# The Merchant Navy Officers Pension Fund Trustee's Climate Change Report for the Fund year ended 31 March 2025

Website where this report can be found:
https://www.mnopf.co.uk/publications_reports.html

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# Section 1: Introduction and Chair Foreword

## A foreword from the Chair of the Merchant Navy Officers Pension Fund (MNOPF)

We are very pleased to present our third Climate Change Report. In this report we deal with the impact of climate risk on the MNOPF, detailing the approach we take to manage climate-related risks and opportunities, the actions taken to date, the assessment of the Fund's exposures and the expected impact of climate change on the MNOPF.

We believe that Sustainable Investment (SI) has a material financial impact on investments and is therefore integral to successful mission delivery for our members. Given the importance of this topic, we consider the possible impacts on MNOPF investments, security of members' benefits, and the support Participating Employers can provide to ensure those benefits are paid.

Reporting on climate change remains in its infancy. We continue to work hard to improve the data, but you should note there are still some limitations around the information available. We expect data quality to improve over time.

We have reviewed our investment strategy and our net zero goal. We continue to set ourselves a target to reduce the carbon footprint of the MNOPF to net-zero by 2050, and have updated the interim reduction to approximately 50% by 2030. Pleasingly the data quality and coverage of the carbon emissions data for the underlying holdings in the Fund has increased over the year for scope 1 and 2 emissions as well as scope 3, reflecting an improvement in the quality and completeness of data. However, it's disappointing to see that this has caused an increase in the level of absolute emissions and intensity reported for the Fund as at 31 March 2025 versus previous years, although this does now represent a clearer picture of the Fund's carbon emissions. We are pleased to see that the proportion of assets with Science Based Targets has increased. This reflects growing alignment with credible, measurable pathways to net zero, and signals a strengthening commitment across the portfolio to long-term decarbonisation.

Scope 3 emissions data remains inherently challenging due to its reliance on third-party disclosures and industry-wide estimation methods. While reporting coverage and quality are steadily improving, current figures should be interpreted as directional indicators rather than precise measures. The Trustee recognises these limitations and continues to monitor industry developments to ensure reporting remains aligned with best practice and reflects improvements in data quality over time.

While we have made meaningful progress over the past year, this has not yet been fully reflected in the emissions data presented in this report, due to an improvement in the underlying data. We acknowledge that the path toward our sustainability goals is complex, and that high-quality data is fundamental to achieving them. We will continue to look to improve our education, monitoring and reporting in this area (as the sustainable finance industry continues to evolve). We look forward to sharing our progress again with you next year.

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Mike Jess
Chair of the Trustees of the Merchant Navy Officers Pension Fund
30 September 2025

# 1 Introduction

The Trustee of the Merchant Navy Officers Pension Fund (hereinafter referred to as the "Trustee" and the "Fund", respectively) presents its annual report under the Occupational Pension Funds (Climate Change Governance and Reporting) Regulations 2021 (the "Regulations") for the year ended 31 March 2025. This is a multi-employer Fund.

The Fund is subject to the requirement to produce climate change disclosures in line with the Regulations. The aim is to improve and increase reporting of climate-related financial risks and opportunities.

This report sets out the Trustee's approach to compliance in each of these four areas.

The climate change framework requires disclosures in four broad categories:

**Governance:** around climate-related risks and opportunities

**Strategy:** the actual and potential impact of climate-related risks and opportunities on the strategy of the Fund under different climate scenarios

**Risk Management:** how the Fund identifies, assesses, and manages climate-related risks

**Metrics and Targets:** the metrics and targets used to assess and manage climate-related risks and opportunities

# Section 2: Governance

## Overview of strategy, investment portfolio and supporting context and changes over the year

**Overview of investment structure**

Whilst the Trustee may delegate certain aspects of its investment arrangements, the Trustee retains ultimate responsibility for setting the Fund's strategy, policies, and actions in this area. The Trustee ensures that organisations carrying out delegated activities are closely monitored and held accountable for the work they do on behalf of the Fund. The main parties to which the Trustee delegates some form of responsibility for implementing its policies in relation to climate change and Sustainable Investment (SI) more widely are:

**Sub-committees –** To ensure the effective management of the Fund, the Trustee has established a number of sub-committees, which includes the Journey Plan Steering Committee (JPSC) and Delegated Chief Investment Officer (DCIO) Executive Oversight Committee. The JPSC consists of three members and is responsible for the Fund's strategy framework, overseeing the funding position of the DB section (including how it has been developing over time), and sets a foundation for the Fund's investment strategy. The DCIO Executive Oversight Committee consists of three members and is responsible for overseeing the actions and responsibilities of the DCIO, as explained in the point below.

**Delegated Chief Investment Officer (DCIO) –** The Trustee has appointed WTW as its DCIO, responsible for ensuring climate change is considered as part of ongoing portfolio construction, the selection of the underlying investment managers and the conduct of its stewardship activities. WTW holds membership of important industry bodies such as the UN Principles of Responsible Investment as well as being a signatory to the UK Stewardship Code. The consideration of SI is fully embedded in WTW's investment processes. WTW works closely with the Trustee Board and provides regular assessment of its views on the underlying managers' capabilities and performance in relation to Environmental, Social and Governance (ESG) and stewardship, and a quantitative assessment of the Fund's portfolio across several ESG criteria, including climate. The Trustee has set the DCIO objectives against which they are assessed annually which includes reference to assisting the Trustee in assessing, managing and measuring climate risks and opportunities. These risks and opportunities are also outlined in the Trustee's policy document on sustainable investments, accessed here.

**Oversight Provider –** The Trustee has also engaged an Oversight Provider, who assists the Trustee with monitoring and holding the DCIO accountable for their actions around climate change. Consideration of climate-related risk and opportunities is embedded into the Oversight Provider's objectives.

**Investment Managers –** Responsible for managing climate change risks and opportunities within their mandates, consistent with their investment guidelines. This includes the selection of assets as well as the managers' ongoing stewardship activities. The Trustee receives reporting on an annual basis to assess the underlying managers' competencies. This provides an assessment of the managers' approach to ESG integration and stewardship activities as well as consideration of a balanced scorecard of climate metrics which provides insight into the managers' underlying exposures to climate change risks and opportunities. The DCIO assesses the investment managers' approach to ESG integration and stewardship activities before investing on the Trustee's behalf, and

on a periodic basis as part of its ongoing manager research activities.

**Other advisers –** The Trustee also takes advice from the Scheme Actuary and Legal Adviser regarding the extent to which climate change may affect the funding strategy of the Fund and the ability of the sponsoring employers to support the Fund.

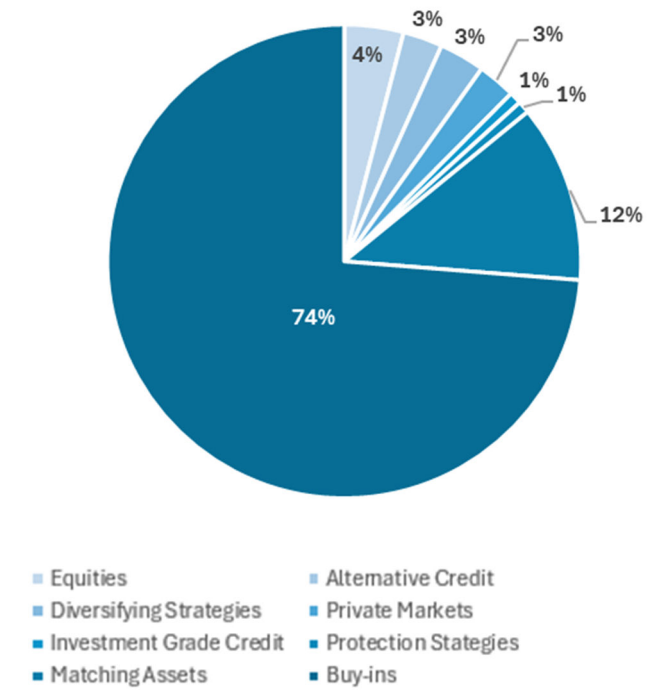
**Overview of context**

As can be seen below, the Fund has a low-risk portfolio; the majority of assets are held in buy-in insurance policies, with the rest invested in an investment portfolio consisting of matching assets (LDI) and a diversified portfolio of growth assets (equities, alternative credit, diversifying strategies, hedge funds, protection assets and private markets). As at 31 March 2025 the Fund was estimated to be 99.4% funded on a Gilts flat basis. The Fund is aiming to build up a funding surplus in a low-risk manner over time. A review of investment strategy took place in September 2024.

