MARS

# Mars Pension Trustees Limited

## As Trustee of the Mars Associates' Retirement Plan

# 2023 TCFD Report

The world we want tomorrow starts with how we do business today



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# Forword by Chairman

Since 1 October 2021, regulations aimed at improving governance and reporting of climate-related risks and opportunities ("CRROs)" have required trustees of certain schemes to consider CRROs in more detail than before. Under the requirements, trustees must identify, assess, and manage CRROs, calculate climate-related metrics and set targets, and then report on those actions. These reporting requirements are developed from the recommendations of the Taskforce on Climate-Related Financial Disclosures ("TCFD").

In this third TCFD report, we build on our previous reports (published in 2022 & 2023) and further outline how Mars Pension Trustees Limited ("**MPTL**"),[1] as trustee of the Mars Associates' Retirement Plan (the "**Plan**"), meets the requirements of the Occupational Pension Schemes (Climate Change Governance and Reporting) Regulations 2021, the Occupational Pension Schemes (Climate Change Governance and Reporting) (Miscellaneous Provisions) Regulations 2021 and the Occupational Pension Schemes (Climate Change Governance and Reporting) (Amendment, Modification and Transitional Provision) Regulations 2022 (together, the "**Regulations**").[2]

We approach these requirements through the lens of our responsible investing beliefs, and our investment process and implementation continues to evolve and improve. During the scheme year 1 January 2023 – 31 December 2023, we have invested time and resources to continue to improve oversight of climate-related risks and opportunities ("CRRO") and integrate related processes and analysis throughout our manager research and portfolio implementation.

MPTL first began to focus on sustainability and climate related risk by incorporating environmental, social, and governance ("ESG") considerations into the Plan's investment strategy and risk management arrangements in 2017. Since then, we have developed responsible investing beliefs (which incorporate ESG factors (including CRROs)), and our investment process and implementation continues to evolve and improve.

During the scheme year 1 January 2023 – 31 December 2023, we have invested time and resources to continue to improve oversight of CRROs and integrate related processes and analysis throughout our manager research and portfolio implementation. We have improved our responsible investing capabilities by enhancing our view of risk and return, confirming our scenario analysis, continuing our impact/sustainable investing programme, and improving our advisor engagement and portfolio monitoring and reporting programme.

We believe that our fiduciary objectives and responsible investing ambition are aligned, and we have agreed on the Plan's objective to maintain or, wherever possible reduce the Plan's weighted average carbon intensity metric ("**WACI**"). While we pursue responsible investing for the benefit of the Plan, as documented in our responsible investing policy (the "**Responsible Investing Policy**"), we also recognise that supporting industry wide initiatives to improve the global financial system is important and are signatories to the United Nations Principles for Responsible Investing ("UNPRI").

We will highlight some of these accomplishments in the report below, as well as articulate some of our plans and aspirations for our ongoing journey as a responsible investor.

**John R Price**
**Chairman, Mars Pension Trustees Limited**

**Footer Notes**

[1] MPTL has prepared this report in its capacity as trustee of the Plan.

[2] The following sources have been considered during the preparation of this report: the TCFD's Principles of Effective Disclosure; the Department for Work and Pensions' guidance on Governance and Reporting of Climate Change Risk; Guidance for Trustees of Occupational Schemes; the Pensions Regulator's guidance on governance and reporting of climate-related risks and opportunities and the Pensions Climate Change Risk Industry Group's Aligning Your Pension Scheme with the Taskforce on Climate-related Financial Disclosures Recommendations dated 27 January 2021.


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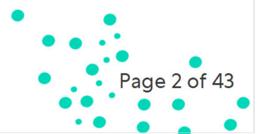

# Executive Summary

## Responsible Investing Approach

The Plan pursues responsible investing for the benefit of the Plan beneficiaries with the goal of achieving their respective investment objectives as documented in the Mars UK ESG & Stewardship ("the Policy") and other Plan documents. We recognise that integration of ESG factors (including CRROs) can reduce risk, protect the value of the Plan and enhance returns, through considering additional risks and injecting new and forward-looking insights into the investment process. We therefore believe that our fiduciary responsibility is aligned with embracing responsible investing and taking ESG factors into account in our investment framework. We also recognise that supporting industry wide initiatives to improve the global financial system and incorporating responsible investing initiatives is important and aligned with the Plans' objectives.

## Governance

MPTL has a well-established governance and oversight framework that addresses themes related to responsible investing (including CRROs).

MPTL works effectively with other advisers and investment managers who undertake or advise on its scheme governance activities and has put processes into place to ensure each of those entities is taking adequate steps to identify, assess and manage CRROs.

## Strategy

MPTL has identified CRROs that may have an effect on the Plan in the short-term, medium-term and long-term. The key risks identified can broadly be categorised as:

- risks associated with transitioning to a low carbon economy;
- physical risks from extreme weather;
- regulatory risks as world governments seek to facilitate the transition to a low carbon economy; and
- disruption in the broader economy due to climate change.

Additionally, there will be new opportunities for the Plan as significant investment will need to be made in the wider markets as the world transitions to a low carbon economy.

MPTL considers the appropriate time horizons for the Plan to be:

- Short-term: 5 years
- Medium-term: 10 years
- Long-term: 20 years

MPTL considers that the impact of the identified CRROs on the Plan's investment strategy can be primarily addressed through ESG integration and impact investing in private equity assets. Based on the identified risks outlined below, we work with the Plan's investment managers to integrate these considerations into their portfolio management and oversight processes. Whilst climate-related risks clearly have the potential to impact the funding strategy, MPTL will work with its advisors to mitigate their effect.

MPTL has analysed four scenarios: an orderly transition, an abrupt transition, no-action and a "green bubble". MPTL considers that the potential impacts on the Plan's assets and liabilities of these scenarios


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will be low and can be mitigated by addressing the relevant risks and opportunities. The Plan is well-funded, is expected to be significantly de-risked in the short- to medium-term and has appropriate hedging and other safeguards in place to minimise the possibility of significant drawdowns. It is also supported by a strong sponsor covenant.

The Plan has considered the potential CRROs relevant to the covenant through consideration of the outputs of climate scenario modelling prepared by Mars management. Whilst climate-related risks clearly have the potential to impact the direct covenant of the Plan (the Mars businesses in the UK) – including, for example, carbon pricing impacting factory energy costs, or the risk of disruption from increasing incidence of extreme weather events over time – there are a number of factors that support the resilience of the Plan's funding strategy.

Overall, MPTL considers that the Plan's investment strategy and funding strategy would be generally resilient to the impacts of the scenarios analysed.

## Risk Management

As noted above, MPTL has a well-established governance and oversight framework that addresses items related to responsible investing (which includes CRROs).

MPTL has chosen to take an approach to the oversight and management of CRROs that largely replicates the process of how it considers other risks and opportunities, and it is integrated into MPTL's overall risk management of the Plan through the existing governance framework.

## Metrics

As part of its process of assessing CRROs, MPTL has introduced the monitoring of several climate-related metrics:

1. WACI, which measures a portfolio’s exposure to carbon-intensive companies and indicates the potential climate change-related risks relative to other portfolios or a benchmark;
2. normalised carbon emissions which provides a normalised measure (by $M invested[3]) of the portfolio’s contribution to greenhouse gas (“GHG”) emissions.
3. exposure to carbon-related assets; and
4. a portfolio alignment metric, in accordance with the Regulations by analysing the portfolio through the Paris Agreement Capital Transition Assessment (PACTA) tool which evaluates a portion of the Plan’s assets to determine how they align with various climate scenarios consistent with the Paris Agreement.

A summary of the results for metrics 1 to 3 is shown below chart with further detail regarding calculation methodology and asset class results in the following Metrics portion of this report.

## Footer Notes

[3] Invested amount shown in US$ converted from GBP to be consistent with industry reporting standards presented in US$.


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| Consolidated Carbon Statistics | | |
|---|---|---|
| Dec-2023 | Calculated Statistics | % of Managers Supplying Data |
| Total Carbon Emissions (Tons CO2e) Scope 1+2 | 34,889 | 37.6% |
| Total Carbon Emissions (Tons CO2e) Scope 1,2,3 | 155,580 | 33.9% |
| Weighted Average Carbon Intensity (Tons COE2e / $m Sales) Scope 1+2 | 112.6 | 48.4% |
| Weighted Average Carbon Intensity (Tons COE2e / $m Sales) Scope 1,2,3 | 439.1 | 33.9% |
| Exposure to Carbon-Related Assets | 0.6% | 81.2% |

MPTL's chosen portfolio alignment metric analyses the Plan's portfolio through the Paris Agreement Capital Transition Assessment ("PACTA") tool which evaluates a portion of the Plan's assets to determine how they align with various climate scenarios consistent with the Paris Agreement. Due to MPTL de-risking, at year end 2022, the Plan held in aggregate less than 5% public equity and corporate bond positions. Given the limited exposure to the assets that PACTA has identified as having material risks or opportunities related to climate change, we conclude that the portfolio is well aligned to achieve its investment objectives and the expected impacts of climate change identified by the tool are not expected to be material to the Plan.

### Targets

MPTL set a target in 2021 to reduce the Plan's WACI by 10 % over the three years and we provide details in achieving the target in the Metrics and Targets section below. In 2022, MPTL reviewed this target and decided that the Plan's target moving forward would be to maintain, and where possible, reduce the Plan's WACI metric. In 2023, MPTL reviewed this target and confirmed it remained appropriate.

### Looking Ahead

This is the third year that MPTL has produced a report in accordance with the Regulations. MPTL is satisfied with the progress it has made, but understands that identifying, assessing and managing CRROs (and wider ESG considerations) will be a continuous effort. Looking ahead, MPTL will seek to meet or exceed its target to maintain the Plan's WACI and look to expand data coverage for WACI and normalised carbon emissions**.** Additionally, we will seek out opportunities related to climate risk by continuing to invest in impact-related private equity investments.

MPTL has carefully considered its obligations under the Regulations and associated statutory guidance, and taking into account the fact that there is no separation or segregation of assets, liabilities and funding for the MPP, ARP and Wrigley sections of the Plan, has decided it is appropriate to report on all activities at the "whole scheme" level.

MPTL has sought to populate gaps in data as far as it is able to – this means that the MPTL has taken all such steps as are reasonable and proportionate in the particular circumstances taking into account (a) the costs, or likely costs, which will be incurred by the Plan; and (b) the time required to be spent by MPTL, or any person to whom MPTL has delegated responsibility, in taking such steps.

Where relevant in this report, MPTL has described the data (1) it has been unable to obtain or (2) has treated as unobtainable, and the reasons for this.


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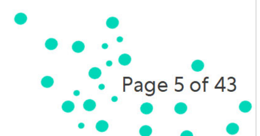

# Responsible Investing Approach

Responsible investing is an approach to investment that explicitly acknowledges the relevance to investor of ESG factors. We recognise these factors impact individual investments as well as the long-term health and stability of the financial system as a whole MPTL's approach to CRROs and other ESG factors is articulated in the Plan's Responsible Investing Policy, is guided by the Plan's responsible investing beliefs, and is implemented through the Plan's responsible investing framework. The Plan is a long-term investor whose primary purpose is to provide pension benefits to its beneficiaries in line with its fiduciary duty. We recognise that integration of responsible investing factors into the management of assets can help to reduce risk, protect the value of the Plan, and can potentially enhance returns. In this context, MPTL defines responsible investing as an approach to investing that explicitly acknowledges the relevance to the investor of ESG factors (including CRROs), and the long-term health and stability of the market as a whole.[4] CRROs are considered as part of MPTL's responsible investing approach.

MPTL believes that its fiduciary responsibility is aligned with embracing responsible investing and taking ESG factors (including CRROs) into account in our investment framework, in a manner that follows legislation and regulatory guidance. As such, MPTL has developed a detailed Responsible Investing Policy and has adopted responsible investing beliefs to articulate its views on ESG factors and, at a more granular level, CRROs. These serve as a guide to implementing responsible investing in the Plan. MPTL will review the Responsible Investing Policy and responsible investing beliefs on a regular basis and will update them as required.

