

Task Force on Climate-Related Financial Disclosure

J.P. Morgan Asset Management 2023 Global TCFD Report

- Executive Summary

Executive Summary

Scope and Purpose of report

This report describes J.P. Morgan Asset Management's ("JPMAM", "Company", "we" or "our") approach to climate-related risks and opportunities (the "Report"). In this report, we disclose how we consider climate-related risks and opportunities in the assets we manage on behalf of our clients as well as in our operations. Please note, although there is broad alignment across the J.P. Morgan group regarding climate risks and opportunities, J.P. Morgan Asset Management's approach is separate, considered with a fiduciary lens, and may differ for a variety of reasons from the approach taken by JPMorgan Chase & Co. (the "Firm", "JPMC", "Firmwide").

All data in this Report is as of 31st December, 2022 with a reporting period of 1st January 2022 – 31st December 2022.

Who we are

JPMorgan Chase & Co (JPMC) is a leading financial services firm based in the United States of America ("U.S."), with operations worldwide. As of December 31, 2022, JPMC had \$3.7 trillion in assets and \$292 billion in stockholders' equity.

The Firm is a leader in investment banking, financial services for consumers and small businesses, commercial banking, financial transaction processing and asset management. Under the JPMorgan Chase & Co. brands, the Firm serves millions of customers in the U.S. and globally including many of the world's most prominent corporate, institutional and government clients.

J.P. Morgan Asset & Wealth Management is a global leader in asset and wealth management services. The Asset & Wealth Management line of business serves institutional, ultra-high net worth, high net worth and individual clients. With combined overall client assets of \$4 trillion and assets under management of \$2.8 trillion as of December 31, 2022, we are one of the largest asset and wealth managers in the world.

J.P. Morgan Asset Management ("JPMAM") is the marketing name for the investment management businesses of JPMorgan Chase & Co. and its affiliates worldwide. Unless otherwise noted, the focus of this Report throughout is on J.P. Morgan Asset Management.²

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The information provided in this report reflects J.P. Morgan Asset Management's approach as at the date of this report and is subject to change without notice. We do not undertake to update any of such information in this report.

This report describes J.P. Morgan Asset Management's approach to climate-related risks and opportunities, as an asset manager and as a corporate entity. For information on how JPMC is addressing climate related risks and opportunities please refer to The 2022 JPMorgan Chase Climate Report.

J.P. Morgan Asset Management is a leading investment manager of choice for institutions, financial intermediaries, and individual investors, offering a broad range of core and alternative strategies, with investment professionals operating in every major world market providing investment expertise and insights to clients. J.P. Morgan Asset Management oversees more than \$2.36 trillion in client assets under management globally as of December 31, 2022.

Approaches to Sustainable Investing, ESG and Climate

JPMAM is committed to acting in its clients' best interests consistent with our fiduciary duty, client goals, and legal requirements.

We offer strategies and products singularly focused on financial goals and objectives. As we strive to meet these objectives, managing financially material Environmental, Social, Governance ("ESG") risks, including climate-related risks and opportunities, is an important part of our investment processes whilst also meeting client objectives for sustainable outcomes through our sustainable investing solutions.

Over the past decade, climate risks have emerged and will continue to be important to investment and stewardship considerations in the future because of the expected potential financial impact on the long-term value of companies.

Our approach to assessing climate-risks and opportunities is multi-faceted and is built around several key elements. These include ESG integration, identifying climate-related risks and opportunities across time horizons, offering strategies for clients with specific climate goals, engaging with portfolio companies on climate change risks and opportunities and adopting our Climate Risk Framework.

Structure of Report

In line with TCFD recommendations, this Report is structured in four sections. The Governance section discusses how climate-related risks and opportunities feature in our governance and management structures. The Strategy section focuses on the key climate-related components of our strategy: ESG integration and research, and investment stewardship. The Risk Management section explores how we identify and manage climate risks through our Climate Risk Framework, development of portfolio and risk management tools and monitoring of our ESG integration approach. Finally, in the Metrics and Targets section, we disclose the data and metrics we currently use and also report our 2022 carbon emissions baseline.

