

# Mitsubishi Heavy Industries, Ltd. (2021 Green Bond)

**Type of Engagement:** Annual Review

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**Engagement Team:**

Shigeru Ogawa, shigeru.ogawa@sustainalytics.com, (+81) 3 4520 2193

Yukie Osari, yukie.osari@sustainalytics.com, (+81) 3 4520 2192

## Introduction

In September 2021, Mitsubishi Heavy Industries, Ltd. (“MHI”) issued a green bond aimed at financing projects related to renewable energy/clean energy (JPY 15 Billion 5-Year Green Bond, hereinafter the “2021 Green Bond”). As of March 31, 2022, the proceeds were allocated to two projects related to renewable energy/clean energy. In March 2023, MHI engaged Sustainalytics to review the project funded through the 2021 Green Bond and assess whether the projects met the Use of Proceeds criteria and the Reporting commitments outlined in the Mitsubishi Heavy Industries, Ltd.’s Green Bond Framework (the “Framework”).<sup>1</sup>

## Evaluation Criteria

Sustainalytics evaluated the project funded with proceeds from September 2021 to March 2022 based on whether the project:

1. Met the Use of Proceeds and Eligibility Criteria outlined in the Framework; and
2. Reported on the impact indicators for each Use of Proceeds criteria outlined in the Framework.

Table 1 lists the Eligibility Criteria and associated impact indicators for the Use of Proceeds category to which the proceeds were allocated.

**Table 1: Use of Proceeds, Eligibility Criteria, and associated impact indicators**

Use of Proceeds	Eligibility Criteria	Impact indicators
<b>Renewable Energy/ Clean Energy</b>	<p>Expenditures for, and refinancing of, the Group’s renewable energy/clean energy business (such as R&amp;D funds, business development and operation funds, and working capital) that meet the following criteria:</p> <ul style="list-style-type: none"> <li>▪ Hydrogen power generation businesses and/or projects for 100% hydrogen combustion (allocation of the proceeds to R&amp;D for hydrogen power generation is not intended);</li> <li>▪ Geothermal power generation businesses and/or projects that emit less than 100g CO<sub>2</sub>/kWh;</li> <li>▪ 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;</li> <li>▪ Of the expenditure for the business and/or project, capital investment expense, etc. (CAPEX) was made within 7 years preceding the green bond issuance date, and operating expense (OPEX) was made within 3 years preceding the green bond issuance date.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Annual power generation (MWh) and annual CO<sub>2</sub> reduction (tons) of renewable energy/clean energy facilities related to the funded business</li> <li>▪ Information on progress in R&amp;D (such as the outline of projects participated in)</li> </ul>

<sup>1</sup> Mitsubishi Heavy Industries, Ltd.’s Green Bond Framework is available at: <https://www.mhi.com/finance/stock/esg/greenbond/framework.html>

## Issuing Entity's Responsibility

MHI is responsible for providing accurate information and documentation relating to the details of the projects that have been funded, including description of projects, amounts allocated, and project impact.

## Independence and Quality Control

Sustainalytics, a leading provider of ESG and corporate governance research and ratings to investors, conducted the verification of MHI's 2021 Green Bond Use of Proceeds. The work undertaken as part of this engagement included collection of documentation from MHI employees and review of documentation to confirm the conformance with the Framework.

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

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

## Conclusion

Based on the limited assurance procedures conducted,<sup>2</sup> nothing has come to Sustainalytics' attention that causes us to believe that, in all material respects, the reviewed bond projects, funded through proceeds of Mitsubishi Heavy Industries, Ltd.'s 2021 Green Bond, are not in conformance with the Use of Proceeds and Reporting Criteria outlined in the Mitsubishi Heavy Industries, Ltd.'s Green Bond Framework. MHI has disclosed to Sustainalytics that the proceeds of the 2021 Green Bond were fully allocated as at March 31, 2022.

