO<sub>2</sub> emissions by 9%, as well as the unit water usage and the unit waste generation by 7%, respectively.

Considering the above, Sustainalytics is of the opinion that the Framework is aligned with its sustainability policies, goals, and initiatives, and will contribute to the Company's initiative to "provide energy solutions to enable a carbon neutral society."

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

While Sustainalytics views that the wind, geothermal, and hydrogen power generation projects, which will be funded by the proceeds from the green bonds issued under the Framework, have the potential to provide clear environmental benefits and contribute to the Company's environmental strategy and global climate change goals, Sustainalytics recognizes that construction and operation of large-scale power generation facilities may be associated with unintended environmental and social risks. Major environmental and social risks include occupational safety and health of employees engaged in the manufacturing of power generation facilities, as well as loss of biodiversity, noise, and relationships with neighboring residents associated with the operation of power plants. For the following reasons, Sustainalytics recognizes that MHI is well positioned to mitigate environmental and social risks:

- MHI has developed the "MHI Group Global Code of Conduct"<sup>19</sup> which states that all MHI Group companies should, on a regular basis, monitor company employees and activities for compliance with local laws in the country where they operate, and for observance of the Code of Conduct. According to the Code of Conduct, MHI has in place a policy of managing the mitigation of social and environmental risks associated with the use of the green bond proceeds, and the Company has committed to Sustainalytics that, for the operation of power plants including the case where the company invests in the

<sup>6</sup> Mitsubishi Heavy Industries Group, "Materiality", at: <https://www.mhi.com/csr/management/materiality.html>

<sup>7</sup> Mitsubishi Heavy Industries Group, "The 27th Session of the CSR Committee", at: [https://www.mhi.com/notice/notice\\_csr\\_27.html](https://www.mhi.com/notice/notice_csr_27.html)

<sup>8</sup> Mitsubishi Heavy Industries Group, "2021 Medium-Term Business Plan (MTBP) (FY2021 – 2023)", at:

<https://www.mhi.com/jp/finance/library/plan/pdf/201030presentation.pdf>

<sup>9</sup> Mitsubishi Heavy Industries Group, "Energy Transition - New Frontier for MHI Group -", at:

[https://www.mhi.com/finance/library/business/pdf/et2020\\_energy.pdf](https://www.mhi.com/finance/library/business/pdf/et2020_energy.pdf)

<sup>10</sup> Mitsubishi Power, Ltd., "MHPS to Participate in Hydrogen Conversion Project at Natural Gas GTCC Power Plant in the Netherlands-- Will Support Feasibility Study to Reduce Annual CO<sub>2</sub> Output by 1.3 Million Tons per Year", at: <https://power.mhi.com/news/20180308.html>

<sup>11</sup> Mitsubishi Power, Ltd., "Hydrogen Power Generation Handbook", at: [https://power.mhi.com/catalogue/pdf/hydrogen\\_en.pdf](https://power.mhi.com/catalogue/pdf/hydrogen_en.pdf)

<sup>12</sup> Challenge Zero, "Participating Members Mitsubishi Heavy Industries, Ltd.", at: <https://www.challenge-zero.jp/en/member/52>

<sup>13</sup> Challenge Zero, "Declaration on "Challenge Zero"", at: <https://www.challenge-zero.jp/en/declaration/>

<sup>14</sup> Mitsubishi Power, Ltd., "GTCC power project using hydrogen from renewable energy sources in Utah, USA Received the first order for an 840MW class hydrogen-fired JAC system for Intermountain Electric Power Company (IPA) (Japanese only)", at: <https://power.mhi.com/jp/news/20200312.html>

<sup>15</sup> Mitsubishi Heavy Industries Group, "Power Systems Business Plan", at: <https://www.mhi.com/finance/library/business/pdf/ps2019.pdf>

<sup>16</sup> Mitsubishi Heavy Industries Group, "Environmental Management", at: <https://www.mhi.com/csr/environment/management.html>

<sup>17</sup> Mitsubishi Heavy Industries Group, "Environmental Management", at: <https://www.mhi.com/csr/environment/management.html>

<sup>18</sup> Mitsubishi Heavy Industries Group, "Environmental Management", at: <https://www.mhi.com/csr/environment/management.html>

<sup>19</sup> Mitsubishi Heavy Industries Group, "MHI Group Code of Conduct", at: [https://www.mhi.com/company/aboutmhi/policy/pdf/codeofconduct\\_en.pdf](https://www.mhi.com/company/aboutmhi/policy/pdf/codeofconduct_en.pdf)



business, it will confirm that environmental impact assessments as required by local laws and regulations of the relevant country or region, are duly carried out.

