

Manulife

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Introduction

In 2017 and 2018, Manulife issued green bonds (the “2017 and 2018 Green Bonds”)¹ aimed at financing activities that promote a low-carbon, climate-resilient future. In 2023, Manulife engaged Sustainalytics to review the projects financed with proceeds from the 2017 and 2018 Green Bonds and provide an assessment as to whether the projects met the use of proceeds criteria and the reporting commitments outlined in Manulife’s Green Bond Framework (the “Framework”).² Sustainalytics provided a second-party opinion on the Framework in November 2017.³

This review follows previous reviews of the 2017 issuance conducted in October 2018 and November 2019, a previous review of the 2018 issuance conducted in May 2019, and a previous review of the combined issuances conducted in April 2020, May 2021 and in May 2022.⁴

Evaluation Criteria

Sustainalytics evaluated the projects funded with proceeds from the 2017 and 2018 Green Bonds based on whether the projects:

1. Met 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
Renewable Energy	Development, construction, operation, maintenance and upgrades of: <ol style="list-style-type: none"> i. Facilities and equipment wholly dedicated to the generation of renewable energy, as defined by the International Renewable Energy Agency (IRENA) Statute⁵, including: <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 ii. Transmission infrastructure and other supporting infrastructure wholly dedicated to renewable energy generation facilities including inverters, transformers, energy storage systems and control systems iii. Production or manufacturing facilities wholly dedicated to equipment, feedstock or components for renewable energy generation facilities

¹ Manulife named the Green Bond issuance in 2017 as “Green Bond 1” and the Green Bond issuance in 2018 as “Green Bond 2” for impact reporting purposes.

² Manulife’s Green Bond Framework dated November 2017 is available on their website at: https://www.manulife.com/content/dam/corporate/global/en/documents/pas/MFC_GBF_2017_EN.pdf.

³ Sustainalytics Second-Party Opinion on Manulife Green Bond Framework is available at: https://www.manulife.com/content/dam/corporate/global/en/documents/pas/MFC_GB_SPO_2017_EN.pdf.

⁴ Manulife, Sustainalytics Annual Review Report 2022, available at: https://www.manulife.com/content/dam/corporate/global/en/documents/pas/MFC_GB_LAS_2022_EN.pdf

⁵ IRENA Statute, 2009. <https://www.state.gov/documents/organization/179955.pdf>

Sustainably Managed Forestry	Purchase and operation of sustainably-managed forest holdings certified by credible third-party forest certification systems, such as: i. Forest Stewardship Council (FSC) ii. Programme for the Endorsement of Forest Certification (PEFC)
Energy Efficiency	Development, construction, acquisition, installation, operation, and upgrades of projects that reduce energy consumption or improve the efficiency of resources, including: i. Projects involving the installation, maintenance or replacement of efficient heating, ventilation, air conditioning, refrigeration, lighting and electrical equipment ii. Projects that allow the monitoring and modeling of energy performance such as the design and installation of digital controls, sensors or building information systems iii. Projects that optimize the amount and time of energy consumption by minimizing peak loads, such as design and installation of metering systems, smart grids, load control systems

Issuer’s Responsibility

Manulife is responsible for providing accurate information and documentation relating to the details of the funded projects, including description 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 the 2017 and 2018 Green Bonds. The work undertaken as part of this engagement included collection of documentation from Manulife and review of said documentation to assess conformance with the Framework.

Sustainalytics relied on the information and the facts presented by Manulife. 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 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 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 reviewed projects do not conform with the use of proceeds criteria and reporting commitments in the Framework. Manulife has disclosed to Sustainalytics that the proceeds from both the 2017 and 2018 Green Bonds were fully allocated in November 2017 and May 2018 respectively.

⁶ Sustainalytics limited assurance process includes reviewing the documentation relating to the details of the funded projects, including description of projects, their estimated and realized costs and impact, as provided by the issuing entity, which is responsible for providing accurate information. 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 projects funded with proceeds from the 2017 and 2018 Green Bonds to determine if projects aligned with the use of proceeds criteria outlined in the Framework.	All projects reviewed complied with the use of proceeds criteria.	None
Reporting Criteria	Verification of the projects funded with proceeds from the 2017 and 2018 Green Bonds to determine if impact of projects was reported in line with the KPIs outlined in the Framework.	All projects reviewed reported on at least one KPI per use of proceeds category.	None

Appendix

Appendix 1: Allocation and Reported Impact^{7,8,9}

Manulife has provided in their 2022 Green Bond Report the following reporting information on the 2017 and 2018 Green Bonds. These figures have been revised for the reporting period to reflect actual energy generation and forest management practices for 2022.

Issuance	Green Bond Category	Sub Sector	Location	Reported Quantitative Indicators	Net Proceeds Allocated (million) ¹⁰	
					CAD	SGD
Green Bond 1	Renewable Energy	Wind Energy	Canada	<ul style="list-style-type: none"> 49,526 metric tons of avoided CO₂e emission 411,138 MWh generated 	-	219
		Solar Energy	Canada and US	<ul style="list-style-type: none"> 12,189 metric tons of avoided CO₂e emissions 67,157 MWh generated 	-	278
Green Bond 2	Renewable Energy	Wind Energy	Uruguay	<ul style="list-style-type: none"> 153 metric tons of avoided CO₂e emissions 31,820 MWh generated 	20	-
		Solar Energy	Canada, Peru and US	<ul style="list-style-type: none"> 22,387 metric tons of avoided CO₂e emissions 85,503 MWh generated 	333	-
	Energy Efficiency		US	<ul style="list-style-type: none"> 52,044 metric tons of avoided CO₂e emissions 38,163 MWh saved 	172	-
	Sustainably Managed Forestry		US	<ul style="list-style-type: none"> - 333,626 metric tons of CO₂ removed/sequestered 35,712 acres of Sustainable Forestry Initiative certified forests^{11, 12} 	73	-
Total Net Proceeds Allocated (million)					598	497
Total Net Proceeds Raised (million)					598	497
Percentage of Allocation Achieved					100%	100%

⁷ 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.

⁸ Manulife has added assets to the allocation of the 2018 Green Bond, as the carrying value of the underlying assets amortized was below the issuance amount.

⁹ Manulife has implemented a methodological change to align with the Partnership for Carbon Accounting Financials (PCAF), which recommends the calculation of share in the project by taking the amortized value of debt and increased value of equity as a proportion of the total enterprise value (EV) of the project at the year-end. Historically, the calculation methodology used the ratio of deployed capital as the percent of EV at project origination.

¹⁰ Allocated amounts for the 2017 Green Bond are provided in million SGD, amounts for the 2018 Green Bond are provided in million CAD, reflecting the currency in which the respective bonds were issued.

¹¹ Manulife has confirmed that the forestry projects to which green bond proceeds have been allocated are certified by the Sustainable Forest Initiative (SFI) endorsed by the Programme for the Endorsement of Forest Certification (PEFC) and has provided information on the certifications for Sustainalytics' review.

¹² Manulife has communicated to Sustainalytics that carbon removals for sustainably managed forestry assets are expected to fluctuate due to ongoing forest management activities and, as such, the year-over-year change in profile may be positive or negative.

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