

3.703% US\$ 750 million, senior notes due 16 March 2032 (the "Green Bond")

# Annual Green Bond Report

## Introduction

In 2017, Manulife became the first global life insurer to issue a green bond<sup>1</sup> with an inaugural issuance in Singapore of SG\$500 million. Since then, we have issued green bonds in Canada (2018) of C\$600 million and in the U.S. (2022) of US\$750 million<sup>2</sup>.

Rooted in our mission and values, Manulife's Impact Agenda reflects the needs of the people we serve and the communities in which we live and work by prioritizing areas where we can create meaningful impact and where progress in one area can spark positive change in others:

- Prioritizing health and well-being unlocks life's potential, enabling people to live fuller and more prosperous lives at any age.
- Supporting financial resilience fosters confidence, security, and pathways for growth across every unique life journey.
- Contributing to a healthier planet strengthens the systems that sustain life and creates possibilities for generations ahead.

For more information, [visit Impact Agenda | Sustainability at Manulife](#).

This report summarizes [Manulife's Sustainable Bond Framework](#) (the "Framework") governing green bond issuances on or after February 2022, allocation of green bond proceeds to eligible assets, the associated environmental impacts, and project examples. Consistent with the Framework, we are committed to publishing annually to outline any changes to the proceeds allocation.

## Green Bond

### Manulife's Sustainable Bond Framework

The Framework is a component of Manulife's sustainability objectives and is governed by the Manulife Sustainable Bonds Council. The Framework was published in February 2022 and was developed in line with the International Capital Market Association's Sustainability Bond Guidelines 2021, Green Bond Principles 2021, and Social Bond Principles 2021. The Framework sets out the following guidelines for issuances of green bonds, social bonds, or sustainability bonds (together, the "Sustainable Bonds"):

1. **Use of proceeds:** Net proceeds from the Sustainable Bonds are allocated towards assets that meet the Eligibility Criteria

described in the Framework.

2. **Process for project evaluation and selection:** Manulife Sustainable Bonds Council reviews and approves the allocation of the net proceeds to ensure that the assets meet our criteria.
3. **Management of proceeds:** A Sustainable Bonds Register (the "Register") is established to record the allocation of the net proceeds, including relevant information of the Eligible Assets, and form the basis for the environmental and social impact reporting.
4. **Reporting:** Commitment to publish an annual report highlighting the amount of proceeds allocated to each Eligibility Criteria, environmental and social indicators, and the remaining balance of unallocated proceeds, among other disclosures.

#### Eligible Categories

##### Green Bond Principles Categories

- Renewable energy
- Green buildings
- Environmentally sustainable management of natural resources and land use
- Energy efficiency
- Clean transportation
- Sustainable water and wastewater management
- Pollution prevention and control

##### Social Bond Principles Categories

- Access to essential services
- Affordable housing

<sup>1</sup> Manulife's green bond is a fixed income instrument with an amount equal to the net proceeds allocated to new and/or existing Eligible Assets defined in Manulife's Sustainable Bond Framework, for example, renewable energy, energy efficiency, sustainably managed forests and other investments that advance ecosystem improvements.

<sup>2</sup> The C\$600 million green bond issued in 2018 was redeemed in 2023, and the SG\$500 million green bond issued in 2017 was redeemed in 2024.

## External Review

Sustainable Fitch, an independent sustainability data, analysis and research provider for the fixed-income market, has provided a Post-Issuance Review on the disclosure and alignment of the allocation of proceeds and impact reporting with the Framework.

The annual report review by Sustainable Fitch can be found on Manulife's website at [www.manulife.com/en/investors/results-and-reports](http://www.manulife.com/en/investors/results-and-reports).

