Merchant Navy Officers Pension Fund
for the Fund Year ending 31 March 2023

Trustee's Report in respect of the Occupation Pension Schemes (Climate Change Governance and Reporting) Regulations 2021

Section 1: Introduction and Chair Foreword

A foreword from the Chair of the Merchant Navy Officers Pension Fund

We are very pleased to present our first climate change report. In this report we deal with the impact of the Merchant Navy Officers Pension Fund ("MNOPF") on climate change and also the expected impact of climate change on the MNOPF.

We believe that Sustainable Investment has a material financial impact on investments and is therefore integral to successful mission delivery for our members. Our Journey Plan timeframe is rapidly decreasing but given the importance of this topic we consider the possible impacts on Fund's investments, the benefits we expect to pay to members 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 and you should note there are still some limitations around the information reported. Whilst we expect data quality to improve over time as the industry works together, imperfect data should not prevent us from reporting. We've already taken various actions to help manage climate change risks and opportunities.

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 track for the 2026 objective. 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. These are set out in this document, which shows that we have materially increased our exposure to climate-related opportunities over the year. We are in a very fortunate position of being well funded and having a low-risk investment portfolio. This means we have a great starting point, and we are committed to taking actions consistent with our overall goals.

Although we have made progress, we will continue to look to improve our education, monitoring and reporting in this area. We look forward to sharing our progress again with you next year.

Rory Murphy
Chair, Merchant Navy Officers Pension Fund Trustee Board
Date: 4 October 2023

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 Schemes (Climate Change Governance and Reporting) Regulations 2021 (the “Regulations”) for the year ended 31 March 2023. The Fund is a multi-employer scheme.

The Fund is now subject to the requirement to produce disclosures in line with the recommendations of the Taskforce on Climate-Related Financial Disclosures (TCFD), as transposed into UK law in 2021. The aim is to improve and increase reporting of climate-related financial risks and opportunities.

The Fund was subject to the TCFD requirements with effect from 1 October 2022, with the first formal report required to be published by 31 October 2023.

The TCFD 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 and financial plans of the scheme;
- **Risk management**: how the scheme identifies, assesses, and manages climate-related risks;
- **Metrics and targets**: the metrics and targets used to assess and manage climate-related risks and opportunities.

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

Section 2: Governance

The Trustee has identified climate change, alongside other Environmental, Social and Governance (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 our Delegated Chief Investment Officer ("WTW") on climate risk and the requirements of the Taskforce for Climate-Related Financial Disclosures ("TCFD") requirements. Given the pace of progress around sustainable investment, 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 can be found online at the following link.

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 Scheme, the Trustee has established a number of sub-committees, which includes the Journey Plan Steering Committee ("JPSC") and DCIO Executive Oversight Committee. The JPSC consists of four members and is responsible for the Scheme'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 Scheme's investment strategy. The DCIO Executive Oversight Committee consists of three members and is responsible for overseeing the actions and responsibilities of the Delegated CIO, 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's approach to climate change and SI was a key determinant factor in their selection and a focus point of the Trustee's ongoing monitoring. 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 sustainable investment is fully embedded in their investment processes. WTW works closely with the Board and provides regular assessment of its views on the underlying managers capabilities and performance in relation to ESG and stewardship, and a quantitative assessment of the Fund's portfolio across a number of 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.
- **Oversight Provider** – The Trustee also employs 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 advisors** – The Trustee also takes advice from the Scheme Actuary and Legal Advisor regarding the extent to which climate change may affect the funding strategy of the Fund and the ability of the sponsor to support the Fund.

The Trustee board meets at least four times a year and climate change is typically discussed at least once a year. The Trustee recognises that climate change is a fast-evolving and complex area which therefore requires ongoing discussion and education. Over the last 12 months, the Trustee has received training from the DCIO on the Department for Work and Pensions (DWP) climate regulations, climate metrics, climate scenario analysis and an annual deep dive into sustainable investment from the DCIO. All Trustee Board members are required to partake in these sessions as recognition of the responsibility of the whole group in evolving the Fund’s approach in this area.

