

# The Willis Pension Trustees Limited's Climate Change Report for the year ended 31 December 2023

Website where this report can be found:

<https://epa.towerswatson.com/accounts/wps/>



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# Section 1: Introduction and Chair Foreword

## A foreword from the Chair of Trustees of the Willis Pension Scheme

The Trustee is pleased to share its second climate change report which discloses how we, as a Board, are continuing our work to appropriately manage climate change risks and opportunities on behalf of our members. Climate change remains a top priority for the Trustee and something that continues to receive due time and attention. In similar fashion to last year, we are pleased to report that the Scheme remains in a very positive funding position with a low-risk investment strategy and limited reliance on the Sponsor. As you will see in the report, that means that, relative to other pension schemes, the Scheme is less exposed to all investment risks, including climate change. That comes through in our analysis to test the funding strategy under different climate scenarios and the climate exposures that the Scheme's portfolio has. Even though that is the case, we hope this report demonstrates that we continue to take many actions to continue to manage climate change as a risk and an opportunity. Key highlights over the year include:

- **Stewardship** – contributing, via the Fiduciary Manager, to several key collaborative initiatives such as engagements with the Government, the investment managers and the underlying assets we invest in.
- **Sustainable Investment review** – a key session the Trustee holds each year to review the Scheme's climate change policies, Fiduciary Manager, investment managers and the portfolio's climate change exposures. We remain pleased with the significant work in this area.
- **Education** – as a Trustee Board we undertook training across a variety of evolving areas such as scope 3 emissions and climate scenario evolutions.
- **Portfolio** – the Scheme's portfolio continues to invest directly in renewable infrastructure that we expect to contribute to and benefit from the transition to a low carbon world.

This is the second year we are reporting the climate metrics and, while there remain gaps in data quality, we do feel that the information is of sufficient quality to inform the work that the Trustee and its advisers do. 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 to reduce the carbon footprint (scope 1 and 2 emissions) of the Scheme's non-government bond assets by 50% by 2030 and to net-zero by 2050. 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 Board and the third parties that it collaborates with.

There has been a lot of debate within the industry in recent months on the suitability of the climate change scenarios that have been used to test the robustness of pension scheme funding strategies. We recognise that this is an important debate, and the Fiduciary Manager has recently evolved their range of climate scenarios which seek to incorporate climate tipping points and more disruptive climate scenarios. Conducting this updated analysis will be a key piece of work for the Trustee over the year ahead.

Over the year we have worked to improve the Statement to be more digestible and user friendly but recognise we still have work to do on communicating the hard work the Trustee and their advisers are doing to manage the risks and opportunities associated with climate change. We look forward to sharing an update in the third report next year.

**Peter Routledge** (Chair of Trustees of the Willis Pension Scheme)

# Introduction

The Trustee of the Willis Pension Scheme (hereinafter referred to as the "Trustee" and the "Scheme", respectively) presents its annual report under the Occupational Pension Schemes (Climate Change Governance and Reporting) Regulations 2021 (the "Regulations") for the year ended 31 December 2023. The principal employer of the Scheme is Willis Limited.

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

This report sets out the Trustee's approach 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 and financial plans of the Scheme under different climate scenarios

**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.

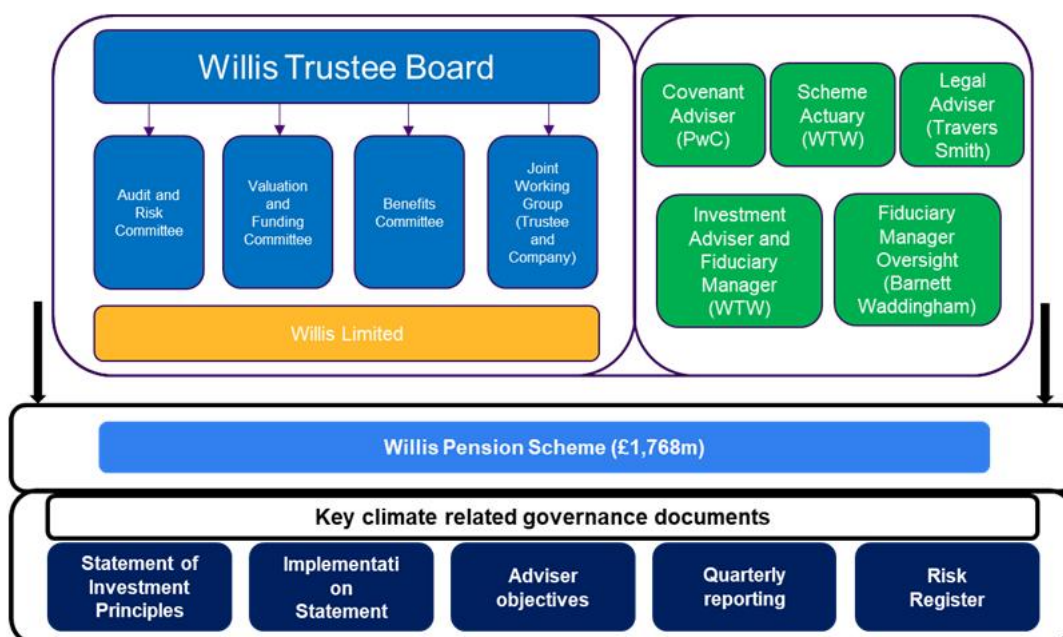


## Section 2: Governance

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

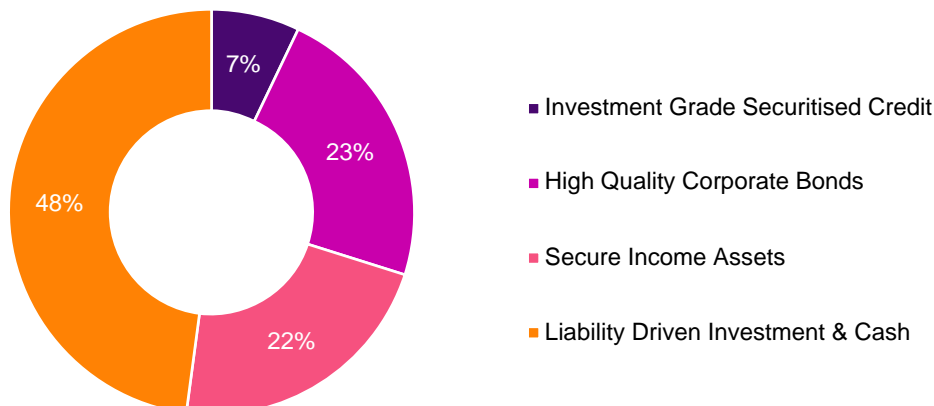
#### Overview of investment structure

The Scheme's governance structure is outlined in the graphic below. The Trustee of the Scheme are the group responsible directly for the Scheme and are involved in day-to-day governance of the Scheme. The Trustee does however make use of sub-committees to efficiently govern and conduct Scheme matters. We have outlined this in the graphic below.

