

Devonport Royal Dockyard Pension Scheme

Climate change governance
and reporting in line with the
recommendations of the
Task Force on Climate-Related
Financial Disclosures (“TCFD”)

Reporting period: 12 months to 31 March 2023

October 2023



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Chair's introduction

The Trustee of the Devonport Royal Dockyard Pension Scheme ("the Scheme") presents its first climate change report, which has been prepared in line with recommendations of the Task Force on Climate-related Financial Disclosures ("TCFD") and the statutory requirements prescribed by the Department of Work and Pensions¹.

Climate change is one of the most relevant issues of our time. The Trustee recognises that climate change presents both risks and opportunities, and therefore the potential financial impacts of both the associated transition to a low-carbon economy and the physical impacts of different climate outcomes need to be analysed.

Ultimately, the Trustee aims to invest the Scheme's assets in the best interests of the members and beneficiaries. Climate change is one of the risks that the Trustee measures, monitors and manages. As such, this needs to be considered alongside other risks affecting the Scheme in a balanced and proportionate way. The climate challenge may also present future opportunities for investment in projects aligned to the low carbon economy; these will be considered using the same governance framework as other potential investments. The Trustee has inevitably focused more on climate-related risks as opposed to opportunities in this report given the Scheme's funding status and investment strategy.

The Trustee's reporting is expected to continue to evolve as data availability improves, and as best practice continues to develop.

Steps taken over the period to 31 March 2023

In preparation for the production of this report, the Trustee has taken the following key steps:

- Receiving training on climate related risks and opportunities and the TCFD framework.
- Carrying out climate metrics analysis which provides an assessment of the Scheme's greenhouse gas emissions exposure.
- Undertaking climate scenario analysis which quantifies the risk to the Scheme over multiple time periods under different climate scenarios.
- Setting targets to reduce greenhouse gas emissions, covering the Scheme's buy and maintain credit portfolio:
 - Reducing greenhouse gas emissions intensity (Scope 1 and 2) for the aggregate buy and maintain credit portfolio by 45% or more by the end of 2030, as measured by Weighted Average Carbon Intensity ("WACI"), with a 30 September 2021 baseline.

1. The Occupational Pension Schemes (Climate Change Governance and Reporting) Regulations 2021, as amended.



- Reviewing investment consultant objectives in respect of climate and/or TCFD requirements.
- Reviewing other adviser requirements in respect of climate change and/or TCFD requirements (actuarial and covenant).
- Developing a governance policy, which clearly sets out the responsibilities of the Trustee and its advisers in relation to climate risks and opportunities.
- Producing an Engagement Policy Implementation Statement (which can be found at www.myoneday.co.uk) which outlines the considerations of climate change-related voting and engagement practices of the Scheme's investment managers.

Members are encouraged to contact the Trustee if there are comments they wish to raise and they can contact the Trustee at:

Secretary to the Trustee

Devonport Royal Dockyard Pension Scheme
Babcock International Group
33 Wigmore Street
London
W1U 1QX

We hope you enjoy reading this report.

Kevin Goodman

Chair of the Trustee



Areas covered in this report

This report sets out the disclosures of the Trustee of the Devonport Royal Dockyard Pension Scheme (the "Scheme") and covers the Scheme year ending 31 March 2023. This report has been prepared in line with the recommendations of the TCFD and the statutory requirements prescribed by the Department of Work and Pensions². As such, it focuses on the areas of Governance, Strategy, Risk Management and Metrics and Targets.

In summary, this report details:

- Key aspects of the Trustee's Climate Governance Policy, which outlines the roles and responsibilities of the Trustee, the Investment Committee (the "IC") and professional advisers with respect to climate-related activities.
- The Trustee's beliefs with respect to environmental, social and corporate governance ("ESG") considerations, including in the area of climate change.
- The training received by the IC and Trustee at multiple meetings over the year from its investment advisers and investment managers, particularly in relation to TCFD-related regulation and setting climate-related targets.
- The steps taken by the Trustee in response to the risk posed by climate change and its impact on the long-term funding objective for the Scheme.
- The key findings from the Trustee's climate change scenario analysis and climate metric analysis.
- The Trustee's processes to identify, assess and mitigate climate change risk.
- The five climate metrics that the Trustee has selected to better inform its understanding of climate-related risks and opportunities and monitor progress against the targets set: (1) total greenhouse gas emissions, (2) carbon footprint, (3) WACI, (4) implied temperature rise ("ITR") and (5) data quality.
- The Trustee's decision to set targets to reduce greenhouse gas emissions. The Trustee has set the following emissions target, covering the Scheme's buy and maintain credit portfolios:
 - Reducing greenhouse gas emissions intensity (Scope 1 and 2) for the aggregate buy and maintain credit portfolio by 45% or more by the end of 2030, as measured by WACI, with a 30 September 2021 baseline.



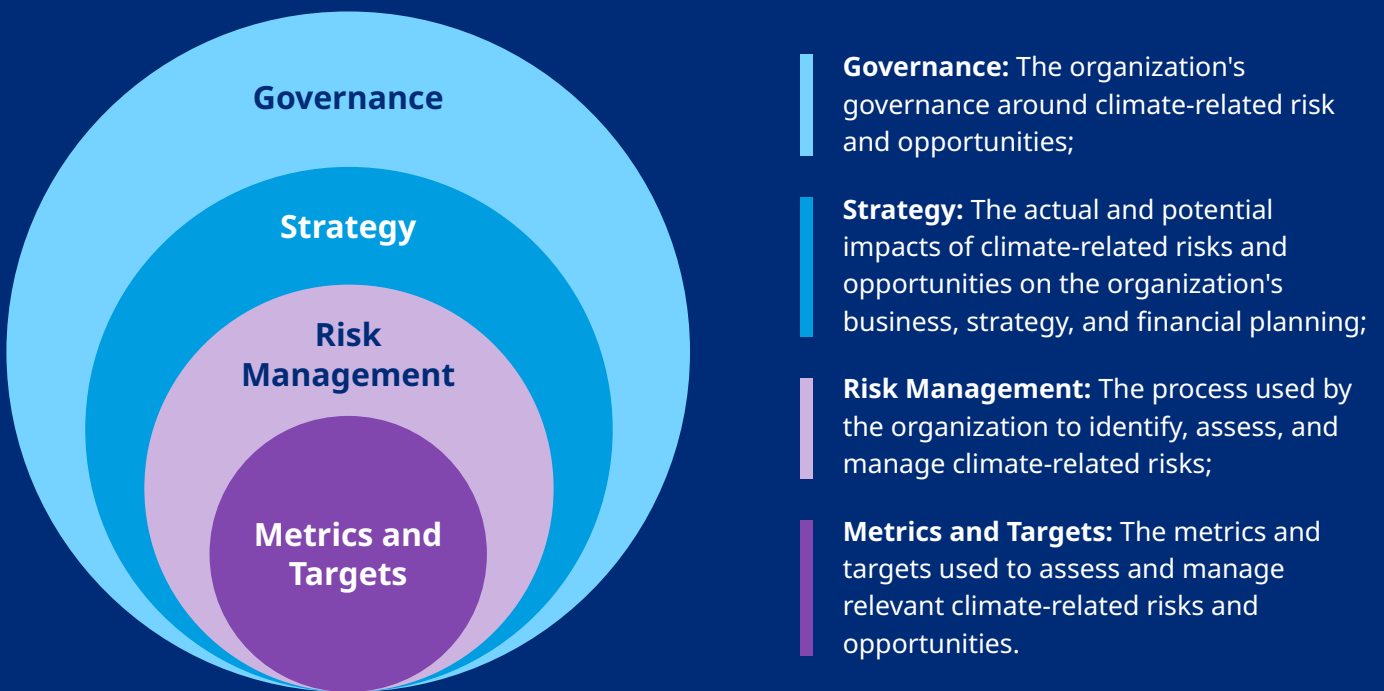
2. The Occupational Pension Schemes (Climate Change Governance and Reporting) Regulations 2021, as amended.

The TCFD framework

The Financial Stability Board, an international body established by the G20 that monitors and makes recommendations about the global financial system, created the TCFD framework in 2015. TCFD was created to improve and increase reporting of climate-related financial information that can promote more climate-informed investments.

Figure 1: TCFD Framework

The recommendations are in four key areas:



From 1 October 2021, the Occupational Pension Schemes (Climate Change Governance and Reporting) Regulations 2021 (“the Climate Change Governance and Reporting Regulations”) introduced new requirements for certain pension schemes (based on scheme size) relating to climate change governance and reporting in line with the TCFD recommendations. The Occupational Pension Schemes (Climate Change Governance and Reporting) (Miscellaneous Provisions and Amendments) Regulations 2021 amend the Occupational and Personal Pension Schemes (Disclosure of Information) Regulations 2013 to introduce disclosure requirements relating to the reports required by the Climate Change Governance and Reporting Regulations. Together, these regulations are intended to ensure there is effective governance with respect to climate change and there is appropriate disclosure regarding the identification, assessment and management of climate risk. The Government has also published Statutory Guidance to accompany the regulations, which sets out how the Trustee should meet the requirements and report in line with the TCFD recommendations.

Governance

The Trustee's approach to climate-related risks and opportunities

The Trustee has ultimate responsibility for ensuring effective governance of climate-related risks and opportunities. The Investment Committee (the "IC") is responsible for supporting and guiding the Trustee's initial work on compliance with the regulatory requirements and TCFD recommendations. It is intended that this ongoing reporting will be integrated into the business of the Trustee Board and the IC going forwards. The Trustee and IC meet at least quarterly (and more frequently, as deemed necessary) where investment performance and risk management are reviewed, and where climate-related risks may be considered as part of wider agenda items including investment and funding strategy, manager selection and retention or investment reporting. The Trustee is satisfied that the amount of governance time spent is reasonable and will allocate more time at future meetings if any analysis or wider industry research requires additional Trustee review and consideration. Climate change will form an explicit agenda item at least annually for the Trustee and IC when the Trustee's annual TCFD report is updated. It will also be covered as part of other agenda items as part of a wider discussion of funding or investment strategy, or as part of the investment manager appointment and review discussions.

The Trustee's approach to the oversight and management of climate-related risks and opportunities is consistent with its approach to considering other financially material risks and opportunities facing the Scheme. The Trustee's Statement of Investment Principles (the "SIP") details the key objectives, risks and approach to considering environmental, social and corporate governance ("ESG") factors, including climate change, and stewardship, as part of its investment decision making. The SIP is reviewed on an annual basis or more frequently as required.