In this Executive Summary, we present the key highlights of the report and provide a summary of our disclosures for each of the TCFD recommendations in **Exhibit I**.



Our approach to engagement on climate risk is to focus on the sectors and companies where, in our view, climate risk poses the greatest material risk to our clients' investments.

Exhibit I. Summary of disclosures aligned to TCFD guidance for all sectors and supplemental guidance for asset managers*



Governance

Describe the board's oversight of climate-related risks and opportunities.

Legal entity boards (or appropriate governance related committees) oversee senior management and challenge business activities and controls, which includes - where appropriate - climate-related matters.

The J.P. Morgan Asset Management Global Risk Committee oversees risk management which includes climate-related risk, as well as various governance frameworks. It is co-chaired by the J.P. Morgan Asset Management Chief Executive Officer (CEO) and J.P. Morgan Asset Management Chief Risk Officer (CRO).

Describe management's role in assessing and managing climate-related risks and opportunities.

Senior management – including certain members of the Operating Committee ("OC") and relevant leaders within each of our LOBs – are responsible for strategy and execution on ESG matters across the Firm.

Executive management bodies tasked with overseeing progress towards strategic AWM business objectives include the J.P. Morgan Asset & Wealth Management Operating Committee and the J.P. Morgan Asset Management Operating Committee.

Sustainable Investing Oversight Committee ("SIOC") oversees sustainable investing activities globally, including via involvement in ESG Integration (re)certification process of investment groups and our commitments under NZAMi.

Business units and functional groups are responsible for overseeing climate-related risks and opportunities as part of oversight in their respective roles.



Strategy

Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term

Our current view is that transition risks and opportunities are particularly important in the short to medium term (3 to 10 years), whereas physical risk are increasingly important over longer time horizons (up to 30 years), although extreme weather events can have short to medium term impacts.

In terms of transition risks, JPMAM considers both the impact of policies that are intended to mitigate climate change, as well as the impact of shifting demand for products and services resulting from policies implemented to combat climate change.

We recognize that the transition to a low-carbon economy can also present an unprecedented business opportunity for companies that are responding to the challenges of climate change and are able to benefit from shifts in market and consumer preferences.

Physical risks which we have identified include acute physical risks such as potential declines in asset values due to the destruction or degradation of property, and chronic physical risks such as reduced availability of insurance for those physical assets.

Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.

In our role as an investment manager, our climate-related strategy is built around several key components:

- 1. ESG integration across asset classes
- 2. Identifying climate-related risks and opportunities for investments held in our client accounts across time horizons
- 3. Developing climate scenario analysis
- 4. Offering investment strategies for clients with specific climate goals including strategies focused on:
 - Decarbonizing portfolios, including developing a low-carbon transition framework
 - Funding Climate solutions
 - Enabling negative emissions
- 5. Engaging with portfolio companies on climate change risks and opportunities
- 6. Adopting the Climate Risk Framework to better manage climate-related risks

JPMAM's annual financial forecasting and budgeting process, which is informed by industry analysis and inputs from product and client subject matter experts, considers potential financial impacts to the business, including where appropriate and material, climate opportunities and risks. In addition, the Firm stresses financial projections, considering adverse market conditions, client outflows and heightened expense environments.

Describe how climate-related risks and opportunities are factored into relevant products or investment strategies.*

Our investment groups assess the financial materiality of different climate-related factors alongside other relevant factors based on the ESG integration process they have adopted.

Describe how each product or investment strategy might be affected by the transition to a low-carbon economy.*

As stewards of our clients' assets, we consider factors that are material to our clients' long-term financial returns, including the investment risks and opportunities arising from the transition to a lower carbon economy.