- MHI considers health and safety as the top priority for its business operation. It is determined to make continuous improvements and prevent work-related accidents in its power generation equipment manufacturing business, by setting, implementing, and assessing occupational safety goals based on the “MHI Group Health and Safety Policies.”<sup>20</sup>
- MHI is committed not only to complying with environmental laws and regulations through its “Basic Policy on Environmental Matters and Action Guidelines,”<sup>21</sup> which govern initiatives in R&D, manufacturing, and other business activities, but also to making continuous improvements to its environmental conservation activities by setting goals and establishing and implementing in-house assessment criteria. The Company is also determined to reduce environmental load by ensuring, for example, pollution prevention, resource saving, energy saving, and waste generation control, in all areas of business activities, including product R&D, design, procurement of raw materials, manufacturing, transportation, consumption, service, and disposal.
- According to its “Basic Policy on Environmental Matters and Action Guidelines” and “MHI Group CSR Action Guidelines,”<sup>22</sup> the Company carries out biodiversity conservation activities at its business locations through, for instance, researches on the conservation endangered species.<sup>23</sup>

### Section 3: Impact of Use of Proceeds

Sustainalytics is of the opinion that the use of proceeds related to renewable energy/clean energy, are projects that have the potential to provide environmental benefits. Sustainalytics explains why the project category produces positive environmental impacts in Japan as follows:

#### Contribution to address climate change by expanding introduction of wind and geothermal power

MHI intends to allocate the proceeds to expenditures associated with R&D and manufacturing of wind and geothermal power generation facilities, as well as businesses development, investment and operation of such power plants. The Japanese government has set the target of reducing greenhouse gas (GHG) emissions by 46%<sup>24</sup> by FY2030 compared to the FY2013 level and reaching net-zero GHG emissions by 2050<sup>25</sup>. To achieve these targets, the government aims to develop renewable energy (zero emissions) sources as a primary source of power generation.<sup>26</sup> The Japanese government is considering an energy mix target that is consistent with its GHG reduction targets for FY2030, and the draft of the Sixth Basic Energy Plan<sup>27</sup>, revealed on 21 July 2021, sets out a target to increase the share of renewable energy in total electricity generation to 36-38% by FY 2030. Moreover, in the Green Growth Strategy<sup>28</sup> formulated in 2021, the government stated that, for the achievement of net-zero GHG emissions, it would advance discussions on the utmost use of renewable energy, with the reference goal of renewable sources accounting for 50% to 60% of the country’s power supply by 2050. Given that renewable energy accounted for 18.1% of Japan’s power supply in FY2019, expanding the deployment of renewable energy sources is essential to achieving Japan’s climate goals.

In terms of power sources, while solar power generation has been growing steadily since 2012, introduction of onshore wind and geothermal power generation have remained at a low level and require further expansion.<sup>29</sup> As introduction of offshore wind power generation has also been slow, the government enacted the “Act on Promoting the Utilization of Sea Areas for the Development of Marine Renewable Energy Power

<sup>20</sup> Mitsubishi Heavy Industries Group, “Occupational Health and Safety”, at: <https://www.mhi.com/csr/social/health.html>

<sup>21</sup> Mitsubishi Heavy Industries Group, “Basic Policy on Environmental Matters and Action Guidelines”, at: <https://www.mhi.com/csr/environment/management.html>

<sup>22</sup> Mitsubishi Heavy Industries Group, “CSR Action Guidelines”, at: <https://www.mhi.com/csr/management/flame.html>

<sup>23</sup> Mitsubishi Heavy Industries Group, “Biodiversity”, at: <https://www.mhi.com/csr/environment/biodiversity.html>

<sup>24</sup> Prime minister’s office of Japan, “Press Conference on Greenhouse Gas Reduction Targets and Emergency Declaration (Japanese only)”, at: [https://www.kantei.go.jp/jp/99\\_suga/statement/2021/0422kaiken.html](https://www.kantei.go.jp/jp/99_suga/statement/2021/0422kaiken.html)

