Climate change report

The Pearson Pension Plan (the "Plan")

A report for members by the Trustee of the Pearson Pension Plan

Plan Year ending 31 December 2024

Why have we written this report?

In the UK it is mandatory for the largest companies and financial organisations to disclose their climate-related risks and opportunities.

This is part of the government's commitment to making the UK financial system the greenest in the world.

This report provides members the opportunity to find out more about the work carried out by the Trustee in relation to climate change.

It is the third climate change report by the Trustee of the Plan. We hope you find it informative and would welcome any feedback.

Lynn Ruddick

Chair of the Trustee of the Pearson Pension Plan

Overview

The Trustee of the Pearson Pension Plan views climate change as a risk to society, the economy, and the financial system, but also recognises that reducing carbon emissions throughout the economy presents opportunities.

These risks and opportunities may affect the Plan's financial position, for example by impacting the businesses the Plan invests in. The Trustee monitors this potential impact and takes steps through engagement with fund managers to reduce climate-related risks for members.

This report describes how the Trustee has identified, assessed, and managed climate-related risks and opportunities to the Plan during the Plan year to 31 December 2024.

Contents

Approved by the Trustee and published alongside the Plan's Annual Report and Financial Statements for the Scheme year to 31 December 2024.

Introduction

About The Pearson Pension Plan (the "Plan")

The Plan has a Defined Benefit ("DB") Section with total assets (including its buy-ins) of c.£2.2bn as at 31 December 2024, and a Defined Contribution ("DC") Section with total investment assets of c.£768m as at 31 December 2024. The DC section has three lifecycle strategies, and members are automatically enrolled into the Drawdown Lifecycle strategy ("default strategy"), unless they actively choose one of the alternative strategies available. The majority of DC members (c.88%) are invested in the default strategy.

The Trustee believes that climate change is a material financial risk to the Plan, alongside other environmental, social and governance ("ESG") considerations. The Trustee has committed appropriate time and resources to ensure that its objectives in this area have been met.

The Trustee notes that any actions as a result of its work in relation to climate change, including efforts to move towards achieving any targets set, will be taken on the condition that they are also appropriate from a wider strategic perspective and are with the Trustee's overall objectives in mind.

The purpose and structure of this report

This report describes the activities and approach taken by us (the Trustee) to understand and reduce the climate-related risks faced by the Plan, and to potentially take advantage of any investment opportunities as part of the transition to a lower carbon economy. It is the Plan's third report in line with the recommendations of the **Taskforce on Climate-Related Financial Disclosures ("TCFD")**, as required by the 2021 Climate Change Governance and Reporting Regulations.

This report covers the TCFD's thematic areas of:

1. **Governance** – the Plan's governance around climate-related risks and opportunities;
2. **Strategy** – the potential effects of climate-related risks and opportunities on the Plan, the resilience of the Plan's investment strategies (for the DB & DC Sections) and the DB funding strategy under different climate-related scenarios;
3. **Risk Management** – the processes used by the Plan to identify, assess, and manage climate-related risks; and
4. **Metrics and Targets** – the metrics and target used to assess and manage relevant climate-related risks and opportunities to the Plan.

Key findings

1. **Governance – the Trustee has a robust framework for managing the Plan, including setting clear expectations and responsibilities in relation to climate change.**

A Climate Governance Statement defines the responsibilities of everyone involved

Climate-related risks and opportunities are reviewed regularly in light of the Trustee's beliefs

The Plan's advisers support the Trustee on climate-related matters

2. **Strategy and Risk Management – the Trustee has taken steps to understand how climate change might affect the Plan and to control the risks it has identified. Based on the analysis carried out, the Trustee expects climate change to potentially impact the Plan more significantly over the longer term. The Trustee aims to reduce the risks to the Plan in several ways, including:**

Investing responsibly, in line with the Trustee's beliefs

Regularly reviewing the Plan's investment managers' climate practices and engaging with managers if concerns arise

3. **Metrics and Target – the Trustee has collected and reviewed information about the greenhouse gas emissions, carbon footprint and emissions reductions targets for the assets the Plan invests in, to help it understand the Plan's exposure to climate risks. It has set a target to increase the proportion of companies it invests in with science-based emissions reductions targets. Collecting metrics helps us to identify climate exposures, but we are conscious there remain material data gaps. It is widely recognised that there remain shortcomings in the quality and completeness of the emissions data available for many assets, unlisted assets being a key stumbling block. Our investment consultant is liaising with our investment managers to encourage improvement in both the quality and the coverage of reporting on climate data and also to improve science-based target ("SBT") alignment in keeping with our target.**

Collected and reviewed greenhouse gas emissions data for the Plan's investments

Reported proportion of investments with no data or estimated data

Agreed to use data quality as an additional climate-related metric to help it monitor climate-related risks

Governance

The Trustee has ultimate responsibility for making decisions and ensuring effective governance of climate change risks and opportunities in relation to the Plan. No one other than the Trustee undertakes governance activities.

1. The Trustee and Trustee Chair's role

It is the Trustee Chair's responsibility to ensure that sufficient time is allocated for consideration and discussion of climate matters by the Trustee, the Investment Committee, and its advisers.

In broad terms, the Trustee is responsible for having effective climate governance arrangements in place for both the DB (Final Pay) and DC (Money Purchase) Sections including:

- allowing for climate-related considerations when assessing and monitoring the Pearson Group's covenant;
- ensuring that the Plan's actuarial, investment, covenant and legal advisers have clearly defined responsibilities in respect of climate change and that they all work together with the Trustee to incorporate climate change in its governance arrangements, risk register, Integrated Risk Management ("IRM ") framework and communication with stakeholders;
- ensuring that the Plan's actuarial, investment, and covenant advisers: (i) have adequate expertise and resources, including time and staff, to carry out their responsibilities; (ii) are taking adequate steps to identify and assess any climate-related risks and opportunities which are relevant to the matters on which they are advising; and (iii) are adequately prioritising climate-related risks;
- considering and documenting the extent to which the advisers' climate-related responsibilities are included in their service agreements, and the investment advisers' strategic objectives;
- incorporating climate-related considerations into the Plan's risk register and IRM framework; and
- communicating with Plan members and other stakeholders on climate change where appropriate, including public reporting in accordance with the Occupational Pension Schemes

(Climate Change Governance and Reporting) Regulations 2021 and the Occupational and Personal Pension Schemes (Disclosure of Information) Regulations 2013 (together "TCFD reporting") when required.

2. Other parties' and advisers' roles

The Trustee Board seeks to identify, assess and manage climate risks and opportunities, with some matters delegated to the Investment Committee, and with support from the Secretary to the Trustee and the Trustee's advisers.

Investment Committee and Alternatives Investment Board

In broad terms, the Investment Committee and Alternatives Investment Board are responsible for carrying out the following for both the DB (Final Pay) and DC (Money Purchase) Sections:

- incorporating climate-related considerations into: (i) the Trustee's investment beliefs and the Plan's investment policies; and (ii) the strategic decisions relating to the Plan's funding and investment framework;
- determining the short-, medium- and long-term periods to be used when identifying climate-related risks and opportunities for the Plan;
- identifying and assessing the main climate-related risks and opportunities for the Plan over the agreed time periods and documenting the management of them;
- commissioning the investment advisers to work with the in-house pension team to satisfy TCFD reporting;
- ensuring that the Plan's investment managers have processes in place for managing climate-related risks and opportunities in relation to the Plan's investments; and
- selecting and regularly reviewing metrics to inform the Trustee's identification of climate risks and opportunities, including: carrying out scenario analysis as and when required, assessment and management of climate-related risks and opportunities, and setting and monitoring targets to improve these metrics over time.

2. Other parties' and advisers' roles (cont.)

Actuarial adviser

The Plan's actuarial adviser is responsible for advising on how climate-related risks and opportunities might affect the Plan's funding position over the short-, medium- and long-term and the implications for the Plan's funding strategy, long-term objective, and journey plan.

Investment advisers

The Plan's investment advisers are responsible, as requested by the Trustee or Investment Committee, and working with the Trustee, Investment Committee, in-house pension team and other advisers as appropriate, for:

- providing training and other updates on relevant climate-related matters;
- helping the Investment Committee to formulate the investment beliefs in relation to climate change and reflecting these in the Plan's investment policies and strategy;
- advising how climate-related risks and opportunities might affect the different asset classes in which the Plan might invest over the short-, medium- and long-term, and the implications for the Plan's investment strategy and journey plan;
- advising the Investment Committee on the appropriateness and effectiveness of the Plan's investment managers' processes, expertise and resources for managing climate-related risks and opportunities, given the Trustee's investment objectives and beliefs, and engaging with the managers to improve climate-related integration over time;
- assisting the Trustee and Investment Committee in incorporating climate change in its investment monitoring;
- advising on the inclusion of climate change in the Plan's governance arrangements, risk register and IRM framework;
- assisting the Investment Committee in identifying, monitoring, and using suitable climate-related metrics and targets in relation to the Plan's investments, including liaising with the Plan's investment managers regarding provision of the metrics;
- leading on the preparation of the Trustee's TCFD reporting, and assisting with other communication with stakeholders in relation to climate change; and
- supporting the Alternatives Investment Board in relevant Responsible Investment and climate requirement matters.

Covenant adviser

The Plan's covenant adviser is responsible for:

- considering in periodic covenant reviews how climate-related risks and opportunities might affect Pearson Plc over the short-, medium- and long-term and the implications for the Plan's journey plan; and
- noting in the Plan's covenant monitoring any changes in the policies and practices of the Pearson Group relating to climate change, and the Company's progress against any climate-related targets it has set.

2. Other parties' and advisers' roles (cont.)

Investment managers

In broad terms, the Plan's investment managers are responsible for:

- identifying, assessing and managing climate-related risks and opportunities in relation to the Plan's investments, in line with the investment management arrangements agreed with the Trustee and/or Investment Committee;
- exercising rights (including voting rights) attached to the Plan's investments, and undertaking engagement activities in respect of those investments, in relation to climate-related risks and opportunities in a way that seeks to improve long-term financial outcomes for Plan members;
- reporting on stewardship activities and outcomes in relation to the Plan's investments on an annual basis, wherever feasible; and
- providing information to the Plan's investment advisers on climate-related metrics in relation to the Plan's investments, as agreed from time-to-time, and using its influence with investee companies and other parties to improve the quality and availability of these metrics over time.

3. Trustee monitoring

The Trustee and Investment Committee consider a range of different information about the climate change risks and opportunities faced by the Plan to enable them to fulfil their responsibilities set out above. These documents will incorporate climate-related risks and opportunities as appropriate, in accordance with the roles and responsibilities set out above. The Trustee (or Investment Committee as appropriate) will review, revise and approve when required the following, according to their roles and responsibilities:

Quarterly

- Updates on the Plan's investments from the Plan's investment advisers (including updates on environmental, social and governance ("ESG") factors and climate change as part of regular reporting from investment managers and presentations to the Trustee).

Annually

- Governance arrangements, investment beliefs and investment policies in relation to climate change, including reviewing the Plan's risk register;
- TCFD reporting;
- Report on the climate metrics in the Plan's IRM framework;
- Business plan for the following year that outlines the main topics due to be discussed at board meetings;
- Whether it is appropriate to carry out scenario analysis that illustrates how the Plan's assets and liabilities might be affected under various climate change scenarios;

3. Trustee monitoring (cont.)

Annually (cont.)

- Advisers' climate competence and assess how they have performed against their climate responsibilities;
- Data on ESG metrics for the Plan's investments, including at least four climate-related metrics, and performance against any targets set in relation to these metrics; and
- Whether to retain or replace any targets set in relation to these metrics.

At least every three years (or following major changes*)

- A responsible investment report from the Plan's investment advisers that reviews the Plan's investment managers in relation to ESG factors and climate change;
- Choice of short-, medium- and long-term time periods to be used when identifying climate-related risks and opportunities to the Plan;
- Scenario analysis that illustrates how the Plan's assets and liabilities might be affected under various climate change scenarios, along with commentary on the potential impacts for the Pearson Plc and the implications for the resilience of the Plan's funding and investment strategies; and
- Choice of metrics to inform the Trustee's identification, assessment and management of climate-related risks and opportunities.

Oversight activity – appointments

The Trustee seeks input from its investment, actuarial and covenant advisers to ensure that it can identify, assess, and manage climate risks and opportunities. The Trustee will review the climate competence of its advisers and take appropriate action if any concerns are identified.

Over 2024, the Trustee and Investment Committee have undertaken activity on climate change, based on information provided to them by their advisers and investment managers. Where appropriate, the Trustee has questioned the information provided to it to ensure it has a clear understanding of the risks facing the Plan and the actions being taken to reduce them.

When appointing new advisers in the future, the Trustee will consider whether the advisers have suitable climate credentials.

With appropriate advisers in place, the Trustee ensures that climate-related risks and opportunities are considered as part of any relevant advice such as investment strategy reviews and assessment of the employer's covenant.

