

Manulife 2017 Green Bond

Type of Engagement: Annual Review

Date: November 6, 2019

Engagement Team:

Zach Margolis, Project Manager, zach.margolis@sustainalytics.com, + (647) 695 4341

Tina Ghaemmaghami, Project Support, tina.ghaemmaghami@sustianalytics.com, + 1 (647) 264 6680

Introduction

In November 2017, Manulife issued a green bond aimed at financing activities that help advance a low-carbon, climate-resilient future. In October 2019, Manulife engaged Sustainalytics to review the projects financed through the issued green bond and provide an assessment as to whether the projects met the Use of Proceeds criteria and the Reporting commitments outlined in the Manulife Green Bond Framework. The proceeds of the green bond were fully allocated at issuance to renewable energy projects, specifically wind and solar. This review follows a previous review, conducted by Sustainalytics in October 2018.

Evaluation Criteria

Sustainalytics evaluated the projects and assets financed by the 2017 green bond based on whether the projects and programmes:

1. Met the Use of Proceeds and Eligibility Criteria outlined in the Green Bond Framework; and
2. Reported on at least one of the Key Performance Indicators (KPIs) for each Use of Proceeds criteria outlined in the Green Bond Framework.¹

Table 1 lists the Use of Proceeds and Eligibility Criteria that are applicable to the 2017 issuance.²

Table 1: Use of Proceeds and Eligibility Criteria

Use of Proceeds	Eligibility Criteria
Renewable Energy	<p>Development, construction, operation, maintenance and upgrades of:</p> <p>i. facilities and equipment wholly dedicated to the generation of renewable energy, as defined by the International Renewable Energy Agency (IRENA) Statute³, including:</p> <ul style="list-style-type: none"> • wind energy • solar energy • small-scale hydro (under 25 Mega Watts) • bio-energy from waste biomass • tidal energy • geothermal energy <p>ii. transmission infrastructure and other supporting infrastructure wholly dedicated to renewable energy generation facilities including inverters, transformers, energy storage systems and control systems</p> <p>iii. production or manufacturing facilities wholly dedicated to equipment, feedstock or components for renewable energy generation facilities</p>

¹ The Manulife Green Bond Framework commits to reporting on qualitative and quantitative environmental performance indicators where feasible. See Appendix 1 for environmental performance indicators reported on per use of proceeds category (Renewable Energy) in the Manulife Green Bond – Use of Proceeds Report dated November 2019.

² The Green Bond Framework also allows for investment in green buildings, environmentally sustainable management of natural resources and land use, energy efficiency, and clean transportation, sustainable water management, and pollution prevention and control

³ IRENA Statute, 2009. <https://www.state.gov/documents/organization/179955.pdf>

Issuing Entity's Responsibility

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

Independence and Quality Control

Sustainalytics, a leading provider of Environmental, Social and Governance (ESG) research and ratings to investors, conducted the verification of Manulife's Green Bond Use of Proceeds. The work undertaken as part of this engagement included collection of documentation from Manulife employees and review of documentation to confirm the conformance with the Green Bond Framework.

Sustainalytics has relied on the information and the facts presented by Manulife with respect to the eligible projects. 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 Manulife.

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,⁴ nothing has come to Sustainalytics' attention that causes us to believe that, in all material respects, the reviewed projects, allocated through proceeds of Manulife's green bond, are not in conformance with the Use of Proceeds and Reporting Criteria outlined in the Green Bond Framework. Furthermore, the methodology used to calculate estimated avoided CO2 emissions was assessed and found to be credible and based on accepted third party GHG emission calculation tools. Manulife has disclosed to Sustainalytics that the proceeds of the green bond were fully allocated as of November 21, 2017.

⁴ Sustainalytics' limited assurance process includes reviewing the documentation relating to the details of the projects that have been financed, including description of projects, allocated amounts, 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.