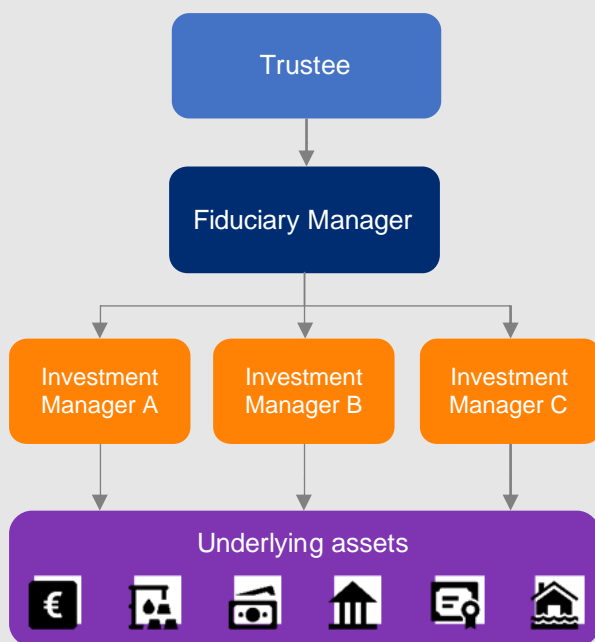


As shown in the graphic, the Scheme is made up of a single defined benefit section with assets totalling £1.8bn as at 31 December 2023. The Scheme also has a small number of Additional Voluntary Contributions (AVCs) which are not covered in this report on the basis of materiality.

#### Asset allocation



## How are the Fund's investments managed?



**Trustee** – The Trustee's key objective is to ensure there are 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.

**Fiduciary Manager (WTW)** – The Trustee appoints a Fiduciary Manager to implement the Trustee's investment strategy. The Fiduciary Manager allocates the Fund's assets between asset classes and investment managers.

**Investment managers** – The Fiduciary Manager appoints underlying investment managers using pooled vehicles and segregated mandates. The Fiduciary Manager 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 context

As can be seen above, the Scheme has a very low-risk portfolio, with most assets invested in Liability Driven Investment (largely UK Government Bonds) and high-quality UK Credit. The Scheme has an allocation to illiquid income generating assets which include renewable energy assets, real estate and other infrastructure assets. The Scheme was 104% funded on a Gilts+0.25% basis as at 31 December 2023. As the Scheme is in a surplus on a low-risk basis, the Trustee is not currently expecting to receive additional deficit contributions from the Company. The Trustee is aiming to build up a funding surplus gradually over time in a low-risk manner. In order to achieve this, the Scheme has an

investment return target of Gilts+0.75% per annum and seeks to hedge 100% of the interest rate and inflation sensitivity in the Scheme's liabilities. The duration (weighted average time) of the Scheme's liabilities is expected to be 16 years as at 31 December 2023. Whilst the Trustee continues to place a high-level of priority on further engaging with, monitoring and seeking to manage climate change risks and opportunities, this broader context does mean the Trustee is starting from a relatively low risk position and has fewer tools at its disposal than many other pension schemes, given the nature of the assets it holds.

## Overview of approach to climate change

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

The Trustee has received investment training provided by its Fiduciary Manager (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 disbanded. The International Financial Reporting Standards (IFRS) Foundation has now taken ownership of the monitoring of the progress on climate-related disclosures. Given the pace of progress around Sustainable Investment (SI), trustee training on climate and ESG has increased over recent years and is expected to remain a priority going forwards. Sustainable investment describes a long-term, finance-driven strategy that integrates environmental, social and governance (ESG) factors, effective stewardship and real-world impact in investment arrangements.

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:

<https://epa.towerswatson.com/accounts/wps/>

The Trustee also monitors the risks and opportunities associated with climate change through the Scheme'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 of all Trustee Board meetings and reviewed quarterly by the Audit and Risk Committee.

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, aiming to assess the implementation of the Trustee's investment strategy whilst also providing a basis on which to monitor the sustainability characteristics of the Scheme. This document is largely meant to support and expand on the policies set out in the publicly available SIP. A review of this policy is carried out on an annual basis to ensure it remains fit for purpose. The Trustee intends to make this policy publicly available in due course.

Whilst the Trustee may delegate certain aspects of its investment arrangements, the Trustee retains ultimate responsibility for setting the Scheme'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 Scheme. The Trustee regularly reviews their external consultants and advisers and will be explicitly considering their risk expertise, capabilities and resources and how they incorporate climate change into their advice as part of the next formal review process. 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 outlined below.



**Fiduciary Manager (FM)** – The Trustee has appointed WTW as its FM, 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. The consideration of sustainable investment is fully embedded in their investment processes. WTW works closely with the Trustee and provides regular assessments of its views on the underlying managers capabilities and performance in relation to ESG and stewardship, and a quantitative assessment of the Scheme's portfolio across a number of ESG criteria, including climate. The Trustee was satisfied with the work completed on its behalf over the year.

The Trustee has set the FM 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, Barnett Waddingham, who assists the Trustee with monitoring and holding the FM accountable for their actions around climate change.

**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 FM 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, Legal Advisor and Covenant Advisor regarding the extent to which climate change may affect the funding strategy of the Scheme and the ability of the sponsor to support the Scheme. Alongside this, to further satisfy itself, the Trustee also receives updates from the Sponsor on evolutions to their strategy to manage climate change risks and opportunities.

The Trustee board met four times over the year and climate change was discussed at two of those meetings. The key outcomes of those discussions were: updating the Scheme's SI policy, agreeing new stewardship priorities related to climate change and biodiversity, considering the annual SI review and producing the first TCFD statement. 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 FM on the Department for Work and Pensions (DWP) climate regulations, climate metrics, climate scenario analysis and an annual deep dive into SI from the FM. All Trustee Board members are required to partake in these sessions as recognition of the responsibility of the whole group in evolving the Scheme's approach in this area. The annual deep dive covered the FM's approach to reviewing managers and how this is evolving, identifying key actions the underlying managers took over the past year and provided sight of the annual manager SI reviews.