Determining the correct apportionment of resources

The key rationale for allocating resources to this area is that the Trustee believes that ESG factors may be one area of market inefficiency and so managers may be able to improve risk-adjusted returns by taking account of ESG factors which include factors relating to climate change.

*Following a significant/material change to the investment and/or funding strategy or some other material change in the Plan's position or change to the assessment of the Pearson Group covenant.

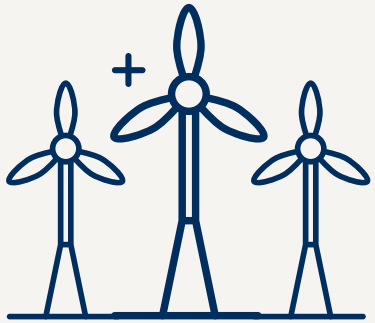
3. Trustee monitoring (cont.)

Oversight activity – objectives set for advisers

Climate-related objectives are included in the Trustee's investment consultant objectives. These are used to assess the consultant's performance on an annual basis.

Climate-related objectives for the Trustee's investment advisers

- "Support the Trustee in relevant Responsible Investment and climate requirements and decisions, including support with preparation of climate reporting (for the DB & DC Sections)"
- "Support the Alternative Investment Board in relevant Responsible Investment and climate requirements and decisions"



Activities undertaken

Climate-related agenda items during the Plan Year

- ***March 2024:*** Review of the DC DGFs which included ESG considerations
- ***May 2024:*** Climate scenario analysis to identify and assess climate-related risks and opportunities
- ***May 2024:*** Analysis of climate metrics for the Plan's investments
- ***November 2024:*** Responsible investment review of the Plan's managers
- ***December 2024:*** Engagement with the Plan's DB and DC managers on TCFD data

Climate-related agenda items post Plan Year

- ***May 2025:*** Review of the Trustee's Responsible Investment views
- ***June 2025***: Review whether to update the Plan's most recent climate scenario analysis

Strategy

Identification and assessment of climate-related risks and opportunities relevant to the Plan

The Trustee has considered climate-related risks and opportunities over various time periods which it believes are most relevant to the Plan.

During the Plan year, the Trustee selected short-term, medium-term and long-term time horizons over which to formally consider the impact of climate related risks and opportunities for the Plan (outlined in the table below).

In setting these time horizons, the Trustee has taken into account the membership profile and the timing of widely held future climate milestones.

The Trustee will review the designated time periods regularly and following any material change to the Plan's membership. These time horizons have informed the Trustee's climate-related considerations and decisions during the year.

During the Plan year, the Trustee considered how such risks and opportunities might affect the funding strategy, investment strategy and the Company's ability to provide financial support for the Plan, by modelling the Plan under different potential climate scenarios (noting significant modelling limitations).

Each year, the Trustee will re-confirm whether a repeat of the analysis is needed.

Time period	DB Section	DC Section
Short-term	**3 years (2027)** – To align with valuation timescales and the Trustee's usual strategic decision-making process.	**3 years (2027)** – Major improvements in climate data quality are expected over this period.
Medium-term	**6 years (2030)** – Key period over which policy action will determine if Paris Agreement goals will be met.	
Long-term	**26 years (2050)** – Many economies are targeting to be net zero by this point.	

Strategy

Overview of the climate-related risks and opportunities relevant to the Plan that the Trustee has identified

The Plan faces risks and opportunities from both the physical effects of climate change – for example, rising temperatures and more extreme weather events – and from the effect of transitioning to a lower carbon economy to help mitigate the impacts of climate change – for example, government policies to reduce the use of fossil fuels, technological advantages in renewable energy, and shifts in consumer demand for "greener" products. The Trustee has identified various specific climate-related risks and opportunities which could impact the Plan's financial position, over the time periods confirmed. This has helped the Trustee to enhance its risk management processes to ensure these issues are appropriately mitigated and monitored.

DB Section

	Key risks	*Key opportunities*
Short term	Exposure to climate-related investment risks may be highest while the Plan retains an allocation to growth assets	Climate-tilted funds aim to protect against transition risks and provide exposure to transition opportunities
Medium term	Market volatility could cause investment losses and increase time to reach full funding on buy-out basis	When winding down the infrastructure and property funds, consider climate credentials of where the proceeds should be invested
Long term	Cost of buy-out may increase as insurers allow for climate-related risks in their pricing and reserving bases	Buy-out may provide greater protection from climate risks for members' benefits

DC Section

	Key risks	*Key opportunities*
Short term	Older members within 7 years of retirement will be most exposed to transition risks in the short term in the event of a Net Zero Financial Crisis	Low carbon investments can mitigate the impact of market shocks due to a market repricing event
Medium term	Transition risks may still be heightened over the medium-term, creating volatility. Market returns may be lower if a Net Zero Financial Crisis harms economic performance.	Impact investments can take advantage of the shift to a low carbon economy and may provide an enhanced source of return over this period
Long term	Physical risks are most severe in the High Warming scenario, impacting those members 15 years or more from retirement	Engagement with investment managers to ensure they are exercising stewardship in support of net zero pathways is key to avoiding a High Warming scenario

The DB Section has a low-risk investment strategy with a strong funding position on its long-term funding basis and the Trustee feels that the DB Section is appropriately positioned taking these risks and time horizons into consideration. The Trustee has a plan in place to wind down its infrastructure and property assets over time which will help to mitigate risks associated with these assets. Which may be susceptible to climate risks to ensure the strategy and funding level is more resilient to potential climate risks.

The above risks and opportunities have been considered as part of the DC triennial investment strategy review. The Trustee has agreed to integrate low-carbon equities into the lifecycles to improve their resilience against climate risks and take advantage of opportunities arising from the transition to a low carbon economy.

Climate scenarios analysis

Scenario analysis is a tool for examining and evaluating different ways in which the future may unfold.

The Trustee carried out climate scenario analysis during the Plan year in May 2024, with the support of one of its investment advisers, LCP.

Since the Plan's previous climate scenario analysis in 2022, the scenarios have been developed to remove the Orderly Net Zero by 2050 scenario as the Trustee and investment adviser no longer believe this is plausible. Disorderly Net Zero by 2050 remains, now representing the only modelled pathway to Net Zero, and has been renamed as **Net Zero Financial Crisis**. The **Limited Action scenario** has been introduced, under which some action is taken to mitigate climate change but not as much as under the Net Zero Financial Crisis scenario and therefore Net Zero is not achieved in 2050. Failed Transition has been renamed **High Warming**. The new scenarios are described below:

Transition	Description	Why the Trustee chose it
High Warming	No new low-carbon policies enacted and some existing ones are scaled back. Current technological trends continue. Paris Agreement goals not met, and the resulting high warming leads to severe physical impacts. Modelling of tipping points has been included in the High Warming scenario.	To explore what could happen to the Plan's finances if carbon emissions continue at current levels and this results in significant physical risks from changes in the global climate that disrupt economic activity.
Limited Action	Policymakers implement limited new climate policies and fall short of meeting the Paris Agreement goals, resulting in a combination of transition and physical risks.	The Limited Action scenario explores plausible physical outcomes, although the route to get there might be expected to be less smooth. This scenario reflects an attempt to correct the climate crisis but with limited success.
Net Zero Financial Crisis	Global net zero CO^2 emissions achieved by 2050 via rapid and effective climate action. Financial markets react abruptly in 2025.	Net Zero Financial Crisis gives important insight into potential volatility in financial markets caused by climate change. Financial markets react slower to corporate and consumer behaviour and an abrupt market reaction can negatively impact investments.

The Trustee acknowledges that many alternative plausible scenarios exist but found these were a helpful set of scenarios to explore how climate change might affect the Plan in future. To provide further insight, the Trustee also compared the outputs under each scenario to a "climate uninformed base case", which makes no allowance for either changing physical or transition risks in the future.

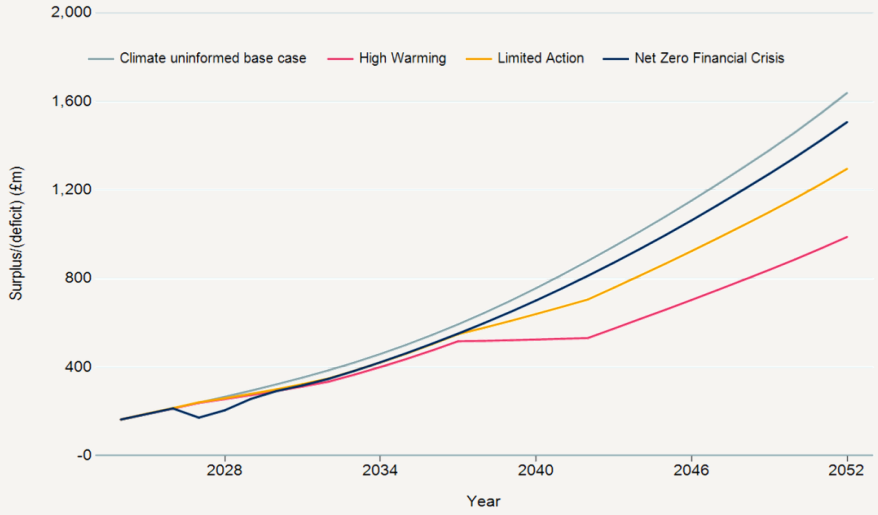
The intricacies of climate systems present considerable difficulties in modelling the impacts on pension schemes' assets and liabilities. This is particularly true in the High Warming scenario where over 3.7°C of warming is observed. Due to the unprecedented nature of such warming, it is challenging to encompass all potential consequences within the modelling process. Simplifications in the modelling, such as not allowing for tail risks, mean the actual impact on pension schemes is likely to be more significant than is currently being modelled. The Trustee considered the potential impact of such limitations in the modelling. The Trustee is comfortable that, whilst acknowledging these limitations the scenarios still provide valuable insights to inform climate risk assessment and management.

Further details on climate scenario analysis can be found in Appendix 1.

Strategy

Potential Plan impacts under each scenario – DB Section

The scenario analysis looked at the impact of the Plan's funding position over time on the Plan's long-term funding target using a discount rate of gilts flat. The chart below illustrates the expected change in surplus of the DB section under each of the three scenarios considered, as well as in the "climate uninformed" base case. A key limitation of the modelling is that the scenarios are based on median projections, meaning the funding position could be materially better or worse over time than what is depicted in the chart below.



Current surplus position is expected to improve with the current investment strategy providing returns in excess of gilt returns.

If net zero is to be reached by 2050 and if the market reaction to the journey to net zero is volatile, there may be some adverse impacts to funding levels

More adverse impacts are expected if limited climate action was taken and net zero was not reached

A high warming scenario, where no new climate policies are introduced, would be expected to have significant impacts on the current portfolio, but the Plan may be able to de-risk before these impacts occur (potentially via another buy-in in due course for example).

The climate scenario analysis showed that equity markets could be significantly impacted by climate change with lesser but still noticeable impacts in bond markets. All three scenarios envisage, on average, lower investment returns and these result in a worse funding position for the Plan. The Trustee's key conclusion is that the Plan is exposed to climate impacts over all time periods.

The infrastructure and property investments may be susceptible to climate risks either through the transition to a low carbon economy or through the physical impacts of climate change if not limited.

The Trustee noted that a difference in funding position between the climate uninformed baseline and the net zero financial crisis projection in 2026/7 (noting this is an illustrative date) arises and reviewed the components of that difference.

As part of this analysis the Trustee also reviewed analysis on its buy-in and reference scheme test ("RST") strain.

Given the Plan's strong funding position on its long-term basis and its likely time horizon, the focus for the DB Section's investment strategy will be more on mitigating climate risks (by assessing and monitoring its current holdings) rather than looking to amend its investment strategy to consider any potential climate-related opportunities.

It is noted that over the long-term, and particularly beyond the time horizon modelled, the largest effects on the funding position would be felt under the High Warming scenario. On the face of it, the results below suggest that the DB section is resilient in this scenario. This is partly because in the modelling the DB section has a low-risk long-term investment strategy with limited exposure to growth assets. Moreover, the DB section invests in a way that is designed to make it fairly immune to changes in interest rates and inflation in normal circumstances, which significantly reduces the volatility of its funding position. However, under climate scenarios with major economic disruption – such as the later years of the Net Zero Financial Crisis scenario – the Plan's interest rate and inflation protection may break down, leaving it more exposed to climate risks. The median modelled outcomes do not illustrate this possibility, but the Trustee has considered this risk.

Source: Ortec Finance. Impacts shown are medians, based on financial conditions as at 31 December 2023.

Strategy

Employer covenant assessment

The Trustee assessed the Employer's covenant during the Plan year. The Trustee noted that the Employer is committed to operate its business in a more sustainable way and has set an ambitious target of becoming Net Zero by 2030 and reducing their scope 1, 2 and 3 carbon emissions by over 50% over the same time period.

The Trustee noted that the Employer's analysis shows that whilst climate change is not one of their principal risks, they have identified climate transition as an emerging risk due to its intensifying importance to all stakeholders.

