Climate change report

A report for members by the Trustee of the Allianz Retirement and Death Benefits Fund

Fund year to 31 March 2024

Why have we written this report?

The UK has become the first G20 country to make it mandatory for Britain's 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 second climate change report produced by the Trustee of the Fund, and is expected to be the final report following the Trustee's purchase of a second bulk annuity policy with Aviva Life & Pensions UK Limited ("Aviva") to insure the Fund's remaining pension liabilities.

We hope you find it informative and would welcome any feedback.

Graham Gibson, Chairman

On behalf of the Allianz Pension Fund Trustees Limited, Trustee of the Fund

Overview

The Allianz Retirement and Death Benefits Fund (the "Fund") is a single-section occupational defined benefit pension scheme with total assets of £891.3m as at 31 March 2024. It is governed by the Allianz Pension Fund Trustees Limited (the "Trustee"), whose primary objective is to ensure that the Fund should be able to meet benefit payments as they fall due. In achieving this objective, the Trustee takes into account the risks and opportunities provided by many factors, including climate change, which is the focus of this report.

The Trustee recognises the importance of managing the impact of climate change in achieving its primary objective, as an issue that poses major systemic risks to society, the economy and the financial system as a whole. However, the Trustee also recognises that transitioning to a lower carbon economy will create opportunities for investors to invest in lower carbon sectors and new technologies.

Climate change could materially affect the Fund's financial position. For example, through physical risks permanently impairing the value of assets and through transition risks reducing the returns of high carbon-emitting entities. Therefore, the Trustee attempts to identify these risks, assess their potential impacts and, where necessary, take steps to mitigate climate-related risks. These actions aim to provide greater security to the benefits that the Fund's members expect to receive.

This report describes how the Trustee has identified, assessed and managed climate-related risks and opportunities to the Fund during the scheme year to 31 March 2024. For a broader indication of the Trustee's policies in relation to investments, please see the Statement of Investment Principles ("SIP"). For details of the Trustee's activity in relation to the environmental, social and governance policies outlined in the SIP please see the Implementation Statement.

Both documents are available online via the following link: Allianz Retirement and Death Benefits Fund (aon.com)

Contents

Approved by the Trustee and published alongside the Fund's Annual Report and Financial Statements for the Fund year to 31 March 2024.

Executive summary

This report describes the activities and approach taken by us (the Trustee) to understand and reduce the climate-related risks faced by the Fund, and to potentially take advantage of any investment opportunities as part of the transition to a lower carbon economy. **The Trustee notes that any actions taken due to 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 with the Trustee's overall objectives in mind.**

The following points are a summary of the detailed report that follows:

- We believe that appropriate treatment of climate-related risks and opportunities for the Fund's investments should improve outcomes for our members through better long-term returns and lower risk.
- Therefore, we have set an ambition to align the Fund's assets with net zero greenhouse gas emissions by 2050 through selecting the right managers, and investing in funds, with credible net zero targets and strong ESG credentials.
- We have allocated time and resource to this topic over the year, and we have integrated climate considerations into the overall risk register for the Fund. We remain focussed on delivering our key objective of delivering members' benefits and, within that, we seek to ensure that climate-related risks and opportunities have been considered.
- We have identified a number of risks and opportunities to the Fund arising from physical changes to the climate itself and from steps being taken to limit climate change. **We are pleased to report that, due to the Fund's strong position and low risk investment strategy, the impact from climate-related risks is expected to be relatively low. The Fund's potential exposure to climate risk has been further reduced following the purchase of a second bulk annuity ("buy-in") policy with Aviva in March 2024 covering all of the Fund's remaining members (ie those not covered by the first annuity policy), thereby removing the risk that poor investment performance could result in the Fund not being able to make benefit payments to members as they fall due.**
- In 2022, we considered how such risks and opportunities might affect the funding level of the Fund under different climate scenarios. We have included this historical analysis in Appendix 2 of this report, noting that the Fund is now almost entirely immune to these the risks highlighted by these scenarios following the full buy-in transaction in March 2024.
- We have collected data on four climate-related metrics: total emissions, carbon footprint (emissions per £m invested), portfolio alignment (a measure of alignment with a transition to a net zero economy) and data quality. We have also set a target against the fourth metric – data quality – which aims to improve emissions data quality for the Fund's holdings. During the year, prior to the full buy-in transaction, we estimated that 45% of the Fund's in-scope assets had Scope 1 and Scope 2 emissions data reported.
- Collecting metrics helped us to identify climate exposures, but we are conscious that material data gaps remain. It is widely recognised that there will be shortcomings in the quality and completeness of the emissions data available for many assets, with unlisted assets continuing to be a key stumbling block.
- As the majority of assets have now been transferred to an insurer, the Trustee expects this to be the final climate change report for the Fund. Going forwards, the Trustee will seek to engage with Aviva, its bulk annuity provider, in respect of climate-related matters.

Section 1 - Governance

How the Trustee maintains oversight of climate-related risks and opportunities relevant to the Fund

The Trustee has ultimate responsibility for ensuring effective governance of climate change risks and opportunities in relation to the Fund. Identifying, assessing and managing these risks and opportunities is a strategic priority for the Fund and therefore this is done by the Trustee Board, with a number of responsibilities delegated to its Investment and Risk Committee ("IRC", formerly known as the Funding & Investment Committee "FIC" for the duration of the Fund year), along with support from its external advisers. Aside from the delegations described below no other body has responsibility for these governance matters.

Establishing responsibilities

The Trustee has agreed a "Trustee Statement on Governance of Climate Change Risks and Opportunities", which documents the governance processes in place to ensure adequate oversight of the climate-related risks and opportunities relevant to the Fund, so that the Trustee can be confident that its statutory and fiduciary obligations are being met. The Statement also sets out the split of responsibilities between the Trustee, the IRC, investment adviser, actuarial adviser, covenant adviser, legal adviser and the Fund's investment managers. The Statement was updated within the scheme year, and last reviewed in February 2024, with the Trustee concluding that it accurately captures the governance arrangements in place for the Fund.

The role of the Trustee Chair

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

The role of the Trustee

In broad terms, the Trustee's role includes:

- ensuring the Trustee Directors have sufficient knowledge and understanding of climate change to fulfil their statutory and fiduciary obligations, and are keeping this knowledge and understanding up to date. This will include knowledge and understanding of the principles relating to the identification, assessment and management of climate-related risks and opportunities for the Fund;
- putting in place effective climate governance arrangements;
- determining short-, medium- and long-term time periods to be used when identifying climate-related risks and opportunities to the Fund;
- identifying and assessing the main climate-related risks and opportunities for the Fund by commissioning input from its advisers where required and documenting the management of these risks and opportunities;
- incorporating climate-related considerations into strategic decisions relating to the Fund's investments and funding arrangements;
- incorporating climate-related considerations into the Fund's investment beliefs, investment policies, risk register and contingency planning and monitoring framework;
- allowing for climate-related considerations when assessing and monitoring the strength of the sponsoring employer's covenant;

- selecting and regularly reviewing metrics to inform its assessment and management of climate-related risks and opportunities, and setting and monitoring targets to improve these metrics over time where appropriate;
- ensuring that the Fund's actuarial, investment, covenant and, where applicable, legal advisers, have clearly defined responsibilities in respect of climate change, that they have adequate expertise and resources, including time and staff, to carry these out, that they 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 that they are adequately prioritising climate-related risks;
- regularly examining and challenging the information and advice given to it by its advisers;
- ensuring that the Fund's investment managers, particularly those who will have a long-term future in managing the Fund's assets, are managing climate-related risks and opportunities in relation to the Fund's investments, and have appropriate processes, expertise and resources to do this effectively; and
- communicating with Fund members and other stakeholders on climate change where appropriate, including public reporting in accordance with the requirements of the Taskforce on Climate-related Financial Disclosures ("TCFD reporting").