The Trustee delegates part of the implementation of this policy to the FM 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, The Fiduciary Manager typically invests 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 FM engages with 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 FM 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 2023 EOS represented \$1.4trn of assets under advice. The FM has been working closely with EOS for many years, and a senior member of the WTW Investment Team chairs EOS's Client Advisory Board. The FM 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 Scheme year to 31 December 2023, 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.

 <b>Stewardship</b>	 <b>Portfolio updates</b>	 <b>Governance updates</b>
<p><b>EOS at Federated Hermes</b> – As described earlier in the Statement, EOS have conducted significant work to enhance the Trustee's stewardship activities</p> <p><b>Stewardship priorities</b> – The Trustee consider that stewardship is an important tool for managing risk and improving the financial outcomes of the Scheme. 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's belief that this is currently the single biggest ESG risk and therefore requires specific attention. Climate change has been an area where the Trustee has carried out engagements with their managers in the past, but they will continue to prioritise this in the future.</p>	<p><b>Biodiversity Investment</b> – The Scheme's Secure Income Asset manager, TWIM Secure Income Fund (SIF), invested in a new strategy that provides exposure to a UK biodiversity opportunity offering attractive expected returns with notable biodiversity impacts. This was based off research into drastic biodiversity loss in the UK and market research into opportunities to invest into an appropriate solution.</p> <p><b>Credit Manager Engagement</b> – The Scheme's Long Term Credit manager has continued to engage with the underlying portfolio companies on ESG matter including 16 different issues on climate change. In one case study the manager engaged with a large US bank on providing transparency on efforts to fulfil net-zero emissions target and explain coal, oil and gas financing policies. The manager sees this bank as a leader compared to its peers but still sees room for engagement and has been making progress with senior executives.</p> <p><b>Investment Grade Securitised Credit</b> – The Fiduciary manager has been engaging the underlying managers to improve data availability for Collateralised Loan Obligations (CLOs) and Asset Backed Securities (ABS). Whilst the Trustee acknowledges that this is a difficult task given the wide variety of assets available, the Fiduciary manager is seeing improvements and expects this to continue with time across the industry.</p>	<p><b>Trustee training</b> – The Trustee undertook training, facilitated by the Investment Adviser, on how best practice in climate change is evolving, including evolutions in climate scenarios, data improvements and how scope 3 carbon emissions should be considered.</p> <p><b>Risk register updates</b> - In conjunction with the FM, the Trustee undertook a review of the risk register. This included a discussion on the key metrics used to assist in monitoring and managing climate change risk.</p> <p><b>Member communications</b> - The Trustee is also committed to keeping the Scheme's members informed of the work carried out in the responsible investment space and how it impacts member benefit security. The Trustee provided an annual update to provide a user friendly summary of the outcome of last year's climate change report.</p> <p><b>FM review</b> – The Trustee reviewed the Scheme's FM against their objectives over the year which included an assessment of their work in climate change. The Trustee reflected positively but continues to encourage further work on improving data and enhancing stewardship activities.</p>

Over the Scheme year to 31 December 2023, the FM has also carried out several activities to help the Trustee meet their climate goals including:

- Confirmed UK Stewardship Code adherence for 1 January 2022 to 31 December 2022 and have recently applied for the year ending 2023
- Partnership with EOS
- The FM's Thinking Ahead Institute was selected by the Principles for Responsible Investment (PRI) to undertake research specifically on stewardship resources in the industry
- Maintained climate as their top theme for engaging with investment managers
- Led the updating of the ICSWG Engagement Reporting Guide
- Active members of the UK Government's Transition Plan Taskforce working to improve organisations' climate transition planning
- Over the year engaged with over 150 managers and almost 300 products on the topics of sustainability and stewardship
- Invested in a new portfolio construction tool incorporating climate metrics
- Researched over 140 sustainability themed strategies with a focus on climate
- Engaged with and responded to several government consultations
- Conducted an annual SI review, which included placing strong emphasis on the Scheme's SI metrics reporting and stewardship priorities
- Delivered training to the Trustee on the updated DWP climate regulations as well as agreeing to an action plan for meeting these arrangements
- Engaged with one of the Scheme's private markets managers to further understand their carbon emissions exposure
- Reviewed the climate change scenario analysis that will be implemented in this climate change report.
- Agreed with the Trustee to target Net Zero greenhouse gas emissions (scope 1 & 2) by 2050

Below are some examples of these engagement in practice.

 <b>Case study: Engagement with UK pensions and climate regulation</b>	 <b>Case study: Issuer engagement by asset manager - ESG reporting within securitized markets</b>	 <b>Case study: Engagement with a global infrastructure manager to improve climate reporting</b>
<p>The FM had several meetings with the Pensions Regulator covering several topics including:</p> <ul style="list-style-type: none"> <li>• how climate scenario analysis can be made more robust and decision useful,</li> <li>• how the regulations might be applied to smaller pension schemes,</li> <li>• 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.</li> </ul> <p>As part of this the FM 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.</p>	<p>A fixed income manager engaged with a range of influential entities in the securitized markets to encourage progress around ESG reporting in these markets. They believe that in future there may be scope to encourage a type of societal bonds via this framework that could be an important development within US securitized markets.</p> <p>In 2022, major enterprises that buy and guarantee mortgages agreed to a proposed methodology for societal-oriented disclosures that would provide investors with better insight into underlying assets. In 2024, these groups announced a new iteration of their social scores which can serve as the basis for future social-labelled agency Mortgage Backed Securities. They will also disclose new impact reporting metrics for investors.</p> <p>The manager notes that they cannot accept credit for having driven this evolution but the manager will continue to engage on this front and offer feedback which they believe should help promote continued focus.</p>	<p>We recognise infrastructure is a key long-term exposure where sustainability metrics are important. The FM has engaged with the manager through annual ESG focused meetings and analysis of its responses to its sustainability questionnaires with several key identified items – approach to climate change reporting, approach to physical risk analysis, limited data availability and increasing demand for sustainability information from limited resource.</p> <p>During 2023, the manager expanded its sustainability team, and will provide climate change reporting for all funds from 2024. The manager is working on physical climate risk modelling and ties this into capex from a resilience perspective. It has started working with an external firm to identify the top 20 sites most at risk from physical climate risk, the worst outcomes at the firm level, and a consequent plan to mitigate these. Alongside this, the manager has invested in bespoke software to improve the efficiency of ESG data collection.</p>