During 2023, there was no change to the Responsible Investing Policy and responsible investment beliefs which are detailed below:

| MPTL's Responsible Investing Beliefs | |
|---|---|
| **1.** | For beliefs to be effective they must be aligned with our fiduciary duty to consider the best long-term interest for the beneficiary, and with our overall investment beliefs. |
| **2.** | We are long-term and forward-looking investors, and thus take into account ESG factors given that they can have a meaningful impact on the long-term expected returns and risks of the Plan. |
| **3.** | ESG factors impact security prices and should be considered as part of effective active management. Their economic materiality will vary by asset class and investment implementation. |
| **4.** | To make well-informed investment decisions, we need to take account of financial and non-financial considerations, including reputational risk, financial risk, and operational risk. |
| **5.** | ESG engagement is more effective than ESG exclusion; however, we are committed to adhering to exclusion policies as required by law and regulation. |
| **6.** | Businesses that embed ESG considerations into their culture and processes improve the likelihood of a prolonged and successful operation. Therefore, we require that managers consider the incorporation of ESG in the management of their businesses and portfolios. |

**Footer Notes**

[4] We use the UNPRI as a starting position in our objective to establish a responsible investing approach and develop our beliefs on the relevance of ESG factors to our investment framework.



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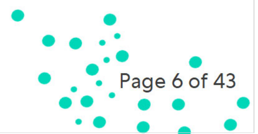

MPTL has demonstrated its commitment to responsible investing by becoming a signatory to the UNPRI. Becoming a signatory provides a public demonstration of the Plan's commitment to one of the world's leading and most recognised proponents of responsible investment. It gives access to UNPRI resources, including reporting and assessment tools, and a network of ESG professionals. Additionally, the UNPRI framework allows us the freedom to continue to craft our own Responsible Investing initiatives, policies, and actions. We consider that the UNPRI represent the global standards for ESG factor consideration and responsible investing.



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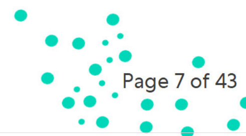

## Oversight of CRROs

**Key obligation #1:** MPTL understands that it must set out how it maintains oversight of CRROs which are relevant to the Plan.

MPTL has chosen to take an approach to the oversight and management of CRROs that largely replicates the process for how it considers other risks and opportunities. As noted above, CRROs are considered to fall under "responsible investing" for MPTL's purposes.

MPTL has a well-established governance and oversight framework that addresses items related to responsible investing, including regular a) scenario analysis and b) total plan and asset class level responsible investing reporting.

This framework ensures that MPTL is regularly informed about CRROs and is able to take steps to assess and manage them.

In addition, MPTL will continue to:

- provide an opportunity for MPTL directors to discuss responsible investing (including CRROs) at each trustee meeting;
- include relevant CRROs in the Plan's Statement of Investment Principles and Responsible Investment Policy, and review and update those documents from time to time;
- integrate CRROs into its risk register;
- engage with the Plan's sponsoring employers to understand how they are addressing climate-related issues relevant to their business and how the sponsor's ability to support the Plan might be affected by climate-related issues in the future; and
- periodically provide MPTL's directors responsible investment training, which includes consideration of CRROs.

Additionally, MPTL's advisors evaluate responsible investing opportunities, such as impact investing, or other innovative ideas as they emerge and evolve.

As part of the governance process, existing procedures and policies are reviewed and updated to incorporate ESG considerations, including CRROs, and any new procedures required will be established. The key processes and policies put into place as part of the responsible investing approach are: the MPTL's Risk Policy Statement; the investment manager hiring process; the investment manager review process; and the vendor management process, including the annual review of external managers' ESG policies and responses to an ESG questionnaire. MPTL will periodically review its approach and the adequacy and relevance of the governance processes and reporting around climate-related risk and opportunities.



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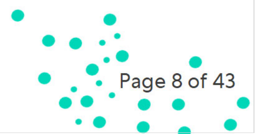

## Governance Framework

**Key obligation #2:** MPTL understands that it must set out (1) the role of any person who undertakes scheme governance activities, or who advises or assists MPTL with scheme governance activities (apart from its legal advisors) and (2) the processes put into place by which MPTL satisfies itself that each of those entities is taking adequate steps to identify, assess and manage relevant CRROs.

MPTL's Investment Committee and the Mars Investment Team ("**MIT**") undertake governance activities for the Plan. SECOR Investment Advisors (UK) LLP ("**SECOR**"), Aon Solutions UK Limited ("**Aon**"), and Ernst & Young LLP ("**EY Parthenon**") advise and assist on governance activities for the Plan.

### Investment Committee

MPTL has established a sub-committee (the "**Investment Committee**") that is responsible for: (1) advising MPTL on its investment policy (and other related matters); (2) implementing the Plan's investment policy; and (3) monitoring the performance of the Plan's investments and its investment managers and advisors and their compliance with the Plan's statement of investment principles ("**SIP**"). So far as is consistent with its fiduciary and legal responsibilities, MPTL has delegated to the Investment Committee appropriate powers to enable the Investment Committee to fulfil these responsibilities.

To ensure that the Investment Committee takes adequate steps to identify, assess and manage any CRROs that are relevant to the governance activities they are undertaking, MPTL expects the Investment Committee to comply with the Responsible Investing Policy. The Investment Committee monitors CRROs through the Plan ESG dashboard report and Public Equity and Public fixed income ESG asset class reports. These reports include qualitative assessments and quantitative data to determine if managers are sufficiently integrating ESG considerations, including CRROs, into their management processes. Additionally, the Investment Committee discusses responsible investing themes and specific investment manager implementation on a quarterly basis.

MPTL has given clear directions in terms of how and when the Investment Committee is required to inform MPTL of its work. The Investment Committee is in regular contact with MPTL throughout the scheme year and must provide quarterly updates on governance activities, including those related to climate-related risk and opportunities. The Investment Committee then reports this information to the full MPTL board, who have the opportunity to question and challenge this information.

Where the Investment Committee has material concerns regarding climate-related risks, it is expected to report those concerns to MPTL in a timely manner by the appropriate means.

### Mars Investment Team (MIT)

MIT is a team of associates made available by the sponsoring companies of the Plan to assist and support MPTL and its committees in the fulfilment of their responsibilities for investment and to carry out all necessary controls and accounting.


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To ensure that MIT takes adequate steps to identify, assess and manage any CRROs that are relevant to the governance activities it is undertaking, MPTL expects MIT to comply with the Responsible Investment Policy.

MPTL has given clear directions in terms of how and when MIT needs to inform MPTL of its work. MIT is in regular contact with MPTL throughout the scheme year, and it must also provide general updates to MPTL. Where MIT has material concerns regarding CRROs, it is expected to report those concerns to MPTL in a timely manner by the appropriate means.

## SECOR: Strategic Investment Advisor

SECOR, as the Plan's strategic investment advisor, provides investment-related advice and assistance to MPTL. To ensure that SECOR takes adequate steps to identify, assess and manage any CRROs which are relevant to the governance activities they are advising or assisting on, MPTL requires SECOR to act in accordance with the SIP and the Responsible Investing Policy. MPTL has given clear directions in terms of how and when SECOR needs to inform MPTL of its work; as noted above, SECOR will prepare semi-annual responsible investment reports for MPTL and the Investment Committee to review. Where SECOR has material concerns regarding CRROs, it is expected to report those concerns to MPTL in a timely manner in the context of the overall risk management framework.

## Aon: Plan Actuary

Aon, as the Plan's actuary, provides actuarial advice and assistance to MPTL. To ensure that Aon takes adequate steps to identify, assess and manage any CRROs which are relevant to the governance activities they are advising or assisting on, MPTL regularly engages with Aon to identify risks and opportunities related to the funding of the Plan, especially during the triennial valuation process. MPTL has given clear directions in terms of how and when Aon needs to inform MPTL of its work and receives funding updates on a quarterly basis at board meetings. MPTL is confident that this is a proportional approach to take considering the nature of Aon's role as actuary.

## EY Parthenon: Plan Covenant Advisor

EY Parthenon advises MPTL in respect of the strength of support the Plan is able to rely on from the Plan's sponsoring employers in the Mars, Inc group - known as the Employer Covenant. EY Parthenon has provided MPTL with an outline of its expertise and experience that underpin its ability to advise on the implications of climate change for the Employer Covenant. To ensure EY Parthenon takes adequate steps to identify and assess CRROs that are relevant to the governance activities they are advising or assisting on, MPTL regularly engages with EY Parthenon to identify risks and opportunities related to the covenant strength of the sponsor, and the funding of the Plan.

## Asset Managers

The day-to-day fund management of the assets of the Plan is performed by external professional fund managers (each of which is authorised and regulated by the Financial Conduct Authority or similar overseas entity).


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As demonstrated by the flowchart in Annex 1.I, outlining SECOR's manager selection and oversight process, responsible investing is considered an integral part of the selection, review and monitoring processes for MPTL's asset managers.

SECOR takes an active role in assessing asset managers for MPTL, including providing a proprietary responsible investment scorecard. Together, SECOR and MIT ensure that the weighting attributed to climate change issues within manager selection, review and monitoring is appropriate to MPTL's investment beliefs and the Plan's investment strategy in relation to climate issues. MPTL also receives and reviews an annual report that states the ratings awarded to each asset manager.

When appointing asset managers, SECOR makes recommendations to the Investment Committee, taking into account the guidelines set by MPTL and the responsible investment rating awarded to the manager. The Investment Committee considers these recommendations and makes the final decision on any appointments.

MPTL maintains oversight of the incorporation of climate considerations in the selection, review and monitoring of asset managers by reviewing SECOR's semi-annual reports which identify the asset managers and their responsible investment rating and provides information on each asset manager's performance. Where MPTL has concerns over an asset manager, it will engage with SECOR to find a suitable resolution.

## Time and resources

MPTL requires regular discussion of responsible investing (which includes consideration of CRROs) at board level as a substantive agenda item, at least bi-annually. The Investment Committee also discusses responsible investing at least bi-annually. These discussions include appropriate training on responsible investing and updates to governance and investment activities. As a result of this reporting framework, MPTL is confident that it has strong oversight of climate change governance even where activities are delegated.

MPTL notes that the MIT and Investment Committee dedicate time and resources (as appropriate) to additional education and oversight to ensure a proper execution of the day-to-day assistance and support for MPTL, so that it can maintain oversight of the CRROs which are relevant to the Plan.

MPTL notes that its professional advisors also dedicate resources to considering CRROs. MPTL has given clear directions in terms of how and when advisors need to inform MPTL of its work. Where any advisor has material concerns regarding CRROs, it is expected to report those concerns to MPTL in a timely manner by the appropriate means.

MPTL considers that no further resources are required for the governance of CRROs because they are already considered as part of MPTL's wider risk-management processes.


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MPTL will keep this position under review. It will consider the results of other related activities (risk-management activities, strategic activities (including scenario analysis) and metrics and targets) to help determine how much time and what resources are allocated to overseeing CRROs.

MPTL has undertaken training relating to:

- its statutory responsibilities under the Regulations;
- how CRROs are relevant to and incorporated into investment management; and
- reporting CRROs.

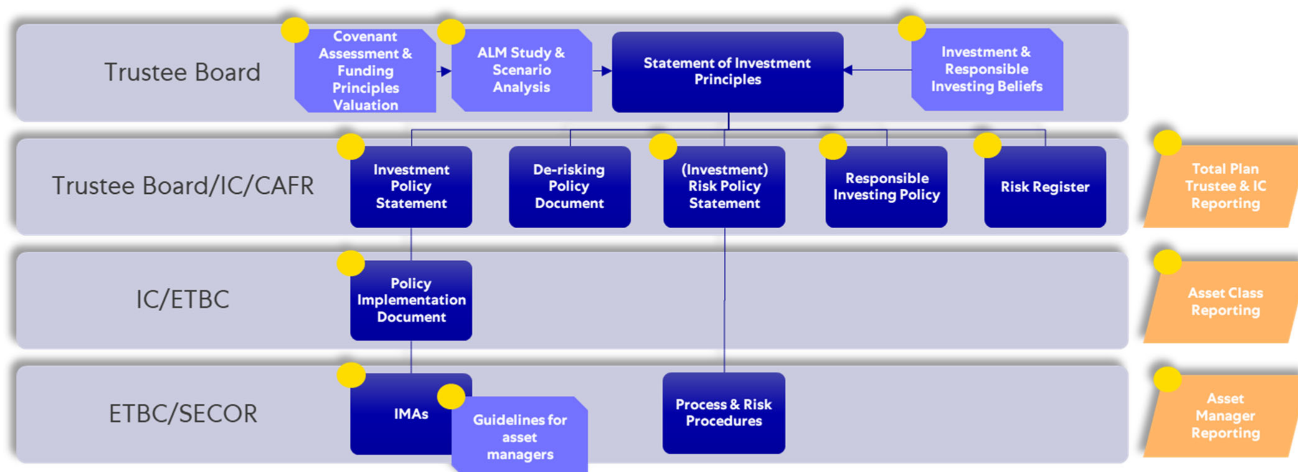
MPTL is keen for all board members to develop their understanding of CRROs. MPTL will periodically review its training programme and, where appropriate, will ask its external advisors to provide additional training.