The Fund had a return target of Gilts +0.6% p.a. as at 31 March 2025, and a hedge target of 100% of the interest rate and inflation sensitivity in the Fund's liabilities (as a percentage of assets).

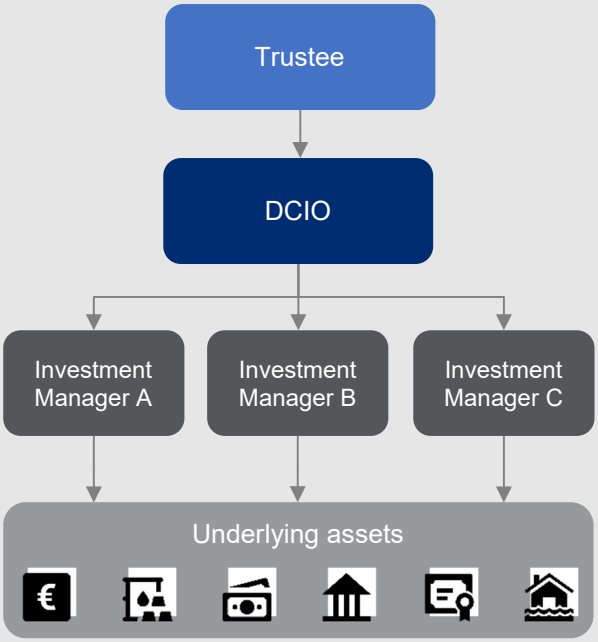
The Fund's liability driven investments (LDI) and buy-in insurance policies have been removed from the Fund's climate target and the climate metrics for LDI have been reported separately. The duration (weighted average time of payment) of the Fund's uninsured liabilities is expected to be 12.0 years as at 31 March 2025. Whilst the Trustee continues to place a high-level of priority on further engaging with, monitoring and seeking to manage climate change risks and opportunities, this broader context does mean the Trustee is starting from a relatively low risk position and has fewer tools at its disposal than many other pension funds, given the nature of the assets it holds.

**Fund breakdown - % of total assets as at 31 March 2025**



The Fund's assets totalled £1.7bn as at 31 March 2025, with 74% of total Fund assets held in buy-in insurance policies and the remaining assets invested in a diversified portfolio of growth assets and LDI. The Fund's assets excluding the buy-in policies are managed by the DCIO. The graphic below outlines how the invested assets are managed in more detail.

**How are the Fund's investments managed?**




Trustee - The Trustee's key objective is to ensure sufficient assets to pay members' benefits as they fall due. The Trustee retains overall responsibility for the Fund's investment strategy but delegates some responsibilities to ensure it is undertaken by somebody with the appropriate skills, knowledge, and resources.

DCIO –The Trustee appoints a DCIO (WTW) to implement the Trustee's investment strategy. The DCIO allocates the Fund's assets (excluding the insurance policies) between asset class and investment managers.

Investment managers – The DCIO appoints underlying investment managers using pooled vehicles and a segregated mandate for their LDI portfolio. The DCIO will look for best in class specialist managers for each asset class.

Underlying assets – The investment managers pick the underlying investments for their specialist mandate e.g. shares in a company or government bonds.

**Overview of approach to climate change**

The Trustee has identified climate change, alongside other ESG factors, as an important risk and opportunity which requires oversight and management over the long-term.

The Trustee has received investment training provided by its DCIO on climate risk and the requirements of the regulations and recommendations of the Task Force for Climate Related Financial Disclosures (TCFD), which has now ceased to exist, in preparation for the Fund's first Climate Change Report. Given the pace of progress around SI, trustee training on climate and ESG has increased over recent years and is expected to remain a priority going forwards. The Trustee's training on SI over the year, particularly focused on how it can engage more with climate change, through both collaboration and manager engagement.

The Trustee's key overarching investment policies (including those in relation to climate) are detailed in the Trustee's Statement of Investment Principles (SIP) which is reviewed on an annual basis and can be found online at the following link: SIP.

The Trustee also monitors the risks and opportunities associated with climate change through the Fund's risk register which details the controls and monitoring that the Trustee has in place to appropriately manage these risks and opportunities. The risk register is a standing item on the agenda for every quarterly JPSC meeting.

Alongside this, given the importance placed on such issues, the Trustee maintains a separate Sustainability Beliefs document which sets out a more in-depth overview of the Trustee's beliefs and goals in this area. During the year, the Trustee reviewed these beliefs and deemed them appropriate. This document clearly sets out the Trustee's policy on SI. This document largely supports the policies set out in the publicly available SIP and includes the Trustees' climate policy, which was signed off as part of reviewing the General Code of Practice.

The Trustee board met seven times over the year and climate change was discussed at five of those meetings. The key outcomes of those discussions were to maintain the annual monitoring of SI criteria for the Fund and its underlying managers, and prompted a review of the Fund's SI beliefs and stewardship priorities. The Trustee recognises that climate change is a fast-evolving and complex area which therefore requires ongoing discussion and education.

The Trustee has a strong belief that stewardship (voting and engaging with the underlying companies the Fund invests in) is an important way in which the Trustee can meaningfully influence outcomes. The Trustee has identified climate change as one of its current stewardship priorities. The Trustee delegates part of the implementation of this policy to the DCIO and underlying investment managers but retains overall responsibility and accountability for the policy. The Trustee considers the implementation of this policy on an annual basis.

**Case Study – EOS at Federated Hermes**

As outlined in the SIP, the Trustee recognises that the long-term financial success of the investments is influenced by a range of factors which includes appropriate management of environmental, social and corporate governance issues (including climate). As such, it typically invests with investment managers with the expectation of a long-term relationship, and expects investment managers to take a similar approach with the companies that it invests in. The DCIO engages with the investment managers where appropriate on their approach to stewardship and engagement. The Trustee has identified climate change, human and labour rights, and human capital as three key priorities in this area. Human capital was added as an additional stewardship priority in March 2025.

The DCIO employs EOS at Federated Hermes, a stewardship service provider, to support the efforts of the appointed investment managers in their company-level engagement on a wide range of topics. EOS also carries out public policy engagement and advocacy on behalf of the Trustee. As at 31 March 2025 EOS represented $2.2trn of assets under advice. The DCIO has been working closely with EOS for many years, and a senior member of the WTW Investment team chairs the EOS Client Advisory Board. The DCIO engages with EOS on behalf of the Trustee to help shape its engagement approach and voting policies. Over 2024 this included:

- Engagements with 994 companies on a total of 4,267 issues and objectives. Voting recommendations on 143,075 resolutions, including 25,070 votes against management.
- Active participation in a range of global stewardship initiatives.

Another example is Climate Action 100+ (CA100+), an investor initiative aiming to ensure the world's largest corporate greenhouse gas emitters take necessary action on climate change. It targets 169 companies globally. EOS is among over 600 investors who have signed up to CA100+.