# 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 Scheme'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 Scheme, the life expectancy of the Scheme's members and the support provided by the Sponsor's 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 Scheme'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	2026	This is the timeframe over which the funding strategy will be revisited in detail as part of the next Actuarial Valuation as at cycle
Medium term	2030	This is the timeframe over which significant climate action is expected, climate transition risks are expected to emerge and is aligned with the Trustee's agreed net-zero objective.
Long term	2040	This is the timeframe consistent with the duration of the Scheme'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:

 <p>Transition risk</p>	 <p>Physical risk</p>	 <p>Regulatory risk</p>	 <p>Reputational risk</p>
<p>The indirect impact arising because of changes in society and economies to combat or adapt to climate change</p>	<p>The direct impact arising because of chronic and/or acute changes in climate and extreme weather events</p>	<p>Regulators are increasing pressure on pension schemes to explicitly consider climate change</p>	<p>The increasing spotlight on pension schemes and climate change increases the risk of being “named and shamed”</p>
<p><b>Examples:</b></p> <ul style="list-style-type: none"> <li>• Assets: Some industries become obsolete (e.g. coal), reinvent themselves or others emerge (electric vehicles)</li> <li>• Liabilities: Improvements in mortality from healthier lifestyles</li> </ul>	<ul style="list-style-type: none"> <li>• Assets: Damage to physical assets underpinning securities (e.g. real estate and infrastructure)</li> <li>• Liabilities: Excess deaths arising from extreme weather</li> </ul>	<ul style="list-style-type: none"> <li>• Implementation Statement</li> <li>• DWP Pensions bill</li> <li>• Mandatory climate change reporting</li> </ul>	<ul style="list-style-type: none"> <li>• 2018 EAC report on 25 biggest UK schemes</li> </ul>



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
<b>Timeframe</b>	To next Triennial Actuarial Valuation (2026)	Significant climate action expected (2030)	Consistent with duration of Scheme's liabilities (2040)
<b>Primary types of risk</b>	<ul style="list-style-type: none"> <li>Regulatory</li> <li>Reputational</li> <li>Transition</li> </ul>	<ul style="list-style-type: none"> <li>Reputational</li> <li>Transition</li> </ul>	<ul style="list-style-type: none"> <li>Transition</li> <li>Physical</li> </ul>
<b>Key risk exposure</b>	<p>The Trustee is exposed to regulatory risks, including fines, if it does not comply with evolving regulatory requirements.</p> <p>The Trustee (and sponsor) are exposed to reputational risks if the Trustee's policies are misaligned with peers and/or sponsor.</p> <p>The Trustee is predominately exposed to transition risks through its corporate bond portfolios and illiquid income generating assets.</p>	<p>The Trustee (and sponsor) are exposed to reputational risks if the Trustee's policies are misaligned with peers and/or sponsors.</p> <p>The Trustee is exposed to transition risks through its corporate bond portfolios and illiquid income generating assets.</p> <p>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.</p> <p>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.</p>	<p>The insurer may be exposed to transition risks through its holdings in various asset classes (including equity, credit, property and infrastructure).</p> <p>The insurer may be exposed to physical risk through its holdings in various assets, in particular real assets including property and infrastructure.</p> <p>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.</p> <p>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.</p>
<b>Potential opportunities</b>	Encouraging existing funds to consider and where possible reduce exposure to transition risks and engage with companies to develop a strong transition plan.	Aligning the Scheme'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.	Invest in companies and assets that are a key part of the low-carbon infrastructure but also contribute to climate adaptation efforts.

# 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 Scheme 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 Scheme. This included limited changes to the Scheme's asset allocation, membership, Sponsor Covenant 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 are 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 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 Appendix I provides the Trustee with a holistic overview of the potential impacts of climate change and how they may affect the Scheme's funding strategy (across assets, liabilities, and covenant). This is an important risk management tool for a top-down risk and opportunity assessment.

The Trustee has also agreed an overarching 'carbon journey plan' which represents a long-term commitment to manage climate change risks and opportunities. As set out in the next section, this is a target to reduce the Scheme's carbon footprint (Scope 1 and 2 emissions) of the non-government bond assets by 50% to 2030 and to reach net-zero by 2050. Although this ultimate goal is based upon the Scheme's carbon footprint, the Trustee recognises that this is a simple and backward looking metric and therefore the Trustee also monitors a dashboard of climate metrics alongside this. Exposures and trends across multiple metrics are assessed rather than focussing just on the carbon footprint target.

### 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 Scheme's exposures.
- **Manager analysis** – The Trustee also conducts an annual review of the FM 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 Scheme is exposed to and enhance the potential opportunities available as part of the transition. Over the Scheme year, the Trustee has undertaken, with support from its advisors and FM:

- 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 FM, to a number of key industry initiatives, working groups and consultations
- Set stewardship priorities as a way to conduct focussed reporting and to communicate with the Scheme's advisers.

## 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 to climate change as a factor.

# Section 5: Metrics and Targets

## Introduction and overview

A key facet of the Trustee's ongoing monitoring and management of climate change is having good data on the Scheme'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 Scheme. The Trustee considers metrics across the SI spectrum, but the focus within this report is those in climate change.

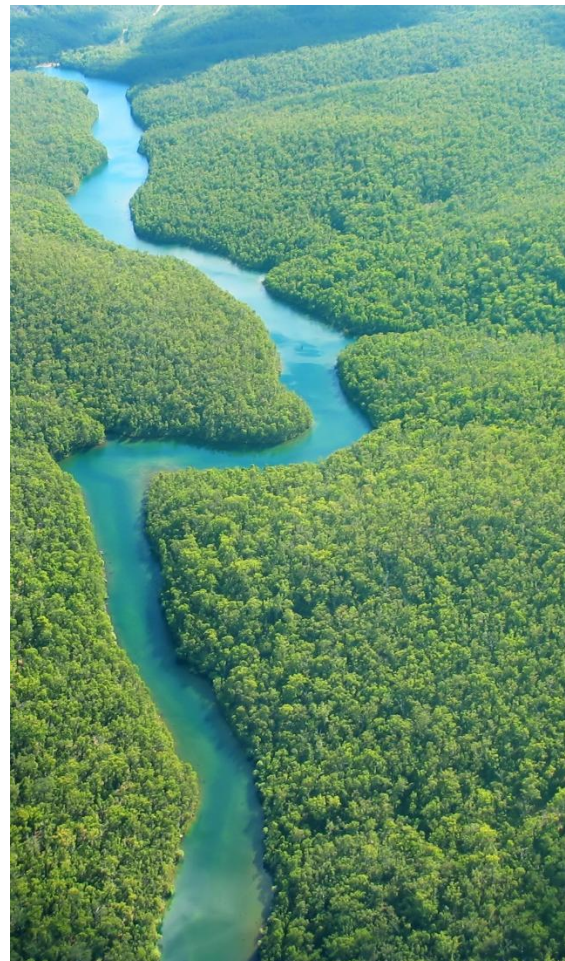
The metrics disclosed have been selected from the following categories:

