Task Force on Climate-related Financial Disclosures (TCFD)

t|p|t
Retirement Solutions

Report 2024

1 October 2023 – 30 September 2024

Contents

Executive summary

This Task Force on Climate-related Financial Disclosures (TCFD) Report has been prepared to provide an overview of Verity Trustees Limited's (VTL) climate-related risks, opportunities and strategies. It outlines the governance measures and actions undertaken by the Trustee during the 2023/2024 financial year (1 October 2023 to 30 September 2024) to identify, assess and manage those risks and opportunities.

Reporting in line with TCFD has been a statutory requirement since the introduction of the UK Department for Work and Pensions' (DWP) Occupational Pension Schemes (Climate Change Governance and Reporting) Regulations 2021 (DWP TCFD Regulations). The Trustee supports TCFD and its framework for climate-related disclosures and is committed to transparency and climate action.

The report is structured around the four pillars of the TCFD framework: **Governance, Strategy, Risk Management, and Metrics and Targets.**

Summary of findings against requirements

The following table provides an overview of our disclosures against the TCFD recommendations and the progress achieved during 2023/24. The Trustee remains committed to assessing and enhancing disclosures in line with the TCFD framework, incorporating relevant guidance, evolving best practices and data availability.

Governance	Disclosure Requirement	Summary of Findings
Disclose the organisation's governance around climate-related risks and opportunities.	Describe the board's oversight of climate-related risks and opportunities.	Our governance structure continues to provide clear oversight of climate-related risks and opportunities, with the Trustee Board responsible for all aspects of running the Trust. The Trustee annually reviews and approves the Climate Change Policy and the wider Responsible Investment Framework. The Defined Benefit (DB) and Defined Contribution (DC) Statements of Investment Principles (SIPs) are also reviewed and approved annually by the Trustee. Climate training is provided at least annually.
	Describe management's role in assessing and managing climate-related risks and opportunities.	For DB investments, VTL delegates investment decisions to TPT Investment Management (TPTIM). For DC investments, VTL delegates investment decisions to AllianceBernstein. Both TPTIM and AllianceBernstein delegate day-to-day investment management to authorised investment managers, ensuring these managers possess the necessary knowledge and experience to manage the Trustee's investments, including robust processes and climate expertise.

Strategy	Disclosure Requirement	Summary of Findings
Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's business, strategy, and financial planning where such information is material.	Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.	Climate-related risks and opportunities are assessed across short, medium and long-term horizons. Both transition and physical risks are considered, along with their varying impacts on asset classes globally.
	Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning.	Climate-related risks and opportunities are assessed as part of the investment decision-making process. These are embedded into portfolio strategy and stewardship practices.
	Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	We consider the resilience of our strategy under different climate scenarios, using both qualitative and quantitative analyses to identify risks and opportunities. In 2022, we conducted climate scenario analysis to stress-test the DB and DC portfolios against climate-change risks. With no material changes to our strategy or data availability, a new analysis was not conducted for this TCFD Report. However, we provide a summary of the analysis performed in 2022.

Risk management	Disclosure Requirement	Summary of Findings
Disclose how the organisation identifies, assesses, and manages climate-related risks.	Describe the organisation's processes for identifying and assessing climate-related risks.	Climate change represents a material financial risk to our investment portfolio and the security of members' retirement benefits. Climate risks are identified, managed and integrated into our Risk Management Framework.
	Describe the organisation's processes for managing climate-related risks.	Our Climate Change Policy ensures that climate risks are explicitly considered during the investment process, from portfolio exposure assessment to active engagement.
	Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.	Climate-related risk identification, prioritisation and management are integrated into the overarching Risk Management Framework, which includes risk pillars, risk appetite, scorecards, risk registers and controls. The framework ensures a consistent and effective approach to mitigating risks across the organisation.

Metrics and targets	Disclosure Requirement	Summary of Findings
Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.	We report against four climate metrics: - Absolute carbon emissions; - Carbon intensity; - Data quality; and - Implied Temperature Rise.
	Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks.	We report scope 1, 2 and 3 emissions data for listed equity, corporate fixed income, real estate and infrastructure. We follow the GHG emissions accounting and reporting standard developed by the Partnership for Carbon Accounting Financials (PCAF).
	Describe the targets the organisation uses to manage climate-related risks and opportunities and performance against targets.	Our Climate Action Plan defines clear climate targets, including reducing carbon intensity by at least 25% by 2025 and 50% by 2030 (relative to a 2019 baseline). This year's report evaluates performance against these targets and analyses changes in carbon intensity over recent years.

Next steps

Addressing climate change and embedding responsible investment practices is a continuous and dynamic journey. We remain committed to advancing our efforts and are focusing on the following strategic priorities.

- **Enhancing stewardship with a climate focus:** Further strengthening our stewardship framework with a dedicated focus on climate action, ensuring impactful engagement and voting strategies that align with and support our net zero ambitions.
- **Improving transparency through enhanced reporting:** Building on our responsible investment reporting to provide stakeholders with more comprehensive and accessible insights into our climate-related actions, progress and challenges.
- **Exploring natural capital:** Deepening our research into natural capital, including the interdependencies between our investment portfolio and nature, while assessing risks related to biodiversity loss and ecosystem degradation.
- **Reassessing our climate strategy post-2025:** Undertaking a thorough review of our climate strategy, using insights gained to refine and strengthen our approach for the years ahead.

These initiatives underline our commitment to responsible investment and the climate transition, ensuring that we continue to adapt and lead the way towards a sustainable and resilient future.

Introduction

Responsible investment is a cornerstone of our investment decision-making process and ownership practices. As a universal owner, we recognise the critical importance of addressing climate and sustainability challenges holistically. We aim to build a resilient portfolio that aligns with the transition to a lower-carbon economy while managing the investment risks and opportunities associated with climate change.

Through our Responsible Investment Framework, we integrate environmental, social, and governance (ESG) factors into the management of members' assets. We believe that ESG factors can influence financial performance and that incorporating these considerations is a fundamental part of our fiduciary duty.

This integration helps mitigate investment risks and, in some instances, enhances long-term portfolio returns. This principle is explicitly reflected in our Investment Beliefs (Statement 10).

Responsible investment is embedded within the governance and risk management framework we employ to safeguard the long-term value of the assets entrusted to us by our members and beneficiaries. Our approach is applied consistently across both Defined Benefit (DB) and Defined Contribution (DC) schemes and is articulated within the Statement of Investment Principles (SIP) for each strategy.

Our climate strategy

Among the environmental and social considerations we address, we recognise climate change as one of the most significant systemic financial risks to the long-term security of our members' retirement benefits. Its potential impacts are pervasive, influencing global markets, economies and ecosystems.

Climate considerations are embedded in our Responsible Investment Principles and integrated throughout our approach to portfolio construction, monitoring, stewardship and reporting. To guide these efforts, we utilise the Net Zero Investment Framework (NZIF), which provides a robust methodology for decarbonising our portfolio while identifying and allocating capital towards climate solutions.

The Trustee is committed to achieving a net-zero emissions portfolio by 2050. Our Climate Action Plan outlines the roadmap to this goal and is anchored in the following key commitments.

part of the governance and risk management framework used to protect the long-term value of the assets we manage on behalf of our members and beneficiaries.

Our approach to RI applies to both our DB and our DC Investments and is reflected in the SIP for both strategies.

Our **Responsible Investment Framework** describes how we incorporate ESG into our investment decisions and the selection and monitoring of investment managers. It is reviewed annually and is available on TPT's website.

1. Be active in influencing the transition to a low carbon economy including reaching net zero within our operations.	**2.** Achieve net zero by 2050, with a decrease in our carbon intensity of at least 25% by 2025 and 50% by 2030.	**3.** Increase our investment in climate solutions to at least 6% of return-seeking assets by 2030.
4. Continue to build a rigorous approach to incorporating climate-change risks and opportunities into theway we invest members' assets.	**5.** Work together with companies, governments and standard-setters and disinvest when no alternatives are possible.	**6.** Regularly report back to members and wider stakeholders including through TCFD reporting.

Recent progress

In 2024, we updated our **Climate Change Policy** to clarify our stance on fossil fuel investments and formalise our expectations for investment managers. These include the requirement to have a clearly-defined policy on climate risk and an active stewardship strategy to support the net-zero transition.

We have also advanced our understanding of the interconnectivity between climate change and nature. Recognising that biodiversity loss presents a growing financial and systemic risk, we have undertaken a **biodiversity footprinting exercise** to evaluate the impact of our DB portfolio on natural ecosystems. This research marks a significant step in broadening our sustainability lens and aligning our investments with nature-positive outcomes.