In assessing the risks, it was determined that there were no significant material risks arising in the near term (up to 2025). One opportunity could be the provision of sustainability-related learning tools, products and services to their customers. Longer-term, the key risks to the business were supply chain risk and outsourcing risk. However, these are not expected to have a material impact on the business in any scenario, in particular due to the Employer's digitalisation strategy.

The Plan's DB Section is fully funded on the Trustee's Long-Term Target and on a solvency basis. The Plan therefore has a limited reliance on the Employer's Covenant, as it is not expected to require any further cash contributions and only needs the Employer to remain an operational business. If climate change were to have a material impact on the Employer business after 2025, the Plan is expected to be able to secure all members benefits in full with an insurance company. The Trustee is therefore comfortable with the Employer covenant in respect of the impact of potential climate risks.

The Trustee, with its advisers, will of course continue to monitor the insurance market to consider any potential for insurer pricing moving adversely, for example, due to insurers needing to increase reserves for climate change or a lack of market capacity.

Strategy

Potential Plan impacts under each scenario – DC Section

The scenario analysis looked at the retirement outcomes (in terms of the size of retirement pots) for individual members of different ages who are invested in the Default strategy.

The analysis highlighted that members will be subject to climate risks to varying degrees. In addition to the impact over time on members' pots, the Trustee notes that market shocks for members near retirement can be particularly detrimental to their retirement planning and outcomes.

- In the short-term, older members who may retire within the next 10 years could see a sharp decrease in their benefits under a Net Zero Financial Crisis scenario, as their fund remains invested in return-seeking assets to some degree all the way to retirement, although the proportion decreases over time which helps to mitigate this risk. These members will not have sufficient time to recover from short-term market shocks before retirement.
- In the medium-term, members with 10 or more years until they retire are likely to see an impact on their retirement funds, either initially from a Limited Action scenario, or later on under a High Warming scenario as the long-term physical impacts of climate change are expected to reduce their benefits during their period to retirement.
- In the long-term, younger members would see the biggest detrimental impact to their benefits under a High Warming scenario and this impact could reduce the level of their benefits by 30% or more.

The Trustee believes that it is imperative to avoid a High Warming scenario to prevent the worst effects of climate change being felt, as the strategy may not be as resilient in that event. The Trustee believes that it cannot do this by lowering the emissions of its investments in isolation; the whole world needs to lower emissions. The Trustee's focus therefore is to encourage investment managers to encourage companies to adopt a science-based net zero target.

Impact on retirement pots*

	Member aged 25	Member aged 35	Member aged 45	Member aged 55
Change relative to climate uninformed outcome				
Net Zero Financial Crisis outcome	-11%	-9%	-8%	-4%
Limited Action outcome	-22%	-16%	-10%	-3%
High Warming outcome	-34%	-25%	-16%	-3%

*Whilst some of the impacts appear large, there is limited action that the Trustee can take to mitigate climate change impacts. These figures are highly uncertain and could be significantly lower or higher than shown. The Trustee delegates the management of financially material risks, including climate change, to the asset managers of the funds in which members are invested. The Trustee considers managers' approaches to managing climate risk as one of several factors when selecting new investments, and reviews these on an ongoing basis for existing holdings.

Note: The scenario numbers above reflect a projection of example members' pots to age 65 under each scenario to provide an indication of how the different scenarios could impact how much members may have in their pots at the point of retirement. Further details on the modelling assumptions can be found in Appendix 1.

Risk Management

Introduction

The Trustee has implemented a number of processes and tools for identifying, assessing and managing climate related risks and opportunities for the Plan, and has taken steps to integrate these within the overall risk management of the Plan. Some of the key measures in place are outlined below:

- attending climate-related training to understand how climate-related risks might affect pension plans and their investments in general terms;
- undertaking climate scenario analysis which shows how the Plan's assets and liabilities might be affected under a range of climate scenarios;
- reviewing how the sponsoring Employer might be impacted by climate-related factors;
- reviewing its investment advisers' assessments of the Plan's current and prospective investment managers' climate practices, including how they incorporate climate-related factors into their investment processes and how effectively they manage climate-related risks;
- ensuring good stewardship practices are in place; and
- monitoring a range of climate-related metrics in relation to the Plan's assets.

In addition, the Trustee expects its investment managers to identify, assess and manage climate-related risks to the Plan's assets on a day-to-day basis. The above processes are integrated into the overall risk management of the Plan through the business plan, the risk register and regular support from its advisers.

The Trustee also ensures its advisers have processes in place to help it research its investment managers' climate-related practices, thereby helping it make informed judgements about its managers.

These tools have helped the Trustee consider issues such as:

- Which climate change risks are most material to the Plan;
- How to take account of transition and physical risks; and
- How climate change affects the Trustee's risk appetite.

The tools are used to identify the key risks that the Trustee should focus on. The Trustee assesses these risks as part of its investment decision-making processes and monitors them through its risk register to ensure all risks are being considered and managed consistently and proportionately.

Risk Management

Processes for identifying, assessing, and managing climate-related risks and opportunities

How the Trustee has assessed climate exposure

The Trustee has used climate scenario analysis to identify, assess and manage climate-related risks and opportunities. In particular, it has used the analysis to identify the time horizons over which physical risks and transition risks to Plan members could materialise.

Using the scenario analysis, the Trustee has considered what the possible impacts of climate change could be over short-, medium-, and long-term time horizons and whether its investment strategy, funding and covenant is likely to be resilient against these risks (or able to take advantage of any opportunities). Climate scenario analysis was carried out for the Plan in May 2024.

The Trustee will carry out scenario analysis at least every three years and check annually if the review should be carried out sooner.

The results of the analysis are fed into the integrated risk management of the DB Section through specific covenant, investment and DB funding focused considerations and the interaction of these.

The results for the DC Section will feed into the Trustee discussions and decisions on the default investment option and how members could be impacted at different ages over different time periods. The Trustee considered the level of climate risk exposure in the Default funds as part of the triennial investment strategy review carried out during the last Plan Year. The review concluded that an allocation to low carbon equities should be considered as part of the Blended Global Equity Fund within the default arrangements. Implementation is expected in late 2025.

Risk register

The Trustee maintains a risk register covering the wide range of risks applicable to the Plan. The Trustee includes a number of specific climate risks to ensure that the Trustee manages these as part of their regular risk reviews.

The potential impacts identified in the risk register that arise from climate risks include:

- Higher cost of future buy-ins;
- Investment losses;
- Increased volatility; and
- Physical risks.

The Trustee reviews the risks and opportunities regularly to ensure they are current, to assess any significant priority risks and opportunities to manage/embrace and to ensure regular action is maintained in monitoring and mitigating the risks identified.

The Trustee's current assessment, based on consideration of their impact and likelihood, is that climate-related risks are fairly low-risk for the Plan, relative to other risks, and should continue to be monitored using existing monitoring processes. However, following the DC triennial investment strategy, the Trustee is in the process of incorporating low carbon equities into the lifecycles to better manage climate-related risks.

Risk Management

Processes for identifying, assessing, and managing climate-related risks and opportunities

Investment Monitoring

The Plan's investment advisers provide quarterly investment performance monitoring reports in respect of the DB and DC sections of the Plan. Any concerns in relation to the investment managers are monitored as part of this process.

The Trustee also receives and reviews information about its investment managers' responsible investment credentials, including climate change mitigation, on a biennial basis. This information is provided by one of the Plan's investment advisers, LCP, and is based on proprietary manager research carried out by LCP. The Plan's investment advisers conduct engagement with the managers, encouraging them to improve their practices further and report back to the Trustee periodically.

The 2024 Responsible Investment ("RI") report was presented by one of the Trustee's investment advisers. The report used a "traffic light" system to show the managers' RI capabilities against a range of different factors which included climate specific responses to LCP's 2024 RI Survey. The report provided a detailed review of the climate credentials for the Plan's investment managers, including factors such as:

- the use of climate tools to assess climate risks and opportunities (e.g., scenario modelling, metrics);
- commitments to climate goals (e.g.TCFD reporting, Net Zero targets);
- the quality and coverage of climate data provided; and
- evidence of engagement and systemic stewardship relating to climate change.

In addition, the report provided fund-specific ratings, based on the specialist asset class and climate knowledge of LCP's manager research teams.

The assessment provided key information on the actions taken by the managers to integrate good climate practices into the running of their firms as well as the funds in which the Plan invests.

The Investment Committee agreed to review its approach to RI issues by developing clearer collective views on key RI issues. This will be considered in 2025 as part of the Strategy Day.

The Trustee, with the help of its investment adviser, engages with its investment managers on climate-related risks and opportunities when they meet. The Trustee encourages managers to improve their climate practices where possible.

Processes for identifying, assessing, and managing climate-related risks and opportunities

Changes to investment mandates

If the Trustee identifies any concerns with the way one of the Plan's managers addresses climate-related risks and opportunities, it will initially engage with the manager to raise concerns and seek improvements. If the manager does not sufficiently improve, the Trustee may switch to a different manager. Over the year under review, no manager changes were made due to concerns over their climate approaches.

Stewardship

In 2023, the Trustee wrote to its investment managers regarding the Trustee's stewardship priorities, in line with the Department for Work and Pensions ("DWP') stewardship guidance. The Trustee has communicated to managers its expectations of them when they carry out responsible investment on the Plan's behalf.

The Trustee uses stewardship to help manage climate-related risks. Voting and engagement activities are delegated to the individual investment managers. The Trustee has set out two stewardship priorities:

1. Climate change; and
2. Corporate transparency.

Each manager has its own ESG policy, which includes assessment of climate-related risks and policies on voting on climate-related resolutions. In order to monitor how the individual investment managers are exercising their voting rights and undertaking engagement on behalf of the Trustee, the Investment Committee:

- periodically meets with the Plan's investment managers, to engage with them inter alia on how they have considered ESG issues (including climate change) within their stewardship activities and will seek to challenge the investment managers on these matters where they think this is in the best interests of members; and
- further monitors the investment managers by receiving stewardship and governance reports from the investment managers on a regular basis.

The Trustee recognises that investment managers' climate competence and practices are crucial for managing the climate-related risks to the Plan's assets, so the Trustee assesses and monitors these on an ongoing basis.

The Trustee seeks to be a responsible steward of its assets. As part of this, it considers both the impact of ESG factors, including climate change, on the Plan's investments, and also, where it is consistent with their legal obligations, the impact of their investment practices on the economy, society and the environment to achieve the best long-term return on the Plan's assets whilst managing investment risks and taking account of financially relevant factors.

Overall management of risks and opportunities

The Plan invests the DB and DC Sections in well-diversified investment strategies to help reduce exposure to risk generally, which also reduces the exposure to climate risks impacting any individual asset class.

The Trustee has a policy to protect against a high proportion of the interest and inflation risks that could impact the value of the Plan's DB liabilities. Therefore, any potential impact on interest rates and inflation from climate change (and indeed from other factors) are significantly mitigated.

Metrics and Targets

Metrics

The Trustee has chosen four climate-related metrics to help it monitor climate-related risks and opportunities relevant to the Plan. These are detailed below and reported on the following pages (as far as the Trustee was able to obtain the data).

The Trustee chose to report these metrics as they are recommended in the Department for Work and Pensions (DWP) statutory guidance.

The metrics and targets are also based on historical data and forward-looking scenarios (science-based targets) that reflect the potential impacts of different climate outcomes on the Plan's assets, liabilities, funding, and investment strategy. For example portfolio alignment is a key part of the Institutional Investors Group on Climate Change Net Zero Investment Framework, so a science-based target would support any net zero commitment the Trustee decides to make in future.

Metric	High-level methodology
Absolute emissions: Total greenhouse gas emissions	The sum of each company's most recent reported or estimated greenhouse gas emissions attributable to the Plan's investment in the company, where data is available. Emissions are attributed evenly across equity and debt investors. Reported in tonnes of CO_2 equivalent. This methodology was chosen because it is in line with the statutory guidance.
Emissions intensity: Carbon footprint	The total greenhouse gas emissions described above, divided by the value of the invested portfolio in £m, adjusted for data availability. Emissions are attributed evenly across equity and debt investors. Reported in tonnes of CO_2 equivalent per £1m invested. This methodology was chosen because it is in line with the statutory guidance.
Portfolio alignment: Science-based targets	The proportion of the portfolio by weight of companies that are aligned with a Net Zero target, demonstrated by a target approved Science Based Targets initiative (SBTi) or equivalent. Reported in percentage terms. The Trustee chose this "binary target" measure because it is considered the simplest and most robust of the various portfolio alignment metrics available.
Data quality	This is the proportion of the portfolio for which each of Scope 1, 2 and 3 emissions are verified, reported, estimated or unavailable. This approach was chosen because it is in line with the statutory guidance.

