

Mitsubishi Heavy Industries, Ltd. (2021 Green Bond)

Type of Engagement: Annual Review

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Engagement Team:

Akshay Chandrakapure, akshay.chandrakapure@morningstar.com

Sidharth P R, sidharth.pr@morningstar.com

Introduction

In September 2021, Mitsubishi Heavy Industries, Ltd. ("MHI") issued a green bond to finance projects related to renewable energy/clean energy (JPY 15 Billion, 5-Year Green Bond, hereinafter the "2021 Green Bond").¹ As of March 31, 2023, the proceeds were allocated to two projects related to renewable energy/clean energy. In February 2024, MHI engaged Sustainalytics to review the projects financed with proceeds from the 2021 Green Bond and provide an assessment as to 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").² This is Sustainalytics' second annual review of allocation and reporting of the MHI's 2021 Green Bond following the previous review in March 2023.³

Evaluation Criteria

Sustainalytics evaluated the projects funded with proceeds from September 2021 to March 2023 based on whether they:

1. Met the Use of Proceeds and eligibility criteria defined 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 Proceed, Eligibility Criteria, and associated impact indicators

Use of Proceeds	Eligibility Criteria	Impact 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> <ol style="list-style-type: none"> i. 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); ii. Geothermal power generation businesses and/or projects that emit less than 100g CO₂/kWh; iii. 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 Mitsubishi Heavy Industries, Ltd.'s Green Bond Framework is available at: <https://www.mhi.com/finance/stock/esg/greenbond/framework.html>

³ Sustainalytics, "Annual Review, MHI (2021 Green Bond)", (2023), at:

[https://mstar-sustops-cdn-mainwebsite-s3.s3.amazonaws.com/docs/default-source/spos/mitsubishi-heavy-industries-ltd.-green-bond-2021-annual-review-\(2023\).pdf?sfvrsn=bce4fb21_1](https://mstar-sustops-cdn-mainwebsite-s3.s3.amazonaws.com/docs/default-source/spos/mitsubishi-heavy-industries-ltd.-green-bond-2021-annual-review-(2023).pdf?sfvrsn=bce4fb21_1)

	<p>from renewable energy/clean energy-related business;</p> <p>iv. 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.</p>	
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Issuing Entity's Responsibility

MHI is responsible for providing accurate information and documentation relating to the details of the funded projects, including descriptions of projects, amounts allocated and project 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,⁴ nothing has come to Sustainalytics' attention that causes us to believe that, in all material respects, the reviewed projects, funded through proceeds of MHI's 2021 Green Bond, do not conform with the Use of Proceeds criteria and Reporting commitments outlined in the MHI's Green Bond Framework. MHI has disclosed to Sustainalytics that the proceeds from the 2021 Green Bond were fully allocated as at March 31, 2023.

⁴ 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

Evaluation Criteria	Procedure Performed	Factual Findings	Error or Exceptions Identified
Use of Proceeds Criteria	Verification of the projects funded by the 2021 Green Bond from September 2021 to March 2023 to determine alignment with the Use of Proceeds criteria outlined in the Framework and above in Table 1.	All projects reviewed complied with the Use of Proceeds criteria.	None
Reporting Criteria	Verification of the projects funded by the 2021 Green Bond from September 2021 to March 2023 to determine if the impact was reported in line with the Impact Indicators outlined in the Framework and above Table 1.	All projects reviewed reported on impact indicators per Use of proceeds criteria.	None

Appendices

Appendix 1: Allocation of Green Bond Proceeds

Use of Proceeds Category	Sub-category	Overview of Project	Net Bond Proceeds Allocation (JPY million)
Renewable Energy / Clean Energy	Wind	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"), ⁵ which is a corporation exclusively engaged in offshore wind power facilities business, to Vestas.	13,931
	Hydrogen	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.	1,000
Total Net Bond Proceeds Allocated			14,931
Total Net Bond Proceeds Unallocated			0
Total Net Bond Proceeds from Green Bond issuance⁶			14,931

⁵ MHI Vestas Offshore Wind A/S ("MVOW") is MHI's joint venture with Vestas Wind Systems A/S ("Vestas").

⁶ Green bond issuance amount of JPY 15 billion less issuance expenses.

Appendix 2: Reported Impact⁷

Use of Proceeds Category	Sub-category	Reported Impact ⁸		
		FY ⁹	Annual power generation (MWh)	Annual CO ₂ reduction (Million tonne)
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
	Hydrogen	<ul style="list-style-type: none"> ▪ 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. ▪ HydrogenPro AS is developing electrolyser systems in the Western US grid. This project will reach a production capacity of 100 metric tonnes of hydrogen per day with HydrogenPro AS's 220-MW alkaline electrolyser systems.¹⁰ 		

⁷ The reported impact is also available at: <https://www.mhi.com/finance/stock/esg/greenbond>

⁸ 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. 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.

⁹ Each fiscal year begins on 1 April and ends on 31 March of the following year.

¹⁰ 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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