MPTL's board members are encouraged to consider their individual skillsets and identify whether they feel they have any skills gaps and require further training.

**Summary of governance-related developments and activities during the reporting year:**

The plan is significantly derisked and the vast majority of assets for which CRRO's may be relevant are held in Private Limited Partnerships that have limited scope for the Plan to influence changes. MPTL and its advisors continue to work with investment managers to improve the transparency of the investment and understand any potential CRRO's that may impact the Plan but overall remain comfortable that the potential impact is extremely limited given the total Plan asset mix and funding status of the Plan. Therefore, the focus over 2023 has been on improved reporting, better transparency, and encouraging private asset investment managers to better integrate ESG considerations in their oversight of Plan assets.

## Diagram showing responsibility for governance of CRROs





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## Time Horizons

**Key obligation #3:** MPTL understands that it must set out its short-term, medium-term and long-term time horizons.

MPTL initially set short, medium, and long-term time horizons in 2021, which were:

**Short-term:** 5 years (2021-2026), covering the triennial valuation cycle and the de-risking that is expected to take place in the investment strategy.

**Medium-term:** 10 years (2021-2031), covering the period wherein policy decisions will need to be made to achieve the Paris Agreement.

**Long-term:** 20 years (2021-2041), in line with the Plan's expected duration.

MPTL believes these time periods remain relevant, taking into account (1) the Plan's liabilities and its obligations to pay benefits and (2) the original reasons for setting such time periods. MPTL will, however, review these periods annually in light of scheme and industry developments.

## General CRROs

**Key obligation #4:** MPTL understands that it must identify CRROs which it considers will have an effect over the short-term, medium-term and long-term on the Plan's investment strategy and funding strategy.

The world's climate is 1°C warmer today, on average, versus pre-industrial levels[5]. Without strong and globally co-ordinated action, some experts believe the world could warm above 4°C by the end of this century, which could lead to significant consequences for ecosystems and humanity. As the world and society seek to address climate change, two types of risks will impact pension scheme portfolios and the businesses of sponsoring employers:

**Footer Notes**

[5] Source: The Intergovernmental Panel on Climate Change: The United Nations body for assessing the science related to climate change.


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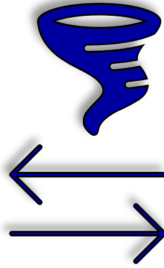

### Physical risks

Relate to the impacts of climate change, such as rising temperatures, changing rainfall, flooding risk and extreme weather.

### Transition risks

The risks from the realignment of our economic system towards low-carbon, climate-resilient or carbon-positive solutions.

The Plan has a diversified investment portfolio and as such the CRROs inherent in the investment strategy are complex. On an ongoing basis, MPTL identifies CRROs which it considers will have an effect over the short-term, medium-term and long-term on the Plan's investment strategy and funding strategy, including the impact on the Plan sponsors and covenant strength. Key risks identified by MPTL are set out below.

Some CRROs will impact investments in individual companies and others will have wider impacts that will impact sectors and asset classes more broadly. For example, investments in the energy sector are likely to be significantly impacted by the transition to a low carbon economy and we expect our managers that invest in this sector to diligently assess the risk and opportunities related to the transition. While investment managers differ in their approach to managing climate risks, and their impact will vary by asset class, we seek to have all managers integrate climate risk and opportunity assessments into their investment process. Key risks that we have identified include:

- Transition risks which may have a financial impact on portfolio investments and businesses as a result of transitioning to a low carbon global economy, including stranded assets, asset mispricing, and carbon sensitive sectors significantly underperforming or outperforming.
- Physical risks from extreme weather as part of climate change.
- Regulatory risks as world governments seek to facilitate the transition to a low carbon economy, the risk of asset mispricing and the potential creation of green bubble asset valuations.
- Disruption in the broader economy due to climate change leading to financial risks:
    - If not fully hedged, the risk of inflation being higher than expected can lead to a negative impact.
    - If not fully hedged, the risk of falling government gilt yields can lead to a negative impact.
    - Increasing longevity can lead to a negative impact.
    - Annuity pricing risk.
- Covenant and sponsor risk (see below)

Further details of these risks are included in the sections below, including those risks that are more likely to be associated with the short, medium, and long-term time horizons.

In addition to these risks, MPTL recognises that climate change can present opportunities, and we access these through the Plan's investment managers' ESG integration approach, as well as impact-oriented investments in the private equity allocation. We believe financial opportunities will develop across many asset classes as the world transitions to a low carbon economy. We expect fund managers to integrate


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these considerations into their asset allocation and security selection process. Within private equity impact investing, we are working with managers to make investments that have a measurable impact related to three impact themes: climate action, inclusive growth, and healthcare.

## Short-term risks and opportunities:

Over the short-term, MPTL acknowledges there will likely be greater market price sensitivity to increased regulation and investor behaviour. This could, in the short-term, result in some sectors or market segments experiencing an artificial increase in valuations. Consequently, the Plan could experience some volatility in funding as the Plan invests 35% of its portfolio in return seeking assets. Over the short-term there are opportunities to position the portfolio to take advantage of the effects of climate transition. MPTL believes an actively managed investment strategy will help the Plan avoid investments that will be negatively affected by climate risks and invest in those that will benefit from the transition. Furthermore, by making an allocation to Impact strategies over the short-term the Plan can position itself for a smoother transition.

## Medium-term risks and opportunities:

Over the medium-term, transition risks, both in terms of technology and policy, are expected to be material. These transition risks will likely present challenges for some of the Plan's investments, but also present new investment opportunities for MPTL. For example, companies that are heavily reliant on sustained carbon emissions will likely need to invest in more sustainable business practices that require significant investment. Conversely, as new technologies are developed, MPTL will be presented with new investment opportunities that will help the Plan achieve investment returns whilst also facilitating the change to a low carbon economy. Opportunities to invest in renewable resources, low carbon alternatives and more climate resilient industries will help drive capital to where it is needed most whilst helping MPTL fulfil its fiduciary responsibilities.

These medium-term transition risks will be particularly important to consider as 2030 gets closer. If significant progress by the world and society to meet the objectives of the Paris Agreement has not been made by 2030, then there could be more drastic policy measures taken which could have an impact on companies and other assets that are not resilient to these measures. To manage this risk, MPTL has requested that investment managers consider climate-related risks when making investments on the Plan's behalf. If significant progress is not made by 2030, the Plan could experience a worsening in the funding level. Medium-term risks are partially mitigated by the Plan's de-risking flight plan which will see a steady reduction in risk as the Plan's funding level improves.

## Long-term risks and opportunities:

Over the long-term, physical risks are expected to dominate. The extent to which these physical risks are borne out will largely depend on global society's success in meeting the objectives of the Paris Agreement. This ultimately highlights the importance of addressing climate change over the long-term. The physical risks of climate change will have a wide-ranging impact on the Plan's assets. More severe weather events could result in damage to physical assets such as real estate which, in turn, could have a contagion impact on other segments of the economy. However, if the objectives of the Paris Agreement are achieved and the world transitions to a low-carbon economy, many assets may become "stranded".


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The Plan will need to carefully navigate the transition and monitor any exposure to potential stranded assets. The Plan's funding position over the long-term is most exposed to a failure to assess accurately the effects of climate change, but the Plan's de-risked portfolio and hedging programmes plan will help mitigate the risk of a material worsening in the funding level.

The long-term opportunities for investment are vast as climate change becomes a priority for governments and society as a whole. This means that opportunities will open up to invest in innovation focussed on addressing climate change. MPTL believe these opportunities are best captured through investments in private market alternative asset classes.

## Funding strategy

**Key obligation #5:** MPTL understands that it must assess the impact of the identified CRROs on the Plan's funding strategy.

In reviewing (on an ongoing basis) and setting the funding strategy and agreeing the long-term funding target (including the appropriate flight path), we consider the integrated and interdependent triangle of considerations: liabilities (funding), covenant risk, and assets (investment) in the light of the key climate-related risks listed above.

The investment implications will be further addressed in the investment strategy section. This includes consideration of appropriate interest rate hedging, inflation hedging and longevity hedging; investment and covenant risk; time dimensions and funded status development.

### Strategy considerations - Liabilities (Funding)

The extent of a scheme's climate risk exposure from a liability's perspective is relevant when determining the degree of prudence to be adopted when setting liabilities assumptions and the overall funding strategy. MPTL has consulted Aon, in its capacity as Actuary for the Plan, to set out the implications of these CRROs on the Plan's funding strategy. The following potential risks and their associated impacts on the Plan's funding strategy were considered:

**Inflation risk:** Increasing extreme weather events eventually might force governments to address greenhouse gas emissions at a global level with carbon tax policies, which could result in inflation figures coming in ahead of expectations. While higher than expected inflation increases the liability, the Plan's 100% LDI hedge ratio means the Plan's Matching Assets will also increase proportionately, and hence this should not have a material adverse impact on the Plan's funding level.

**Gilt yield risk:** Considerable economic disruption could lead to a flight to safety, pushing gilt yields down, and this could happen at the same time as inflation is increasing (even though it is normally expected that bond yields would rise in an inflationary environment). While lower government bond yields increase the liability, the Plan's 100% LDI hedge ratio means the Plan's Matching Assets will also increase proportionately, and hence this should not have a material adverse impact on the Plan's funding level.


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**Longevity risk:** Increasing longevity could lead to a negative impact on funding as liabilities increase. Better air quality and improved health conditions may lead to higher longevity. This may happen in those scenarios where there is a transition to a low carbon economy and so may be expected to have the biggest impact in earlier transition scenarios than those that tend to lead to high inflation and gilt yield risk. However, the timing may be such that this does not get reflected in the actuarial valuation for another 10 years, whereas the transitional risks to the gilt yields and inflation may occur earlier.

**Annuity pricing risk:** The cost of buy-in and buy-out will be affected by the risks above. However, there are the additional risks that the strength of the insurers may weaken as a result of climate risk or that the solvency standards are increased to reflect the increased risks. This could further increase the price of buy-in or buy-out.

## Strategy Considerations – Employer Covenant

All sponsoring employers will be exposed to CRROs to some extent, although their nature and magnitude will vary considerably. Climate change is therefore a relevant consideration for covenant assessments, particularly over the longer term.

As part of its scenario analysis in 2021, MPTL consulted EY Parthenon, in its capacity as covenant advisor to the Plan, on the CRROs relevant to the covenant. The Plan's covenant is derived from the financial strength of the Plan's sponsoring employers. Mars' UK businesses are exposed to a number of potential climate risks.

Mars, Inc has previously considered climate risks in relation to the group as a whole and shared elements of this with MPTL and EY Parthenon. Mars, Inc's analysis of climate risks shows that different climate scenarios have the potential to have financial costs to the group, but ones that are considered low in the context of the overall group's financial resources.

MPTL considers that climate risks relevant to the covenant include:

- Transition risks, such as carbon pricing: the risk that increased cost of carbon generation through taxation and/or offsetting increases the direct costs of the employers (energy for manufacturing and distribution) and the costs of raw materials (particularly animal proteins)
- Physical risks, such as extreme weather events causing factory shut down, and changing weather patterns causing disruption to the supply of (and impacting the cost of) raw materials.


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The sponsor has modelled these risks at Group level and considers the impact of them to be low in the context of the financial resources of the Group. This is taken directly from the materials the sponsor provided to EY Parthenon in the Carbon Disclosure Project Report.