Greenhouse gas emissions explained

- **Scope 1** greenhouse gas emissions are all direct emissions from the activities of an entity or activities under its control.
- **Scope 2** greenhouse gas emissions are indirect emissions from energy purchased and used by an entity.
- **Scope 3** greenhouse gas emissions are all indirect emissions from activities of the entity, other than scope 2 emissions, which occur from sources that the entity does not directly control.

Metrics and Targets

Metrics – DB Section

The Trustee has aimed to report on all the Plan's DB assets including its liability driven investments ("LDI") and bulk annuity holdings, which form the largest holdings of the Plan's assets. Minor residual holdings in an infrastructure and property fund and some historical bulk annuity holdings have not been included for materiality reasons and disproportionate levels of time and costs.

The Trustee has been unable to obtain data in certain instances which has prevented it from calculating certain metrics and identifying some potential impacts, with reasons shown below. Most of the Plan's investment managers are seeking to improve their climate-related reporting by increasing the number of metrics they report and seeking to fill the data gaps. The Trustee expects data coverage and quality to improve over time.

The main gaps in the data provided by the DB managers have been outlined on slide 27.

The table on the next page sets out the data the Trustee was able to collect from its investment managers during the Plan Year on each of the four chosen metrics.

Metrics and Targets

Metrics collected – DB Section

Scope 1 & 2 Emissions											
Portfolio	**Manager**	**Assets at 30 September 2024 (% total of DB assets)**	**GHG emissions (tonnes CO_2e)[1]**		**Carbon footprint (tonnes CO_2e per £m invested)**		**Coverage of emissions data**		**SBT alignment % targets set**		**Source**
			2024	**2023**	**2024**	**2023**	**2024**	**2023**	**2024**	**2023**	
LDI	L&G LDI[4]	£599.2m / 24.7%	**109,028**	**102,358[3]**	**170**	**170[3]**	**100%**	**100%**	**100%**	**100%**	LCP
Infrastructure	Meridiam	£106.9m / 4.4%	**1,100**	**962[2,3]**	**10**	**9[3]**	**100%**	**100%**	**N/A**	**N/A**	Manager
	aberdeen	£181.9m / 7.5%	**19,173**	**17,272[3]**	**20**	**14[3]**	**99%**	**71%[3]**	**N/A**	**N/A**	Manager
	Infrared	£41.2m / 1.7%	**762**	**920[3]**	**19[2]**	**21[2, 3]**	**100%**	**100%**	**N/A**	**N/A[3]**	Manager
Trade Finance	Allianz	£57.1m / 2.3%	**1,474**	**5,257[2,3]**	**53**	**162[3]**	**49%**	**61%**	**39%**	**46%**	Manager
Property	LaSalle Main[3]	£8.7m / 0.4%	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	Manager
	LaSalle RPI[3]	£137.4m / 5.7%	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	Manager
Private Equity	Pantheon	£9.1m / 0.4%	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	Manager
Short Duration Credit	Aegon	£134.3m / 5.5%	**2,771**	**3,789[3]**	**32**	**45[3]**	**67%**	**64%[3]**	**29%**	**27%**	Manager
Buy-ins	L&G	£759.1m / 31.3%	**38,712**	**52,570**	**51**	**71**	**100%**	**100%**	**N/A**	**N/A**	Insurer
	Aviva (listed equity and corporate bonds)	£347.4m / 14.3%	**7,411[2]**	**10,139[2]**	**47**	**67**	**96%**	**87%**	**N/A**	**N/A**	Insurer
	Aviva (sovereign bonds)		**8,063[2]**	**9,321[2]**	**180**	**212**	**100%**	**99%**	**N/A**	**N/A**	Insurer
	Aviva (other)		**699[2]**	**5,096[2]**	**19**	**29[3]**	**95%**	**90%**	**N/A**	**N/A**	Insurer

Portfolio emissions coverage	<75%	75%-90%	>90%

Figures may not sum due to rounding. N/A the manager is unable to provide the requested data. We have excluded reporting on EQT, CBRE, Alinda and L&G SLF. Note total assets include cash held in the Trustee bank account and residuals as at the reference date. Total emissions are for the Plan's assets, not the whole pooled fund.

[1] Carbon footprint has been translated from tCO2e per €m / $m invested to £m invested. [2] Total emissions have been calculated by LCP as assets multiplied by carbon footprint and coverage. [3] We have restated this figure to reflect updates directly from managers and to ensure the reporting is comparable across the table. [4] LDI emissions are calculated using a different methodology, outlined in the appendix.

Metrics and Targets

Metrics collected – DB Section

Scope 3 Emissions									
Portfolio	**Manager**	**Assets at 30 September 2024 (% total of DB assets)**	**GHG emissions (tonnes CO2e)**		**Carbon footprint (tonnes CO2e per £m invested)**		**Coverage of emissions data**		**Source**
			2024	**2023**	**2024**	**2023**	**2024**	**2023**	
LDI	L&G LDI[3,4]	£599.2m / 24.7%	**87,238**	**81,901**	**136**	**136**	**100%**	**100%**	LCP
Infrastructure	Meridiam	£106.9m / 4.4%	**68,415**	**67,394[3]**	**640**	**630[3]**	**100%**	**100%**	Manager
	aberdeen[3]	£181.9m / 7.5%	**12,330**	**21,372**	**N/A**	**N/A**	**N/A**	**N/A**	Manager
	Infrared	£41.2m / 1.7%	**348**	**402[3]**	**8[2]**	**9[2.3]**	**100%**	**100%**	Manager
Trade Finance	Allianz	£57.1m / 2.3%	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	Manager
Property	LaSalle Main[3]	£8.7m / 0.4%	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	Manager
	LaSalle RPI[3]	£137.4m / 5.7%	**2,041**	**2,657**	**14**	**18**	**100%**	**100%**	Manager
Private Equity	Pantheon	£9.1m / 0.4%	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	Manager
Short Duration Credit	Aegon	£134.3m / 5.5%	**39,321**	**31,468**	**455**	**372[3]**	**67%**	**64%[3]**	Manager
Buy-ins	L&G	£759.1m / 31.3%	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	Insurer
	Aviva (listed equity and corporate bonds)	£347.4m / 14.3%	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	Insurer
	Aviva (sovereign bonds)		**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	Insurer
	Aviva (other)		**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	Insurer

Portfolio emissions coverage	**<75%**	**75%-90%**	**>90%**

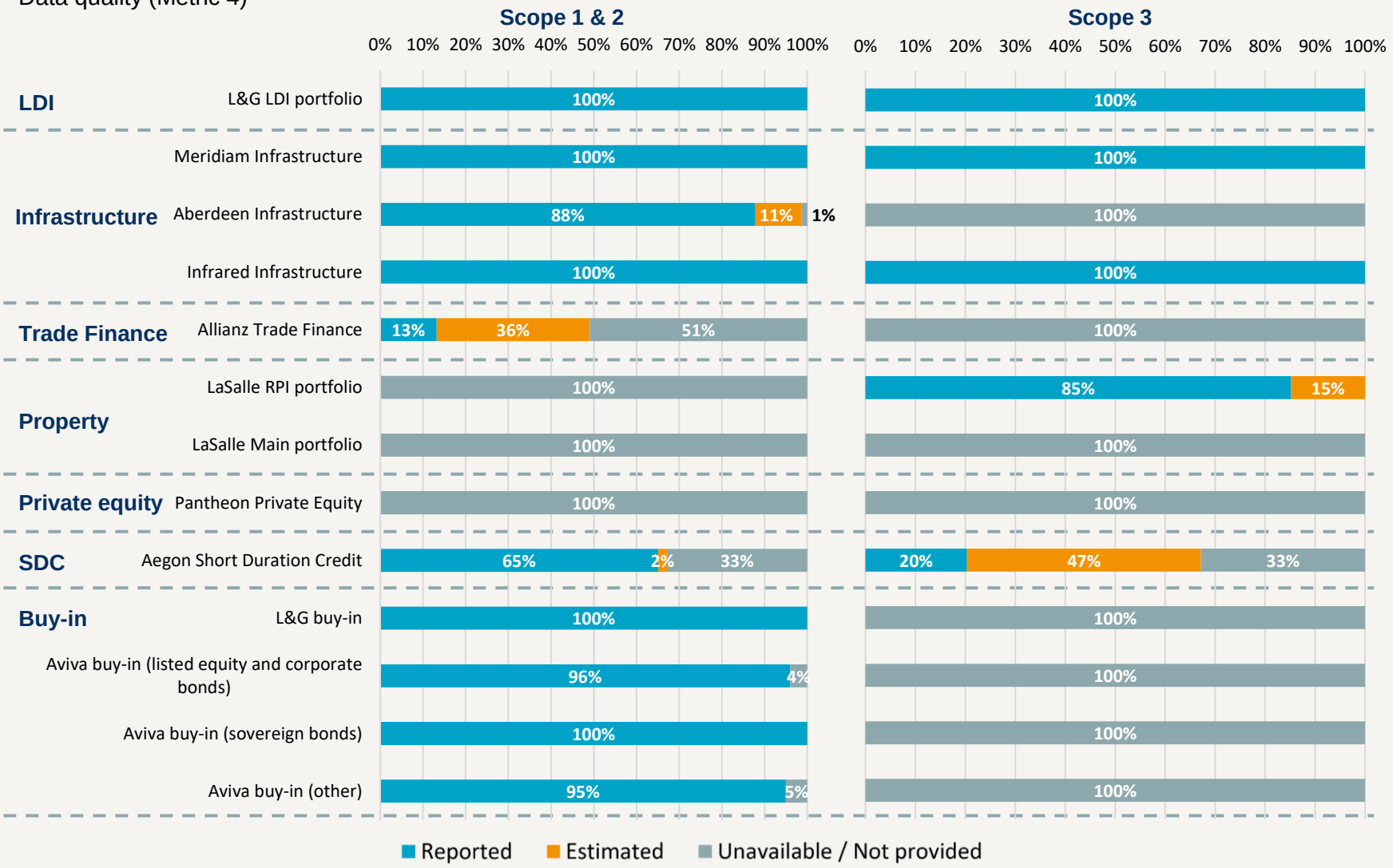
Figures may not sum due to rounding. N/A the manager is unable to provide the requested data. We have excluded reporting on EQT, CBRE, Alinda and L&G SLF. Note total assets include cash held in the Trustee bank account and residuals as at the reference date. Total emissions are for the Plan's assets, not the whole pooled fund.

[1] Carbon footprint has been translated from tCO2e per €m / $m invested to £m invested. [2] Total emissions have been calculated by LCP as assets multiplied by carbon footprint and coverage. [3] We have restated this figure to reflect updated based on emission data provided directly from the manager. [4] LDI emissions are calculated using a different methodology, outlined in the appendix.

Metrics and Targets

Metrics collected – DB Section

Data quality (Metric 4)



Source: Managers, LCP calculations. Figures may not sum due to rounding.

Metrics and Targets

Conclusions from the DB metrics collected

The Trustee uses the metrics to identify and assess climate-related risks and opportunities to the DB section of the Plan. This more granular assessment complements the macro-level climate scenario analysis described in Appendix 1, enabling the Trustee to focus its climate risk management on the areas of the portfolio which are expected to be most exposed to climate change.

Whilst there is a requirement to collect and report on total greenhouse gas emissions, the Trustee notes this may not be a good indication of climate risk exposure for certain asset classes. The Trustee has therefore focused on the intensity and SBTi metrics when drawing conclusions from the metrics collected.

- **LDI:** As already noted and in addition to Appendix 3, the LDI portfolio is held for key strategic reasons. As such, climate considerations do not form a key part of the selection process for this mandate. The LDI GHG emissions figure have seen an increase over the year on both Scope 1+2 and Scope 3 level; this is due to a change in the value of the LDI and is expected given the change in value. The Trustee will focus more on looking to improve metrics from their other assets where managers can have greater impact through engagements to reduce climate related risks.

- **Short Dated Credit:** data coverage and SBT alignment has slightly improved over the year; nonetheless remaining on the low side. The Trustee has engaged with the Aegon to encourage them to address this over time and understands the managers limitations due to mandates natural structure.

- **Infrastructure:** can be a high emitting asset class with high exposure to physical and transition risks, but also provides considerable opportunities in relation to the low carbon transition. Therefore, it is not surprising that the Scope 3 carbon footprint is one of the highest of the Plan's assets (Meridiam). The Trustee will work with its investment consultant to identify which projects are the worst emitters in the portfolio and use this to better understand how the manager is engaging with these projects to reduce portfolio emissions.

- **Buy-in:** GHG emission and carbon footprint provided by Aviva has improved over the year, which is positive with coverage having improved.

Metrics and Targets

Climate change DB data gaps

Most of the Plan's investment managers are seeking to improve their climate-related reporting, by increasing the number of metrics they report and seeking to fill the data gaps. The Trustee therefore expects data coverage and quality to improve over time.

The main data gaps with DB assets relate to the Trustee's investments in trade finance, property and private equity:

- **Trade Finance:** Allianz mentioned the fund experienced a drop in SBT due to the fund moving toward more private investments during the year that provide Allianz with higher yield at the expense of a drop in data coverage.