By leveraging our global research capabilities within our investment analysis, we are working towards better understanding the balance between potential risks and opportunities arising from this transition.

Additionally, we have a proprietary framework for investing in the low-carbon transition, developed by the Sustainable Investing Team in partnership with our Quantitative Solutions team. The low-carbon transition framework is used to construct products across a range of markets for equity and fixed income funds.

Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario and other considerations are considered by the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario and the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario and the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario and the resilience of the organization's strategy.

We are developing portfolio and risk management tools and research focused on assessing companies' climate-risk exposure and resilience. Our central technology platform provides a hub for our fundamental research analysts to assess companies, share insights and provide updates on engagement efforts.

Describe, where appropriate, engagement activity with investee companies to encourage better disclosure and practices related to climate-related risks in order to improve data availability and asset managers' ability to assess climate-related risks.*

As an active investment manager, we consider engagement with investee companies to encourage them to improve disclosures and adopt their own plans to manage climate risks as part of our investment processes across asset classes. Climate risk is one of our firmwide investment stewardship priorities. We discuss our investment stewardship approach in the Strategy section.

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Risk Management

Describe the organization's processes for identifying and assessing climate-related risks.

With an aim to identify climate-related risks in our investments on behalf of clients, we are continuing to develop portfolio and risk management tools and research focused on assessing companies' climate-risk exposure and resilience.

As primary risk owners, investment teams are responsible for identification, discussion and escalation of climate-related risks associated with investments, as appropriate.

The Firmwide Climate Risk team will review and challenge the integration of climate-related risks as a part of the existing risk management process.

The JPMAM Risk Management team will review and challenge material climate-related risks in investment portfolios as a part of the existing risk management process in J.P. Morgan Asset Management.

Describe how material climate-related risks for each product or investment strategy are identified and assessed. This might include a description of the resources and tools used in the process.*

We identify and assess climate-related risks and opportunities in our actively managed client accounts and strategies by leveraging our proprietary qualitative and quantitative ESG research and assessments.

Qualitative assessment of financially material ESG factors, including climate risk and opportunities, varies by investment group and strategy. For example, the Global Equity and Global Fixed income Currency & Commodities investment groups have developed a detailed a 40-question ESG checklist that sets a baseline fundamental assessment for over 3,000 companies globally.

The J.P. Morgan Asset Management's Quantitative ESG Score is a proprietary ESG score used by some investment groups to support their quantitative and qualitative ESG analysis.

Describe the organization's processes for managing climate-related risks.

Describe how material climate-related risks for each product or investment strategy are managed.*

We have three lines of defense to manage risks in client portfolios, including climate-related risks. These lines work together but with distinct responsibilities to provide oversight over business activities, including climate-related risks.

As primary risk owners (first line of defense), investment teams are responsible for considering financially material ESG factors which may include climate risks as part of their investment analysis in actively managed investment strategies that are considered ESG integrated under our governance processes. In addition to J.P. Morgan Asset Management's risk management process, Investment Directors monitor and assess how investment teams are incorporating material sustainability risks into their investment strategies as part of their ESG integration approach. Our Compliance function will independently risk assess the framework and develop testing and monitoring as appropriate. Our Risk Management are part of the second line of defense and our Audit function is part of our third line of defense.

Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management

Climate change is viewed as a driver of risk that may impact existing types of risks managed by the Firm

J.P. Morgan Asset Management leverages the Firmwide Climate Risk Framework and continues to enhance the processes to capture the transmission channels through which transition and physical risk drivers impact each of our risk types (investment, liquidity, counterparty, reputation, market and operational).

At J.P. Morgan Asset Management, the independent Risk Management team is responsible for challenging and monitoring climate risks.



Metrics and Targets

Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.

Describe metrics used to assess climate-related risks and opportunities in each product or investment strategy. Where relevant, asset managers should also describe how these metrics have changed over time.*

We are currently evaluating the most appropriate metrics to use for assessing climate related risks and opportunities, taking into account, as appropriate, data and methodology, quality and availability, the needs of our clients, and regulatory requirements.

