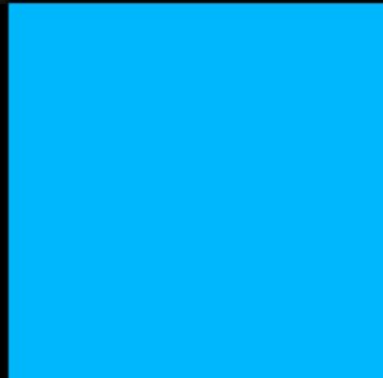




**Macquarie Asset Management**  
Taskforce for  
Climate-related  
Financial Disclosures  
Report

June 2024



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# 01

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## Introduction



# 1. Introduction

## 1.1 About MAM

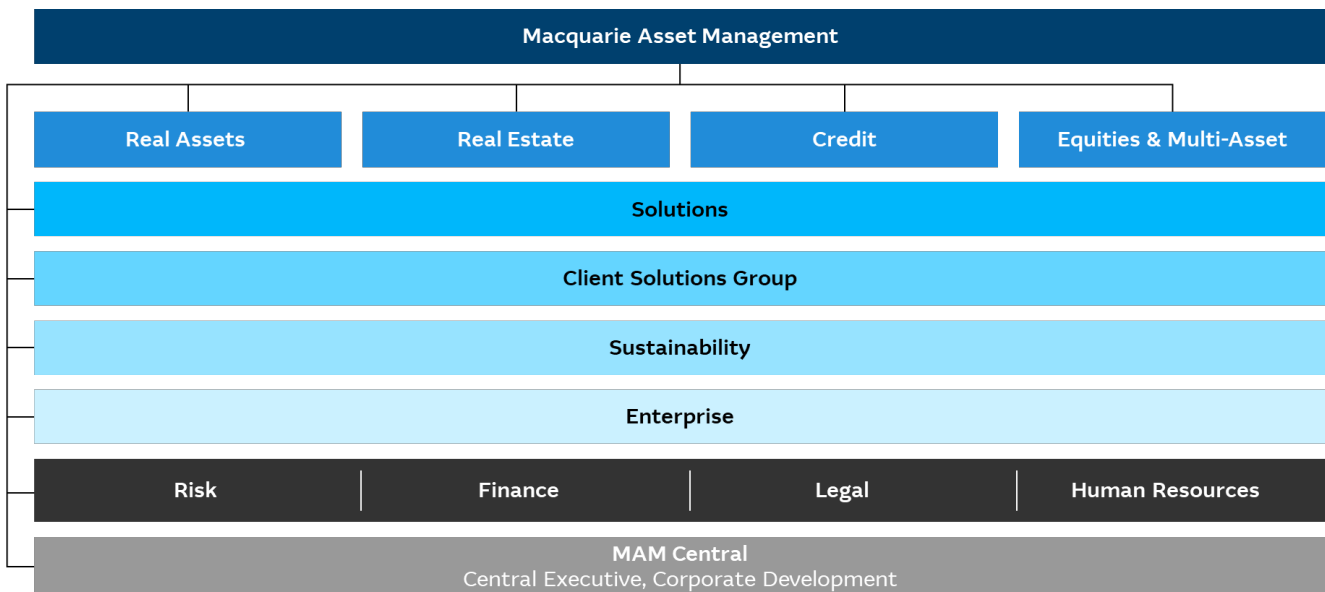
Macquarie Asset Management (**MAM**, also referred to in this report as **we**, **our** or **us**) is a global asset manager integrated across public and private markets. We focus on generating positive outcomes for our clients, portfolio companies and communities. This starts with understanding their needs and providing solutions that seek to deliver superior results over the long term.

Managing approximately £484.8<sup>1</sup> billion in assets with a team of more than 2,450 people operating in 25 markets, we provide a diverse range of investment solutions across Real Assets (Infrastructure, Green Investments, Agriculture), Real Estate, Credit, Equities & Multi-Asset, and Solutions (a cross-MAM business group that provides new strategies and initiatives for MAM).

Refer to MAM's website for further information at [www.macquarie.com/mam](http://www.macquarie.com/mam).

MAM is part of Macquarie Group (**Macquarie**), a diversified financial services group operating in 34 markets. Macquarie was founded in 1969 and is listed on the Australian Securities Exchange. Refer to Macquarie's website for further information at [www.macquarie.com](http://www.macquarie.com).

### MAM organisational chart



<sup>1</sup> As at 31 March 2024. Private markets assets under management (AUM) includes equity yet to deploy and equity committed to assets but not yet deployed.

## 1.2 About this report

This report (the “**Report**”) has been prepared to comply with the UK Financial Conduct Authority’s (FCA) mandatory climate-related reporting requirements for UK asset managers in Chapter 2 of the Environmental, Social and Governance (ESG) Sourcebook in the FCA Handbook (the “**FCA Rules**”), consistent with the Recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD)<sup>2</sup>. The Report covers the period from 1 January 2023 to 31 December 2023 (the “**Reporting Period**”) for the following MAM entities regulated by the FCA in the UK (collectively the “**Firms**”):

- Macquarie Infrastructure and Real Assets (Europe) Limited (**MIRAE**L), an alternative investment fund (AIF) manager, that undertakes some of MAM’s Real Assets activities in the UK; and
- Macquarie Investment Management Europe Limited (**MIMEL**), a MiFID investment firm, that undertakes MAM’s Equities & Multi-Asset and Credit activities in the UK.

In line with the TCFD’s recommendations, this Report provides details on **Governance, Strategy, Risk Management, and Metrics and Targets** in relation to climate-related risks and opportunities of the Firms and is our first TCFD Report issued under the recommendations. As a global asset manager, certain areas of this Report may be written from a global perspective, such as Section 3 (Strategy) and Section 4 (Risk Management) while other areas may be more focused on the Firms, for example, Section 2.1 (Governance) and Section 5 (Metrics and Targets).

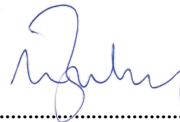
This Report relates to the relevant assets that the Firms manage as both investment manager in respect of portfolio management services, and fund manager in respect of AIFs and advise on as part of TCFD in-scope business (as defined in the FCA Rules). In this Report, the Firms’ managed products and services are together referred to as the “**Portfolios**”. This entity-level TCFD Report generally applies in respect of all Portfolios, however, it is separate from any product-level TCFD reports that may be produced with respect to particular funds or separately managed accounts.