- **Property:** LaSalle were unable to report on a Scope 1 and 2 emissions basis for the LaSalle RPI portfolio. The Main portfolio held with LaSalle, only has exposure to one indirect investment. LaSalle are unable to provide data on this investment.

- **Private equity:** no data is available for this portfolio (unchanged over the year) – TCFD metrics are not measured at a fund level across their legacy portfolios. While this is expected due to the illiquid nature of the assets, the manager is expecting to be able to provide proxy data in the near future. Therefore, the Trustee is hopeful that it will be able to report data for this portfolio in future reports. The Trustee understands, there are lower disclosure requirements and greater complexity of the underlying holdings with its private asset holding which affects the collection of data. A higher coverage would of course provide better insights for the Plan.

- Majority of the Plan's investment managers have been unable to provide Scope 3 data and confirm proportion of holdings with SBT as at 30 September 2024. Some of the Plan's managers are working towards collecting Scope 3 data to provide in the future, however some managers are unable to provide Scope 3 data due to the nature of the asset / complexity at the moment.

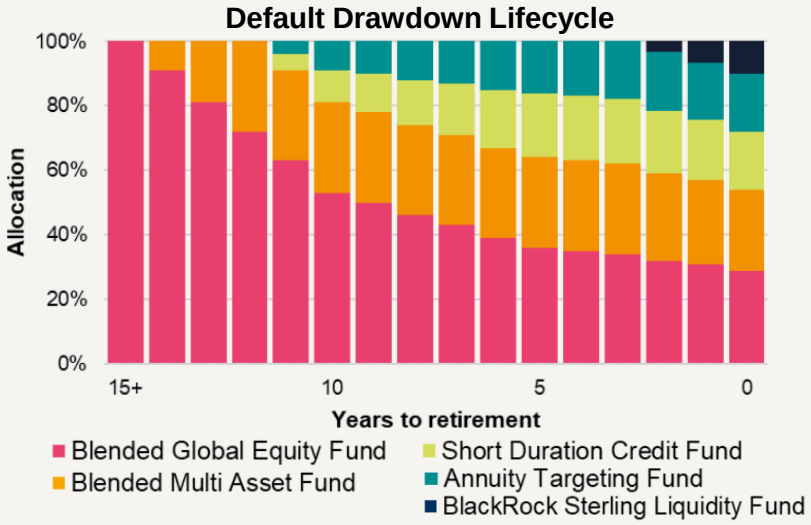
- The proportion of holdings with SBTi (science-based target initiative) portfolio alignment targets is low. The Trustee has a long-term target related to this metric and will therefore seek to engage with its managers to encourage improvement of this overtime.

Metrics and Targets

Metrics – DC Section

Metrics are required to be calculated in relation to each "popular arrangement" within the Plan. The Trustee considers the Plan's default Drawdown Lifecycle to be the only popular arrangement.

The majority of assets are invested in the default strategy, with the assets allocated depending on members' expected retirement dates, as shown in the chart on the right. As at December 2024, 82% of assets were invested in this strategy. The remaining assets are invested in a range of self-select funds, the largest self-select fund allocation being c5% (£38m) to the Blended Global Equity Fund. The Trustee has not collected metrics for the self-select funds as it did not feel it was proportionate to do so. This is in line with the guidance issued by the DWP.



Equities make the most significant contribution to climate risk in the Plan, both as a result of equities being one of the assets most strongly impacted by climate risk and given the high allocation in the default strategy. The Plan's bond and multi-asset funds contribute a smaller proportion of the Plan's total emissions.

The proportion of holdings with SBTi portfolio alignment targets is also highest for the Plan's equity funds (higher is better). The Trustee has a long-term target related to this metric which is shown later in this section.

Coverage for eligible assets will not always be 100%. Reasons for this include a particular company not publishing its carbon emissions data, or the correct mapping not being found between a bond and its parent company to apply the correct carbon data to the correct company. As data coverage is less than 100%, the Plan's total greenhouse gas emissions are understated.

The Trustee has reported coverage of metrics where the investment managers disclose this information and continues to liaise with them to address limitations in coverage of different asset classes.

The Trustee considers both risks and opportunities related to carbon metrics when reviewing its investments.

Metrics and Targets

Metrics collected – DC Section

Portfolio emissions coverage	<75%	75%-90%	>90%

Scope 1 & 2 Emissions

Portfolio	Fund	Manager	Assets at 30 September 2024 (% of total DC assets)	Metric 1		Metric 2		Metric 3		Metric 4		Source
				GHG emissions (tonnes)[1]		Carbon footprint (tonnes CO_2e per £m invested)[1,2]		SBT alignment % targets set		Coverage of emissions data		
				2024	2023	2024	2023	2024	2023	2024	2023	
Listed equities	World Equity Index Fund	BlackRock	£152.2m / 20.3%	7,581	7,809	50	56	47%	41%	99%	99%	Manager
	Fundamental Equity Index Fund	BlackRock	£152.2m / 20.3%	20,194	18,849	134	135	37%	33%	99%	99%	Manager
	Minimum Volatility Index Fund	BlackRock	£152.2m / 20.3%	10,640	10,198	70	73	55%	47%	99%	99%	Manager
	World Emerging Markets Equity Index Fund	BlackRock	£34.4m / 4.6%	5,850	5,721	171	180	19%	15%	99%	99%	Manager
Bonds	Over 5 Years Index Linked Gilt Index Fund[3]	BlackRock	£11.4m / 1.5%	1,933	2,908	170	135	100%	100%	100%[4]	100%[4]	LCP
	Up to 5 Years Index Linked Gilt Index Fund[3]	BlackRock	£34.7m / 4.6%	5,885	2,908	170	135	100%	100%	100%[4]	100%[4]	LCP
	Over 15 Years Gilt Index Fund[3]	BlackRock	£2.3m / 0.3%	390	N/A	170	N/A	100%	N/A	100%[4]	N/A	LCP
	Short Duration Credit	BlackRock	£41.9m / 5.6%	1,691	1,594	48	52	35%	29%	84%	82%	Manager
Multi-asset	Real Return Fund	Newton	£33.8m / 4.5%	2,114	1,137	116	43	20%	18%	54%	88%	Manager
	Sustainable Future Multi Asset Fund	Schroders	£33.8m / 4.5%	979	614	46	34	55%	32%	63%	59%	Manager
	Multi Asset Growth Fund	Baillie Gifford	£33.8m / 4.5%	1,733	1,178	109	90	45%	16%	47%	43%	Manager
Cash	Sterling Liquidity Fund	BlackRock	£12.2m / 1.6%	8	N/A	1	N/A	5%	N/A	91%	N/A	Manager

[1] Figures relate only to the assets for which data is available. Total emissions are for the Plan's assets, not the whole pooled fund. We calculated total carbon emissions using the tonnes CO2e per £1 million multiplied by data coverage percentage and assets as at 30 September 2024. [2] Where necessary, carbon footprint was converted from tonnes CO_2e per $m to tonnes CO_2e per £m using the exchange rate as at 30 September 2024 (£1= $1.34). [3] Emissions intensity metric shown for sovereign bonds is a WACI-style metric calculated as emissions per £m of GDP (PPP). [4] We consider gilts to have a science-based target. This is because the United Kingdom has net zero emissions by 2050 written into law, with interim carbon budgets set based on advice from the independent Committee on Climate Change.

Metrics and Targets

Metrics collected – DC Section

Portfolio emissions coverage	<75%	75%-90%	>90%

Scope 3 Emissions

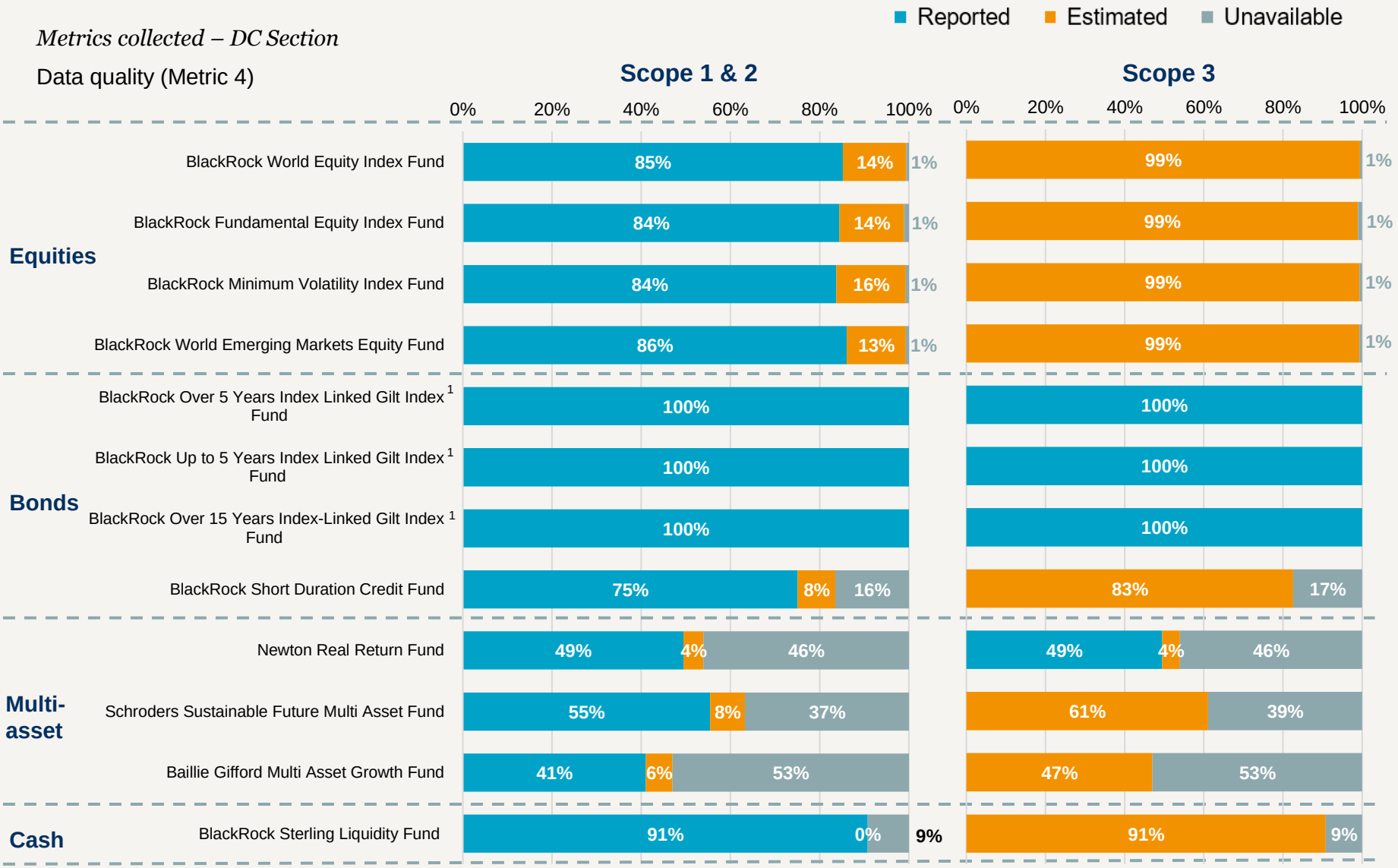
Portfolio	Fund	Manager	Assets at 30 September 2024 (% of total DC assets)	Metric 1		Metric 2		Metric 4		Source
				GHG emissions (tonnes)[1]		Carbon footprint (tonnes CO_2e per £m invested)[1,2]		Coverage of emissions data		
				2024	2023	2024	2023	2024	2023	
Listed equities	World Equity Index Fund	BlackRock	£152.2m / 20.3%	59,713	N/A	395	N/A	99%	N/A	Manager
	Fundamental Equity Index Fund	BlackRock	£152.2m / 20.3%	121,343	N/A	806	N/A	99%	N/A	Manager
	Minimum Volatility Index Fund	BlackRock	£152.2m / 20.3%	52,522	N/A	347	N/A	99%	N/A	Manager
	World Emerging Markets Equity Index Fund	BlackRock	£34.4m / 4.6%	25,022	N/A	734	N/A	99%	N/A	Manager
Bonds	Over 5 Years Index Linked Gilt Index Fund[3]	BlackRock	£11.4m / 1.5%	1,547	1,830	136	85	100%	100%	LCP
	Up to 5 Years Index Linked Gilt Index Fund[3]	BlackRock	£34.7m / 4.6%	4,709	1,830	136	85	100%	100%	LCP
	Over 15 Year Gilt Index Fund[3]	BlackRock	£2.3m / 0.3%	312	N/A	136	N/A	100%	N/A	LCP
	Short Duration Credit	BlackRock	£41.9m / 5.6%	13,792	N/A	399	N/A	83%	N/A	Manager
Multi-asset	Real Return Fund	Newton	£33.8m / 4.5%	27,629	17,798	1,514	666	54%	88%	Manager
	Sustainable Future Multi Asset Fund	Schroders	£33.8m / 4.5%	6,334	4,464	307	258	61%	57%	Manager
	Multi Asset Growth Fund	Baillie Gifford	£33.8m / 4.5%	4,659	3,185	293	244	47%	43%	Manager
Cash	Sterling Liquidity Fund	BlackRock	£12.2m / 1.6%	1,186	N/A	108	N/A	91%	N/A	Manager

[1] Figures relate only to the assets for which data is available. Total emissions are for the Plan's assets, not the whole pooled fund. We calculated total carbon emissions using the tonnes CO2e per £1 million multiplied by data coverage percentage and assets as at 30 September 2024. [2] Where necessary, carbon footprint was converted from tonnes CO_2e per $m to tonnes CO_2e per £m using the exchange rate as at 30 September 2024 (£1 = $1.34). [3] Emissions intensity metric shown for sovereign bonds is a WACI-style metric calculated as emissions per £m of GDP (PPP).