**Overview of key climate activities conducted over the year**

Over the Fund year to 31 March 2025, the Trustee undertook a number of actions in line with the policies outlined above and in order to help achieve the ultimate aim of managing climate change risks and opportunities.

| Stewardship | Portfolio updates | Governance updates |
|---|---|---|
| **EOS at Federated Hermes** – The Fund's Alternative Credit and Global Equity managers uses EOS at Federated Hermes, a leading stewardship provider, with over $2.2 tn under advice. The EOS platform adds another level of direct corporate engagement in addition to the underlying managers and facilitates greater collaborative stewardship impact. Over 2024 this included 994 company engagements on 4,267 issues and 143,075 voting recommendations, with 25,070 against management. EOS also continued to be an active participant in several initiatives such as Climate Action 100+, Principles for Responsible Investment and the Institutional Investors Group on Climate Change.<br><br>**Stewardship priorities** – The Trustee considers stewardship as an important tool for managing risk and improving the financial outcomes of the Fund. However, the Trustee also acknowledges that stewardship can be multifaceted and therefore it makes sense to have a small number of stewardship priorities to focus engagements in the short term. Following a review of their Sustainability Beliefs and stewardship priorities in February 2025 the Trustees decided to include Human Capital as an additional stewardship priority in order to increase focus on Social factors within ESG. This has since been communicated to the Fund's managers. | **AXA IG credit –** During the year an allocation to AXA's Long Term Credit fund was added to the portfolio. AXA are highly rated for their ESG capabilities, thereby improving the sustainability credentials of the Fund's corporate bond assets. | **Trustee training** – The Trustees undertook training, facilitated by the DCIO, on ESG integration within the investment portfolio including an annual report showing the qualitative assessment of the SI practices of the Fund's investment managers and a quantitative assessment of the fund managers to get a snapshot of the carbon exposure of the portfolio.<br><br>The Trustee also received training on sustainable investment beliefs and stewardship priorities as part of the review in February 2025 which was delivered by the DCIO and EOS at Federated Hermes.<br><br>**Adviser review** – The Trustee reviewed the Fund's advisers against their objectives over the year which included an assessment of their work on climate change. The Trustee continues to encourage further work on improving data and enhancing stewardship activities.<br><br>**Insurers review:** The Trustees reviewed the ESG aspects, including climate, of the Fund's Insurers |

The DCIO has also carried out several activities to help the Trustee meet their climate goals over the Fund year to 31 March 2025, which included:

- Confirming UK Stewardship Code adherence for 1 January 2023 to 31 December 2023 and have recently applied for the year ended 2024
- Partnership with EOS
- Engaging the DCIO's Thinking Ahead Institute, selected by the PRI, to undertake research specifically on stewardship resources in the industry
- Maintaining climate as their top theme for engaging with investment managers
- Being active members of the UK Government's Transition Plan Taskforce working to improve organisations' climate transition planning
- Over the year, the DCIO conducted engagements with over 80 managers across asset classes. The DCIO also engaged on over 100 products on sustainability and stewardship.
- Researching over 150 sustainability themed strategies with a focus on climate
- Engaging with and responding to several government consultations

| **Below are some examples of the engagement activity the DCIO has undertaken in practice.** | | |
|---|---|---|
| **Case study: Engagement with UK pensions and climate regulation** | **Case study: Working directly with an Equity Manager to improve on climate related issues** | **Case study: Engagement with a Real Estate Debt manager to improve climate reporting** |
| The DCIO had several meetings with the Pensions Regulator covering several topics including:<br>• how climate scenario analysis can be made more robust and decision useful<br>• how the Regulations might be applied to smaller pension funds<br>• whether the Regulations themselves had achieved their main purpose of getting trustees to take more steps to appropriately monitor and manage climate change risks and opportunities<br>As part of this the DCIO talked through client examples and internal thought pieces. They continue to actively engage with the Pensions Regulator to input into the positive development of these Regulations. | The DCIO found that there has been good evidence of improvement from the equity manager over the year on key components previously engaged with. However, the focus of the engagement was on key outstanding issues, namely around impact, broader governance, and voting, where the strategy has returned neutral scores. Addressing these issues will be crucial for further progress and ensuring the effectiveness of the manager's overall strategy.<br>Following the DCIO's engagement, the equity manager has made significant progress in several areas, including Task Force on Climate-Related Financial Disclosures (TCFD) alignment, where they now report in line with the TCFD framework and provide climate-related metrics at the fund level. They have further developed their sustainability policy, planning to track carbon reduction objectives from 2025 and improving coverage across most strategies. In terms of voting, the manager has implemented a new process to track every vote and its rationale, along with a new voting policy. Additionally, they have developed a | The DCIO engaged with a real estate debt manager who, as part of their strategy to manage financial risks, seeks to lend on buildings with strong ESG characteristics. The DCIO engaged with them to report on the proportion of properties that could be considered as climate solutions. This was discussed with their senior leadership, outlining that a lack of improvement may result in challenging discussions about new commitments in the future.<br>Following our engagement, the manager agreed to develop a plan for how they could improve their climate reporting and increase transparency in line within industry standards. |

| | | |
|---|---|---|
| | firm-wide ESG data tool for immediate access to ESG/Sustainable Investment research for analysts.<br><br>However, the DCIO continues to engage with the manager on implementing a modern slavery policy and impact measurements due to difficulties in obtaining disclosures in the Japanese market. They are working to track progress in this area, and it will be closely monitored. Engagement on the Governance/Stewardship policy review process has also taken place, with a preference for annual reviews. | |

# Section 3: Strategy

Appropriately managing the risks and opportunities associated with climate change from a strategic perspective is a key part of the Trustee's role. The Trustee recognises that climate change could have a material impact on the potential success of the overarching funding strategy and therefore seeks to ensure that this matter is given appropriate consideration. To support this, the Trustee undertakes climate change scenario analysis to test the resilience of the Fund's funding strategy under a range of plausible climate scenarios. Importantly, the Trustee recognises that climate change could have a material impact on the investments of the Fund, the life expectancy of the Fund's members and the support provided by the Participating Employers' covenant. All three aspects are therefore considered as part of this analysis. This scenario analysis was undertaken for the first time in June 2022 and again in May 2025 (using data as at 31 December 2024). The Trustee's intention is to repeat this analysis at least every three years or sooner should there be a material change in either the Fund's circumstances or the assumptions underlying the analysis.

To appropriately assess the impact of the climate change scenario analysis, the Trustee has agreed the following time horizons over which climate risks and opportunities should be considered. These timeframes were reviewed as part of the triennial Actuarial Valuation and investment strategy discussions which took place in Q3 2024.

| | | |
|---|---|---|
| Short term | 2027 | This is defined as the next Actuarial Valuation at which the funding strategy will be revisited in detail. |
| Medium term | 2030 | This is the timeframe over which significant climate action is expected, climate transition risks are expected to emerge and is aligned with the Trustee's agreed net-zero objective and the end of the Fund's Journey Plan. |
| Long term | 2035 | This is the timeframe consistent with the duration of the Fund's liabilities and the point at which a significant proportion of member benefits will have been paid out. |

The Trustee has identified the following categories of climate-related risks and opportunities:

| Transition risk | Physical risk | Regulatory risk | Reputational risk |
|---|---|---|---|
| The indirect impact arising because of changes in society and economies to combat or adapt to climate change | The direct impact arising because of chronic and/or acute changes in climate and extreme weather events | Regulations are changing rapidly in order to change behaviour and help achieve The Paris Agreement objectives | The increasing spotlight on pension funds and climate change increases the risk of being "named and shamed" |
| Examples: | | | |
| • Assets: Some industries become obsolete (e.g. coal), reinvent themselves or others emerge (electric vehicles)<br>• Liabilities: Improvements in mortality from healthier lifestyles | • Assets: Damage to physical assets underpinning securities (e.g. real estate and infrastructure)<br>• Liabilities: Excess deaths arising from extreme weather | • Implementation Statement<br>• DWP Pensions bill<br>• Mandatory climate change reporting | • 2018 EAC report on 25 biggest UK Funds |

The Trustee has assessed how the categories identified are relevant to the agreed short, medium and long-term time horizons.