This Report is complementary to MAM’s Sustainability reporting, including [MAM’s FY23 Sustainability Report](#) and [2022 Stewardship Report](#). For more information on our sustainability activities, please visit our website [here](#). Additionally, this Report is separate from the [Macquarie Group Net Zero and Climate Risk Report](#) that is informed by the TCFD recommendations and Macquarie’s commitments as a member of the Net-Zero Banking Alliance.<sup>3</sup>

As this Report is the Firms’ first TCFD Report, it has been prepared using the most up-to-date information available for the Reporting Period (in so far as is reasonably practicable). However, climate reporting in the asset management industry is still in its infancy, and there are significant data challenges and methodological challenges associated with climate reporting. We have included TCFD-aligned disclosures where it is fair, clear and not misleading for us to do so. We have also explained limitations on our ability to disclose, and the steps being taken to address those limitations in Sections 3.2 and 5.2.

### Compliance statement

The disclosures in this Report comply with the climate-related disclosure requirements in the FCA Rules.



.....  
**Martin Bradley**

Chief Executive Officer

Macquarie Infrastructure and Real Assets (Europe) Limited



.....  
**Peter Glaser**

Chief Executive Officer

Macquarie Investment Management Europe Limited

<sup>2</sup> Final Report: “Recommendations of the Task Force on Climate-related Financial Disclosures”, Task Force on Climate-related Financial Disclosures, June 2017, <https://assets.bbhub.io/> (PDF).

<sup>3</sup> The Commitment: Net-Zero Banking Alliance’, UN Environment Programme, Finance Initiative, accessed September 2023, <https://www.unepfi.org/>.





# 02

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## Governance

## 2. Governance

### 2.1 Board oversight of climate-related risks and opportunities

The MIRAEL and MIMEL boards (hereafter the “**Boards**”), in accordance with their respective charters, are responsible for overseeing the material risks within each entity's activities. The Boards typically meet four times per year with additional ad-hoc meetings as required and receive regular reporting on sustainability-related matters from the MAM Sustainability team. Updates from the MAM Sustainability team provide the Boards with an overview of applicable sustainable finance regulatory developments, relevant market developments, updates on relevant internal sustainability initiatives and reporting, and progress against MAM's Net Zero Commitment and targets. Please refer to Section 4 for more information on the responsibilities of the MAM Sustainability team.

MAM's approach has been to integrate the consideration of climate and sustainability risks into existing processes and therefore the Boards do not receive regular standalone reporting specifically addressing climate-related risks or opportunities that the Firms or Portfolios may face. However, the Boards do receive reporting on material issues and risks from various teams including the MAM Risk team, MAM Compliance team, and investment and asset management teams, and such reporting would include material risks arising from climate, if identified.

### 2.2 Management's role in assessing and managing climate-related risks and opportunities

The structures described below apply across MAM, including with respect to the Firms. As the Firms are

MAM entities, the majority of the committees set out in this section do not report into the Boards, save for certain Investment Committees. Rather, these committees lead up to the MAM Executive Committee. The MAM governance structure provides that senior management, consisting of the MAM Executive Committee, implement MAM's strategy across their respective business areas, including the legal entities through which they operate.

#### 2.2.1 MAM Executive Committee

The MAM Executive Committee sets the overall strategic direction of MAM's approach to climate change and has accountability for MAM's management of climate-related risks and opportunities and MAM's Net Zero Commitment across its whole portfolio. MAM's Chief Sustainability Officer reports to the MAM Group Head and is a member of the MAM Executive Committee.

The committee comprises MAM's Group Head, Chief Sustainability Officer, Chief Risk Officer, Chief Operating Officer, Chief Financial Officer, Chief Commercial Officer, General Counsel, Head of Human Resources, Head of Client Solutions Group, Head of Real Assets, Head of Real Estate, Head of Credit and Head of Equities & Multi-Asset.

The MAM Executive Committee meets fortnightly and receives regular sustainability reporting that includes updates on climate initiatives and MAM's Net Zero Commitment. A simplified organisational chart of the key teams involved in supporting governance across MAM is shown here with further details available in our latest [Stewardship Report](#).



## 2.2.2 Overview of other MAM committees

In addition to the MAM Executive Committee described above, MAM management is supported by a number of committees as summarised in the following table. The committees below do not consider climate-related issues on a standing basis however, they are the relevant forums to which such issues are escalated as required. The specific committee that would consider such an issue would depend on the asset class and issue in question and is determined on a case-by-case basis.

Committees	Frequency	Roles and responsibilities
<b>MAM Risk Committee</b>	Quarterly	<p>The MAM Risk Committees primary objective is to provide a dedicated forum for the oversight of the identification, measurement, evaluation, monitoring and control or mitigation of material risks that arise in or because of the operations of MAM.</p> <p>The MAM Risk Committee comprises the MAM Executive Committee members, with MAM-aligned leads from Risk Management Group (<b>RMG</b>) Compliance and RMG Operational Risk, and leads within the MAM Sustainability team as standing invitees to the committee.</p> <p>The committee provides strategic guidance and acts as an escalation forum for members to raise key issues to ensure that MAM appropriately and proportionately manages its material risks and complies with obligations under the relevant laws, regulations and Macquarie policies. The committee also provides a forum for Macquarie's RMG and other Central Services Groups to provide updates on Macquarie-wide risk themes, risk management priorities and learnings.</p>
<b>MAM Reputational Risk Committee</b>	As required for specific agenda items	<p>The MAM Reputational Risk Committee is a sub-committee of the MAM Risk Committee convened by the MAM Risk team on an ad-hoc basis when required. The committees core members are MAM's Group Head and MAM's Chief Risk Officer, with other members attending the called committee nominated dependent on the specific subject of discussion. The committees purpose is to review and determine matters that may give rise to material reputational risk to MAM, ensuring they are escalated and evaluated by the relevant stakeholders.</p>
<b>MAM Operating Committee</b>	Monthly	<p>The MAM Operating Committees key objective is to provide a forum to prioritise MAM initiatives and resources, govern change, optimise the MAM operating model and operational expenditure, monitor and manage key risks, influence Macquarie activities that impact MAM and to share information that is essential and/or high value across MAM.</p> <p>The MAM Operating Committee provides strategic guidance and acts as an escalation forum for key issues to ensure that MAM operates effectively to meet its business objectives, internal and external obligations, and to manage risk in line with established policies, standards, and risk appetite thresholds of MAM and Macquarie.</p> <p>Effective functioning of the MAM Operating Committee provides the MAM Executive Committee and the MAM Group Head with the required oversight on MAM's performance, key initiatives, and compliance with our internal and external obligations. These key initiatives may include any operational matters relating to the delivery of processes, systems and resources to meet MAM's sustainability goals.</p>
<b>MAM Divisional Executive Committee and/or</b>	Varies for each asset class; at	<p>Each MAM asset class division<sup>4</sup> has an Executive Committee and/or Management Committee. While the terms and scope of each committee may differ across the different divisions of MAM, the committees are typically chaired by the divisional or business heads and are forums for</p>

<sup>4</sup> MAM's asset class divisions include Real Assets, Real Estate, Credit, and Equities & Multi-Asset.