Metrics and Targets

Metrics collected – DC Section

Data quality (Metric 4)



Source: Managers, LCP calculations. Figures may not sum due to rounding.

[1] The carbon footprint of gilts is calculated based on greenhouse gas emissions produced in the UK and is assumed to cover 100% of emissions.

Metrics and Targets

Conclusions from the DC metrics collected

Equities

- Equities make the most significant contribution to climate risk in the Plan, both as a result of equities being one of the assets most strongly impacted by climate risk and given the high allocation in the default strategy. It is typical for equities to account for a higher proportion of emissions as investing in equities means investing in companies and their operations, which are directly tied to emissions.
- The Trustee has agreed to replace the allocation to the BlackRock World Equity Index Fund within the Blended Global Equity Fund with passive climate-tilted equities, which has a significantly lower carbon footprint. Implementation is expected in late 2025.
- A significant proportion (at least 47%) of companies in the Plan's three global equity funds have made commitments to make their strategy compatible with 1.5C of warming. Therefore, while current emissions are high, companies are integrating strategies to reduce these.
- Stewardship is also a key tool for managing climate risk. Amongst passive managers, we believe BlackRock to be above average in managing climate risk through voting and engagement.

Bonds and multi-asset

- The Plan's bond and multi-asset funds contribute a smaller proportion of the Plan's total emissions. Sovereign bonds (including gilts) metrics are calculated on a different basis to other funds shown, so cannot be compared with them. Emissions associated with gilts are based on the total greenhouse gas emissions produced in the UK.

SBTi alignment

- The proportion of holdings with SBTi portfolio alignment targets is also highest overall for the Plan's equity funds (higher is better). The Trustee has a long-term target related to this metric, which is shown later in the next section, and there has been strong progress against this target over the year.

Data gaps

- The main gaps in the data for the DC Section relate to multi-asset managers (Newton, Baillie Gifford and Schroders). This is primarily because these managers largely report on climate data for listed equity and corporate bond holdings only.
- The Trustee will continue to work with the Plan's managers with low data coverage to increase, where possible, their collection and reporting of metrics.

Metrics and Targets

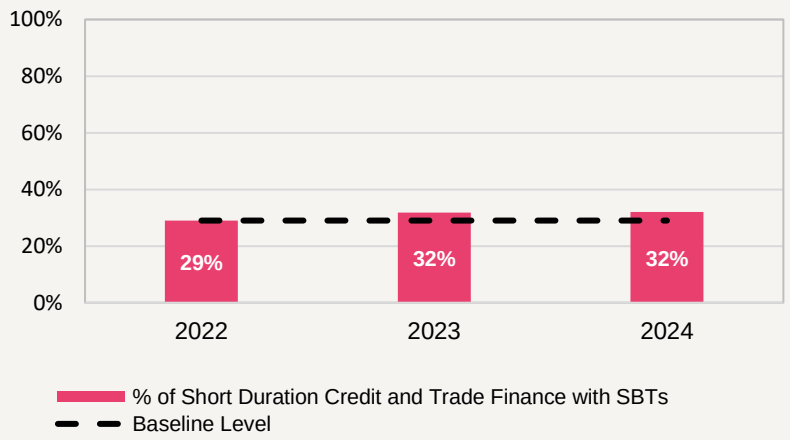
SBT target – DB & DC Section

The Trustee must measure and review at least one target for its selected metrics and report on it annually (for both DB & DC). The Trustee separates targets for the DB and DC Sections of the Plan.

DB

- The Trustee's DB target is **to increase the percentage of short duration credit and trade finance with an SBT**, relative to the 2022 level, by 30 September 2030, as set out below.
- As at 30 September 2024, **32%** of the DB assets within scope of the Trustee's target have a **science-based target**, which represents a **3% increase** in absolute terms from the baseline level in 2022.

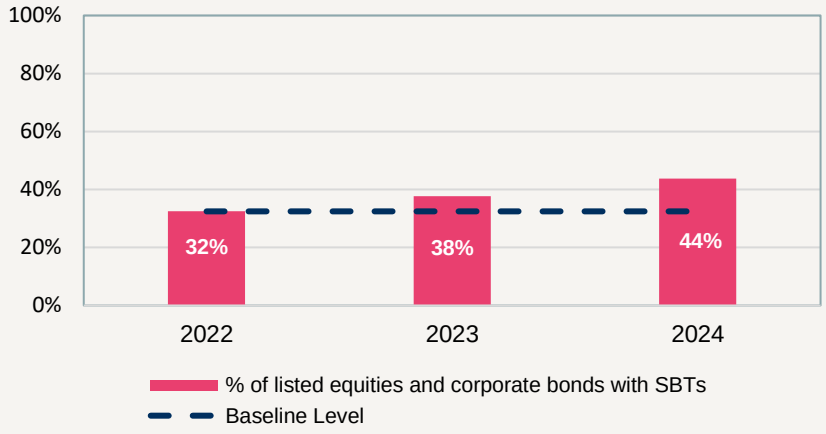
Progress towards the Plan's DB SBT target



DC

- The Trustee's target is **to increase the percentage of listed equities and corporate bonds with an SBT**, relative to the 2022 level, by 30 September 2030, as set out below.
- As at 30 September 2024, **44%** of the assets within scope of the Trustee's target have a **science-based target**, which represents a **12% increase** in absolute terms from the baseline level in 2022, and a 6% increase from 2023.

Progress towards the Plan's DC SBT target



Performance against the target for the year to 30 September 2024:

The targets were chosen as the metric is forward-looking and focused on the transition that needs to occur in the future in order to achieve net zero aims globally. The Trustee chose to base the targets around listed equites and corporate bonds for the DC section, and short duration credit and trade finance for the DB section as they form a significant part of the respective investment strategies.

The Trustee was comfortable with the current progress made against its, noting that the proportion of in-scope DC and DB assets with science-based targets has increased relative to the baseline level. The Trustee notes that actions to move towards achieving the target will be taken on the condition that they also make sense from a wider strategic perspective, with the Trustee's overall objectives in mind.

Steps taken to achieve the target:

The Trustee, with help from its investment advisers, has communicated the target to each investment manager. Investment managers are routinely invited to present at Trustee meetings as part of the existing monitoring process. When appropriate, the Trustee will ask managers to discuss progress towards improving the proportion of portfolio companies with SBTi-validated targets and data collection/coverage.

One of the investment advisers (LCP) encourages managers to support the goal of net zero emissions by 2050 or earlier and has published its expectations for investment managers in relation to net zero. This includes the use of effective voting (where applicable) and engagement with portfolio companies to encourage achievement of net zero. The investment advisers continue to engage with managers on this topic and will encourage them to use their influence with portfolio companies to increase the use of SBTi targets. The Trustee will review progress towards the target each year and consider whether additional steps are needed to increase their chance of meeting the target.

Appendix 1 – Climate Scenario Analysis

The climate scenarios considered by the Trustee

Scenarios as at 31 December 2023 – key features

Scenarios:	*High Warming*	*Limited Action*	*Net Zero Financial Crisis*
Low carbon policies	There are no new* low-carbon policies enacted in this scenario and some existing ones are scaled back. Current technological trends continue (eg significant falls in renewable energy prices).	Moderate steps taken by policymakers to increase climate action including working towards the 2030 targets and net zero commitments. Carbon Capture and Storage also used.	Ambitious low carbon policies, high investment in low carbon technologies and substitution away from fossil fuels to cleaner energy sources and biofuel. Carbon Capture and Storage also used to achieve global net zero by 2050.
Paris Agreement outcome	Paris Agreement goals not met.	Paris Agreement goals not met.	Global net zero CO_2 achieved by 2050; Paris Agreement goals met.
Global warming	Average global warming is about 2°C by 2050 and 3.7°C by 2100, compared to pre-industrial levels.	Average global warming is about 1.8°C by 2050 and 2.6°C by 2100, compared to pre-industrial levels.	Average global warming stabilises at around 1.5°C above pre-industrial levels.
Physical impacts	Severe physical impacts. Multiple climate tipping points are reached and modelled and many countries suffer from extreme weather events.	High physical impacts.	Moderate physical impacts.
Impact on GDP	Global GDP in 2100 predicted to be almost 80% lower than in the Ortec Finance / Cambridge Econometrics base case.	Global GDP in 2100 predicted to be about 50% lower than in the Ortec Finance / Cambridge Econometrics base case.	Global GDP is slightly behind the Ortec Finance / Cambridge Econometrics base case by 2100.
Financial market impacts	Physical risks priced in over the period 2026-2030. A second repricing occurs in the period 2036-2040 as investors factor in the severe physical risks.	Physical risks priced in over the period 2026-2030. A second repricing occurs in the period 2036-2040 as investors factor in the high physical risks.	Abrupt repricing of assets and a sentiment shock to the financial system in 2025*.

Source: Ortec Finance. Figures quoted are medians. *New compared to the International Energy Agency's World Energy Outlook 2021 – Stated Policies Scenario (STEPS).
*The reference to the year 2025 is an illustrative assumption to model a near-term impact and is not intended as a prediction of timing.

Appendix 1 – Climate scenario analysis

Modelling approach

- The scenario analysis is based on a model developed by Ortec Finance and Cambridge Econometrics. The outputs were then applied to the Plan's assets by LCP.
- The three climate scenarios are projected year by year, up to a 40-year period. The results are intended to help the Trustee to consider how resilient the DB strategy and DC default strategy are to climate-related risks.
- The three climate scenarios chosen are intended to be plausible narratives of how the future could unfold. They are only three scenarios out of countless others which could be considered. Other scenarios could give better or worse outcomes for the Plan.
- The modelling included contributions assumed to be paid in line with the current Schedule of Contributions, and the Trustee discussed how future planned changes to the investment strategies for both Sections would change the analysis. For the DC Section, members' starting pots values were assumed to equal the median value for Plan members of their age, and member and employer contributions were assumed to be paid in line with the current contribution structure. No allowance was made for changes to the investment strategy or contributions in response to the climate impacts modelled.
- The scenario analysis is based on the ClimateMAPS model developed by Ortec Finance and Cambridge Econometrics, and was then applied to the Plan's assets and liabilities by LCP. The three climate scenarios were projected year by year, over the next 40 years.
- ClimateMAPS uses a top-down approach that consistently models climate impacts on both assets and liabilities, enabling the resilience of the DB Section's funding strategy to be considered. The model output is supported by in-depth narratives that bring the scenarios to life to help the Trustee's understanding of climate-related risks and opportunities.
- ClimateMAPS uses Cambridge Econometrics' macroeconomic model which integrates a range of social and environmental processes, including carbon emissions and the energy transition. It is one of the most comprehensive models of the global economy and is widely used for policy assessment, forecasting and research purposes. The outputs from this macroeconomic modelling – primarily the impacts on country/regional GDP – are then translated into impacts on financial markets by Ortec Finance using assumed relationships between the macroeconomic and financial parameters.
- Ortec Finance runs the projections many times using stochastic modelling to illustrate the wide range of climate impacts that may be possible, under each scenario's climate pathway. LCP takes the median (ie the middle outcome) of this range of impacts, for each relevant financial parameter, and adjusts it to improve its alignment with LCP's standard financial assumptions.
- LCP then uses these adjusted median impacts to project the assets and liabilities of the Plan to illustrate how the different scenarios could affect its funding level. The modelling summarised in this report used scenarios based on the latest scientific and macro-economic data at 31 December 2023, calibrated to market conditions at 31 December 2023.
- Uncertainty in climate modelling is inevitable. In this case, key areas of uncertainty relating to the financial impacts include how climate change might affect interest rates and inflation, and the timing of market responses to climate change.