The role of the IRC

Recognising the detail underlying a number of the Trustee's responsibilities, the Trustee has delegated the consideration of some of these matters to the Fund's IRC, a committee comprised of three Trustee Directors and a representative of the sponsoring employer. The IRC meets quarterly with additional meetings arranged if required. The IRC's roles and responsibilities are set out in a Terms of Reference, which is regularly reviewed by the Trustee.

The IRC may make decisions related to the implementation or reporting of the Trustee's agreed climate objectives; and may provide recommendations to the Trustee.

In broad terms, the IRC is responsible for:

- incorporating climate-related considerations into strategic decisions relating to the Fund's investments, before recommending these to the Trustee;
- incorporating climate-related considerations into its investment beliefs and the Fund's investment policies before recommending these to the Trustee;
- ensuring that the Fund's investment managers are managing climate-related risks and opportunities in relation to the Fund's investments, and have appropriate processes, expertise and resources to do this effectively;
- selecting and regularly reviewing metrics to inform the Trustee's identification, assessment and management of climate-related risks and opportunities, and setting and monitoring targets to improve these metrics over time where appropriate.

In addition, the IRC assists the Trustee where appropriate concerning the fulfilment of its responsibilities outlined in the section above, including but not limited to the investment aspects of:

- incorporating climate-related considerations into the Fund's risk management framework; and
- considering the extent to which the advisers' responsibilities are included in any Fund documentation, such as investment consultants' strategic objectives and service agreements.

Key advisers to the Trustee

We have included a list of the key advisers in-place supporting the Trustees over the year below:

- **Actuarial adviser** – Lane Clark & Peacock LLP ("LCP")
- **Investment adviser** – LCP
- **Covenant adviser** – LCP
- **Legal advisers** – Pinsent Masons LLP; Squire Patton Boggs (UK) LLP; Hogan Lovells International LLP
- **Scheme Secretary** – Aon Solutions UK Ltd ("Aon")
- **De-risking adviser** – Aon

The role of the investment adviser

In broad terms, the Fund's investment adviser is responsible, as requested by the Trustee, for:

- helping the Trustee to formulate its investment beliefs in relation to climate change and reflecting these in the Fund's investment policies and strategy;
- advising how climate-related risks and opportunities might affect the different asset classes in which the Fund might invest over the short-, medium- and long-term, and the implications for the Fund's investment strategy;
- advising the Trustee on the appropriateness and effectiveness of the Fund's investment managers' processes, expertise and resources for managing climate-related risks and opportunities, given the Trustee's investment objectives and beliefs;
- assisting the Trustee in identifying and monitoring suitable climate-related metrics and targets in relation to the Fund's investments, including liaising with the Fund's investment managers regarding the provision of the metrics;
- leading on the preparation of the Trustee's TCFD reporting, working with the Trustee and its other advisers as appropriate; and
- working with the Trustee's other advisers to assist the Trustee in incorporating climate change in its governance arrangements, risk register, contingency planning and monitoring framework and communication with stakeholders as appropriate.

The role of other advisers

In addition to the investment roles and responsibilities identified above, the Trustee expects its other advisers to support its approach to monitoring risks and opportunities relating to Environment Social and Governance ("ESG") factors, as follows:

- The Trustee's covenant adviser will help the Trustee form a view of the impact of ESG Factors, including climate change, on the covenant supporting the Fund over the short-, medium- and long-term;
- The Trustee's actuarial adviser will help the Trustee form a view of the impact of ESG Factors, including climate change, on the Fund's funding strategy over the short-, medium- and long-term; and
- The Trustee's legal adviser will advise the Trustee of its legal obligations in relation to taking account of ESG factors, including climate change and any associated reporting obligations where applicable.

The role of the investment managers

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

- identifying, assessing and managing climate-related risks and opportunities in relation to the Fund's investments, in line with the investment management arrangements agreed with the Trustee;

- exercising rights (including voting rights) attaching to the Fund'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 Fund members; and

- providing information to the Fund's investment adviser on climate-related metrics in relation to the Fund'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.

Oversight activity

By the Trustee Board

At one or more of its regular quarterly Board meetings during the Fund Year, the Trustee will receive and review:

- updates on the Fund's investments from the Fund's investment advisers, including data on climate-related metrics and progress against any targets set in relation to these metrics;

- a Responsible Investment ("RI") report from the Fund's investment advisers that reviews the Fund's investment managers in relation to ESG factors including climate change;

- whether it is appropriate to carry out scenario analysis that illustrates how the Fund's assets and liabilities might be affected under various climate change scenarios. In years when this is not required, it is because it has been carried out within the previous two years;

- the advisers' climate competency and assess how they have performed against their climate responsibilities; and

- the Trustee Statement on Governance of Climate Change Risks and Opportunities.

These documents will incorporate climate-related risks and opportunities as appropriate, in accordance with the roles and responsibilities set out above.

In addition, on an annual basis the Trustee will review and revise where appropriate, and approve:

- its governance arrangements, risk register, investment beliefs and policies in relation to climate change;

- its draft TCFD reporting; and

- a draft business plan for the following year in relation to ESG and climate change that outlines the main topics due to be discussed at each Board meeting and the papers expected from advisers in relation to each item.

The Trustee will consider climate-related risks and opportunities whenever the following activities are undertaken:

- triennial actuarial valuation of the Fund;
- assessment of the sponsoring employer's covenant; and
- review of the investment strategy for the Fund, which will include the bulk annuity policies held with Aviva.

The Trustee will also, at least every three years and following any major changes in the Fund's position, review:

- its choice of short-, medium- and long-term time periods to be used when identifying climate-related risks and opportunities to the Fund;
- the results of scenario analysis that illustrates how the Fund's assets and liabilities might be affected under various climate change scenarios, along with commentary on the potential impacts for the sponsoring employer; and
- its choice of metrics to review regularly to inform its assessment and management of climate-related risks and opportunities.

Whenever it reviews its agreements with external advisers, or appoints new advisers, the Trustee will consider and document the extent to which the advisers' climate-related responsibilities are included in the agreements and/or any adviser objectives set.

Specific activities undertaken by the Trustee

The box below shows the key topics discussed at specific meetings over the year to 31 March 2024:

September 2023:	Reviewing and updating the Fund's climate governance statement.
November 2023:	Review of investment consultant strategic objectives, as well as reviewing the Scheme's investment consultant against these objectives, which includes a climate-related objective.
February 2024:	Reminder of the Scheme's ongoing TCFD requirements to ensure regulatory requirements have been met and to identify any gaps. This included agreeing a timetable for completing climate-related activities. Review of the appropriateness of the Trustee's chosen climate target, following a review of the collected draft climate data for the Scheme from 30 September 2023. Review of the Fund's investment managers' and buy-in provider's approaches to responsible investment and climate-related risks. Considering whether updated climate scenario analysis on the Fund's assets and liabilities is required.

The Trustee's climate-related investment beliefs and policies

The Trustee documents its beliefs and policies on climate-related risks in its SIP which sets out the policy of the Trustee on various matters governing decisions about the investments of the Fund.

A link to the Fund's SIP can be found online via the link below, which was last updated in June 2024 to reflect the Trustee's purchase of the second bulk annuity policy with Aviva: Allianz Retirement and Death Benefits Fund (aon.com).

Climate-related beliefs

The Trustee's key climate-related investment beliefs, which influenced the setting of investment arrangements for the Fund, are as follows:

- Responsible investment by investing in companies who consider ESG factors, and by engaging as long-term owners, may reduce risk over time and could positively impact the Fund's returns.
- Managers' RI credentials should form part of the Trustee's manager selection criteria.
- Long-term environmental, social and economic sustainability is one factor that trustees should consider when making investment decisions.
- Achieving alignment with the goals of the Paris Agreement is likely to be in the long-term financial interests of the Fund and its members.

Climate-related policies

The Trustee has considered how ESG and ethical factors should be taken into account in the selection, retention and realisation of investments, given the time horizon of the Fund and its members.

The Trustee expects its investment managers to take account of financially material factors (including climate change and other ESG considerations). The Trustee seeks to appoint managers that have the appropriate skills and processes to do this and from time to time reviews how its managers are taking account of these issues in practice.