Governance

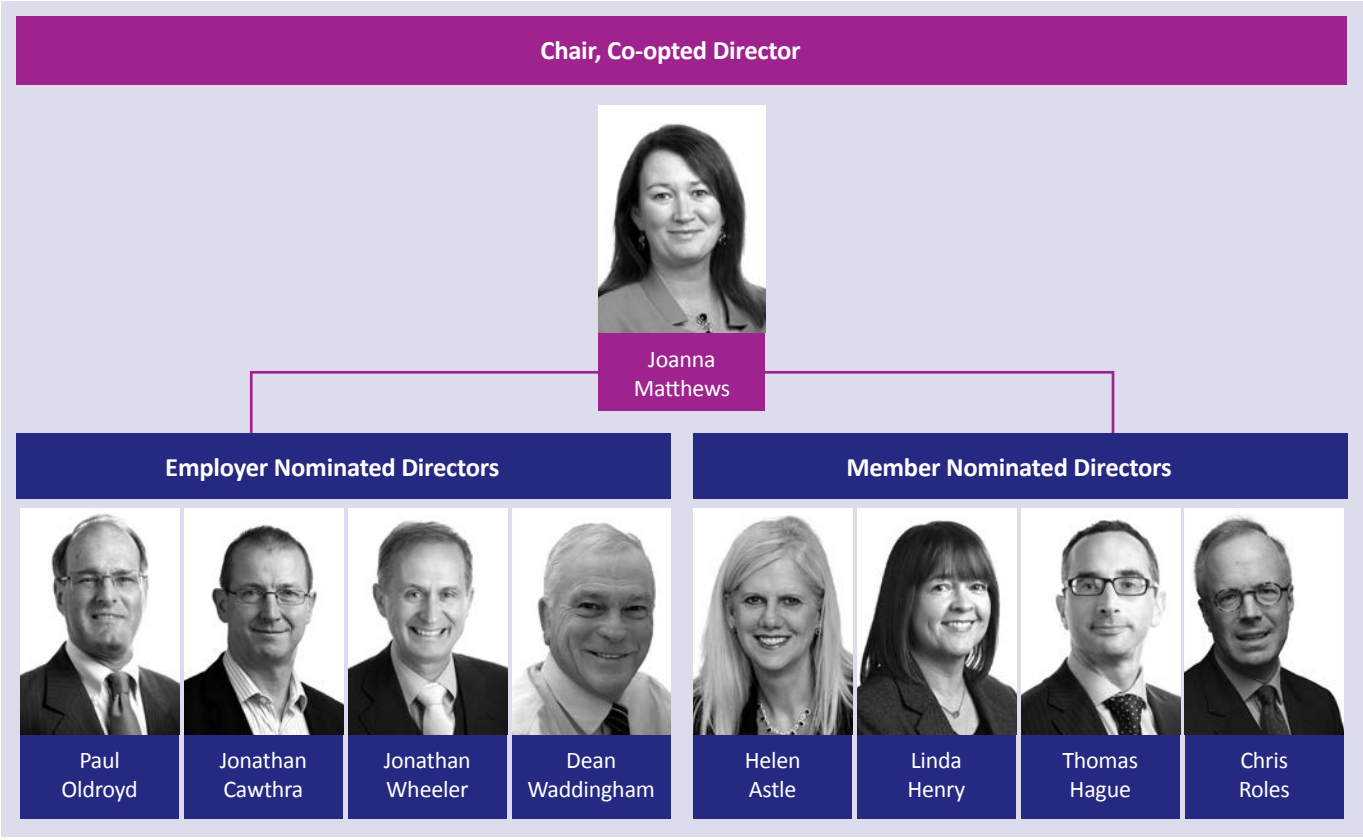
Good governance is fundamental to the effective oversight of climate-related risks and opportunities. The Trustee Board holds ultimate responsibility for all scheme-related matters.

Verity Trustees Limited

Trustee Board

Verity Trustees Limited (VTL) provides the trustee services for our Master Trust, which incorporates the funds from our DC and DB Complete pension schemes. The members of the Trustee Board are responsible for keeping our members' benefits safe and making sure the Master Trust is properly run.

Figure 1. Trustee Board composition as at 30 September 2024[1]



[1]The composition of the Trustee Board was updated on 1 October 2024. As of this date, the Board comprises: Joanna Matthews (Chair), Chris Roles (Senior Nominated Director), Thomas Hague, Paul Oldroyd, Dean Waddingham, Dan Jackson, Roger Boulton, Lauren Whitworth and Helen Astle.

2,452* employers

469,143* members

£11.1bn* assets under management

Subcommittees of VTL

Investment Oversight Committee

Responsible for overseeing the performance of TPT Investment Management (TPTIM)[2] and AllianceBernstein, the appointed investment managers for the DB and DC portfolios, respectively.

Audit, Risk and Compliance Committee

Ensures effective internal controls and compliance, oversees the annual audit process, and reviews the annual accounts of the Trusts.

Appeals & Discretions Committee

Reviews appeals at the second stage of the Internal Dispute Resolution Procedure and considers discretionary benefit payments.

Remuneration & Appointments Committee

Approves the overall remuneration strategy for all Trustee Board and Committee members.

Funding Committee

Makes scheme-specific funding and investment decisions for TPT's DB pension schemes and oversees the valuation process for all Trust DB pension schemes.

Member Services Committee

Oversees the services provided by TPT Retirement Solutions (TPT RSL)[3] to members, offering input on service enhancements and agreeing on administration policy as required.

Figure 2. Governance structure

Trustee Board					
Investment Oversight Commitee	Audit, Risk and Compliance Committee	Appeals and Discretions Committee	Renumeration and Appointments Committee	Funding Committee	Member Services Committee

[2]TPTIM is authorised and regulated by the Financial Conduct Authority (FCA) and provides investment management and consultancy services to UK pension schemes. It is a wholly owned subsidiary of TPT RSL. [3]TPT RSL provides pension management and administration services to UK pension schemes. TPT RSL is wholly owned by VTL. *As at September 2024.

Key policies and processes

The Trustee conducts an annual review of policies, and assesses the Trust's response to opportunities and risks that arise from climate change and broader responsible investment considerations. The Trustee believes that its comprehensive approach to ESG helps to identify and mitigate risks whilst potentially enhancing portfolio returns.

The Trustee has:

- developed a range of Responsible Investment Principles that outline the implementation approach to responsible investment and stewardship matters;
- embedded a robust process to ensure that both new and existing investments are managed with due consideration of climate-related risks and opportunities;
- approved the scheme's overall climate-related strategy, which includes integration into investment strategy, scenario analysis, and the use of metrics and targets;
- positioned climate change as a key risk, warranting close attention and regular discussion by the Funding Committee, under the direct supervision of the Trustee Board.

The Trustee addresses issues requiring a group-wide perspective by identifying significant themes for in-depth discussion and managing them within an annual schedule. ESG-related matters are actively explored through dedicated sessions and discussions during regular meetings, ensuring these issues remain a priority.

Training

The Trustee Directors bring considerable experience, expertise and complementary skills to the Trustee Board, providing diverse perspectives. All Trustee Directors are required to complete The Pensions Regulator's Trustee Toolkit and meet the "Fit and Proper" regulatory requirements.

An annual training programme ensures that Trustee Directors maintain appropriate knowledge and understanding. The programme, reviewed regularly by the Trustee Board, is designed to address major developments in the field and to close any knowledge gaps identified through individual or rolling assessments.

Climate training is provided at least once a year. During the year under review, dedicated sessions were held on 20 March 2024 and 12 June 2024, covering climate strategy, progress towards net zero, the Taskforce on Nature-related Financial Disclosures (TNFD) framework and natural capital.

Investment Beliefs and Responsible Investment Principles

The Trustee has established a set of Investment Beliefs to serve as a framework for decision-making and investment strategy. Recognising the importance of the topic, the Trustee has also adopted a set of Responsible Investment Principles. Both the Investment Beliefs and Responsible Investment Principles are reviewed and published annually, forming the foundation of the investment strategy.

Our Investment Beliefs

1. Assets are held to pay benefits and should be invested taking account of the characteristics of these benefits.
2. Risk should only be tolerated to the extent that the Trustee has confidence, where relevant, that the covenant of sponsoring employer(s) is sufficient to meet potential adverse consequences. The investment strategy may take account of the preferences of sponsoring employer(s), including ethical concerns, where these are consistent with risk tolerance and investment beliefs.
3. Asset allocation is a more important determinant of returns than manager or stock selection.
4. The potential to achieve a higher investment return generally requires taking higher risk (uncertainty in future returns). Higher risk assets (e.g. equities) are expected to outperform lower risk assets (government bonds) but are also expected to have higher variability of returns (volatility).
5. Diversification of risk assets, both within and across asset classes, reduces the variability of returns, both in absolute terms and relative to liabilities.
6. The real world is complex; judgement and qualitative research are important alongside quantitative analysis.
7. Illiquid assets, that provide sufficient reward to compensate for illiquidity, may be suitable investments. Sufficient liquidity to meet payments, including in stress scenarios, should be maintained.
8. Market opportunities to deliver returns in excess of an index may exist. However identifying and implementing strategies that consistently deliver excess returns after costs is difficult.
9. Good governance improves the quality of investment decision-making. Transparency is an important enabler for good governance.
10. Responsible investment helps identify and mitigate risks. Responsible investment may also enhance portfolio returns.

Our Responsible Investment Principles

1. VTL aims to act as a good steward toward its stakeholders.
2. VTL views itself as a universal owner; it strives to positively contribute to the debates in the real economy: climate change, fair society, and good governance.
3. ESG factors impact financial performance and create risk and opportunities.
4. Decisions relating to ESG matters should be made on a financial basis with an inclusive view of different ethical beliefs.
5. The Trustee prefers to engage with, rather than exclude, companies or sectors. Our focus is on long-term value creation and tangible real-world outcomes. Exclusion should be considered a last resort, e.g. when it becomes clear that engagement will not work.
6. The Trustee is responsible for the votes cast, even if voting is delegated to third-party investment managers. Therefore, the Trustee needs to appropriately oversee investment managers to assess whether they are voting in a manner consistent with its Voting and Engagement Policy.
7. We value collaboration with other investors and market participants to seek positive outcomes for the assets managed on behalf of our members.
8. VTL's aspiration is that its approach to and implementation of Responsible Investment compares favourably with its peers.
9. Responsible investment is an evolving subject and the Trustee's principles and objectives should be reviewed regularly to ensure that they continue to be consistent with best practices and regulatory requirements.
10. Sufficient resources are required to fulfil the Responsible Investment objectives in the interests of the members.

Strategy

Climate-related risks and opportunities are integrated into the investment decision-making process and embedded within portfolio strategy and stewardship practices.

Risks and opportunities and the impact on investment strategy

We recognise that climate change is a key driver of macroeconomic shifts, impacting all asset classes to varying degrees and on a global scale. These changes create both risks and opportunities, influencing market dynamics, asset valuations, and long-term investment outcomes. Understanding and managing these factors is integral to our investment approach, ensuring resilience and adaptability in an evolving economic landscape.

Key risks

- **Physical risks:** Physical risks arise from the gradual increase in global temperatures and the growing severity and frequency of extreme weather events. Over the longer term, these risks are expected to manifest primarily as natural disasters affecting investee companies and the broader impact of changing temperatures on mortality rates.
- **Transition risks:** Transition risks stem from policy actions and technological innovations aimed at mitigating climate change. These risks are expected to materialise in the short to medium term, with high-emitting economic sectors particularly vulnerable to significant declines in valuation.