Annually, the Trustee also receives a deeper dive into both the DCIO’s and underlying investment managers’ approach to SI. This covers the DCIO’s approach to reviewing managers and how this is evolving, identifying key actions the underlying managers took over the past year and sight of the annual manager SI reviews.

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 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. We 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 December 2022 EOS represented $1.34trn 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 EOS' Client Advisory Board. The DCIO engages with EOS on behalf of the Trustee to help shape its engagement approach and voting policies. Over 2022, this included:

- Engagements with 1,138 companies on a total of 4,250 issues and objectives.
- 33 responses to consultations or proactive equivalents and 75 discussions with relevant regulators and stakeholders.
- Voting recommendations on 134,188 resolutions, including 24,461 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 25 focus companies and is collaborating with other investors on over 30 companies as part of this initiative.

EOS has undertaken climate engagements with major oil and gas companies through CA100+. As part of this strong momentum, CA100+ issued its net-zero benchmark for the world's largest carbon emitters in March 2021. EOS helped to design the benchmark, which set clear engagement priorities.

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. 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:

Short Term – to 2024: this is the defined as the next Actuarial Valuation cycle at which the funding strategy will be revisited in detail.
Medium Term – to 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 – to 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:

Regulatory risk

- Regulators are increasing pressure on pension schemes to explicitly consider climate change
- **Example:**
  - Implementation Statement
  - DWP Pensions bill
  - Mandatory TCFD reporting

Reputational risk

- The increasing spotlight on pension schemes and climate change increases the risk of being "named and shamed"
- **Example:**
  - 2018 EAC report on 25 biggest UK schemes

Transition risk

- The indirect impact arising as a result of changes in society and economies to combat or adapt to climate change
- **Example:**
  - **Assets:** Some industries become obsolete (e.g. coal), reinvent themselves or others emerge (electric vehicles)
  - **Liabilities:** Improvements in mortality from healthier lifestyles

Physical risk

- The direct impact arising as a result of chronic and/or acute changes in climate and extreme weather events
- **Example:**
  - **Assets:** Damage to physical assets underpinning securities (e.g. real estate and infrastructure)
  - **Liabilities:** Excess deaths arising from extreme weather

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 next Triennial Actuarial Valuation (2024)	To expected timeframe to buyout (2026)	Beyond expected timeframe to buyout (post-2026)
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 sponsor) are exposed to reputational risks if the Trustee's policies are misaligned with peers and/or sponsor. The Trustee is predominately exposed to transition risks through the passive equity and passive corporate bond portfolios.	The Trustee (and sponsors) 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.	N/A – Fund no longer in existence

Working with the 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:

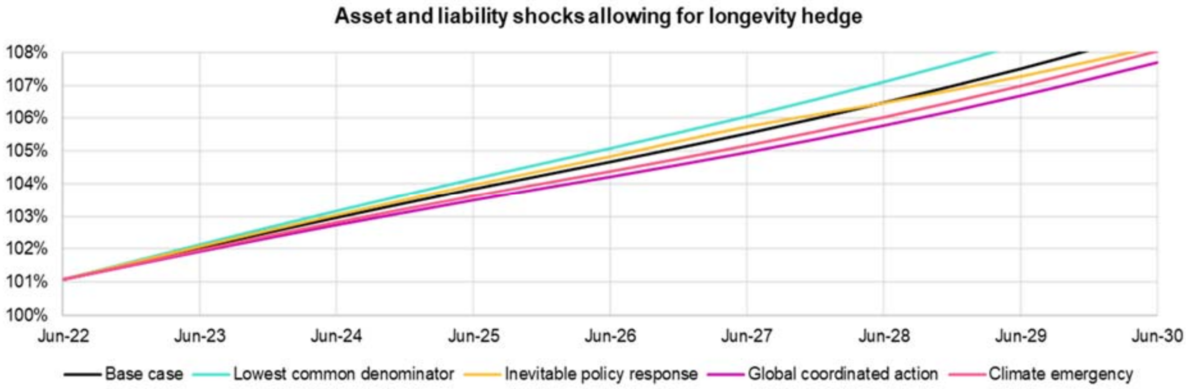
	Lowest Common Denominator	Inevitable Policy Response	Global Coordinated Action	Climate Emergency
Description	A 'business as usual' scenario where current policies continue with no further attempt to incentivise further emission reductions.	A delay in meaningful action but a rapid shift in policy in the 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.