The impact of these risks on the strength of the Employer Covenant can be mitigated in a number of ways:
- UK progress to green energy sources for UK operations, reducing its direct exposure to carbon pricing
- A diverse range of products with differing inputs and exposures to climate risks
- Manufacturing resilience plans that allow UK sales to be met from alternative factories in the event of disruption
- Considerable planning and investment at group level to understand and mitigate emerging risks, for example in the supply chain.

When coupled with the Plan's relatively strong funding position, and the expected impact of the various climate scenarios on Employer Covenant and the Plan's funding, the above indicates that the Plan's funding strategy, including consideration of the support provided by the covenant, appears resilient.

## Investment strategy

**Key obligation #6:** MPTL understands that it must assess the impact of the identified CRROs on the Plan's investment strategy.

CRROs are relevant considerations for MPTL's investment strategy; when setting the Plan's investment strategy and when selecting investment managers, MPTL considers factors such as strategic asset allocation, the strength of the sponsor covenant and responsible investing-related investment approaches.

### Framework

The Plan's approach to Responsible Investing is articulated in the Policy, is guided by the Plan's Responsible Investing beliefs, and is implemented through the Plan's Responsible Investing framework. MPTL assesses the impact of the CRROs which they have identified on the Plan's investment strategy on an ongoing basis. MPTL continues to believe it makes sense to look at ESG risk and return considerations (including CRROs) utilising a common framework across all asset classes, with due consideration for asset class differences. The three primary ways in which ESG can be incorporated are: exclusion, integration, and impact investing as outlined in the table to the right.

| | Definition | Example |
|---|---|---|
| **Exclusion Investing** | Attempting to screen out investment in stocks, companies or industries based on a set of ethical values. | Carbon, coal, fossil fuel, cluster munitions. |
| **Integration** | Integrates environmental, social and governance non-financial data into fundamental investment analysis to the extent they are material to investment performance. | A clear and systematic process on how financially material ESG factors are identified and incorporated into the decision-making process. |
| **Impact Investing** | Looking for (or avoiding) investments that have a positive (or negative) investment return as well as a desired social, economical or environmental outcome. | Climate change, low-income housing, clean drinking water, clean technology projects, protecting biodiversity. |



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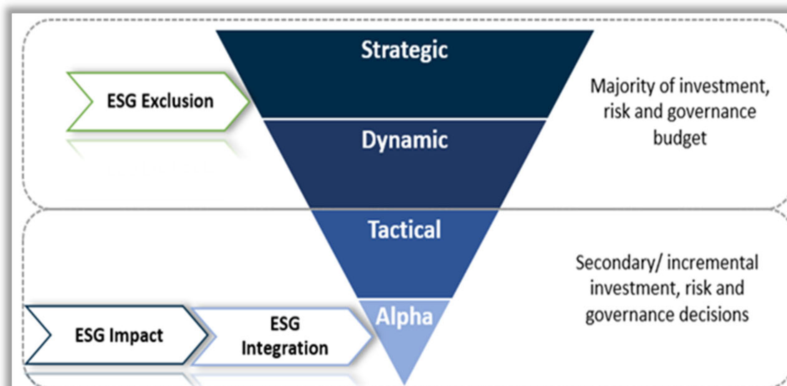
## Approach

The impact of a particular climate-related risk or opportunity on the Plan's investment strategy depends on how it is managed (either through exclusion, integration, or impact investing). MPTL has worked with its advisors, particularly SECOR, to adopt these approaches as appropriate when responding to CRROs that have materialised or are expected to materialise.




We believe each of these approaches can be utilised in the portfolio, to varying degrees, and that ESG should primarily be incorporated as part of the Plan's active management programmes (tactical and alpha levels in the diagram to the left), rather than as part of higher-level investment strategy (and strategic and dynamic in the diagram). The exception is that ESG Exclusion (as required by law or regulation) is a strategic consideration.

ESG considerations – including CRROs - are generally managed using an "integration" approach (which means ESG factors - including CRROs – are integrated into the Plan's investment strategy to the extent they are material to investment performance). This can be incorporated in a number of ways, but for the Plan is primarily implemented through the manager selection process and by the Plan investment managers through the active investment management process. There are a number of ways that managers implement ESG integration. It can be used in fundamental security selection, sector evaluation, regional allocations and both qualitatively and quantitatively. SECOR asses these approaches for each manager similarly to how we asses a manager active management style and this is further captured in ESG reporting produced for MPTL.

MPTL also seeks to incorporate a sustainable "impact investing" approach and is working with its advisors, particularly SECOR, to identify potential existing and future sustainable impact investments in alternative asset classes- primarily in private equity and property.

MPTL uses the "exclusion" investing approach on a limited basis, primarily to ensure adherence to laws and regulations, such as the exclusion of cluster munitions and other regulatory restrictions. As stated in the Plan's Responsible Investing beliefs, MPTL believes engagement on ESG topics – including CRROs - is a more effective way to initiate positive change than ESG exclusion. Exclusion can often come with many unintended consequences, such as unwanted sector and regional tilts, or excluding good or improving businesses with those that are truly not good ESG investments. Additionally, exclusion provides no opportunity for engagement and does not provide encouragement for improvement other than the hope that a lack of investment by the markets as a whole (if this happens) may cause management to self-initiate change.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## Evolving Impact of CRROs

The impact of ESG – including CRROs – on investments is an evolving topic and there is the potential for it to be greater than currently anticipated and conventional wisdom could be turned on its head. In light of this, and given the CRROs relevant to the Plan, we continue to monitor:

- Investors' increasing awareness of ESG factors and the number of investors actively pursuing specific agendas, with the potential for the broader market, as well as specific sectors, to be increasingly driven by ESG issues;
- Potential for increased focus and / or changes in regulations to create a major shift in conventional market wisdom and pricing, e.g. companies and sectors with perceived negative social impact could see dramatic downside outcomes as their current business models face scrutiny or investors withdraw funding; and
- Demographics – as the proportion of "Millennials" and "Gen Zs" grows, the drivers of business financing, consumer demand and asset pricing could favour greater social awareness.

## Responsible Investing

As illustrated in the following diagram, SECOR has advised MPTL that by incorporating ESG considerations into investing, it is possible for a portion of assets to meet the investment objectives (doing well) while also having a positive environmental, social, or governance impact (doing good). The intersection of the "investment opportunities" and "positive impact opportunities" is the sweet spot of "doing good while doing well".

- At a minimum, the Plan will need to meet regulatory requirements
- The primary objective of the Plan is to meet its fiduciary duty to provide pension benefits to its members; "doing well"
- As a secondary objective, we investigate if we can achieve a positive sustainable impact; "doing good"


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# Scenario Analysis

## Scenarios

**Key obligation #7:** MPTL understands that it must set out the most recent scenarios which it has analysed.

Given that data availability remains relatively unchanged from 2022, MPTL has decided that the initial scenario analysis conducted remains appropriate for the purposes of the Regulations. MPTL is satisfied that this scenario analysis provides the directors with up to date understanding of:
(a) the potential impact on the Plan's assets and liabilities of the effects of the global average increase in temperature and of any steps which might be taken (by governments or otherwise) because of the increase in temperature in these scenarios;
(b) the resilience of the scheme's investment strategy; and
(c) the resilience of the funding strategy
in all of the scenarios considered.

For the year end 2023, SECOR reviewed the scenario analysis previously conducted to ensure that the Plan's exposure to CRROs remains consistent. SECOR constructed four climate-risk scenarios that project the assets and liabilities forward based on SECOR's assumptions. The scenario analysis is assumption-based and has been conducted top-down rather than based on underlying holdings for which there may be limited climate-risk information. The objectives of the Paris Agreement could be achieved or not achieved in numerous ways. SECOR has suggested these four scenarios to demonstrate the breadth of outcomes that could be observed in practice and MPTL has agreed that this is a balanced approach to take. The orderly transition scenario assumes a smoother journey to the objectives of the Paris Agreement, whilst the abrupt transition scenario stresses this assumption. The no action scenario reflects a sustained failure to address climate change, whereas the green bubble scenario reflects a similar failure resulting from the risk of financial markets and investors providing only lip-service to the Paris Agreement.

The four scenarios that MPTL has considered are summarised below:

Orderly transition: 2° C or lower scenario where emission reduction starts now and continues in line with the Paris Agreement. SECOR has calibrated its base-case asset and liability assumptions to assume an orderly transition. This reinforces the view that if early action to address climate change is not taken, then normal capital market return assumptions may not hold.

Abrupt transition: 2° C or lower scenario where little short-term action is taken, followed by sudden action in 2030 to address climate change. Under this scenario, SECOR's base-case capital market assumptions are shocked in 2030 because of rushed policy action, resulting in a market drawdown in response. Under this scenario, growth assets sell-off, interest rate expectations fall, and inflation expectations rise in 2031. Markets eventually return to the base case as the new policy action is priced in.

No action: 4+°C scenario where society fails to address climate change. Under this scenario, SECOR's base-case capital market assumptions are shocked in 2031 as markets price-in the impact of failing to


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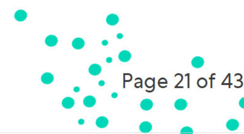

achieve the targets set in the Paris Agreement. The drawdown in 2031 is similar to the Abrupt transition; however, market returns continue to decline as 2050 gets closer and the physical risks of climate change weigh on future growth.

Green bubble: A scenario where substantial financial investments behind addressing climate change are found to be ineffective, resulting in a bubble and crash, followed by a loss of confidence in any ability to truly address climate change using the financial system. This scenario has a similar climate consequence as the No Action scenario but involves two severe market drawdowns. Addressing climate change requires significant investment. However, if the desire to deploy capital to address climate change is misguided and results in artificial valuation bubbles in certain market segments, there could be a market correction in the short-term followed by a market impact similar to the No Action scenario.

## Assumptions

The scenarios above are deterministic scenarios that have been constructed based on SECOR's judgement of the climate risks embedded in each asset class. Each scenario represents a set of deterministic return paths ending in 2050. The Orderly scenario represents SECOR's base-case capital market assumptions which reinforced the belief that in order for the Plan's investment strategy to perform in line with expectations, there must be an orderly transition to a low carbon economy. The Abrupt, No Action and Green Bubble scenarios are also composed of deterministic return paths but with market shocks for each asset class relative to the Orderly scenario. At key points in the pathway's returns are informed by historical asset class returns in other stress scenarios. The pathway returns are informed by the latest Capital Market Assumptions hence the analysis remains up-to-date.

## Limitations

The scenario analysis provided is appropriate for assessing the impact of the four scenarios constructed by SECOR on the Plan's investment strategy. The scenarios are top-down scenarios and hence rely on SECOR's judgement and proprietary analytics to assess how each asset class might behave under these scenarios. In practice, there is insufficient data on the dependencies between asset class returns and climate risks and so the analysis should not be solely relied upon when constructing portfolios.



