

## 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 (CO<sub>2</sub>e) per million dollars invested. Below is the formula for the calculation of portfolio carbon footprint<sup>1</sup>:

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

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](#) (manulifefunds.com.hk).

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<sup>1</sup> [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)**

<b>Fund</b>	<b>Carbon Footprint (tonnes CO2e/million invested (USD))</b>	<b>Data Coverage (%)</b>	<b>Data as of Fiscal Year End</b>
<b>ManuFlex (MIL)</b>			
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
Hang Seng Index Tracking Fund**	61.6	100.00%	31 Dec 2022
<b>Manuflex</b>			
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
<b>ManuFund (MIL)</b>			
Capital Guarantee Fund (HK\$)*	Not Available	Below 50%	31 Dec 2022
<b>Manufund</b>			
Capital Guarantee Fund (HK\$)*	Not Available	Below 50%	31 Dec 2022
Five Year Bond Fund*	Not Available	Below 50%	31 Dec 2022
<b>Group Deposit Administration Policy (MIL)</b>			
Capital Guarantee Fund (HK\$)*	Not Available	Below 50%	31 Dec 2022
International Equity Fund*	25.70	96.02%	31 Dec 2022
<b>Group Deposit Administration Policy</b>			
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
<b>Manulife Investment Trust</b>			
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
<b>Manulife (Macau) Pension Fund Scheme</b>			
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
<b>Manulife Global Select (MPF) Scheme</b>			
Manulife MPF Healthcare Fund*	3.22	93.28%	31 Mar 2023
Manulife MPF Pacific Asia Equity Fund*	115.74	88.01%	31 Mar 2023
Manulife MPF China Value Fund*	58.08	99.87%	31 Mar 2023
Manulife MPF Hong Kong Equity Fund*	97.72	100.00%	31 Mar 2023
Manulife MPF Japan Equity Fund*	40.09	73.57%	31 Mar 2023
Manulife MPF European Equity Fund*	7.69	100.00%	31 Mar 2023
Manulife MPF North American Equity Fund*	10.87	98.90%	31 Mar 2023
Manulife MPF International Equity Fund*	35.87	96.22%	31 Mar 2023
Manulife MPF Aggressive Fund*	67.43	91.35%	31 Mar 2023
Manulife MPF Fidelity Growth Fund*	73.08	92.93%	31 Mar 2023
Manulife MPF Growth Fund*	72.58	79.29%	31 Mar 2023
Manulife MPF Fidelity Stable Growth Fund*	69.14	63.92%	31 Mar 2023
Manulife MPF Retirement Income Fund*	107.78	72.60%	31 Mar 2023
Manulife MPF 2045 Retirement Fund*	67.79	90.39%	31 Mar 2023
Manulife MPF 2040 Retirement Fund*	66.63	88.42%	31 Mar 2023
Manulife MPF 2035 Retirement Fund*	67.90	85.88%	31 Mar 2023
Manulife MPF 2030 Retirement Fund*	70.08	78.94%	31 Mar 2023
Manulife MPF 2025 Retirement Fund*	76.68	67.42%	31 Mar 2023
Manulife MPF Smart Retirement Fund*	76.53	68.19%	31 Mar 2023
Manulife MPF RMB Bond Fund*	33.22	62.69%	31 Mar 2023
Manulife MPF Pacific Asia Bond Fund (renamed as Manulife MPF Sustainable Pacific Asia Bond Fund effective 3 October 2023)*	Not Available	Below 50%	31 Mar 2023
Manulife MPF International Bond Fund*	Not Available	Below 50%	31 Mar 2023
Manulife MPF Hong Kong Bond Fund*	125.05	66.00%	31 Mar 2023
Manulife MPF Conservative Fund*	Not Available	Below 50%	31 Mar 2023
Manulife MPF Stable Fund*	101.56	73.30%	31 Mar 2023
Manulife MPF Interest Fund*	133.11	64.88%	31 Mar 2023
Manulife MPF Hang Seng Index Tracking Fund (renamed as Manulife MPF Hang Seng Index ESG Fund effective 3 October 2023)**	61.6	100.00%	31 Mar 2023
Manulife MPF Core Accumulation Fund*#	93.92	96.45%	31 Mar 2023