Appendix 1 – Climate scenario analysis

Modelling limitations

- As this is a “top-down” approach, investment market impacts were modelled as the average projected impacts for each asset class. This contrasts with a “bottom up” approach that would model the impact on each individual investment held by the default strategy. As such, the modelling does not require extensive plan-specific data and so the Trustee was able to consider the potential impacts of the three climate scenarios for all of the Plan’s assets in the default strategy and DB Strategy.
- In practice, the Plan’s investments may not experience climate impacts in line with the market average.
- The asset and liability projections shown reflect the current strategic journey plan. No allowance is made for changes that might be made to the funding or investment strategy as the climate pathways unfold, nor for action to be taken in response to the Plan achieving its long-term funding target.
- Like most modelling of this type, the modelling does not allow for all potential climate-related impacts and, therefore, is quite likely to underestimate some climate-related risks.
- In addition, the model presumes that the UK government and bank counterparties will remain solvent, thereby making no allowance for credit risk on government bonds and derivative exposures. However, in a scenario where global warming exceeds 4ºC, this assumption may no longer be valid.
- Medians from Ortec Finance’s model outputs are used to project forward assets and liabilities, which means the results reflect the model’s “middle outcomes” for investment markets under the three scenarios. Allowing for market volatility would result in better or worse model outputs than shown. Investment markets may be more volatile in future as a result of physical and transition risks from climate change, and this is not illustrated in the modelling shown.

Appendix 1 – Climate scenario analysis

Assumptions for the DC section

- LCP's modelling is designed to illustrate, for each climate scenario and the default lifestyle strategy, the development of a typical member's fund value. The investment strategy modelled is the Drawdown Lifecycle.
- The key investment assumptions behind its modelling are set out overleaf.
- These assumptions are used within LCP's modelling to determine:
  - the expected fund at retirement and various measures of the risk of achieving this; and
  - the pension the member could buy and various measures of the risk of achieving this.
- A 2.5% pa real increase in the member's salary is assumed. The output is shown in real terms.
- LCP's assumptions for the long-term expected annual return and expected standard deviation of the annual returns for each asset class or investment are set out overleaf.
- The expected return assumptions are geometric average long-term annual figures.
- The assumptions are intended to be best estimates; this means for each assumption there is a 50/50 chance that the observed value will be either higher or lower than assumed. The return assumptions have been reduced to allow for the typical investment management fees required to invest in each asset class.
- The climate-uninformed expected return assumptions for cash, gilts, index-linked gilts, corporate bonds, high yield debt and emerging market debt are based on observed market yields as at 31 December 2023. Other climate-uninformed assumptions have been set by:
  - looking at analyses of historical information;
  - taking into account the views of a number of investment organisations; and
  - making pragmatic judgements.

Appendix 1 – Climate scenario analysis

Asset class return assumptions – 31 December 2023

Expected return (% pa)	Climate uninformed based case			High Warming			Limited Action			Net Zero Financial Crisis		
	5 years	10 years	40 years	5 years	10 years	40 years	5 years	10 years	40 years	5 years	10 years	40 years
Money market cash	3.5%	3.6%	3.9%	3.5%	3.6%	3.8%	3.5%	3.7%	3.8%	3.5%	3.7%	3.9%
Fixed interest gilts (18 years)	3.5%	3.6%	3.9%	3.5%	3.6%	3.9%	3.4%	3.6%	4.0%	3.2%	3.5%	4.0%
Index-linked gilts (23 years)	3.5%	3.6%	3.9%	3.5%	3.7%	4.0%	3.6%	3.7%	4.0%	4.0%	3.9%	4.0%
Investment grade corporate bonds (8 years)	4.7%	4.8%	5.1%	4.5%	4.8%	5.1%	4.5%	4.8%	5.1%	4.7%	4.7%	5.1%
Investment grade (ex-BBB) corporate bonds (8 years)	4.7%	4.8%	5.1%	4.5%	4.8%	5.1%	4.5%	4.8%	5.1%	4.7%	4.7%	5.1%
IG ex-BBB Corp bonds FRN	4.7%	4.8%	5.1%	4.6%	4.9%	5.0%	4.7%	4.9%	5.1%	4.8%	4.9%	5.1%
IG Corp bonds FRN	4.7%	4.8%	5.1%	4.6%	4.9%	5.1%	4.7%	4.9%	5.1%	4.8%	4.9%	5.1%
Short duration credit FRN	5.1%	5.2%	5.5%	5.0%	5.3%	5.5%	5.1%	5.3%	5.5%	5.2%	5.3%	5.5%
IG Corp bonds 15Y+ FRN	4.7%	4.8%	5.1%	4.5%	4.8%	5.0%	4.5%	4.9%	5.0%	5.0%	5.0%	5.1%
UK equities	6.8%	6.9%	7.2%	6.0%	6.0%	5.4%	6.3%	6.2%	6.1%	3.7%	5.3%	6.5%
Overseas equities	7.1%	7.2%	7.5%	6.2%	6.1%	5.4%	6.2%	6.0%	6.2%	3.0%	5.0%	6.6%
Overseas equities (currency hedged)	7.0%	7.1%	7.4%	6.1%	6.0%	5.5%	6.1%	5.9%	6.3%	2.9%	4.9%	6.6%
Global equities	7.1%	7.2%	7.5%	6.2%	6.1%	5.4%	6.2%	6.0%	6.2%	3.0%	5.0%	6.6%
Emerging markets equities	8.2%	8.3%	8.6%	7.1%	7.0%	5.1%	7.5%	7.4%	6.5%	4.8%	6.6%	7.4%
Private equity	8.1%	8.2%	8.5%	7.1%	6.9%	5.6%	7.3%	7.2%	6.7%	4.8%	6.3%	7.5%
High yield debt	6.1%	6.2%	6.5%	5.8%	6.2%	6.4%	5.8%	6.2%	6.4%	6.2%	6.2%	6.3%
Emerging market debt	5.9%	6.0%	6.3%	5.7%	5.9%	5.9%	5.7%	5.9%	6.0%	5.3%	5.6%	6.2%
EM multi-asset	7.3%	7.4%	7.7%	6.7%	6.7%	5.7%	6.9%	6.9%	6.5%	5.4%	6.4%	7.1%
UK property	5.6%	5.7%	6.0%	4.8%	4.8%	4.2%	5.2%	5.2%	5.1%	4.2%	5.0%	5.6%
Absolute return bonds	5.1%	5.2%	5.5%	5.0%	5.3%	5.5%	5.1%	5.3%	5.5%	5.2%	5.3%	5.5%
Diversified growth	6.1%	6.2%	6.5%	5.5%	5.7%	5.5%	5.5%	5.6%	5.9%	4.1%	5.1%	6.1%
Unlisted Infrastructure equity	6.5%	6.6%	6.9%	5.9%	5.9%	5.5%	5.9%	6.1%	6.2%	5.3%	6.3%	6.7%
Commodities	6.7%	6.8%	7.1%	6.9%	7.1%	7.3%	7.0%	7.2%	7.2%	5.6%	6.5%	7.0%
Fund of hedge funds	5.1%	5.2%	5.5%	4.8%	5.0%	5.0%	4.8%	4.9%	5.2%	4.5%	4.8%	5.3%
Multi-asset credit	6.3%	6.4%	6.7%	6.2%	6.5%	6.7%	6.2%	6.5%	6.6%	6.5%	6.5%	6.7%
Dynamic LDI LIBOR (3x lev)	3.9%	4.0%	4.3%	3.9%	4.0%	4.2%	3.9%	4.1%	4.2%	3.9%	4.1%	4.3%
Opportunistic credit	7.4%	7.5%	7.8%	6.9%	7.1%	6.8%	6.9%	7.2%	7.2%	6.6%	6.9%	7.4%
Private credit	7.3%	7.4%	7.7%	7.2%	7.5%	7.6%	7.2%	7.5%	7.6%	7.5%	7.5%	7.6%
Long lease property	5.8%	5.9%	6.2%	5.0%	5.0%	4.4%	5.4%	5.4%	5.3%	4.4%	5.2%	5.8%
Alternative risk premia	4.8%	4.9%	5.2%	4.5%	4.7%	4.7%	4.5%	4.6%	4.9%	4.2%	4.5%	5.0%
Insurance-linked securities	6.0%	6.1%	6.4%	5.7%	5.9%	5.9%	5.7%	5.8%	6.1%	5.4%	5.7%	6.2%
Asset-backed securities	5.7%	5.8%	6.1%	5.6%	5.9%	6.1%	5.6%	5.9%	6.1%	6.1%	6.0%	6.1%
Low carbon global equities (hedged)	7.0%	7.1%	7.4%	6.1%	6.1%	5.6%	6.4%	6.3%	6.5%	5.1%	6.2%	7.0%
Low carbon global equities (unhedged)	7.1%	7.2%	7.5%	6.3%	6.2%	5.6%	6.5%	6.4%	6.4%	5.2%	6.3%	7.0%
Low carbon UK equities	6.8%	6.9%	7.2%	6.1%	6.1%	5.6%	6.7%	6.7%	6.4%	7.2%	7.4%	7.2%
Diversified growth (relative value)	5.1%	5.2%	5.5%	4.5%	4.7%	4.5%	4.5%	4.6%	4.9%	3.1%	4.1%	5.1%
Global property	5.5%	5.6%	5.9%	4.7%	4.7%	4.1%	5.1%	5.1%	5.0%	4.1%	4.9%	5.5%
Credit default swaps fund	4.8%	4.9%	5.2%	4.6%	4.9%	5.1%	4.6%	5.0%	5.1%	5.0%	5.0%	5.1%
Listed infrastructure equity	6.3%	6.4%	6.7%	5.6%	5.5%	4.6%	5.2%	5.1%	5.2%	2.5%	3.8%	5.6%

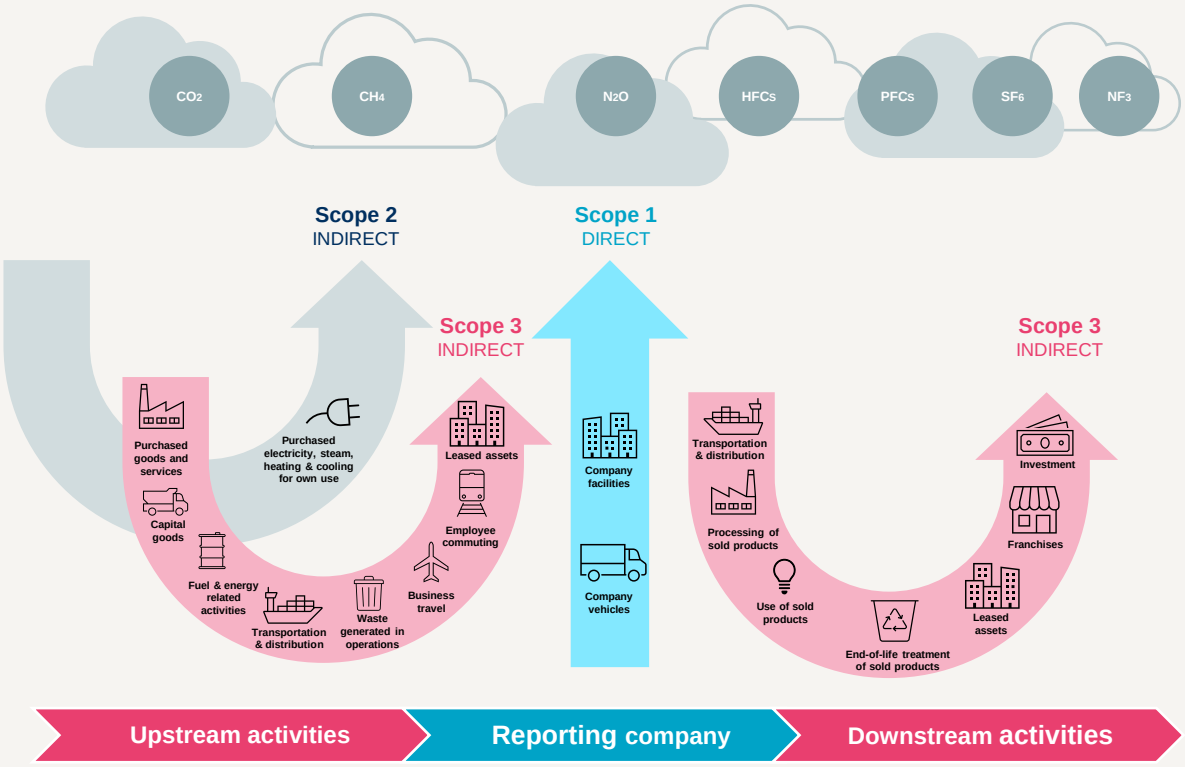
- This table shows the investment annualised returns assumed under each scenario in our modelling over a specified time horizon from 31 December 2023. These annualised returns are a consequence of the many assumptions underlying the scenario modelling. Alternative assumptions may be justifiable; the choice of assumptions will impact the output of our modelling.
- We have illustrated returns over distinct periods. As such, these do not show the timings of exactly when these returns are expected to take place, in particular the timings of any market shocks described throughout this report.