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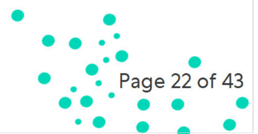
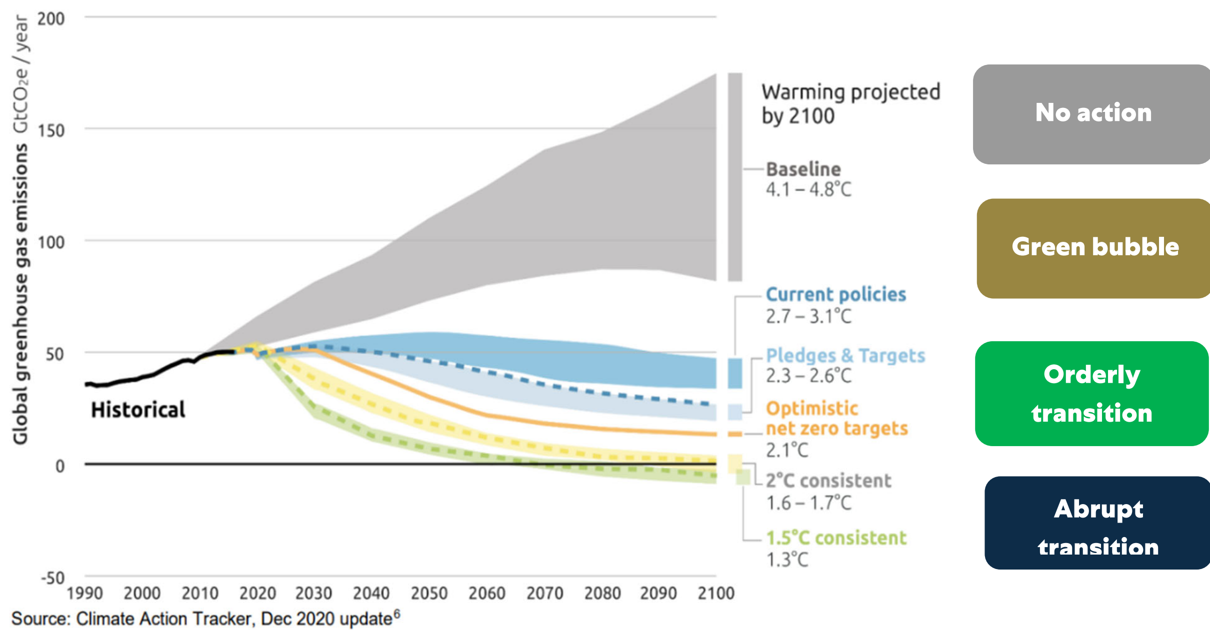


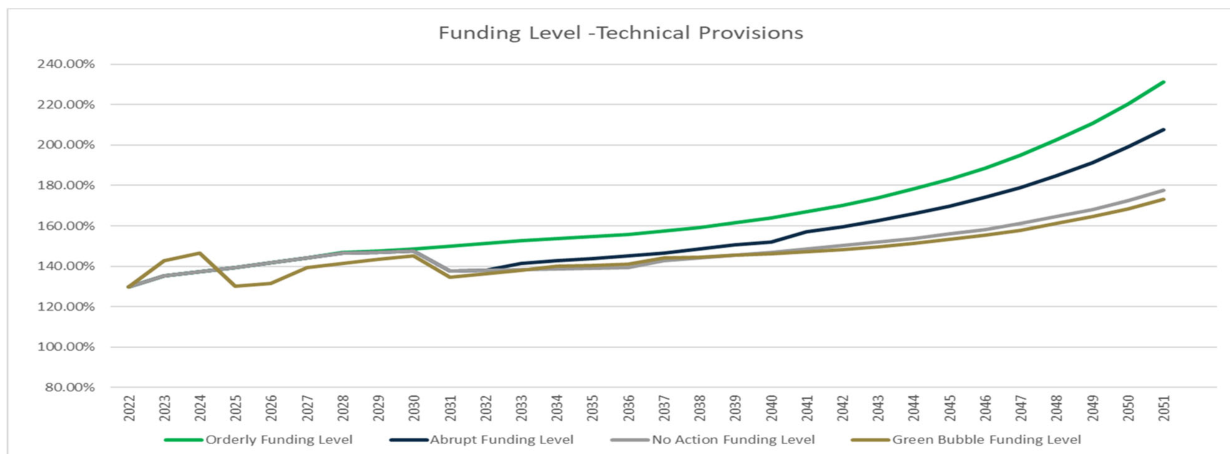


Source: Climate Action Tracker, Dec 2020 update[6]

## Scenario Analysis Results:

**Key obligation #8:** MPTL understands that it must set out (1) the potential impacts on the Plan's assets and liabilities which it has identified in the scenarios analysed above and (2) if it has not been able to obtain data to identify potential impacts for all of the assets of the Plan, why this is the case.

SECOR has projected forward the Plan's assets and liabilities of the Plan under each of the four scenarios. The below chart demonstrates the progression of the funding level through to 2051.




The above chart illustrates the funding level of the Plan over time in all four scenarios (from 2022 to 2051-spanning 30 years). The Plan pathways differ quite a lot in the short-medium term (5-10 years), but the Plan continues to become better funded over the longer term in all scenarios. The Plan funding level never falls below 120% in any of the scenarios analysed, including the 'green bubble'. The high initial funding level of the Plan (~130%), the de-risked nature of the portfolio (65% Matching Assets, 30% of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Plan TRH coverage, no Public Credit asset class) and the 100% LDI hedge ratio (on TP basis) means the Plan is well placed to withstand significant capital market shocks without a material deterioration in funding.[6]

| Scenario Analysis Summary | | Orderly | Abrupt | No action | Green bubble |
|---|---|---|---|---|---|
| **Short-term (five years)** | Assets | £4,800m | £4,800m | £4,800m | £4,600m |
| | Liabilities | £3,300m | £3,300m | £3,300m | £3,300m |
| | Funding level | 144% | 144% | 144% | 139% |
| **Medium-term (10 years)** | Assets | £4,700m | £4,800m | £4,800m | £4,800m |
| | Liabilities | £3,100m | £3,500m | £3,500m | £3,500m |
| | Funding level | 151% | 138% | 138% | 136% |
| **Long-term (20 years)** | Assets | £3,900m | £3,700m | £3,600m | £3,600m |
| | Liabilities | £2,300m | £2,300m | £2,400m | £2,400m |
| | Funding level | 170% | 160% | 150% | 148% |

## Short-term:

Over the short-term, the Plan is well-positioned to manage climate change risks. The primary risk in the short-term is a green bubble scenario which could result in more volatile funding levels. In practice, MPTL has invested in equity downside protection that could help mitigate further against any drawdowns or market volatility.

## Medium-term:

Over the medium-term, the Plan's funding level remains above 100% on a technical provisions basis in all scenarios. The key identifiable risk is focussed around 2030 and the potential for any drastic policy action (or lack thereof). Much of the market impact in these scenarios is mitigated by the 100% LDI hedge ratio (inflation and interest rate shocks are hedged, and should not impact Plan funding level materially), the considerably de-risked portfolio and the equity downside protection programme.

## Long-term:

Over the long-term, the impact of climate change risks on the Plan is more pronounced as lower returns compound over time resulting in worse funding levels. The scenario analysis shows that the largest risk to the Plan is a societal failure to achieve the Paris Agreement; however, it is worth putting this in context. The Plan maintains strong levels of funding in all of these scenarios, driven by the Plan's strong initial funding position, de-risked portfolio and the equity downside protection programme.

**Footer Notes**

[6] The table is based on the current applicable TP basis, and it is expected that over time this basis will develop towards a discount rate that reflects the long term objective, which is to be decided.



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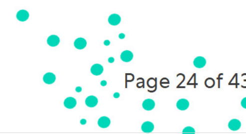

## Resilience of the Plan's Investment Strategy and Funding Strategy:

**Key obligation #9:** MPTL understands that it must set out the resilience of the Plan's investment strategy and funding strategy in the scenarios analysed above.

Following advice from SECOR, Aon and EY Parthenon, MPTL believes that the Plan's funding strategy will be resilient in the face of all four scenarios described above. The reason for this is that the Plan is already well-funded, MPTL has used scenario analysis to better understand the potential impact on the covenant of the effects of climate change, and the funding strategy will be assessed and amended as appropriate in light of any changes to the covenant and investment strategy.

MPTL is also comfortable, following advice from SECOR, that the investment strategy will be robust and resilient in the face of the climate-related risks identified in each of the four scenarios above because it can address those risks in a number of ways. As shown by the Scenario Analysis summary table above, over the short, medium and long-term the Plan remains over 120% funded on a technical provisions basis. This is largely due to the high funding level at the beginning of the analysis, the 100% LDI hedge ratio (inflation and interest rate shocks are hedged, and hence do not impact Plan funding level materially), and the considerably de-risked portfolio, including the equity downside protection programme. The Plan is overall well-positioned to manage climate risks.

MPTL recognises that climate change risk is an inherently long-term risk but it could have significant short and medium-term impacts too. The current flight plan provides a robust framework to manage these risks over the short, medium and long-term and MPTL believes the largest risk for the Plan over the short-term is a green bubble scenario, though MPTL views this as an unlikely scenario. In those circumstances, MPTL will work with its advisors to overcome the challenges associated with a green bubble scenario.

MPTL will review the scenario modelling regularly and update it at the end of a three-year period or earlier if there are material developments affecting the Plan, available data, or analytical techniques. MPTL considers this to be a proportionate and balanced approach to scenario analysis.

## Identifying, assessing and managing climate-related risks

**Key obligation #10:** MPTL understands that it must describe the processes it has established for identifying, assessing and managing climate-related risks which are relevant to the Plan.

MPTL's processes for identifying, assessing and managing climate-related risks are set out in the "Governance" section of this report. Key points include:

- MPTL works with its internal teams and external advisors to identify relevant risks and opportunities;
- CRROs are assessed in the regular investment and risk performance reports MPTL receives from its internal teams and external advisors;
- MPTL recognises climate change as a responsible investing risk factor, and as part of the Plan's overall risk management oversight and investment programme, MPTL works with MIT, its investment advisor SECOR, its actuary Aon, its covenant adviser EY and others by aligning relevant climate-related risks within the agreed upon risk/return investment guidelines. These risk management activities are reported to MIT and MPTL;
- climate-related risk management is co-ordinated and managed in close partnership between MIT and SECOR. SECOR assists in the management of climate-related risks of the scheme's investment portfolio on behalf of MPTL throughout the investment lifecycle;
- as part of the investment process, SECOR monitors and engages with external investment managers regularly on activities related to climate risk, stewardship and ESG as reported in the annual implementation statement. The external investment managers are expected to implement their respective ESG policies in assessing and managing climate related risks based on their mandates.

MPTL prioritises and manages risks which pose the most significant potential for loss and are most likely to occur by working with its advisors to undertake scenario analysis and to consider the outputs of that analysis. The scenarios that have the most extreme consequences for the Plan in terms of financial loss or instability get the most attention, and the investment strategy will be reviewed to ensure that risks that could materialise are sufficiently addressed in the investment strategy.

**Summary of risk management-related developments and activities during the reporting year:**

As stated above in the governance section, the plan is significantly derisked and the vast majority of assets for which CRRO's may be relevant are held in Private Limited Partnerships that have limited scope for the Plan to influence changes. From a risk management perspective, MPTL and its advisors continue to work with investment managers to improve the transparency of the investment and understand any potential CRRO's that may impact the Plan but overall remain comfortable that the potential impact is extremely limited given the total Plan asset mix and funding status of the Plan. Therefore, the focus over 2023 has been on improved reporting, better transparency, and encouraging private asset investment managers to better integrate ESG considerations in their oversight of Plan assets.


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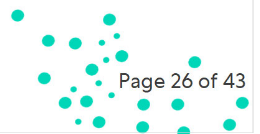

## Integration

**Key obligation #11:** MPTL understands that it must describe how the processes described above are integrated into its overall risk management of the Plan.

As stated in the "Governance" section of this report, MPTL has chosen to take an approach to the oversight and management of CRROs that largely replicates the process for how it considers other risks and opportunities.

Responsible Investing is integrated into MPTL's overall risk management of the Plan through the existing governance framework (the risk register, SIP and Responsible Investing Policy) and is aligned with the Risk Policy Statement and the established operational procedures. This approach has been approved by MPTL and the Investment Committee, is overseen by the MIT, and executed by SECOR with appropriate delegation to third party managers and service providers.

## Risk tools

MPTL relies on SECOR's broad range of custom-built proprietary risk analytics to monitor and manage risks within the investment strategy, including climate risk. The risk tools include, but are not limited to:

*Top-down macro-economic and market factor analysis*
The key output of this analysis is a summary of the macro-economic and market factors that drive portfolio returns. SECOR monitors and assesses how the relationships between these factors and the Plan's portfolio changes over time.

*Value at Risk analytics*
SECOR provides value at risk analysis that provides a breakdown of the key risks that affect the Plan's funding status. The value at risk analysis focusses on a 1-in-20-year downside outcome.

*Active risk reporting*
The investment strategy of the Plan is implemented via active managers who are given discretion to add alpha versus their respective benchmarks. The discretion afforded to managers is governed by an active risk measure. SECOR sets a Plan-level active risk budget and monitors the active risk of underlying managers versus the aggregate risk budget.

*Stochastic asset-liability modelling*
MPTL relies on stochastic asset liability modelling conducted by SECOR to assess the range of outcomes the Plan could experience. SECOR projects forward the assets and liabilities, accounting for the sophistication of the Plan's de-risking flight plan and investment strategy. A key output of this analysis are the potential downside scenarios and the likelihood and size of company contributions required in these scenarios.