The Trustee holds the following responsible investment beliefs, which are documented in the SIP, last reviewed in July 2022:



- **ESG integration:** ESG factors may have a material impact on long-term investment risk and return outcomes. These factors should be integrated into the investment process.
- **Climate change risk:** Climate change may have substantive impact on the global returns and subsequently on investment returns and aims to minimise the risk to the Scheme.
- **Stewardship (or active ownership):** Good stewardship can create and preserve value for companies and markets as a whole, hence having the potential to benefit Scheme members in the long term. Engagement and voting are influential and can be effective in changing behaviour and increasing returns. The Scheme's investment managers are best placed to manage risks related to ESG, to engage with companies and to effect change on the Trustee's behalf on a day to day basis.

The Trustee has reviewed in detail the roles and responsibilities of those undertaking or advising the Trustee on the Scheme's governance activities and produced a Climate Governance Policy, which outlines the roles of the Trustee, IC, in-house pensions team, and professional advisers in respect of climate-related risks and opportunities, and the governance processes around this; please see Appendix 1 for further details of the roles and responsibilities of those parties advising or assisting the Trustee. Ongoing actions are embedded into the Trustee's business plan, and climate-related risks are included in the Trustee's risk register. TCFD items and training are tabled at IC meetings, as well as at full Trustee Board meetings.

The Trustee expects all advisers and the Babcock in-house pensions team to act with integrity and diligence in fulfilling the set objectives (see Appendix 1 for details) and uses meetings with the advisers to assess and challenge them. Where relevant, this includes discussion of the steps taken by advisers to identify and assess any climate-related risks and opportunities.

The investment consultant's approach to climate change and how it is integrated into their advice and services is assessed as part of the adviser selection and monitoring process. The Trustee sets its investment consultant objectives, including ones related to ESG and climate change competency. The investment consultant is formally assessed against these objectives annually. The Trustee will adopt climate-related objectives for other relevant advisers, including the scheme actuary and covenant adviser, in the near future.

Key Trustee responsibilities and oversight of climate change risks

The Trustee has ultimate responsibility for ensuring effective governance of climate change risks and opportunities in relation to the Scheme. In doing so, the Trustee is supported and guided by the IC, its professional advisers and input from

its investment managers in order to help assess and manage climate risks and opportunities. The Trustee considers, discusses and challenges the advice provided to ensure that any decisions continue to be integrated into a coherent investment strategy that supports the Scheme's ability to provide pensions.

The Trustee has agreed the Scheme's strategic asset allocation and funding strategy considering climate risk. The Trustee has also agreed a greenhouse gas emissions target, which would involve changes to investment mandates, to ensure that the Scheme's portfolio is better aligned for the transition to a low-carbon economy.

The Trustee has also considered the short, medium and long term impacts of climate change on the Scheme's assets, funding level and covenant. More detail on the results is provided in the 'Strategy' section.

Overall, resources and time committed were significant in the period from 2021-2023. The Trustee and IC meet regularly to discuss climate-related risks and opportunities. The Trustee ensures that sufficient agenda time is allocated in these meetings to discuss climate governance and reporting. The Trustee Board and IC regularly identify the training needs of its members, and the wider Trust Board, and make training recommendations to the Trustee as appropriate to help them achieve an appropriate degree of knowledge and understanding relating to climate change and the requirements of the TCFD.



Regular monitoring

The Trustee has commissioned an annual TCFD dashboard report from its investment advisers covering climate metric analysis (see 'Metrics' section for more detail), ESG integration and stewardship. The Trustee engages with its investment managers on the key findings as necessary and monitors progress on at least an annual basis. The Trustee will also use the annual TCFD dashboard report to monitor progress against the targets (see 'Targets' section for more detail) set going forward.

In addition, the Trustee and IC receive and regularly review quarterly performance reports and ESG ratings (which include consideration of the investment managers' approaches to climate change and stewardship) for relevant investment mandates.

The Trustee published its annual Engagement Policy Implementation Statement during the year, which contains information on key votes relating to climate change.

The Trustee will also review the climate scenario analysis (see 'Strategy' section for further detail) at least every three years.

Training and climate competency

Research into how climate-related risks and opportunities impact financial markets is constantly evolving and expanding. Responsible Investment topics may also form stand-alone agenda items at meetings. The Trustee's investment managers are also asked to explicitly cover ESG and climate issues when presenting. The Trustee has allocated a significant proportion of its annual investment strategy day to climate related risk and opportunities and the Trustee and the IC have received training at multiple meetings over the year from its investment advisers and investment managers particularly in relation to TCFD regulations and setting climate-related targets.



Day-to-day implementation

The implementation of the management of climate change-related risk with respect to specific securities is delegated to third party portfolio managers. Each manager's approach to ESG issues and how these are integrated into their investment process is assessed as part of the manager selection and monitoring process. The Trustee has given its investment managers discretion in evaluating ESG factors, including climate change considerations, exercising voting rights and stewardship obligations attached to the Scheme's investments in accordance with their own corporate governance policies, and current best practice, including the UK Corporate Governance Code and the UK Stewardship Code. However, it is recognised that ultimate responsibility for the setting of policy and the management of ESG factors remains with the Trustee.

Strategy

The Trustee's approach to managing strategic climate change risks and opportunities

Summary of Scheme's Assets

This section sets out the Scheme's strategic asset allocation, which has been considered as part of the scenario analysis.

Figure 2: Strategic Asset Allocation as at 30 June 2022

Strategic Asset Allocation	
Equities	9.5%
Growth fixed income	14.0%
Growth	23.5%
Absolute return bonds	2.7%
HLV property	7.7%
Liquid debt	16.7%
Illiquid debt	10.4%
Defensive	37.5%
Matching	39.0%
Total	100.0%

A Liability Driven Investment ("LDI") approach is adopted by the Scheme. Its primary aim is to hedge 100% of assets, equal to the funding level as a proportion of liabilities on the gilts+0.5% p.a. basis.



Climate change timescales

The Trustee believes that sustainability issues, including climate change, present risks and opportunities, which increasingly require explicit consideration. Climate change is identified and described as a systemic risk, which may materially affect the financial performance of the Scheme’s investments.

The Trustee has considered the following time horizons:

Figure 3: Timeframes of short, medium and long-term horizons to identify relevant climate-related risks and opportunities.



Over the short term, **transition risks (i.e. risks and opportunities relating to transitioning the economy to emit lower levels of greenhouse gasses) are expected to dominate** and may present themselves through rapid market re-pricing as:

- The likelihood of different levels of global warming occurring, and different approaches to transitioning the economy, change.
- Market awareness of climate risks grows. For example, the implications of the physical impacts of climate change become clearer to markets.
- If policy changes catch markets by surprise. For example, if a carbon price is introduced across key markets to which the portfolio is exposed, at a sufficiently high price to impact behaviour.

Over the medium term, **transition risks are also expected to dominate** and will be associated with the transition to a low carbon economy. These include the development of technology

and low carbon solutions (i.e. transition risks can also present opportunities). Policy, legislation and regulation are likely to also play a key role at the international, national and subnational level. Technology and policy changes are likely to produce winners and losers both between and within sectors and lead to stranded asset risks.

Over the long term, **physical risks are expected to come to the fore**. This includes the impact of natural catastrophes leading to physical damage through extreme weather events. Availability of resources is expected to become more important if changes in weather patterns (e.g. temperature or precipitation) affect the availability of natural resources such as water.

The Trustee will consider approaches to further manage climate change risks and opportunities as part of its ongoing investment strategy. The climate scenario analysis (and climate metrics) will help the Trustee to understand how the Scheme is exposed to climate-related risks and how it could be best positioned for the move to a low carbon economy.

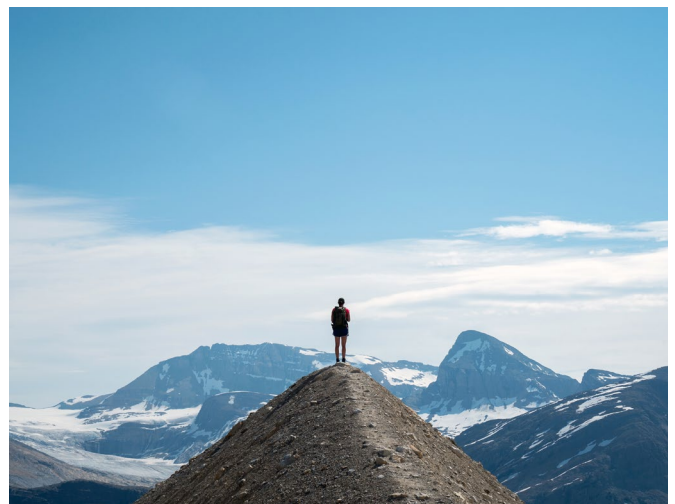
Climate change scenarios

This section summarises the analysis of three climate scenarios in addition to a base case³. These are defined as ‘warming pathways’: the expected degrees of warming of the atmosphere by the end of the century relative to pre-industrial levels.

	1.5°C Scenario – Rapid Transition	<2.0°C Scenario – Orderly Transition	4.0°C Scenario – Failed Transition
Overview	<p>Average temperature increase of 1.5°C by 2100 in line with the Paris Agreement.</p> <p>This scenario assumes sudden large-scale downward re-pricing across multiple securities in 2025. This could be driven by a change in policy or realisation that policy change is inevitable, consideration of stranded assets or expected cost. To a degree the shock is sentiment driven and is therefore followed by a partial recovery across markets. The physical damages are most limited under this scenario.</p>	<p>Average temperature increase of less than 2.0°C by 2100.</p> <p>This scenario assumes political and social organisations act in a co-ordinated way to implement the recommendations of the Paris Agreement to limit global warming to well below 2°C. Transition impacts do occur but are relatively muted across the broad market.</p>	<p>Average temperature increase above 4°C by 2100.</p> <p>This scenario assumes the world fails to co-ordinate a transition to a low carbon economy and global warming exceeds 4°C above pre-industrial levels by 2100. Physical climate impacts cause large reductions in economic productivity and increasingly negative impacts from extreme weather events. These are reflected in re-pricing events in the late 2020s and late 2030s.</p>

Running analysis against lower and higher warming pathways allows the Trustee to explore the potential impact of both transition risks and physical risks.

Climate scenario analysis is an evolving space and, as such, the scenarios modelled and reported may be subject to review in future periods. The Appendix provides further information on the key assumptions and limitations of the climate scenario modelling. It is important to note that the modelling may understate the true level of risk due to the uncertainty around the future economic impacts of climate change.

