The Merchant Navy Officers Pension Fund Trustee's Climate Change Report for the Fund Year ending 31 March 2024

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 second 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 is 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 as the industry works together. Given the importance of data quality we have added more granularity to the disclosures on data quality in this year’s report. This year we have included Scope 3 carbon emissions data for the first time.

We have set ourselves a target to reduce the carbon footprint of the MNOPF to net-zero by 2050 or sooner, and an interim 25% reduction by 2026. Pleasingly, we are slightly ahead of our planned trajectory to achieve the 2026 objective as absolute carbon emissions have fallen since the first report and we have taken action to help manage climate change risks and opportunities. We recognise the limitation of focusing on a single figure and so we monitor a range of climate change metrics as part of our ongoing management.

Although we have made progress, 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.

Mike Jess
Chair of the Trustees of the Merchant Navy Officers Pension Fund
Date: 8 October 2024

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 2024. 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 and the Trustee ensures that such third parties 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 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 four 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 that climate change is considered as part of the 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 Net-Zero Asset Managers Initiative as well as being a signatory to the UK Stewardship Code. The consideration of SI is fully embedded in their 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.

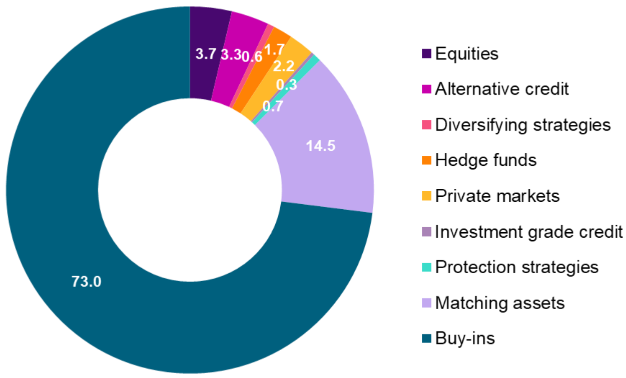
Overview of context

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 2024 the Fund was estimated to be 100.2% funded on a Gilts flat basis. The Fund is aiming to build up a funding surplus in a low-risk manner over time and aims to insure all of its liabilities in the coming years. A review of investment strategy is taking place in September 2024.

Under the current investment strategy, the Fund had a return target of Gilts +0.6% p.a. as at 31 March 2024, and a hedge target of 100% of the interest rate and inflation sensitivity in the Fund's liabilities (as a percentage of assets).

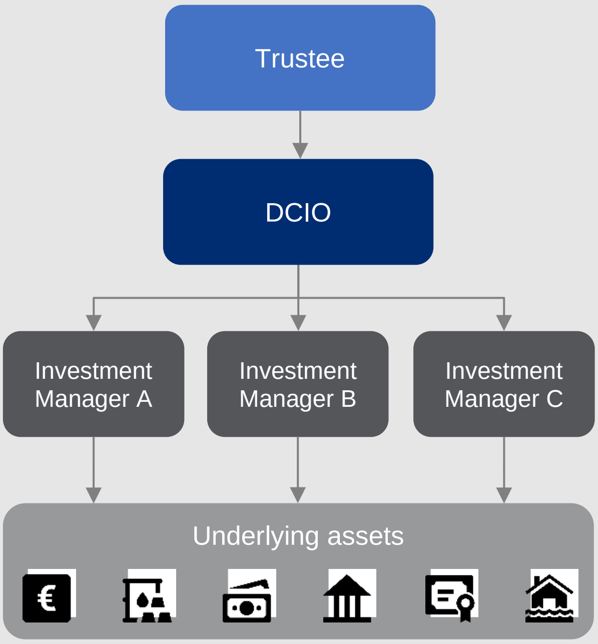
The Fund's liability driven investments (LDI) and buy-in insurance policies have been removed from the Fund's climate target and the climate metrics for LDI have been reported separately. The duration (weighted average time of payment) of the Fund's uninsured liabilities is expected to be 13.6 years as at 31 March 2024. 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 and a shorter time horizon than many other pension funds, given the nature of the assets it holds and its objective.