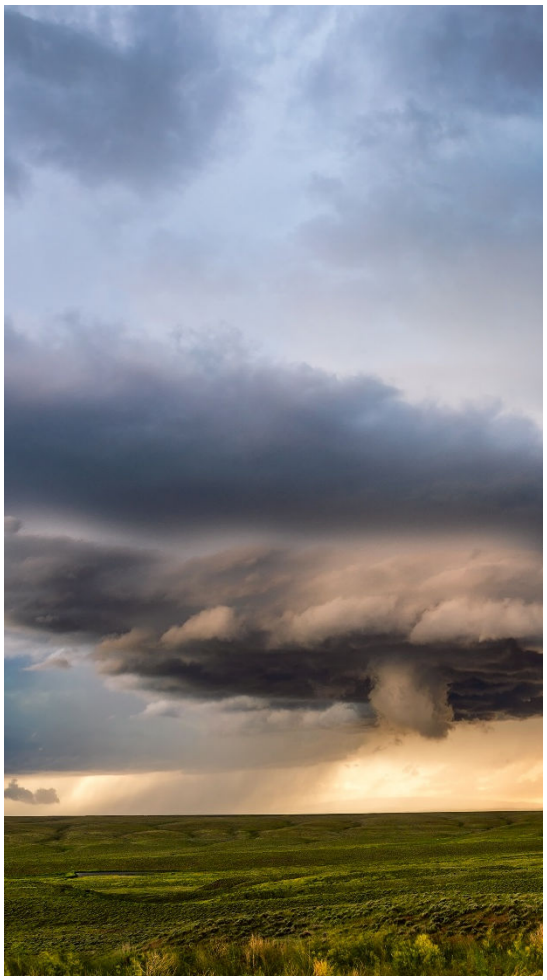
| | Short Term | Medium Term | Long Term |
|---|---|---|---|
| Timeframe | 2027 | 2030 | 2035 |
| Primary types of risk | • Regulatory<br>• Reputational<br>• Transition | • Reputational<br>• Transition | • Transition<br>• Physical |
| Key risk exposure | The Trustee is exposed to regulatory risks, including fines, if it does not comply with evolving regulatory requirements.<br><br>The Trustee (and Participating Employers) are exposed to reputational risks if the Trustee's policies are misaligned with peers and/or sponsors.<br><br>The Trustee is predominately exposed to transition risks through its equity and corporate bond portfolios. | The Trustee (and Participating Employers) are exposed to reputational risks if the Trustee's policies are misaligned with peers and/or sponsors.<br><br>The Trustee is exposed to transition risks through the equity and bond portfolios.<br><br>The Trustee is exposed to the impact on insurers pricing of climate risk, including the impact on future expected returns and other financial and demographic assumptions.<br><br>Given the long-term nature of these risks, there is a high level of uncertainty in terms of the likely effect and the potential magnitude of their impact. | In an extreme left-tail event, exposure to, and poor management of these risks may weaken the strength of the insurers and ability to meet pensioner benefits.<br><br>Given the long-term nature of these risks, there is a high level of uncertainty in terms of the likely effect and the potential magnitude of their impact. |
| Potential opportunities | Encouraging existing funds to consider and where possible reduce exposure to transition risks engage with companies to develop a strong transition plan. | Aligning the Fund's investments with the ESG policies of leading insurers may increase the likelihood of credit assets being taken in specie, marginally reducing the cost of buyout. Considering insurers approach to ESG and climate risks as part of the decision to choose a particular fund can help influence insurers approaches to these risks. | N/A – The Fund will have a lower allocation to invested assets at this point. |

## Climate scenario analysis

### Update of climate scenario analysis

The Trustee has updated the climate change scenario analysis in partnership with the DCIO and the actuarial advisors. The aim of this analysis was to help the Trustee to understand and quantify the potential effects of climate change on the Fund's assets, and liabilities, where required, identify possible actions to address the risks and opportunities presented.

The Trustee updates the climate scenario analysis at least every 3 years. In the intervening years, the Trustee reviews whether any factors have changed materially to warrant an additional update to the analysis. The Fund's previous climate analysis was undertaken in June 2022. As part of the updated analysis, the Trustee has considered five separate scenarios which are in part defined through their success, or otherwise, in meeting the Paris Agreement target of a below 2.0ºC temperature rise. As compared to the first and second climate change report, one new scenario was introduced reflecting a scenario with a Net Zero 2050 pathway where global temperatures exceed 2.0°C due to a lower-than-expected carbon budget, despite significant and costly efforts do decarbonize. This scenario is more reflective of recent industry findings, including those as set out in the paper published by the Institute and Faculty of Actuaries (IFoA) in collaboration with climate scientists, which indicate that global warming accelerated in 2023 and is now driving more severe impacts across the planet with the overshoot of the 1.5°C threshold being more likely. More information on how the scenarios have been developed is included in the appendix.



### Climate scenario analysis results – as at 31 December 2024

Working with its DCIO, the Trustee seeks to mitigate the risks and take advantage of opportunities which may occur so as to improve the likelihood of the Fund meeting its short- and medium-term funding and investment goals. These time horizons, risks and opportunities are key inputs into the Trustee's climate scenario analysis. The Trustee, in conjunction with the DCIO and Scheme Actuary, has conducted this scenario stress testing and presented the results within this section.

The regulatory requirements require schemes to use at least two climate risk scenarios (including one of 2.0ºC or lower). For our scenario analysis, the Trustee has considered five separate scenarios

which are in part defined through their success, or otherwise, in meeting the Paris Agreement target of limiting warming to below 2.0ºC and ideally 1.5ºC.

The scenarios differ in the size of the physical risks, based on the resulting temperature impacts, but also in the size of the transition risks. The net zero 2050 and hot house world scenarios, where decisive action is taken, and the delayed transition scenario, where transition is more disorderly due to delays in meaningful action, represent bigger transition risks than the nationally determined contributions scenario.

The key climate scenarios* that the Trustee has considered are:

| | Nationally Determined Contributions | Delayed Transition Below 2.0ºC | Below 2.0ºC | Net Zero 2050 | Hot House World |
|---|---|---|---|---|---|
| **Description** | A 'business as usual' scenario where current policies continue with no further attempt to incentivise further emission reductions. Socioeconomic and technological trends do not shift markedly from historical patterns. | Delays in taking meaningful policy action result in a rapid policy shift around 2030. Policies are implemented in a somewhat but not completely co-ordinated manner resulting in a more disorderly transition to a low carbon economy. Emissions exceed the carbon budget temporarily, but then decline. | Globally co-ordinated climate policies are introduced immediately, becoming gradually more stringent over time. Companies and consumers take the majority of actions available to capture opportunities to reduce emissions | A more ambitious version of the 'Below 2.0ºC' scenario where more aggressive policy is pursued immediately. More extensive technology shifts are achieved with Carbon Dioxide Removal ('CDR') used to accelerate the transition, broadly in line with sustainable levels of bioenergy production. | The world follows a Net Zero 2050 pathway, however the resultant temperature outcome exceeds 2.0ºC due to a lower than expected remaining carbon budget and/or the impact of climate tipping points. Use of CDR technologies is relatively low. |
| **Temperature rise vs pre-industrial levels** | ~2.5ºC | ~2.0ºC | ~2.0ºC | ~1.5ºC | ~3.0ºC |
| **% of Renewable energy by 2050** | c85% | c90% | c90% | c90% | c90% |
| **Transition risk level (** | Low | High | Medium | High | High |
| **Physical risk level (Medium-longer term)** | High | Medium | Medium | Low-Medium | Very High |

*Notes relating to the WTW's climate scenarios are shown in Appendix 1

The scenarios were created to reflect the differing paths that could be taken to meet, or fail to meet, the temperature rise target agreed as part of the Paris Agreement. The Paris target is to hold "the

increase in the global average temperature to well below 2.0°C above pre-industrial levels" and to pursue efforts "to limit the temperature increase to 1.5°C above pre-industrial levels." The scenarios differ in the size of the physical risks, based on the resulting temperature impacts, but also in the size of the transition risks. In the view of the Trustee, the five scenarios selected reflect an appropriate range of plausible decarbonisation pathways and are relevant in the context of the Fund's journey and funding plans. The Trustee recognises that there is the potential for more extreme outcomes than reflected in the chosen scenarios.