The Trustee's ambition is to align the Fund's assets with net zero greenhouse gas emissions by 2050 through selecting managers, and investing in funds, with credible net zero targets and strong ESG credentials.

Consideration of climate-related risks

The Trustee considers climate-related risk to be an important investment risk to consider for the Fund. As documented in the Fund's SIP, the Trustee believes that:

Climate change is a source of risk, which could be financially material over both the short and longer term. This risk relates to the transition to a low-carbon economy, and the physical risks associated with climate change (eg extreme weather). The Trustee seeks to appoint investment managers who will manage this risk appropriately, and the Trustee monitors how this risk is being managed in practice. The Trustee encourages its managers to set credible net zero targets for the funds in which it invests and align the Trustee's investments with net zero greenhouse gas emissions by 2050 (where practical) to help drive real world emissions reduction and reduce systemic risks relating to climate change. The Trustee monitors and engages with its managers on their progress towards net zero alignment.

Ensuring adequate oversight of climate-related risks and opportunities

The Trustee seeks input from its advisers to ensure that it can identify, assess and manage climate risks and opportunities. From time to time, the Trustee will review the climate competency of its advisers and take appropriate action if any concerns are raised.

Should the Trustee look to appoint 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, the actuarial valuation process and assessment of the employer's covenant.

The Trustee also ensures that the Trustee Directors have suitable experience in considering climate risk, to ensure that the risks are suitability considered, documented, reviewed and kept up to date. This includes receiving training from its advisors on climate risks and opportunities where necessary. As part of reviewing the Fund's climate action roadmap to ensure regulatory requirements are being met, knowledge gaps are also highlighted by the Trustee to its advisers to ensure that appropriate training can be incorporated into the meeting schedule. For example, prior to making decisions on climate metrics and targets, the Trustee received training from its investment adviser on various metrics available and their suitability for the Fund. Full details of the training undertaken is documented in the Trustee's training log.

The Trustee ensures that the Fund's advisers:

- have clearly defined responsibilities in respect of climate change – having reviewed and agreed their responsibilities in the Trustee's Statement on Governance of Climate Change Risks and Opportunities;
- have documented their responsibilities in relevant agreements, where applicable, such as the investment consultant's strategic objectives;
- have adequate expertise and resources, including time and staff, to provide suitable advice in relation to climate factors;
- 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
- are adequately prioritising climate-related risk.

Over the Fund Year, the Trustee has undertaken various climate-related activities based on information provided to them by its advisers and investment managers. Where appropriate, the Trustee has questioned the information provided to them to ensure a clear understanding of the risks facing the Fund and the actions being taken to reduce these.

Objectives set for advisers

In November 2023, the Trustee reviewed its investment adviser against its investment consultant objectives. These objectives include a specific climate-related objective, reflecting its investment advisor's climate-related responsibilities as set out in the Trustee Statement on Governance of Climate Change Risks and Opportunities.

The Trustee concluded that its investment adviser had demonstrated added-value and that climate risks and opportunities had been considered where appropriate in the context of the Scheme's journey plan.

Section 2 - Strategy

How the Trustee has identified and assessed climate-related risks and opportunities most relevant to the Fund

The Fund faces risks and opportunities from:

1. the physical effects of climate change ("physical risks") – for example, rising temperatures and more extreme weather events; and

2. the effect of transitioning to a lower carbon economy to help mitigate the impacts of climate change ("transition risks") – for example, government policies to reduce fossil fuel usage, technological advances in renewable energy, and increased consumer demand for "greener" products.

Many of these climate-related risks and opportunities could affect the value of the Fund's assets. Others could affect the sponsoring employer and its ability to provide financial support to the Fund. Some may also affect the Fund's liabilities, for example through affecting members' life expectancy or the inflationary increases made to pensions each year. Climate change could therefore impact the Fund's funding level over time. This was considered within the climate-scenario analysis undertaken by the Trustee.

Time horizons relating to the Fund

The Trustee has considered climate-related risks and opportunities over various time periods which it believes are most relevant to the Fund. In June 2022, the Trustee selected short-, medium- and long-term time horizons over which to formally consider the impact of climate-related risks and opportunities for the Fund. These, along with the Trustee's rationale for each and the key climate risks and opportunities identified, pre-full buy-in, are set out below:

<table>
<tr><th>Time period*</th><th>Rationale</th><th>Key risks</th><th>Key opportunities</th></tr>
<tr><td>Short term
3 years
(to 2026)</td><td>This is in line with the Fund's next actuarial valuation cycle</td><td>Exposure to climate-related investment risks (physical and/or transitional) could have a detrimental impact on the Fund's credit holdings and physical assets (eg infrastructure).</td><td rowspan="2">The Trustee has incorporated specific climate factors into its buy & maintain credit portfolio, which comprises around a quarter of total Fund assets. This is expected to increase the resilience of the portfolio's returns to climate risks in the short-medium term and take advantage of lending to companies who are expected to be more resilient to the transitional impact of climate change.</td></tr>
<tr><td>Medium term
7 years
(to 2030)</td><td>This is the period within which the Fund is expected to be fully funded on a low dependency basis</td><td>Market volatility could cause investment losses and increase time to reach full funding, particularly in a Disorderly Net Zero scenario, in which transitional risks could have a material impact on the funding position.</td></tr>
<tr><td>Long term
16 years
(to 2039)</td><td>This is the approximate duration of the Fund's aggregate liabilities, ie including the buy-in</td><td>Lower investment returns over the longer term due to physical impacts of climate change.</td><td>Buy-out is expected to provide greater protection from climate risks for members' benefits.</td></tr>
</table>

		Cost of long-term solutions, such as buy-out, may increase as insurers allow for climate-related risks in their pricing and reserving bases.	

*Relative to the 31 March 2023 reference date.

More recently, the Trustee also identified the following risk relating to the insurance market and the potential implications for fully insuring liabilities:

- Potential impact on insurers' capacity to meet benefit payments – climate-related risks could increase the chance that insurers will be unable to pay members their full benefits as promised. This risk is mitigated, however, by regulation, insurer reserves and the financial services compensation scheme, which provide protection in the event of insurer default.

In practice, many of these risks in the table above (dated 2022) have been mitigated now that the Fund has purchased a second bulk annuity policy which covers all of the Fund's liabilities.

Climate scenario analysis

Section 3 - Risk Management

Processes for identifying and assessing climate-related risks

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

- The Trustee receives climate-related training to understand how climate-related risks might affect pension schemes and their investments in general;

- The Trustee undertakes climate scenario analysis, which shows how the Fund's assets and liabilities might be affected under a range of climate scenarios;

- The Trustee reviews its investment adviser's assessments of the Fund'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;

- The Trustee maintains a business plan, which includes matters on RI (including processes required under TCFD reporting requirements) as relevant;

- The Trustee considers the Fund's asset exposure to climate risk on an annual basis using selected climate-related metrics that are included in the TCFD reporting; and

- As part of its covenant assessments, the Fund's covenant advisor will look to consider the materiality of climate risks relative to the Fund's journey plan to inform the Fund's strategy. The covenant advisor monitors risk using regulatory and policy announcements, company information and reports periodically to the Trustee.

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

The role of stewardship in managing climate-related risks and opportunities

The Trustee expects the Fund's investment managers to engage with investee companies on climate-related (and other) matters. The Trustee generally believes that engaging with companies is more effective at encouraging change than selling the Fund's investments in those companies.

A review of the Fund's managers' climate approaches in February 2024 highlighted no material concerns. Most managers demonstrated awareness of climate-related risks at the portfolio level and provided examples of engagement on climate change within the Fund's mandates as part of LCP's ongoing manager due diligence. The Trustee did note that some managers had areas for improvement. Despite there being a few managers whose practices could be improved, the Trustee did not believe that it would be an efficient use of its resources to further scrutinise their approach to managing climate risks, given the pending full buy-in of the Fund in March 2024. At the same meeting in February 2024, the Trustee also undertook a review of Aviva's approach to managing climate risks, based on analysis from LCP's bi-annual RI survey of bulk annuity providers. The scope of this review covers ESG, climate, as well as stewardship. Overall, LCP scored Aviva as broadly "middle of the pack" in relation to climate matters versus other bulk annuity providers.