*Climate risk scenario analysis*
MPTL uses climate risk scenario analysis to better understand the Plan's exposure to the transition and physical risks of climate change. The output of this analysis is provided in this report and is further assessed against the output of the stochastic asset-liability modelling.


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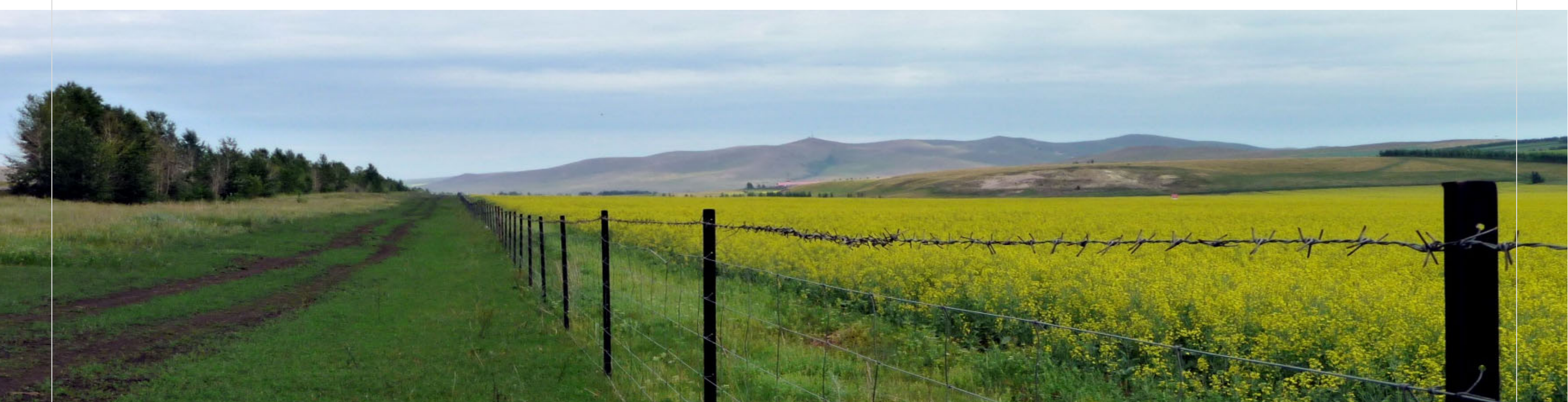
The Plan's climate-related risks process is a top-down analysis of the exposure of different asset classes to macro-economic and market factors and, in turn, how these exposures may drive returns in each of the four scenarios considered. Asset class level data is used for this analysis and the Plan leverages fund and security specific reporting provided from managers. These reports are aggregate responses in a database, which populates portfolio, asset class and manager specific reporting and how ESG and climate risks are integrated into the investment process. The reporting from managers is based on internal proprietary data or third-party data received from providers such as MSCI, Sustainalytics and Bloomberg.

## Focus on transition and physical risks

Asset managers identify and assess the risk to the Plan of transition risks (including stranded assets, asset mispricing, the potential for carbon sensitive sectors to significantly underperform or outperform), as well as physical risks from extreme weather as part of climate change. Transition and physical risks related to climate change are then managed through the integration of ESG considerations in the security selection and manager investment process. Additionally, incorporating impact-oriented investments will help to mitigate these risks. SECOR liaises with all the asset managers to ensure that their approach to climate-related risks is appropriate for their asset class and investment mandate.

MPTL believes that an actively managed investment strategy will help the Plan avoid investments that will be negatively affected by physical and transition risks and invest in those that will benefit from the transition. In the medium and longer-term, exposures to these risks will be reduced as the Plan continues to de-risk due to its strong funding level. Assets that have exposures to these risks are expected to be significantly reduced in the short to medium-term, thus limiting the potential for them to have a material impact on the resilience of the Plan. MPTL also regularly engages with EY Parthenon to identify risks and opportunities related to the Employer Covenant and the funding of the Plan.

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## Metrics[7,8,9]

**Key obligation #12:** MPTL understands that it must describe the metrics it has calculated.

For trustees, metrics can help to inform their understanding and monitoring of their scheme's CRROs. Quantitative measures of their scheme's CRROs, in the form of both emissions and non-emissions-based metrics, help trustees to identify, manage and track their scheme's exposure to the financial risks and opportunities climate change will bring. Considering the above, in this section we outline our approach to the incorporation of various metrics in our approach to Responsible Investing for the Plan.

In 2023, the MPTL calculated total carbon emissions as its absolute emissions metric, WACI as its emissions intensity metric and exposure to fossil fuel intensive assets as its additional climate metric. In accordance with the Regulations, MPTL has also reported a portfolio alignment metric since 2022. MPTL remains comfortable that these metrics are appropriate for the Plan and will continue to calculate them. MPTL will, review these metrics annually in light of scheme and industry developments.

Portfolio CO2e emissions can be measured using different metrics. For the reasons discussed in the first part of this report, we are approaching the process carefully and expect ultimately to adopt an approach and methodology tailored to the Plan's investment programme. We report results related to WACI and total carbon emissions and disclose year-over-year portfolio carbon emissions based on a market value invested weighting methodology. The results are calculated based on physical investments, excluding overlays and cash accounts and are measured using the following indicators:

### Scope 1, 2 and 3 data (whole scheme level)

Each metric calculated uses Scope 1, Scope 2 and Scope 3 emissions.

### Absolute Emissions metric (whole scheme level)

- Total Carbon Emissions – Measures the carbon emissions of the portfolio in tons of carbon dioxide equivalent ("tCO2e")[10]. TCO2e emissions include those from carbon and other greenhouse gasses. The metric has limited use for comparison to other portfolios because it is not normalised by portfolio size.
- Normalised Carbon Emissions — A normalised measure (by $M invested) of the portfolio's contribution to GHG emissions. Expresses the carbon efficiency of the portfolio.
- Total Carbon Emissions calculated as (Normalized Carbon Emissions x £M invested in strategy). Based on the available data assets produce approximately 34,889 tCO2e. This is an increase from 2022 and

**Footer Notes**

[7] Proxy determined by underlying manager's benchmark and managers weight in the portfolio as of 31 December 2023.

[8] If appropriate benchmark data is not provided, the benchmark exposure will be matched to the manager. The percentage of managers where this is the case is indicated in the tables in this section.

[9] Data shown only accounts for Scope 1, 2 and 3 Emissions. See Appendix I for methodology and disclosure.

[10] Reference: Eurostat - tCO2e is a carbon dioxide equivalent or CO2 equivalent, abbreviated as CO2-e is a metric measure used to compare the emissions from various greenhouse gases on the basis of their global-warming potential, by converting amounts of other gases to the equivalent amount of carbon dioxide with the same global warming potential.


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reflects greater data coverage from our Investment Grade Fixed Income Manager who had not supplied data in years past. Data coverage went from 18.0% in 2022 to 37.6% in 2023. Data coverage to include Scope 3 emissions is at 33.9% and shows total carbon emissions of 155,580 tCO2e. This is also a higher result than 2022 and is attributable to the increase in data coverage of 12.9% from last year.

| Total Carbon Emissions (Tons CO2e) Scope 1+2 | | | | |
|---|---|---|---|---|
| Dec-2023 | % of Plan | % of Managers Supplying Data | % of Managers using Benchmark as Proxy | Asset Class Total Emissions (tCO2e) |
| Public Equity | 0.0% | 100.0% | 0.0% | 0 |
| Public Fixed Income | 48.2% | 61.1% | 0.0% | 20,472 |
| Private Equity | 18.8% | 23.6% | 0.0% | 7,952 |
| Private Credit | 4.0% | 93.2% | 0.0% | 6,465 |
| Property | 9.9% | 0.0% | - | - |
| Hedge Funds | 19.1% | 0.0% | - | - |
| Total | 100.0% | 37.6% | 0.0% | 34,889 |

Note: Majority of the Fixed Income asset class is derivative-based exposure which does not have emissions data.

| Total Carbon Emissions (Tons CO2e) Scope 1,2,3 | | | | |
|---|---|---|---|---|
| Dec-2023 | % of Plan | % of Managers Supplying Data | % of Managers using Benchmark as Proxy | Asset Class Total Emissions (tCO2e) |
| Public Equity | 0.0% | 100.0% | 0.0% | 0 |
| Public Fixed Income* | 48.2% | 61.0% | 0.0% | 121,275 |
| Private Equity | 18.8% | 23.6% | 0.0% | 34,305 |
| Private Credit | 4.0% | 0.0% | 0.0% | 0 |
| Property | 9.9% | 0.0% | - | - |
| Hedge Funds | 19.1% | 0.0% | - | - |
| Total | 100.0% | 33.9% | 0.0% | 155,580 |

Note: Majority of the Fixed Income asset class is derivative-based exposure which does not have emissions data.

## Emissions Intensity metric (whole scheme level)

- WACI — Measures a portfolio's exposure to carbon-intensive companies and indicates the potential climate change-related risks relative to other portfolios or a benchmark. It is useful for comparing portfolios across asset classes.
- MPTL has also calculated and reported WACI in addition to the carbon emissions for the following reasons:
    - It can be more easily applied across asset classes and portfolios of different sizes.
    - It is more easily understood by and communicated to stakeholders.
    - It also allows for portfolio decomposition and attribution analysis.


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| Weighted Average Carbon Intensity (Tons CO2e / $m Sales) Scope 1+2 | | | | |
|---|---|---|---|---|
| Dec-2023 | % of Plan | % of Managers Supplying Data | % of Managers using Benchmark as Proxy | Scaled Asset Class Weighted Average |
| Public Equity | 0% | 100.0% | 0% | 0 |
| Public Fixed Income | 48% | 61.1% | 0% | 22 |
| Private Equity | 19% | 81.2% | 0% | 55 |
| Private Credit | 4% | 93.2% | 0% | 36 |
| Property | 10% | 0.0% | - | - |
| Hedge Funds | 19% | 0.0% | - | - |
| Total | 100% | 48.4% | 0% | 112.6 |

| Weighted Average Carbon Intensity (Tons CO2e / $m Sales) Scope 1,2,3 | | | | |
|---|---|---|---|---|
| Dec-2023 | % of Plan | % of Managers Supplying Data | % of Managers using Benchmark as Proxy | Scaled Asset Class Weighted Average |
| Public Equity | 0% | 0.0% | 0% | 0 |
| Public Fixed Income | 48% | 61.0% | 0% | 115 |
| Private Equity | 19% | 23.6% | 0% | 324 |
| Private Credit | 4% | 0.0% | 0% | 0 |
| Property | 10% | 0.0% | - | - |
| Hedge Funds | 19% | 0.0% | - | - |
| Total | 100% | 33.9% | 0% | 439.1 |

Note: The WACI of 112.6 for Scope 1+2 emissions and 439.1 for Scope 1,2,3 emissions is based on the available data.

## Portfolio alignment metric

In compliance with the reporting requirement for a portfolio metric alignment, SECOR has conducted the analysis using the Paris Agreement Capital Transition Assessment (PACTA) tool which measures financial portfolios' alignment with various climate scenarios consistent with the Paris Agreement. The PACTA tool assesses portfolio alignment by comparing the performance of investments in the portfolio against one or more benchmarks for public equity and corporate bonds (which is why this is often referred to as a benchmark performance model). The PACTA analysis focuses on asset classes with the most direct and traceable impact on the real economy, and for which public data is available.

MPTL undertook significant de-risking; at the end of 2022. At the end of 2023, the Plan held less than 1% public equity and 3.5% corporate bond positions. The aggregate equity and corporate bond positions that the PACTA tool analysis covers is approximately 0.5% of Plan AUM, a very small and de minimis impact to the plan's overall portfolio.[11] The PACTA tool output does not have one overall metric to report on; it includes a number of climate related factors that PACTA tool compares.[12] Given the limited exposure to the assets that PACTA has identified as having material risks or opportunities related to

**Footer Notes**

[11] PACTA tool analysis of MPTL's holdings coverage is 0.46% of Plan - sector exposure coverage PACTA determined to contribute to GHG emissions.

[12] Portfolio alignment analysis include climate relevant sectors: power, oil & gas, coal mining, automotive, shipping, aviation, cement, steel, and heavy-duty vehicles.


