

**Independent Opinion  
on the Statements of  
Manufacturers Life Insurance  
Company  
Relative to Its  
Inventory of MIMTA Timberland  
Non-Biological GHG Emissions**

Opinion Date: 2025-04-25

|                                             |                                                                                                                         |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| <b>To the Management of:</b>                | MANULIFE INVESTMENT MANAGEMENT, TIMBERLAND AND AGRICULTURE<br>197 Clarendon St, Boston, MA 02116 USA<br>OmnexFuturepast |
| <b>Independent Verification Opinion of:</b> | 315 E. Eisenhower Pkwy, Ste 300<br>Ann Arbor, Michigan 48108 USA                                                        |
| <b>Subject Matter:</b>                      | Annual emissions of GHGs                                                                                                |
| <b>For the Period:</b>                      | 1 January 2024 to December 31 2024                                                                                      |

## Details Pertaining to the Statements

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### Responsible Party, if Different from Addressee

### Statement of Responsibility:

It was the responsibility of Manufacturers Life Insurance Company (“Manulife”) to prepare Manulife Investment Management Timberland (MIM-Timberland) non-biological greenhouse gas (GHG) inventory statements in accordance with the World Resources Institute/World Business Council for Sustainable Development’s The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard – Revised Edition” (March 2004) as amended in 2013 and 2015 (GHG Protocol). This responsibility includes designing, implementing and maintaining a data management system relevant to the preparation and fair presentation of the statements. Manulife is responsible for the fair presentation of its data and information and ensuring that these are free from material misstatements.

## Intended User and Limitation of Liability

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|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Intended User:</b>           | This report has been prepared for the management of Manulife for internal management purposes.                                                                                                                                                                                       |
| <b>Limitation of Liability:</b> | Manulife is solely responsible for the preparation and presentation of the information it has submitted to OmnexFuturepast for verification. Our role is limited to expressing a conclusion as to whether the greenhouse gas emissions as stated by Manulife are presented fairly in |

accordance with the GHG Protocol. In doing so, we do not assume any duty, liability, or responsibility of Manulife or of any third party. Our duties in relation to the opinions expressed are owed solely to Manulife. As such, we do not accept any responsibility for any loss allegedly occasioned by any third party acting or refraining from action because of our expressed opinions.

## Details Pertaining to the Validation/Verification Body

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**OmnexFuturepast’s Role:** OmnexFuturepast is an impartial third-party validation/verification body.

## Declaration of Impartiality

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**Evaluation of Actual or Potential Conflicts-of-Interest** OmnexFuturepast, and the verification team members and independent reviewer, have evaluated their potential for compromised impartiality and found no actual or potential threats to impartiality with respect to the performance of this engagement.

## Details Pertaining to the Verification Team and Independent Reviewer

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**Verification Team Leader:** This verification was led by John Thurmes.  
**Verification Team Members:** The following person assisted the team leader in the execution of this verification:  
 — Bruce Carroll.  
**Independent Reviewer:** This verification was independently reviewed by:  
 — John Shideler

## Details Pertaining to the Verification

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**Type(s) of Engagement:** Verification  
**Objectives of the Verification:** To verify the 2024 non-biological GHG Inventory of Manulife’s timberland business and to confirm that these emissions are free from material misstatements within the agreed level of assurance and that the inventory conformed to the requirements of the

|                                   |                                                                                                                                 |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
|                                   | criteria, and to assure that the comparison to the baseline year (2020) was presented fairly.                                   |
| <b>Scope of the Verification:</b> | Manulife directly operated forest lands in six countries: Australia, Canada, Chile, New Zealand, Brazil, and the United States. |
| <b>Level of Assurance:</b>        | Limited                                                                                                                         |
| <b>Threshold of Materiality:</b>  | 10%                                                                                                                             |
| <b>Verification Criteria:</b>     | OmnexFuturepast performed this verification in accordance with the requirements of ISO 14064-3:2019.                            |