 $Asset\ managers\ should\ disclose\ GHG\ emissions\ for\ their\ AUM\ and\ WACI\ for\ each\ product\ or\ investment\ strategy,\ where\ data\ and\ methodologies\ allow.$

Asset managers should consider providing other carbon footprinting metrics they believe are useful for Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.

Currently we use carbon footprint and weighted average carbon intensity data from Trucost to measure the carbon exposure of investment portfolios in Global Equities and Fixed Income, primarily in regions where this is a regulatory requirement, but also for interested clients.

Our carbon exposure metrics for our assets under management for 2022 are:

Total financed emissions: 57 M tCO₂e,

Carbon footprint: 63 tCO₂e /\$million invested

WACI: 184 tCO₂e/\$million revenue

For more information please refer to our Metrics section which discloses our Scope 1 and 2 GHG emissions.

Asset managers should describe the extent to which their assets under management and products and investment strategies, where relevant, are aligned with a well below 2°C scenario, using whichever approach or metrics best suit their organizational context or capabilities.*

Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.

On November 9, 2022, J.P. Morgan Asset Management's interim net zero targets were published.

We included all of our AUM in listed equities and corporate bonds, as well as certain direct investments in forestry, in scope for the net zero targets. Those assets make up 45% of our total assets under management (\$1.2 trillion), as of December 31, 2021.

Certain of our sustainable strategies are designed for clients with climate objectives and have specific targets to invest in issuers with reduced carbon intensity or carbon emissions. Outside these strategies, net zero targets do not change how we manage client accounts. We will measure progress towards these net zero targets by the proportion of investee companies that have set their own credible net zero targets. By 2030, we anticipate that the percentage of our AUM held in companies with science-based targets will increase from 20% to 55%.

J.P. Morgan Asset Management

^{*} Reflects recommendations that are included in the Supplemental Guidance for Asset Managers, which incorporates updates to the guidance for the financial sector released by the TCFD in 2021 (https://assets.bbhub.io/company/sites/60/2021/07/2021-TCFD-Implementing_Guidance.pdf)

Measuring progress since last report

We have made advancements, as highlighted below in the ways we help our clients to address climate risks and seek to act upon opportunities presented by the transition to a lower carbon economy. We will aim to continue to deepen these capabilities over the coming years.

Expanding choices across our sustainable investment products³

In 2022, we launched 11 funds within our sustainable product suite, including a new fixed income product. These products invest in businesses that we believe are providing solutions to global sustainability challenges such as climate risk management, preserving biodiversity, retrofitting and constructing resilient transport and infrastructure, and fostering social advancement.

Climate change is an investment stewardship priority

In 2022, we engaged⁴ with 539 companies on climate risk across 42 markets and 26 sectors.

Voting on shareholder proposals relating to climate change is another important way of expressing our views where we think company management should be encouraged to better manage climate risk they actually face.

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J.P. Morgan Asset Management takes a global approach to sustainable investing, and the solutions offered through our sustainable investing platform meet our internally defined criteria for a sustainable investment. The evolving nature of sustainable finance regulations and the development of jurisdiction-specific legislation setting out the regulatory criteria for a "sustainable investment" or "ESG" investment mean that there is likely to be a degree of divergence as to the regulatory meaning of such terms. This is already the case in the European Union where, for example, under the Sustainable Finance Disclosure Regulation (EU) (2019/2088) certain criteria must be satisfied in order for a product to be classified as a "sustainable investment." Any references to "sustainable investing," "SI" or "ESG" in this document are intended as references to our internally defined criteria only and not to any jurisdiction-specific regulatory definition.

Our engagement is based on our in-depth investment research on companies, alongside our assessment of macroeconomic drivers, sector-specific factors and financially material ESG themes. For more information, please refer to our 2022 Investment Stewardship Report.