In this section, the Trustee has illustrated the impact of the climate change scenarios on the Fund's funding level. The key results from the climate scenario analysis are outlined below. The Trustee has considered these over a timeframe that is consistent with the Fund's medium term time horizon (c.5 years). The Trustee recognises that assuming such climate scenarios are priced in gradually, year by year, is an unrealistic expectation and in practice this is likely to be far less linear. The Trustee has therefore also included one-off shock analysis which seeks to illustrate the impact of climate change if it was to be reflected instantaneously. This assumes that markets immediately price in the transition and physical risks over the next 5 years and that the market initially overreacts to this news in struggling to price in the actual impact. Whilst this is potentially unrealistic, the Trustee thinks this helpfully stress tests the assumptions made in the analysis and helps consider how robust the funding strategy might be. The Trustee also recognises the uncertainty in the underlying assumptions and that the shocks experienced could be larger.

In some climate scenarios, life expectancy is reduced relative to the base case. That means that over the timescale considered, the funding level is projected to improve in some scenarios, even though investment returns are reduced. The Trustee does not view improved funding levels due to poorer life expectancy associated with climate change as a successful outcome. The Trustee believes that climate change is a systematic risk of unprecedented scale and severity. Actions to address it are a collective priority, given the risks it presents to individual pension schemes, the ongoing resilience of the savings universe, and the planet as a whole.

**Impact of Climate Drags on the Fund's Funding Level**

The table below shows the Journey Plan under the five scenarios relative to the current base case Journey Plan as at 31 December 2024.This is based on the gilts flat measure of liabilities.

| Scenario | Average annual drag on expected returns (over 15 yrs) | Average drag on liabilities | Expected change in funding level in 2030 vs base case** |
|---|---|---|---|
| **Nationally Determined Contributions** | -0.07% | -0.05% | +0.30% |
| **Delayed Transition Below 2ºC** | -0.07% | -0.02% | -0.30% |
| **Below 2ºC** | -0.02% | 0.04% | -0.40% |
| **Net Zero 2050** | -0.07% | -0.01% | -0.80% |
| **Hot House World** | -0.11% | -0.09% | +0.10% |

The analysis identified that, due to the impact of lower longevity improvements, the Hot House World scenario leads to a greater funding level improvement by 2050. Net Zero 2050, with a high level of transition risk, causes the largest reduction in expected funding level improvement by 2030. The analysis shows that the different scenarios have no material impact on the attainability of the Fund's overall goals, with only minor variations in the funding level trajectory. This indicates that the potential for a climate shock would be a more material concern for the Fund. Below, the analysis shows the per annum climate shocks on the Fund's funding level.

Impact of Climate Shocks on the Fund's Funding Level

| Scenario | Asset shock (change in assets, £m) | Liability shock (change in liabilities, £m) | Immediate change in deficit (£m)[2] | Immediate change in funding level |
|---|---|---|---|---|
| **Nationally Determined Contributions** | -64 | -15 | +49 | -3% |
| **Delayed Transition Below 2ºC** | -33 | -6 | +27 | -1% |
| **Below 2ºC** | -17 | +11 | +28 | -1% |
| **Net Zero 2050** | -37 | -2 | +35 | -2% |
| **Hot House World** | -81 | -26 | +55 | -3% |

1. The asset shock is estimated to be approximately twice the size of the per annum impacts over time as markets tend to overreact in more extreme scenarios.
2. Liability shocks are assessed on the Fund's gilts flat liability basis.

The change in deficit shocks across all scenarios result in an immediate increase in deficit for the Fund. This analysis highlights that the climate-related risks are broadly comparable in scale to the investment risks already present in the ex-buy-in portfolio. This reinforces that climate risk is not disproportionately large and should be monitored and managed as part of the overall portfolio investment risk, rather than in isolation.

As a result of the combined analysis, the Trustee's assessment is that the investment and funding strategy of the Fund is resilient against climate risk, and that the Fund is expected to be somewhat protected against the impact of climate change both as a gradual impact and a sudden shock. This is due to the Fund's strong funding position (currently 99.4% as at 31 March 2025) and the Fund's low risk portfolio with 74% of assets invested in buy-in policies. However, the Trustee acknowledges that short-term climate shocks could still have a significant impact. As such, the Trustee continues to allocate resource to actively monitor, manage, and mitigate climate-related risks to safeguard the Fund's long-term sustainability.

**Covenant considerations**

Given the Fund's strong funding position and the fact that 74% of assets are invested in buy-in insurance policies, the Trustee considers there to be a reduced likelihood of needing to place material reliance on the sponsoring employers in the future. Nonetheless, the Trustee continues to carry out regular covenant assessments, which include consideration of climate-related risks, to ensure the Fund remains well protected under a range of scenarios.

# Section 4: Risk Management

Climate change is a key risk and opportunity and therefore receives particular attention as part of the Trustee's ongoing risk management processes. The Trustee thinks about how it integrates climate into this in three ways:

**Governance**

Climate change and the climate policy is included within the Trustee's risk register which is monitored quarterly and reviewed annually. This clearly details the size and likelihood of the risk, the controls in place and the actions the Trustee takes to manage, mitigate, and exploit both the risk and opportunity. Although the Trustee retains ultimate ownership, the risk register clearly sets out the parties that assist the Trustee in delivering on its responsibilities.

**Top-down**

The climate change scenario analysis shown in the Strategy section provides the Trustee with a holistic overview of the potential impacts of climate change and how they may affect the Fund's funding strategy (across assets, liabilities, and covenant). This is an important risk management tool for a top-down risk and opportunity assessment.

**Bottom up**

As mentioned, the Trustee also conducts more granular analysis to manage the risks and opportunities associated with climate change. These include:

**Security analysis** – The Trustee calculates various climate change related metrics for the underlying securities within the portfolio. This includes metrics such as absolute carbon, carbon footprint and exposure to climate opportunities. These provide the Trustee with a more detailed understanding of the Fund's exposures.

**Manager analysis** – The Trustee also conducts an annual review of the DCIO and underlying investment manager policies, processes, and actions in the area of SI, which includes a focus on climate change. The Trustee has been reassured in the results presented and the actions taken to date. The Trustee does however have a strict policy of engagement if any concerns are identified as part of this monitoring.

**Stewardship**

One of the other risk and opportunity assessment tools the Trustee uses is stewardship. As mentioned in other parts of the report, this is a key way in which the Trustee can influence the actions of companies and broader industry and therefore mitigate the climate risk the Fund is exposed to and enhance the potential opportunities available as part of the transition. Over the year, the DCIO has carried out the following activities on the Trustee's behalf:

- Significant engagement via EOS at Federated Hermes with companies and industry (see governance section)
- Review of the stewardship practices of the underlying investment managers with a focus on assessing this relative to the Trustee's climate stewardship priority
- Contributed, via the DCIO, to a number of key industry initiatives, working groups and consultations

**Summary**

Through the use of the variety of risk tools referenced above, the Trustee has identified a number of key areas to continue further work to help exploit and manage the opportunities and risks associated with climate change. The key priorities are continuing to ensure that the investment managers are appropriately factoring climate change into their approach and stewardship activities as well as making sure that any future insurance activity includes due consideration of climate change as a factor.

# Section 5: Metrics and Targets

## Introduction and overview

A key facet of the Trustee's ongoing monitoring and management of climate change is having good data on the Fund's exposure in this area. Although there are limitations with some of the metrics presented and the completeness of data, the Trustee still has a strong belief that these can helpfully inform the ongoing monitoring and management of the Fund. The Trustee considers metrics across the SI spectrum, but the focus within this report is those in climate change.