<sup>25</sup> Prime minister’s office of Japan, “Speech by Prime Minister Suga at the 203rd Diet Session (Japanese only)”, at: [https://www.kantei.go.jp/jp/99\\_suga/statement/2020/1026shoshinhyomei.html](https://www.kantei.go.jp/jp/99_suga/statement/2020/1026shoshinhyomei.html)

<sup>26</sup> Ministry of Economy, Trade and Industry, “Basic Energy Plan”, at: [https://www.meti.go.jp/english/press/2018/pdf/0703\\_002c.pdf](https://www.meti.go.jp/english/press/2018/pdf/0703_002c.pdf)

<sup>27</sup> Ministry of Economy, Trade and Industry, “Over view of Basic Energy Plan (draft)”, at: [https://www.enecho.meti.go.jp/committee/council/basic\\_policy\\_subcommittee/2021/046/046\\_004.pdf](https://www.enecho.meti.go.jp/committee/council/basic_policy_subcommittee/2021/046/046_004.pdf)

<sup>28</sup> Ministry of Economy, Trade and Industry, “Green Growth Strategy through Achieving Carbon Neutrality in 2050 (Japanese only)”, at: <https://www.meti.go.jp/press/2021/06/20210618005/20210618005-3.pdf>

<sup>29</sup> Agency for Natural Resources and Energy, “FY2019 Energy Supply and Demand Report (Final Figures) (Japanese only)”, at: <https://www.meti.go.jp/press/2021/04/20210413004/20210413004-1.pdf>

Generation Facilities” (“Offshore Renewable Energy Act”)<sup>30</sup> in March 2019 with the aim of promoting the use of offshore wind power by establishing rules on the utilization of Japan’s sea areas.

Based on the above, Sustainalytics is of the opinion that MHI’s use of proceeds for R&D, manufacturing, businesses development, investment and operation of wind and geothermal power generation facilities will contribute to the introduction of said power sources, and thereby support the Japanese government’s anti-climate change measures and generate positive environmental impacts.

#### **Contribution of 100% hydrogen-fired power generation to the realization of low carbon energy**

Hydrogen is considered as a clean energy that does not emit CO<sub>2</sub> in its consumption stage and its use is increasing in various areas such as industry, transportation, buildings, and power generation. Hydrogen is produced by reforming fossil fuels such as natural gas, or through the electrolysis of water and other processes. Depending on the method, its production entails the emission of greenhouse gases. However, in hydrogen production by electrolysis using electricity from renewable energy sources or in combination with CO<sub>2</sub> capture and storage (CCS) technology, the CO<sub>2</sub> emission in the production process may be reduced significantly or even to zero.<sup>31</sup>

The Framework specifies that MHI intends to allocate the proceeds to manufacturing and operation of power generation facilities that are 100% fueled by hydrogen. Hydrogen is expected to contribute to the decarbonization of the power generation industry when it is used as a fuel, as it does not emit CO<sub>2</sub> at the time of combustion. When generating 1 kWh electricity by thermal power generation, the amount of direct CO<sub>2</sub> emissions from an average coal-fired power plant and an LNG thermal power plant is 864 g CO<sub>2</sub> and 341 to 476 g CO<sub>2</sub>, respectively.<sup>32</sup> On the other hand, a 100% hydrogen-fired power plant emits no CO<sub>2</sub> during the power generation. In the gas turbine power generation industry, there has been progress in the development of hydrogen co-firing technology, and further R&D efforts have been made for the establishment of a 100% hydrogen mono-fuel combustion technology.<sup>33</sup>

Considering the fact that approximately 40% of Japan’s CO<sub>2</sub> emissions come from the power generation industry, and that 77% of the country’s energy mix is accounted for by fossil fuel-based thermal power generation (including 38% by gas, 32% by coal, and 7% by oil and other fuels),<sup>34</sup> the reduction of CO<sub>2</sub> in thermal power generation, through the promotion of hydrogen power generation, will be an important measure for Japan’s long-term decarbonization strategies. Furthermore, in light of its ability to adjust as required the level of power generation (similar to thermal power generation), hydrogen is also expected to play a role in introducing renewable energy in a large scale, as a flexible power source that complements renewable energy sources whose levels of power generation vary depending on the weather conditions.<sup>35</sup> When it formulated the “Basic Hydrogen Strategy”<sup>36</sup> in 2017, the Japanese government showed its intention to establish technologies for the commercialization of hydrogen power generation by around 2030 and expand the share of hydrogen power generation in its energy mix.