Fund breakdown - % of total assets as at 31 March 2024



The Fund's assets totalled £2bn as at 31 March 2024, with 73% 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 they are 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 its 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 (WTW) 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 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 SI policy which sets out a more in-depth overview of The Trustee's beliefs and goals in this area. 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 four times over the year and climate change was discussed at three 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. 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 our SIP, the Trustee recognises that the long-term financial success of our investments is influenced by a range of factors which includes appropriate management of environmental, social and corporate governance issues (including climate). As such, we typically invest with investment managers with the expectation of a long-term relationship, and we expect investment managers to take a similar approach with the companies that they invest in. The DCIO engages with our investment managers where appropriate on their approach to stewardship and engagement. The Trustee have identified climate change and human and labour rights as two key priorities in this area.

The DCIO also 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 2024 EOS represented $1.8trn 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 2023, this included:

- Engagements with 1,041 companies on a total of 4,272 issues and objectives.
- 31 responses to consultations or proactive equivalents and 90 discussions with relevant regulators and stakeholders.
- Voting recommendations on 128,101 resolutions, including 22,716 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 167 companies globally. EOS is among over 615 investors, totalling $65tn under management, who have signed up to CA100+. EOS led or co-led the engagement on over 20 focus companies as part of this initiative.

Overview of key climate activities conducted over the year

Over the Fund year to 31 March 2024, 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 manager uses EOS at Federated Hermes, a leading stewardship provider, with over $1.8tn 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 2023 this included 1,041 company engagements on 4,272 issues and 128,101 voting recommendations, with 22,716 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. **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. One of the selected priorities was climate change reflecting the Trustee belief that this is currently one of the biggest ESG risks and therefore requires specific attention. Climate change has been an area where the Trustees have carried out engagements with their managers in the past, but they will continue to prioritise this in the future.	**ESG action within the credit portfolio:** As the DCIO increased its minimum standards and expectations over time in relation to SI, one manager became a clear laggard relative to other exposures in the portfolio, lacking a framework for both ESG integration and engagement. The DCIO communicated its concerns with the manager and stopped allocating new capital to this manager while they developed a plan to significantly improve their capabilities and resources spent here. The manager has now made significant progress on their SI capabilities, as well as the commitments made as part of the engagement process.	**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. **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. **Member communications** – The Trustee issued a member communication over the year which covered climate change reporting and the net zero target.

The DCIO has also carried out several activities to help the Trustee meet their climate goals over the Fund year to 31 March 2024, which included:

- Confirming UK Stewardship Code adherence for 1 January 2022 to 31 December 2022 and have recently applied for the year ended 2023
- 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
- Leading the update of the ICSWG Engagement Reporting Guide
- Being active members of the UK Government's Transition Plan Taskforce working to improve organisations' climate transition planning
- Engaging with over 150 mangers and almost 300 products, over the year, on the topics of sustainability and stewardship
- Investing in a new portfolio construction tool incorporating climate metrics
- Researching over 140 sustainability themed strategies with a focus on climate
- Engaging with and responding to several government consultations, such as the updated TCFD Regulations from the Department for Work and Pensions (DWP)

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: Creating investment solutions integrating sustainability factors**	**Case study: Engagement with a Latin American high yield debt strategy**
The DCIO had several meetings with the Pensions Regulator covering several topics including: • how climate scenario analysis can be made more robust and decision useful • how the Regulations might be applied to smaller pension funds • 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 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.	This year the DCIO worked with an index provider to launch the WTW Global Equity Diversified Index (GEDI) – an index which aims to provide 'whole of equity portfolio' smart beta exposures whilst integrating various sustainability factors in a way that is expected to deliver meaningful excess returns over a market capitalisation exposure at a reduced cost. GEDI's approach integrates sustainability, climate, and net zero, including incorporation of WTW's Climate Transition Value at Risk (CTVaR). It has rules for excluding stocks based on certain criteria and the strategy includes a net zero target consistent with WTW Investment's commitment to target net zero greenhouse gas emissions by 2050 across their fully discretionary delegated portfolios and includes an interim goal of a 50% reduction by 2030 which is consistent with plausible pathways to net zero as set out in the current climate science.	We recognise that some areas of the portfolio will have higher emissions than others, but we believe it is important to engage to try to improve the level of emissions where possible. The DCIO found that the opportunity set for Latin American high yield debt was heavily weighted towards high emitters. The DCIO wanted to explore ways the manager could bring down the emissions of the portfolio over time, recognizing energy names are a core part of the Latin universe and WTW were not in a position to dictate the guidelines of the pooled fund in question. The DCIO engaged with the portfolio managers and ESG team within the strategy and provided feedback on the manager's privileged position to negotiate better ESG policies with their borrowers. In response the manager took the feedback on board and as part of a workout it had undertaken on a Chilean thermal coal company, negotiated with the company to develop a plan to shut down its plants in the coming years (consistent with Chilean Regulations to shut down coal fired plants by 2040), therefore managing risk for investors in the company. Our DCIO continues to engage with them on ESG reporting.