- 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 ("tCO2e")	An 'absolute emissions' metrics which gives a measure of carbon emissions attributable to the Scheme. 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, a leading provider of critical decision support tools and services for the global investment community. In line with the protocol, includes all the major GHG 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 dollars invested causes. This uses a comparable methodology as the total carbon emissions referenced above for underlying data and emissions attribution for companies.	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	Percentage of the portfolio that may be considered EU Taxonomy eligible based on the criteria set out in the taxonomy	Provides a balance of the risks and opportunities presented by the transition to a low carbon global economy with the potential to enhance investment returns through investment in such assets.
Data coverage/quality	A measure of the proportion of the Scheme's assets for which the Trustee has high quality audited data, proxied data, or no data at all.	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 FM) can most influence our investment managers and improvements would allow better decision making on future climate metrics.

The table below outlines the values of the key statistics for the year ending 2023 which the Scheme monitors annually.

As at 31 December 2023	Allocation	Carbon Emissions Data		Exposure to Climate Solutions (%)	% of assets with approved SBTs
		Absolute Emissions (tCO <sub>2</sub> e) – Scope 1 & 2	Carbon Footprint (tCO <sub>2</sub> e / \$m) – Scope 1 & 2		
<b>Total Corporate Assets</b>	<b>52%</b>	<b>59,911</b>	<b>51</b>	<b>11%</b>	<b>29%</b>
Investment Grade Securitised Credit	7%	10,642	67	8%	54%
Secure Income	22%	22,489	46	11%	21%
Corporate Bonds	23%	26,781	51	11%	29%
<b>Liability Driven Investment</b>	<b>48%</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
LDI & Cash	48%	See further in report on page 22			

Note: the methodology used to proxy the Investment Grade Securitised Credit holdings was improved over the year to focus on proxying the underlying look through sector and geographical exposures of the assets held which was sourced from the investment managers and reflected in the numbers above. Investment Grade Securitised Credit encompasses the Scheme's allocation to Alcentra Collateralized Loan Obligations and M&G Investment Grade Asset Backed Securities. The carbon footprint figures are at the total asset class level and the total is a weighted average. Note that, as per the data quality chart below, the Investment Grade Securitised Credit and Secure Income metrics are based on public proxies and therefore do not reflect the actual underlying private holdings.

### Trustee observations of analysis

- The Trustee recognises the limitations associated with the climate metrics given the underlying data quality and the 'proxying' of assets required. 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 majority of the Scheme's assets is comparable or lower than that of a similar standard market index. The Trustee noted that Carbon Footprint is not necessarily an indication of the Scheme's exposure to climate risk (which the Trustee ultimately cares about) as the two are not always highly correlated.
- The Trustee recognises that the metrics associated with the secure income assets are not reflective of the holdings the Scheme actually has, given the proxying required.
- 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 Scheme's FM.

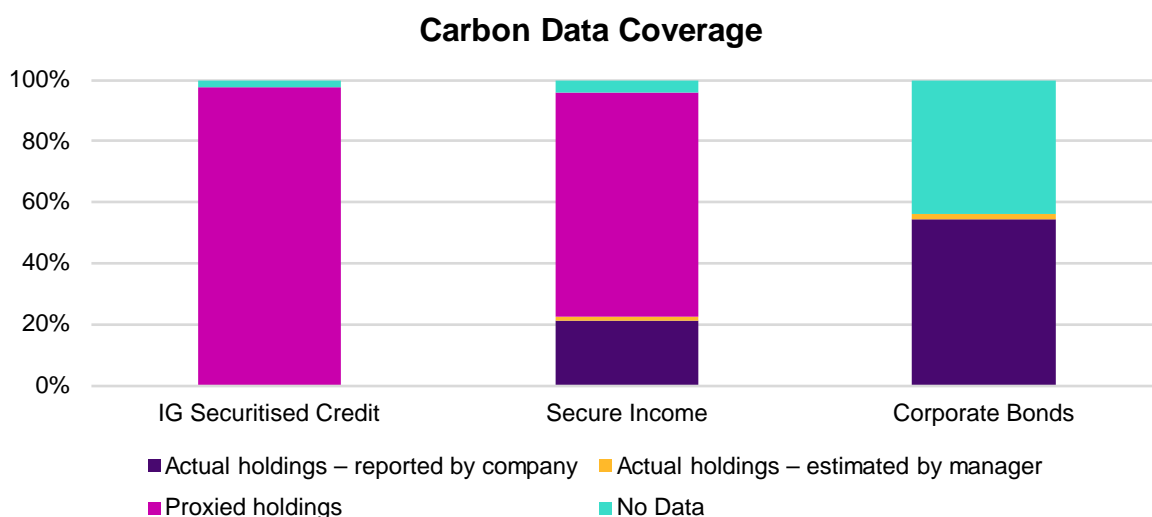
## Data quality

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 charts below 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 secure income assets (with CBRE and TWIM) the Trustee has proxied the exposure by using appropriate geographic and sector weights for the underlying holdings. The charts only show this breakdown in respect of the Scheme's assets excluding LDI (Government Bonds) & Cash.

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 Scheme'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 accurate and prudent approach to take.

On the Trustee's behalf, the FM 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 Scheme 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. 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 board and the third parties that it collaborates with.

### Medium Term Target

50% reduction in GHG footprint of the Group's portfolio of assets (excluding government bonds) by 31 March 2030 (Scope 1 & 2 emissions) from 31 March 2019



### 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 2019

The Trustee has reported year on year progress below in relation to the carbon footprint (Scope 1 and 2 emissions) of the Scheme's non-government bond assets. As can be seen from the table below, this has reduced by 4% over the period.

Over time, the Trustee expects that the longer-term trend of Scheme's carbon footprint will continue downwards, towards the Trustee's net-zero target. The Trustee, however, also

recognises 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

As at 31 December 2023	Allocation	31 Dec 2022 Carbon Footprint (tCO <sub>2</sub> e / \$m) – Scope 1 & 2	31 Dec 2023 Carbon Footprint (tCO <sub>2</sub> e / \$m) – Scope 1 & 2	Year on year change
IG Securitised Credit	7%	48	67	40%
Secure Income	22%	51	46	-10%
Corporate Bonds	23%	60	51	-15%
<b>Total Corporate assets</b>	<b>52%</b>	<b>53</b>	<b>51</b>	<b>-6%</b>

Note: the methodology used to proxy the Investment Grade Securitised Credit holdings was improved over the year to focus on proxying the underlying look through sector and geographical exposures of the assets held which was sourced from the investment managers and reflected in the numbers above. Investment Grade Securitised Credit encompasses the Scheme's allocation to Alcentra Collateralized Loan Obligations and M&G Investment Grade Asset Backed Securities.