Based on the above, Sustainalytics is of the opinion that MHI’s manufacturing and supply of 100% hydrogen-fired power generation facilities as well as operations of power plants fueled by 100% hydrogen, which are intended for the use of the green bond proceeds, will contribute not only to the achievement of the Japanese government’s goal of expanding the share of hydrogen power generation, but also to the decarbonization of the power generation industry, through the efforts to develop hydrogen power generation technologies.

<sup>30</sup> Agency for Natural Resources and Energy, “Current State of Renewable Energy in Japan and Overseas and Draft Issues Proposed for the Current Year by the Procurement Price Calculation Committee (Japanese only)”, at: [https://www.meti.go.jp/shingikai/santetii/pdf/061\\_01\\_00.pdf](https://www.meti.go.jp/shingikai/santetii/pdf/061_01_00.pdf)

<sup>31</sup> International Energy Agency (IEA), “The Future of Hydrogen”, at: [https://www.capenergies.fr/wp-content/uploads/2019/07/the\\_future\\_of\\_hydrogen.pdf](https://www.capenergies.fr/wp-content/uploads/2019/07/the_future_of_hydrogen.pdf)

<sup>32</sup> Central Research Institute of Electric Power Industry, “Comprehensive Life Cycle CO<sub>2</sub> Emissions Assessment of Power Generation Technologies in Japan (Japanese only)”, at:

<https://criepi.denken.or.jp/hokokusho/pb/reportDownload?reportNoUkCode=Y06&tenpuTypeCode=30&seqNo=1&reportId=8713>

<sup>33</sup> International Energy Agency (IEA), “The Future of Hydrogen”, at: [https://www.capenergies.fr/wp-content/uploads/2019/07/the\\_future\\_of\\_hydrogen.pdf](https://www.capenergies.fr/wp-content/uploads/2019/07/the_future_of_hydrogen.pdf)

<sup>34</sup> Agency for Natural Resources and Energy, “FY2019 Energy Supply and Demand Report (Final Figures) (Japanese only)”, at: <https://www.meti.go.jp/press/2021/04/20210413004/20210413004-1.pdf>

<sup>35</sup> Hydrogen and Fuel Cell Strategy Council, “The Strategic Road Map for Hydrogen and Fuel Cells”, at: [https://www.meti.go.jp/english/press/2019/pdf/0312\\_002b.pdf](https://www.meti.go.jp/english/press/2019/pdf/0312_002b.pdf)

<sup>36</sup> Ministerial Council on Renewable Energy, Hydrogen and Related Issues, “Basic Hydrogen Strategy”, at: [https://www.meti.go.jp/english/press/2017/pdf/1226\\_003b.pdf](https://www.meti.go.jp/english/press/2017/pdf/1226_003b.pdf)

### 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 target:

Use of Proceeds Category	SDG	SDG target
Renewable Energy/Clean Energy	7. Affordable and Clean Energy	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix

### Conclusion

MHI has developed its Green Bond Framework with the intention of using the green bond proceeds to finance and/or refinance its renewable energy/clean energy projects. Sustainalytics is of the opinion that the use of proceeds set forth in this Framework will not only contribute to promote the development of renewable energies/clean energies and the decarbonization of the energy sector but also the Company's initiative to "provide energy solutions to enable a carbon neutral society." MHI's use of proceeds will also contribute to the achievement of climate change mitigation measures and energy policies undertaken by the Japanese government as well as to the promotion of SDG 7.

The use of proceeds set forth in the Framework is a category and project with clear environmental benefits, as recognized by the Green Bond Principles 2021 and Japan's Green Bond Guidelines 2020. In its eligible criteria for the use of proceeds, the Framework provides certain thresholds for geothermal and hydrogen power generation in addition to wind power generation. The evaluation and selection of projects and the proceeds will be managed by the Finance department, and the Company's CSR framework will apply to all allocation decisions made under the Framework. Moreover, commitments have been made for reporting on the allocation status and quantitative environmental impact metrics. Sustainalytics considers the Company's risk management systems to be adequate and that policies for each core components are aligned with market practice.

Based on the above, Sustainalytics is of the opinion that the Framework is aligned with the four core components of Green Bond Principles 2021 and Japan's Green Bond Guidelines 2020, and is credible and transparent.



## Appendices

### Appendix 1: Framework Overview

For the purpose of issuing green bonds, MHI has developed the following Framework which addresses the four key core components of the GBP: use of proceeds, project evaluation and selection process, management of proceeds, and reporting, in July, 2021. The Framework belongs to MHI.