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 2022. 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 will be reviewed as part of the triennial Actuarial Valuation and investment strategy discussions taking place in Q4 2024.

Short term	2024	This is defined as the next Actuarial Valuation at which the funding strategy will be revisited in detail.
Medium term	2026	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	2030	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) • Liabilities: Improvements in mortality from healthier lifestyles	• Assets: Damage to physical assets underpinning securities (e.g. real estate and infrastructure) • Liabilities: Excess deaths arising from extreme weather	• Implementation Statement • DWP Pensions bill • 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.

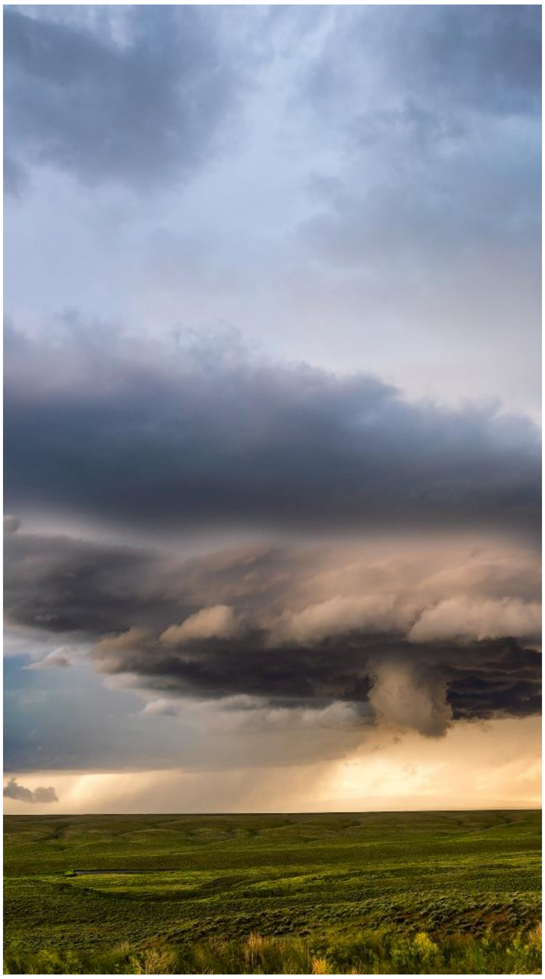
	Short Term	Medium Term	Long Term
Timeframe	To the next Triennial Actuarial Valuation (2024)	Timeframe expected to end of Journey Plan (current target of 2026)	Timeframe beyond insuring all liabilities (2030)
Primary types of risk	• Regulatory • Reputational • Transition	• Reputational • Transition	• Transition • Physical
Key risk exposure	The Trustee is exposed to regulatory risks, including fines, if it does not comply with evolving regulatory requirements. The Trustee (and Participating Employers) are exposed to reputational risks if the Trustee's policies are misaligned with peers and/or sponsors. 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. The Trustee is exposed to transition risks through the equity and bond portfolios. The Trustee is exposed to the impact on insurer pricing of climate risk, including the impact on future expected returns and other financial and demographic assumptions. 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.	The insurer may be exposed to physical and transition risks through its holdings in various asset classes. In an extreme left-tail event, exposure to, and poor management of these risks may weaken the strength of the insurer and ability to meet pensioner benefits. 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 insurer approaches to ESG and climate risks as part of the decision to choose a particular fund can help influence insurer approaches to these risks.	N/A – Fund no longer in existence

Climate scenario analysis

Annual review of climate scenario analysis

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. Over the Fund year the Trustee conducted this review and agreed that updating the climate scenario analysis was not warranted as there were no material changes to the funding objectives and strategy of the Fund. This included limited changes to the Fund's asset allocation, membership, Participating Employers' covenants and the underlying climate scenarios available to test the robustness of the funding strategy. The Trustee is therefore continuing to progress the previous actions identified as part of the previous analysis which is outlined in Appendix I.