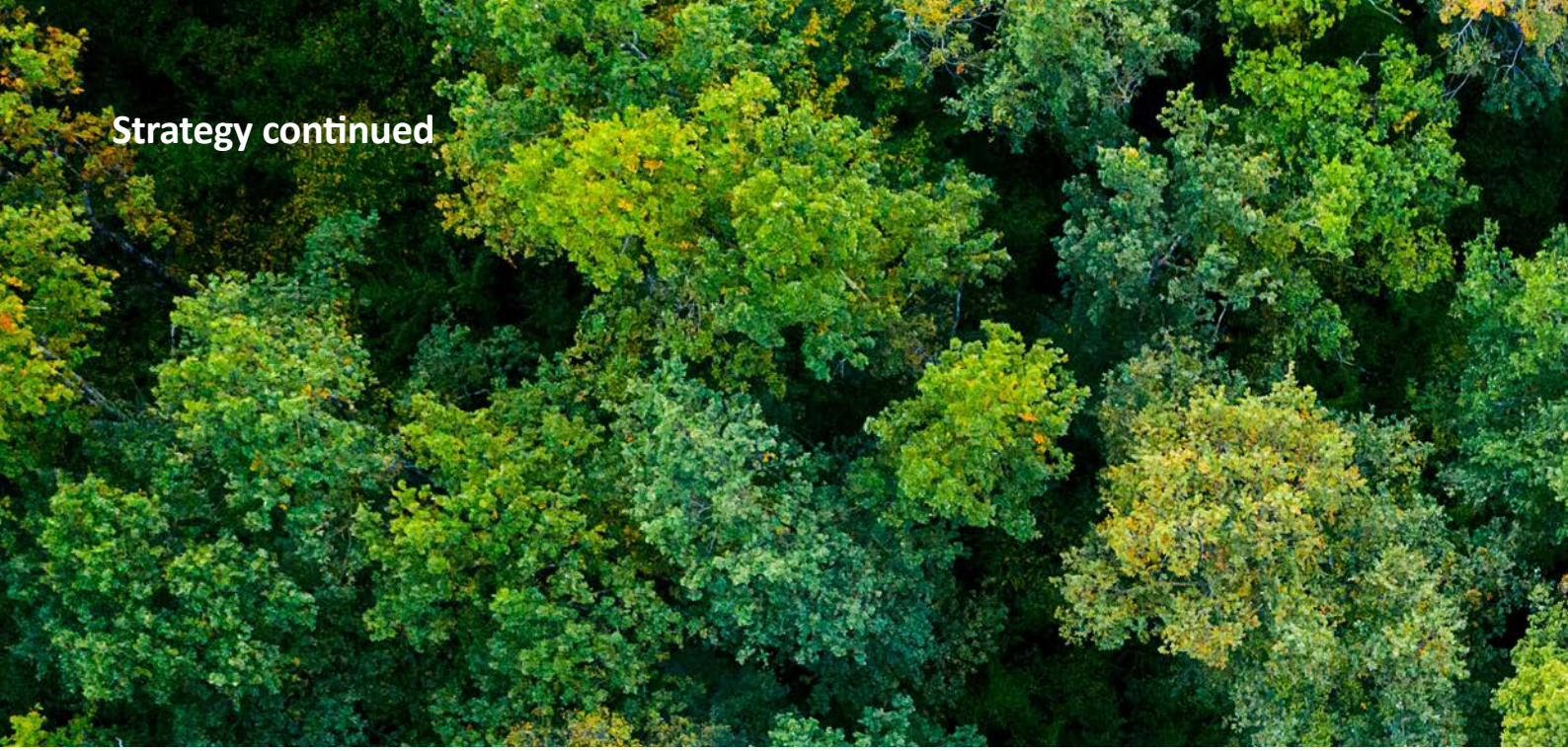
Opportunities

With risks come opportunities. These opportunities are likely to include assets that benefit from the transition to a net zero economy. Examples include renewable energy infrastructure and innovative technologies designed to support the net-zero transition, which will create new avenues for investment.

Table 1 outlines how climate change may influence key asset classes, highlighting the associated risks and opportunities.

Table 1. Transition and physical risks relating to the schemes

Asset Class	Transition Risks	Physical Risk	Opportunities
Listed Equities	High-emitting sectors (e.g. energy, industrials) face declining valuations due to regulatory changes and carbon pricing. Technological disruptions may render some companies' business models obsolete.	Increased frequency of extreme weather events can disrupt supply chains and operations. Rising temperatures may impact workforce productivity and consumer behaviour.	Companies innovating in low-carbon technologies or renewable energy may experience growth. Opportunities in sectors driving decarbonisation, such as clean energy and electric vehicles.
Corporate Fixed Income	Credit risk may increase for issuers in carbon-intensive industries as regulatory costs rise. Stranded assets could affect issuers' ability to service debt.	Physical damages to assets or facilities could impact issuers' operational and financial stability. Weather events could lead to insurance premium hikes, affecting credit ratings.	Green bonds and sustainability-linked debt instruments offer exposure to climate-positive projects. Companies transitioning effectively to low-carbon models may present resilient investment opportunities.
Real Estate	Stricter building regulations and higher energy efficiency standards may increase costs for property developers and owners.	Properties in climate-vulnerable locations face risks from flooding, storms and / or rising sea levels. Increased cooling costs in warmer climates may impact operating expenses.	Investments in green buildings and retrofitting to improve energy efficiency can yield long-term cost savings. Demand for sustainable, climate-resilient properties is likely to grow.
Infrastructure	Fossil fuel-based infrastructure assets may face obsolescence as the energy transition accelerates. Regulatory risks may impact project viability, particularly for high-carbon assets.	Critical infrastructure is vulnerable to damage from extreme weather events, leading to higher maintenance and insurance costs. Water shortages or temperature extremes could disrupt operations.	Infrastructure projects supporting the net zero transition, such as renewable energy, smart grids and public transport systems, offer attractive long-term returns. Investments in climate-resilient infrastructure can mitigate risk and create value.



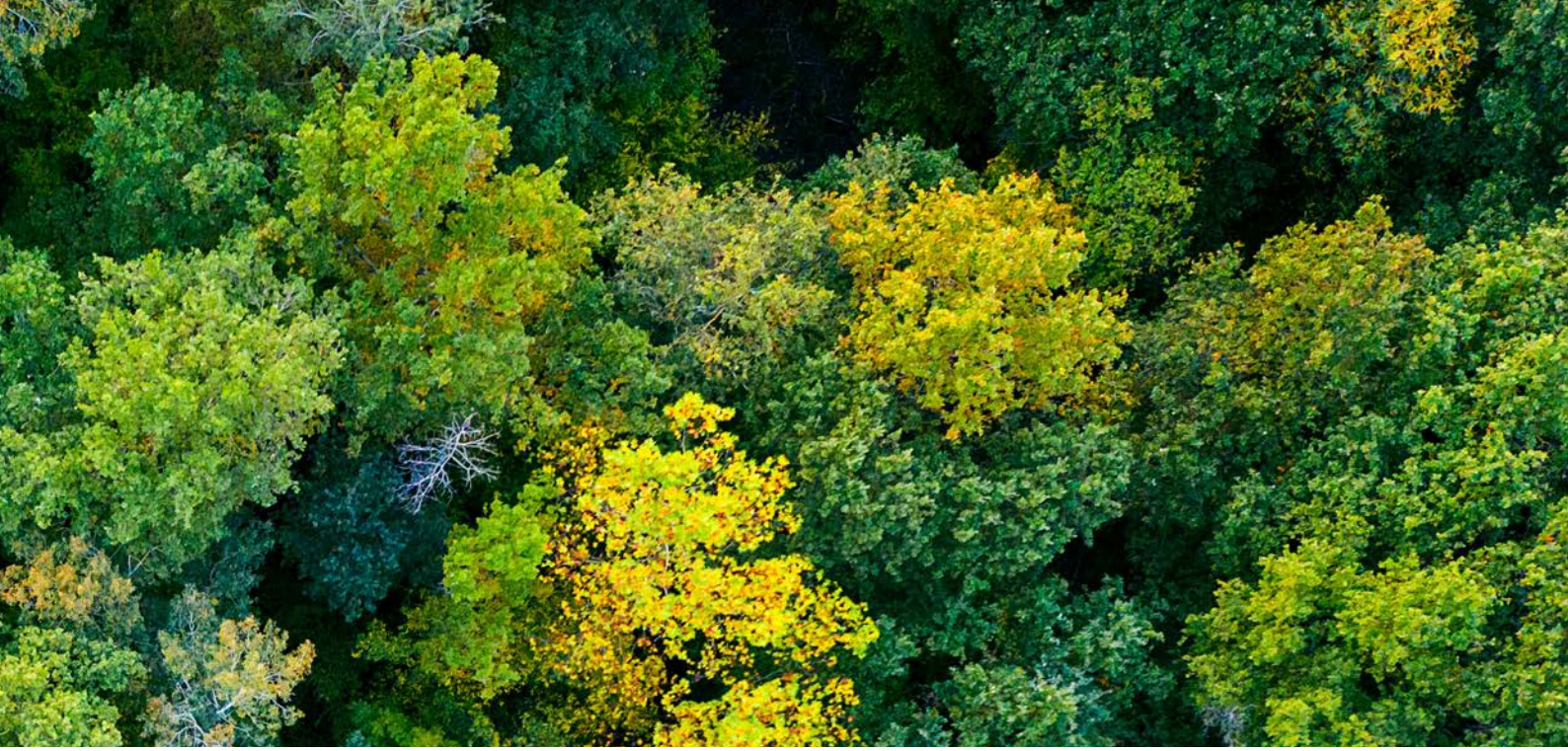
How climate change impacts DB and DC pension schemes

Defined Benefit

DB pension schemes must meet the statutory funding objective, ensuring the Trust holds sufficient assets to pay members' pension benefits. A scheme's funding position is assessed by comparing the market value of its assets with the present value of its liabilities. This is typically expressed either as a funding ratio (the ratio of assets to liabilities) or as a deficit or surplus (the difference between assets and liabilities). The Scheme Actuary determines the assumptions used to calculate the value of the liabilities.

Climate change can affect DB pension schemes in several ways, including:

- **investment returns:** Climate-related risks can influence the returns achieved by scheme assets, particularly in sectors exposed to transition or physical risks. Asset valuations could shift as some industries face increased costs or obsolescence, while others benefit from the transition to a low-carbon economy.
- **mortality assumptions:** Changing environmental factors, such as rising temperatures or increased extreme weather events, could alter life expectancy assumptions, impacting future liabilities.
- **employer covenant:** Climate change may affect the financial stability of sponsoring employers, particularly those in high-risk sectors. This could influence the strength of the covenant and the employer's ability to meet its pension obligations.
- **regulatory risks:** New climate-related regulations, such as mandatory carbon disclosure or carbon pricing, could increase operational costs or impact investment strategies. Failure to comply with these regulations could lead to higher liabilities or additional costs.
- **inflation and liability hedging:** Climate change-related disruptions, such as increased extreme weather events or resource shortages, could exacerbate inflationary pressures. These factors may impact inflation-linked bonds and other hedging assets, altering the scheme's liability projections and funding position.
- **long-term sustainability:** The long-term effects of climate change could lead to irreversible environmental and economic shifts, impacting the sustainability of pension schemes. These changes could affect the assumptions underlying the scheme's long-term liabilities, particularly for schemes with obligations extending over many decades.