Committees	Frequency	Roles and responsibilities
<b>Management Committee</b>	least bi-monthly	them to receive updates from the key representatives of the relevant business lines and specialist functions. The committees will typically discuss new business strategies, staff matters, operational updates, risk management, and other organisational matters. Matters discussed may include sustainability and/or climate-related risks and opportunities, and sustainability-related projects and initiatives.
<b>Equities &amp; Multi-Asset Investment Governance Committee</b>	Monthly	This committee is responsible for performing an independent review of Equities & Multi-Asset investment strategy performance in the context of a particular strategies investment objectives. The remit of this committee extends beyond ESG factors, but ESG factors are a core area of focus amongst the members. The Equities & Multi-Asset Global Proxy Voting Committee reports into this committee.
<b>MAM private markets<sup>5</sup> Investment Committees</b>	As required	<p>Each private markets fund has an investment committee, whether at fund level or divisional/regional level, dependent on the product strategies. This committee acts as the ultimate decision-making body responsible for overseeing the various stages of the of the investment life cycle as shown in Section 4.2.</p> <p>For some of the Portfolios managed by the Firms, the Boards have delegated investment decision making responsibilities to the relevant investment committees.</p> <p>The investment committee reviews asset papers and due diligence reports that may contain climate-related risks and opportunities put to the committee by the asset teams for consideration in investment decisions. Members of the MAM Sustainability team may attend an investment committee meeting at the request of the MAM Risk team on an ad-hoc basis should material ESG factors arise for discussion during MAM's management of an asset.</p>

<sup>5</sup> MAM private markets refers to MAM's Real Assets and Real Estate divisions, and the Private Credit capability of the Credit division.



# 03

## Strategy

# 3. Strategy

MAM's sustainability strategy, including with respect to climate, is set by the MAM Executive Committee, and applies to the Firms and their Portfolios.

MAM manages a diverse suite of products and asset classes on behalf of our clients, with different levels of ownership in, and influence over, the assets in

which we invest. As a result of this, the way we exercise our fiduciary responsibilities varies between our business divisions (and within each division) and, accordingly, so does the way we implement our strategy, as outlined in further detail below.

## 3.1 Description and impact of climate-related risks and opportunities

The risks of climate change to MAM and the investments held on behalf of our clients are the financial and non-financial risks arising from physical climate risk, transition climate risk or liability climate risk drivers:

Physical climate risk	Transition climate risk	Liability climate risk
Includes the chronic risk arising from progressive shifts in climate patterns and the acute risk presented by changes to the frequency and magnitude of extreme weather events.	Includes risk arising directly or indirectly from the process of (orderly or disorderly) adjustment towards a lower-carbon and more environmentally sustainable economy, including changes in policy and regulatory settings, technological innovation, social adaptation, and market changes.	Includes the potential for litigation or regulatory enforcement due to the failure to adequately consider or respond to the impacts of climate change.

MAM's focus to date has been on incorporating the consideration of climate-related risks and opportunities into its investment decision making processes. Please see Section 4.2 below for further information regarding how we apply this approach when making investment decisions. MAM is currently in the process of identifying the specific climate-related risks and opportunities the investments in its portfolios may face in the short, medium, and long term, and the impact of such risks and opportunities. We will report on the outcome of this assessment as it relates to the Portfolios in future TCFD reporting.

### 3.1.1 Our Net Zero Commitment

In late 2020, MAM set the foundations for our net zero journey by publicly announcing our Net Zero Commitment. In supporting the transition to a low carbon economy, MAM has made the following commitments:

- Where we have control or significant influence,<sup>6</sup> we will invest and manage our portfolio in line with global net zero Scope 1 and 2 greenhouse gas (GHG) emissions by 2040.
- Where we do not have control or significant influence, such as in our managed portfolio of

public securities, we will continue to support the goals of the Paris Agreement<sup>7</sup> in a manner consistent with our client-guided fiduciary and regulatory responsibilities.

Throughout this document, we refer to these commitments as MAM's "**Net Zero Commitment**". As MAM entities, the Firms are subject to MAM's Net Zero commitment.

For further information on MAM's Net Zero Commitment, please see [Our approach to Sustainability](#).

<sup>6</sup> MAM generally only has influence over Scope 1 and 2 emissions. However, to the extent possible, in line with the Net Zero Asset Managers initiative guidance, MAM intends to support assets where it has control or significant influence to reduce their Scope 3 emissions.

<sup>7</sup> The Paris Agreement's central aim is to strengthen the global response to the threat of climate change by maintaining a global temperature rise this century well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5°C. The Intergovernmental Panel on Climate Change concluded the need for net zero emissions by 2050 to remain consistent with 1.5°C.



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As a global asset manager headquartered in Australia, MAM has sought to support the goals of the Paris Agreement when developing our Net Zero

Commitment. MAM has therefore not specifically considered the UK government's commitment to a net zero economy<sup>8</sup> when developing our strategy.

### 3.1.2 Net Zero Asset Managers initiative

In further support of our Net Zero Commitment, MAM joined the Net Zero Asset Managers (**NZAM**) initiative in 2021. The initiative comprises an international group of asset managers committed to supporting the goal of net zero GHG emissions by 2050, in line with global efforts to limit warming to 1.5°C, considering Scope 1 and 2 emissions and, to the extent possible, material portfolio Scope 3 emissions. Please refer to the [NZAM initiative website](#) for further information on the commitments made by signatories of the initiative.

### 3.1.3 Our approach to net zero

Our approach focuses on three core actions to achieve our Net Zero Commitment:

<b>01</b> <b>Decarbonising our portfolio:</b> adopting appropriate methodologies, targets, and implementation strategies across asset classes to support the decarbonisation of our portfolio.	<b>02</b> <b>Investing in climate solutions.</b>	<b>03</b> <b>Stakeholder engagement:</b> engaging with clients, industry and government to address challenges and barriers to reaching net zero.
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MAM continues to support carbon-intensive industries and companies, including those in the electricity, water, gas, agriculture, transport, mining, oil and waste sectors. These industries provide products and services that communities rely on, and our approach recognises that long-term solutions lie in collaboration, rather than divestment.

For further detail, please see [Our approach to sustainability](#).

## Action area 1:

### Decarbonising our portfolio

For our portfolios that we have committed to manage in line with net zero under NZAM<sup>9</sup> (“**in-scope portfolio holdings**”), MAM has adopted methodologies and set targets in support of our Net Zero Commitment that are tailored to each asset class in which we invest. In doing so, we have considered the methodologies, tools, and resources currently available in the market. Our approach is likely to evolve as the industry gains a deeper understanding of the various pathways to net zero

and their associated challenges across the sectors and asset classes in which we invest.