Following the introduction of DWP's guidance, the Trustee agreed to set a number of stewardship priorities, which it believes are market-wide areas of risk that are financially material for the investments and can be addressed by good stewardship, to focus engagement with its investment managers.

Where relevant, the Trustee reviews case studies of the managers' engagement activities which relate to the Trustee's stewardship priorities to better understand its managers' approaches to engagement. An example is provided below:

Stewardship theme: Health

LGIM has engaged several times with US based pharmaceutical company, Eli Lilly ("LLY"). LLY saw its drug, Zepbound, approved for obesity in the US in November 2023, following strong off-label uptake for obesity since its May 2022 approval for type 2 diabetes. The off-label use was heavily promoted by social media influencers, which posed risks of exacerbating negative body image issues among teenagers and young people.

LGIM met with LLY four times and engaged via email to discuss the risks of inappropriate social media promotion. LGIM initially alerted LLY to the issue in October 2022 and held follow-up calls in March and October 2023, urging LLY to address and shut down inappropriate influencer messaging.

Following LGIM's engagement, LLY has increased efforts to shut down illegal advertisements by compounding pharmacies and clinics and releasing press statements opposing cosmetic weight loss uses of Zepbound. Although LLY has not yet taken action against social media influencers, LGIM continues to advocate for this and plans to escalate the issue if necessary.

More information on the stewardship activities undertaken on behalf of the Fund can be found in its Implementation Statement: Allianz Retirement and Death Benefits Fund (aon.com).

Tools used to identify and assess risks and opportunities

The Trustee has sought to identify and assess climate-related risks and opportunities facing the Fund arising from both the physical impacts of climate change and the transition to a low carbon economy. The Trustee has used the following tools to help:

- **Climate scenario analysis** was used in 2022 to understand the macroeconomic impact of different climate scenarios on the Fund's investment and funding strategy.

- The Trustee's investment adviser, with the assistance of the investment managers, provides reporting for the Fund's portfolios containing various **climate-related metrics**, which helps illustrate the current exposure to certain climate transition risks.

- The Trustee, with the help of its advisers, **assesses and monitors the Fund's investment managers** to ensure they are adequately managing risks to the Fund's assets, including those relating to the physical and transition risks from climate change. This includes the following steps:

    - **assessing the RI practices** of prospective managers during any manager selection processes; and

    - **regular monitoring** of the managers' and buy-in provider's RI practices with the aid of the investment advisers' assessments.

The Trustee also undertakes training to maintain and deepen its understanding of climate-related risks and opportunities, and hence support its identification and assessment of those faced by the Fund. On an ongoing basis the use of these tools will help the Trustee to identify both current, but also new and emerging climate-related risks and opportunities.

How the assessment of climate-related risks fits into the wider risk management picture

The IRC maintains a risk register, which covers all aspects of the Fund's investment, funding and covenant activities. The IRC reviews the risk register on a quarterly basis.

The IRC has reviewed the risk register and ensured that climate factors are integrated into the risks identified (covenant support, funding/investment factors, compliance/regulation, scheme management). Inclusion within the risk register helps the Trustee to put climate risk into the context of other risks being run, and to prioritise those risks which pose the most significant potential for loss and are most likely to occur.

The Fund's risk register is reviewed regularly to consider if any further risks need adding or amending, to assess any significant priority risks to manage and to ensure regular action is maintained in monitoring and mitigating these risks.

The Trustee's current assessment, based on consideration of their impact and likelihood, is that climate-related risks are material but are one of many risks faced by the Fund, and therefore should continue to be monitored in the context of broader investment risks and opportunities. Due to the approach being taken by the Trustee to monitor climate risks, along with the low-risk investment strategy currently being run, the IRC view the impact of climate risks on the Fund to be relatively low.

How the Trustee helps to manage the key risks and opportunities identified

The Trustee has in place a number of measures to help manage climate-related risks and opportunities. The most relevant examples of these are outlined below:

- The Trustee has purchased two buy-in policies with Aviva which cover all of the Fund's liabilities. The policies provide protection against the risk that some members live longer than expected, which could be influenced by climate change, by paying all benefit payments to the members to the Fund as they fall due.
- The Trustee reviews its investment managers' and buy-in provider's climate approaches and LCP's RI scores for the Fund's managers (which consider climate factors) on an annual basis.
- The Trustee has set a target to improve emissions data quality for the Fund's holdings, such that by 2030 at least 80% of the portfolio's holdings have Scope 1 and Scope 2 emissions data reported by the underlying investee entities themselves.

Section 4 -Metrics and targets

The Trustee's choice of metrics

The Trustee has chosen four climate-related metrics to help it monitor climate-related risks and opportunities to the Fund. The Trustee chose to report these metrics as they are ones recommended in the DWP's statutory guidance.

They are listed below and reported overleaf (as far as the Trustee was able to obtain the data):

Metric	High-level methodology
Absolute emissions: Total greenhouse gas emissions[1]	The sum of each company's most recent reported or estimated greenhouse gas emissions attributable to the Fund's investment in the company, where data is available. Emissions are attributed evenly across equity and debt investors. Reported in tonnes of CO2 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 ("SBT")	The proportion of the portfolio by weight of holdings with science-based targets to reduce their greenhouse gas emissions, demonstrated by a target validated by the Science Based Targets initiative ("SBTi")[2] or equivalent. This measures the extent to which the Fund's investments are aligned to the Paris Agreement goal of limiting global average temperature rises to 1.5°C. Reported in percentage terms. The Trustee chose this "binary target" measure because it is the simplest and most robust of the various portfolio alignment metrics available.
Additional climate change metric: Data quality	The proportion of the portfolio for which greenhouse gas emissions data is verified, reported, estimated or unavailable. "Verified" emissions refers to data reported by the emitting company and verified by a third party. "Reported" emissions are reported by the emitting company but not verified. This approach was chosen because it is in line with the statutory guidance. In practice, none of the parties providing data could distinguish verified emissions from unverified emissions, so only "reported" emissions are shown overleaf.

[1] More information about greenhouse gas emissions is provided in Appendix 1, including their classification into Scopes 1, 2 and 3. Please note that the majority of managers were unable to provide Scope 3 emissions data.
[2] Science-Based Targets initiative (see Appendix 4).

The data has been calculated using portfolio holdings as at 30 September 2023 except where otherwise stated. At that date, the total invested assets of the Fund (including the buy-in) were valued at around £775m. Note that the emissions data applicable to the underlying holdings at this measurement date will often relate to an earlier period. For example, corporate emissions data will typically be aligned to the corporate reporting year for each company. As year-ends vary by company, the emissions data will be from various periods. Data has only been included in the table below where information on the Fund's assets was available. All information has been provided by the investment managers, with the exception of the LDI portfolio and the Buy & maintain credit portfolio, which have been calculated by LCP using data sourced from the UK government and MSCI, respectively. We have provided more detail on data gaps on pages 19-20.