### **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 statement.

- Appointed an FM that has made a commitment that is consistent with the Trustee's target. The Trustee assesses the FM annually.
- The FM continues to partner with EOS at Federated Hermes to engage and with companies, industry and regulators to encourage decarbonisation over time.
- The Trustee reviewed the engagement activities of the FM over the year and was comfortable with the work being undertaken
- The underlying managers continue to have strong policies and processes in these areas
- The Scheme continues to invest a significant proportion of assets in UK infrastructure and renewable energy assets which facilitate this gradual de-carbonisation of the economy
- Over the last few years, the Trustee has undertaken significant de-risking of the investment portfolio which has seen a reduction in the allocation to higher climate risk investments

## Government Bonds

As referenced early in the report, the Trustee has agreed to exclude Government Bonds from the Scheme's target and to report the climate metrics for these asset classes 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 Scheme's target is as follows:

- The Trustee primarily holds Government Bonds as assets to hedge the Scheme'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 Scheme up to excessive funding and investment risk
- The Trustee recognises that it has limited capacity and capability to engage with the Government on climate related metrics
- 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 Scheme excludes liability hedging assets from the Scheme'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 Scheme's LDI manager, BlackRock. These have been separated between those sovereign bonds held for matching and non-matching purposes. The Trustee, via their FM, does also continue to monitor that the manager of these Government Bonds appropriately considers climate change in their actions, whether that be selecting bank counterparties for derivatives or engaging with industry discussions and consultations on climate related matters.

Metric	Matching Government Bonds
Total allocation	£810m
Total allocation (% of portfolio)	47%
GHG Intensity (t/USD million GDP nominal)	132
GHG Emissions per Capita (t)	6.3



## 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.

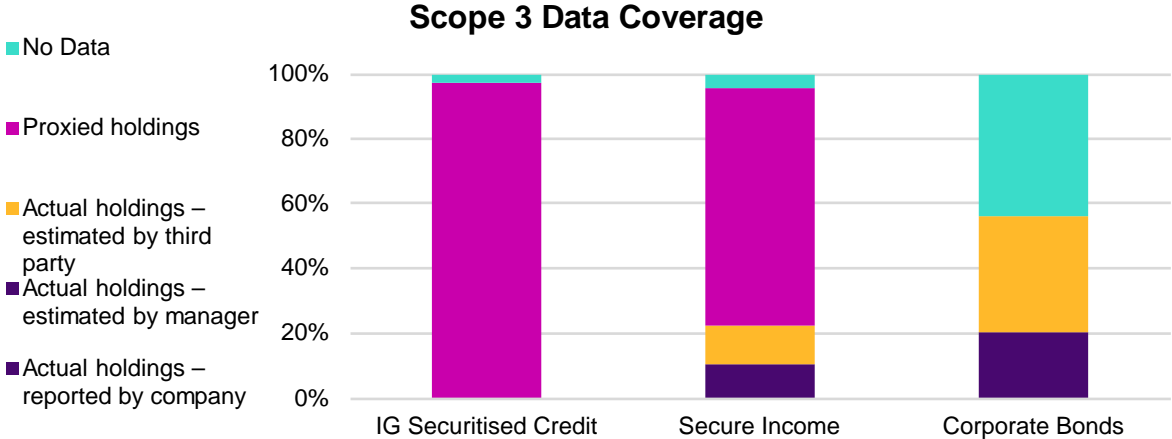
Data providers, like MSCI, have tried to solve for this problem by providing scope 3 datasets using proprietary models and internally vetted methodologies. However, current solutions rely significantly on top-down sector emissions data with limited use of bottom-up data (which is company-specific). Models 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 the FM'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 FM is working closely with and engaging data providers to promote better disclosures. Similarly, the FM engages extensively with the asset management community, including on pushing for better corporate disclosure, and for the adoption of generally accepted standards and methodologies. The FM also undertakes direct and indirect policy engagement, advocating for the adoption of common standards and methodologies, including those of the International Sustainability Standards Board. The FM believes the recently released IFRS S1 and S2, including provisions around scope 3 emissions, are a highly significant forward step.

As at 31 December 2023	Allocation	Carbon Emissions Data	
		Absolute Emissions (tCO <sub>2</sub> e) – Scope 3	Carbon Footprint (tCO <sub>2</sub> e / \$m) – Scope 3
Total Corporate Assets	52%	307,024	262
IG Securitised Credit	7%	58,958	372
Secure Income	22%	50,335	103
Corporate Bonds	23%	197,731	378
Liability Driven Investment	48%	-	-



**Going forward**

Next year the Trustee will be reviewing the target that has been set to consider whether it remains fit for purpose and to take account of some of the limitations referred to above. As mentioned, the target aside, the Trustee continues to focus on taking appropriate actions to manage the risks and opportunities and to monitor and 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

Working with its FM, the Trustee seeks to mitigate the risks and take advantage of opportunities which may occur so as to improve the likelihood of the Scheme 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 FM and input from the Scheme Actuary and Covenant Advisor, 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	3.5°C	2.0°C	2.0°C	1.5°C
% of Renewable energy by 2050	30-40%	80-85%	65-70%	80-85%
Transition risk level (shorter term)	Low	High	Low – Medium	Medium – High
Physical risk level (Medium-longer term)	High	Low – Medium	Low	Low

The 'base case' is the central funding projection against which the climate scenarios are considered. It projects, using the FM's investment model, the assets and liabilities of the Scheme over the period considered. This considers commonly used central UK life expectancy projections for the liabilities (which includes an assumed long-term rate of improvement of 1.5% p.a. over the period). It assumes that the current asset portfolio of the Scheme remains the same, which is consistent with the Trustee's strategic discussions to date. It also does not make any explicit future allowance for climate change outcomes within the assumptions, but there is an implicit assumption that future outcomes will rhyme with history (which has exhibited other such large external shocks). We expect that current market

pricing, which is to some extent built into the model, only allows for a small amount of transition risk (similar to the Lowest Common Denominator scenario) and makes no allowance for physical risk.