Impact of Climate Drags on the Fund's Funding Level

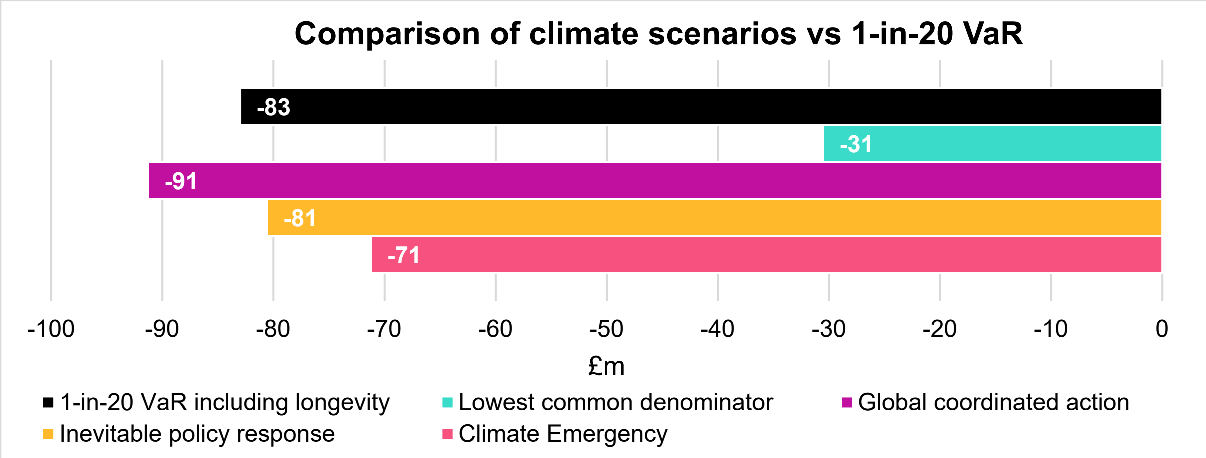


Scenario	Asset return impact p.a.*	Buy-in return impact p.a.***2	Liability return Impact p.a.	Funding level in December 2025	Relative Funding
Base case	-	-	-	104.3%	0.0%
Lowest Common Denominator	0.00%	- 0.25%	- 0.34%	104.6%	+0.3%
Global Coordinated Action	-0.04%	+ 0.17%	+ 0.23%	103.8%	-0.5%
Inevitable 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.

* 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.

Impact of Climate Shocks on the Fund's Funding Level



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. This was driven by two key factors:

The Fund's strong funding position – This was 101.0% (on a gilts flat basis) at the date of the analysis conducted. The funding level stands at 99.6% as at 30 June 2023, remaining strong.

The Fund's low-risk asset portfolio – The Fund has undertaken a significant amount of de-risking within the investment portfolio and has three buy-ins. The analysis therefore has a limited exposure to 'return-seeking' assets and instead largely invests in very high-quality debt securities (both Government and Corporate).

Although the analysis provided the Trustee with some reassurance on the robust nature of the Fund's funding strategy, it did clearly highlight that climate change could have a material impact on the Fund's outcomes. This reiterated to the Trustee that it warrants continued focus as part of the Trustee's broader SI strategy and should remain a priority area for portfolio monitoring, stewardship activities and manager engagement. In terms of next steps, the Trustee is focussing on the following:

- The Trustee is continuing to engage with its DCIO to ensure its investment managers maintain a focus on the risks and opportunities associated with climate change.
- The Trustee uses a dashboard of climate and ESG metrics together with an assessment of stewardship policies/activities to monitor the portfolio annually.

As mentioned earlier, the Trustee intends to update this analysis at least every three years and will be testing annually whether this needs to be done more frequently, including if there have been material changes to the scenarios used or the Fund's funding strategy.

Covenant considerations

Given that the Fund has a very strong funding position and is very close to buy-out, the Trustee now has a reduced likelihood of needing to place material reliance on the Sponsor in the future.