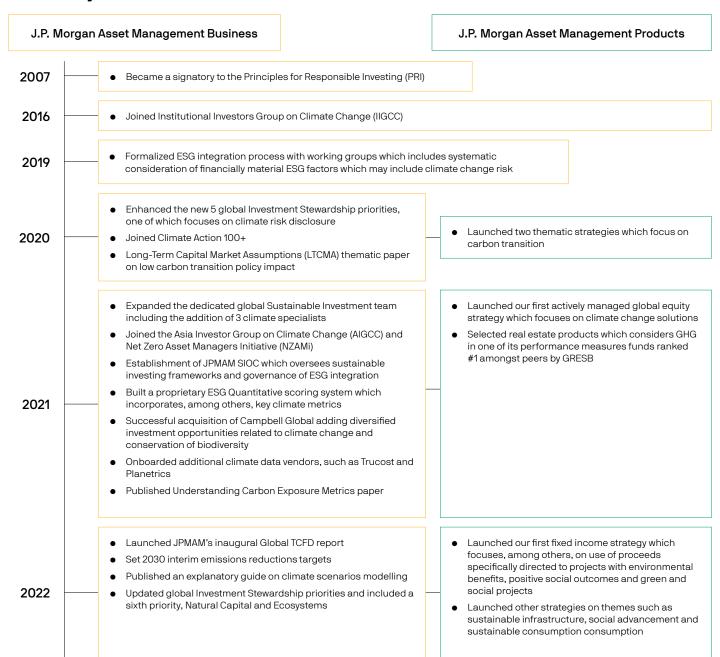
We continue developing our climate analytics capabilities

We continue to work towards enhancing our processes for identifying, assessing and managing climate-related risks. This includes working towards developing the capabilities to deliver climate insights as well as integrating climate-related data and metrics into a centralized J.P. Morgan Asset Management platform alongside other material information used for portfolio management and research. The approach integrates what J.P. Morgan Asset Management has identified to be the most appropriate data, scenarios and analytical tools, combined with the expertise from our dedicated climate researchers in the Sustainable Investing team and our 200+ fundamental researchers.



We have reached several key milestones along the journey of enhancing the integration of ESG risk considerations, including climate and sustainable investing.

Exhibit II. Key Milestones⁵



⁵ For milestones relating to Firmwide climate action to date, please refer to the JPMC 2022 Climate Report.

J.P. Morgan Asset Management

It is important to remember that the MSCIESG metrics provided in this report may not fully reflect future economic reality. At J.P. Morgan Asset Management, our ESG specialists collaborate closely with our research analysts to understand when that may be the case, and where appropriate we engage with companies to improve disclosure and enhance policies. Where we think climate risk may be material, we review fossil fuel exposure, disclosed reduction targets going forward and other relevant information.

DISCLAIMERS

Statements made in this report by J.P. Morgan Asset Management (together with its affiliates, "JPMAM") relating to environmental, social and governance ("ESG") matters, including those included on their websites may constitute "forward-looking statements" within the meaning of applicable law, which may not be a reliable indicator of future performance. JPMAM cautions that forward-looking statements are subject to numerous assumptions, risks, and uncertainties, which may change over time and speak only as of the date they are made. JPMAM assumes no duty to and does not undertake to update forward-looking statements. Actual results could differ materially from those anticipated in forward-looking statements and future results could differ materially from historical performance.

The methodology and calculations used by companies that provide awards and ratings are not verified by J.P. Morgan Asset Management and therefore are not warranted to be accurate or complete. All data is based on past holdings information and is not a guide as to how the fund may be scored by MSCI in the future. The ESG Coverage (%) relates to the percentage of a fund's holdings in scope for MSCI's ESG analysis. Some assets, such as cash, are out of scope for analysis and are removed from a fund's holdings prior to calculating both the ESG Coverage (%) and ESG Analysis.

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