Detailed Findings

Table 3: Detailed Findings

Eligibility Criteria	Procedure Performed	Factual Findings	Error or Exceptions Identified
Use of Proceeds Criteria	Verification of the projects funded by the green bond in 2017 to determine if projects aligned with the Use of Proceeds Criteria outlined in the Green Bond 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 green bond in 2017 to determine if impact of projects was reported in line with the KPIs outlined in the Green Bond Framework.	All projects reviewed reported on at least one KPI per Use of Proceeds criteria.	None

Appendix 1: Impact Reporting by Eligibility Criteria

Manulife has provided in their green bond report the following impact reporting information. These figures are based on actual reported data, and can be contrasted with the 2018 figures which were based on forecasts.

Green Bond Category	Location(s)	Amount Allocated (million SGD)	Installed capacity (MW)	Energy generated (MWh)	Avoided CO ₂ (tons)
Renewable Energy: Wind Energy	Canada	219	83	297,360	41,310
Renewable Energy: Solar Energy	Canada & US	278	44	59,878	15,430
	TOTAL:	497	127	357,238	56,740

NOTE:

The capacity, energy, and avoided emissions are calculated on a basis proportional to Manulife's share of debt and equity investments in the project, scaled to the amount financed by the green bond proceeds

Disclaimer

© Sustainalytics 2019. All rights reserved.

The intellectual property rights to the information contained herein is vested exclusively in Sustainalytics. No part of this deliverable may be reproduced, disseminated, comingled, used to create derivative works, furnished in any manner, made available to third parties or published, parts hereof or the information contained herein in any form or in any manner, be it electronically, mechanically, through photocopies or recordings without the express written consent of Sustainalytics.

As the information herein is based on information made available by the issuer, the information is provided “as is” and, therefore Sustainalytics does not warrant that the information presented in this deliverable is complete, accurate or up to date, nor assumes any responsibility for errors or omissions and Sustainalytics will not accept any form of liability for the substance of the deliverable and/or any liability for damage arising from the use of this deliverable and/or the information provided in it. Any reference to third party names is for appropriate acknowledgement of their ownership and does not constitute a sponsorship or endorsement by such owner.

Nothing contained in this deliverable shall be construed as to make a representation or warranty on the part of Sustainalytics, express or implied, regarding the advisability to invest in companies, selection of projects or make any kind of business transactions. It shall not be construed as an investment advice (as defined in the applicable jurisdiction), nor be interpreted and construed as an assessment of the issuer’s economic performance, financial obligations nor its creditworthiness.

The issuer is fully responsible for certifying and ensuring the compliance with its commitments, for their implementation and monitoring.

Sustainalytics

Sustainalytics is a leading independent ESG and corporate governance research, ratings and analytics firm that supports investors around the world with the development and implementation of responsible investment strategies. With 13 offices globally, the firm partners with institutional investors who integrate ESG information and assessments into their investment processes. Spanning 30 countries, the world's leading issuers, from multinational corporations to financial institutions to governments, turn to Sustainalytics for second-party opinions on green and sustainable bond frameworks. Sustainalytics has been certified by the Climate Bonds Standard Board as a verifier organization, and supports various stakeholders in the development and verification of their frameworks. In 2015, Global Capital awarded Sustainalytics "Best SRI or Green Bond Research or Ratings Firm" and in 2018 and 2019, named Sustainalytics the "Most Impressive Second Party Opinion Provider." The firm was recognized as the "Largest External Reviewer" by the Climate Bonds Initiative as well as Environmental Finance in 2018, and in 2019 was named the "Largest Approved Verifier for Certified Climate Bonds" by the Climate Bonds Initiative. In addition, Sustainalytics received a Special Mention Sustainable Finance Award in 2018 from The Research Institute for Environmental Finance Japan and the Minister of the Environment Award in the Japan Green Contributor category of the Japan Green Bond Awards in 2019.

For more information, visit www.sustainalytics.com

Or contact us info@sustainalytics.com