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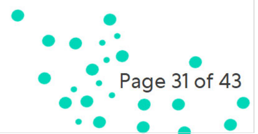

climate change the analysis provides further confirmation that climate risks and opportunities are limited for the Plan. Therefore, we conclude that the expected impacts of climate change identified by the tool are not expected to be material to the Plan.

## Additional climate change metric (whole scheme level)

Exposure to fossil fuel intensive assets — The amount of carbon-related assets in the portfolio, expressed in percentage of the current portfolio value. This metric was chosen as MPTL views fossil fuel intensive assets as having a relatively high exposure to near-term climate-related risk and will be considering limiting or reducing these risks in the near-term. Absolute exposure is relatively low at this time and expected to reduce as the Plan continues to de-risk.

| Exposure to Carbon-Related Assets | | | | |
|---|---|---|---|---|
| Dec-2023 | % of Plan | % of Managers Supplying Data | % of Managers using Benchmark as Proxy | Asset Class Carbon Exposure |
| Public Equity | 0.0% | 100.0% | 0.0% | 0.0% |
| Public Fixed Income | 48.2% | 61.1% | 0.0% | 0.2% |
| Private Equity | 18.8% | 100.0% | 0.0% | 0.1% |
| Private Credit | 4.0% | 100.0% | 0.0% | 0.9% |
| Property | 9.9% | 100.0% | 0.0% | 0.0% |
| Hedge Funds | 19.1% | 100.0% | 0.0% | 2.3% |
| Total | 100.0% | 81.2% | 0.0% | 0.6% |

## Using the metrics to identify and assess the CRROs which are relevant to the Plan

**Key obligation #13:** MPTL understands that it must use the metrics it has calculated to identify and assess the CRROs which are relevant to the Plan.

The metrics above will allow us to assess more accurately the emerging risk and reward opportunities that will come from decarbonisation. It also provides us with an additional tool for assessing managers on a standalone basis against their benchmark and against comparable managers. The collection and analysis of this data gives a better perspective on where managers could improve their decarbonisation efforts and what asset classes are slower to adopt these practices.

As such, decarbonisation and carbon emissions reporting has become a standard part of our due diligence process and ongoing monitoring as we look to reach our own reduction targets discussed later in this report. These metrics indicate that the Plan has a material carbon emissions and is exposed to carbon intensive companies and fossil fuel intensive assets.

In an orderly transition scenario, we anticipate that continuous gradual decarbonisation will avoid significant climate-related risks for the Plan. In an abrupt scenario, there may be some initial impact as interest rate expectations could fall and inflation expectations could rise. We would expect similar results in an inaction scenario, although the physical risks of climate change may have a greater impact. A green bubble scenario could involve significant market drawdowns and is considered to pose the most material risk for the Plan. However, the metrics indicate that the funding strategy and investment strategy would remain largely resilient so that impact on the Plan would be mitigated.


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## Metrics - Data Availability

**Key obligation #14:** MPTL understands that if it has not been able to obtain data to calculate the metrics for all of the assets of the Plan, it must describe why this is the case.

This section of the report describes the data (1) MPTL has been unable to obtain or (2) MPTL has treated as unobtainable, and the reasons for this.

Data availability related to emissions varies widely across the Plan's portfolio. Due to the nature of regulatory reporting for public companies, Public Equity and Public Fixed Income managers are able to aggregate emissions data for their underlying holdings. While some managers collect this data themselves, the majority of managers rely on third party data providers that charge an annual fee for access. As such, only those managers that are willing to pay for full access to these data providers are currently able to satisfy the required scope of emissions while others can only supply a few data points. For those managers that do not subscribe to any third party data provider, we rely on publicly available resources such as the MSCI ESG Fund Rating tool to fill in the data gaps. The end result gives a very strong coverage for metrics such as WACI, but less coverage for further statistics such as total emissions or scope 3 emissions. However, we expect that this data will become more readily available through a combination of regulation and pressure from institutional investors. MPTL has been able to use look through data for public holdings to obtain the available metrics to provide the current data as available.

In previous years, managers in private asset classes, such as private credit and private equity, have provided much less data related to emissions of their underlying assets for a myriad of reasons. Since the assets are privately owned, they are not subject to the same reporting requirements as publicly traded companies. This is also applicable in real estate, although we have seen an increase in direct property holders reporting total carbon emissions through GRSEB[13] reporting. However, this year we have seen a significant increase in private managers using proxy analysis to give a representation of what the decarbonisation characteristics the portfolios have. While the accuracy of this data still has room for improvement, we are encouraged by the growing participation of our managers in supplying these metrics.

The nature of a fund-of-funds ("FoF") structure adds an additional layer of complexity in collecting data since the manager of the FoF does not have direct control of the underlying assets in the portfolio. That said, there has been an effort by some data providers to try and streamline this process for private asset owners that may bring us greater data coverage in the future. Where there are data gaps, MPFL has treated the data as unobtainable because it would be disproportionately time consuming and costly to attempt to collect this data.

Hedge Funds are arguably the most difficult asset class for which to quantify ESG data, because managers are much more reluctant to divulge portfolio details at the risk of exposing their proprietary strategy

**Footer Notes**

[13] GRESB (Global Real Estate Sustainability Benchmark) is a mission-driven and investor-led organization that provides actionable and transparent environmental, social, and governance (ESG) data to financial markets. www.gresb.com



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methods to the market. These strategies often utilise broad market securities, commodities and complex derivatives that do not easily lend themselves to ESG analysis. Finally, many of the Hedge Fund managers in our portfolio have smaller AUM than our public market managers, and they typically lack the financial resources to pay for information for a third party ESG data provider. Again, where there are data gaps, MPTL has treated the data as unobtainable because it would be disproportionately time consuming and costly to attempt to collect this data.

As we are reliant on businesses calculating and reporting their own metrics to asset managers, and the asset managers collating that data and creating asset class calculations, there is some inherent uncertainty about the quality of the data used. As industry practice develops, we expect that this uncertainty will lessen.

## Metrics – Scope of Analysis

Total climate-related metrics are reported at both the asset class level and portfolio level using an asset weighted methodology. Data availability varies widely across asset classes, particularly when comparing public versus private market investments, making it difficult to accurately report at a total portfolio level. While we expect the portfolio level metric to become more useful in the years to come as data improves, the current analysis provides valuable insight into public asset classes through benchmark and peer comparison. Our asset class reports focus on the common metrics that are provided by a consistent data provider. These reports include both quantitative climate metrics and additional qualitative ESG metrics based on the underlying portfolio holdings. Because public markets are much more liquid, the information that we can gather is more decision-useful in terms of what portfolio changes can be made to reduce emissions than if we were to receive the equivalent information for our private market investments.

## Metrics – Approach, Rational and Assumptions

Methodologies for the metrics calculated above are set out in Annex 1.II. Our approach to reporting climate-related metrics is tailored to fit the recommendations of the TCFD guidelines while also accounting for the wide spectrum of data availability across managers and asset classes as discussed above. Ultimately, we seek to provide meaningful statistics that are representative of the asset class exposure and the overall portfolio. We also seek to use consistent providers to ensure that there is no variation in methodology. While the majority of public managers supply climate metrics as calculated by MSCI ESG based on their underlying holdings, private managers have started to use proxy analysis to assess their decarbonisation characteristics. MPTL has conducted the analysis using both actual and proxy metrics and at the level which is most meaningful (at asset class level).

As discussed above, the primary hurdle impacting the analysis is data availability. The tables above show the percentage of managers that were able to provide that statistic on an asset-weight basis (% of Managers Supplying Data). For managers that have not provided a statistic, but where we can rely on an equivalent benchmark, one of the key assumptions in our analysis is to use benchmark data as a proxy. This assumes that the manager's carbon exposure is similar to the benchmark, which may not be the case. The percentage of managers using a benchmark proxy in lieu of manager data is also indicated in the table (% of Managers using Benchmark as Proxy). This assumption (that managers without data have


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benchmark-like carbon exposure) does not impact the results significantly as only a small portion of managers fall under that category in the context of the portfolio as a whole.

MPTL has calculated and reported metrics on the proportion of the portfolio for which it has reported or estimated data. In calculating the above metrics, one of our assumptions has been to exclude entries from those managers who have not provided any data and where there is no equivalent benchmark. We expect data availability for alternative asset classes to improve over time and it will be incorporated as it becomes available.

As previously noted, benchmark data is more readily available for public market managers compared to private. The lack of representative data means that the results of the tables only represent data for a certain percentage of the assets. While this data is still valuable in terms of assessing current risks and opportunities, it does not paint a complete picture of the portfolio's true carbon exposure. MPTL has sought to populate gaps in data as far as it is able to do so, but some data gaps are unavoidable because it is not possible to estimate data with sufficient accuracy. This will impact our ability to create meaningful targets for the total portfolio until coverage improves. We discuss these issues further in the "Next Steps" section of the analysis and potential remedies going forward.

In the absence of sufficient data coverage for total carbon emissions, we have excluded the results for the time being. We plan to include these data points in future reports. Any additional statistics supplied by the manager are documented and help to inform our investment decisions.

## Next Steps

MTPL, is working closely with its advisors to improve data availability and collection efforts. We continue to work to improve our data coverage for the metrics outlined with the ultimate goal of being able to calculate and disclose year-over-year portfolio carbon emissions with good accuracy and data coverage across the four metrics. We have seen notable progress in the past few years with much improved data availability from public market managers, primarily driven by investor demand and regulation. We expect this trend to continue, and plan to focus our efforts on encouraging better disclosure from those managers that are currently not able to provide sufficient information.

Our expectations for disclosure in private markets is more modest due to the challenges discussed above. However, we have a slightly higher expectation for managers in Private Equity and Real Estate since they are traditionally equity owners in their investments. In Real Estate, GRESB has already provided a standardised format for emissions reporting that many of our managers have already adopted. In Private Equity, the push towards standard reporting has been


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slower and the FoF structure adds an additional layer of complexity as discussed above. Despite this, we do anticipate a gradual shift towards GHG reporting among Private Equity managers.

The sheer challenges of obtaining consistent, standardized climate data, will take time and will require collaborative efforts by investment managers, industry groups and to be remedied and enforced by regulators globally. In the meantime, MPTL will continue to work with the investment team and the investment advisor to engage with managers and various ESG industry groups to promote standardization of ESG and climate data and reporting. MPTL through SECOR engages regularly with investment managers on ESG and reporting of climate data as appropriate to encourage and seek improvements in data gaps where MPTL has influence and can make the most impact.

## Targets

**Key obligation #15:** MPTL must measure, as far as it is able, the performance of the Plan against the target MTPL set in 2022.

Target-setting should be used by trustee boards to track their efforts to manage climate change risk exposure and take advantage of climate change opportunities.

Based on available year-end 2021 data, at a total portfolio level, the Plan aimed to reduce the weighted average carbon intensity (Scope 1 and 2) of the Plan by 10% by year-end 2024. As of year-end 2023 data, the plan WACI (Scope 1 and 2) at 112.6, exceeding the 10% reduction target of 114.

From 2022, the Plan's target has been to maintain, and where possible, reduce the Plan's WACI metric. The WACI slightly increased in 2023 to 112.6% (up 0.5% from 2022):

| Target | Target by end of 2024 | 31 December 2023 | 31 December 2022 |
|---|---|---|---|
| 1) Maintain, and where possible, reduce the Plan's WACI metric from 2022 levels | 114 | 112.6 | 112.1 |

**Key obligation #16:** MPTL must, taking into account the performance of the Plan against the target MTPL set in 2021, determine whether the target should be retained or replaced.

Given the increase in WACI, MPTL decided not to change the target at this moment in time, and instead will continue taking steps to achieve it.

**Key obligation #17:** MPTL understands that it must describe the target it has set.

The current framework gives us the flexibility to incorporate additional climate-related metrics, such as absolute emissions and fossil fuel exposure, into our targets. The progress towards achieving the targets has been reviewed and will be reassessed every three years to ensure that we are in line with goals. MPTL's target continues to be to maintain (or, where possible, reduce even further) the current WACI (Scope 1 and 2) of the Plan. Maintaining a low WACI metric aligns with MPTL's fiduciary duties by reducing risk to the Plan.