Overall, MAM has used the NZAM-endorsed Paris Aligned Investment Initiative (**PAII**) [Net Zero Investment Framework \(NZIF\)](#) and supporting asset class-specific guidance to inform our approach to net zero across each of our asset classes for its in-scope portfolio holdings, as we believe it most closely aligns with MAM's existing investment approach.

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<sup>8</sup> As set out in the *Climate Change Act 2008 (2050 Target Amendment) Order 2019* <https://www.legislation.gov.uk/ukpga/2008/27/contents>.

<sup>9</sup> In May 2022, MAM disclosed that 43 per cent of assets were managed in line with NZAM criteria as detailed in NZAM's Initial Target Disclosure Report.

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## Action area 2:

### Investing in climate solutions

Climate solutions are those activities, goods, or services that contribute substantially to, and/or enable, emissions reductions to support decarbonisation in line with Paris aligned pathways towards net zero, or that contribute substantially to climate adaptation.

Macquarie has invested significantly in the development and deployment of climate solutions over the past two decades, including through the purchase of the Green Investment Group (GIG) from the UK Government in 2017. To further support Macquarie's ambition, GIG moved into MAM in April 2022, forming MAM Green Investments as a sub-division of Real Assets.

The move has enabled us to combine the renewables project development and finance expertise of MAM Green Investments and its portfolio of specialist development platforms with the fiduciary capital resources entrusted to MAM, thereby providing access to larger pools of capital and finance that in turn will allow us to facilitate the further development of renewables projects.

Across MAM we are seeing many clients are now expressing their climate-related preferences, both in favour and against MAM managing their portfolios in

line with our Net Zero Commitment. We carefully consider those preferences when developing new products and bespoke solutions for our clients.

**105 GW** of green energy assets in development, under construction, or currently operating<sup>10</sup>

**\$A1.4b** invested or arranged financing in MAM green energy assets during FY2024<sup>11</sup>

To this end, we seek to facilitate increased client investment in climate solutions through the introduction of new investment products dedicated to the energy transition across both public and private markets, including some of the Portfolios of the Firms, that disclose under Articles 8 or 9 of the EU's Sustainable Finance Disclosure Regulation (SFDR).<sup>12</sup>

For further detail on MAM's investments in climate solutions, please see the latest [MAM Sustainability Report](#).

## Action area 3:

### Stakeholder engagement

As an asset manager and fiduciary, MAM recognises the importance of stakeholder collaboration and frequently engages with clients, governments, regulators, industry alliances, communities, and other stakeholders on ESG matters, including climate change.

#### Engagement with clients

Across MAM, our teams provide information and engage with clients on our sustainability activities through a variety of channels, including:

- Dedicated client relationship managers for all MAM institutional financial products.

- Regular updates on fund or investment activity and performance through quarterly reporting, including reporting on portfolio emissions data where possible.
- A range of client marketing communications, including knowledge-based events and webinars and sharing important announcements and thought leadership, including our "Pathways" and "Navigating to Net Zero" podcast series.
- Encouraging continuous client feedback through workshops and meetings.

MAM also engages with potential investors and consultants through education sessions, pitches, and a range of client marketing communications to help

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<sup>10</sup> On our balance sheet or under Macquarie management as at 31 March 2024. Represents MAM portion only, not Macquarie. GW of green energy assets reflect 100% generating capacity of each asset, not the proportion owned/managed by Macquarie. Excludes lending and private credit funds. Split by life cycle stage: 91 GW in development; 2 GW under construction; 12 GW currently operating. Refer to Macquarie's [FY2024 Basis of Preparation for ESG Reporting](#) for the definition of 'green energy assets'.

<sup>11</sup> On our balance sheet or under Macquarie management. Refer to the [FY2024 Basis of Preparation for ESG Reporting](#) for the definition of 'green energy assets'.

<sup>12</sup> Funds disclosing under Article 8 of SFDR seek to promote environmental and/or social characteristics through binding investment criteria. Funds disclosing under Article 9 of SFDR have sustainable investment or a reduction in carbon emissions as their objective.

them understand our business and our approach to sustainability and climate-related risks and opportunities.

### Industry engagements and advocacy

The transition to a low carbon and climate resilient economy will involve the development of new technologies and overcoming complex challenges across a range of sectors.

There are a range of industry working groups and advisory committees that seek to promote guidance, tools, and standards that support effective management of climate-related risks and identify solutions to some of the major transition challenges of the financial sector and the real economy. We participate in industry working groups and advisory committees where we believe we can contribute to their objectives.

For further detail about the industry alliances and initiatives that MAM engages with, please see [Our approach to sustainability](#).

MAM also collaborates with and supports Macquarie's participation with some of the world's leading industry alliances and advocacy groups across a wide range of sectors, including the

Glasgow Financial Alliance for Net Zero and the Sustainable Markets Initiative, as well as attending global climate events, such as the United Nations Climate Change Conference. Refer to the latest [Macquarie Net Zero and Climate Risk Report](#) for further information on how Macquarie engages across industry.

### Engagement with government and regulators

MAM recognises the importance of sustainable finance policy advocacy in accelerating the transition towards a low carbon and climate-resilient economy. MAM has provided feedback on sustainable finance regulatory and legislative proposals through our membership with industry affiliations such as the UK's Investment Association and the Australian Financial Services Council. We have also contributed feedback on the EU Taxonomy, EU Sustainable Finance Disclosure Regulation, and Australian Sustainable Finance Strategy via such bodies.

### Engagement with third-party managers

The Firms do not delegate portfolio management to third-party (non-affiliates) managers in respect of any of the Portfolios.

## 3.2 Scenario analysis

Information on how climate-related scenario analysis is carried out by the Firms with respect to the Portfolios is set out below.

### 3.2.1 Private markets<sup>13</sup>

An assessment of the physical and transition risks impacting MAM's Real Assets Infrastructure and Green Investments portfolio companies and MAM's Private Credit portfolios (which include the Firms' Portfolios) is being conducted in 2024 to assess resilience to climate risk. A physical risk assessment was previously conducted in 2021 on 160 Real Asset Infrastructure portfolio companies, including some held by the Firms. The assessment considered physical risks under the Intergovernmental Panel on Climate Change (IPCC) Representative Concentration Pathways 4.5 and 8.5 scenarios. The risks were assessed for 2021, 2030 and 2050, and did not identify any stranded asset risks within the portfolio.

The assessment being carried out in 2024 will apply the following datasets and scenarios:

- **Physical risks:** We use hazard indicators from downscaling climate models according to three

IPCC Scenarios, linked with corresponding Network for Greening the Financial System (NGFS) scenarios. We apply predefined thresholds corresponding to risk levels for each of the hazards covered. Physical risks covered include, but are not limited to, extreme weather events, sea level rise, water stress, wildfires, extreme heat, and flooding.