Metrics collected for the Fund

					Metric 1		Metric 2		Metric 3		Metric 4
Portfolio	Invested assets at 30 Sep 2023	%age of Fund	Date of data	Asset exposure at date of data	Total emissions (tonnes CO_2e) for the Fund's assets		Carbon footprint (tonnes CO_2e per £m invested)		SBTi alignment % targets set	Total coverage (reported & estimated)	Data quality (% reported / estimated/ unavailable)
					Scope 1+2	Scope 3	Scope 1+2	Scope 3			
Buy-in – listed equities and corporate bonds			31/12/23		7,281	N/A	67	N/A	N/A	S1&2: 87% S3: 0%	S1&2: 0 / 87 / 13 S3: 0 / 0 / 100
Buy-in – sovereign bonds	£354.7m	47%	31/12/23	£378.5m	9,553	N/A	212	N/A	N/A	S1&2: 99% S3: 0%	S1&2: 0 / 99 / 1 S3: 0 / 0 / 100
Buy-in – other assets			31/12/23		5,662	N/A	34	N/A	N/A	S1&2: 80% S3: 0%	S1&2: 0 / 80 / 20 S3: 0 / 0 / 100
Liability driven investment portfolio	£168.9m	21%	30/09/23	£226.4m	38,395	30,721	170	136	100%	S1&2: 100% S3: 100%	S1&2: 100 / 0 / 0 S3: 100 / 0 / 0
Buy & maintain credit	£119.5m	15%	30/09/23	£119.5m	2,214	22,209	26	261	40%	S1&2: 71% S3: 71%	S1&2: 65 / 6 / 29 S3: 0 / 71 / 29
Long lease property	£34.5m	4%	31/12/22	£50.6m	0	1,841	0	36	N/A	S1&2: 100% S3: 100%	S1&2: 100 / 0 / 0 S3: 66 / 34 / 0
Private credit	£51.5m	6%	30/09/23	£51.5m	366	4,278	11	163	N/A	S1&2: 62% S3: 51%	S1&2: 48 / 15 / 38 S3: 36 / 15 / 49
Absolute return bonds	£4.5m	1%	30/09/23	£4.5m	68	728	20	216	N/A	S1&2: 75% S3: 75%	S1&2: 53 / 22 / 25 S3: 4 / 71 / 25
European ABS	£4.5m	1%	30/06/23	£4.4m	357	N/A	81	N/A	N/A	S1&2: 100% S3: 0%	S1&2: 0 / 100 / 0 S3: 0 / 0 / 100
Infrastructure debt	£28.2m	4%	31/12/22	£29.3m	995	44	65	4	N/A	S1&2: 52% S3: 34%	S1&2: 52 / 0 / 48 S3: 34 / 0 / 66
Property debt	£8.5m	1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	S1&2: 0% S3: 0%	S1&2: 0 / 0 / 100 S3: 0 / 0 / 100
											S1&2: 45 / 39 / 16 S3: 33 / 13 / 54

Source: MSCI, Investment managers, Aviva, LCP. Please note that totals may not sum due to rounding.
Metrics data is shown at fund level. Due to differences in calculation methodologies the Trustee has decided not to aggregate emissions figures. Total emissions relate to the Fund's assets, where data is available. Carbon footprint has been adjusted, where required, by data coverage to show the footprint of the assets that have been reported on. Further information about the methodologies used to calculate the metrics is provided in Appendix 3.

Notes to the metrics collected for the Fund

1. Certain data ©2024 MSCI ESG Research LLC. Reported by permission. See Appendix 3 for further details, including how to interpret data where coverage is less than 100%.
2. GHG emissions (and therefore emissions intensity) figures for government bonds are calculated on a different basis, so cannot be compared with the other emissions figures shown. This is because, instead of using £m invested (a concept which doesn't apply in the same way for a government), the emissions are considered in the context of UK GDP (see Appendix 3 for further details).
3. The UK has a net zero by 2050 target written into law, with carbon budgets based on advice from the independent Committee on Climate Change, so UK government bond exposure has been treated as having a credible science-based target.
4. Aviva has published emissions data for the liquid equity, credit and sovereign holdings for Aviva Life & Pensions UK Limited in its 2023 TCFD report. These assets back a range of life insurance products, including its bulk annuity book. The provider was not able to provide emissions data for the bulk annuity assets alone, nor any data for the Trustee's selected alignment metric.
5. In relation to the long lease portfolio, Evora Global is responsible for measuring the fund's GHG emission in accordance with the GHG protocol recommendation. Under the GHG protocol, long income funds such as the long lease portfolio, report emissions under Scope 3 only as all assets and the related carbon emissions are under the operational control of tenants. Therefore, according to M&G (the investment manager), Scope 1 & Scope 2 emissions are both equal to 0.
6. Emissions data has been excluded for portfolios with less than a 0.5% holding, which mainly comprise small residual cash holdings with the managers. The Fund's additional voluntary contribution ("AVC") assets have also been excluded, as these holdings constitute a very small proportion of the Fund's overall level of assets.
7. For the Liability driven investment portfolio, the Trustee has included derivative exposure, which increases the carbon intensity of the portfolio. Not all pension schemes report on this basis. For the Fund, broadly 75% of the exposure is through gilts physically held by the Fund and 25% is exposure gained through derivative instruments.
8. Where the Trustee has not been able to obtain any data, N/A is shown.

Conclusions from assessment of the metrics

The Trustee uses the metrics collected in its identification and assessment of climate-related risks and opportunities to the Fund. This more granular assessment complements the macro-level climate scenario analysis, and enables the Trustee to focus its climate risk management on the areas of the portfolio which are expected to be most exposed to climate change.

The Trustee considered the metrics collected for each of the asset classes in the portfolio on the previous page. A summary of the Trustee's conclusions is as follows:

- **At the aggregate portfolio level:** data quality has marginally improved (45% of Scope 1 and 2 emissions reported this year versus 37% last year), with more of the Fund's managers reporting actual emissions data, as opposed to relying on estimates or disclosing it as being unavailable. Overall data coverage reported for Scope 1 & Scope 2 emissions has increased over the year, from 68% to around 84%.

- Despite this improvement in data quality, it **remains too low to draw meaningful comparisons** between this year's and last year's data. However, the data from the Fund's buy-in provider showed a reduction in carbon footprint in their holdings in listed equities and corporate bonds and sovereign bonds.

- **The metrics for the Fund's own invested corporate bond portfolio were largely unchanged**, although this portfolio was liquidated towards the end of the Fund year.

Towards the end of the Fund year, in March 2024 the Trustee fully insured the Fund's liabilities and transferred practically all the Fund's assets to Aviva. As such, the Fund no longer has exposure to the majority of assets outlined in the table above.

Climate change data gaps

Some data was available for mandates comprising almost all of the exposure of the Fund's assets that the Trustee sought to collect, as at 30 September 2023 (or nearest available date), with Scope 1 and 2 emissions data (either reported or estimated) for individual assets comprising around 84% of the exposure of the Fund's assets.

Most of the Fund'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 main data gaps relate to the Trustee's investments in the more illiquid assets eg property debt, infrastructure debt and private credit. The illiquid nature of these assets limits the actions that the Trustee can take to reduce the Fund's climate-related risk exposure in relation to these assets. Particularly with the property debt portfolio, where no data was available, the property debt manager is limited by the amount of operational data and carbon emissions data available to share. The portfolio focusses on providing mortgages secured by commercial real estate undergoing value-add business plans. Generally, this includes assets that are transitional in nature, are not operational, and have limited cashflow at origination. For wider context, provision of emissions data is generally lagging for private market investments.

Due to the composition of the Fund's assets following the full buy-in, the Trustee will now look to engage with the selected insurer on climate-related issues and will no longer progress efforts with the legacy investment managers.

Setting a climate-based target for the Fund

Trustee's choice of target

The Trustee has set the following target:

Target	Reference base year	Level at 30 September 2022	Level at 30 September 2023
The Fund's target is to improve emissions data quality for the Fund's holdings, such that by 2030 at least 80% of the portfolio's holdings have Scope 1 and Scope 2 emissions data reported by the underlying investee entities themselves.	30 September 2022	37%	45% **(+8%)**

The sponsoring employer has set an objective to reach net zero by 2050. The Trustee is also supportive of this for the Fund's portfolio but, in order to measure the Fund's progress against this goal, the quality of data needs to improve.

The Trustee originally set this target on improving emissions data quality recognising that the Fund expected to own less private market holdings (for strategic reasons) by the end of this period and, therefore, its attention could focus on data quality within the public market assets. Following the full buy-in transaction in March 2024, monitoring of the Fund's assets versus this target has been suspended, given the significant change in the invested assets of the Fund.

Based on data collected over the Fund year, the level of data reported by the underlying investee entities themselves was 45%.

Steps taken to achieve the target

The Trustee, with the help from its investment adviser, has communicated the target to each investment manager.