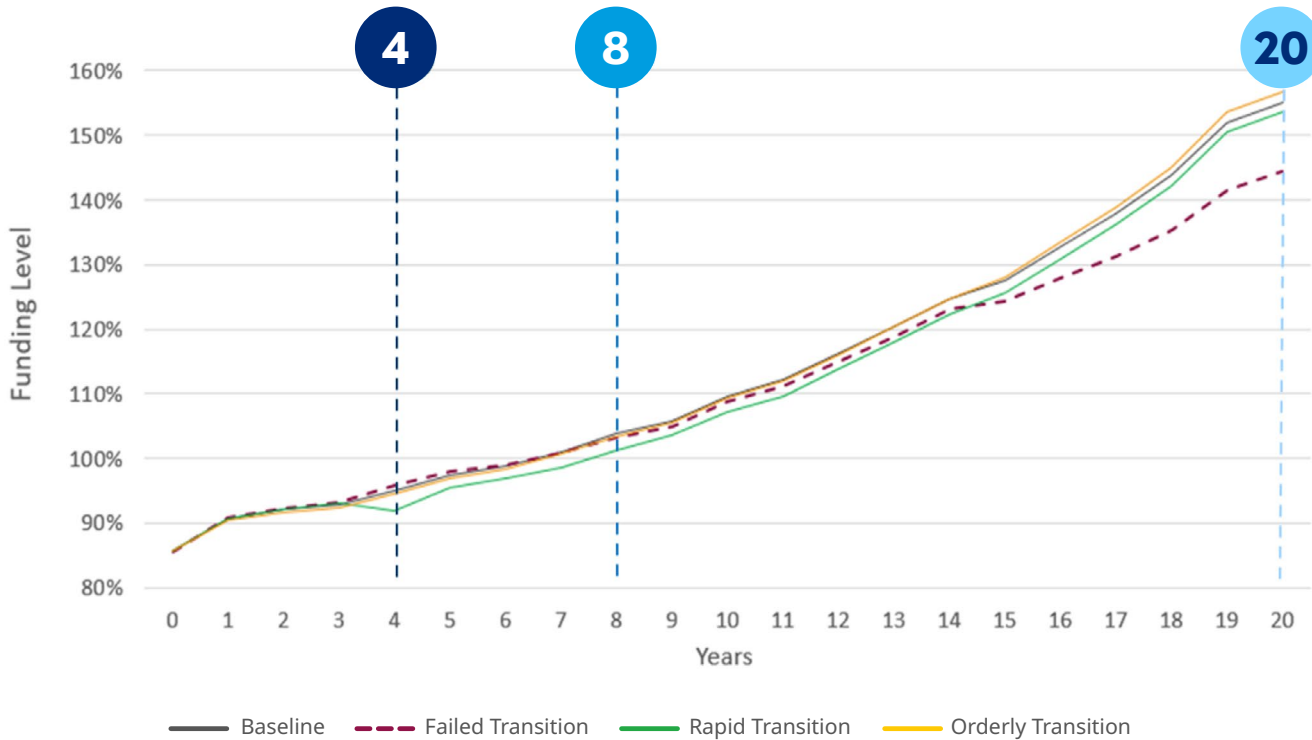


3. The return impacts of the climate scenarios represented in this report are relative to the ‘baseline’. The baseline represents what we are assuming the market is currently pricing in. The baseline includes a 10% weight to a Failed Transition, 40% weight to an Orderly Transition, 10% to a Rapid Transition and 40% to a range of low impact scenarios.

Impact on investments and funding

The scenario analysis presented is based on the Scheme’s funding position (on a low risk, or “self-sufficiency” (gilts+0.5% p.a.) actuarial basis) as at 30 June 2022.

Figure 4: Summary results of climate change scenario analysis – financial aspects.



Source: Mercer, excludes mortality stresses

In the short term (4 years) transition risk dominates, with the Rapid Transition having the largest impact. A funding level loss of c.3% is assumed, due to a reduction in returns of c.0.9% p.a. as unprecedented policy action causes markets to initially overreact. All asset classes within the Scheme’s investment strategy experience losses except LDI and Liquid Debt. The market is then assumed to largely recover in subsequent years. The credit mandate contributes to the rebound on the basis of limited additional defaults. There is a c.1% funding level gain between the baseline scenario and the Failed Transition, with physical risks not yet having a material impact on returns.

Over the medium term (8 years), physical risks begin to be priced in. The impacts of the Orderly, Failed and Rapid Scenarios are cumulative funding level losses of c.0.3%, c.0.5% and c.2.4% respectively, relative to the baseline at that time point.

Over the long term (20 years), the portfolio fares materially better under the Orderly and Rapid Transition versus the Failed Transition. Under the Orderly and Rapid Transition scenarios, physical impacts are lower due to temperature rises being limited. Physical impacts are relevant for all scenarios, with the Failed Transition showing a much greater impact. Cumulative losses under the failed transition scenario over 20 years could amount to c. 11% of the funding level relative to the baseline (equivalent to underperformance of c. 0.4% p.a.) – equity and property are the most impacted in the long term.

Overall, the Trustee believes the Scheme’s investment strategy and funding level broadly demonstrate robustness with respect to the potential impact of climate change across the scenarios over the short and medium term (excluding the impact of mortality stresses), because of the high allocations to investment grade corporate bonds and gilts which are at the lower end of the risk spectrum. Bonds show less sensitivity to climate transition risk due to the seniority afforded to bonds by the capital structure, so climate-related risks would need to wipe out equity holders before bonds are impacted. A failed transition however could significantly impact the Scheme over the long term.

The Trustee has previously taken steps within its equity portfolio to reduce the impact of climate risks by moving the mandate from a pure “market capitalisation” based approach to a “low carbon” approach, which weights the underlying companies by their carbon emissions rather than their market capitalisation. The Trustee is also currently working with the Scheme’s buy and maintain credit managers with a view to implement emissions targets within their

mandates as a way to reduce both transition and physical risks, as lower carbon portfolios are expected to fare better in general in adverse climate scenarios.

The projections indicate that, under each of the scenarios, the funding level is expected to improve over the medium to long term, with the low risk funding level exceeding 100% under all the scenarios from year 8 onwards. No explicit adjustment to the assumptions used in the actuarial valuation has been made to date, although the valuation assumptions overall do implicitly allow for the impact of climate change to the extent it is already priced into markets (reflected in the financial assumptions) and is incorporated in the views on long term mortality assumptions.

The analysis above ignores any impact that these scenarios might have on life expectancy of pension scheme members. Aon (the Scheme actuarial advisers) have also provided mortality stresses to be applied to the liabilities under the various scenarios. All else being equal, lower mortality leads to higher life expectancy, which in turn results in higher liabilities. The impact allowing for this is shown below.

Figure 5: Summary results of climate change scenario analysis – mortality aspects.

Mercer scenario	Aon scenario	Aon assumed long-term improvement in mortality	Ultimate liability impact (age 60) from mortality
-	Base case	1.5% p.a.	-
Rapid Transition	Abrupt Transition	1.5% p.a.	-1%
Orderly Transition	Orderly Transition	2.0% p.a.	+2%
Failed Transition	No Transition	0.0% p.a.	-4%

Source: Aon. Figures are based on impact on male life expectancy but each scenario impacts females to the same extent. Figures are appropriate for the overall membership profile of the Scheme and the discount rate being used for the Mercer modelling.

The next figure shows the overall estimated impact of climate change on the Scheme’s funding level for the different scenarios over a 20 year period, incorporating both financial and mortality impacts.

Figure 6: Summary results of climate change scenario analysis – combined.

Funding Level Impact at 20 years			
	Financial assumptions stress	Estimated mortality stress	Overall stress
Rapid Transition	-1.4%	+1.6%	+0.2%
Orderly Transition	+1.7%	-3.1%	-1.4%
Failed Transition	-10.6%	+6.0%	-4.6%

Source: Mercer and Aon estimates; financial stress assumptions estimated by Mercer while mortality stress estimated by Aon. Figures are shown relative to baseline scenarios. Figures subject to rounding.

Over the longer term, the negative impact of Rapid and Failed Transition scenarios due to the stress in financial assumptions is (partially) offset by the fall in liabilities resulting from the mortality stress. Given the expected improvements in mortality in an Orderly Transition scenario, liabilities are expected to rise, leading to an overall negative impact on funding level.

Climate change in respect of the sponsoring employer

The ongoing financial strength of the sponsoring employer is important for the Scheme as it ultimately underwrites the Scheme, by paying contributions to support/improve the funding position over time. The Scheme also relies on the employer's operational capabilities in terms of certain administrative and governance activities. As such, the impact of climate change on the employer is important for the Trustee to keep under review.

In 2022, the employer prepared qualitative disclosures in relation to TCFD. In 2023, the employer engaged KPMG to support them in limited qualitative analysis of their shortlisted climate-related risks and opportunities. Our understanding is that the Company is looking to undertake more extensive quantitative assessments in future years, therefore the work that the Trustee can reasonably undertake with respect to the impact of climate change on the employer at this time is primarily based on a qualitative assessment.

In 2022, the employer assessed climate related risks and opportunities across all business operations, against three climate scenarios (noting that these are different to the Trustee's scenarios noted above):

- **Orderly** - 'Net Zero by 2050', warming limited to 1.5°C;

- **Disorderly** - 'Delayed Transition', warming limited to 2°C; and
- **Hothouse world** - 'Current Policies', warming of 3°C +.

The employer's analysis showed that the majority of risks and opportunities are in the medium term (defined by the employer as 2030-2040) and long term (defined by the employer as 2040-2100).

In 2023, the employer prepared scenario analysis of their shortlisted climate-related risks and opportunities across two scenarios:

- **Best case scenario:** Paris-aligned - 1.5°C
- **Baseline scenario:** Business-as-usual - 4°C

This initial analysis indicated that the impact of climate change on the Group's financial performance and position is not expected to be material, after considering the potential risk management and mitigation strategies available.

As more information becomes available from the employer, including quantitative data, the Trustee will be able to more fully consider the impact of climate change on the employer covenant, including the correlation of risks faced by the Scheme and employer.

Risk Management

The Trustee recognises that climate-related risks can be financially material and that due consideration of climate risk falls within the scope of the Trustee's fiduciary duty. Given the long-term nature of the Scheme's investments and the timeframe in which climate risks could materialise, a total portfolio approach to risk management covering all sectors and all relevant asset classes has been taken, coupled with funding and covenant analysis.

This section summarises the primary climate-related risk management processes and activities of the Trustee. These help the Trustee understand the materiality of climate-related risks, both in absolute terms and relative to other risks to which the Scheme is exposed.