- **Transition risks:** We identify two of the most material risks and opportunities per sector and identify a proxy, using the NGFS dataset, including three scenarios and geographies. The delta between their value in 2025 and 2030, 2025 and 2040 and 2025 and 2050 is then calculated. Transition risks considered include, but are not limited to, carbon pricing policy, shifts in supply and demand of commodities, rapid low carbon technology change, changing customer and community expectations.

<sup>13</sup> Private markets refers to MAM's Real Assets and Real Estate divisions, and the Private Credit capability of the Credit division.



Scenario	Description of scenario <sup>14</sup>	Physical risk scenario <sup>15</sup>	Transition risk scenario <sup>16</sup>
<b>Hot house world</b>	Scenarios assume that some climate policies are implemented in some jurisdictions, but global efforts are insufficient to halt significant global warming. Critical temperature thresholds are exceeded, leading to severe physical risks and irreversible impacts like sea-level rise.	SSP5-8.5	Current policies
<b>Disorderly transition</b>	Scenarios explore higher transition risk due to policies being delayed or divergent across countries and sectors. Carbon prices are typically higher for a given temperature outcome.	SSP2-4.5	Delayed transition
<b>Orderly transition</b>	Scenarios assume climate policies are introduced early and become gradually more stringent. Both physical and transition risks are relatively subdued.	SSP1-2.6	Net zero 2050

MAM's intention is to use the outcomes of the scenario analysis to better understand the resilience of the Portfolios to the different scenarios outlined above.

### Real Assets - Infrastructure and Green Investments

Separate to the scenario analysis assessment described above, MAM considers climate-related risks (including both physical and transition risk) for all investments at acquisition and throughout the investment holding period, applying its proprietary System 7 Asset Management Framework<sup>17</sup> in doing so. MAM actively monitors physical risks at the portfolio company level through periodic asset reviews. Identified material physical risks are incorporated into portfolio company risk registers and subsequently managed alongside other key investment risks.

During the reporting period MAM has supported the majority of its portfolio companies to measure and verify their baseline year Scope 1 and 2 GHG emissions, set interim GHG emissions reduction targets for 2030 or sooner, and develop Board-approved net zero business plans. These net zero business plans provide a long-term roadmap to commence company net zero alignment and identify near-term emissions abatement measures. Selection, prioritisation and budgeting of these measures are at the discretion of each portfolio company. Plans are revisited annually and amended as required.

Additionally, MAM has supported portfolio companies by developing best practice guidance materials, deploying specialist resources to aid in business plan development and/or connecting them to industry experts to identify abatement options for decarbonisation.

### Private Credit

Data availability to conduct climate scenario analysis is limited for our Private Credit business given the nature of the relationship between credit investors and borrowers. Acknowledging this, we directly engaged with borrowers during the reporting period to understand their approach to physical and transition risks, where appropriate. We also engaged with key equity sponsors to obtain any scenario analysis they had conducted on the assets.

We are currently conducting physical and transition scenario analysis as outlined above. The analysis is being conducted for key sector and geography combinations with the aim of identifying key risks and opportunities across our Private Credit portfolio.

Beyond climate scenario analysis, we consider physical and transition risks during the due diligence process for all investments. Where these are

<sup>14</sup> Network for Greening the Financial System, Scenarios Portal, <https://www.ngfs.net/ngfs-scenarios-portal/>.

<sup>15</sup> Illustrative scenarios that cover the range of possible future development of anthropogenic drivers of climate change covering very high GHG emissions (SSP5-8.5), intermediate GHG emissions (SSP2-4.5), and low GHG emissions declining to net zero around or after 2050, followed by varying levels of negative CO<sub>2</sub> emissions (SSP1-2.6), IPCC, 2021: [Summary for Policymakers](#).

<sup>16</sup> Scenarios assume ambitious scenario that limits global warming to 1.5°C by 2100 through "business as usual" scenario ("Current policies"), no annual emission decrease until 2030 requiring strong policies to limit warming to below 2°C with limited CO<sub>2</sub> removal ("Delayed transition"), and stringent climate policies and innovation ("Net zero 2050").

<sup>17</sup> MAM value creation practices are underpinned by its proprietary System 7 asset management framework, which sets out minimum standards for value creation initiatives and aims to drive performance across all aspects of portfolio company's operations.

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assessed as material, we take further action to understand the risks, such as conducting enhanced due diligence or sourcing additional analysis from third-party providers.

### **3.2.2 Public markets<sup>18</sup>**

MAM's public markets businesses are managed by investment teams focused on providing investment capabilities across global public equities, fixed income, and multi-asset solutions. These specialised investment teams focus on delivering long-term, consistent results for our clients.

Environmental risks, including both physical and transition risks, are considered and incorporated into each investment teams investment analysis to support the decision-making process for portfolio inclusion, where appropriate.

Investment teams have access to a proprietary tool to assess a portfolios exposure to different carbon pricing scenarios over different time periods using various pricing estimates. Additionally, MAM leverages a third-party 'climate scenario alignment analysis' tool, which is available to all public markets' investment teams. Output from the third-party tool can be used to analyse the alignment of an asset or portfolio to different climate scenarios, and to identify the current and future emissions intensity performance of an investee company. Results are available on a portfolio, sector, and company level.

### **3.2.3 Quantitative scenario analysis**

As outlined above, MAM is conducting scenario analysis in 2024. Once the results are available, the findings of any quantitative scenario analysis will be assessed alongside methodological assumptions and limitations to ensure, where practicable, appropriate potential future disclosures are accurate and offer sufficient context.

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<sup>18</sup> Public markets businesses of MAM comprise of the Equities & Multi-Asset division and the Fixed Income and Leveraged Credit capabilities of the Credit division.



# 04

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## Risk Management



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## 4. Risk Management

Macquarie's Risk Management Framework (RMF) is the totality of systems, structures, policies, processes and people within Macquarie that identify, measure, evaluate, monitor, report and control or mitigate all internal and external sources of material risk. Macquarie's RMF defines the risks of climate change ("climate risks") to Macquarie as the financial and non-financial risks arising from physical climate risk, transition climate risk or liability climate risk drivers (see section 3.1 for further detail).

Under Macquarie's Code of Conduct, its people share responsibility for identifying and managing environmental and social risks, including climate-related risks, as part of normal business practice. MAM investment teams are supported by dedicated Sustainability and Risk teams, as well as other specialists across MAM and Macquarie, as further outlined below.

### 4.1 Risk management approach

MAM is subject to the RMF. As part of MAM, the Firms are also subject to the RMF.

The Boards of the Firms have endorsed the RMF on the premise that a disciplined approach to risk management is best maintained with a single risk management framework that is applied appropriately throughout Macquarie including the Firms. This framework is supported by a Macquarie-wide approach to policies and procedures.