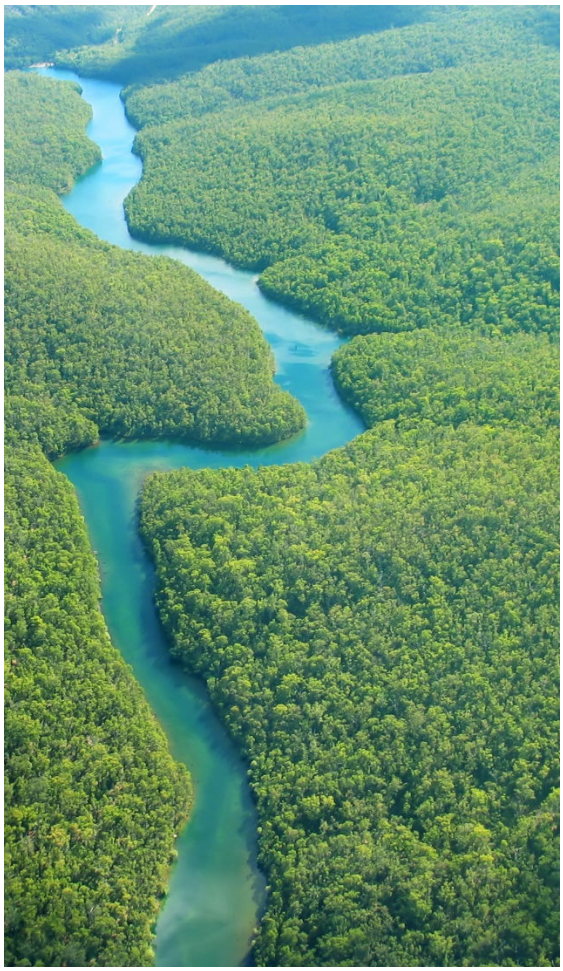
The metrics disclosed have been selected from the following categories:

- An absolute emissions metric
- An emissions intensity metric
- An alignment metric
- One additional climate change metric

It is also important to be clear which emissions are captured within the above metrics and therefore the Trustee have referred to the categories of emissions as follows:

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

Due to the nature of the emissions, Scope 3 emissions are significantly more difficult to calculate than Scope 1 or Scope 2 emissions for any given entity. It is also the case that, for some assets, even Scope 1 and Scope 2 emissions are difficult to calculate. The Trustee has included Scope 1, 2 and 3 emissions within this report. Scope 1 and 2 emissions are reported separately to Scope 3 emissions given their differences in data quality and application. Further detail is provided on this under the Scope 3 section.



**Overview of analysis**

The following table details the rationale for choosing these metrics:

| Metric | Definition | Rationale |
|---|---|---|
| Total Carbon Emissions ("tC02e") | An 'absolute emissions' metric which gives a measure of carbon emissions attributable to the Fund. This is calculated in line with the Greenhouse Gas (GHG) protocol methodology and currently includes only Scope 1 and 2 emissions. The underlying emissions data has been sourced from MSCI and, in line with the protocol, includes all the major GH gases with a conversion into carbon emissions equivalent quantities. The entity's enterprise value, including cash (EVIC) has been used to attribute carbon emissions | Mandated as part of the Department for Work and Pensions Statutory guidance |
| Carbon Footprint (tCO2e / $ invested) | An 'emissions intensity' metric which gives a measure of how many equivalent tonnes of carbon emissions each million invested causes. This uses a comparable methodology as the total carbon emissions referenced above for underlying data and emissions attribution for companies | Preferred by the regulator, it provides a direct measure of absolute emissions, which ultimately impact global outcomes and provides a simple comparable measure across portfolios of different sizes |
| Percentage of assets with approved Science based targets ("SBTi") | A 'portfolio alignment' metric which is a forward-looking measure of the percentage of assets with targets validated by the Science-Based Targets Initiative | It provides a consistent verification of a company's alignment to the Paris agreement |
| Climate Solutions | Aims to assess exposure to the investments which are the most likely to benefit from transition to a low carbon economy | This additional metric of 'exposure to climate-related opportunities' has been selected as this reflects the Trustee belief that the global response to climate change can reward those who respond and adapt quickly as well as punishing the laggards |

**Data Quality:**

In the report, information on data quality has been included as the Trustee believes it is important to monitor this as climate metrics are at an early stage and data is currently limited. The Trustee also believes that improved data quality and coverage is an area that, (through the DCIO) can be most influenced by investment managers and improvements would allow better decision making on future carbon metrics.

The data quality for each metric is presented in a table beneath the metric, allowing the reliability of the data to be considered alongside the results. Whilst the Trustee has aimed to carry out the analysis as far as they are able, the availability of data is dependent on external factors which are largely outside the Trustee's control such as certain companies not disclosing their carbon emissions. The data quality reported in the following pages shows how the portfolio has been modelled, be it through

the analysis of direct company holdings data, where it was available, or otherwise, using proxies. For the private assets the Trustee has proxied the exposure by using appropriate geographic and sector weights for the underlying holdings where possible. The tables show this breakdown in respect of the Fund's assets excluding the buy-in insurance policies.

Whilst the Trustee, aims for 100% data quality for its underlying investments, it understands that there are limitations with data availability, particularly for private assets. The Trustee uses MSCI, a market leader in sustainability-related data, to provide ESG and Carbon metrics for the underlying companies. Whilst MSCI has a broad, constantly expanding and improving set of data, this primarily covers public companies due to the nature of the legislative requirements for these companies. Private companies, on the other hand, are not always subject to the same level of transparency and thus require proxying using characteristics that map to similar public companies. Our expectation is that data coverage will continue to improve as pressure from the investment industry leads, including from the Fund's investment managers, to further transparency for private market assets and the Trustee will continue to monitor and encourage this over time. Over the last year, the data quality for scope 1 and 2 emissions, as well as scope 3 has improved, specifically the percentage of assets that use actual holdings carbon data increased by 7% and 19% for scope 1&2 and scope 3 respectively. Scope 3 emissions data remains inherently challenging due to its reliance on third-party disclosures and industry-wide estimation methods. Reported Scope 3 values are therefore best viewed as directional indicators rather than precise measures. The Trustee recognises these limitations and continues to monitor industry developments to ensure reporting remains aligned with best practice and reflects improvements in data quality over time.

Where data was not available on the underlying holdings, the Trustee has followed the 'pro-rata approach' which involves scaling up the portfolio data that exists rather than assuming such positions have zero emissions. The Trustee believes this is a more representative and prudent approach to take.

On the Trustee's behalf, the DCIO is working actively with its investment managers to improve the quality of the data supplied for these purposes over time. The Trustee will monitor how these metrics evolve over time on an annual basis and understand the drivers for change.

**Climate metrics analysis**

| As at 31 March 2025 | Allocation | Carbon Emissions Data | | Exposure to Climate Solutions (%) | % of assets with approved SBTs |
|---|---|---|---|---|---|
| | | Absolute Emissions (tCO2e) – Scope 1 & 2 | Carbon Footprint (tCO2e / $m) – Scope 1 & 2 | | |
| Total assets ex buy-in | | **16,396** | 29 | 4% | 15% |
| Global Equity | 19% | **2,723** | 5 | 7% | 46% |
| Alternative Credit | 8% | **6,625** | 12 | 4% | 4% |
| Private Markets | 8% | **2,565** | 5 | 15% | 53% |
| Investment Grade Credit | 3% | **477** | 1 | 3% | 24% |
| Diversifiers | 12% | **4,006** | 7 | 6% | 13% |
| LDI | 40% | | | See further in report | |
| Cash | 10% | | | | |

*LDI and other government bond assets have been classified as cash for the total asset figures reported above, consistent with the approach taken last year. The scope 1&2 emissions have been disclosed separately on page 26.
The Carbon Footprint has been scaled to reflect asset holdings, while other metrics remain unscaled.

| | Allocation | Carbon Emissions Data for comparison | | Exposure to Climate Solutions (%) | % of assets with approved SBTs |
|---|---|---|---|---|---|
| | | Absolute Emissions (tCO2e) – Scope 1 & 2 | Carbon Footprint (tCO2e / $m) – Scope 1 & 2 | | |
| *31 March 2024 Total assets ex buy-in* | | ***14,980*** | *22* | *2%* | *10%* |
| *Global Equity* | *18%* | ***4,749*** | *7* | *7%* | *36%* |
| *Alternative Credit* | *8%* | ***4,715*** | *7* | *1%* | *2%* |
| *Private Markets* | *6%* | ***3,399*** | *5* | *5%* | *15%* |
| *Diversifiers* | *11%* | ***2,117*** | *3* | *1%* | *11%* |
| *LDI* | *45%* | | | *See further in report* | |
| *Cash* | *12%* | | | | |
| *31 March 2023 Total assets ex buy-in* | | *18,743* | *27* | *5%* | *8%* |
| *31 March 2022 Total assets ex buy-in* | | *28,758* | *29* | *2%* | *9%* |

