

Task Force on Climate-Related Financial Disclosure

J.P. Morgan Asset Management

2022 Inaugural Report – Singapore Addendum

Introduction from Ms. Sherene Ban, CEO of JPMorgan Asset Management (Singapore)

JPMorgan Asset Management (Singapore) Limited (“**JPMorgan Asset Management (Singapore)**”) is an asset manager with assets under management of \$24.6b USD as of 31st December 2021, operating in Singapore as part of J.P. Morgan Asset Management (“**JPMAM**”). J.P. Morgan Asset Management is the marketing name for the investment management businesses of JPMorgan Chase & Co. and its affiliates worldwide.

This Singapore Addendum is complementary to and should be read in conjunction with J.P. Morgan Asset Management’s Global Task Force for Climate-Related Financial Disclosures Report (the “**2022 TCFD Report**”), and together with this Singapore Addendum, this “**Report**”. They together provide disclosure in accordance with the Guidelines on Environmental Risk Management for Asset Managers issued by the Monetary Authority of Singapore in December 2020.

Recognizing that climate change is the pre-eminent environmental risk, we have aligned

this Report to the recommendations of the TCFD, specifically its Supplemental Guidance for Asset Managers.

I am proud of the progress we have made in addressing climate change as an important component of our sustainability strategy. Our journey towards meeting our climate-related targets also illustrates our environmental efforts as part of integrating financially material E (environmental), S (social), and G (governance) risk factors into our investment process.

We hope you find this Report informative.



Ms. Sherene Ban,
Chief Executive Officer,
JPMorgan Asset Management (Singapore)

Governance

Board

The Board of JPMorgan Asset Management (Singapore) chaired by Ms. Sherene Ban, Chief Executive Officer (CEO) of JPMorgan Asset Management (Singapore) meets on a bi-annual basis. Board-level oversight and escalation of climate-related risks and opportunities follows the framework adopted by J.P. Morgan Asset Management globally. For details, please refer to the “Governance – Board Oversight” section of the **2022 TCFD Report**.

Members of the Board of JPMorgan Asset Management (Singapore) are also presented with the Global TCFD Report (including this addendum) and more specifically the relevant risk management frameworks which are reviewed alongside senior management within our Sustainable Investment (SI) team and the APAC Head of Risk as required.

J.P. Morgan Asset Management’s APAC Lead Sustainable Investing Strategist also attends Board meetings as a standing invitee, and provides climate and other environmental, social and governance (ESG) risks training and updates to the Board as required.

Management

The Singapore Business Management Meeting, chaired by Ms. Sherene Ban, CEO of JPMorgan Asset Management (Singapore) meets on a monthly basis and was established to assist and advise the CEO in co-ordinating the business activities of the various business groups within JPMorgan Asset Management (Singapore). Management accountability for climate-related risks follows the global framework adopted by J.P. Morgan Asset Management. As part of the global framework, the Sustainable Investing Oversight Committee (SIOC) is responsible for oversight and governance into all ESG integration processes. Where and when escalation specific to APAC is required from a controls and risk oversight perspective, escalation from SIOC is to the APAC Business Controls Committee (APAC BCC). The APAC BCC representatives would then escalate matters in the Singapore Business Management Meeting as required. For more details, please refer to the “Governance – Management” section of the **2022 TCFD Report**.

Separately, J.P. Morgan Asset Management’s APAC Lead Sustainable Investing Strategist provides climate and other ESG risk, training and updates on an ad-hoc basis when required, through separate classroom trainings / workshops to all relevant staff of JPMorgan Asset Management (Singapore).

JPMorgan Asset Management (Singapore) also adopts J.P. Morgan Asset Management’s firmwide internal controls framework and has multiple lines of defense to manage risks in client portfolios. These lines work together but with distinct responsibilities to provide oversight over business activities, including climate-related risks. For details, please refer to the “Risk Management” section of the **2022 TCFD Report**.

Strategy & Risk Management (including Stewardship and Engagement)

In identifying and assessing the impact of climate-related risks and opportunities, JPMorgan Asset Management (Singapore) forms part of the global strategy and firmwide risk management framework that J.P. Morgan Asset Management implements globally. These climate-related risks and opportunities are identified, assessed and managed across multiple functions within J.P. Morgan Asset Management, including portfolio managers of J.P. Morgan Asset Management (Singapore) and J.P. Morgan Asset Management’s regional and firmwide risk management and internal audit functions. For more information, please refer to the “Strategy” and “Risk Management” sections of the **2022 TCFD Report**.