As we note in the summary of the analysis, the Trustee is aware of concerns in the industry about the severity of some of the climate scenarios and expects to address this as part of future iterations of this analysis.



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 Appendix I 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.

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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.

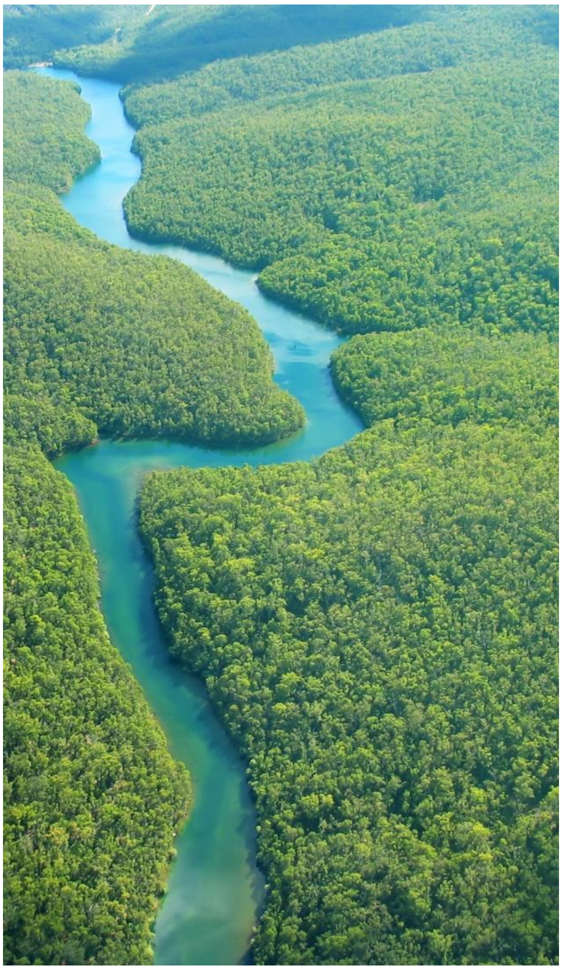
The metrics disclosed have been selected from the following categories:

- 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’ metrics 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. We have used each entity’s enterprise value, including cash (EVIC) 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 beliefs that the global response to climate change can reward those who respond and adapt quickly as well as punishing the laggards

We have also published information on data quality as we believe it is important to monitor this as climate metrics are at an early stage and data is currently limited. We also believe that improved data quality and coverage is an area that we (through the DCIO) can most influence our investment managers and improvements would allow better decision making on future carbon metrics.

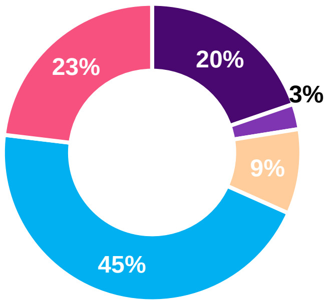
Climate metrics analysis

As at 31 March 2024	Allocation	Carbon Emissions Data Absolute Emissions (tCO2e) – Scope 1 & 2	Carbon Emissions Data Carbon Footprint (tCO2e / $m) – Scope 1 & 2	Exposure to Climate Solutions (%)	% of assets with approved SBTs
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%*				
for comparison					
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%*

*LDI assets have been classified as cash for the total asset figures reported above, consistent with the approach taken last year. We have provided further information on the LDI assets in the coming pages.

Data quality for scope 1 + 2 emissions (shown in the table and pie chart below)

Carbon emission (CE) data quality for scope 1 & 2	Data quality
Actual holdings – CE reported by company	20%
Actual holdings – CE estimated by third party	3%
Proxied holdings	9%
No data	23%
LDI assets	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 reflected positively that the Carbon Footprint of the Fund's assets has fallen over the last two years. 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 % of assets with approved SBTs increased from 8% to 10% but exposure to climate solutions fell due to a change in reporting methodology.

- 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. Indeed, the calculation methodology supporting the science-based targets metric has changed since last year's report and proxy holdings are no longer included in the calculation.

Ultimately the Trustee was comfortable with the analysis presented but continues to use these metrics to inform the actions referred to later in this section and engage with the Fund's DCIO.

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.

Metric	**LDI portfolio**
Total allocation	£243.7m
Total allocation (% of portfolio)	45%
Absolute Emissions (tCO_2e)	59,970
Carbon footprint (tCO_2e / £M invested)	167.4

The Trustee's view on approaching scope 3 emissions

Scope 3 emissions data is critical to help build a better picture as we decarbonise 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. 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.