## Detailed Findings

**Table 2: Detailed Findings**

<b>Evaluation Criteria</b>	<b>Procedure Performed</b>	<b>Factual Findings</b>	<b>Error or Exceptions Identified</b>
<b>Use of Proceeds Criteria</b>	Verification of the projects funded by the 2021 Green Bond from September 2021 to March 2022 to determine if the projects were aligned with the Use of Proceeds Criteria outlined in the Mitsubishi Heavy Industries, Ltd.'s Green Bond Framework and above in Table 1.	All projects reviewed complied with the Use of Proceeds criteria.	None
<b>Reporting Criteria</b>	Verification of the projects funded by the 2021 Green Bond from September 2021 to March 2022 to determine if the impact of the projects was reported in line with the impact indicators outlined in the Mitsubishi Heavy Industries, Ltd.'s Green Bond Framework and above in Table 1.	All projects reviewed reported on impact indicators per Use of Proceeds criteria.	None

<sup>2</sup> Sustainalytics limited assurance process includes reviewing the documentation relating to the details of the projects that have been funded, including description of projects, and project impact, which were provided by the Issuer. The Issuer is responsible for providing accurate information. Sustainalytics has not conducted on-site visits to projects.

## Appendix

### Appendix 1: Allocation of Green Bond Proceeds

Use of Proceeds Category	Sub-category	Overview of Project	Net Bond Proceeds Allocation (Million JPY)
Renewable Energy/ Clean Energy	Wind	<ul style="list-style-type: none"> <li>Refinancing for the acquisition of Vestas Wind Systems A/S ("Vestas") shares through the transfer of MHI's total shares of MHI Vestas Offshore Wind ("MVOW")<sup>3</sup>, which is a corporation exclusively engaged in offshore wind power facilities business, to Vestas.</li> </ul>	13,931
	Hydrogen	<ul style="list-style-type: none"> <li>Refinancing of an investment in HydrogenPro AS, a corporation engaged in the development and manufacture of electrolyzers, devices that produce hydrogen by the process of water electrolysis.</li> </ul>	1,000
<b>Total Net Bond Proceeds Allocated:</b>			14,931
<b>Total Net Bond Proceeds Unallocated:</b>			0
<b>Total Net Bond Proceeds from Green Bond issuance<sup>4</sup>:</b>			14,931

### Appendix 2: List of impact indicators<sup>5</sup>

#### Renewable Energy (Wind)

Use of Proceeds Category	Impact Indicators <sup>6</sup>		
	FY <sup>7</sup> <sup>8</sup>	Annual power generation (MWh)	Annual CO <sub>2</sub> reduction (Million ton)
Renewable Energy/ Clean Energy	2016	981,602	0.49
	2017	3,176,087	1.60
	2018	5,499,659	2.77
	2019	7,610,776	3.84
	2020	9,772,989	4.93
	2021 <sup>9</sup>	55,819,561	28.13

<sup>3</sup> A joint venture between MHI and Vestas.

<sup>4</sup> Green bond issuance amount of JPY 15 billion less issuance expenses

<sup>5</sup> Impact Reporting by MHI is available at: <https://www.mhi.com/finance/stock/esg/greenbond>

<sup>6</sup> The impact results are theoretical values from FY2016 onwards, when the wind power facilities are expected to start operation following the completion of the development, design and manufacture of the facilities by MVOW after receiving investment from MHI in Fiscal year 2014.

<sup>7</sup> Each fiscal year begins on 1 April and ends on 31 March of the following year.

<sup>8</sup> The figures from FY2016 to FY2020 are the figure for MVOW.

<sup>9</sup> In FY2021, Vestas's figures are reported as MVOW has become a Vestas' wholly-owned subsidiary.

## Clean Energy (Hydrogen)

Use of Proceeds Category	Impact Indicators
Renewable Energy/ Clean Energy	<ul style="list-style-type: none"> <li data-bbox="678 390 1511 474">▪ Investment in HydrogenPro AS of Norway, a company engaged in the development and manufacture of electrolyzers, devices that produce hydrogen by the process of water electrolysis.</li> <li data-bbox="678 474 1511 558">▪ HydrogenPro AS is developing electrolyser systems in the Western US grid. This project will reach a production capacity of 100 metric tons of hydrogen per day with HydrogenPro AS's 220-MW alkaline electrolyser systems.<sup>10</sup></li> </ul>

<sup>10</sup> Hydrogen Pro (2022), "\$504 million loan guarantee granted world's largest renewable hydrogen energy project", at: <https://hydrogen-pro.com/2022/06/30/504-million-loan-guarantee-granted-worlds-largest-renewable-hydrogen-energy-project/>

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