In addition to Macquarie-wide policies, climate risk is recognised as potentially impacting a broad range of material risks within the RMF. MAM has its own suite of risk management policies that govern the investment, credit, liquidity, operational, legal, and reputational risks specific to MAM's business structures, operations, investments, and stakeholders.

Macquarie's approach to risk management adopts the 'three lines of defence' model, which sets risk ownership responsibilities functionally independent from oversight and assurance:

- The responsibility for managing risks and opportunities, including climate-related risks, is owned in the first line of defence by each of MAM's investment and asset management teams, with support provided by MAM's specialist functions, such as Sustainability, Risk, Compliance and Legal. Investment and asset management teams are responsible for monitoring their portfolios for ESG risks, including climate-related

risks, and reporting on those risks within the framework set out by the RMF.

- RMG is an independent and centralised function that provides objective review and challenge, oversight, monitoring and reporting in relation to Macquarie's material risks as the second line of defence. With respect to MAM, RMG's approach in relation to climate-related risks is subject to Macquarie's policies and controls, including but not limited to, Macquarie's Environmental & Social Risk Policy and New Product and Business Approval process. When new or evolving risks are identified, including climate-related risks, the impacted areas of the RMF are assessed and adjusted where required to ensure the risks are managed effectively. The Internal Audit Division (IAD), as the third line, provides independent and objective risk-based assurance to senior management, the Board Audit Committee and other board committees on compliance with, and effectiveness of, Macquarie's financial and risk management framework, including its governance, systems, structures, policies, processes and people for managing material risks. IAD regularly reassesses emerging risks, regulations and trends to ensure that these are adequately captured within the internal audit plan, including climate-related risks.

For further information on Macquarie's management of climate-related risks, please see the latest [Macquarie Group Net Zero and Climate Risk report](#).

## 4.2 Processes for identifying, assessing, and managing climate-related risks

Effective ESG integration and management is core to MAM’s strategy, decision-making, and investment processes. Given the diverse range of products and asset classes MAM manages on behalf of our clients, the way we apply our ESG policies can differ across our businesses.

A range of commercial factors, including material ESG risks and opportunities, are assessed before investing across different asset types. Our investment and asset management teams focus on the most material ESG issues, including climate-related risks, when evaluating a prospective investment, as it helps our business understand the risks and opportunities more comprehensively and allows us to make better investment decisions for clients.

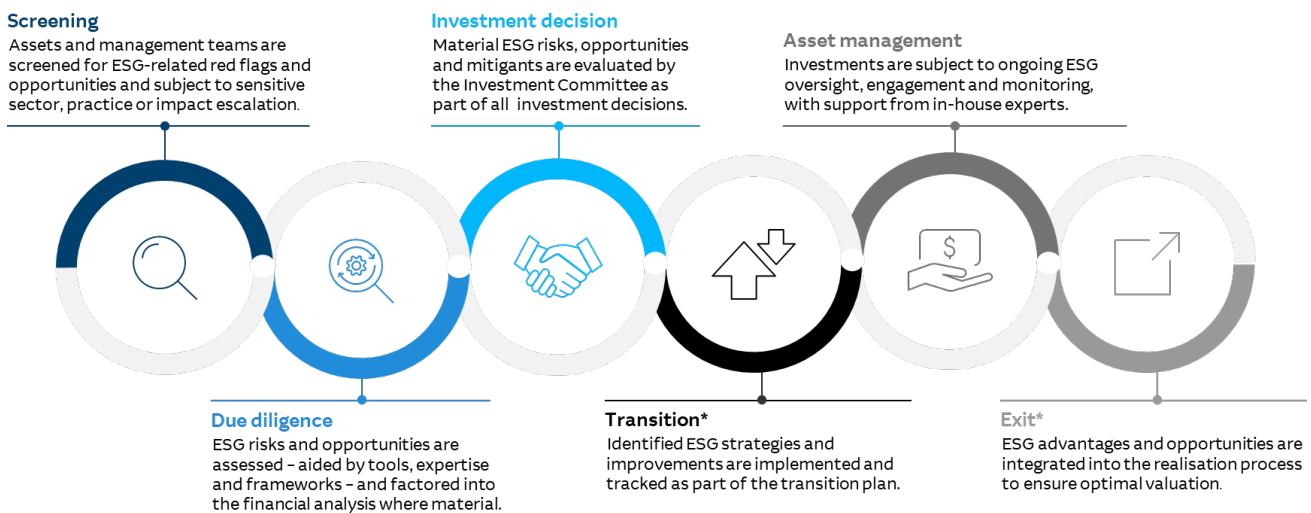
Examples of ESG factors that MAM investment teams may consider are set out below:

Environmental	Social	Governance
<ul style="list-style-type: none"> <li>• Climate change risks</li> <li>• GHG emissions</li> <li>• Biodiversity and ecosystems</li> <li>• Resource efficiency</li> <li>• Water usage</li> <li>• Land use</li> <li>• Waste and pollution</li> </ul>	<ul style="list-style-type: none"> <li>• Workplace health and safety</li> <li>• Community engagement and inclusion</li> <li>• Diversity, equity and inclusion</li> <li>• Labour rights</li> <li>• Human rights, modern slavery</li> <li>• Privacy and data protection</li> <li>• Animal welfare</li> </ul>	<ul style="list-style-type: none"> <li>• Business ethics and conflicts of interest</li> <li>• Regulator/government relations</li> <li>• Cyber security</li> <li>• Anti-bribery and corruption, fraud prevention</li> <li>• Sanctions</li> <li>• Executive remuneration</li> <li>• Supply chain</li> </ul>

Please also refer to Section 3.2 for information on how climate-related scenario analysis is carried out by the Firms.

### 4.2.1 Private markets

Our ESG policies and supporting guidance set out a framework for systematic due diligence, management, and reporting of material ESG risks and opportunities, including those climate-related, associated with the operations of our private markets businesses. The policies define ESG-related escalation requirements, related policies, processes, and minimum sustainability standards for the businesses in which we invest and allows us to monitor sustainability and ESG outcomes. Through this framework, ESG factors are considered in our investment decision-making process and during the investment life cycle. These policies and procedures are adapted for each underlying private market businesses based on the nature of the investment and asset class.