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 within its risk management in three ways:

Governance

Climate change is included within the Trustee's risk register which is monitored quarterly and reviewed in-depth 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 its responsibilities.

Top-down

The climate change scenario analysis shown in the previous 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 and liabilities). 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 have 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.

Case Study – DCIO's approach to Risk Management

The Fund's DCIO considers climate to be a financial risk and that the transition to net zero is a systematic and urgent global challenge which necessitates specific risk management and collective action. To achieve this, the DCIO has placed emphasis on the importance of:

- A combination of decarbonising existing investments and new investments in long-term climate solutions

- Using multiple ‘levers’ including changes to risk management and asset allocation, manager selection, and index design
- The critical importance of effective stewardship and policy level engagement

In line with this, the DCIO has developed the following Carbon Journey Plan framework which is consistent with the Trustee’s overall goals. This is outlined below.

Emission reduction levers

Climate ‘levers’	Description
Free Rider	The carbon intensity of major equity markets has been falling in recent years (albeit this depends on the metric used for measurement). As global governments introduce further measures to encourage the reduction of carbon emissions, the carbon intensity of corporate exposure could fall through no specific action by pension schemes
Mandate Changes	Making changes to the mandates given to investment managers can encourage or instruct a lower carbon portfolio to be held. Examples include exclusions (e.g. thermal coal), benchmark design (e.g. climate tilted indices) and limitations (e.g. through guideline limitations).
Engagement	Increased engagement with portfolio companies (across the portfolio, including equity and corporate bonds) may increase the pace of decarbonisation. It will likely be difficult to disaggregate the impact of engagement from the free rider effect.
Impact investing	Impact investments made by pension schemes into carbon neutral or negative assets can reduce or offset carbon emissions from elsewhere in the portfolio
De-risking	A pension scheme’s carbon risk (and depending on calculation methodology, carbon exposure) is expected to fall as schemes de-risk out of equities (higher carbon risk) and into bonds/LDI (lower carbon risk)

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 statement 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 and 2 emissions within the metrics displayed in this report but will look to include Scope 3 emissions as far as the Trustee is able as part of next year's report.

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.	Determined by the regulator
Carbon Footprint (tCO_2e / $ invested)	An 'emissions intensity' metric which gives a measure of how many tonnes of CO_2 emissions each million invested causes.	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.
Exposure to climate related opportunities/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 our beliefs that the global response to climate change can reward those who respond and adapt quickly as well as punishing the laggards.

In-line with current guidance, the emissions associated with UK Government bonds have not been included in the Fund's Carbon emissions figures. In future reports, the Trustees expect that the emissions from the UK gilts will still be calculated as the tons of carbon emissions per £m of nominal GDP and monitored separately. We have therefore assumed zero emissions for LDI and cash in the figures below.

	31 March 2022	31 March 2023
Total Carbon Emissions ("tCO2e")	28,758	18,743
Carbon Footprint (tCO2e / £m invested)	29	27
% of assets with approved Science based targets (SBTi)	8.5%	8.0%
Exposure to climate related opportunities/solutions	2.1%	4.6%

