

Climate Metrics Disclosure for Funds Managed and Operated by Manulife Investment Management (Hong Kong) Limited

Introduction

At Manulife Investment Management Hong Kong Limited (“**Manulife IM (HK)**”), we believe that climate change is a systemic risk that may have an imminent and potentially irreversible impact on the global economy, capital markets, and society at large. These impacts will manifest as both risks and opportunities for almost all companies in all industries and therefore must be properly assessed by investors in order to safeguard clients’ assets.

As part of the framework to govern its management of climate-related risks, Manulife IM (HK) monitors sustainability risks and factors relevant and material to an investment including [climate-related risks](#). Portfolio Carbon Footprint is considered to be a meaningful metric in assessing climate-related risks of the funds managed and operated by Manulife IM (HK).

Portfolio Carbon Footprint

Portfolio carbon footprint is a representation of carbon emissions normalised by the portfolio’s market value and expressed in tons of carbon dioxide equivalent emissions (CO₂e) per million dollars invested. Below is the formula for the calculation of portfolio carbon footprint¹:

$$\sum_N^i \left(\frac{\text{Current value of investment}_i}{\text{Investee company's enterprise value}_i} \times \text{Investee company's Scope 1 and Scope 2 GHG emissions}_i \right) \div \text{Current portfolio value (\$ million)}$$

The portfolio carbon footprint of the funds managed and operated by Manulife IM (HK) calculated using the formula above are shown in the tables below.

Further information on Manulife IM (HK)’s approach to sustainability including climate-related risks is accessible at [Sustainability](#).

¹ [Circular to licensed corporations Management and disclosure of climate-related risks by fund managers](#)

Portfolio Carbon Footprint of Funds Managed and Operated by Manulife IM (HK)#

Fund	Carbon Footprint (tonnes CO2e/million invested (USD))	Data Coverage (%)	Data as of Fiscal Year End
ManuFlex (MIL)			
Aggressive Fund*	51.52	86.88%	31 Dec 2022
Balanced Fund*	57.74	71.20%	31 Dec 2022
Capital Guarantee Fund (HK\$)*	Not Available	Below 50%	31 Dec 2022
Capital Guarantee Fund (US\$)*	Not Available	Below 50%	31 Dec 2022
China Value Fund*	78.61	96.33%	31 Dec 2022
European Equity Fund*	5.38	95.42%	31 Dec 2022
Five Year Bond Fund*	Not Available	Below 50%	31 Dec 2022
Healthcare Fund*	3.09	96.99%	31 Dec 2022
Hong Kong Equity Fund*	85.51	96.65%	31 Dec 2022
International Bond Fund*	Not Available	Below 50%	31 Dec 2022
International Equity Fund*	25.70	96.02%	31 Dec 2022
Japan Equity Fund*	36.46	95.84%	31 Dec 2022
JPMorgan Global Bond Fund*	Not Available	Not Available	31 Dec 2022
North American Equity Fund*	17.38	97.68%	31 Dec 2022
Pacific Asian Equity Fund*	72.01	95.19%	31 Dec 2022
Schroder Balanced Investment Fund*	37.90	83.53%	31 Dec 2022
Stable Fund*	Not Available	Below 50%	31 Dec 2022
Technology Fund*	6.42	95.80%	31 Dec 2022
US Equity Strategic Fund*	4.61	99.35%	31 Dec 2022
Manuflex			
Balanced Fund*	57.74	71.20%	31 Dec 2022
Capital Guarantee Fund (HK\$)*	Not Available	Below 50%	31 Dec 2022
European Equity Fund*	5.38	95.42%	31 Dec 2022
Five Year Bond Fund*	Not Available	Below 50%	31 Dec 2022
Hong Kong Equity Fund*	85.51	96.65%	31 Dec 2022
International Bond Fund*	Not Available	Below 50%	31 Dec 2022
International Equity Fund*	25.70	96.02%	31 Dec 2022
Japan Equity Fund*	36.46	95.84%	31 Dec 2022
North American Equity Fund*	17.38	97.68%	31 Dec 2022
Pacific Asian Equity Fund*	72.01	95.19%	31 Dec 2022
ManuFund (MIL)			
Capital Guarantee Fund (HK\$)*	Not Available	Below 50%	31 Dec 2022
Manufund			
Capital Guarantee Fund (HK\$)*	Not Available	Below 50%	31 Dec 2022
Five Year Bond Fund*	Not Available	Below 50%	31 Dec 2022
Group Deposit Administration Policy (MIL)			
Capital Guarantee Fund (HK\$)*	Not Available	Below 50%	31 Dec 2022
International Equity Fund*	25.70	96.02%	31 Dec 2022
Group Deposit Administration Policy			
Capital Guarantee Fund (HK\$)*	Not Available	Below 50%	31 Dec 2022
Capital Guarantee Fund (US\$)*	Not Available	Below 50%	31 Dec 2022
Fifteen Year Deposit Fund*	Not Available	Below 50%	31 Dec 2022
Five Year Bond Fund*	Not Available	Below 50%	31 Dec 2022