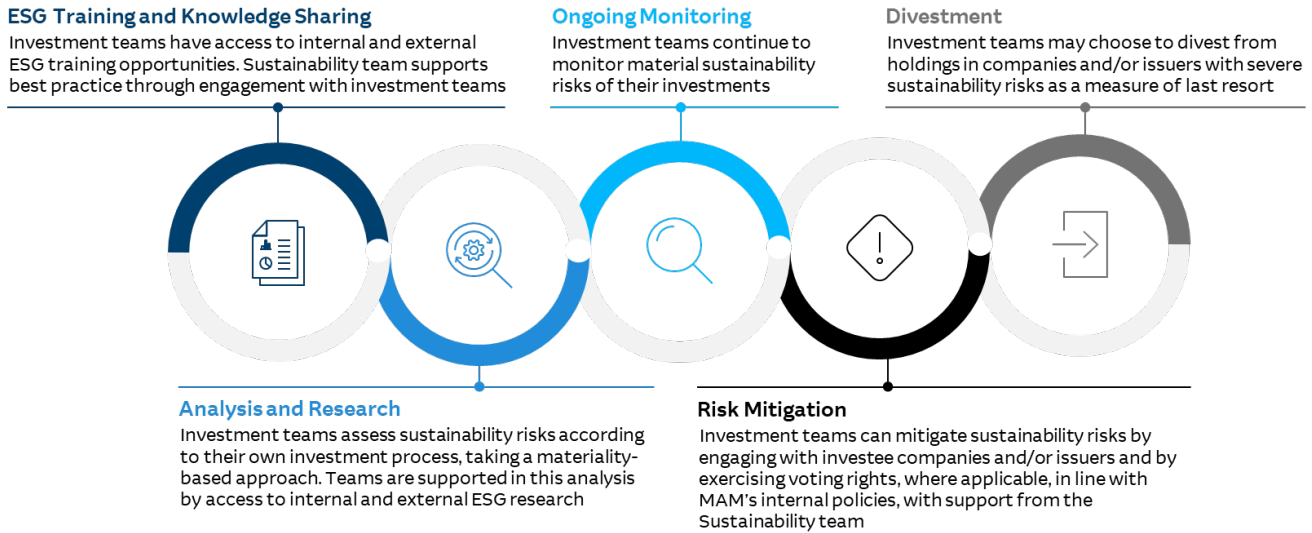


For further information, refer to the latest [MAM Stewardship report](#), including our approach across asset classes.

## 4.2.2 Public markets

MAM's public markets businesses are managed by investment teams focused on providing investment capabilities across global public equities, fixed income, and multi-asset solutions.

While the integration of sustainability initiatives in the investment process varies by team, material ESG risks are considered during the investment process in accordance with our public markets ESG Framework, as illustrated below:



For further information, refer to the latest [MAM Stewardship report](#), including our approach across asset classes.

## 4.2.3 Tools and resources

Across MAM, we use a variety of ESG-related analytical tools and resources to support investment teams to identify, measure and track material climate, and other ESG factors associated with investee companies or issuers and to integrate these considerations into their investment decisions. These include both internally developed tools and the use of third-party data providers, with the MAM Sustainability team conducting periodic monitoring to assess data quality and enhancements to the services of third-party providers.

Within our public markets businesses, each specialist investment team has access to ESG analytical tools that provide insight into climate-related risks such as the carbon footprints of individual investments and portfolios, exposure to certain business activities, as well as the degree of alignment of their portfolio or potential investments with the United Nations Sustainable Development Goals (**UN SDG**) through our proprietary UN SDG database. These tools enable engagement and proxy

voting efforts that consider ESG factors. Investment teams maintain discretion as to how best to leverage resources to be most conducive to their investment philosophy and process.

Please refer to the [Our approach to sustainability](#) document for further information on all the tools and resources available.

## 4.2.4 Climate-related risk management

ESG performance and material issues relating to investment positions are monitored during the investment lifecycle, including as part of annual investment reviews. To help preserve and create long-term value for our clients, asset deep dive reviews or increased investee company engagement may be undertaken to respond to material ESG risks identified.

Investment teams and MAM Sustainability engage with investee companies where possible, and actively monitor key ESG-related trends and events, including climate-related risks. These engagements tend to be strategic in nature and provide additional insights into a range of factors, including business drivers, performance, emergent risks and ESG factors.



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Material risks identified by the investment and asset management teams throughout the investment life cycle are escalated as appropriate and discussed with the relevant teams, including MAM Sustainability, MAM Risk, and in some instances the RMG Credit Environmental and Social Risk team who assist staff in identifying and managing environmental and social risks, including climate-related risks. Further escalation may follow to specific committees, as described in Section 3.2, and governing bodies. Recommendations and actions are decided by the relevant investment committees and/or investment approval bodies.

Within our public markets business, MAM Risk (Investment Risk) conducts fund-specific monitoring pre- and post-trade to ensure that funds are operating within mandates, including for ESG and climate-related characteristics.

# 05

## Metrics & targets

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## 5. Metrics and Targets

In calculating the metrics provided in this Section, we have used a calculation date of 31 December 2023. Products that were terminated, or where the Firms' TCFD in-scope business-related activities were terminated, prior to this date have not been included in the metrics provided.

### 5.1 Metrics used to assess climate-related risks and opportunities

As set out in more detail in Section 3.1, the risks of climate change (“**climate risks**”) to MAM or investments held on behalf of underlying clients are the financial and non-financial risks arising from physical climate risk, transition climate risk, or liability climate risk drivers.

MAM is currently in the process of carrying out an assessment to identify the climate-related risks and opportunities in the short, medium, and long term and potential impacts to the Portfolios. As a result, MAM currently does not use metrics to assess climate-related risks and opportunities at the Firm level. MAM does, however, identify climate-related risks as part of its investment decision-making process regarding individual assets, as set out in more detail in Section 4.2. Details on metrics used for the individual Portfolios will be included in the individual product-level reports prepared for the Portfolios where required.

### 5.2 GHG emissions

In the below table, we have disclosed the Scope 1, Scope 2, and Scope 3 GHG emissions on an aggregated basis, across all the Portfolios managed by the respective Firms as at 31 December 2023.

The metrics provided below relate to the Firms' financed emissions associated with our investment activities through the Portfolios. These are the emissions of our portfolio of investments that we hold on behalf of underlying clients. Emissions data provided reflects the pro-rata share of emissions based on the Portfolios' investments in each investee company (i.e., not the total emissions data we have available for the investee companies). The emissions arising from MAM's/the Firms' own business operations and those pertaining to on-balance sheet investments are not included in the metrics provided in this Report. For further information, please see the latest [Macquarie Net Zero and Climate Risk Report](#).

As this Report is the Firm's' first TCFD report, historical trends will be reported in future reports.