Liabilities – covenant analysis

Employer covenant represents one of the primary risks faced by DB pension schemes and is among the most challenging to mitigate. The modelling of climate risks for employer covenants is still in its infancy, with progress largely dependent on the availability and quality of data, which is often limited.

The Trustee's Covenant Team continuously monitors the strength of sponsors' ability to meet their funding obligations, intervening and engaging with sponsors if any issues arise between formal covenant assessments.

Given the large number of individual schemes within the Trust, the Trustee's approach to climate change covenant reviews is sector-based. This involves assessing the potential impact of climate change on a sponsor's ability to fulfil its obligations, taking into account macroeconomic conditions, regulatory developments, and supply chain dynamics.

Liabilities – mortality analysis

Changes in mortality assumptions can significantly impact the liabilities of UK DB pension schemes. Climate change introduces both direct and indirect effects on mortality, although these are inherently difficult to forecast.

- **Direct impacts:** These involve the immediate effects of climate change, such as rising temperatures potentially increasing mortality rates, thereby influencing longevity assumptions.
- **Indirect impacts:** These encompass secondary effects, such as disruptions to water supplies, which could indirectly affect mortality.

Quantifying the scale and timing of these impacts, particularly indirect effects, remains challenging. As a result, we currently consider changes to mortality rates qualitatively. However, we are committed to incorporating quantitative analysis as the quality and availability of relevant data improve. This area remains under review by the Trustee.

Defined Contribution

DC pension schemes must invest members' contributions effectively to build a retirement pot of sufficient size to support them through retirement.

Climate change can affect DC schemes in the following ways.

- **investment returns:** Climate change can impact asset valuations, particularly in high-emitting sectors. This may lead to negative investment returns in certain assets, especially in the short to medium term, as some industries face regulatory pressures or physical risks that undermine profitability.
- **Member behaviour:** There is a growing trend of members seeking to invest in more sustainable or climate-friendly assets. This shift may impact the allocation of funds within the scheme, leading to increased demand for ESG or low-carbon investment options.
- **Regulatory and legal risks:** New regulations requiring DC schemes to consider climate-related risks in their investment choices may lead to a reassessment of investment strategies. Failure to adapt could result in legal and reputational risks for pension providers.
- **Long-term value creation:** As with DB schemes, DC schemes must consider long-term sustainability. The transition to a net-zero economy presents both challenges and opportunities for investment. Schemes that adopt forward-thinking investment strategies aligned with sustainability goals may create better value for members over time.

In both DB and DC schemes, the growing importance of climate-related risks and opportunities calls for strategic adjustments. These may include changes to investment strategies, incorporating ESG criteria, reassessing liabilities, and ensuring that schemes remain resilient in the face of evolving environmental and regulatory landscapes.

Climate scenario analysis

In 2022, we appointed Ortec Finance to provide advice on how climate-related risks may affect the Scheme's assets and liabilities under different climate scenarios at future dates. This was the first quantitative climate scenario analysis conducted on VTL's assets.

Under the TCFD Regulations, scenario analysis must be carried out during the first scheme year in which the Trustee is subject to the requirements of the Regulations, and every third scheme year thereafter. In the scheme years when scenario analysis is not mandated, trustees are required to review the most recent scenario analysis and assess whether a new analysis should be conducted to ensure they maintain an up-to-date understanding of the factors they are required to consider under the Regulations.

Following the completion of scenario analysis and its reporting in the 2022 report, and with no material changes in the investment or funding strategy, nor new data available, the Trustee decided not to undertake a new climate scenario analysis in 2024. Given the significance of this matter to the Trustee and in line with regulatory requirements, the Trustee will review annually whether new scenario analysis is necessary.

In the following section, we provide a summary of the climate scenario analysis conducted in 2022. The full analysis can be found in our 2022 TCFD report, available on our website (pages 10-21).

2022 Climate scenario analysis

In 2022, we conducted a climate scenario analysis to stress-test the Trust's DB and DC portfolios against climate-related risks. Our baseline scenario, referred to as the climate-uninformed baseline, assumed that all existing policies and historical physical impacts were priced into markets, but no future physical risks were considered.

Climate scenarios and time horizons

The Trustee selected specific climate scenarios and adopted time horizons to evaluate the impact of climate-related risks and opportunities across both DB and DC schemes. These climate scenarios and time horizons are outlined below.

Orderly Net Zero by 2050	Disorderly Net Zero by 2050	Failed Transition
– Orderly transition, 2°C or lower scenario – Emission reductions start now and continue in line with the Paris Agreement	– Disorderly transition, 2°C or lower scenario – Little climate action in the short term, followed by sudden unanticipated tightening in 2025 as countries rush to get on track	– Failed transition, pathway to 4+°C scenario – Continuation of historic emission trends and failure to transition away from fossil fuels

Table 2. Time horizons

Time horizon	Years	Reason
Short term	10 years	Transition risks are expected to materialise over this period.
Medium term	20 years	Reflects anticipated market repricing dynamics, with significant changes expected in the 2030s.
Long term	40 years	Aligns with the typical duration of a member's investment journey, encompassing the long-term physical risks of climate change.

Resilience of investments and funding strategy

DB schemes

The Trust encompasses over 50 DB schemes, including multi-employer arrangements, resulting in a large and diverse set of underlying sponsoring employers. The 2022 analysis assessed funding levels on a scheme-specific basis, with aggregate commentary provided in the report. Across all scenarios, downside risks to expected returns were observed when compared to the climate-uninformed baseline. However, the magnitude of these risks varied across time horizons and scenarios.

To capture the nuances of climate risks, we analysed the DB portfolio's return-seeking assets across two sub-portfolios:

– **Growth Assets Portfolio:** Aimed at delivering equity-like returns above liabilities.

– **Matching-Plus Portfolio:** Focused on providing predictable returns through investment-grade assets.

The failed transition scenario presented the greatest downside risk, particularly for the Growth Assets Portfolio, which showed higher vulnerability to climate impacts compared to the more stable Matching-Plus Portfolio.

Strategy continued

DC schemes

For DC schemes, where the risk of insufficient retirement income lies with individual members, climate scenario analysis focused on four Target Date Fund (TDF) vintages representing members' investment journey:

1. At retirement
2. Pre-retirement
3. Mid-life
4. Young

Each vintage demonstrated different climate-change impacts due to varying asset allocations. For instance, the young vintage, with its higher equity allocation, exhibited the greatest vulnerability to climate risks, particularly under the failed transition scenario. In contrast, the long-term orderly transition scenario emerged as the most favourable, minimising negative impacts on members' pension pots.

Key assumptions and limitations

Assumptions

- Asset projections were based on a gilts plus outperformance framework using best-estimate returns adjusted annually with Ortec Finance data.
- Liability projections were derived from the Trust's long-term funding target or a gilts flat basis, depending on the scenario.
- No liabilities were assumed to change due to interest rates or inflation, with qualitative adjustments for covenant strength and mortality rates.
- Asset mapping to Ortec benchmarks involved certain assumptions, potentially introducing mapping inaccuracies.

Limitations

- The analysis relied on third-party data, including member and liability information, limiting accuracy and completeness.
- Projections were based on PFaroe software and market conditions at the calculation date, subject to inherent limitations.
- Climate scenario modelling, being nascent, carries significant uncertainty, particularly in capturing interactions between climate, macroeconomic and financial factors.
- Physical tipping points were not incorporated, potentially underestimating long-term physical risks.
- The climate-uninformed baseline does not fully reflect real-world conditions, as it is difficult to determine the extent to which markets have already priced in climate impacts.

Net zero investment strategy

Climate considerations are integrated into the investment strategy. This includes adapting asset allocation, refining portfolio construction and implementing a robust stewardship approach supported by strong voting and engagement policies.

Manager selection and oversight

Both TPTIM and AllianceBernstein require prospective investment managers to demonstrate strong responsible investment capabilities and expertise in managing climate-related risks and opportunities. ESG and climate considerations are fully integrated into operational due diligence and ongoing monitoring processes to ensure alignment with the Trustee's priorities.

Asset allocation

Green infrastructure and renewable energy play a central role in our asset allocation approach. We are committed to increasing investment in climate solutions to at least 6% of return-seeking assets by 2030. Since 2016, we have made dedicated allocations to renewable energy generation and supporting technologies, reinforcing our commitment to the low-carbon transition.

Screening

Our Climate Policy explicitly states that investments in thermal coal, oil sands, and Arctic drilling activities are misaligned with a net zero ambition. In 2024, the policy was updated to further clarify our position on fossil fuel investments and to strengthen the requirements placed on investment managers, ensuring they implement robust climate guidelines and stewardship policies in line with net zero objectives.

Tilting

As part of our transition strategy, in 2021 we reallocated our passive equity investments into a Low Carbon Transition Global Equity Fund. This climate-tilted approach led to an approximate 79% reduction in absolute portfolio emissions from the equity portfolio between 2019 and 2021.

Stewardship

We believe that real-world decarbonisation should be the primary driver of emissions reductions within our portfolio. Active ownership is therefore a critical component of our net zero strategy. We use engagement and voting tools to influence corporate behaviour and align our investments with climate objectives.

Selecting and monitoring managers

For DB investments, VTL delegates investment decisions to TPTIM. For DC investments, VTL delegates investment decisions to AllianceBernstein. Both TPTIM and AllianceBernstein, in turn, delegate day-to-day investment management to authorised asset managers. The selection and ongoing monitoring of these managers are key to ensuring alignment with VTL's climate commitments.

Manager selection

When selecting asset managers, TPTIM and AllianceBernstein assess their expertise in addressing climate-related financial risks and opportunities. Key considerations include:

- climate integration: Evidence of integrating climate-related risks and opportunities into the investment decision-making process;
- alignment with net-zero objectives: Commitment to net-zero targets and active participation in relevant industry initiatives, such as the Net Zero Asset Managers initiative;
- engagement and stewardship: A demonstrated track record of engaging with investee companies on material climate-related issues and using voting rights to drive meaningful change;
- disclosure and transparency: Comprehensive and regular reporting on climate metrics, including carbon emissions, temperature alignment and scenario analysis.