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, we need 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 our DCIO's Climate Dashboard approach. The Trustee believe 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, we believe that the investment industry can play a proactive role in accelerating and supporting this trend. Our DCIO is working closely with and engaging data providers to promote better disclosures. Similarly, our DCIO engages extensively with the asset management community, including pushing for better corporate disclosure, and for the adoption of generally accepted standards and methodologies. Our 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. Our DCIO believes the recently released IFRS S1 and S2, including provisions around Scope 3 emissions, are a highly significant forward step.

<u>Scope 3 Emissions (on a total assets basis)</u>

As at 31 March 2024	Carbon Emissions Data	
	Absolute Emissions (tCO_2e) – Scope 3	Carbon Footprint (tCO_2e / \$m) – Scope 3
Total assets ex buy-in and LDI assets	83,686	121

Scope 3 emissions are calculated at the overall portfolio level.

<u>Data quality for Scope 3 emissions</u>

Carbon emission **(**CE) data quality for scope 3	Data quality
Actual holdings – CE reported by company	6%
Actual holdings – CE estimated by third party	17%
Proxied holdings	9%
No data	23%
LDI assets	45%

Data quality

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 tables above show 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.

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.

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 (Scope 1 and 2 emissions) by 25% by 2026 and to achieve net-zero by 2050. This is measured against a 2022 baseline. The Trustee is reassured that the DCIO has also made a commitment that is consistent with this objective and a key part of our responsibility will be monitoring the DCIO's progress against this objective over time. 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 assets excluding buy-in insurance policies. As can be seen from the chart below, this has changed by 17% over the period.

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. This could be due to changes in underlying holdings and ongoing developments within the industry (such as data availability and methodology changes). The Trustee also recognises that a key driver of change will be the actions of governments, consumers and corporates and while the Trustee will do what it can to ensure the objective is achieved, there is reliance placed on the actions of others.

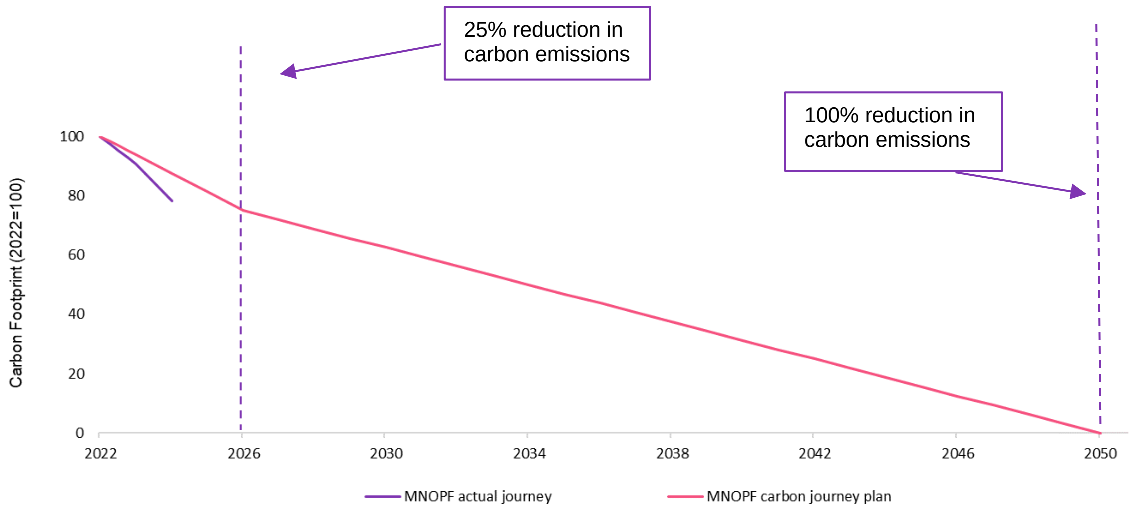
Medium Term Target

25% reduction in GHG footprint of the Group's portfolio of assets (excluding government bonds) by 31 March 2026 (Scope 1 & 2 emissions) from 31 March 2022

Long Term Target

Net-zero GHG footprint of the Group's portfolio of assets (excluding government bonds) by 2050 or sooner (Scope 1 & 2 emissions) from 31 March 2022

Carbon Journey Plan



Target	MNOPF 31/3/22 Carbon Footprint (tCO2e / $m) – Scope 1 & 2	MNOPF 31/3/23 Carbon Footprint (tCO2e / $m) – Scope 1 & 2	MNOPF 31/3/24 Carbon Footprint (tCO2e / $m) – Scope 1 & 2	Year on year change
Total assets ex buy-in	29	27	22	-17%

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). 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.