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## Methodology to measure performance

Due to the nature of the asset weighted calculation for the total portfolio, these targets can be influenced by the availability of data, and careful consideration should be taken when evaluating future results as new data is introduced. Anticipating that data coverage will continue to improve, we will still be able to compare progress year-over-year by only updating data from the prior year's template. This would give us two total portfolio results for the current year. The first will only make updates for data points that were included in the analysis the prior year, which will be compared to the previous result. The second result will be a portfolio that updates all data points from the previous year and all new manager data that we have received. It is here that we plan to make use of estimations for asset classes where we do not currently have information. The use of estimates will reduce the need to perform these types of adjustments for future year-over-year comparisons.

## Performance so far

**Key obligation #18:** MPTL understands that it must describe the Plan's performance against the target.

As of year-end 2023, the Plan's WACI (Scope 1 and 2) is at 112.6, already exceeding the 10% reduction target established in 2021. From 2022, the Plan's target has been to maintain, and where possible, reduce the Plan's WACI metric. The WACI slightly increased in 2023 (up 0.5% from 2022) due to shifting asset values. Although the reduction target has been exceeded in the interim period, it remains a three-year objective.

## Steps MPTL is taking to achieve its targets

MPTL intends to employ de-risking activities as the Plan's funding level improves. De-risking is expected to lead to a lower level of emissions arising from the Plan's assets, assisting the Plan in achieving its target. MPTL will continue ongoing engagement with managers and counterparties.

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# Looking Ahead

Collection of metrics and the identification of targets has helped MPTL to identify two primary strategies for improving data for future reports.

Looking forward, the Plan will continue to encourage all managers, both public and private, to improve data availability and quality that aligns with TCFD recommendations. We expect coverage and accuracy for these metrics to improve in the coming years as climate reporting becomes industry standard across public companies and public asset managers.

Additionally, we will continue to enhance our data collection from private market managers by encouraging the use of benchmark proxies. This will not only help us better to incorporate data from private managers as they continue to improve their reporting capabilities, but it will also help to inform more accurate portfolio level reporting, whereas the current calculation is heavily influenced by missing data.

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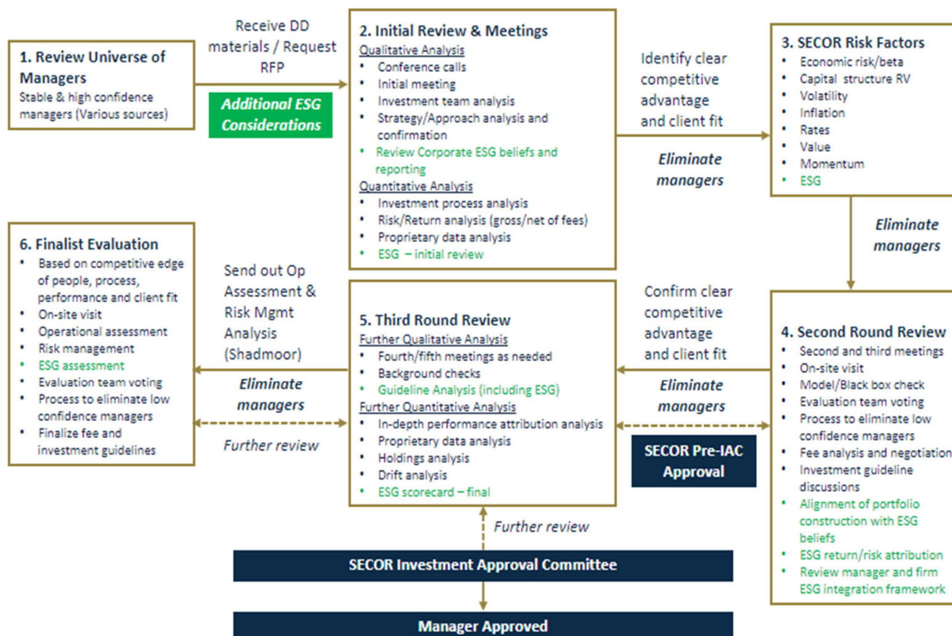
# Annex 1.I: SECOR's Multi-Stage Manager Selection Process

## Manager Research

*An evolving and rigorous process*



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# Annex1.II: Emissions Methodologies and Disclosures

WACI (tCO2/$M Sales

$$\sum_{i=1}^{n}(Weight_i \times CARBON_EMISSIONS_SCOPE_12_i \ / \ SALES_i) \ / \ \sum_{i=1}^{n}(Weight_i)$$

- *i* = index security with both carbon emissions (scope 1 and 2) and sales available
- *Weight*$_i$ = closing index weight for security i
- *CARBON_EMISSIONS_SCOPE_12*$_i$ = scope 1 and 2 carbon emissions of security i's issuer (in t CO2)
- *SALES*$_i$= Company sales for security i's issuer(in USD million)

**Scope 1 and Scope 2 GHG emissions are allocated based on portfolio weights (the current value of the investment relative to the current portfolio value), rather than the equity ownership approach (as described under methodology for Total Carbon Emissions). The caluclation can adjusted to include Scope 3 GHG emissions using the same methodology.**

Total Carbon Emissions (tCO2e)

$$\sum_{i=1}^{n}(Weight_i \times Reported\ Emissions\ Factor_i)$$

- ***i* = index security with both carbon emissions (scope 1 and 2) and EVIC[14] available**
- ***Weight*$_i$ = closing index weight for security i**
- ***Reported EmissionsFactor*$_i$ = reported emissions factor for security i**

Scope 1 and Scope 2 GHG emissions are allocated to investors based on an equity ownership approach. Under this approach, if an investor owns 5 percent of a company's total market capitalization, then the investor owns 5 percent of the company as well as 5 percent of the company's GHG (or carbon) emissions. **The caluclation can adjusted to include Scope 3 GHG emissions using the same methodology.**

Normalised Carbon Emissions

*Formula*

$$\frac{\sum_{n}^{i}\left(\frac{current\ value\ of\ investment_i}{issuer's\ market\ capitalization_i} * issuer's\ Scope\ 1\ and\ Scope\ 2\ GHG\ emissions_i\right)}{current\ portfolio\ value\ (\$M)}$$

**Normalized Carbon Emissions is similar to Total Carbon Emissions, except that rather than providing the total carbon emissions for the portfolio it normalizes the carbon emissions for every $1,000,000 of market value. As a normalized metric, it can be used to accurately compare portfolios of any size.**

**Footer Notes**

[14] EVIC: enterprise value including cash



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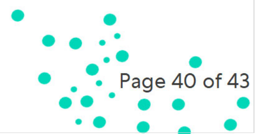

Exposure to Fossil Fuel Intensive Assets

| | |
|---|---|
| *Description* | The amount or percentage of carbon-related assets[34] in the portfolio, expressed in $M or percentage of the current portfolio value. |
| *Formula for Amount* | $\sum \$M\ current\ value\ of\ investments\ in\ carbon\text{-}related\ assets$ |
| *Formula for Percentage* | $\frac{\sum current\ value\ of\ investments\ in\ carbon\text{-}related\ assets}{current\ portfolio\ value} * 100$ |
| *Methodology* | This metric focuses on a portfolio's exposure to sectors and industries considered the most GHG emissions intensive. Gross values should be used. |

This metric focuses on a portfolio's exposure to sectors and industries considered the most GHG emissions intensive.

**Portfolio Alignment Metric Methodology**

**PACTA tool methodology[15]**

The Paris Agreement Capital Transition Assessment (PACTA) is a tool which measures financial portfolios' alignment with various climate scenarios consistent with the Paris Agreement.

PACTA compares what needs to happen in climate-relevant sectors in order to minimize global temperature rises, with financial institutions' exposure to companies in the most relevant sectors. It employs a forward-looking approach, based on the 5-year production plans of companies to which a portfolio is exposed.

The methodology measures alignment per sector or per technology with consideration of what needs to happen to meet the goals of the Paris Agreement for that sector. Some sectors need to move more quickly than others; some sectors need to reform (such as power generation); and others need to phase out (for instance, fossil fuels).

The climate-relevant sectors currently covered by PACTA are power, coal mining, oil & gas upstream sectors, auto manufacturing, cement, steel, and aviation. Collectively, these sectors account for about 75% of global greenhouse gas emissions.

PACTA relies on physical, asset-based company data as the core analytical concept, which provides regional, sector-specific, and forward-looking production pathways that can be compared with various scenarios.

This core alignment functionality is complemented by a stress-testing module for investors that measures various climate scenarios' influence on asset prices.

**Footer Notes**

[15] PACTA tool methodology description as presented by 2° Investing Initiative (2DII). PACTA tool is developed by 2DII.



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## 2022 Metrics and Targets

| Total Carbon Emissions (Tons CO2e) Scope 1+2 | | | | |
|---|---|---|---|---|
| Dec-2022 | % of Plan | % of Managers Supplying Data | % of Managers using Benchmark as Proxy | Asset Class Total Emissions (tCO2e) |
| Public Equity | 0.0% | 100.0% | 0.0% | 5 |
| Public Fixed Income | 36.6% | 27.7% | 0.0% | 1,725 |
| Private Equity | 18.0% | 15.2% | 0.0% | 2,246 |
| Private Credit | 5.6% | 92.5% | 0.0% | 8,706 |
| Property | 10.6% | 0.0% | - | - |
| Hedge Funds | 29.2% | 0.0% | - | - |
| Total | 100.0% | 18.0% | 0.0% | 12,681 |

| Total Carbon Emissions (Tons CO2e) Scope 1,2,3 | | | | |
|---|---|---|---|---|
| Dec-2022 | % of Plan | % of Managers Supplying Data | % of Managers using Benchmark as Proxy | Asset Class Total Emissions (tCO2e) |
| Public Equity | 0.0% | 100.0% | 0.0% | 5 |
| Public Fixed Income* | 36.6% | 27.7% | 0.0% | 11,321 |
| Private Equity | 18.0% | 15.2% | 0.0% | 16,984 |
| Private Credit | 5.6% | 0.0% | 0.0% | 0 |
| Property | 10.6% | 0.0% | - | - |
| Hedge Funds | 29.2% | 0.0% | - | - |
| Total | 100.0% | 12.9% | 0.0% | 28,309 |

| Weighted Average Carbon Intensity (Tons CO2e / $m Sales) Scope 1+2 | | | | |
|---|---|---|---|---|
| Dec-2022 | % of Plan | % of Managers Supplying Data | % of Managers using Benchmark as Proxy | Scaled Asset Class Weighted Average |
| Public Equity | 0% | 100.0% | 0% | 0 |
| Public Fixed Income | 37% | 51.8% | 0% | 18 |
| Private Equity | 18% | 90.0% | 0% | 64 |
| Private Credit | 6% | 92.5% | 0% | 30 |
| Property | 11% | 0.0% | - | - |
| Hedge Funds | 29% | 0.0% | - | - |
| Total | 100% | 40.3% | 0% | 112.1 |

| Weighted Average Carbon Intensity (Tons CO2e / $m Sales) Scope 1,2,3 | | | | |
|---|---|---|---|---|
| Dec-2022 | % of Plan | % of Managers Supplying Data | % of Managers using Benchmark as Proxy | Scaled Asset Class Weighted Average |
| Public Equity | 0% | 0.0% | 0% | 0 |
| Public Fixed Income | 37% | 51.8% | 0% | 82 |
| Private Equity | 18% | 15.2% | 0% | 288 |
| Private Credit | 6% | 0.0% | 0% | 0 |
| Property | 11% | 0.0% | - | - |
| Hedge Funds | 29% | 0.0% | - | - |
| Total | 100% | 21.7% | 0% | 369.3 |


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| Dec-2022 | % of Plan | % of Managers Supplying Data | % of Managers using Benchmark as Proxy | Asset Class Carbon Exposure |
|---|---|---|---|---|
| | Exposure to Carbon-Related Assets | | | |
| Public Equity | 0.0% | 100.0% | 0.0% | 0.0% |
| Public Fixed Income | 36.6% | 51.8% | 0.0% | 0.4% |
| Private Equity | 18.0% | 100.0% | 0.0% | 0.1% |
| Private Credit | 5.6% | 100.0% | 0.0% | 2.2% |
| Property | 10.6% | 100.0% | 0.0% | 0.0% |
| Hedge Funds | 29.2% | 100.0% | 0.0% | 2.3% |
| Total | 100.0% | 82.4% | 0.0% | 1.0% |


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