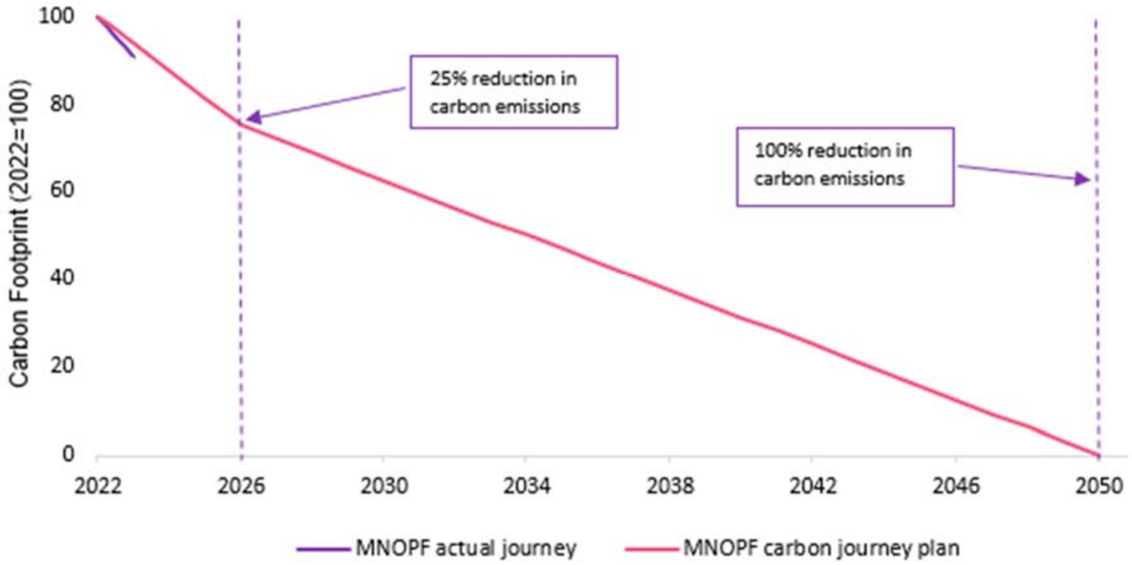
Data quality

In calculating the current absolute emissions and carbon footprint, the Trustee was able to obtain data on over 39% of the non-liability driven investment (LDI) part of the portfolio. Since the 2022 analysis, data availability has improved, and the Trustee expects data quality to continue to improve overtime as the industry collectively works together towards that common goal.

For the private assets the Trustee has proxied the exposure by using appropriate geographic and sector weights for the underlying holdings. This represents 12.3% of the total portfolio (on an ex-buy in basis). All the underlying carbon emissions data has been sourced from MSCI.

Targets

As referenced, the Trustee has also identified carbon footprint as the metric on which to set a target. This target is to reduce the Fund's carbon footprint (scope 1 and 2 emissions) by 25% by 2026 and to achieve net-zero by 2050. This will be measured from a baseline of 2022, and the experience to date is shown in the chart below. 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.



The estimated Carbon Footprint has decreased by around 10% since 2022, ahead of the reduction required to meet the 2026 target. The main driver for the decrease in carbon footprint between 2022 and 2023 is driven by lower footprint measures from the Fund's investments in equities and liquid diversifiers layer. 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.

Case Study – DCIO's approach

The DCIO has identified the challenges posed from managing portfolio performance alongside the carbon journey plan which led to a combination of setting top-down targets for long-term value creation alongside bottom-up evaluations of the portfolio's performance. In line with the Climate Financial Risk Forum's guidance, they are considering the impact of the Trustee's portfolios on climate change as well as the impact of climate change on the Fund's portfolios, in the form of a climate dashboard.

Having made substantial progress for target setting and measurement approaches, going forward increased focus will be on assessing climate-related performance and ensuring ESG and climate-related information is readily available to support the investment-decision making process.

Below is an extract of the DCIO's climate dashboard:

Category	Use case	Current metric	Notes
Impact of climate change on the portfolio	Transition Risk	Climate Transition Value at Risk	
	Physical Risk	Proportion of portfolio exposed to significant physical risks	Quantifying physical risk is a major focus, led by our Climate Quantified program and our leadership of the Coalition for Climate Resilient Investment
Impact of the portfolio on climate change	Decarbonisation	Financed emissions – emissions / $ invested	We assess total emissions and carbon footprint, also looking to exclude the impact of market movements to focus on actual underlying decarbonisation
	Alignment	% assets Paris aligned	We draw on multiple lenses here, including Science Based Targets Initiative (SBTi), Transition Pathway Initiative, Climate Action 100+. We also utilise the guidance and methodologies outlined in the Net Zero Investment Framework.
	Mobilising transition finance	Exposure to climate solutions	Aligned to EU Taxonomy and IIGCC methodologies.
Cross-cutting	Engagement	Climate engagement activities, voting records, public policy advocacy and collaboration.	Engagement through multiple mechanisms – asset-level engagement, voting, public policy and advocacy and collaboration. See the Stewardship Section.

Going forward

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 over time.