#### 1. Use of proceeds

The proceeds of the green bond will be allocated towards new or existing businesses and/or projects that relate to the eligible businesses and/or projects described below.

##### 1.1 Eligibility Criteria

Eligible businesses and/or projects:

Renewable energy/clean energy business (wind, geothermal, and hydrogen power generation facilities/businesses)

Eligibility Criteria:

Expenditures for, and refinancing of, the Group's renewable energy/clean energy business (such as R&D funds, business development and operation funds, and working capital) that meet the following criteria:

- Hydrogen power generation businesses and/or projects for 100% hydrogen combustion (allocation of the proceeds to R&D for hydrogen power generation is not intended);
- Geothermal power generation businesses and/or projects that emit less than 100g CO<sub>2</sub>/kWh;
- Investments in corporations that are exclusively engaged in the renewable energy/clean energy business or generate at least 90% of their sales from renewable energy/clean energy-related business; and
- The expenditure for the business and/or project, was made within 7 years prior to the green bond issuance date for capital expenditure (CAPEX) and within three years prior to the green bond issuance date for operating expenditure (OPEX)

#### 2. Process for project evaluation and selection

##### 2.1 Application of Eligibility and Exclusionary Criteria in Project Selection

MHI's business divisions select the businesses and/or projects to be funded by green bond proceeds, and the finance department then confirms the compliance with the eligibility criteria, and the CFO will make the final decision.

##### 2.2 Environmental Objectives

To enhance corporate value and grow in the medium to long term through solutions to social issues, MHI Group has identified materiality it should be addressing. In response to the increasing importance of sustainability in international standards and guidelines, as seen in recent years in the Sustainable Development Goals (SDGs) adopted by the United Nations, growing ESG Investment, and the EU taxonomy and subsequent changes in megatrends influencing the MHI Group, in 2020 we reviewed the materiality identified in 2015 and added five new items as noted below. The materiality we identified is reflected in the 2021 Medium-term Business Plan announced in October 2020 and targets have been set for each, with progress regularly monitored as part of the Group's non-financial management indicators.

##### MHI Group's Company-wide Materiality Targets

Materiality	Company-wide Targets (for 2030 or 2050)
1. Provide energy solutions to enable a carbon neutral world	1-1 Contribute to building up energy infrastructure toward a carbon neutral world by 2050 1-2 Contribute to decarbonization in the energy demand sector by 2050 1-3 Contribute to building a circular economy 1-4 Decarbonize MHI Group's business activities by 2050 (Scope1, Scope 2)
2. Transform society through AI and digitalization	2-1 Expand lineup of convenient and sustainable AI/digital products meeting needs of customers and users 2-2 Create a future-oriented energy management structure 2-3 Build a foundation to produce creative products

3. Build a safer and more secure world	3-1 Make critical infrastructure more resilient 3-2 Make critical infrastructure unmanned or requiring fewer people 3-3 Continuously strengthen cybersecurity measures for all MHI products 3-4 Commercialize cross-domain security technologies 3-5 Develop engineers keenly aware of safety and security needs in all products
4. Promote diversity and increase employee engagement	4-1 Create new value through participation of diverse human resources 4-2 Ensure safe and comfortable workplaces 4-3 Support the health and vitality of employees, so they can contribute to society 4-4 Foster self-sustaining growth in all employees 4-5 Increase employee engagement
5. Enhance Corporate Governance	5-1 Further improve Board of Directors meetings 5-2 Promote legal compliance and honest and fair business practices 5-3 Further promote responsible (CSR) procurement in the global supply chain 5-4 Create opportunities to explain non-financial information
Applicable to Materiality Items 1 through 5	Enhance provision of information on MHI Group's initiatives to realize a sustainable society

The “MHI Group Long-Term Environmental Target” and the “Fifth MHI Group Environmental Targets,” which represent the Group’s medium-term goals, were established at a meeting of the Environment Committee held in March 2021. The former aims to decarbonize the Group’s business activities by 2050, while the latter intends to reduce CO<sub>2</sub> emissions, water usage, and waste generation by FY2023. MHI Group will work together to achieve these goals in order to address the problem of climate change.