Governance

The Trustee reviews climate change developments to identify risks and opportunities for the Scheme regularly. In particular the Trustee reviews the investment managers' ESG ratings quarterly. Annually, a TCFD dashboard report covering carbon metric analysis, ESG integration and stewardship is reviewed. In addition, climate-related risks are referenced in the Trustee's risk register. In addition, the Trustee reviews the SIP on a regular basis, and the climate-related risks are referenced in the Trustee's risk register.

The Trustee reviews the advice and services provided by its advisers as part of the selection and monitoring process.



Strategy

The Trustee has carried out climate change scenario modelling which provides a strategic assessment of climate change risks and opportunities at the total Scheme level. This focussed on the Scheme's potential exposure to both transition and physical risks.

This analysis assessed the impact these risks could have on the funding level of the Scheme.

The Trustee has consulted with its covenant adviser, Interpath, regarding the impact of climate change on the employer.

In 2022, the employer identified dockyard disruption due to coastal flooding as the most significant risk. Whilst in 2023 the employer's analysis suggested that coastal inundation could still pose a risk after 2050, with respect to lost revenue and asset value, the risk of dockyard disruption has been assessed as less likely than previously expected. The employer noted physical hazards could still result in high levels of lost revenue, in particular due to flooding at the Bristol Ashton Vale site and forest fires in Manitoba.

The most significant transition risk under the two scenarios considered in 2023 relates to labour cost rises. However, this is likely to materialise in the medium and long term. Labour costs, along with increased direct carbon costs, are a key driver to supply chain disruption being considered a significant risk.

Whilst there is currently insufficient quantitative data to enable the Trustee to prepare climate change scenario modelling in respect to the employer covenant, Interpath considers the overall risk exposure to be low, noting that the employer has assessed the majority of risks to fall within the medium (2030-2040) and longer term (2040-2100), by which time, the Scheme's reliance on the employer covenant is expected to be low (e.g. the Trustee's current target is to reach a low dependency funding level by the early years of the employer's medium term timeframe). Further, this gives the employer

time to implement strategies to mitigate the risks identified, which the Trustee notes the employer is already proactively engaged in doing.

The Trustee takes into account climate change considerations when reviewing the overall investment strategy review, which includes highlighting the expected change in climate-risk exposure through proposed asset allocation changes, both from the top-down level (via climate scenario analysis) and bottom-up (via climate-related metrics).



Metrics and Targets

As set out later in this report, the Trustee has assessed the Scheme using a number of climate-related metrics to identify potential areas of risk.

Reflecting the relative importance of climate risk relative to the other risks that the Scheme faces, the Trustee has set targets to reduce greenhouse gas emissions. The Trustee will monitor progress annually and challenge managers should they not meet the agreed targets. The Trustee believes that this will reduce climate-related risk over time.

The Trustee recognises the challenges with various metrics, tools and modelling techniques used to assess climate change risks. The Trustee aims to work with its investment consultant and investment managers to improve its approach to assessing and managing risks over time.

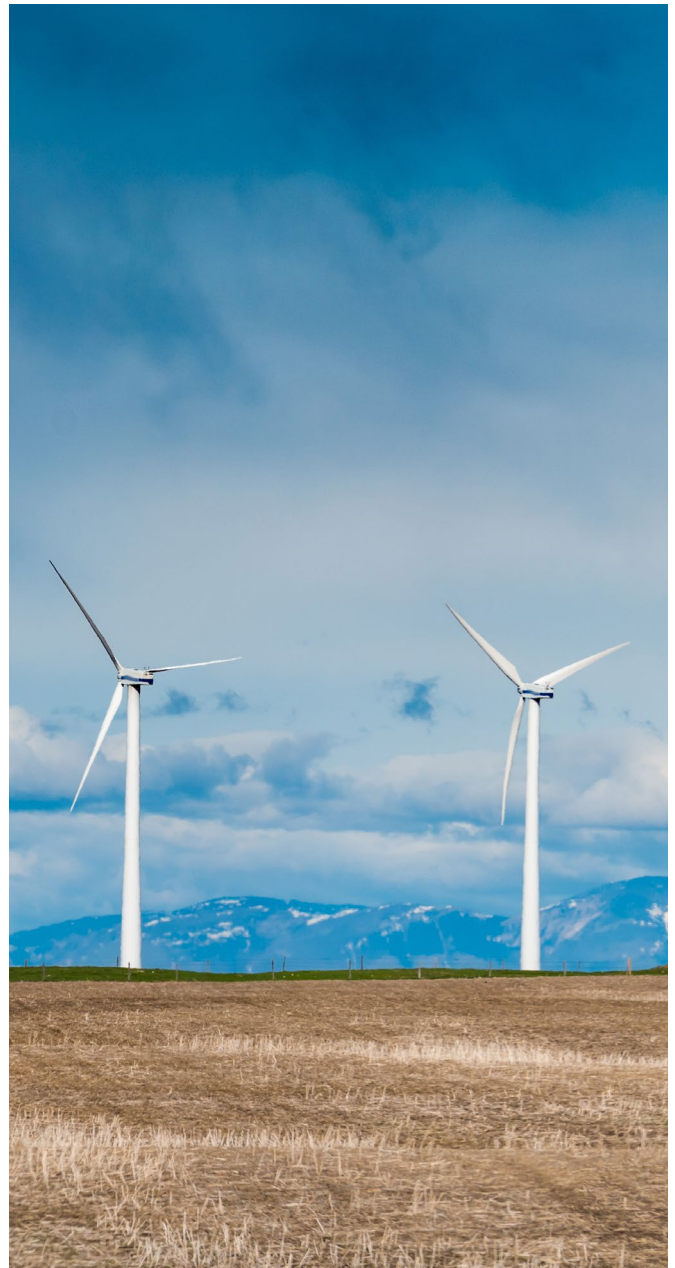
Manager selection, monitoring and retention

As the Trustee relies on third party investment managers to manage its assets, the day-to-day assessment of climate change related risks on specific assets has been delegated to them. They in turn are regularly assessed using the investment consultant's ESG investment manager research ratings and as part of the annual TCFD dashboard report framework and Implementation Statement.

Where relevant, managers are invited to present to the Trustee to explain their approach to climate change risk management, amongst other topics. The Trustee will engage with managers where they are perceived to be lagging behind their peers in terms of ESG integration or active ownership, including where this relates to climate change risks.

Active stewardship

The Trustee recognises that active ownership by the investment managers will continue to be a very important part of the Scheme's



approach to managing these risks. The Trustee has agreed to assess investment managers' approaches to stewardship and engagement on an annual basis and summarise its findings in the Engagement Policy and/or annual TCFD dashboard report. The Trustee expects companies in its portfolio to manage climate change risks. Stewardship activities can help hold companies to account and ensure they are taking a meaningful approach in this area.

The Trustee delegates stewardship engagement activity to the underlying investment managers.

Metrics

Key metrics for climate change related risks

Climate risk metrics aid the assessment of potential climate-related risks to which the Scheme is exposed, and help to identify areas for further risk management, including engagement and fund manager monitoring.

The Trustee recognises that the availability of accurate data for some asset classes or methodology is an industry-wide issue and will engage with the investment managers to improve their climate reporting.

The Trustee has chosen to report on the following metrics:

Figure 7: Metrics description

Metric type	Description
1. Absolute emissions: Total greenhouse gas emissions	The total greenhouse gas emissions (in metric tonnes) of the Scheme's investments
2a. Emissions intensity: Carbon footprint	Total greenhouse gas emissions (in metric tonnes) weighted to take account of the size of the investment made (in \$million)
2b. Alternative emissions intensity: WACI	The average, based on the size of the Scheme's holding in each investment, of the greenhouse gas emissions (in metric tonnes) divided by revenue (in \$million) associated with each investment
3. Portfolio Alignment: ITR	A forward-looking assessment of how aligned the Scheme's portfolios are relative to the Paris Agreement's 1.5°C target. This is estimated based on the activities and decarbonisation targets of portfolio companies / issuers, relative to what global decarbonisation needs to be to achieve 1.5°C.
4. Additional metrics: Data quality	Proportion of the portfolio for which emissions data is verified, reported, estimated or unavailable.



In addition to the emissions intensity metric proposed by the Department for Work and Pensions (carbon footprint), the Trustee has also selected to report on WACI. Following discussions with the Scheme's buy and maintain credit managers, the Trustee agreed this would be the primary metric to monitor progress against the decarbonisation target (see Targets section below for further details) as this metric has higher levels of data coverage (compared to carbon footprint).

In terms of emissions based metrics (total greenhouse gas emissions, carbon footprint and WACI), the Trustee has chosen to report on Scope 1 and 2 emissions only at this stage. The Trustee is looking to work with its investment managers over the next year and will report on Scope 3 emissions in the Scheme's second statutory report. This metric represents the underlying investee company's or issuer's reported or estimated greenhouse gas emissions, where available.

For portfolio alignment, the Trustee has chosen the ITR because of its simplicity in presentation and as it is a useful way to see, at a glance, the positioning of the Scheme towards a low carbon economy. Investments with high ITR metrics are expected, in most cases, to have a greater transition risk.

The Trustee has chosen data quality as an additional metric as it quantifies the overall quality of the data available and helps identify mandates where the Trustee should work further with its investment managers to increase the quality of data reported.

The Trustee recognises the challenges with various metrics, tools and modelling techniques used to assess climate change risks. The Trustee aims to work with its investment advisers and investment managers to continuously improve the approach to assessing and managing risks over time, particularly as data availability improves.

Appendix 4 sets out in further detail the metrics selected by the Trustee.



Results

Data assumptions and limitations

The greenhouse gas emissions analysis includes scope 1 and 2 emissions. The summary presented overleaf shows metrics data as at 30 September 2022, across most of the investment managers, but excludes the following:

- Legacy mandates that are close to winding down or represent a negligible proportion of total Scheme assets;
- Synthetic equity, as reporting is still being looked into by the manager due to synthetic nature of exposure;
- Asset Backed Securities due to lack of data availability on the underlying assets;
- Real Estate Debt as the investment manager was not able to provide data at time of writing; and
- Secured Finance as data coverage was low (data not available for 74% of assets).

Some of the investment managers have provided total greenhouse gas (GHG) emissions at the total pooled fund level rather than at the Scheme holding level. Mercer has estimated the emissions at the Scheme level by applying the Scheme's proportion of the funds' total assets under management.

Where managers have provided carbon footprint normalised by invested value per £million, Mercer has converted this metric to US dollars (given this is the general industry standard, and to ensure consistency across all investment managers), based on the exchange rate as at 30 September 2022 (source: Refinitiv).