Going forward

Next year the Trustee will be reviewing the target that his been set to consider whether it remains fit for purpose and to take account of some of the limitations referred to above. In addition, the Trustee will reconsider its climate strategy (e.g. reviewing time horizons and risks) in the context of the results of the Actuarial Valuation and any updates or changes in its mission and objectives. As mentioned, the target aside, 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 analysis results

Previous climate scenario analysis – as at June 2022

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 key climate scenarios that the Trustee has considered are:

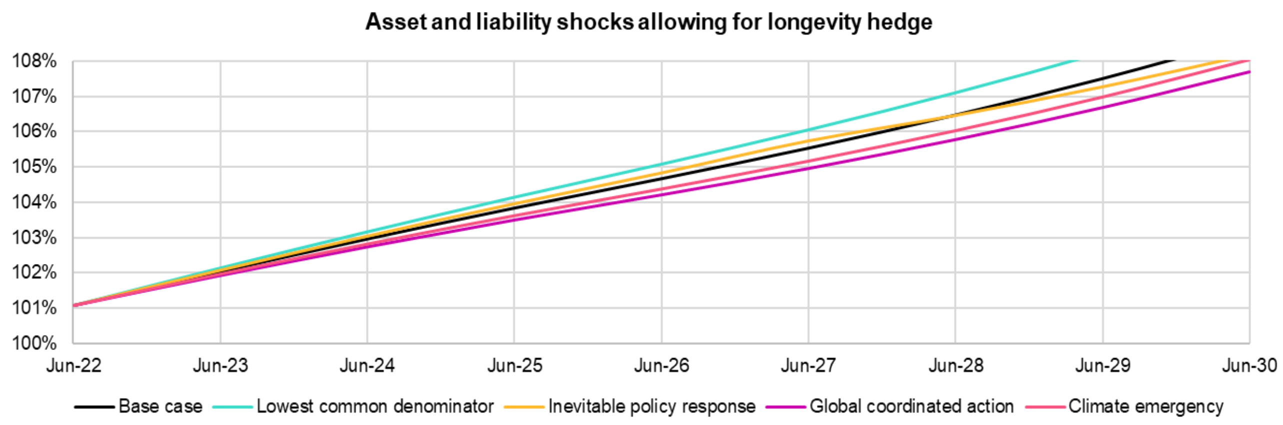
	Lowest Common Denominator	Inevitable Policy Response	Global Coordinated Action	Climate Emergency
Description	A 'business as usual' scenario where current policies continue with no further attempt to incentivise further emission reductions.	A delay in meaningful action but a rapid shift in policy in the mid/late 2020s. Policies are implemented but not in a very co-ordinated manner.	Policy makers agree on and immediately implement policies to reduce emissions in a globally co-ordinated manner.	An immediate, ambitious and coordinated response in which aggressive policy is pursued and more extensive technology shifts are achieved.
Temperature rise vs pre-industrial levels	3.5ºC	2.0ºC	2.0ºC	1.5ºC
% of Renewable energy by 2050	30-40%	80-85%	65-70%	80-85%
Transition risk level (shorter term)	Low	High	Low	Low
Physical risk level (Medium-longer term)	High	Low	Low	Low

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°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 four 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.

Below, 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 longer term time horizon (c.15 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 a one-off shock which seeks to illustrate the impact if climate change was to be reflected instantaneously. This assumes that markets immediately price in the transition and physical risks over the next 15 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, in reality, the shocks experienced could be larger.

In some climate scenarios, our modelling process implies reduced life expectancies (relative to other scenarios and/or schemes' central mortality assumptions) and therefore a relative reduction in the Fund's liabilities. This is a plausible potential outcome arising from the negative impacts of increasing climate change. This can suggest a relative improvement in the expected funding position for the Fund even when combined with associated reductions in the value of the Fund's assets. However, it is important to recognise that an assessment of what is in the best interests of the Fund and its members is a much broader question than the impact on funding level alone. Key considerations may be a reduction in the quality (and length) of members' lives, and the quality of the environment that they will retire into. Consequently, the results of any such modelling should not be assumed to reflect any complacency or acceptance (either implicit or explicit) that the Trustee considers global inaction or business-as-usual with respect to climate change to be in the best interests of the Fund or its members. 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.