Long-Term Environmental Target (FY2050)	Decarbonize MHI Group’s business activities (Scope1, Scope2)	
The Fifth MHI Group Environmental Targets (FY2023)	Unit CO <sub>2</sub> emissions	– 9% Compared with FY2014 (Note)
	Unit water usage	– 7% Compared with FY2014 (Note)
	Unit waste generation	– 7% Compared with FY2014 (Note)

(Note) Domestic and overseas consolidated Group companies

**2.3 Process to Mitigate Environmental and Social Risks**

In executing projects, MHI is committed to the mitigation of environmental and social risks according to the eligibility criteria and contributing to the creation of a sustainable society in accordance with the Group’s CSR framework.

**3. Management of Proceeds**

MHI’s finance department manages the allocation of the green bond proceeds on a regular basis (at least once a year), until the maturity of the green bond, using an internal management system. After the issuance of a green bond, the proceeds will be allocated until the maturity of the green bond. Pending the allocation to eligible businesses and/or projects, the amount of unallocated proceeds will be held in cash or cash equivalents.

**4. Reporting**

MHI will annually report on the allocation of proceeds to eligible businesses and/or projects, management of proceeds, and social impact on its corporate website, or in a timely manner whenever any significant change occurs. The first report will be made public within one year from the green bond issuance.

**4.1 Allocation reporting**

Until the proceeds are fully allocated, MHI will provide information on the allocation of proceeds to businesses and/or projects that meet the eligibility criteria, on an annual basis.

MHI will report on the following items to the extent practicable.

- Status of allocation to eligible businesses and/or projects, overview with up-to-date progress
- Amount or share of unallocated proceeds, allocation schedule, and the method to manage unallocated proceeds

Moreover, in case of refinancing an asset that requires long-term maintenance through the issuance of multiple green bonds, MHI will disclose the asset's age and remaining useful life and the amount to be refinanced as at the time of the bond issuance.

**4.2 Impact reporting**

Until the maturity of the green bond, MHI will provide, to the extent practicable, the following and other indices that indicate positive environmental impacts:

Annual power generation (MWh) and annual CO<sub>2</sub> reduction (tons) of renewable energy/clean energy facilities related to the funded business, and information on their progress in R&D (such as the outline of projects participated in)

**5. Annual Review**

The Company plans to allocate the proceeds within one year prior to the green bond issuance date, and will receive a review from Sustainalytics as an external review provider to assess whether the eligible businesses and/or projects are in conformity with its Framework. MHI intends to perform the review process annually until the full allocation of proceeds.

## Appendix 2: Alignment with Japan's Green Bond Guidelines 2020

Four elements	Alignment	Sustainalytics' comments
1. Use of Proceeds	Yes	MHI defines the projects related to renewable energy/clean energy that have positive environmental impacts as eligible for the use of proceeds. In the Framework, the Company explains to investors that it will use the proceeds for (i) manufacturing of onshore and offshore wind power generation, geothermal power generation, and hydrogen power generation facilities as well as business development, investment and operation of such power plants, (ii) R&D for onshore and offshore wind power generation, geothermal power generation, and its measures to reduce environmental risks associated with the eligible projects. Moreover, MHI states in the Framework, that in case of refinancing an asset that requires long term maintenance through the issuance of multiple green bonds, it will disclose the asset's age, and remaining useful life and the amount to be refinanced at the time of the respective green bond issuance.
2. Process for Project Evaluation and Selection	Yes	In the Framework, MHI demonstrates its CSR and environmental policies and goals, which are expected to be achieved through the issuance of green bonds. Furthermore, the Framework defines eligibility criteria in the use of proceeds; and describes that its business divisions evaluate and select projects and that the final decision will be made by Chief Financial Officer after the Finance department confirms that the projects are aligned with eligibility criteria.
3. Management of Proceeds	Yes	The Finance department allocates and manages green bond proceeds and tracks the amount of allocated and unallocated proceeds regularly, at least once a year, until the maturity of the green bonds, using the Company's internal management system. The Company describes in the Framework that it intends to manage unallocated proceeds in cash or cash equivalents until full allocation.
4. Reporting	Yes	MHI demonstrates in the Framework that it will disclose the allocation status of proceeds and environmental impact of the allocated projects on the Company's website annually. In the allocation reporting, the Company will report on the amount of allocated proceeds, and amount or share of, allocation schedule for, and method to manage, unallocated proceeds, as well as, to the extent practicable, the overview of allocated projects with up-to-date progress, until the proceeds are fully allocated or in a timely manner even after all the proceeds are allocated if there are significant changes. In the impact reporting, the Company will report on, to the extent practicable, the annual amount of power generated (MWh), the annual amount of CO <sub>2</sub> reduced (tons), and progress in R&D by the renewable energy/clean energy facilities funded by the green bond proceeds, until the maturity of the green bonds.