In some cases, managers have provided the split between reported data and estimated data (see Appendix for further detail). The Trustee understands that missing or estimated data can have an impact upon investment decision making. The Trustee incentivises its investment managers to improve quality and coverage over time and will be reactive to such changes. The Trustee is also working with its investment consultants to stay abreast of emerging net zero and carbon metric methodologies.



Figure 8: Metrics summary

Asset Class	Manager	Overall Assessment (Allocation, %) ¹	Benchmark / Comparator Index	Climate-related metrics ²								
				Total GHG Emissions ¹ (tCo2e)	Carbon Footprint (tCo2e/\$M invested)		WACI (tCo2e/\$M revenue)		ITR (°C)		Data Coverage ³	
				Fund	Fund	B'mark	Fund	B'mark	Fund	B'mark	Fund	B'mark
Multi-Asset Credit	Mercer	18.2%	50% ML High Yield Constrained / 50% S&P Leveraged Loan 100 Index Hedged GBP	36,727	129	165	330	390	3.4	2.5	35.3%	-
HLV Property	Aviva	11.9%	n/a	1,814	15	-	628 ⁴	-	3.3	-	62.0%	-
Absolute Return Bonds	M&G	3.5%	50% Barclays Global Agg IG / 50% Barclays Global Agg HY	3,861	69	107	125	283	3.3	2.9	59.1%	81.4%
B&M	LGIM	5.8%	Markit iBoxx Non-Gilts	5,052	56	66	129	137	2.4	2.4	46.0%	54.8%
	Insight	4.1%	Global IG Corporates	2,771	34	61	91	233	2.0	2.5	50.0%	85.0%
Private Debt	Cambridge Associates	3.2%	MSCI ACWI IMI	2,294	43	88	77	157	-	-	99.5%	99.9%
LDI	Insight ⁵	39.4%	n/a	267,463	180	-	125 ⁶	-	1.5 / 2.0	-	100.0%	-
Total		86% of assets analysed ⁷									73% (coverage of analysed assets)	63% (coverage of total assets)

Source: Investment managers (climate metrics figures) and Mercer.

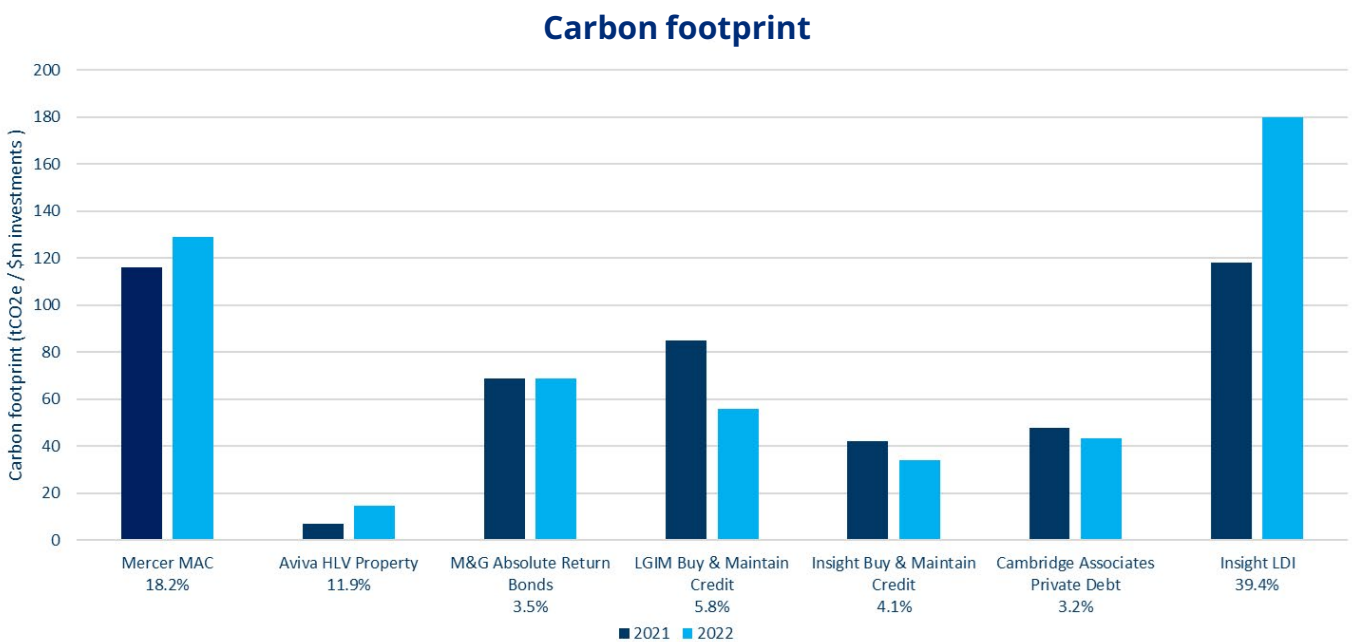
- Based on actual allocation as at 30 September 2022. Some managers provided total emissions at the mandate level, rather than at the Scheme level. Mercer have estimated the emissions at the Scheme level by applying the Scheme's proportion of the funds' total assets under management. This applied to data provided by M&G, Cambridge Associates and Insight B&M.
- For details on scaling of carbon metrics given gaps in data coverage, please refer to Appendix 5.
- The Trustee reports on Data Quality. Please see the appendix for further details. Data coverage summary shown in the table is based on reported and estimated data.
- This is a real estate fund and therefore there is no 'revenue' as these are not corporates. However, Aviva provided this figure based on the gross rent of the properties (tCO₂e/\$m ground rent).
- Excludes synthetic equity offset. Insight have provided two ITR figures computed using two different methodologies based on leveraged exposure. The Trustee expects there to be greater consensus on methodologies over time.
- Insight LDI Weighted average carbon intensity is expressed in tCO₂e per GK\$m GBP. GK\$m being the international dollar, the unit of PPP-adjusted GDP.
- Data unavailable from Insight Synthetic Equity, Insight Asset Backed Securities, Arrowgrass Multi-Strategy, King Street Multi-Strategy, Longbow Real Estate Debt, Rockspring Property, CBRE Property, H2O Adagio, H2O Allegro and M&G Secured Finance.

Emissions intensity metric

The Trustee monitors Scope 1 and 2 carbon metrics against a benchmark or comparator index, which helps in identifying areas for further risk management, including company engagement and investment manager monitoring.

The Trustee monitors the year-on-year change in portfolio (at 30 September), as can be seen below. The carbon footprint has decreased for most portfolios, although we note the Insight LDI portfolio’s carbon footprint has increased materially, and remains by far the largest contributor to overall GHG emissions.

Figure 9: Year on year change in carbon footprint.

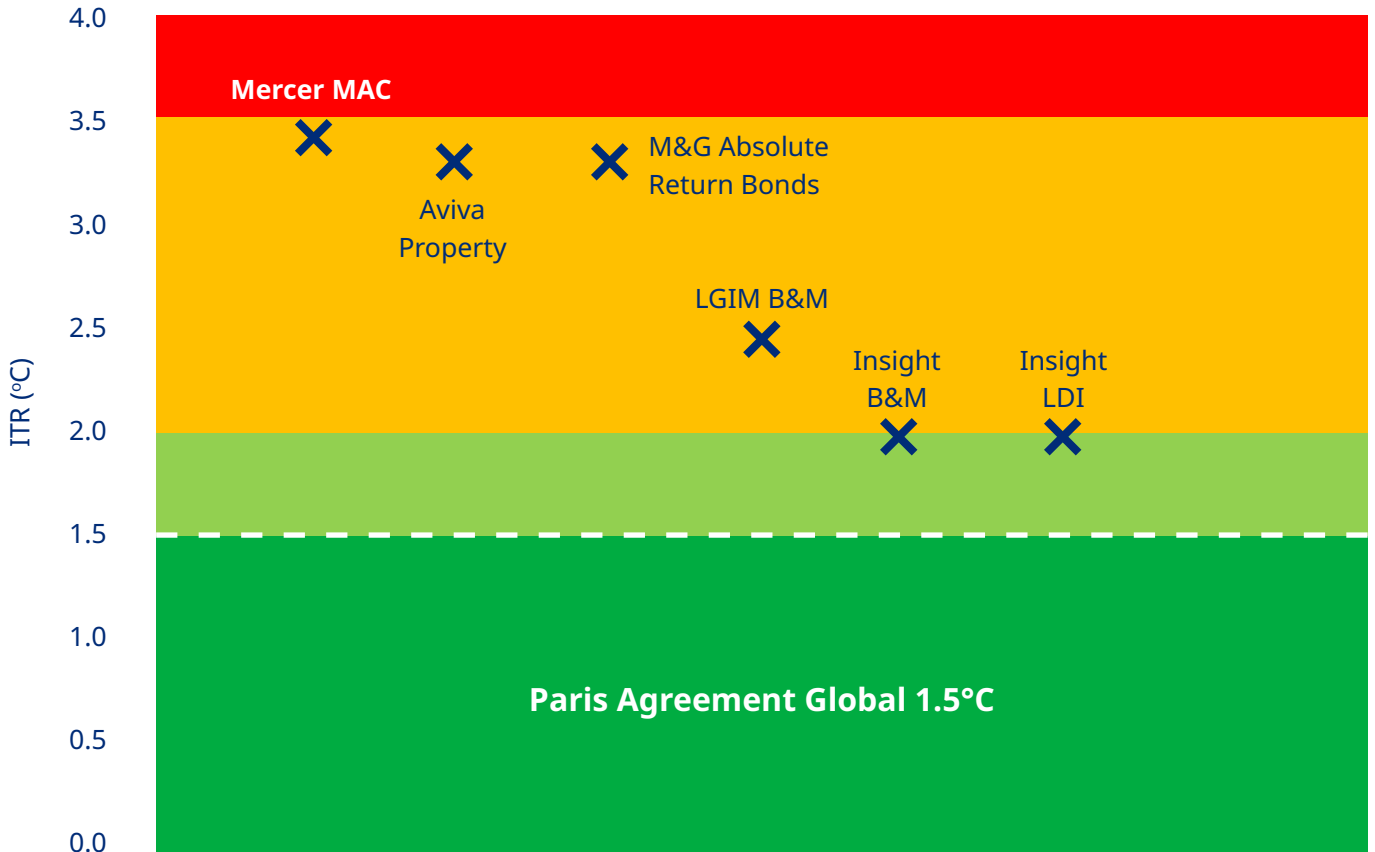


Source: Investment managers. Actual asset allocations shown as at 30 September 2022 for reference.