International Equity Fund*	25.70	96.02%	31 Dec 2022
Manulife Investment Trust			
Strategic Income Fund*^	Not Available	Below 50%	31 Dec 2022
Floating Rate Income Fund*^	Not Available	Below 50%	31 Dec 2022
Strategic Income Opportunities Fund*^	Not Available	Below 50%	31 Dec 2022
Global Allocation Fund II*^	Not Available	Below 50%	31 Dec 2022
US Core Fixed Income Fund*^	Not Available	Below 50%	31 Dec 2022
Manulife (Macau) Pension Fund Scheme			
Balanced Fund (Macau)*^	61.43	55.85%	31 Dec 2022
Guaranteed Fund (Macau)*^	Not Available	Below 50%	31 Dec 2022
Healthcare Fund (Macau)*^	24.41	74.04%	31 Dec 2022
HK & China Equity Fund (Macau)*^	95.12	74.98%	31 Dec 2022
Pacific Asia Bond Fund (Macau)*^	Not Available	Below 50%	31 Dec 2022
Stable Growth Fund (Macau)*^	Not Available	Below 50%	31 Dec 2022

#Climate-related risks are considered irrelevant for certain types of investments (and they have been accordingly excluded from the above table), please refer to [Disclosures on Climate-related Risk Management](#) for details.

Funds marked with (*) are not available to Hong Kong retail investors.

Funds marked with (^) are not authorized in Hong Kong.

Manulife Investment Management places reliance on third-party data providers and Third-Party Managers where appropriate, who in turn place reliance on both company disclosed figures, estimates and other sources to produce the data. Manulife Investment Management does not provide assurance as to the accuracy or completeness of such third-party data.

Carbon emissions as reported by companies may be subject to estimation error. Corporate reporting of climate-related data is typically either not audited or audited to a lower standard than a financial audit.

Data Coverage is calculated by dividing the value of investments in a fund's portfolio that have data reasonably available to Manulife Investment Management for the calculation of Carbon Footprint by the total value of the fund's portfolio.

Even after taking reasonable steps to identify the portfolio carbon footprint of the Scope 1 and 2 emissions associated with the funds' underlying investments, the Data Coverage may not be sufficiently high to produce a reported portfolio carbon footprint which is meaningful or representative of the fund's actual portfolio. Accordingly, funds with Data Coverage below 50% have been tagged as having "Not Available" Carbon Footprint in the above table. For illustration purposes, Data Coverage may be impacted by cash, cash equivalents and derivatives, sovereigns and quasi-sovereigns, securitized assets, municipal bonds and related securities, and any securities where data is not reasonably available to Manulife Investment Management for the calculation of the Carbon Footprint.

For the avoidance of doubt, where a fund is in a master-feeder fund structure, the feeder fund is subject to the risks attendant in the master fund including climate-related risks, which are managed by the investment manager of that master fund. For funds that are part of a master-feeder structure the data of the feeder fund may not be available until the master fund has provided data as part of the master fund's first reporting period. There may be limitations on data availability where the investment manager of the master fund may not be subject to similar disclosure requirements.

Data disclosures, data sources and methodologies are subject to changes as industry standards evolve, data availability improves and Manulife Investment Management enhances its climate reporting capabilities. The disclosure may be updated from time to time without any prior notice.

Important Information

Manulife Investment Management is the global wealth and asset management segment of Manulife Financial Corporation. This material, intended for the exclusive use by the recipients who are allowable to receive this document under the applicable laws and regulations of the relevant jurisdictions, was produced by and the opinions expressed are those of Manulife Investment Management as of the date of writing and are subject to change. The information and/or analysis contained in this material have been compiled or arrived at from sources believed to be reliable but Manulife Investment Management does not make any representation as to their accuracy, correctness, usefulness or completeness and does not accept liability for any loss arising from the use hereof or the information and/or analysis contained herein. Neither Manulife Investment Management or its affiliates, nor any of their directors, officers or employees shall assume any liability or responsibility for any direct or indirect loss or damage or any other consequence of any person acting or not acting in reliance on the information contained herein.

This material was prepared solely for informational purposes and does not constitute a recommendation, professional advice, an offer, solicitation or an invitation by or on behalf of Manulife Investment Management to any person to buy or sell any security. This material should not be viewed as a current or past recommendation or a solicitation of an offer to buy or sell any investment products or to adopt any investment strategy. Nothing in this material constitutes investment, legal, accounting or tax advice, or a representation that any investment or strategy is suitable or appropriate to your individual circumstances, or otherwise constitutes a personal recommendation to you. Past performance is not an indication of future results.

Investment involves risk. Investors should not base on this material alone to make investment decisions and should read the offering document (if applicable) for details, including the risk factors, charges and features of any investment products.

Proprietary Information – Please note that this material must not be wholly or partially reproduced, distributed, circulated, disseminated, published or disclosed, in any form and for any purpose, to any third party without prior approval from Manulife Investment Management.

This material is issued by Manulife Investment Management (Hong Kong) Limited.

This material has not been reviewed by the Securities and Futures Commission (SFC).