Investment managers are periodically invited to present at Trustee meetings. When appropriate, the Trustee will ask managers to discuss progress towards improving the quality of emissions data reported.

In March 2024 the Trustee fully insured the Fund's remaining liabilities and transferred practically all the Fund's assets to Aviva. As such, this is expected to be the last TCFD report produced for the Fund. That being said, the Trustee will continue to engage with Aviva and the investment managers of the Fund's residual assets to encourage improvements in their reporting capabilities where applicable.

Appendix 1 – Greenhouse gas emissions explained

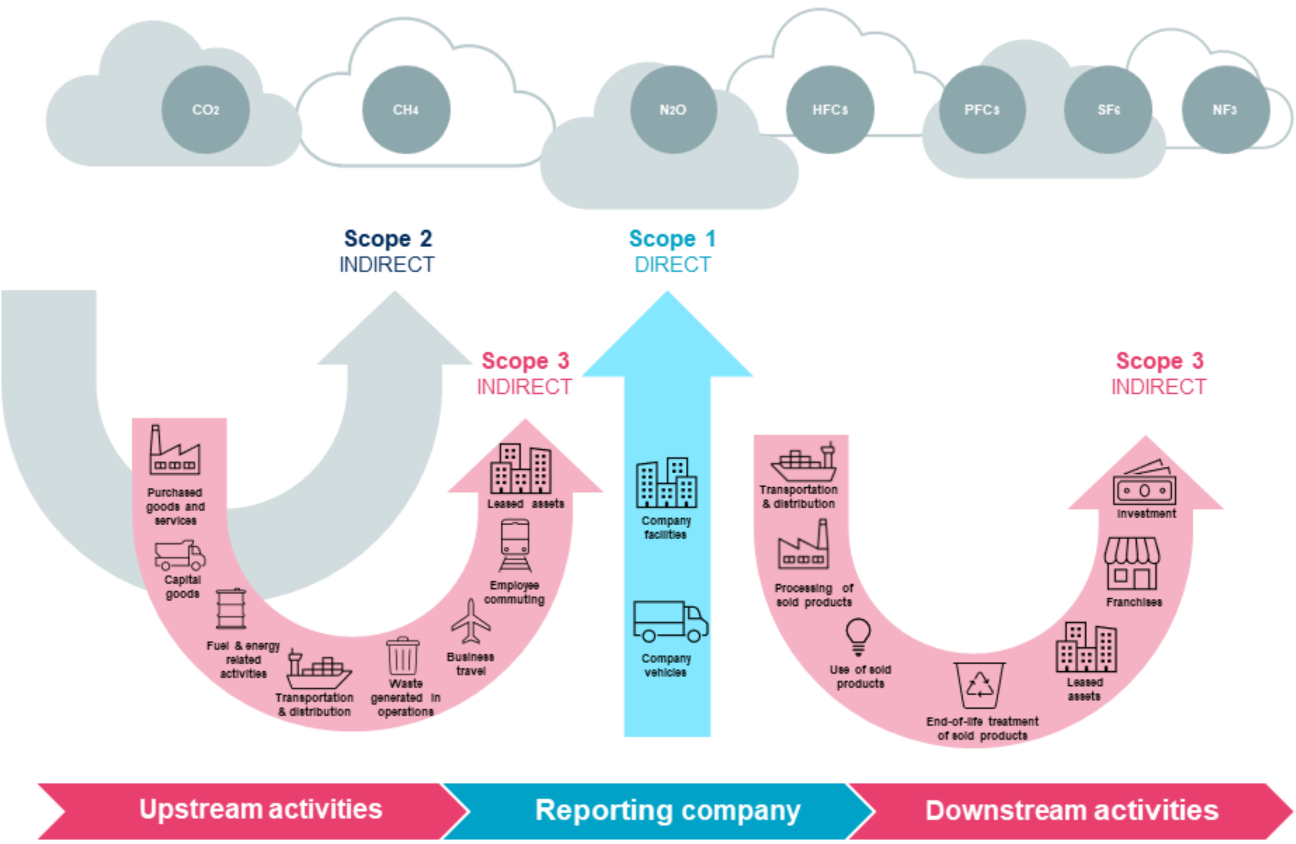
In the metrics section of the report, the emissions metrics relate to seven greenhouse gases – carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF_6) and nitrogen trifluoride (NF_3). The figures are shown as "CO_2 equivalent" (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. 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 2 – Climate scenario analysis 2022

Scenario analysis is a tool for examining and evaluating different ways in which the future may unfold. At its June 2022 Trustee meeting, the Trustee used scenario analysis to consider how climate change might affect the Fund's investment and funding strategies.

With the support of its investment adviser, the Trustee carried out scenario analysis using scenario sets as at 31 December 2021, adjusted for market conditions as at 31 March 2022. The analysis looked at three possible scenarios, as outlined in the table below, along with the Trustee's rationale for considering them.

Scenario	Overview of scenario	Rationale
Failed transition	Global net zero carbon emissions not reached by 2050; only existing climate policies are implemented and temperatures rise significantly.	To explore what could happen to the Fund'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.
Orderly Net Zero by 2050	Global net zero carbon emissions are achieved by 2050; rapid and effective climate action (including using carbon capture and storage), with smooth market reaction.	To see how the Fund's finances could play out if global net zero carbon emissions are achieved by 2050, meaning that the economy makes a material shift towards low carbon by 2030.
Disorderly Net Zero by 2050	Same policy, climate and emissions outcomes as the Orderly Net Zero scenario, but financial markets are initially slow to react and then react abruptly.	To look at the risks and opportunities for the Fund if global net zero carbon emissions are achieved by 2050, but financial markets are volatile as they adjust to a low carbon economy.

The Trustee acknowledges that many alternative plausible scenarios exist but found that these were a helpful set of scenarios to explore how climate change might affect the Fund 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 Failed Transition scenario where over 4°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 tipping points, mean the actual impact on pension schemes is likely to be more significant than is currently being modelled. As long as these limitations are understood, the scenarios still provide valuable insights to inform climate risk assessment and management.

To provide further insight, the Trustee 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 key features of each scenario are summarised in the table below:

	Failed Transition	Orderly Net Zero	Disorderly Net Zero
Low carbon policies	Continuation of current low carbon policies and technology trends	Ambitious low carbon policies, high investment in low-carbon technologies and substitution away from fossil fuels to cleaner energy sources and biofuel	
Paris Agreement outcome	Paris Agreement goals not met	Global net zero achieved by 2050; Paris Agreement goals met	
Global warming	Average global warming is about 2°C by 2050 and 4°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 risks	Moderate physical risks	
Impact on GDP	Global GDP is significantly lower than the climate-uninformed scenario in 2100 For example, UK GDP in 2100 predicted to be 50% lower than in the climate uninformed scenario	Global GDP is lower than the climate-uninformed scenario in 2100 For example, UK GDP in 2100 predicted to be about 5% lower than in the climate-uninformed scenario	In the long term, global GDP is slightly worse than in the Orderly Net Zero scenario due to the impacts of financial markets volatility
Financial market impacts	Physical risks priced in over period 2026-2030 A second repricing occurs in the period 2036-2040 as investors factor in the severe physical risks	Transition and physical risks priced in smoothly over the period of 2022-2025	Abrupt repricing of assets causes financial market volatility in 2025

Source: Ortec Finance. Figures quoted are medians.

The scenarios showed that equity markets could be significantly impacted by climate change with lesser but still noticeable impacts in bond markets. All three scenarios envisaged, on average, lower investment returns and resulted in a worse funding position than the climate uninformed base case. However, due to the strong funding position of the Fund, and the relatively low risk investment strategy held with zero exposure to equities, the Trustee noted that the expected impact on the funding position was notably lower than some other pension schemes (for example, with a higher allocation to growth assets such as equities).

Over the long-term, and particularly beyond the time horizons modelled, the largest effects would be felt under the Failed Transition scenario. However, on the face of it, the results below suggest that Fund would have been relatively resilient in this scenario. This is partly because the Fund was invested in a relatively low risk portfolio, with relatively low exposure to growth assets, which are expected to be most severely affected by climate change. Moreover, the Fund invested in a way that was 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 Failed Transition scenario – the Fund'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.

