

# Manulife

**Type of Engagement:** Annual Review

**Date:** May 7, 2021

**Engagement Leader:**

Zach Margolis, zach.margolis@sustainalytics.com, (+1) 647 695 4341

## Introduction

In 2017 and 2018, Manulife issued green bonds (the “2017 and 2018 Green Bonds”) aimed at financing activities that help advance a low-carbon, climate-resilient future. In May 2021, Manulife engaged Sustainalytics to review the projects funded through the issued green bonds 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. 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 May 2020.

## Evaluation Criteria

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

1. Met the Use of Proceeds and Eligibility Criteria outlined in the Manulife Green Bond Framework; and
2. Reported on qualitative and/or quantitative environmental performance indicators as outlined in the Green Bond Framework.<sup>1</sup>

Table 1 lists the Use of Proceeds and Eligibility Criteria that are applicable to the 2017 and 2018 Green Bond issuances.<sup>2</sup>

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

Use of Proceeds	Eligibility Criteria
<b>Renewable Energy</b>	Development, construction, operation, maintenance and upgrades of: <ol style="list-style-type: none"> <li>i. facilities and equipment wholly dedicated to the generation of renewable energy, as defined by the International Renewable Energy Agency (IRENA) Statute<sup>3</sup>, including:               <ul style="list-style-type: none"> <li>• wind energy</li> <li>• solar energy</li> <li>• small-scale hydro (under 25 Mega Watts)</li> <li>• bio-energy from waste biomass</li> <li>• tidal energy</li> <li>• geothermal energy</li> </ul> </li> <li>ii. transmission infrastructure and other supporting infrastructure wholly dedicated to renewable energy generation facilities including inverters, transformers, energy storage systems and control systems</li> <li>iii. production or manufacturing facilities wholly dedicated to equipment, feedstock or components for renewable energy generation facilities</li> </ol>

<sup>1</sup> 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 in Manulife’s 2020 Green Bond Annual Report, dated May 2021.

<sup>2</sup> The Green Bond Framework also allows for investment in green buildings, clean transportation, sustainable water management, and pollution prevention and control.

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

<p><b>Sustainably Managed Forestry</b></p>	<p>Purchase and operation of sustainably-managed forest holdings certified by credible third-party forest certification systems, such as:</p> <ul style="list-style-type: none"> <li>i. Forest Stewardship Council (FSC)</li> <li>ii. Programme for the Endorsement of Forest Certification (PEFC)</li> </ul>
<p><b>Energy Efficiency</b></p>	<p>Development, construction, acquisition, installation, operation, and upgrades of projects that reduce energy consumption or improve the efficiency of resources, including:</p> <ul style="list-style-type: none"> <li>i. projects involving the installation, maintenance or replacement of efficient heating, ventilation, air conditioning, refrigeration, lighting and electrical equipment</li> <li>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</li> <li>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</li> </ul>

### Issuing Entity’s Responsibility

Manulife 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 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 Manulife Green Bond Framework.

Sustainalytics has relied on the information and the facts presented by Manulife with respect to the Nominated 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,<sup>4</sup> 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 both the 2017 and 2018 Green Bonds were fully allocated at the respective times of issuance.

---

<sup>4</sup> 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 2: Detailed Findings**

<b>Eligibility 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 green bonds in 2017 and 2018 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
<b>Reporting Criteria</b>	Verification of the projects funded by the green bond in 2017 and 2018 to determine if the impact of projects was reported in line with the Green Bond Framework. For a list of KPIs reported please refer to Appendix 1.	All projects reviewed reported on at least one KPI per Use of Proceeds criteria.	None

## Appendices

### Appendix 1: Impact Reporting by Eligibility Criteria

Manulife has provided in their 2020 Green Bond Report the following reporting information. These figures have been revised for the reporting period to reflect actual energy generation and forest management practices for 2020.