The carbon footprint increased for the Insight LDI portfolio over the year to 30 September 2022. Due to data availability from the UK Government at the time of writing, the total UK carbon emissions used in the calculation for 2021 and 2022 were the same. The difference in the carbon footprint at 30 September 2021 and 30 September 2022 therefore arises from the different market value of gilts in issue as at each measurement date. In particular, the market value as at September 2022 was markedly lower. The increase in carbon footprint over the period is therefore not an indicator of higher absolute emissions in 2022 but instead is an indicator that emissions were more concentrated around the normalisation factor for carbon footprint (i.e., gilts in issue); due to the lower value of gilts in issue in September 2022, UK emissions are spread across that lower value and therefore the intensity is higher.

ITR

Figure 10: ITR.



Source: Investment managers, as at 30 September 2022.

Where data is available, the Scheme’s portfolios have an ITR of between 2.0°C and 3.4°C reflecting a range of methodologies for computing ITR and underlying companies at different stages of transitioning towards a low carbon future.

None of the Scheme's ITR scores are currently compatible with the Paris Agreement that sets out a global framework to avoid dangerous climate change by limiting global warming to well below 2°C and pursuing efforts to limit it to 1.5°C.

We note that there are currently multiple methodologies for computing ITR and these can have varying results. Where multiple temperatures were provided by the manager, the highest figure has been shown.

Targets

The Trustee has set the following emissions targets, covering the Scheme's buy and maintain credit portfolio:

- Reducing greenhouse gas emissions intensity (Scope 1 and 2) for the aggregate buy and maintain credit portfolio by 45% or more by the end of 2030, as measured by WACI, with a 30 September 2021 baseline.

The estimated WACI (Scope 1 and 2) for the aggregate buy and maintain credit portfolio was 110 as at 30 September 2022; a reduction of 44% since 30 September 2021. This was largely due to disinvestments over the period to meet collateral requirements elsewhere in the Scheme's portfolio. These disinvestments were sourced from more liquid parts of the credit market which were also more carbon intensive. Since 30 September 2022, the Trustee has topped up the allocation to buy and maintain credit.

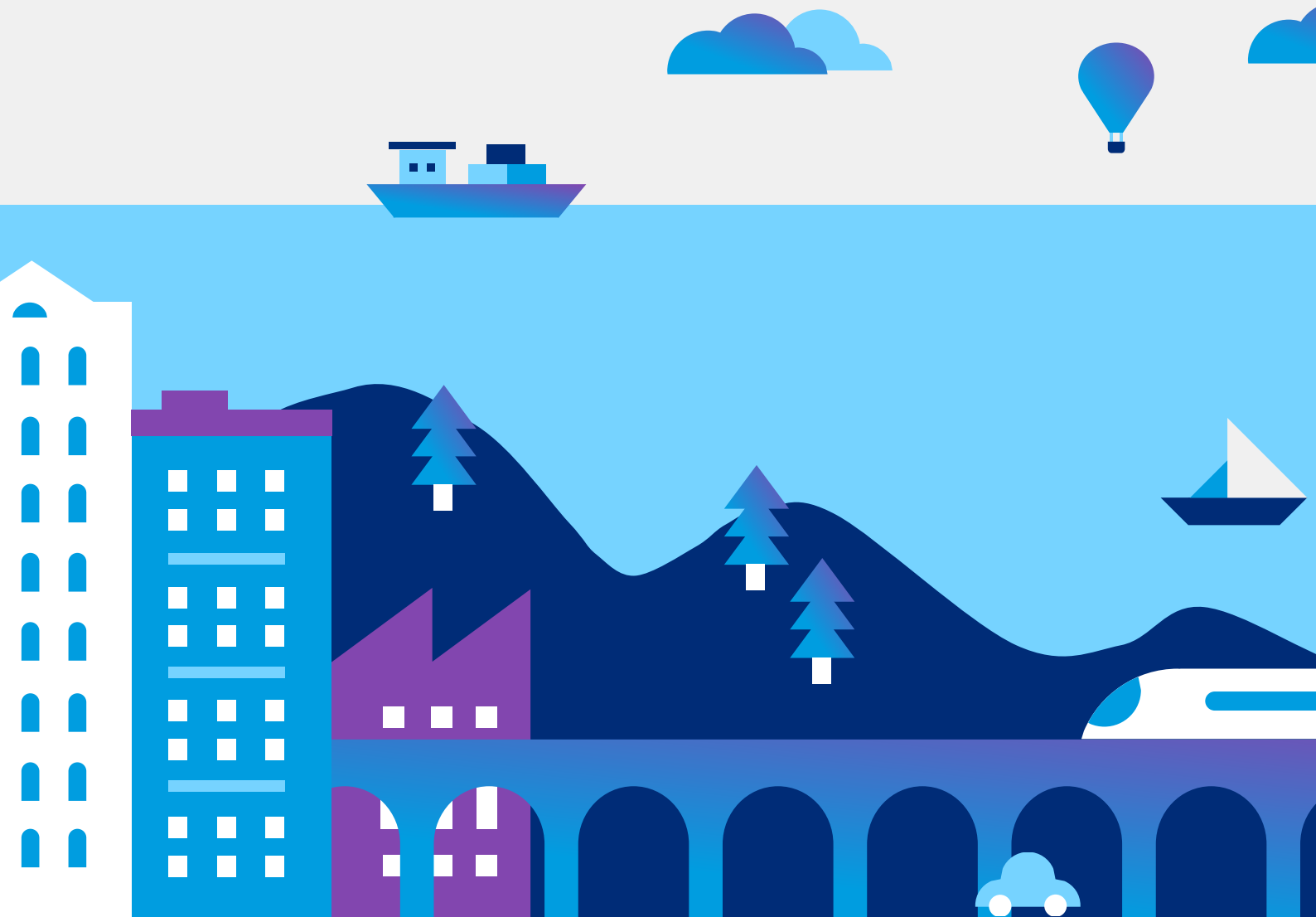
The LDI portfolio is excluded from this target since this portfolio predominantly holds UK Government bonds which are an integral part of the Trustee's wider risk management approach. The Trustee notes that the UK Government is targeting being net zero by 2050.

The Trustee has decided not to set targets for the real estate debt, asset backed securities, secured finance and private debt mandates due to lack of data availability. The Trustee will engage with the multi-asset credit, HLV property and synthetic equity mandate managers to consider the feasibility of setting emissions targets in future. The absolute return bonds mandate has been terminated since the date of this report. The Trustee recognises that due to the pooled fund nature of these mandates, it cannot directly influence portfolio holdings, but instead will seek to engage with the investment managers.

The Trustee will review its progress against the above targets at least annually and will consider setting specific targets for other asset classes and include Scope 3 emissions, when the available data has improved and there are suitable methodologies.



A wide range of factors will affect whether the Trustee achieves its targets and the Trustee has varying degrees of control over these factors. Ultimately achieving the desired level of decarbonisation will depend on global economies overall successfully decarbonising. Notwithstanding that there are factors outside of the Trustee's control, the Trustee's intention is to meet its targets and it engages with its investment managers to make clear its requirements.



Appendix 1: The roles of those undertaking or advising the Trustee on Scheme governance activities

It is the responsibility of the IC to support and guide the Trustee's work on compliance with the regulatory requirements and TCFD recommendations, including:

- Liaising with professional advisers on the Trustee's proposed objectives;
- Ensuring appropriate time and resource is allocated to climate governance and reporting; and
- Facilitating information sharing between the Trustee, professional advisers and investment managers as appropriate.
- Over the reporting period, the Trustee's relevant professional advisers were:

Mercer, as the investment consultant for the Scheme, who:

- Advises on strategic asset allocation taking into account climate risk, advises on greenhouse gas emissions targets, advises on changes to investment mandates and monitors investment managers;
- Provides climate related scenario analysis, advice and training on the selection of climate-related metrics for the Scheme;
- Produces the annual TCFD dashboard report for the Trustee which includes various climate metrics, outlines climate related risks or opportunities on an ongoing basis and monitors progress against climate related targets; and
- Liaises with investment managers and other professional advisers to provide training to the Trustee and IC on climate change, as appropriate.

Interpath, as the covenant adviser, who:

- Assesses the sponsor's ability and willingness to continue to support the Scheme. Climate-related exposures are considered alongside other factors that could have a positive or negative impact on the strength of the sponsor's covenant; and
- Provides input into scenario analysis and advises on covenant implications.

Aon, as the Scheme Actuary, who:

- Advises on the funding position including an understanding of the potential funding impact resulting from changes to financial or demographic assumptions driven by climate change;
- Advises on funding strategy robustness to climate risk. Provides input to enable strategic asset allocation decisions to be made considering impact of climate risks on funding strategy; and
- Provides input into scenario analysis and advises on funding implications.
- Over the reporting period, the Trustee was also supported by the **Babcock in-house pensions team**, who:
 - Assist with the organisation of meetings;
 - Facilitate reporting to the Trustee Board;
 - Facilitate appropriate communications to members; and
 - Assist the Trustee in the general running of the Scheme.

Appendix 2: Climate related risks and opportunities

We are already experiencing climate change and its associated physical impacts today. The average global temperature in 2022 was about 1.2°C above pre-industrial levels⁴. Most of this warming has occurred in the past 35 years, with the eight “warmest” years on record taking place since the start of 2015. The overwhelming scientific consensus is that the observed climatic changes are primarily the result of human activities including electricity and heat production, agriculture and land use change, industry and transport.

In order to mitigate the worst economic impacts of climate change, there must be a large, swift, and globally co-ordinated policy response. Despite this, the majority of climate scientists anticipate that given the current level of climate action, by 2100 the world is estimated to be between 2°C and 4°C warmer than pre-industrial levels, with significant regional variations. This is substantially higher than the 2015 Paris Agreement objectives, which reflect a collective goal to hold the increase in the climate’s average global surface temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C.

There is considerable uncertainty regarding the future warming pathway, which is highly dependent on the actions of governments, industries, businesses and individuals.

The effects of climate change will be felt over many decades. There are two broad types of climate-related risks and opportunities that have been considered by the Trustee in its climate scenario analysis: transition risk (and opportunities) and physical risks (and opportunities).



4. <https://public.wmo.int/en/media/press-release/past-eight-years-confirmed-be-eight-warmest-record>

Transition risks and opportunities

These cover the potential financial and economic risks and opportunities from the transition to a low-carbon economy (i.e. one that has a low or no reliance on fossil fuels), such as:

- Policy and legal
- Market
- Technology
- Reputation

These risks cover the possibility of future bans, or high costs, associated with high carbon activities or products as well as opportunities that may come from the development of low-carbon technologies.

In order to make a meaningful impact on reducing the extent of global warming, most transition activities need to take place over the next decade and certainly in the first half of this century.