The climate scenarios considered 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 limit global temperature rises to well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. They have been constructed with reference to the Network of Central Banks and Supervisors for Greening the Financial System (NGFS) and other industry research. 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 (see above for the key parameters). These are translated into estimate GDP growth impacts which are used to inform the estimated impact on assets returns. The liability impacts modelled are focused on the climate impacts on mortality. Specifically, we assume that the long-term rate of mortality improvement will vary in each scenario, and we re-calculate liability values under these different mortality assumptions. The impact of each scenario on mortality assumptions have been derived using judgement from professional Actuaries at WTW and are designed to illustrate the potential direct and indirect impacts of climate on mortality. These include the impacts of climate change on weather patterns, lifestyles, and the socioeconomic situations of members.

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 Scheme's journey and funding plans. The Trustee acknowledges that many alternative plausible scenarios exist but found these were a helpful set of scenarios to explore how climate change might affect the Scheme in future. The Trustee has been engaging with the FM to continue to evolve the climate scenarios and expects to re-conduct the analysis as part of next year's report.

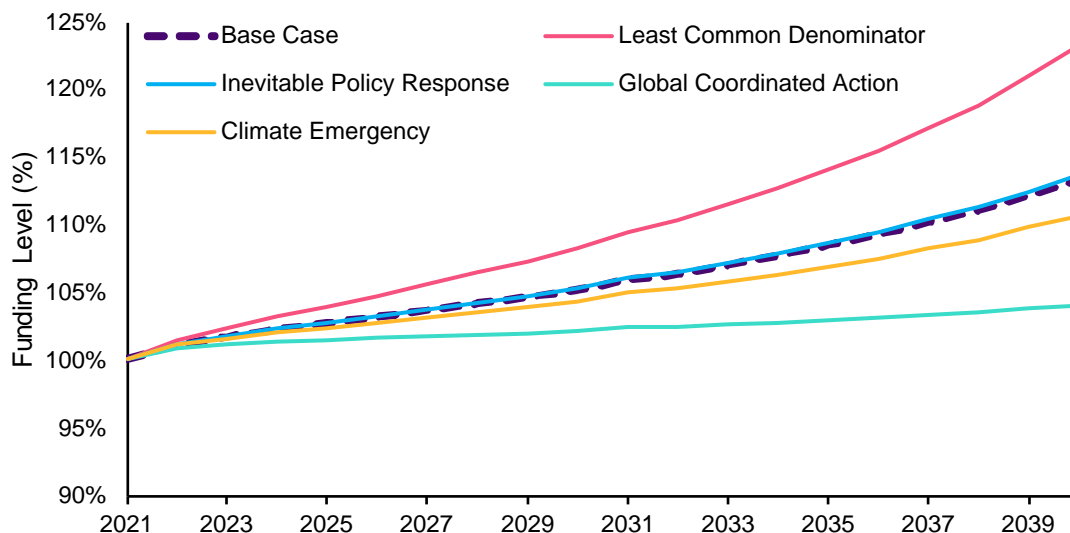
Below the Trustee has illustrated the impact of the climate change scenarios on the Scheme's funding level. The Trustee has considered these over a timeframe that is consistent with the Scheme's longer term time horizon (c.20 years), as well as a one-off shock.

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 Scheme'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 Scheme even when combined with associated reductions in the value of the Scheme's assets (given their low-risk nature). However, it is important to recognise that an assessment of what is in the best interests of the Scheme 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 Scheme 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 Scheme's Funding Level**

The chart below shows how the Scheme's funding level is expected to evolve under the different climate scenarios considered (defined in the earlier table). This illustrates the range of potential funding outcomes. The table below separates out the impact (shown as an annualised impact) on

assets and liabilities which is aggregated on the graph (as the funding level considers how much in assets the Trustee has to cover the expected liabilities). The scenarios vary based on the level of assumed transition and physical risk that occurs (shown in the earlier table), such that over the short-term a high transition risk scenario has greater impact on asset returns and in the longer term there is a greater impact of the physical risk from climate change.

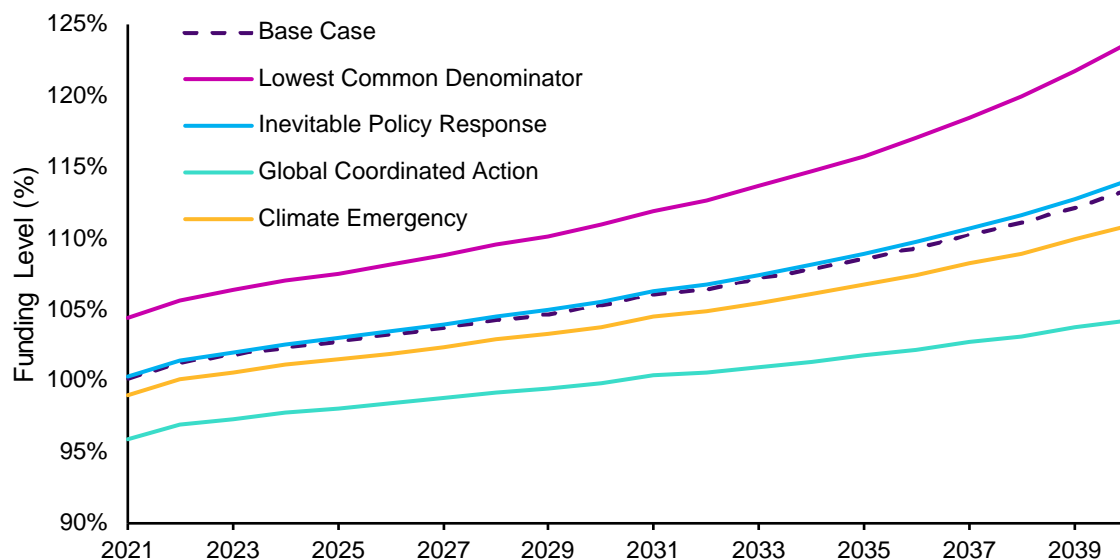


Climate scenario	Asset Return Drag pa.*	Liability Return Impact pa.	Projected Funding Level in 2040
Base case	0	0	113%
Lowest Common Denominator	-0.16%	-0.38%	124%
Inevitable Policy Response	-0.18%	-0.18%	113%
Global Coordinated Action	0.01%	0.25%	104%
Climate Emergency	-0.12%	-0.04%	111%

Note: The asset drags are relatively small given the large holding in UK Government Bonds.