Green Bond Category	Issuance	Location(s)	Amount Allocated <sup>5</sup> (million)	Avoided CO <sub>2</sub> (tonnes)	Other reported quantitative indicators
Renewable Energy: Wind Energy	Green Bond 1	Canada	SGD 219	38,097	274,212 MWh generated
Renewable Energy: Solar Energy	Green Bond 1	Canada & US	SGD 278	15,079	59,846 MWh generated
Renewable Energy: Wind Energy	Green Bond 2	Uruguay	CAD 19.8	998	33,254 MWh generated
Renewable Energy: Solar Energy	Green Bond 2	Canada & US	CAD 333.9	20,146	76,286 MWh generated
Energy Efficiency	Green Bond 2	US	CAD 171.6	44,535	32,635 MWh saved
Sustainably Managed Forestry	Green Bond 2	US	CAD 72.6	73,604	28,440 PEFC-certified acres <sup>6</sup>
		<b>TOTAL:</b>	SGD 497 million CAD 597.9 million	192,459	

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

<sup>5</sup> Allocated amounts from Green Bond 1 are provided in million SGD, amounts from Green Bond 2 are provided in million CAD, reflecting the currency in which the bond was issued.

<sup>6</sup> 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.

---

## Disclaimer

### **Copyright ©2021 Sustainalytics. All rights reserved.**

The information, methodologies and opinions contained or reflected herein are proprietary of Sustainalytics and/or its third party suppliers (Third Party Data), and may be made available to third parties only in the form and format disclosed by Sustainalytics, or provided that appropriate citation and acknowledgement is ensured. They are provided for informational purposes only and (1) do not constitute an endorsement of any product or project; (2) do not constitute investment advice, financial advice or a prospectus; (3) cannot be interpreted as an offer or indication to buy or sell securities, to select a project or make any kind of business transactions; (4) do not represent an assessment of the issuer's economic performance, financial obligations nor of its creditworthiness; and/or (5) have not and cannot be incorporated into any offering disclosure.

These are based on information made available by the issuer and therefore are not warranted as to their merchantability, completeness, accuracy, up-to-dateness or fitness for a particular purpose. The information and data are provided "as is" and reflect Sustainalytics' opinion at the date of their elaboration and publication. Sustainalytics accepts no liability for damage arising from the use of the information, data or opinions contained herein, in any manner whatsoever, except where explicitly required by law. Any reference to third party names or Third Party Data is for appropriate acknowledgement of their ownership and does not constitute a sponsorship or endorsement by such owner. A list of our third-party data providers and their respective terms of use is available on our website. For more information, visit <http://www.sustainalytics.com/legal-disclaimers>.

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

In case of discrepancies between the English language and translated versions, the English language version shall prevail.

## About Sustainalytics, a Morningstar Company

Sustainalytics, a Morningstar Company, is a leading ESG research, ratings and data firm that supports investors around the world with the development and implementation of responsible investment strategies. The firm works with hundreds of the world's leading asset managers and pension funds who incorporate ESG and corporate governance information and assessments into their investment processes. The world's foremost issuers, from multinational corporations to financial institutions to governments, also rely on Sustainalytics for credible second-party opinions on green, social and sustainable bond frameworks. In 2020, Climate Bonds Initiative named Sustainalytics the "Largest Approved Verifier for Certified Climate Bonds" for the third consecutive year. The firm was also recognized by Environmental Finance as the "Largest External Reviewer" in 2020 for the second consecutive year. For more information, visit [www.sustainalytics.com](http://www.sustainalytics.com).

### 5th Green Bond Pioneer Awards

Climate Bonds Initiative

Largest Verifier for Certified  
Climate Bonds of 2019

awarded to Sustainalytics



More information [conference.climatebonds.net/awards](http://conference.climatebonds.net/awards)



### GlobalCapital SRI Awards

**Named**

**2015:** Best SRI or Green Bond Research or Rating Firm  
**2017, 2018, 2019:** Most Impressive Second Opinion Provider



The  
**Green Bond  
Principles**