Manulife MPF Age 65 Plus Fund*#	94.99	95.92%	31 Mar 2023
<b>Manulife Provident Fund Unit Trust Series</b>			
Manulife Hong Kong Equity Fund*	108.14	100.00%	31 Mar 2023
Manulife Hong Kong Equity Fund Series – (I)*	76.01	100.00%	31 Mar 2023
Manulife Japan Equity Fund*	39.79	73.03%	31 Mar 2023
Manulife Pacific Asia Equity Fund*	118.23	84.26%	31 Mar 2023
Manulife European Equity Fund*	7.63	100.00%	31 Mar 2023
Manulife North American Equity Fund*	17.04	99.50%	31 Mar 2023
Manulife North American Equity Fund Series – (I)*	4.61	98.23%	31 Mar 2023
Manulife International Bond Fund*	Not Available	Below 50%	31 Mar 2023
Manulife Pacific Asia Bond Fund (renamed as Manulife Sustainable Pacific Asia Bond Fund effective 3 October 2023)*	Not Available	Below 50%	31 Mar 2023
Manulife Hong Kong Short Term Bond Fund*	129.95	60.17%	31 Mar 2023
Manulife Hong Kong Medium Term Bond Fund*	125.05	66.00%	31 Mar 2023
Manulife Global Investment Grade Bond Fund*	144.31	78.77%	31 Mar 2023
Manulife China Value Fund*	87.32	100.00%	31 Mar 2023
Manulife China Value Fund Series – (I)*	66.39	100.00%	31 Mar 2023
Manulife China Value Fund Series – (II)*	19.34	99.59%	31 Mar 2023
Manulife RMB Bond Fund*	17.10	62.10%	31 Mar 2023
Manulife Healthcare Fund*	2.79	91.80%	31 Mar 2023
Manulife Healthcare Fund Series – (I)*	5.25	96.18%	31 Mar 2023
Manulife Healthcare Fund Series – (II)*	2.91	97.84%	31 Mar 2023
Manulife Technology Fund*	13.83	98.69%	31 Mar 2023
Manulife China A Equity Fund*	235.56	99.02%	31 Mar 2023
Manulife Conservative Fund*	Not Available	Below 50%	31 Mar 2023
<b>Insurance Policy</b>			
Interest Fund Policy*	133.11	64.88%	31 Mar 2023
Stable Fund Policy*	101.56	73.30%	31 Mar 2023
<b>Manulife Asset Allocation Fund</b>			
Manulife Growth Fund*	63.74	87.88%	31 Mar 2023
Manulife Balanced Fund*	71.13	79.73%	31 Mar 2023
Manulife Stable Fund*	76.41	63.70%	31 Mar 2023
<b>Other</b>			
Manulife Career Average Guaranteed Fund*	277.66	77.89%	31 Mar 2023
<b>Manulife Advanced Fund SPC</b>			
China A Segregated Portfolio	262.21	91.70%	30 Jun 2023
Renminbi Bond Segregated Portfolio	Not Available	Below 50%	30 Jun 2023
U.S. Bank Equity Segregated Portfolio	0.83	97.91%	30 Jun 2023
Greater Bay Area Growth and Income Segregated Portfolio	221.10	85.66%	30 Jun 2023
<b>Manulife Global Fund</b>			
ASEAN Equity Fund	58.38	88.01%	30 Jun 2023
Asia Pacific REIT Fund	7.49	95.92%	30 Jun 2023
Asian Small Cap Equity Fund	135.03	83.06%	30 Jun 2023
China Value Fund	249.73	97.48%	30 Jun 2023
Dragon Growth Fund	61.35	99.28%	30 Jun 2023
Dynamic Leaders Fund*^	27.19	97.67%	30 Jun 2023

Emerging Eastern Europe Fund	122.85	78.16%	30 Jun 2023
European Growth Fund	32.65	97.95%	30 Jun 2023
Global Climate Action Fund	14.80	94.78%	30 Jun 2023
Global Equity Fund	58.92	93.30%	30 Jun 2023
Global REIT Fund	6.20	94.85%	30 Jun 2023
Global Resources Fund	208.36	96.99%	30 Jun 2023
Healthcare Fund	3.12	90.63%	30 Jun 2023
India Equity Fund	191.80	56.62%	30 Jun 2023
Japan Equity Fund	41.60	71.47%	30 Jun 2023
Sustainable Asia Equity Fund	22.54	94.17%	30 Jun 2023
Taiwan Equity Fund	34.91	97.89%	30 Jun 2023
U.S. Equity Fund	16.48	100.00%	30 Jun 2023
U.S. Small Cap Equity Fund	50.04	91.77%	30 Jun 2023
Asia Total Return Fund	Not Available	Below 50%	30 Jun 2023
Asian High Yield Fund	370.65	77.49%	30 Jun 2023
Asian Short Duration Bond Fund	122.20	69.99%	30 Jun 2023
China Total Return Bond Fund	324.58	57.02%	30 Jun 2023
Sustainable Asia Bond Fund	24.87	68.00%	30 Jun 2023
U.S. Bond Fund	93.26	55.08%	30 Jun 2023
U.S. Special Opportunities Fund	128.36	77.19%	30 Jun 2023
Asia Dynamic Income Fund	254.07	82.60%	30 Jun 2023
Global Multi-Asset Diversified Income Fund	124.18	73.13%	30 Jun 2023
Investment Grade Preferred Securities Income Fund	90.75	79.68%	30 Jun 2023
Preferred Securities Income Fund	186.02	72.33%	30 Jun 2023
<b>Manulife Hong Kong Series</b>			
Manulife Global Dynamic Asset Allocation Fund	42.46	66.33%	30 Jun 2023
Manulife Capital Conservative Fund	81.61	59.55%	30 Jun 2023
Manulife STARS Income and Growth Fund	129.63	65.43%	30 Jun 2023
Manulife Global Multi-Asset Diversified Income Fund	124.13	73.10%	30 Jun 2023

#Climate-related risks are considered irrelevant for certain types of investments. For further details, please refer to [Disclosures on Climate-related Risk Management](https://www.manulifefunds.com.hk/disclosures-on-climate-related-risk-management) (manulifefunds.com.hk).

\*In respect of Manulife MPF Hang Seng Index Tracking Fund (the “Fund”) - Effective 3 October 2023, the underlying index-tracking collective investment scheme (“ITCIS”) of the Fund has been changed to ChinaAMC HSI ESG ETF (“New ITCIS”). Correspondingly, (i) the name of the Fund has changed to Manulife MPF Hang Seng Index ESG Fund, and (ii) the investment objective and balance of investments of the Fund, and the relevance of climate-related risks, have been changed in reflection of the investment policy of the New ITCIS. Please refer to the relevant notice ([notice-05-2023.pdf \(manulife.com.hk\)](https://www.manulife.com.hk/notice-05-2023.pdf)) 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 maybe updated from time to time without any prior notice.

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