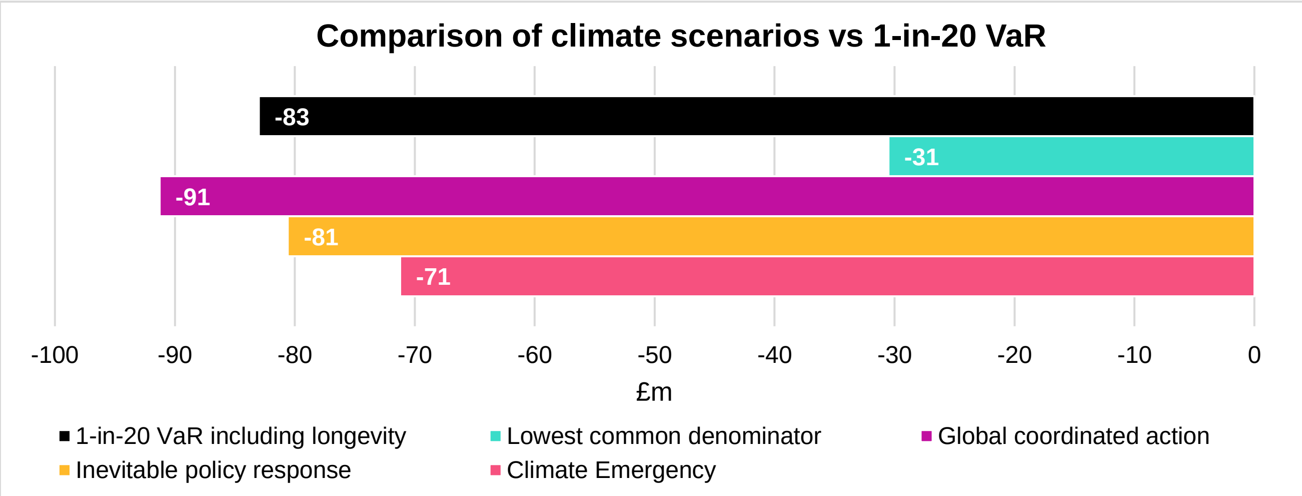
<u>Impact of Climate Drags on the Fund's Funding Level</u>



Scenario	Asset return impact p.a.*	Buy-in return impact p.a.***[2]	Liability return Impact p.a.	Funding level in December 2025	Relative Funding
Base case	-	-	-	104.3%	0.0%
Lowest Common Denominator	0.00%	- 0.25%	- 0.34%	104.6%	+0.3%
Global Coordinated Action	-0.04%	+ 0.17%	+ 0.23%	103.8%	-0.5%
Inevitable Policy Response **	- 0.23%	- 0.10%	- 0.13%	104.4%	+0.1%
Climate Emergency	- 0.08%	- 0.02%	- 0.03%	104.0%	-0.3%

The above analysis was conducted as at June 2022 when the funding level was 101%. It has since declined slightly to 99.6% as at June 2023, so updated projections may differ.

Impact of Climate Shocks on the Fund's Funding Level



* Relative to the base case. Base case is assumed to price in Lowest Common Denominator transition costs. Asset return impacts are assessed only on ex-buy-in assets.
** Asset return impact begins from June 2027 (i.e., 5 years from the projection date) in this scenario. This represents the potential delay in agreeing and implementing required action.
*** Buy-in return impact represents the increase or decrease in the value of the buy-in as longevity impacts materialise.

Scenario	Asset shock (£m)[1]	Buy-in shock (£m)	Liability shock (£m)[2]	Decrease in surplus (£m)[2]	Decrease in funding level
Lowest Common Denominator	- 66	-98	- 133	31	1.2%
Global Coordinated Action	- 66	+ 68	+ 93	91	3.3%
Inevitable Policy Response	- 95	- 39	- 53	81	3.1%
Climate Emergency	- 75	- 10	- 13	71	2.7%

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, and the Fund’s gilts funding basis surplus as at 30 June 2022 is £27m.

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 relatively well protected against the impact of climate change both as a gradual impact and a sudden shock.