As part of the due diligence process, TPTIM and AllianceBernstein also evaluate managers' governance structures, investment processes and alignment with our Responsible Investment Framework.

Manager monitoring

TPTIM and AllianceBernstein conduct regular reviews to ensure appointed managers continue to meet our expectations on climate-related issues.

- Annual assessments: Reviewing managers' climate performance, including progress against net-zero targets, emissions reductions, and other relevant metrics.
- Engagement outcomes: Evaluating the effectiveness of managers' engagement activities with investee companies, particularly in addressing climate transition risks.
- Policy updates: Monitoring any updates to managers' climate policies or strategic commitments.

TPTIM and AllianceBernstein engage with them to address any gaps. In cases of persistent underperformance or misalignment with our climate strategy, they may reassess the relationship and consider alternative options.

Active ownership

The Trustee implements its voting and engagement policies through the delegation of stewardship responsibilities to its investment managers. These managers are expected to exercise voting rights and engage with investee companies in line with the Trustee's Responsible Investment Framework and the policies set out in the SIPs.

Voting

Investment managers are required to cast votes on behalf of the Trustee in a manner that supports long-term value creation and reflects the Trustee's commitment to high standards of corporate governance. Key priorities include:

- promoting transparency and accountability in governance practices;
- supporting robust climate and ESG disclosures in line with recognised frameworks;
- encouraging companies to adopt credible net-zero strategies; and
- opposing practices misaligned with shareholder or stakeholder interests, such as excessive executive remuneration.

The Trustee monitors voting outcomes through detailed quarterly reporting from investment managers, which includes information on significant votes and the rationale behind voting decisions.

Engagement

Engagement is central to the Trustee's stewardship approach. Investment managers are expected to engage with investee companies on a range of material ESG issues, including:

- climate change and net-zero alignment;
- board diversity and governance practices;
- human capital management and supply chain risks; and
- biodiversity and nature-related risks.

Managers are required to report on their engagement activities, providing details on the objectives, progress and outcomes.

Collaborative action

VTL recognises that, as a responsible asset owner, it has a role in supporting initiatives that enhance the regulatory and operational environment for all investors. To advance this goal, TPTIM and AllianceBernstein, on behalf of VTL, will engage in collaborative initiatives with other asset owners and industry groups, ensuring alignment with VTL's Investment Beliefs and Responsible Investment Framework.

In the area of climate action, these initiatives include the Institutional Investors Group on Climate Change (IIGCC), Climate Action 100+ and the Investor Policy Dialogue on Deforestation (IPDD).

VTL is a signatory to the Principles for Responsible Investment (PRI) and the UK Stewardship Code. It is also a member of Pensions for Purpose and the Paris-Aligned Asset Owners Group (PAAO).

Monitoring and oversight

TPTIM and AllianceBernstein ensure that investment managers apply effective voting and engagement policies through:

- regular review of manager stewardship reports, which outline voting records, significant engagements, and progress against ESG objectives;
- annual assessments of managers' Responsible Investement Ratings, which include an evaluation of their voting and engagement practices; and
- periodic deep-dive discussions with managers to challenge their approaches and ensure alignment with the Trustee's expectations.

If concerns arise regarding a manager's voting or engagement performance, TPTIM and AllianceBernstein will engage with them to drive improvements. Persistent failure to meet expectations may result in a reassessment of their appointment.

Risk Managenent

Climate-related risks present unique challenges. These risks are systematically identified, managed and integrated into our Risk Management Framework to ensure robust oversight and mitigation.

Risk Management Framework

The Trust employs a comprehensive Risk Management Framework, underpinned by policies, processes and controls, to identify, manage, monitor and report risks effectively. Climate-related risks are embedded within this Framework.

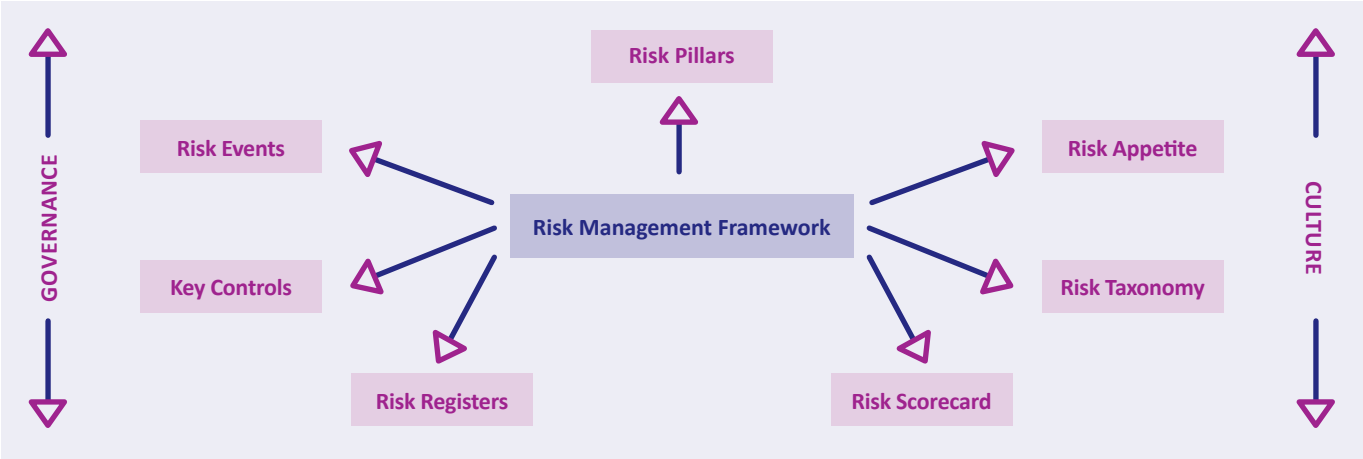
The Framework provides a systematic approach to identifying, assessing and mitigating risks. It is supported by key enablers, including:

- **Risk horizon scanning** – Proactively monitoring potential risks across short, medium, and long-term horizons.
- **Change management risk assessment** – Capturing new risks arising from projects, processes or structural changes.
- **Risk management information (RMI) and reporting** – Delivering insights to stakeholders using thematic, trend and root cause analyses.
- **Training and education** – Ensuring comprehensive understanding of risk principles through tailored training programmes.

Several mechanisms are in place to ensure a proactive approach.

- **Risk appetite metrics and key risk indicators:** Used to monitor exposure and ensure risks remain within defined tolerance levels.
- **Remedial action plans:** Developed and implemented when risks exceed appetite, ensuring swift resolution and ongoing alignment with strategic objectives.
- **Risk hierarchy:** A structured approach that identifies and manages risks from principal strategic risks to process-level risks, ensuring comprehensive coverage across the organisation.

Figure 3. Investment Risk Framework



Climate-related risk management

As part of its approach to responsible investment, the Trustee considers a range of ESG risks, including corporate governance, human rights, bribery and corruption, as well as labour and environmental standards. Of the environmental and social issues that we consider, we believe that climate change presents a material financial risk to the assets held in our portfolios.

The Trustee has developed an approach to ensure that climate change risk, including physical and transition risks, is explicitly considered through the investment process.

The Trustee's approach to climate change is set out in its Climate Change Policy, which include its commitments towards net zero.

Climate considerations are integrated into the broader Risk Management Framework, leveraging tools such as risk registers, scenario analysis and external benchmarking.

Key processes include:

- **sponsor covenant assessments:** Climate-related risks, including their impact on physical assets and transitional dynamics, are considered in evaluating sponsor strength and funding risk;
- **governance oversight:** Regular monitoring and reporting of climate risks through the Risk Committee, the Executive Board, and ultimately the Audit, Risk, and Compliance Committee; and
- **investment concentration risk:** Climate-related risks are integrated into the Trustee's oversight of sector, regional and asset exposures to mitigate adverse impacts on investment returns.

Where climate risks pose regulatory or reputational concerns, these are proactively managed to ensure compliance with the Trustee's SIPs, Investment Beliefs and Responsible Investment Principles.

The Trustee incorporates climate-related risk management across its portfolio through:

- **Climate Change Policy, Responsible Investment Framework and Responsible Investment Principles:** These are reviewed annually to ensure alignment with evolving risks and opportunities;
- **manager assessments:** External managers are evaluated by TPTIM and AllianceBernstein on their climate integration, investment performance and alignment with the Trustee's responsible investment strategy; and
- **stakeholder communication:** The SIPs and Implementation Statements are reviewed annually and communicated transparently to members, reflecting the Trustee's commitment to stewardship and responsible investment.

This integrated approach ensures consistency across the Risk Management Framework, applying the same rigour to climate-related risks as to other key risk categories.

Metrics and targets

Climate metrics are key to understanding and managing climate-related risks and opportunities. The integration of climate data informs our strategic decisions and guides the actions needed to achieve our objectives.

Metrics for assessing climate risks and opportunities

In line with DWP regulations, occupational pension schemes subject to TCFD reporting requirements must disclose four key climate metrics. These provide insights into the carbon profile of the investment portfolio and support the identification of climate-related risks and opportunities.

- **Absolute emissions metric:** Measures the total greenhouse gas (GHG) emissions generated by the portfolio.
- **Emission intensity metric:** Assesses emissions relative to a financial measure, providing context for carbon output.
- **Additional climate metric:** Focuses on a non-emission factor, which in our case is data quality score.
- **Portfolio alignment metric:** Evaluates the alignment of investments with global climate goals, including the Paris Agreement target of limiting warming to 1.5°C above pre-industrial levels.

Scopes 1, 2, and 3 emissions

The Trustee considers GHG emissions across scopes 1, 2, and 3.

Scope 1	Scope 2	Scope 3
Direct emissions from owned or controlled sources.	Indirect emissions from the generation of purchased electricity, heating, and cooling.	All other indirect emissions occurring across the value chain, including supply chain and end-use activities.

The inclusion of scope 3 emissions provides a more comprehensive view of the Trust's carbon footprint, recognising the significant contribution of value chain activities. However, scope 3 emissions are inherently difficult to capture fully, with data availability and quality remaining limited.

The Trust's climate metrics

Scope and asset classes

The climate metrics presented in this report cover the following asset classes.

- Listed equity
- Corporate fixed income
- Real estate
- Infrastructure

Infrastructure was included in the previous report following engagement with investment managers to enhance data collection. Given the Trust's exposure to this asset class, it was prioritised. As data quality improves, we aim to extend our metrics to additional asset classes.