Source of emissions	Definition / methodology	MIMEL (2023)	MIRAEL (2023)
		(tCO <sub>2</sub> e)	(tCO <sub>2</sub> e)
<b>Scope 1 GHG emissions</b>	<p><b>Direct GHG emissions</b></p> <p>Direct GHG emissions occur from sources that are owned or controlled by the investee company, for example, emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc.; emissions from chemical production in owned or controlled process equipment.</p> <p>The Firms calculate this in accordance with the GHG Protocol methodology</p>	1,797,601	2,516,031
<b>Scope 2 GHG emissions</b>	<p><b>Indirect GHG emissions</b></p> <p>Scope 2 accounts for GHG emissions from the generation of purchased electricity consumed by the investee company. Purchased electricity is defined as electricity that is purchased or otherwise brought into the organisational boundary of the company. Scope 2 emissions physically occur at the facility where electricity is generated.</p> <p>The Firms calculate this in accordance with the GHG Protocol methodology</p>	312,675	349,897
<b>Total Scope 1 + 2 GHG emissions</b>		2,110,276	2,865,928
<b>Scope 3 GHG emissions</b>	<p><b>Other indirect GHG emissions</b></p> <p>Scope 3 is a reporting category that allows for the treatment of all other indirect emissions. Scope 3 emissions are a consequence of the activities of the investee company, but occur from sources not owned or controlled by the company. Some examples of Scope 3 activities are extraction and production of purchased materials; transportation of purchased fuels; and use of sold products and services.</p> <p>The Firms calculate this in accordance with the GHG Protocol methodology</p>	2,705,612	1,223,113



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### 5.2.1 Preparation of metrics

Data reported for MIRAEL relates to MAM's Real Assets business and has been sourced directly from portfolio companies. Where data is not provided by portfolio companies, these companies have been excluded from the metrics reported above – no estimation is currently performed. MAM actively engages with portfolio companies to improve GHG emissions reporting and coverage, and will work to report on data coverage in future TCFD reports to provide additional context for the GHG emissions figures.

Data reported for MIMEL relates to MAM's Private Credit business and MAM's public markets businesses. Private Credit data has been sourced directly from borrowers where provided. Where data is not provided by borrowers, data has been estimated where possible. For borrowers where estimation is not possible due to insufficient availability of information, these companies have been excluded from the metrics reported above. Public markets data has been sourced from Sustainalytics.<sup>19</sup> Where Sustainalytics data is not available, these investments have been excluded from the metrics reported above – no estimation is currently performed. Further details are provided below.

#### Private markets businesses

Across MAM's private markets businesses, data for investments has been obtained from a variety of sources, including:

- Where possible, MAM has directly sourced data from portfolio companies or borrowers.
- With respect to our Private Credit business, where data was not provided directly by borrowers, MAM appointed a third-party consultant to estimate GHG emissions. Estimations have been performed using the framework set out in the Global GHG Accounting & Reporting Standard Part A: Financed Emissions, Second Edition (2022) issued by the Partnership

for Carbon Accounting Financials. Calculations have been performed using the Business loans and unlisted equity methodology, option 3a for the estimation of Scope 1, Scope 2, and Scope 3 emissions. The coverage of Scope 3 estimates varies by sector, depending on data availability.

#### Public markets businesses

MAM appointed Sustainalytics<sup>20</sup> to provide data for all public markets investments made by MIMEL.

The scope of GHG emissions disclosed for public markets businesses includes listed equities and corporate bonds. It does not currently include sovereign debt, however, it is our intention to disclose these emissions in future TCFD reports.

### 5.2.2 Data gaps and limitations

Climate data, models and methodologies used are often relatively new, are rapidly evolving and are not of the same standard as those available in the context of other financial information, nor are they subject to the same or equivalent disclosure standards, historical reference points, benchmarks or globally accepted accounting principles.

Reporting of ESG data is still in its infancy and data can be inaccurate and incomplete. In the absence of widely available public reporting of these metrics by investee companies, MAM has used a variety of data sources, including data we have gathered ourselves directly from investee companies and/or publicly available sources, and data provided by third-party data providers to prepare the metrics in the above table. MAM has not verified the data in this document and the data has not been subject to third-party assurance. Any data source used may not be comprehensive, may use estimations, or may involve a qualitative assessment, for example by a third-party data provider. Further, there may be discrepancies between data sources, as well as data gaps, lags, or limitations in the methodology for a particular data source.

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Divergent ESG-related views, approaches, methodologies, and disclosure standards exist in the market, including among data providers, with respect to the identification, assessment, disclosure, or determination of ESG factors, indicators or adverse impacts associated with an investment, product or asset, and different persons may consider or treat the same investment, product, asset, targets, actions or the like, differently from a sustainability perspective. Data provided by a third-party may also be subject to change.

It is not currently possible for MAM to give an accurate numerical representation of the associated margin of error with respect to the data presented in this statement.

MAM does not make any representation or warranty as to the completeness or accuracy of any data (whether actual or estimated) that is disclosed in this statement, including data provided by third-parties.

The data providers or sources that have been used for the preparation of this statement, may differ from the data providers or sources that are used by specific investment teams in their management of MAM's fund and products (including, without limitation, for the purposes of meeting or monitoring the environmental or social characteristics or sustainability objectives of such products).

### 5.2.3 Data availability

- Metrics have been calculated using the latest available data applicable to the Reporting Period. In some cases, the latest available data may be aligned to a period other than the Reporting Period, for example, an investee company's financial year end. If some data points used in the calculation of a metric are available for the Reporting Period and others are available for a different period, no adjustment is made in the calculation to reflect this misalignment.

- For positions held in fund of fund structures, a look through is performed to the underlying investments of that fund where possible. For Exchange Traded Fund structures, no look through to underlying securities was performed due to difficulties in systematically sourcing this information.

MAM has not provided quantitative scenario analysis in relation to the Portfolios of the Firms. Please refer to Section 3.2 for further explanation.

## 5.3 Targets

As outlined in Section 3, we announced our Net Zero Commitment in late 2020. In March 2021, we joined NZAM in support of our Net Zero Commitment. Please see [NZAM's Initial Target Disclosure Report](#) for further details our commitment to manage our assets in line with NZAM's criteria and the interim targets set.

The MAM Sustainability team is responsible for reporting on progress with regards to our Net Zero Commitment and preparing other climate-related regulatory reporting.

As a signatory of NZAM, we are required to report annually on our net zero progress. We satisfy this requirement through sustainability-related reporting issued in accordance with the Principles for Responsible Investment (**PRI**). MAM's latest PRI Transparency Report can be found [here](#).

MAM's annual Sustainability Report also includes information on our Net Zero Commitment progress, including numerous case studies that highlight the challenges and outcomes associated with our Net Zero Commitment. MAM's latest Sustainability Report can be found [here](#).

# Important information

The name "Macquarie" in this report refers to the Macquarie Group which comprises Macquarie Group Limited ABN 94 122 169 279 and its worldwide affiliates. Macquarie Group comprises two separate subgroups, a banking group and a non-banking group which includes Macquarie Asset Management ("MAM"), a full-service fund manager.

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