The scenario analysis undertaken excludes the buy-in policy, as this has effectively transferred part of the Fund's exposure to climate risk to the insurer. While the Fund's insured liabilities are likely to be subject to similar financial risks to those illustrated for the non-insured liabilities, the protection afforded by the buy-in asset means that, absent insurer insolvency, any financial impacts should not affect the net funding position, as modelled under any of the three climate scenarios considered.

However, the Trustee acknowledges climate change is a systemic risk that will undoubtedly have profound impacts on the insurance sector over the coming years. To the extent that the insurer is unprepared for these changes, climate risk increases the chance that they will be unable to meet the benefit payments promised. The regulatory regime, the insurer's reserves and the financial services compensation scheme aim to protect against insurer default due to climate change, as well as any other risk.

Potential impacts on the Fund's assets and liabilities identified by the scenario analysis

The scenario analysis explored the impact on the Fund's funding position over time on the Fund's long term funding target of gilts + 0.35% pa. The funding position reflects the gap between the value placed on the Fund's assets and the value placed on its liabilities over time. To calculate the funding position at each point, the impact of each climate scenario has separately been applied to the assets and liabilities, before the two figures are compared.

The chart on the next page illustrates the expected change in the deficit/surplus of the Fund at the time of the modelling under each of the three chosen scenarios, as well as in the "climate uninformed" base case.

The key conclusions from the Trustee's analysis were as follows:

- In the short term, scenarios where the global economy transitions to net zero, especially if this is achieved in a disorderly way, represented a risk to the Fund, with the potential to slow down the expected timelines to achieve full funding on the long-term target. Transition risk is therefore more significant over shorter time horizons.

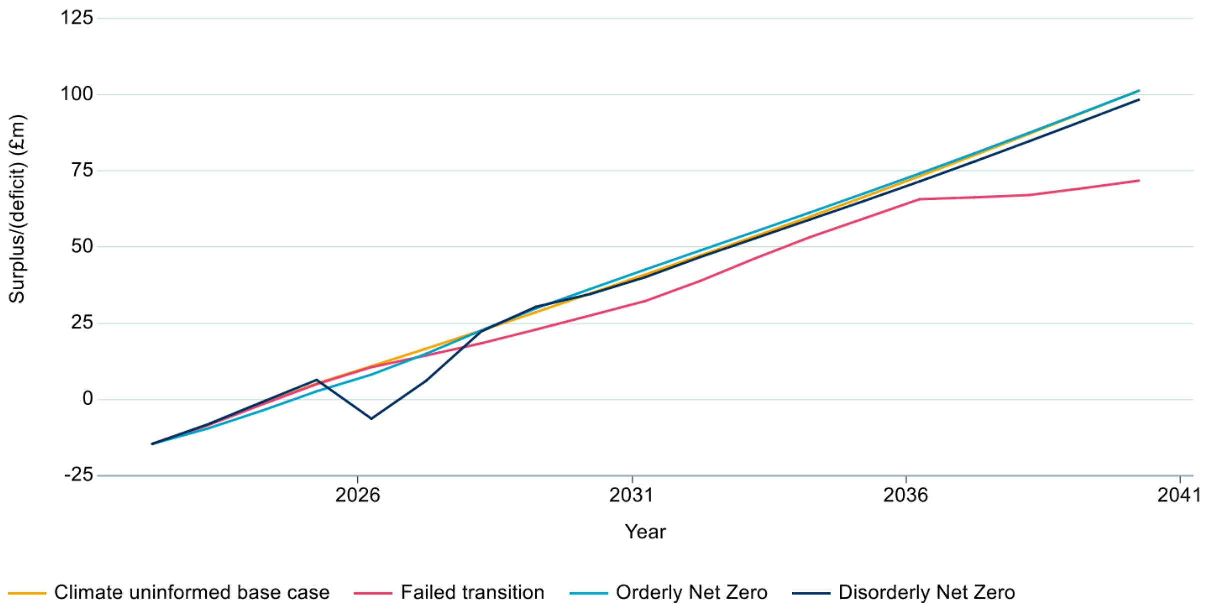
- Over the longer term, the Fund was more exposed to physical risk as the impact of a failed transition is felt more over longer periods.

- However, climate risk alone is relatively low in context of the wider investment risks the Fund was exposed to. This is because the overall low level of general investment risk in the Fund (for example, zero equities) means the impact of the adverse scenarios modelled is relatively modest. Even in a failed transition scenario, in the long-term the impact would result in a reduction in surplus rather than a significant chance of falling into deficit.

- Given the key objective to buy out the Fund's liabilities with an insurer, climate risk is most likely to manifest itself in the impact on insurer pricing. However, it may also create opportunities; for example, adverse economic scenarios could lead to higher yields on assets and more attractive buyout pricing.

- Finally, the Trustee noted the scenarios modelled are only possible paths that could play out in the economy/financial markets. The overall level of risk in adverse climate scenarios is likely to be higher.

Impact of different climate scenarios on the Fund's funding position over time:



All in all, the analysis highlighted that the Fund is expected to be relatively resilient against climate risks over the long-term, reflecting the low-risk investment strategy in place.

Impact of climate change on life expectancy

If a member lives longer, the Fund pays the member's pension for longer and therefore needs more assets to make the payments.

Like the economic impacts, the impact of climate change on life expectancy is highly uncertain. As part of the climate scenario discussions, the Trustee considered the various possible drivers for changes in mortality rates with both positive and negative impacts expected in each of the scenarios considered.

For example, in the Orderly Net Zero scenario, the reduced use of fossil fuels should lead to lower air pollution, increasing life expectancy. But this effect could be countered by economic prosperity generally being lower in this scenario, and this may limit the funding available for healthcare.

Given the level of uncertainty, the Trustee made no specific allowance in the scenario analysis for changes in life expectancy. The Trustee notes that the buy-in policy provides protection for any changes in life expectancy for the proportion of liabilities insured.

Potential impacts of climate change on the sponsoring employer

The Trustee notes that, due to the strong funding position of the Fund and low risk investment strategy currently adopted, its reliance on the sponsoring employer for ongoing support is relatively low and therefore any potential climate risks to the sponsor are unlikely to be a material factor for the Fund.

However, the Trustee acknowledges that, if the impacts of climate risks are more severe in practice than what has been modelled, this could have implications for the Fund's journey plan and potentially require additional contributions from the sponsoring employer.

In 2021 the sponsoring employer took part in the Climate Biennial Exploratory Scenario, which is an assessment by the Bank of England to explore the resilience of the largest UK banks and insurers to risks arising from climate change.

The Trustee discussed the results of the assessment at the September 2023 FIC meeting, and noted the following points:

- The impact of both physical risk and transition risk on the sponsoring employer's business is greater under scenarios where there is a failure to meet the goals of the Paris Agreement. A higher temperature risk is likely to be accompanied by greater losses in the insurance book from factors such as flooding and storm surge, whereas the impact of transition risk is likely to be felt more keenly in the employer's investment portfolio.

- However, the assessment noted that the physical risks of climate change are expected to manifest over longer time horizons. As a general insurer with the ability to re-price most policies every year and assets backing claims liabilities with a generally short tail, changes to the pricing and asset portfolio can be made at a suitable rate to keep pace with the emerging impacts of climate change on the employer.

More details on 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 Fund's assets and liabilities by LCP. The three climate scenarios are 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 Fund's funding strategy to be considered. The model output is supported by in-depth narratives that bring the scenarios to life, in order 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 Fund 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 2021, adjusted to market conditions at 31 March 2022.

- The modelling is based on the Fund's liability "Buffer" basis of gilts+0.35% pa, and the liability assumptions are in line with those set out in the Fund's Statement of Funding Principles dated 31 June 2021, updated for market conditions as at 31 March 2022. The analysis excludes the buy-in policy and assumes the starting investment strategy is in-line with the proposed strategy being discussed at the time of the analysis (noting that the Trustee agreed to move to this allocation after the date of the analysis) and also makes an allowance for some of the illiquid allocations to reduce over the period to 2025.