## Description of Work Performed

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|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                 | <p>Manulife provided a methods document describing how they followed the GHG Protocol for reporting emissions and shared documentation of raw data, chosen emission and conversion factors, and calculations of Scope 1 and Scope 3 emissions. Futurepast reviewed these documents using a risk-based approach where we focused on those data that posed the greatest risks to material misstatement of calculated emissions.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Description of the Basis for Our Conclusions and Opinion</b> | <p>Futurepast verified the non-biological emissions found in the “Emission Summary by Property” tab in <i>Rebase_HTRG 2024 Non-Biological Emissions Calculator_472025_Copy.xlsx</i> and the linked tabs and the data and calculations found in the same file. We searched for anomalies in calculated results by country and region and in the raw data. We reviewed the emission factors and conversion assumptions and checked them against their sources. We tested the calculations and the summaries.</p> <p>We also compared the results described above for 2024 to 2020 base year (recalculated) results as presented in the “Inventory vs. Baseline “tab” in the same workbook. We assembled the two years, along with intervening years, to search for regional and overall trends and anomalies.</p> <p>Issues we encountered were assembled into a list of findings and were presented to the client for resolution. Manulife made corrections and these corrections were accepted.</p> <p>The data examined were historical in nature.</p> |

## Summary of the Responsible Party's Statements and Base Year Comparison

|                                                                                                  | 2020    | 2024    | % Change |
|--------------------------------------------------------------------------------------------------|---------|---------|----------|
| (a) Emissions - Fuel Combustion from MIM-T Owned Vehicles-/Equipment (MtCO <sub>2</sub> e)       | NI      | 3,443   |          |
| (b) Emissions - Fuel Combustion from Contractor Owned Vehicles / Equipment (MtCO <sub>2</sub> e) | 240,645 | 400,648 | +66.5%   |
| (c) Total Direct and Indirect N <sub>2</sub> O Emissions (MtCO <sub>2</sub> e)                   | NI      | 10,939  |          |
| (d) CH <sub>4</sub> and N <sub>2</sub> O Emission from Managed Fire (MtCO <sub>2</sub> e)        | NI      | 44,701  |          |
| Total Scope 1 (MtCO <sub>2</sub> e, (a+c+d))                                                     | 78,909  | 59,083  | -25.1%   |
| Total Scope 3 (MtCO <sub>2</sub> e, (b))                                                         | 240,645 | 400,648 | +66.5%   |
| Total Non-Biological Emissions (MtCO <sub>2</sub> e)                                             | 319,554 | 459,731 | +43.9%   |
| <i>NI = Separate categories of Scope 1 emissions not itemized</i>                                |         |         |          |

## Limitations, If Any

Scope 2 electricity emissions were not reported as no offices or infrastructure were located at the remote forest sites and any electricity consumption was considered to be *de minimis*.

## Modifications, If Any

- Manulife's inventory of non-biological emissions from its timberland operations did not fulfil the requirement for public disclosure listed in the GHG Protocol, Chapter 9, "Reporting GHG Emissions" that emissions data for all seven GHGs (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>, NF<sub>3</sub>) be separately reported in metric tonnes and in tonnes of CO<sub>2</sub> equivalent.
- Manulife's recalculation of the base year did not fully meet the standard in either the GHG Protocol or their own documented procedures. Scope 1 emissions were calculated in a manner that meets the standard. Scope 3 emissions, particularly contractor fuel use in New Zealand and Australia, were not adjusted to account for the change in data collection methods for contractor hauling.

## Conclusions (Verification)

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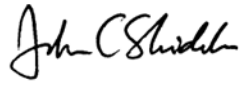
Except for the limitations and modifications described above, and based on our evaluation of the evidence, nothing comes to our attention which causes us to believe:

- That Manulife's non-biological MIMTA (timberland) emissions inventory report for the period from 01/01/2024 to 12/31/2024 is not materially correct and is not a fair representation of its GHG data and information, and
- That Manulife's non-biological MIMTA (timberland) inventory report for the period from 01/01/2024 to 12/31/2024 has not been prepared in accordance with the World Resources Institute/World Business Council for Sustainable Development's "The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard – Revised Edition" (March 2004) as amended in 2013 and 2015, and
- That Manulife's comparison of non-biological MIMTA (timberland) emissions reported for 2024 with recalculated emissions from 2020 is not a fair representation of differences in emissions between those two years.

## Approvals

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**Verification Team Leader:** John Thurmes  
  
Date: 2025-04-25

**Independent Reviewer:** John Shideler  
  
Date: 2025-04-25

## Signature

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**Verification/Validation Body:** OmnexFuturepast, Ann Arbor, Michigan USA

**Opinion Issued:** 2025-04-25

