

Mitsubishi Heavy Industries, Ltd. (2021 Green Bond)

Type of Engagement: Annual Review

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Introduction

In September 2021, Mitsubishi Heavy Industries, Ltd. (“MHI”) issued a green bond (the “2021 Green Bond”)¹ raising JPY 15 billion to refinance renewable energy and clean energy projects. In 2024, MHI engaged Sustainalytics to review the projects financed with proceeds from the 2021 Green Bond (the “Nominated Expenditures”) and provide an assessment as to whether they meet the use of proceeds criteria and whether MHI complied with the reporting commitments in the Mitsubishi Heavy Industries, Ltd. Green Bond Framework (the “Framework”).² Sustainalytics provided a Second-Party Opinion on the Framework in July 2021.³ This is Sustainalytics’ third annual review of allocation and reporting of the instruments issued under the Framework, following previous reviews in March 2023 and February 2024.^{4,5}

Evaluation Criteria

Sustainalytics evaluated the Nominated Expenditures and MHI’s reporting based on whether they:

1. Meet the use of proceeds and eligibility criteria defined in the Framework; and
2. Reported on at least one key performance indicator (KPI) for each use of proceeds category defined in the Framework.

Table 1: Use of Proceeds Categories, Eligibility Criteria and Associated KPIs

Use of Proceeds Category	Eligibility Criteria	Key Performance Indicators
Renewable Energy/ Clean Energy	<p>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:</p> <ul style="list-style-type: none"> • 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 CO₂/kWh; • Investments in corporations that are exclusively engaged in the renewable energy/clean energy business or generate at least 90% of their sales 	<ul style="list-style-type: none"> • Annual power generation (MWh) and annual CO₂ reduction (tons) of renewable energy/clean energy facilities related to the funded business • Information on progress in R&D (such as the outline of projects participated in)

¹ MHI, “Green Bond, 38th Series Unsecured Corporate Bond”, at: <https://www.mhi.com/finance/stock/esg/greenbond>

² MHI, “Green Bond Framework”, at: <https://www.mhi.com/finance/stock/esg/greenbond/framework.html>

³ Sustainalytics, “Second-Party Opinion, MHI Green Bond Framework”, (2021), at: <https://mstar-sustops-cdn-mainwebsite-s3.s3.amazonaws.com/docs/default-source/spos/mitsubishi-heavy-industries-ltd.-green-bond-second-party-opinion25d35e3a-dcc1-4067-84ef-db8430ba8469.pdf>

⁴ Sustainalytics, “MHI Annual Review”, (2023), at: https://www.mhi.com/finance/stock/esg/greenbond/pdf/38gb_review2021.pdf

⁵ Sustainalytics, “MHI Annual Review”, (2024), at: https://www.mhi.com/finance/stock/esg/greenbond/pdf/38gb_review2022.pdf

	<p>from renewable energy/clean energy related business;</p> <ul style="list-style-type: none">• 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.	
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Issuer's Responsibility

MHI is responsible for providing accurate information and documentation relating to the details of the projects, including descriptions, amounts allocated and impact.

Independence and Quality Control

Sustainalytics, a leading provider of ESG research and ratings, conducted the verification of the use of proceeds from MHI's 2021 Green Bond. The work undertaken as part of this engagement included collection of documentation from MHI and review of said documentation to assess conformance with the Framework.

Sustainalytics relied on the information and the facts presented by MHI. Sustainalytics is not responsible nor shall it be held liable for any inaccuracies in the opinions, findings or conclusions herein 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 of the review.

Conclusion

Based on the limited assurance procedures conducted,⁶ nothing has come to Sustainalytics' attention that causes us to believe that, in all material respects, the Nominated Expenditures do not conform with the use of proceeds criteria and reporting commitments in the Framework. MHI has disclosed to Sustainalytics that the proceeds from the 2021 Green Bond were fully allocated as of March 2024.

⁶ Sustainalytics' limited assurance process includes reviewing documentation relating to details of projects, as provided by the issuing entity, which is responsible for providing accurate information. These may include descriptions of projects, estimated and realized costs, and reported impact. Sustainalytics has not conducted on-site visits to projects.

Detailed Findings

Table 2: Detailed Findings

Framework Requirements	Procedure Performed	Factual Findings	Error or Exceptions Identified
Use of Proceeds Criteria	Verification of the Nominated Expenditure to determine alignment with the use of proceeds criteria outlined in the Framework.	The Nominated Expenditures comply with the use of proceeds criteria.	None
Reporting Criteria	Verification of the Nominated Expenditure or assets to determine if impact was reported in line with the KPIs outlined in the Framework.	MHI reported on at least one KPI per use of proceeds category.	None

Appendices

Appendix 1: Allocation Reporting

Table 3: Allocation of proceeds from the 2021 Green Bond

Use of Proceeds Category	Sub-category	Overview of Project	Amount Allocated (JPY million)
Renewable Energy / Clean Energy	Wind	Refinancing for the acquisition of Vestas Wind Systems A/S shares through the transfer of MHI's total shares of MHI Vestas Offshore Wind ⁷ , which is a corporation exclusively engaged in offshore wind power facilities business, to Vestas	13,931
	Hydrogen	Refinancing of an investment in HydrogenPro ASA, a corporation engaged in the development and manufacture of electrolyzers, devices that produce hydrogen by the process of water electrolysis.	1,000
Total Net Proceeds Allocated			14,931
Total Unallocated Proceeds			0
Total Net Proceeds Raised⁸			14,931

⁷ MHI Vestas Offshore Wind A/S ("MVOW") is MHI's joint venture with Vestas Wind Systems A/S ("Vestas").

⁸ Green bond issuance amount of JPY 15 billion minus issuance expenses.

Appendix 2: Reported Impact

Table 4: Reported Impact for the 2021 Green Bond

Use of Proceeds Category	Sub-category	Reported Impact ⁹		
		FY ¹⁰	Annual Power Generation (MWh)	Annual CO ₂ Reduction (million tonnes)
Renewable Energy / Clean Energy	Wind	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	55,819,561	28.13
		2022	94,362,019	47.56
		2023	133,992,198	67.53
	Hydrogen	<ul style="list-style-type: none"> Investment in HydrogenPro ASA of Norway, which develops and manufactures electrolyzers HydrogenPro ASA develops electrolyzer systems in the western US grid. HydrogenPro increased its capacity from 300 MW to 500 MW. In mid-2023, the company delivered a 5.5 MW electrolyzer to Mitsubishi Heavy Industries' Takasago Hydrogen Park. By the end of 2023, HydrogenPro finalized a complete fleet of 40 electrolyzers ordered for the Advanced Clean Energy Storage Hub in Delta, Utah, followed by on-site work with final completion in late 2024. ACES Delta intends to use excess renewable energy to power large-scale electrolyzers that will produce low-carbon hydrogen and oxygen. 		

⁹ The impact results are theoretical values from FY2016 onwards, when the wind power facilities would have started operation following the completion of the development, design and manufacture. The figures from FY2016 to FY2020 are based on the delivery record of MVOW, MHI's joint venture with Vestas (MHI's stake: 50%). From FY2021, the figures are based on Vestas' delivery record (and not MHI's), because in December 2020, MHI transferred its total shareholding in MVOW to Vestas. Simultaneously, MHI acquired approximately 5 million shares in Vestas, equivalent to about 2.5% ownership.

¹⁰ Each fiscal year begins on 1 April and ends on 31 March of the following year.

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