## Use of Proceeds and Impact Indicators

| Eligible category            | Allocation of proceeds (US\$ millions) | Allocation of proceeds (%) | Impact indicators                              | Manulife's share of impact indicators |
|------------------------------|----------------------------------------|----------------------------|------------------------------------------------|---------------------------------------|
| Renewable Energy: Wind       | 111                                    | 15                         | Renewable energy generated (MWh)               | 293,575                               |
|                              |                                        |                            | Avoided / reduced carbon emissions (tCO2e)     | 32,012                                |
| Renewable Energy: Solar      | 133                                    | 18                         | Renewable energy generated (MWh)               | 209,717                               |
|                              |                                        |                            | Avoided / reduced carbon emissions (tCO2e)     | 87,038                                |
| Renewable Energy: Hydro      | 73                                     | 10                         | Renewable energy generated (MWh)               | 20,987                                |
|                              |                                        |                            | Avoided / reduced carbon emissions (tCO2e)     | 2,456                                 |
| Renewable Energy: Biomass    | 34                                     | 4                          | Renewable energy generated (MWh)               | 263,375                               |
|                              |                                        |                            | Avoided / reduced carbon emissions (tCO2e)     | 92,294                                |
| Sustainably Managed Forestry | 205                                    | 27                         | Sustainable certification                      | Sustainable Forestry Initiative®      |
|                              |                                        |                            | Certified area (acres)                         | 174,977                               |
|                              |                                        |                            | Removed / sequestered carbon emissions (tCO2e) | 499,598                               |
| Green Buildings              | 190                                    | 26                         | Green buildings certifications                 | LEED Gold<br>BOMA Best<br>Platinum    |
|                              |                                        |                            | Certified area (square footage)                | 802,145                               |
| Total                        | \$746 <sup>1</sup>                     | 100%                       |                                                |                                       |

<sup>1</sup> Represents net proceeds from the 2022 Green Bond issuance of US\$750 million.

## Examples of Projects

### **Renewable Energy: Romney Wind**

Manulife provided financing to support Aamjiwnaang First Nation ("AFN")'s acquisition of a part of the Romney Wind project. The project provides the AFN and its local communities with a sustainable energy source. The project is a 60 MW wind farm located in Ontario, Canada, that became operational in 2019 and consists of 17 turbines.

### **Renewable Energy: Coaldale Solar**

Manulife provided financing to the Coaldale Solar project, located in Alberta, Canada. The project consists primarily of photovoltaic equipment, civil and structural infrastructure, electrical systems, and a control system. The project has a capacity of 22 MW. Subsequently, a 42MWh Battery Energy Storage System (BESS) was added to allow for dispatch control of a part of the project's generation.

### **Sustainably Managed Forestry: Blueback**

Blueback is an 89,000-acre forest in the U.S. state of Maine. The property is 100% certified under the Sustainable Forestry Initiative® and is a contiguous block of timberlands with a diverse mix of naturally regenerated spruce fir and northern hardwood tree species. The core of the investment thesis is centered on the timberlands being used primarily to store carbon and to generate high-quality, high-integrity carbon credits.

## Methodology

**Renewable Energy:** Renewable energy generated were provided by the project developer or estimated based on a third-party service provider. Avoided emissions were calculated by multiplying the annual renewable energy project's production by the region and energy specific carbon dioxide emission avoidance factors as published by the International Renewable Energy Agency. To calculate the impact measures associated with the Green Bond, our share of loan was applied to each project's enterprise value.

**Energy Efficiency:** Annual energy savings and avoided emissions were provided directly by the project developer. To calculate the impact measures associated with the Green Bond, our share of loan was applied to each project's enterprise value.

**Sustainably Managed Forestry:** Carbon removals from timberland were estimated by Manulife Investment Management timberland and agriculture. Net carbon removals reflect the change in carbon stored in the forest carbon 'pools' over the year, as well as the carbon going into long-term storage within harvest wood products. Generally, the net greenhouse gas profile includes change in carbon stock within standing forest inventory (biogenic growth), carbon stored in harvested wood products and nonbiological emissions from operations. The net greenhouse gas profile is expected to fluctuate due to ongoing forest management activities, such as fertilization, herbaceous weed control, and harvesting schedules. The year-over-year change in the profile may be positive or negative.

Change in carbon stored is calculated using standard industry timber inventory and appraisal approaches to estimate 'opening' and 'closing' growing stock volumes, and these volumes are then converted into amounts of carbon stored.

**Green Buildings:** Certified square footage was provided by the property owners. To calculate the impact measure associated with the Green Bond, our share of mortgage was applied to the property value.