Methodology and rationale

The Trust follows the methodology developed by the Partnership for Carbon Accounting Financials (PCAF). PCAF provides an industry-standard framework for measuring and disclosing the GHG emissions financed by investments.

Data collection and metrics

- For **listed equity** and **corporate fixed income**, emissions data were sourced via **MSCI**.
- For **real estate** and **infrastructure**, data were provided by **investment managers**.

Table 3 outlines the key climate metrics used, along with their descriptions, calculation methods and rationale.

Metrics and targets continued

Table 3. Chosen climate metrics

TCFD Metric	Chosen metric	Description and calculation	Rationale
Absolute carbon emissions	Absolute carbon emissions **(tCO2e)**	The total GHG emissions attributable to a portfolio. Measured in tCO2e. **Calculation*:** Value of investment / Total enterprise value x Company emissions *In line with PCAF	Helps to track emissions reduction. Emissions reductions in our investment portfolio should primarily be achieved through a reduction in absolute emissions from the companies and assets in which we invest, rather than by avoiding or divesting from certain geographies, sectors, or companies.
Carbon intensity	Carbon footprint (tCO2e/£m invested) for corporate assets and infrastructure	Total carbon emissions for a portfolio normalised by an appropriate factor related to the portfolio. **Calculation*:** Absolute emissions / Current portfolio value *In line with PCAF	Measuring emission intensity is important to help understand the portfolio's emission composition. Carbon intensity can enable comparison between portfolios of different sizes and time horizons.
	Carbon intensity **(kg/CO2e/m2)** for real estate assets	Total carbon emissions for a portfolio normalised by an appropriate factor related to the portfolio. **Calculation:** Absolute emissions / Area in m^2	
Additional climate metric	Data quality	PCAF-aligned data quality scores, which indicate how accurate a footprint is. Data quality score 1 indicates the highest quality, while data quality score 5 represents the lowest. The criteria for data quality scores are specific to the individual asset. Detailed information can be found in the PCAF Global GHG Standard. Metric provided by MSCI.	Carbon data is still quite nascent and there are issues around quality and transparency. It is, therefore, important to understand the quality of the data within our portfolio and what proportion of our assets our carbon metrics relate to.
Portfolio alignment metric	Implied temperature rise (ITR) for corporate assets and real estate	Temperature alignment based on the cumulative emissions of the investment portfolio with global temperature goals in degrees Celsius. Metric provided by MSCI.	Considers companies' transition plans and is an intuitive, forward-looking metric. This metric allows investors to assess compliance with globally agreed temperature thresholds, as set in the Paris Agreement.
	Net zero objective for infrastructure	Proportion of AUM with a net zero objective. Metric provided by investment managers.	Considers the climate commitments of assets, specifically whether the asset has a net zero objective. ITR is not available for our infrastructure assets and thus the choice of this metric.

Challenges with data quality and coverage

While the availability and quality of carbon data continue to improve, challenges remain, particularly for scope 3 emissions, which were reported for the first time last year. While scope 1 and 2 emissions data are generally more accessible for public asset classes, scope 3 emissions- often the largest contributor to a portfolio's carbon footprint- are less consistently disclosed.

The availability and quality of data also vary across asset classes, geographies and sectors. Currently, the reported metrics cover only a portion of the Trust's DB and DC portfolios. The Trustee, through TPTIM and AllianceBernstein, is working closely with partners and service providers to enhance the accuracy and consistency of these metrics, which may result in periodic adjustments.

Greenhouse gas summary

DEFINED BENEFIT

Listed equity and corporate fixed income (as at 30 September 2024)

AUM	Absolute Emissions (tCO2e)	Emission Intensity (tCO2e/ £m invested)	% AUM with
Total AUM in scope **£1.35bn**	Financed emissions (scope 1) **22.54bn**	Emissions intensity (scope 1) **22.90**	GHG targets **69.43%**
With scope 1 and 2 **£989.31m**	Financed emissions (scope 2) **6.74bn**	Emissions intensity (scope 2) **6.82**	SBTi targets **30.21%**
With scope 3 **£823.17m**	Financed emissions (scope 1 and 2) **29.28bn**	Emissions intensity (scope 1 and 2) **29.60**	
	Financed emissions (scope 3) **278.41bn**	Emissions intensity (scope 3) **338.22**	

Table 4. Portfolio implied temperature rise

Implied temperature rise (° Celsius)	Temperature category	Temperature range	% Companies (ISIN)	% AUM
2.74	1.5 °C aligned	=< 1.5 °C	19.01%	25.55%
	2 °C aligned	=< 2 °C and > 1.5 °C	25.29%	25.35%
	Misaligned	=< 3.2 °C and > 2 °C	29.98%	26.66%
	Strongly misaligned	> 3.2 °C	17.65%	9.22%
	N/A	N/A	8.07%	13.22%

As of 30 September 2024, the financed emissions associated with the DB portfolio for listed equity and corporate fixed income are detailed across scopes 1, 2, and 3. Financed emissions for scope 1 and scope 2 amount to 29.28bn tCO2e, with an overall emissions intensity of 29.60 tCO2e/£m invested. Scope 3 emissions, which account for indirect value chain emissions, contribute significantly to the total, with financed emissions reaching 278.41bn tCO2e and an emissions intensity of 338.22 tCO2e/£m invested. 69.43% of the AUM is linked to companies that have GHG targets.

The portfolio's implied temperature rise stands at 2.74°C. 25.55% of AUM is associated with companies aligned with a 1.5°C pathway, while 25.25% falls within the 2°C-aligned range. 26.66% is currently classified as misaligned, with an implied temperature rise between 2°C and 3.2°C. Additionally, 9.22% of AUM is strongly misaligned, exceeding a 3.2°C trajectory, underscoring the need for continued engagement and strategic action to reduce transition risks and drive emissions reductions within the portfolio.

DEFINED BENEFIT

Real estate (as at 31 December 2023)

AUM	Absolute Emissions (tCO2e)	Emissions intensity (kgCO2e/£m2)	Implied temperature rise °C
Total AUM in scope **707.8m**	Financed emissions (scope 1) **50.5**	Emissions intensity (scope 1) **0.2**	**2.4**
	Financed emissions (scope 2 location-based) **29.6**	Emissions intensity (scope 2 location-based) **0.1**	
	Financed emissions (scope 2 market-based)[4] **0.0**	Emissions intensity (scope 1 and 2) **0.4**	
	Financed emissions (scope 3 tenant – scaled up to owned area) **16,028.6**	Emissions intensity (scope 3 tenant – scaled up to owned area) **77.6**	
	Financed emissions (total – inc. proxy data) **17,262.4**	Emissions intensity (total – inc. proxy data) **72.5**	

As of 31 December 2023, the DB real estate portfolio's direct (scope 1) financed emissions are 50.5 tCO2e, with an emissions intensity of 0.2 kgCO2e/m². Location-based scope 2 emissions amount to 29.6 tCO2e. The combined emissions intensity for scope 1 and 2 is 0.4 kgCO2e/m², reflecting relatively low operational emissions. However, tenant-related emissions (scope 3) represent the most significant contribution, with financed emissions reaching 16,028.6 tCO2e and an emissions intensity of 77.6 kgCO2e/m². When incorporating proxy data, total financed emissions rise to 17,262.4 tCO2e, with an overall emissions intensity of 72.5 kgCO2e/m².

The real estate portfolio's implied temperature rise is 2.4°C, indicating a moderate misalignment with a 1.5°C pathway. While operational emissions are relatively low, the high proportion of tenant-related scope 3 emissions underscores the importance of engagement with occupiers, improvements in energy efficiency, and further decarbonisation efforts to align the portfolio with net zero.

[4]Scope 2 (market-based) is shown for information only; total emissions uses location-based data.

Metrics and targets continued

DEFINED BENEFIT

Infrastructure (as at 30 September 2024)

AUM	Absolute Emissions (tCO2e)	Emission Intensity (tCO2e/ £m invested)	% AUM with
Total AUM in scope **£488.43m**	Financed emissions (scope 1) **69.13bn**	Emissions intensity (scope 1) **141.53**	Net zero targets **82.59%**
	Financed emissions (scope 2) **6.55bn**	Emissions intensity (scope 2) **13.78**	SBTi targets **38.43%**
	Financed emissions (scope 1 and 2) **75.68bn**	Emissions intensity (scope 1 and 2) **154.95**	
	Financed emissions (scope 3) **301.67bn**	Emissions intensity (scope 3) **617.62**	

As of 30 September 2024, the DB infrastructure portfolio's combined scope 1 and 2 emissions amount to 75.68bn tCO2e, with an overall emissions intensity of 154.95 tCO2e/£m invested. Scope 3 emissions, which include indirect emissions from the value chain, represent the largest component, with financed emissions reaching 301.67bn tCO2e and an emissions intensity of 617.62 tCO2e/£m invested. Despite these emissions, 82.59% of AUM is associated with assets that have set net zero targets, while 38.43% of AUM is linked to assets with targets validated by the Science Based Targets initiative (SBTi).

DEFINED CONTRIBUTION

Listed equity and corporate fixed income (as at 30 September 2024)

AUM	Absolute Emissions (tCO2e)	Emissions intensity (tCO2e/£m invested)	% AUM with
Total AUM in scope **£3.10bn**	Financed emissions (scope 1) **78.13bn**	Emissions intensity (scope 1) **26.15**	SBTi targets **44.40%**
With scope 1 and 2 **£2.99bn**	Financed emissions (scope 2) **28.95bn**	Emissions intensity (scope 2) **9.69**	
With scope 3 **£2.31bn**	Financed emissions (scope 1 and 2) **107.09bn**	Emissions intensity (scope 1 and 2) **35.84**	
	Financed emissions (scope 3) **1.00t**	Emissions intensity (scope 3) **434.57**	

Table 5. Portfolio implied temperature rise

Implied temperature rise (° Celsius)	Temperature category	Temperature range	% Companies (ISIN)	% AUM
2.50	1.5 °C aligned	=< 1.5 °C	21.09%	31.98%
	2 °C aligned	=< 2 °C and > 1.5 °C	29.51%	25.59%
	Misaligned	=< 3.2 °C and > 2 °C	31.65%	26.37%
	Strongly misaligned	> 3.2 °C	15.22%	12.23%
	N/A	N/A	2.53%	3.83%

As of 30 September 2024, financed emissions for scope 1 in relation to the DC portfolio for listed equity and corporate fixed income amount to 78.13bn tCO2e, with an emissions intensity of 26.15 tCO2e/£m invested. Scope 2 emissions contribute a further 28.95bn tCO2e, leading to a combined scope 1 and 2 emissions total of 107.09bn tCO2e and an intensity of 35.84 tCO2e/£m invested. Scope 3 emissions, which encompass value chain emissions, are a significant factor, with financed emissions recorded at 1.00t and an emissions intensity of 434.57 tCO2e/£m invested. In terms of climate commitments, 44.40% of AUM is linked to companies with SBTi commitments, reflecting progress towards alignment with net zero goals.