- The Trustee notes that the three climate scenarios chosen are intended to be plausible, not "worst case", and the modelling is based on median outcomes. It therefore illustrates how the centre of the "funnel of doubt" surrounding the Fund's funding projections might be affected by climate change. It does not consider tail risks within that funnel, nor does it consider how the funnel might be widened by the additional uncertainties arising from climate change. In addition, only three scenarios out of infinitely many have been considered. Other scenarios could give better or worse outcomes for the Fund.

More details on 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, ie assuming that the Fund's investments are affected by climate risk in-line with the market-average portfolio for the asset class. This contrasts with a "bottom up" approach that would model the impact on each individual investment held in the Fund's investment portfolio. As such, it does not require extensive scheme-specific data and so the Trustee was able to consider the potential impacts of the three climate scenarios for all of the Fund's assets.

- In practice, the Fund's investment portfolio may not experience climate impacts in-line with the market average. The Trustee considers, on an ongoing basis, how the Fund's climate risk exposure differs from the market average using climate metrics (which are compared with an appropriate market benchmark) and its periodic responsible investment review which considers the investment managers' climate approaches.

- The asset and liability projections shown reflect the Fund's proposed 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 the action to be taken in response to the Fund 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. For example, tipping points (which could cause runaway physical climate impacts) are not modelled and no allowance is made for knock-on effects, such as climate-related migration and conflicts. In addition, the model presumes that the UK government will remain solvent, thereby making no allowance for credit risk on government bonds. However, in a scenario where global warming exceeds 4°C, 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 3 – Further information on climate-related metrics

This appendix provides more detail on the metrics reported in the Metrics and Targets Section.

Corporate bonds

Notes for data sourced from MSCI (shown on page 23)

Emissions are attributed to investors using "enterprise value including cash" (ie EVIC, the value of equity plus outstanding debt plus cash).

The total GHG emissions figures omit any companies for which data was not available. For example, if the portfolio was worth £200m and emissions data was available for 70% of the portfolio by value, the total GHG emissions figure shown relates to £140m of assets and the portfolio's carbon footprint equals total GHG emissions divided by 140. In other words, no assumption is made about the emissions for companies without data.

The science-based targets metric equals the % of portfolio by weight of companies that have a near-term carbon emissions reduction target that has been validated by the Science Based Targets initiative (SBTi). The MSCI database does not distinguish between companies which do not have an SBTi target and companies for which MSCI does not check the SBTi status, so the coverage for this metric is equal to the % of the portfolio with an SBTI target.

Emissions data coverage and quality

Where coverage of the portfolio analysed is less than 100%, this is because the MSCI database:

- Does not cover some holdings (eg cash, sovereign bonds, bonds that have recently matured, shares in companies no longer listed when the analysis was undertaken);
- Does not hold emissions data for some portfolio companies because the company does not report it and MSCI does not estimate it; and/or
- Does not hold EVIC data for some portfolio companies, so emissions cannot be attributed between equity and debt investors.

The last of these reasons is usually the main explanation for the fairly low coverage of bond portfolios.

The MSCI database records whether emissions data is reported or estimated, and which estimation method has been used, but not whether companies' reported emissions have been independently verified. Our investment consultant has asked MSCI to introduce this distinction. Where emissions data is estimated, MSCI uses one of three methods.

- For electric utilities, MSCI's estimate of Scope 1 emissions is of direct emissions due to power generation, calculated using power generation fuel-mix data.
- For companies not involved in power generation, which have previously reported emissions data, MSCI starts with a company-specific carbon intensity model.
- For other companies, MSCI uses an industry segment-specific carbon intensity model, which is based on the estimated carbon intensities for 1,000+ industry segments.

For Scope 3 emissions, we have chosen to use MSCI's estimated emissions even where reported emissions are available. This provides greater consistency than using a mixture of reported and estimated emissions. Analysis of reported Scope 3 emissions suggests that the data quality is currently low: data is volatile and often out of date, with relatively few companies reporting on all types of Scope 3 emissions. In contrast, MSCI estimates all types of Scope 3 emissions for most companies in its database, for a recent reporting year and using a consistent approach.

MSCI is a leading provider of climate-related data, so we would expect the coverage to compare favourably with other data sources.

Disclaimer

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UK government bonds and LDI

GHG emissions for government bonds (gilts) are calculated on a different basis from the other asset classes, so cannot be compared with the other emissions figures shown.

The emissions figures were calculated by the Trustee's investment adviser using publicly available data sources. As suggested in the statutory guidance, Scope 1+2 emissions have been interpreted as the production-based emissions of the country. Scope 3 emissions have been interpreted as the emissions embodied in goods and services imported by the country and consumed within the country (rather than re-exported).

In line with guidance from the Partnership for Carbon Accounting Financials (PCAF) issued in December 2022, emissions intensity has been calculated as:

$$\frac{UK\ GHG\ emissions}{PPP - adjusted\ GDP\ for\ the\ UK}$$

GHG emissions have then been calculated as:

$$Emissions\ intensity\ x\ value\ of\ the\ Fund's\ investment\ in\ gilts.$$

PPP - PPP is a theory of long-term equilibrium in exchange rates based on relative prices. For example, if the price of a basket of goods in the UK is £100 and the same basket costs $200 in the USA, then the PPP exchange rate would be £1:$2. The PPP rate and the actual market exchange rate can differ.

GDP - the value of all goods and services produced in a country over a given period, typically a year.

For the LDI mandate, derivatives have been treated 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 the Trustee's understanding of the typical interpretation of the DWP guidance by investment managers and consultancies as not requiring estimation 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 scheme, 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 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.

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 scheme trustees may choose to "buy-in" some of their scheme's expected future benefit payments by purchasing a bulk (ie one covering many individuals) annuity contract with an insurance company. This allows the trustees to reduce their scheme's risk by acquiring an asset (the annuity contract) whose cash flows are designed to meet ie "match" a specified set of benefit payments under the pension scheme. 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 scheme trustees may choose to "buy-out" some or all of their scheme's expected future benefit payments by purchasing a bulk (ie one covering many individuals) annuity contract from an insurance company. The insurer then becomes responsible for meeting pension benefits due to scheme members (effected ultimately by allocating to each scheme member an individual annuity contract). Following a full buy-out, (ie one covering all scheme members) and having discharged all of the trustees' liabilities, the pension scheme 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 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 scheme's assets and the agreed funding target.

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

Defined Benefit (DB) – a pension scheme 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 scheme fall short of the amount needed to meet the benefits.

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

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.

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 scheme.

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. See also Appendix 1.

Gross Domestic Product (GDP) – this is the value of all goods and services produced in a country over a given period, typically a year.

Investment mandate – see pooled mandate and segregated mandate

Integrated risk management – Integrated risk management is an approach used by DB pension scheme 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 scheme'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 scheme 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 scheme's assets to those of its underlying liabilities in response to changes in certain factors, most notably interest rate and inflation expectations.

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, eg company, investor, country or global.

Paris Agreement – the Paris Agreement is an international treaty on climate change, adopted in 2015. It covers climate change mitigation, adaptation and finance. Its primary goal is to limit global warming to well below 2°C, preferably to 1.5°C, compared to pre-industrial levels.

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 (ie "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 – eg 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 (eg by buying units in a UK equity fund) as well as across markets (eg 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 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.

Purchasing Power Parity (PPP) – the PPP is a theory of long-term equilibrium in exchange rates based on relative prices. For example, if the price of a basket of goods in the UK is £100 and the same basket costs $200 in the USA, then the PPP exchange rate would be £1:$2. The PPP rate and the actual market exchange rate can differ.

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 companies through 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) – an organisation 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 greenhouse gas emissions. See Appendix 1.

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.

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 exercising 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 company balance sheets.

Sustainable investing – an approach in which an assessment of the environmental and social sustainability a company's products and practices is a key driver 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.