Appendix 2 – Greenhouse gas emissions explained

Within the 'metrics and targets' section of the report, the emissions metrics relate to seven greenhouse gases – carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF_6) and nitrogen trifluoride (NF_3). The figures are shown as "CO_2 equivalent" (CO_2e) which is the amount of carbon dioxide that would be equivalent to the excess energy being stored by, and heating, the earth due to the presence in the atmosphere of these seven greenhouse gases.

The metrics related to greenhouse gas emissions are split into the following three categories: Scope 1, 2 and 3. These categories describe how directly the emissions are related to an entity's operations, with Scope 1 emissions being most directly related to an entity's everyday activities and Scope 3 referring to indirect emissions in an entity's value chain. Scope 3 emissions often form the largest share of an entity's total emissions, but are also the ones that the entity has least control over.

- **Scope 1** greenhouse gas emissions are all direct emissions from the activities of an entity or activities under its control.
- **Scope 2** greenhouse gas emissions are indirect emissions from electricity purchased and used by an entity which are created during the production of energy which the entity uses.
- **Scope 3** greenhouse gas emissions are all indirect emissions from activities of the entity, other than scope 2 emissions, which occur from sources that the entity does not directly control.



Source: GHG Protocol

Appendix 3 – Gilt / LDI metrics

- Gilts metrics are calculated on a different basis to other mandates shown, so cannot be compared with them. The emissions intensity (analogous to Weighted Average Carbon Intensity or WACI) has been calculated as "total greenhouse gas emissions produced in the UK" divided by "UK GDP using PPP methodology" using publicly available data sources. Total greenhouse gas emissions have been calculated as "value of your investment in gilts" multiplied by "emissions intensity". Note that there can be double counting across the portfolio where UK country emissions include UK company emissions already accounted for within the credit portfolio.

- In calculating metrics for your LDI exposure, we have treated derivatives as an investment in an equivalent gilt. Greenhouse gas emissions have been calculated for the gilt exposure (including the repo loan amount) but not the swap positions. This is in line with our understanding of the typical interpretation of the DWP guidance by investment managers and consultancies as not requiring calculation of emissions for swap exposures at this time.

Appendix 4 – Glossary

Actuarial valuation – an actuarial valuation is an accounting exercise performed to estimate future liabilities arising out of benefits that are payable to members of a DB pension plan, typically once every three years. In the actuarial valuation exercise, a liability payout at a future date is estimated using various assumptions such as discounting rate and salary growth rate.

Alignment – in a climate change context, alignment is the process of bringing greenhouse gas emissions in line with 1.5°C global temperature rise targets. It can be applied to individual companies, investment portfolios and the global economy.

Asset class – a group of securities which exhibit broadly similar characteristics. Examples include equities and bonds.

Avoided emissions – these are reductions in greenhouse gas emissions that occur outside of the value chain a product's life cycle, but as a result of the use of that product. For example, emissions avoided through use of a wind turbine or buildings insulation.

Bond – a bond is a security issued to investors by companies, governments, and other organisations. In exchange for an upfront payment, an investor normally expects to receive a series of regular interest payments plus, at maturity, a final lump sum payment, typically equal to the amount invested originally, or this amount increased by reference to some index.

Buy-in – DB pension plan trustees may choose to "buy-in" some of their plan's expected future benefit payments by purchasing a bulk (i.e., one covering many individuals) annuity contract with an insurance company. This allows the trustees to reduce their plan's risk by acquiring an asset (the annuity contract) whose cash flows are designed to meet i.e., "match" a specified set of benefit payments under the pension plan. The contract is held by the trustees and responsibility for the benefit payments remains with the trustees. Common uses of buy-in arrangements have been to cover the payments associated with current pensioners or a subset of those members. Contracts to meet payments to members who are yet to become pensioners can also be purchased.

Buy-out – DB pension plan trustees may choose to "buy-out" some or all of their plan's expected future benefit payments by purchasing a bulk (i.e., one covering many individuals) annuity contract from an insurance company. The insurer then becomes responsible for meeting pension benefits due to plan members (effected ultimately by allocating to each plan member an individual annuity contract). Following a full buy-out, (i.e., one covering all plan members) and having discharged all of the trustees' liabilities, the pension plan would normally be wound up.

Carbon emissions - These refer to the release of carbon dioxide, or greenhouse gases more generally, into the atmosphere, for example from the burning of fossil fuels for power or transport purposes.

Carbon footprint – In an investment context, the total carbon dioxide or greenhouse gas emissions generated per amount invested (eg in £m) by an investment fund. Related definitions are used to apply the term to organisations, countries, and individuals

Climate change adaptation – steps taken to adapt to the physical effects of climate change such as improving flood defences and installing air conditioning.

Climate change mitigation – steps taken to limit climate change by reducing greenhouse gas emissions, for example by shifting to renewable sources of energy – such as solar and wind – and by using less energy and using it more efficiently.

Covenant – the ability and willingness of the sponsor to make up any shortfall between a DB plan's assets and the agreed funding target.

CO2e (carbon dioxide equivalent) – the standard measurement of GHG emissions in terms of the most common GHG, carbon dioxide (CO2)

Credit – long-term debt issued by a company, also known as corporate bonds. Corporate bonds carry different levels of credit risk which is indicated by their risk rating and credit spread.

Defined Benefit (DB) – a pension plan in which the primary pension benefit payable to a member is based on a defined formula, frequently linked to salary. The sponsor bears the risk that the value of the investments held under the plan fall short of the amount needed to meet the benefits.

Appendix 4 – Glossary

Defined Contribution (DC) – a pension plan in which the sponsor stipulates how much it will contribute to the arrangement which will depend upon the level of contributions the member is prepared to make. The resultant pension for each member is a function of the investment returns achieved (net of expenses) on the contributions and the terms for purchasing a pension at retirement. In contrast to a defined benefit plan, the individual member bears the risk that the investments held are insufficient to meet the desired benefits.

Debt – money borrowed by a company or government which normally must be repaid at some specified point in the future.

Default strategy – the fund or mix of funds in which contributions in respect of a DC member will be invested in the absence of any explicit fund choice(s) of that member.

Environmental, social and governance (ESG) – an umbrella term that encompasses a wide range of factors that may have been overlooked in traditional investment approaches. Environmental considerations might include physical resource management, pollution prevention and greenhouse gas emissions. Social factors are likely to include workplace diversity, health and safety, and the company's impact on its local community. Governance-related matters include executive compensation, board accountability and shareholder rights.

Equity – through purchase on either the primary market or the secondary market, company equity gives the purchaser part-ownership in that company and hence a share of its profits, typically received through the payment of dividends. Equity also entitles the holder to vote at shareholder meetings. Note that equity holders are entitled to dividends only after other obligations, such as interest payments to debt holders, are first paid. Unlike debt, equity is not normally contractually repayable.

Ethical investment – an approach that selects investments on the basis of an agreed set of environmental, social and governance (ESG) criteria that are motivated by ethical considerations.

Fossil fuels – fuels made from decomposing plants and animals, which are found in the Earth's crust. They contain carbon and hydrogen, which can be burned for energy. Coal, oil, and natural gas are examples of fossil fuels.

Funding position – a comparison of the value of assets with the value of liabilities for a DB pension plan.

Gilts – bonds issued by the UK government. They are called gilts as the bond certificates originally had a gilt edge to indicate their high quality and thus very low probability of default

Greenhouse gas (GHG) emissions (scopes 1, 2 and 3) – gases that have been and continue to be released into the Earth's atmosphere. Greenhouse gases trap radiation from the sun which subsequently heats the planet's surface (giving rise to the "greenhouse effect"). Carbon dioxide and methane are two of the most important greenhouse gases.

Investment mandate – see pooled mandate and segregated mandate

Integrated risk management – Integrated risk management is an approach used by DB pension plan trustees to identify, manage and monitor the wide range of risks (relating to investment, funding and covenant) which might impact the chances of meeting their plan's overall objectives

Liabilities – obligations to make a payment in the future. An example of a liability is the pension benefit 'promise' made to DB pension plan members, such as the series of cash payments made to members in retirement. The more distant the liability payment, the more difficult it often is to predict what it will actually be and hence what assets need to be held to meet it.

LDI (Liability Driven Investment) – an investment approach which focusses more than has traditionally been the case on matching the sensitivities of a DB pension plan's assets to those of its underlying liabilities in response to changes in certain factors, most notably interest rate and inflation expectations.

Appendix 4 – Glossary

Net zero – this describes the situation in which total greenhouse gas emissions released into the atmosphere are equal to those removed. This can be considered at different levels, e.g., company, investor, country or global.

Offsetting – the process of paying someone else to avoid emitting, or to remove from the atmosphere, a specified quantity of greenhouse gases, for example through planting trees or installing wind turbines. It is sometimes used to meet net zero and other emission reduction targets.

Physical risk – these are climate-related risks that arise from changes in the climate itself. They include risks from more extreme storms and flooding, as well as rising temperatures and changing rainfall pattens.

Pooled mandate – a feature of a collective investment vehicle whereby an investor's money is aggregated (i.e., "pooled") with that of other investors to purchase assets. Investors are allotted a share of those assets in proportion to their contribution. Ownership is represented by the number of "units" allocated – e.g., if the asset pool is worth £1m and there are 1m units then each unit is worth £1. Pooled funds offer smaller investors an easy way to gain exposure to a wide range of investments, both within markets (e.g., by buying units in a UK equity fund) as well as across markets (e.g., by buying units in both a UK equity fund and a UK corporate bond fund).

Portfolio alignment metric – this measures how aligned a portfolio is with a transition to a world targeting a particular climate outcome, such as limiting global temperature rises to well below 2°C, preferably to 1.5°C, as per the Paris Agreement. Assessments using these metrics consider companies' and governments' greenhouse gas (GHG) emissions reduction plans and likelihood of meeting them, rather than current, or the latest reported, GHG emissions.

Responsible Investment (RI) – the process by which environmental, social and governance (ESG) issues are incorporated into the investment analysis and decision-making process, and into the oversight of investments by companies through their stewardship activities. It is motivated by financial considerations aiming to improve risk-adjusted returns.

Science-based targets – targets to reduce greenhouse gas emissions that are in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement.

Science-Based Targets initiative (SBTi) – a partnership that sets standards and provides validation for science-based targets set by companies and investors.

Scenario analysis – a tool for examining and evaluating different ways in which the future may unfold.

Scope 1, 2 and 3 – a classification of sources of greenhouse gas emissions.

Segregated mandate – a segregated investment approach ensures that an investor's investments are held separately from those of other investors. This approach offers great flexibility – for example, the investor can stipulate the precise investment objective to be followed and can dictate which securities can or cannot be held.

Self-select – in contrast with a default fund, a self-select fund within a DC plan is one of a range of funds that members can choose to invest in.

Stakeholder – an individual or group that has an interest in any decision or activity of an organisation. The stakeholders of a company include its employees, customers, suppliers and shareholders.

Statutory obligations – statutory obligations are those obligations that do not arise out of a contract, but are imposed by law.

Stewardship – stewardship is the responsible allocation, management and oversight of capital to create long-term value for clients and beneficiaries leading to sustainable benefits for the economy, the environment and society. It is often implemented via engagement with investee companies and the exercising of voting rights.

Stranded assets – assets that have suffered an unanticipated loss of value before the end of their expected useful economic life. The term is most often applied to fossil fuel investments in the context of climate policy, where legislative and market developments may result in assets being worth less than the value recorded on related company balance sheets.

Appendix 4 – Glossary

Sustainable investing - an approach in which the environmental and social sustainability of a company's products and practices is evaluated and is a key consideration in the investment decision. ESG analysis therefore forms a cornerstone of the investment selection process.

Taskforce on Climate-related Financial Disclosures (TCFD) – a group of senior preparers and users of financial disclosures from G20 countries, established by the international Financial Stability Board in 2015. The TCFD has developed a set of recommendations for climate-related financial risk disclosures for use by companies, financial institutions and other organisations to inform investors and other parties about the climate-related risks they face.

Transition risk – these are climate-related risks that arise from the transition to a low-carbon economy and can include changes in regulation, technology and consumer demand.

Appendix 5 – Principles for Effective Disclosure

The Trustee has aimed to follow the Principles for Effective Disclosure (as set out in the statutory guidance) when drafting the report.

Principles	
1	Disclosures should present relevant information specific to the potential impact of climate-related risks and opportunities on the plan avoiding generic or boilerplate disclosures that do not add value to members' understanding of issues.
2	Disclosures should be specific and sufficiently complete to provide a thorough overview of the Plan's exposure to potential climate-related impacts and the trustees' governance, strategy and processes for managing climate-related risks and opportunities.
3	Disclosures should be clear and understandable showing an appropriate balance between qualitative and quantitative information.
4	Disclosures should be consistent over time to enable plan members to understand the development and/or evolution of the impact of climate-related issues on the plan.
5	Disclosures should ideally be comparable with other pension funds of a similar size and type.
6	Disclosures should be reliable, verifiable, and objective.
7	Disclosures should be provided on a timely basis. The TCFD recommends annual disclosures for organisations.