**Data quality for scope 1 + 2 emissions (shown in the table below)**

| Carbon emission (CE) data quality for scope 1 & 2 | Data quality as at 31 March 2025 | *Data quality as at 31 March 2024* |
|---|---|---|
| Actual holdings – CE reported by company | 27% | *20%* |
| Actual holdings – CE estimated by Manager | 1% | - |
| Actual holdings – CE estimated by third party | 2% | *3%* |
| Proxied holdings | 11% | *9%* |
| No data | 19% | *23%* |
| LDI assets | 40% | *45%* |

**Trustee observations**

- The Trustee recognises the limitations associated with the climate metrics given the underlying data quality and the 'proxying' of assets required. Also, the analysis only reflects a small part of the portfolio, as the buy-in insurance policies within the Fund account for around 74% of total Fund assets. That said the Trustee reflects positively on being able to assess the portfolio through this new lens and provide an assessment of the exposure to climate change risks and opportunities.
- The Trustee noted that Carbon Footprint is not necessarily an indication of the Fund's exposure to climate risk (which the Trustee ultimately cares about) as the two are not always highly correlated. Over the year, the percentage of assets with approved SBTs decreased from 10% to 9% but exposure to climate solutions rose over the year by 2%.
- The Trustee recognises that the metrics associated with the private assets are not reflective of the holdings the Fund has, given the proxying required. The Trustee recognises that the definitions and calculation methods for various metrics will evolve over time.

The increase in total portfolio emissions over the twelve months to 31 March 2025 is largely due to improved carbon data coverage for the Fund's holdings in alternative credit and diversifiers. As a result, the Fund is now relying less on proxy estimates and can report and review emissions with greater confidence. Specifically:

- Within Alternative credit: Carbon data coverage rose from under half to over two-thirds, and actual reported holdings data increased from a very small proportion to around one-third. This has reduced reliance on proxies and improved reporting accuracy.
- Within Diversifiers: In 2024, carbon data was unavailable for 45% of holdings. By 2025, this dropped to 19%. The improved coverage has resulted in higher reported emissions but offers a more complete view of the asset class's carbon footprint.

It is naturally disappointing to see some headline carbon emissions metrics increase and the Trustee has explored the reasons behind this. Over time, the Trustee expects that the longer-term trend will continue downwards but recognises the volatility in the short term that may be present due to changes in underlying holdings and ongoing developments within the industry (such as data availability and methodology changes). As was noted in previous years, data availability and accuracy has improved since the Fund started producing Climate Change reports. The Trustee also recognises that a key driver of change will be the actions of governments, consumers and corporates.

**LDI investments and buy-in insurance policies**

The Trustee has agreed to exclude LDI and buy-in insurance policies from the Fund's target and to report the climate metrics for LDI separately. The reason for the separate disclosure is because the underlying methodology is materially different, as are the potential actions available to the Trustee.

For UK Government Bonds, for example, the carbon emissions are calculated as the territorial emissions in the whole of the UK i.e. those that take place within a country's territorial boundaries and include exports but omits imports. The denomination used to attribute emissions is the total amount of UK Government Debt outstanding.

The rationale then for the current exclusion of Government Bonds from the Fund's target is as follows:

- The Trustee primarily holds Government Bonds as assets to hedge the Fund's liabilities and as such, even if reducing exposure to these assets would lead to an overall improvement in climate metrics, it would open the Fund up to excessive funding and investment risk
- The Trustee recognises that it has limited capacity and capability to engage with the UK Government on its climate policies
- The level of financial risk arising from these assets is perceived to be much smaller i.e. the influence of climate change on the price of Government Bonds in comparison to the other assets held is likely to be lower

Whilst the above provide the rationale as to why the Fund excludes liability hedging assets from the Fund's target, the Trustee still believes it is useful to monitor these figures over time. As such, the table below shows the climate metrics provided by the Fund's LDI manager, Insight. The Trustee, via their DCIO, does also continue to monitor that the manager of these Government bonds appropriately considers climate change in their actions, whether that be in their selection of bank counterparties for derivatives or engaging with industry discussions and consultations on climate related matters. The DCIO has also partnered with Insight Investment, a manager in this space which the DCIO views very positively in their approach to climate change.

The reduction in the below metrics is largely attributable to a reduction in the portfolio allocation to LDI. Over the 12 month period to 31 March 2025, the Fund made an investment in UK corporate bonds which provides some matching characteristics and as a result reduced the allocation to LDI assets in the portfolio.

| Metric **(Scope 1 & 2)** | **LDI portfolio – as at 31 March 2025** | LDI portfolio – as at March 2024 |
|---|---|---|
| Total allocation | £182.6m | £243.7m |
| Total allocation (% of portfolio) | 40% | 45% |
| Absolute Emissions (tCO2e) | 49,883 | 59,970 |
| Carbon footprint (tCO2e / £M invested) | 166.3 | 167.4 |

**The Trustee's view on approaching scope 3 emissions**

Scope 3 emissions data is critical to help build a better picture as the Fund decarbonises our portfolios and economies. However, the Trustee believes that current reported Scope 3 emissions data is largely inadequate for purposes including making accurate climate-informed investment decisions. Further, given data issues, the Trustee believes that disclosing the Scope 3 emissions of investment portfolios at this stage will necessarily be limited in coverage, subject to large estimation errors, and not fit for meaningful comparison between investors or over time. This is shown in change in emissions reported between 2024 and 2025 below. At a minimum, the Trustee believes any Scope 3 emissions disclosures should be disaggregated from Scope 1 and 2 emissions. The Scope 3 emissions are therefore outlined below separately.

The level of Scope 3 emissions reported as at 31 March 2025 has increased significantly versus what was reported last year. This is largely attributed to data quality, specifically the increase in actual carbon emissions been reported by the Company which increased by 19% over the period. This is something the DCIO and Trustee will continue to monitor as the data quality of scope 3 emissions improves.

Data providers, like MSCI, have tried to solve for this problem by providing Scope 3 datasets using proprietary models and internally vetted methodologies. However, current solutions rely significantly on top-down sector emissions data with limited use of bottom-up data (which is company-specific). Models that rely on sector information limit users' ability to distinguish companies from peers. While there is sizable support from the investment industry and others for better disclosures, the Trustee needs to be realistic around the current issues of reliability of Scope 3 data available.

Importantly, assessing risks and opportunities are not purely about emissions. A holistic picture that uses various metrics can be achieved through the DCIO's Climate Dashboard approach. The Trustee believes that this balanced scorecard approach can helpfully inform investment decision-making and support the construction of robust and resilient portfolios.

Whilst Scope 3 emissions disclosure is improving, the Trustee believes that the investment industry can play a proactive role in accelerating and supporting this trend. The Trustee's DCIO is working closely with and engaging data providers to promote better disclosures. Similarly, the Trustee's DCIO engages extensively with the asset management community, including pushing for better corporate disclosure, and for the adoption of generally accepted standards and methodologies. The Trustee's DCIO also undertakes direct and indirect policy engagement, advocating for the adoption of common standards and methodologies, including those of the International Sustainability Standards Board.

**Scope 3 Emissions (on a total assets basis)**

| | Carbon Emissions Data | |
|---|---|---|
| | Absolute Emissions (tCO2e) – Scope 3 | Carbon Footprint (tCO2e / $m) – Scope 3 |
| Total assets ex buy-in and LDI assets- 2025 | 229,772 | 401 |
| Total assets ex buy-in and LDI assets -2024 | 83,686 | 121 |

Scope 3 emissions are calculated at the overall portfolio level.

**Data quality for Scope 3 emissions**

| Carbon emission (CE) data quality for scope 3 | Data quality 2025 | Data Quality 2024 |
|---|---|---|
| Actual holdings – CE reported by company | 25% | 6% |
| Actual holdings – CE estimated by Manager | 1% | - |
| Actual holdings – CE estimated by third party | 3% | 17% |
| Proxied holdings | 10% | 9% |
| No data | 21% | 23% |
| LDI assets | 40% | 45% |

**Target**

The Trustee recognises that measurement of progress of the Fund and the whole investment industry in stewarding the transition to a net zero and climate-resilient economy is an important issue. There is no single definitive metric that can be used to adequately measure progress as climate is a multi-dimensional issue, and the data and analytics in this space are rapidly evolving. In line with the Regulations, the Trustee has however set a target on a single metric which is outlined below.