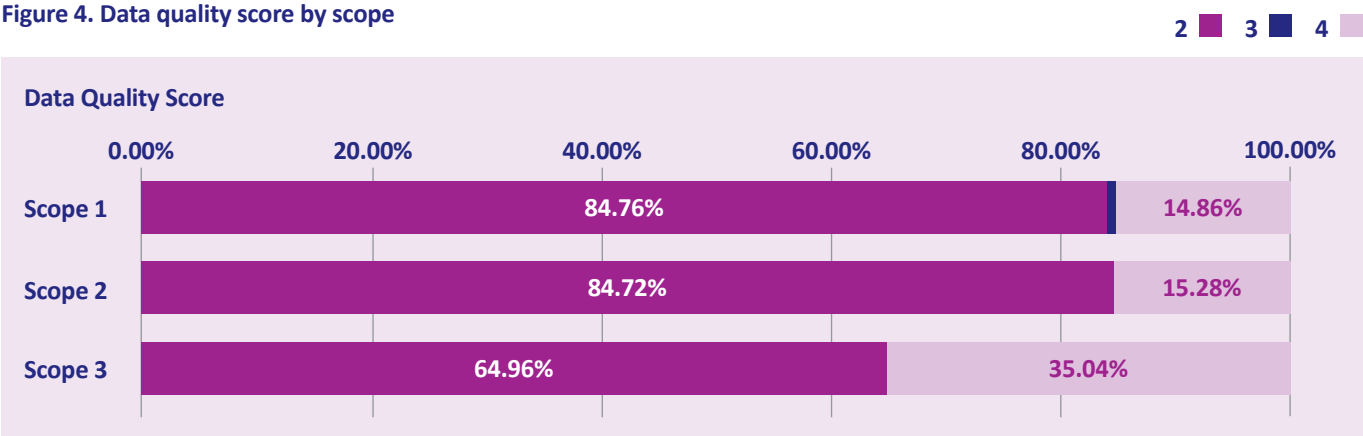
The portfolio's implied temperature rise is 2.50°C, indicating a moderate misalignment with the Paris Agreement's 1.5°C target. While 31.98% of AUM is associated with companies aligned with a 1.5°C pathway, 26.37% remains in the misaligned category, with an implied temperature rise between 2°C and 3.2°C. Additionally, 12.23% of AUM is linked to strongly misaligned companies exceeding a 3.2°C trajectory. These findings highlight the importance of ongoing stewardship efforts to drive emissions reductions and further climate alignment within the portfolio.

Data quality scores

DEFINED BENEFIT

Listed equity and corporate fixed income

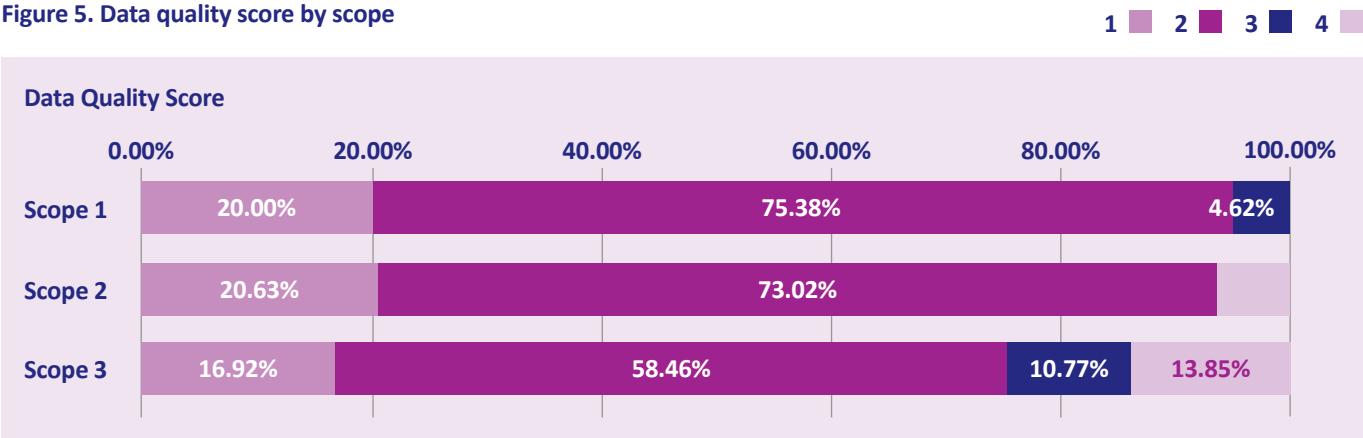
Figure 4. Data quality score by scope



DEFINED BENEFIT

Infrastructure

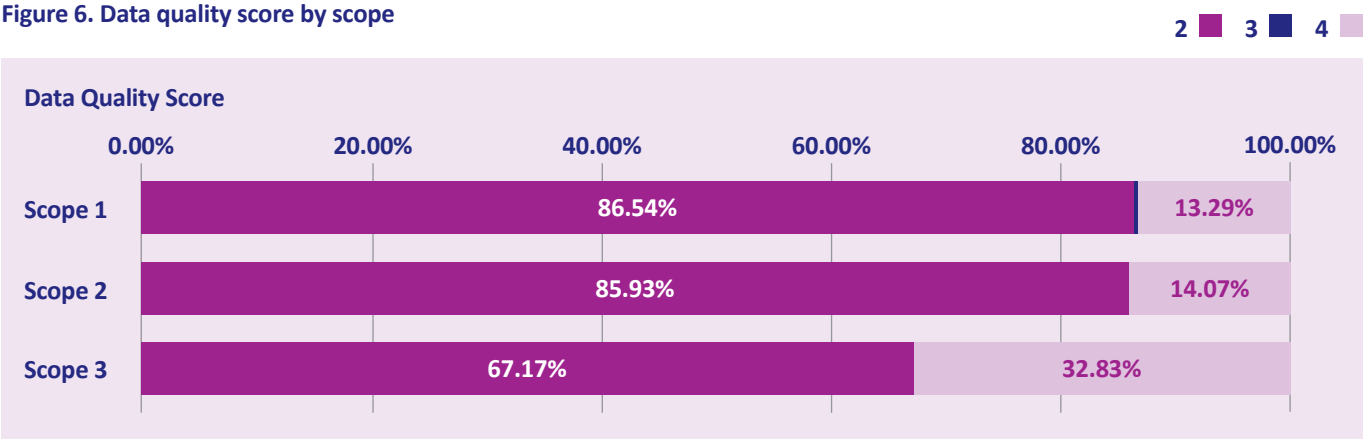
Figure 5. Data quality score by scope



DEFINED CONTRIBUTION

Listed equity and corporate fixed income

Figure 6. Data quality score by scope



Data quality scores provide an assessment of the reliability and accuracy of emissions data used in portfolio analysis. The data quality assessment for listed equity and corporate fixed income within the DB portfolio indicates a relatively strong level of data availability for scope 1 and scope 2 emissions, with a high proportion of reliable, reported data. However, scope 3 emissions continue to present a challenge, with a significant portion of lower-quality data, reflecting the ongoing difficulty in obtaining comprehensive value chain emissions reporting.

For infrastructure, the data quality scores are mostly 1 and 2, reflecting a high degree of reliance on reported emissions data and limited use of estimates or proxy data.

Within the DC portfolio, data quality scores show a strong level of confidence in scope 1 and scope 2 emissions data, comparable to the DB portfolio. However, scope 3 emissions data quality is weaker, mirroring the broader market challenge of tracking and verifying indirect emissions. This highlights the importance of continued stewardship efforts to encourage transparency and standardised emissions reporting across the investment universe.

Net zero ambition and targets

Climate metrics play a pivotal role in shaping our strategy. By utilising robust climate metrics, the Trustee is committed to achieving real-world outcomes that support the transition to a sustainable, low-carbon economy.

The Trust's long-term ambition is to achieve net zero by 2050. To support this, we have set interim targets to reduce scope 1 and 2 emissions intensity by 25% by 2025 and 50% by 2030, relative to a 2019 baseline. These targets currently apply to listed equity, corporate fixed income and real estate assets. Our target-setting methodology aligns with NZIF.

Recognising the importance of addressing climate risk across the full portfolio, we are working to improve data coverage and methodologies for other asset classes. As data quality and disclosure improve, we aim to extend our targets, ensuring a comprehensive and meaningful approach to decarbonisation across all investments. In the meantime, we continue to engage with investment managers and underlying assets to encourage greater transparency and alignment with net zero pathways.