Physical risks and opportunities

The higher the future level of global warming, the greater physical risks will be in frequency and magnitude. Physical risks cover:

- Physical damage (storms, wildfires, droughts, floods)
- Resource scarcity (water, food, materials, biodiversity loss)

The Trustee expects physical risks to be felt more as the century progresses though the extent of the risks is highly dependent on whether global net zero greenhouse gas emissions are achieved by 2050.

There are investment opportunities in newly constructed infrastructure and real estate that are designed to be resilient to the physical impacts of climate change, as well as being constructed and operated in a way that has low or no net carbon emissions. There are also opportunities for investment in those companies or industries that focus on energy conservation and resource efficiency.



Appendix 3: Scenario analysis assumptions and limitations

Mercer

	1.5°C Scenario – Rapid Transition	<2.0°C Scenario – Orderly Transition	4.0°C Scenario – Failed Transition
Overview	This scenario captures a sudden transformation to a low-carbon economy, in order to limit global warming to no more than 1.5°C by the end of the century.	This scenario captures an early and coordinated transformation to a low-carbon economy, in order to limit global warming to no more than 2°C by the end of the century.	This scenario captures no transformation to a low-carbon economy, as global warming is allowed to rise to 4oC by the end of the century.
Risk factors	Transition risks are very high, particularly in the first half of this century. Physical risks are anticipated in the latter half of the century though are less impactful relative to higher warming pathway scenarios.	Transition risks are higher in the near term as policies are implemented quickly. Lower long term physical risks relative to higher warming pathway scenarios.	Transition risks are very low. Physical risks are conversely high, are anticipated sooner in the century and are more impactful than with lower warming pathway scenarios.
Narrative	Global action starts immediately, driven by policy, regulation and consumer sentiment. Emissions peak in the early 2020s and coal is phased out by mid-century. By the middle of the century, the average global sea level is expected to rise and longer droughts will be experienced in regions across the globe.	Global action is taken quickly and orderly, with political and social organisations acting in a co-ordinated way. Emissions peak in the 2020s and coal is phased out by mid-century. By the middle of the century, the average global sea level is expected to rise and longer droughts will be experienced in regions across the globe.	Global economies fail to co-ordinate a transition to a low carbon economy. Emissions peak late in the century and coal is not phased out. The average global sea level continues to rise throughout the century and natural disasters become commonplace.

	1.5°C Scenario – Rapid Transition	<2.0°C Scenario – Orderly Transition	4.0°C Scenario – Failed Transition
Market impact	Over the short term, the cost of transition plays through at the sector level with heavy carbon-based industries, such as the energy sector and utilities, being most negatively impacted. The renewable energy sector is expected to perform strongly under this scenario, along with raw materials, telecoms and IT.	Heavy carbon-based industries, such as the energy sector and utilities, remain the most negatively impacted. The renewable energy sector is still expected to perform strongly under this scenario, along with raw materials, telecoms and IT.	Heavy carbon-based industries, such as the energy sector and utilities, are not negatively affected as they would be in lower warming pathway scenarios. The renewable energy sector is expected to perform less strongly under this scenario, along with raw materials, telecoms and IT.
Asset class impacts	At the asset class level, equities, infrastructure and commodities are most sensitive to climate-related risks. Sustainable allocations to global equity and infrastructure capture the opportunities presented by the transition to a low-carbon economy and avoid exposure to carbon-intensive sectors and/or companies.	At the asset class level, equities, infrastructure and commodities are most sensitive to climate-related risks. Sustainable allocations to global equity and infrastructure still capture the opportunities presented by the transition to a low-carbon economy and avoid exposure to carbon-intensive sectors and/or companies.	At the asset class level, equities, infrastructure and commodities are most sensitive to climate-related risks. Sustainable allocations to global equity and infrastructure underperform due to lack of transition to a low carbon economy and carbon intense industries continue to generate stable returns.

Source: Mercer and Ortec

The return impacts of the climate scenarios represented in this report are relative to the ‘baseline’. The baseline is set based on what the market is assumed to have currently pricing in. The baseline includes a 10% weight to a Failed Transition, 40% weight to an Orderly Transition, 10% to a Rapid Transition and 40% to a range of low impact scenarios.

Climate scenario modelling is a complex process. The Trustee is aware of the modelling limitations. In particular:

1. The further into the future you go, the less reliable any quantitative modelling will be.
2. Looking at average asset class returns over multi-decade timeframes leads to small impacts. The results are potentially significantly underestimated.
3. There is a reasonable likelihood that physical impacts are grossly underestimated. Feedback loops or 'tipping points', like permafrost melting, are challenging to model particularly around the timing of such an event and the speed at which it could accelerate.
4. Financial stability and insurance 'breakdown' is not modelled. A systemic failure may be caused by either an 'uninsurable' 4°C physical environment, or due to the scale of mitigation and adaption required to avoid material warming of the planet.
5. Most adaptation costs and social factors are not priced into the models. These include population health and climate related migration.

Aon

	1.5°C Scenario – Rapid Transition	<2.0°C Scenario – Orderly Transition	4.0°C Scenario – Failed Transition
Possible mortality impacts	<p>Short to medium term mortality improvements are in line with the base scenario but longer-term improvements are slightly lower.</p>	<p>Disruption to health and social care services, and damage to related infrastructure, due to extreme weather (potentially coinciding with increased demand) may increase mortality. However, the disruption is likely to be short-lived.</p> <p>In longer-term, better air quality and improved health conditions may lead to higher longevity: overall around a 0.5 year improvement in life expectancy for the average 60-year-old.</p>	<p>In the short-term more money may be spent on health services, perhaps reducing mortality slightly.</p> <p>There is growing awareness of a changing environment and the damaging effects a lack of action is having, over the intermediate term. There is a higher incidence of damaging storms, water shortages, higher pollution levels and reduced agricultural yields (leading to higher food prices). Markets become more volatile and climate change begins to have a growing drag on economic growth and asset returns. In such an environment, there may be no long-term future improvements in mortality (consistent with what we saw between 2014 and 2018).</p> <p>In terms of the direct climate impacts, fewer deaths from warmer winters may more than offset any impact of heatwaves but the impact is likely to be marginal.</p> <p>Overall it is expected this will have a fairly significant impact on UK mortality, reducing future life expectancies.</p>

Appendix 4: Key metrics for climate change related risks

Total greenhouse gas emissions

This metric measures the total absolute greenhouse gas emissions attributable to a portfolio. This metric represents the underlying investee company's or issuer's reported or estimated greenhouse gas emissions, where available.

There are seven recognised greenhouse gases, as defined by the GHG Protocol. In order to simplify reporting, each greenhouse gas is calibrated relative to carbon dioxide and is reported as 'carbon dioxide equivalent' emissions (CO₂e).

To determine total exposure for this metric: The share of a given company that the Scheme holds (the weight) is multiplied by the company's emissions (by Scope), effectively measuring the Scheme's share of the company's emissions.

Carbon Footprint

This metric measures the carbon emissions (in metric tonnes) divided by size of investment made (per \$ invested). It seeks to answer how carbon intensive the portfolio is. This means that for the Scheme, for example, a company with a very high carbon intensity but a low Scheme weighting might contribute to the carbon footprint measure to a lesser extent than a company with a lower carbon intensity but a higher weighting in the Scheme.

Weighted Average Carbon Intensity (WACI)

This is also an emissions related metric that measures the carbon emissions (in metric tonnes) divided by revenue (per \$million of revenue) for each underlying company. This involves multiplying percentage holding or exposure to a company by the carbon intensity (the company's total emissions per \$million revenue).



The Trustee has selected to report the WACI as an alternative emissions metric to the carbon footprint metric. The Trustee has also selected this metric as the primary metric to monitor the short-term decarbonisation target set for the buy and maintain credit portfolio (see the 'Target' section for further details).

Implied temperature rise (ITR)

A forward-looking assessment of how aligned the Scheme's portfolios are relative to the Paris Agreement's 1.5°C target. This is estimated based on the activities and decarbonisation targets of portfolio companies / issuers, relative to what global decarbonisation needs to be to achieve 1.5°C. It provides a prediction of the potential temperature rise over the rest of the century based on the activities of those companies and issuers.

The Trustee has chosen this metric to include in this report because of its simplicity in presentation and a useful way to see, at a glance, the positioning of a fund towards a low carbon economy. High ITR metrics at the Scheme level would imply it is invested in companies or issuers that are not transforming their businesses or activities quickly enough in order to reduce their reliance on fossil fuels. This is also a measure of climate transition risk with greater transition risk highlighted in funds with a higher ITR.

The Trustee notes that there are currently multiple methodologies used by its investment managers for computing this metric and these can have variable results. The Trustee will work with its investment managers to improve the scope and consistency of the ITR metric.