It’s also important to note the internal audit function will consider the robustness of JPMorgan Asset Management (Singapore)’s risk management framework in managing environmental risks as part of its independent review following a comprehensive risk-based cycle audit plan.

Metrics & Targets

As part of our global commitment to disclosing carbon emissions at both a firm and portfolio level, JPMorgan Asset Management (Singapore) is a component of the metrics and targets that J.P. Morgan Asset Management adopts firmwide in assessing the progress of its efforts in managing climate-related risks and setting the relevant targets. For details, please refer to the “Metrics and Targets” section of the **2022 TCFD Report**.

The portfolio carbon footprints based on the portfolio holdings as of 31st December, 2021 for funds managed by JPMorgan Asset Management (Singapore) are set out in the **Appendix (Portfolio Carbon Footprint)** below.

The formula (see below) is used in line with the TCFD guidelines to identify the carbon footprint of Scope 1 and Scope 2 greenhouse gas (GHG) emissions of a portfolio’s underlying investments which is disclosed at the portfolio level¹.

$$\text{Carbon footprint (tonnes CO}_2\text{e/million invested (USD))} = \frac{\sum_{i=1}^N \left[I_i \times \frac{\text{Investment}_i \times \text{Emissions}_i}{\text{AUM} \times \text{EVIC}_i} \right]}{\sum_{i=1}^N \left[I_i \times \frac{\text{Investment}_i}{\text{AUM}} \right]}$$

where:

I_i is a scope marker, equal to 1 for assets in scope and with available (reported or estimated) data (0 otherwise)

Emissions_i are the greenhouse gas emissions of company i , in tonnes of CO₂ equivalent

Investment_i is the total value invested in company i

AUM is the total size of the portfolio

EVIC_i is the enterprise value (including cash) of company i , in million USD, defined as “the sum of the market capitalization of ordinary shares at fiscal year-end, the market capitalization of preferred shares at fiscal year-end, and the book values of total debt and minorities’ interest” (PCAF)

As part of calculating the emissions data of underlying holdings in client portfolios, J.P. Morgan Asset Management uses Trucost data as the primary emissions data source. Where emissions data is not available, gaps are filled following a hierarchical approach consisting of a Trucost emissions estimate model and an internal data gap filler policy using industry / sub-industry averages to ensure complete data coverage.

For more details, please refer to the “Metrics and Targets – Bridging Emissions Data Gaps” section of the **2022 TCFD Report**. In addition to the Trucost data for listed equity and corporate bonds covered in the Global AM TCFD Report, we also utilize MSCI data for sovereign bonds.

As this is the first year J.P. Morgan Asset Management is reporting carbon footprints for portfolios, the scope, methodologies and data sources may change in the future as we enhance our climate metric capabilities.

¹ For more information on carbon metrics, calculations used and equations are outlined in our paper “[Understanding Carbon Exposure Metrics](#)”.

This information has been provided for information and disclosure purposes only, not to be construed as offer or investment advice. Not all strategies or products referenced here might be available for all investors.

Singapore Addendum – Appendix (Portfolio Carbon Footprint)

Fund Name	Portfolio Carbon Footprint (Tons/Million) (USD)*	Weighted Investee Company Carbon Data Availability (%)			
		A. TruCost		B. JPMAM Estimate (Data Gap Policy)	C. Total Availability (A+B)
		Actual	Estimate		
JPMorgan Funds - China A-Share Opportunities Fund	22.87	6%	88%	6%	100%
JPMorgan Funds - ASEAN Equity Fund	42.10	6%	84%	10%	100%
JPMorgan ASEAN Fund	41.95	6%	84%	10%	100%
JPMorgan Thailand Fund	181.00	3%	83%	15%	100%
JPMorgan Vietnam Opportunities Fund	18.01	0%	58%	42%	100%
JPMorgan Malaysia Fund	124.66	6%	90%	5%	100%
JPMorgan Indonesia Fund	90.09	19%	71%	10%	100%
JPMorgan Philippine Fund	48.58	9%	90%	0%	100%

* Calculated as at 31st December, 2021