The Trustee has identified carbon footprint as the metric on which to set a target. This target is to reduce the Fund's carbon footprint of the non-government bond assets excluding buy-in insurance policies (Scope 1 and 2 emissions) by approximately 50% by 2030 and to achieve net-zero by 2050. This is measured against a 2022 baseline. The Trustee is reassured that the DCIO has also set a goal that is consistent with this objective and a key part of the Trustee's responsibility is to monitor the DCIO's progress against this objective over time. The Trustee updated the target this year to reflect changes in the investment strategy and timescales. The Trustee intends that this goal will be achieved through engagement (with the Fund's underlying managers and companies invested in), impact investing (in assets such as green energy), strategic changes (investing in assets with lower climate risk) and also as a result of the 'free rider' effect. This recognises that although the Trustee has and will take positive actions, the Trustee won't be able to achieve this goal alone and will require the continued collaboration of the global community to combat climate change.

It is well acknowledged in the industry that there are several difficulties associated with measuring progress against a carbon footprint goal, such as data quality, backdating of metric information and the fact that changes in the metric are often driven largely by noise (e.g. a company value changing) rather than reductions in real world emissions. The Trustee therefore measures success by monitoring change in multiple metrics and also by reviewing the actual actions taken by the Trustee and the third parties that it collaborates with.

The Trustee has reported year on year progress below in relation to the carbon footprint (Scope 1 and 2 emissions) of the Fund's non-government bond assets excluding buy-in insurance policies. As can be seen from the chart below, this has increased by over the period. This was largely as a result of changes to the underlying asset allocations within the fund combined with an improvement in the carbon data coverage in certain asset classes.

Over time, the Trustee expects that the longer-term trend of the Fund's carbon footprint will continue downwards, towards the Trustee's net-zero target. The Trustee, however, also recognise that there may be short term deviations in some years for the reasons described earlier in the report. The Trustee will continue to contribute to collective industry efforts to reduce real world emissions; acknowledging that the Trustee's own success in this area depends on the actions of others as well as its own.

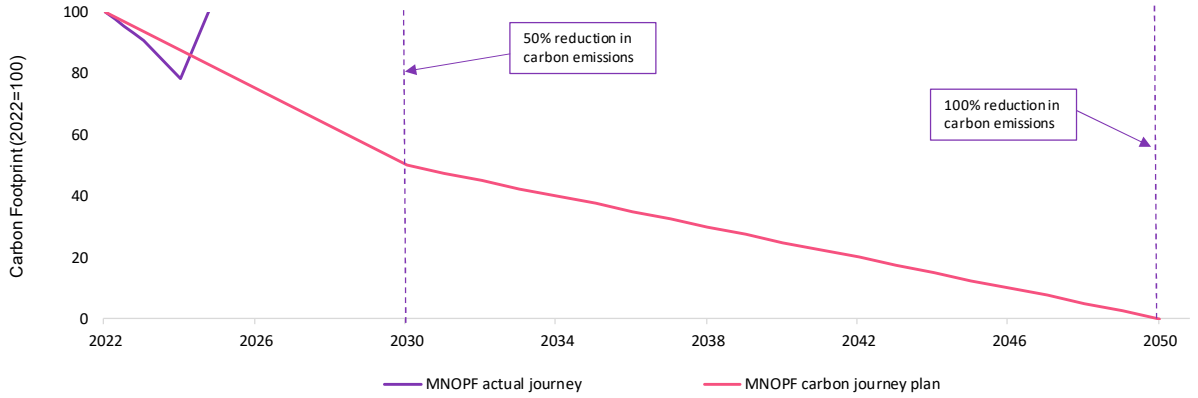
**Medium Term Target**

50% reduction in GHG footprint of the portfolio of non-government bond assets (excluding buy-ins) by 31 March 2030 (Scope 1 & 2 emissions) from 31 March 2022

**Long Term Target**

Net-zero GHG footprint of the portfolio of non-government bond assets (excluding buy-ins) by 2050 or sooner (Scope 1 & 2 emissions) from 31 March 2022

## Carbon Journey Plan




| Target | MNOPF 31/3/23 Carbon Footprint (tCO2e / $m) – Scope 1 & 2 | MNOPF 31/3/24 Carbon Footprint (tCO2e / $m) – Scope 1 & 2 | MNOPF 31/3/25 Carbon Footprint (tCO2e / $m) – Scope 1 & 2 | Year on year change |
|---|---|---|---|---|
| Total assets ex buy-in | 27 | 22 | 29 | 32% |

### Steps taken over the year to achieve target

The Trustee has taken the following steps to help achieve the target outlined. These are in addition to the various other points referred to throughout this report.

- Maintained the appointment of a DCIO that has made a commitment that is consistent with the Trustee's target. The Trustee assesses the DCIO annually.
- The Trustee reviewed the engagement activities of the DCIO over the year and was comfortable with the work being undertaken.

The underlying managers continue to have strong policies and processes in these areas. Whilst data quality is improving, the Trustee would warn against focussing solely on the absolute carbon footprint as any actual improvements (or regression) in emissions made by the Fund could be offset by changes in underlying data (which the Trustee has limited control over) which the DCIO believes was the cause of the short term increase over the last year. It should therefore be recognised that the progress towards the ultimate target is unlikely to be a smooth one, however the Trustee expects the analysis to become more robust over time, as data improves, and industry practice evolves. The recent increase in reported carbon metrics reflects an improvement in the quality and completeness of data rather than a deterioration in the scheme's position or a deviation from the Journey Plan. More comprehensive data has provided a clearer picture of the Fund's carbon emissions. Importantly, this does not represent a setback in progress but rather a recalibration, ensuring that future monitoring and reporting is based on a more accurate baseline.

**Going forward**

The Trustee continues to focus on taking appropriate actions to manage the risks and opportunities and to monitor a balanced scorecard of climate metrics in line with the belief that climate change will have a material impact on financial outcomes in the future.

The Trustee is continuing to monitor the evolving climate measurement landscape with the expectation that the robustness of the metrics will improve over time. The Trustee looks forward to sharing updates on our progress in monitoring and managing climate risks and opportunities next year.

# Appendix I – Climate Scenario notes

WTW have developed proprietary scenario analysis modelling to assist clients in assessing climate risk in their investment strategies. However, WTW does not seek to create climate scenarios "from scratch" given the large number of scenarios already produced by credible sources and instead look to augment these with internal research and analytics where appropriate.

The process that WTW has undergone to design climate scenarios is:

- Describe a transition narrative at a high level in terms of the proportion of technical levers captured across the various key sectors of the economy.
- Translate these into a set of high-level parameters (e.g. carbon price pathway, pace of decarbonisation of the energy system) for the scenario as well as an emissions pathway based on existing research.
- Translate the pathways above into consistent outcomes for global average temperature rises relative to pre-industrial levels
- Compare the above to the outputs from existing scenario providers (e.g. NGFS, IPR, IPCC) and identify compatible transition narratives to "fill in" more detailed parameters.
- Compare the full parameter set to the assumptions underlying MSCI datasets and determine if the assumptions are sufficiently close that the MSCI data sets can be used directly or attempt to adjust the dataset outputs to reflect material differences

The key data inputs that we use for the construction of our existing climate scenarios are:

- IPCC's Shared Socioeconomic Pathways, Representative Concentration Pathways, Sixth Assessment Report and Special Report on Warming of 1.5ºC
- The NGFS climate scenarios and associated databases
- The IEA NZE 2050 scenario and associated datapoints
- The IPR Forecast Policy Scenario value driver's database
- MSCI's Climate Value at Risk dataset
- Climate Action Tracker: https://climateactiontracker.org/
- WTW's own proprietary climate research and transition risk analytics