Progress against targets

Table 6. Carbon intensity comparison (scopes 1 and 2)

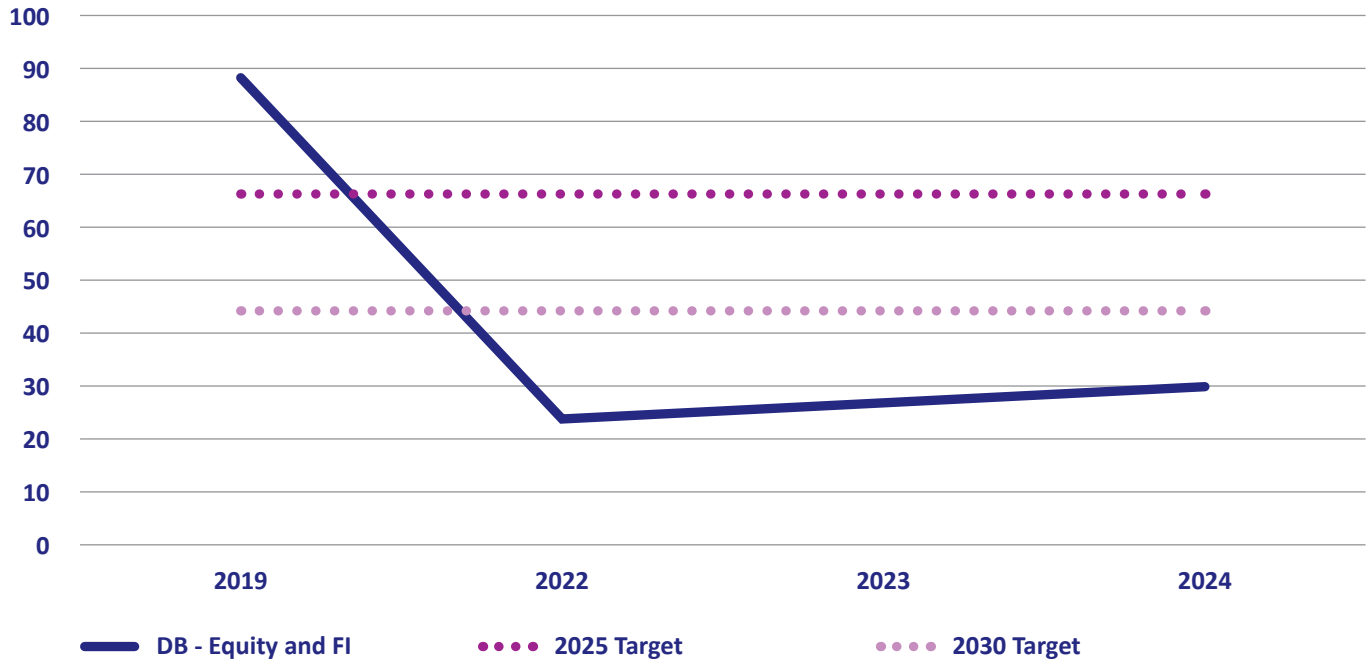
	2019	2022	2023	2024
DB – Listed equity and corporate fixed income	88.4	24.1	26.9	29.6
DC – Listed equity and corporate fixed income	101.7	39.9	47.9	35.8
	2019	**2021**	**2022**	**2023**
DB – Real estate	0.3	0.3	0.3	0.4

Metrics and targets continued

DB - Equity and FI

Carbon Intensity vs. Targets

Figure 7. DB – Listed equity and corporate fixed income



DC - Equity and FI

Carbon Intensity vs. Targets

Figure 8. DC – Listed equity and corporate fixed income

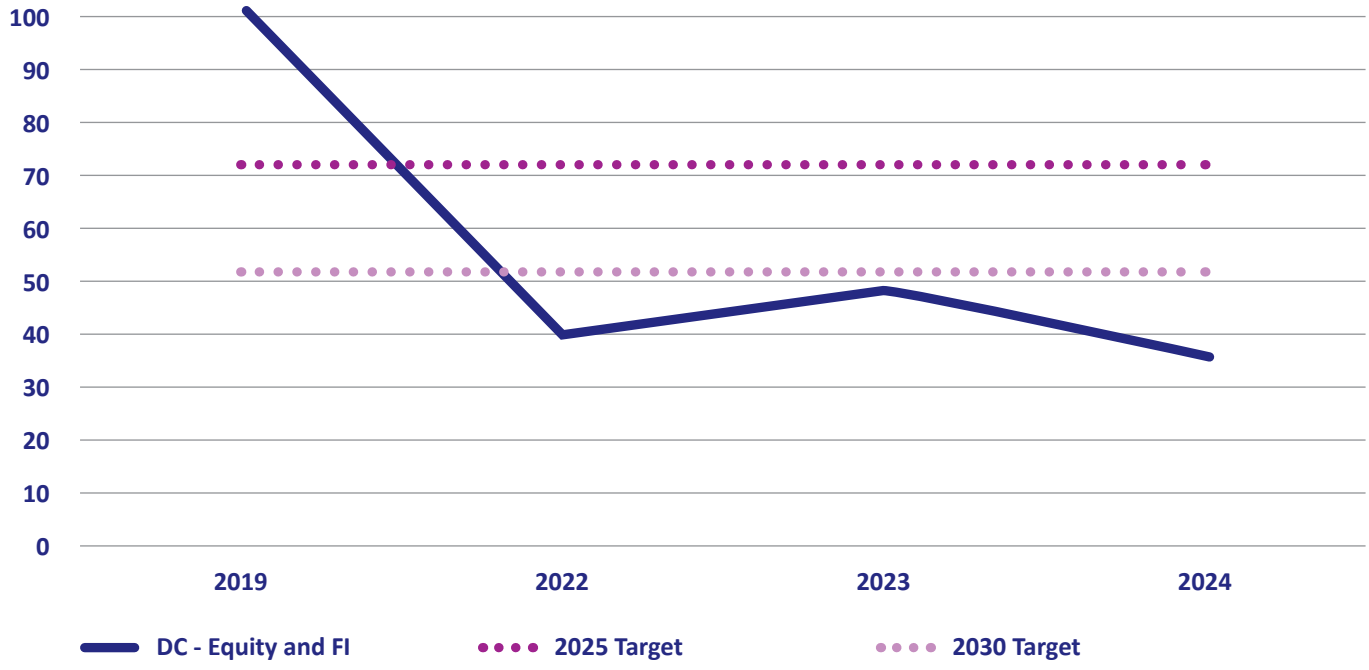


Table 6 presents the carbon intensity of our portfolio across both DB and DC schemes for listed equity, corporate fixed income and real estate. The data highlights a significant reduction in the carbon intensity of listed equity and corporate fixed income holdings between 2019 and 2022, followed by a mixed trend in subsequent years. The DB portfolio's carbon intensity fell sharply from 88.4 in 2019 to 24.1 in 2022, before gradually increasing to 29.62 in 2024. Similarly, the DC portfolio declined from 101.7 in 2019 to 39.9 in 2022, rising to 47.96 in 2023 before decreasing again to 35.84 in 2024. For DB real estate holdings, carbon intensity has remained relatively stable, with a slight increase from 0.3 in 2019 to 0.4 in 2023.

Despite these fluctuations, we have already met our 2025 target and remain well below the intensity threshold required to achieve a 25% reduction relative to the 2019 baseline, for both the DB and DC portfolios. As highlighted in our previous report, the pace of carbon intensity reduction varies across asset classes and is influenced by multiple factors. Notably, we observed a significant decline following our net zero commitment under the Paris Aligned Investment Initiative (PAII) in 2021, due to portfolio adjustments made as part of our Climate Action Plan.

We recognise that the transition to net zero is not always linear and year-on-year fluctuations in carbon intensity are expected. These variations reflect the complexities of the climate transition and the evolving nature of carbon data measurement. Our approach prioritises real-world decarbonisation through active engagement rather than exclusion alone. This means investing in and supporting companies still undergoing their transition, even if this results in temporary increases in financed emissions.

While financed emissions provide valuable insights, they represent only part of the picture. Our primary focus is on the broader trajectory, ensuring our capital allocation supports genuine decarbonisation outcomes. We remain committed to transparent reporting and will continue to monitor, engage and escalate actions as needed to achieve our climate objectives.

To deepen our understanding of emissions trends, the Trustee previously outlined plans to conduct an emissions attribution analysis. This analysis would help differentiate between emissions reductions driven by decarbonisation of underlying companies, and those resulting from changes in portfolio composition. This remains under consideration and may form part of our upcoming climate strategy review.

Climate strategy review

This year, we are undertaking a comprehensive review of our climate strategy. This review will assess progress towards our targets, evaluate the effectiveness of our action plan and refine our approach to achieving net zero. It will also identify lessons learned, highlight areas for improvement, and ensure alignment with evolving regulatory requirements and best practices.

The findings from this review will inform the development of new actions, reinforcing the Trustee's commitment to delivering long-term, sustainable outcomes.

Glossary

Term	Acronym	Data Coverage
Defined Benefit	DB	A Defined Benefit pension scheme is one where the amount you are paid is based on how many years you have been a member of the employer's scheme and the salary you have earned when you leave or retire. They pay out a secure income for life, which increases each year in line with inflation.
Defined Contribution	DC	Defined contribution pension schemes are occupational pension schemes where your contributions and your employer's contributions are invested and the proceeds used to buy a pension and/or other benefits at retirement.
Department of Work and Pensions	DWP	The Department for Work and Pensions is responsible for welfare, pensions and child maintenance policy in the UK.
Environmental, social and governance	ESG	The incorporation of Environmental, Social, and Governance issues into investment analysis and decision-making processes.
Greenhouse gases	GHG	Gases that trap heat in the atmosphere.
Institutional Investors Group on Climate Change	IIGCC	A leading European investor network focused on climate change, representing asset owners and managers committed to aligning investment practices with net-zero goals.
Investor Policy Dialogue on Deforestation	IPDD	A global investor initiative that engages with governments and public institutions to address deforestation and promote sustainable land use policies. IPDD aims to reduce investment risks associated with deforestation and biodiversity loss by advocating for stronger regulatory frameworks and improved transparency.
Implied temperature rise	ITR	Measures temperature alignment based on the cumulative emissions of the investment portfolio with global temperature goals in degrees Celsius.
Net Zero Investment Framework	NZIF	Provides a common set of recommended actions, metrics and methodologies through which investors can maximise their contribution to achieving global net zero emissions by 2050 or sooner.
Paris Aligned Investment Initiative	PAII	An investor-led initiative launched by IIGCC to support asset owners and managers in aligning their portfolios with the goals of the Paris Agreement. Developed the NZIF.
Paris Aligned Asset Owners	PAAO	A collaborative investor-led global forum enabling investors to align their portfolios and activities to the goals of the Paris Agreement.
Partnership for Carbon Accounting Financials	PCAF	PCAF is a global partnership of financial institutions that work together to develop and implement a harmonised approach to assess and disclose the GHG emissions associated with their loans and investments.

Term	Acronym	Data Coverage
Principles for Responsible Investment	PRI	A UN-supported network of investors committed to integrating ESG factors into investment decisions. The PRI provides a framework for responsible investment through six voluntary principles, supporting investors in managing ESG risks and contributing to a more sustainable global financial system.
Responsible investment	RI	Responsible investment involves considering ESG issues when making investment decisions and influencing companies or assets (known as active ownership or stewardship). It complements traditional financial analysis and portfolio construction techniques.
Task Force on Climate-Related Financial Disclosures	TCFD	A reporting framework that helps organisations disclose climate-related financial risks and opportunities.
Task Force on Nature-Related Financial Disclosures	TNFD	A set of disclosure recommendations and guidance that encourage and enable business and finance to assess, report and act on their nature-related dependencies, impacts, risks and opportunities.

Get in touch

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