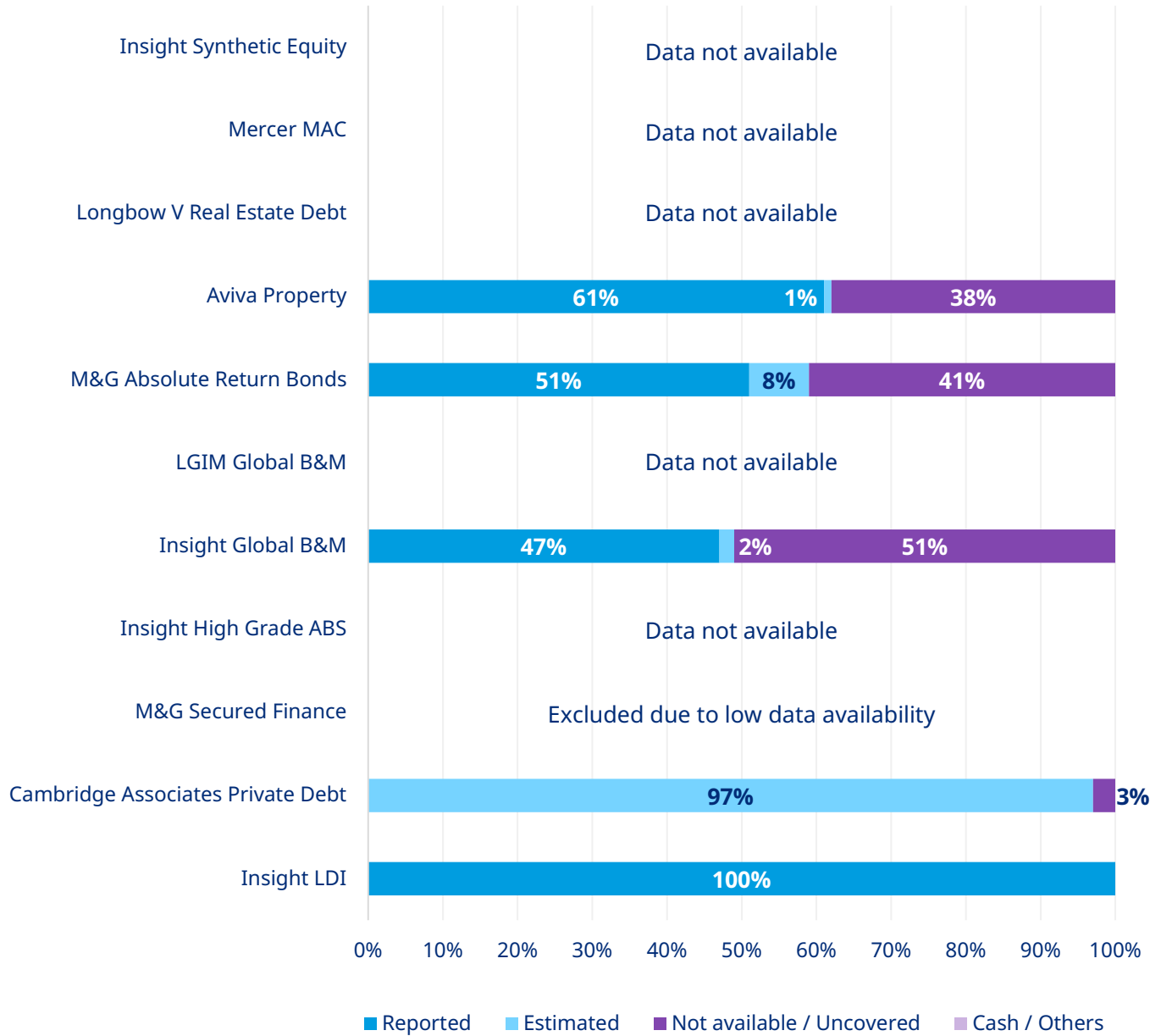
Data Quality

This is an alternative metric that aims to represent the proportions of the portfolio for which the Trustee has verified, reported, estimated or unavailable carbon emissions data.

The Trustee has chosen this metric to include in this report as it quantifies the overall quality of the carbon data available and helps identify mandates the Trustee should work further on with its investment managers to increase the quality of data reported. The Trustee does not have access to the verified component of the carbon emissions data provided by managers which becomes a data limitation.



Appendix 5: Data quality and coverage



Source: Investment managers. As at 30 September 2022.

The data above is in relation to Scope 1 and 2 emissions only.

LGIM, Longbow and Mercer have advised that they are unable to provide information on data quality metrics as at 30 September 2022. However, they are in the process of considering reporting in this area.

Insight have not been able to provide information relating to the synthetic equity (reporting is still being looked into due to synthetic nature of exposure) and liquid ABS mandates (due to lack of data availability on the underlying assets).

Data coverage for the M&G secured finance is currently low and has been excluded as it may impact the reliability of any results.

Data for the LDI mandate is based on the emissions data and PPP-adjusted GDP from the UK Government data as at 31 December 2021 and approximated by Insight based on the Scheme's share of the gilt market as at 30 September 2022 (including both funded and unfunded (repo) exposure for the Scheme). UK emissions data is published with a lag – provisional figures for the previous year are published in March; finalised figures are published two years post-year end). Published figures for the previous year are broken down by quarter-end but given the lag Insight deems it appropriate to use the latest data available as at calendar year-end. GDP figures are sourced from the IMF World Economic Outlook Database. Further, the following assumptions apply:

- Gilts posted out as collateral are included in gilt valuations; gilts received as collateral are excluded.
- Interest rate swaps, inflation swaps, futures, cash and money market fund holdings have all been excluded. Short gilt positions have also been excluded.
- Figures cannot be sensibly aggregated with emissions data for non-gilt assets due to risk of double counting.

The Trustee is comfortable with this approach and notes that this is not a specific issue to the Scheme.

For the rest of the Scheme's assets, data quality is mixed, with HLV property having the largest proportion of reported data and the Cambridge Associates private debt mandate having no reported data (and the largest proportion of estimated data).



Due to gaps in data coverage, some investment managers opt to scale the climate metrics for their portfolios in order to represent the data as if full coverage was available (applying the average metric for the proportion of the portfolio for which they have data across the entire portfolio). The approach taken by each of the investment managers is set out below.

Insight	Insight provides both actual and scaled carbon metrics. The scaled figures have been quoted in this report.
M&G	The climate metrics provided by M&G have been scaled using carbon figures for which data is available. Their current primary data provider is MSCI and they calculate the portfolio level metric based on what is covered, and scale the emissions that are covered to a 100% portfolio level basis. However M&G's view is that going forward these metrics would be reported unscaled.
Cambridge Associates	Cambridge Associates does not scale their calculations as the data for the fund covers 99.5% of the portfolio.
Mercer	The climate metrics provided have been scaled using carbon figures for which data is available.
LGIM	The climate metrics provided are calculated assuming missing data equal to the average metric on available fund data and based on Carbon Intensity Scope 1 and Scope 2.
Aviva	Aviva does not apply scaling to their calculations due to the likely high level of inaccuracy.



Appendix 6: Climate Change Glossary

Carbon footprint:

The amount of carbon dioxide (and other greenhouse gasses) released into the atmosphere as a result of the activities of a particular individual, organization or community. Carbon footprint is calculated for each company as (Scope 1 and 2 carbon emissions / \$m investments). See also Scope 1, 2, 3 emissions and WACI.

Carbon intensity:

The amount of emissions of carbon dioxide (and other greenhouse gasses) released per unit of another variable such as revenue, gross domestic product (GDP), per \$1million invested etc. See also WACI.

Carbon price:

The price for avoided or released carbon dioxide (CO₂) or CO₂-equivalent emissions. This may refer to the rate of a carbon tax, or the price of emission permits. In many models that are used to assess the economic costs of mitigation, carbon prices are used as a proxy to represent the level of effort in mitigation policies.

Carbon neutrality:

Achieved by offsetting emissions by paying for credits (usually certified via new forestry equivalents that provide carbon removal). Carbon neutrality is similar to net zero targeting – though the latter requires actual emissions reductions to meet targets (rather than purchasing offsets). See also Net zero greenhouse gas emissions.

Decarbonisation:

The process by which countries, individuals or other entities aim to achieve zero fossil carbon existence. Typically refers to a reduction of the carbon emissions associated with energy, industry and transport.

Global warming:

The estimated increase in global mean surface temperature expressed relative to pre-industrial levels unless otherwise specified. See also Pre-industrial.

Greenhouse gases:

Gases in the planet's atmosphere which trap heat. They let sunlight pass through the atmosphere but prevent heat from leaving the atmosphere. Greenhouse gases include: Carbon Dioxide (CO₂), Methane (CH₄), Nitrous Oxide (N₂O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulphur Hexafluoride (SF₆), Nitrogen Trifluoride (NF₃).

Inevitable policy response:

A scenario that expects an acceleration of climate-related policy announcements in 2023-2025, which has been supported by the Principles for Responsible Investment (PRI).

Mitigation (of climate change):

A human intervention to reduce emissions or enhance the sinks of greenhouse gases.

Mitigation strategies:

In climate policy, mitigation strategies are technologies, processes or practices that contribute to mitigation, for example, renewable energy technologies, waste minimization processes and public transport commuting practices.

Net zero greenhouse gas emissions:

Net zero greenhouse gas emissions (represented as a CO₂ equivalent, or CO₂e) are achieved when emissions are balanced globally by removals over a specified period. The term "net zero" is also typically associated with the 2050 date or earlier, as this is aligned with the scientific recommendations to achieve a 1.5°C scenario. See also Carbon neutrality (which differs slightly).

Paris Agreement:

The Paris Agreement under the United Nations Framework Convention on Climate Change (UNFCCC) was adopted on December 2015 in Paris, at the 21st session of the Conference of the Parties (COP) to the UNFCCC. The agreement, adopted by 196 Parties to the UNFCCC, entered into force on 4 November 2016 and as of May 2018 had 195 Signatories and was ratified by 177 Parties. One of the goals of the Paris Agreement is “Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels”, recognising that this would significantly reduce the risks and impacts of climate change. Additionally, the Paris Agreement aims to strengthen the ability of countries to deal with the impacts of climate change.

Physical risks:

Dangers or perils related to the physical or natural environment that pose a threat to physical assets e.g. buildings, equipment and people. These are typically grouped into the impact of natural catastrophes (for instance sea level rise, flooding, wildfires, and hurricanes) and resource availability (particularly water). See also Transition risks.

Pre-industrial:

The multi-century period prior to the onset of large-scale industrial activity around 1750. The reference period 1850–1900 is used to approximate pre-industrial global mean surface temperature.

Principles for Responsible Investment (PRI):

Non-profit organisation, which encourages investors to use responsible investment to enhance returns and better manage risks. It engages with global policymakers and is supported by, not but part of, the United Nations. It has six PRIs that offer a menu of possible actions for incorporating ESG issues into investment practice.

Scope 1, 2, 3 emissions:

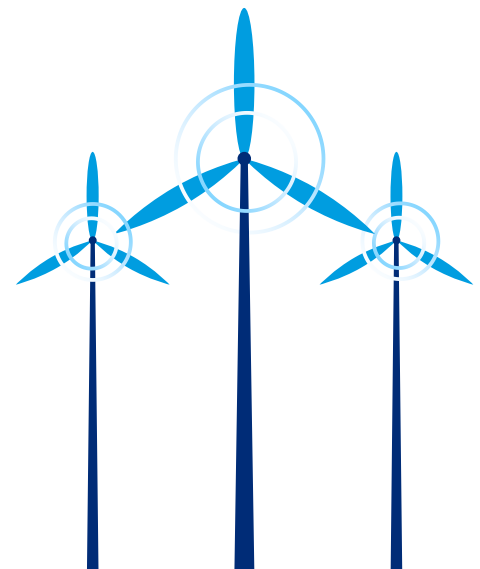
Scope 1 emissions are direct emissions from owned or controlled sources. Scope 2 emissions are indirect emissions from the generation of purchased energy. Scope 3 emissions are all indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions.

Transition risks:

Risks from policy changes, reputational impacts and shifts in market preferences, norms and technology as the economy moves to a low carbon approach. See also Physical risks.

Weighted average carbon intensity (WACI):

The carbon intensity of a portfolio, weighted by the proportion of each constituent in the portfolio. Carbon intensity is calculated for each company as (Scope 1 and 2 carbon emissions / \$m revenue). See also Carbon footprint.



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