## Appendix 3: Green Bond / Green Bond Programme - External Review Form

### Section 1. Basic Information

Issuer name:	Mitsubishi Heavy Industries, Ltd.
Green Bond ISIN or Issuer Green Bond Framework Name, if applicable:	Mitsubishi Heavy Industries, Ltd. Green Bond Framework
Review provider's name:	Sustainalytics
Completion date of this form:	July 30, 2021
Publication date of review publication:	

### 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 GBP:

- |  |  |
|--|--|
| <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 category for the use of proceeds Renewable Energy/Clean Energy, is aligned with those recognized by the GBP. Sustainalytics considers that the eligible category will lead to positive environmental impacts and advance the UN Sustainable Development Goals, specifically SDG 7 - Affordable and Clean Energy.

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

- |   |  |
|---|--|
| <input checked="" 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 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 GBP | <input type="checkbox"/> Other ( <i>please specify</i> ):  |

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

**2. PROCESS FOR PROJECT EVALUATION AND SELECTION**

Overall comment on section (if applicable):

Mitsubishi Heavy Industries, Ltd.'s business divisions will evaluate and select projects, and the Finance department then confirms that the projects are aligned with the eligibility criteria. Mitsubishi Heavy Industries, Ltd.'s CSR Framework are applicable to all allocation decisions made under the Framework. Sustainalytics considers this risk management systems to be adequate. Sustainalytics considers the Company's project evaluation and selection process in line with market practice.

**Evaluation and selection**

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Credentials on the issuer's environmental sustainability objectives            | <input checked="" 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 checked="" type="checkbox"/> Documented process to identify and manage potential ESG risks associated with the project |
| <input checked="" type="checkbox"/> Summary criteria for project evaluation and selection publicly available       | <input type="checkbox"/> Other ( <i>please specify</i> ):   |



**Information on Responsibilities and Accountability**

- Evaluation / Selection criteria subject to external advice or verification       In-house assessment
- Other (please specify):

**3. MANAGEMENT OF PROCEEDS**

Overall comment on section (if applicable):

The Finance department will track the amount of allocated and unallocated green bond proceeds regularly, at least once a year, using the Company's internal management system. Unallocated proceeds will be held in a form of cash or cash equivalents. The Company's management of proceeds is in line with market practice.

**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:**

- Allocations to future investments only       Allocations to both existing and future investments
- Allocation to individual disbursements       Allocation to a portfolio of disbursements
- Disclosure of portfolio balance of unallocated proceeds       Other (please specify):

**4. REPORTING**

Overall comment on section (if applicable):

Mitsubishi Heavy Industries, Ltd. intends to report on the allocation of proceeds and environmental impacts, on its website on an annual basis. Allocation reporting will include the amount of allocated proceeds, amount or share of, allocation schedule for, and method to manage, unallocated proceeds, as well as the overview of projects for which the proceeds were allocated to the extent practicable. Impact reporting will include, the annual amount of power generated (MWh) and the annual amount of CO<sub>2</sub> emissions reduced (tons) by the renewable energy/clean energy facilities funded by the green bond proceeds, as well as the progress in R&D to the extent practicable. The Company is also committed to obtaining annual reviews from an independent reviewer after the issuance of green bonds. Sustainalytics views that Mitsubishi Heavy Industries, Ltd.'s commitment on reporting and annual reviews as aligned with market practice.

**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*): Overview of funded projects with up-to-date progress, amount and share of, allocation schedule for, and the method to manage, unallocated proceeds.

**Frequency:**

- Annual  Semi-annual
- Other (*please specify*): Whenever any significant change occurs

**Impact reporting:**

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

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

- GHG Emissions / Savings  Energy Savings
- Decrease in water use  Other ESG indicators (*please specify*): To the extent practicable, the annual amount of power generated (MWh) by the renewable energy/clean energy facilities funded by the green bond proceeds and progress in R&D.

**Frequency**

- Annual  Semi-annual
- Other (*please specify*): Whenever any significant change occurs

**Means of Disclosure**

- Information published in financial report  Information published in sustainability report
- Information published in ad hoc documents  Other (*please specify*):  
The Company's website
- 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.)

**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.

## Disclaimer

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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).