### Impact of Climate Shocks on the Scheme's Funding Level

As noted above, the Trustee recognises that assuming such climate scenarios are priced in gradually, is an unrealistic expectation and is likely to be far less linear. The Trustee has also included a one-off shock below 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 20 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. The table below separates this out between the £ impact on the assets and liabilities in the scenarios and therefore the combined impact on the current funding surplus.



Climate scenario	Asset shock (£m)	Liability shock (£m)	Immediate change in funding (£m)	Immediate change in funding level
<b>Lowest Common Denominator</b>	-78	-188	109	4.2%
<b>Inevitable Policy Response</b>	-88	-91	3	0.1%
<b>Global Coordinated Action</b>	4	129	-125	-4-3%
<b>Climate Emergency</b>	-59	-26	-33	-1.2%

In creating the climate scenarios analysed, WTW have considered the comparative long-term impacts of each scenario. The scenarios which have the most negative impact on assets in the long-term are those with the worst physical outcomes, namely the “Lowest Common Denominator” scenario, displaying the economic benefit of transitioning to a low-carbon economy. However, the circumstances of the Scheme means that the most impactful scenarios on the Scheme are not necessarily those with the most severe physical outcomes. We have outlined these in the ‘summary’ that follows.

The Trustee recognises the assumption driven nature of the scenario analysis, and assumptions made on the timing of transition and physical risks are material to the resulting outcomes.

### Covenant analysis

As part of the above analysis, the Trustee has also engaged with the Sponsor and considered how the Sponsor could be impacted under the above climate scenarios considered. As part of these discussions, the Trustee has been reassured by the size and diversified nature of the Sponsor’s business. This includes both the various lines of business and their direct exposure to climate change risks and opportunities as well as the underlying client base which the Sponsor works with on an ongoing basis.

At the current time the Scheme does not receive any contributions from the Sponsor and given the very strong funding position of the Scheme and very low-risk portfolio, the Trustee expects that there is a relatively low likelihood of reliance on the Sponsor in the future as well. The Trustee does have

sight of the Sponsor's annual ESG report and is reassured to see that the Company has taken several positive steps to manage climate risks and opportunities such as:

- Set a 2050 Net Zero target, given the nature of its trade the greatest risk is to its client base particularly those in the marine, aviation, natural resources and aerospace industries which are most likely to be impacted by climate risks.
- Continue to manage a largely diversified business with a diverse client base.
- Generate revenues as a result of the greater awareness of climate risk, with a Climate Resilience hub set up to assist clients in analysing and mitigating their exposure risk.
- Publish its full ESG disclosure in late June/early July, which will cover carbon consumption and key statistics on regulatory policies and employee demographics.

The Trustee will continue to monitor the Sponsor's progress in these areas and its exposure to climate change risks and opportunities noting that a proportionate monitoring approach makes most sense in light of the limited exposure to the Covenant, given how well funded the Scheme is.

### Summary

As a result of the combined analysis, the Trustee's assessment is that the investment and funding strategy of the Scheme is resilient against climate risk, and that the Scheme is expected to be relatively well protected against the impact of climate change both as a gradual impact and a sudden shock. This is the case under all the climate scenarios considered. This was driven by four key factors:

- **The Scheme's very strong funding position** – This was 104% (on a prudent gilt+0.25% basis) at the date of the analysis conducted
- **The Scheme's very low-risk asset portfolio** – The Scheme no longer holds any 'return-seeking' assets and instead largely invests in very high-quality debt securities (both Government and Corporate), targeting a small investment return of Gilts+0.75% per annum.
- **The allocation to climate positive investments** – The Scheme has a sizeable allocation to investments which are expected to benefit from the transition to a low-carbon economy. These include investments in wind, solar and opportunistic renewable energy investments.
- **The Scheme has a longevity swap** – The Trustee has already mitigated some of the life expectancy risk within the Scheme, with a large longevity swap.

Although the analysis provided the Trustee with some reassurance on the robust nature of the Scheme's funding strategy, it did clearly highlight that climate change could have a material impact on the Scheme'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:

1. **Further longevity risk hedging** – The Trustee noted the Scheme is considering undertaking additional longevity hedging to further insulate the Scheme from the impact of changes in life expectancy.

2. **Additional asset analysis** – Although the asset classes that the Scheme invests in are expected to be relatively robust under the scenarios considered, largely due to their high-quality well diversified nature, the Trustee is also conducting further analysis to interrogate this conclusion. This includes bottom-up security level analysis of the specific investments and companies the Scheme invests in. The Trustee considers a balanced scorecard of climate metrics to assess the specific risks and opportunities the Scheme is expected to be exposed to. This provides further support alongside the top-down scenario analysis conclusions.
3. **Engagement with Sponsor** – The Trustee has held sessions with representatives from the Sponsor to provide further detail on how the Sponsor is working to appropriately manage and monitor climate change risks and opportunities. This is expected to be a key annual agenda item for updates provided by the Sponsor.

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 Scheme's funding strategy. As mentioned, the Trustee has been engaging with the FM to continue to evolve the climate scenarios and expects to re-conduct the analysis as part of next year's report.



## Appendix II – Climate Change Glossary

<b>Absolute Carbon Emissions</b>	The total Carbon emissions attributable to the Scheme's assets. Note that this includes all greenhouse gases emissions as defined by the Kyoto Protocol and converts these to a carbon equivalent number.
<b>Carbon Footprint</b>	The total Carbon emissions per \$ million invested (tCO <sub>2</sub> e/\$m invested).
<b>Carbon Journey Plan</b>	The strategic plan to reduce the Scheme's carbon footprint over time
<b>Climate Transition Value at Risk (CTVaR)</b>	A quantification of the value impact on a Company or portfolio of the expected transition required to meet the goals of the Paris Agreement.
<b>Climate scenario analysis</b>	Use of varied plausible climate trajectories and evaluating their potential impact on the Scheme's funding strategy (assets, liabilities and covenant)
<b>Climate solutions / related solutions</b>	An investment that is expected to benefit as part of the decarbonisation of the world economy. How this is specifically calculated can vary significantly.
<b>CO<sub>2</sub>e</b>	Carbon dioxide emissions or equivalent.
<b>EVIC Methodology</b>	This weights emissions across a company's Enterprise Value (assets and liabilities) including Cash
<b>Kyoto Protocol</b>	The original international climate change agreement made between 'developed nations' aiming to combat rising global average temperatures.
<b>Net Zero</b>	The position of removing as many greenhouse gases as are emitted
<b>Net-Zero Asset Managers Initiative</b>	The Net Zero Asset Managers initiative is an international group of asset managers committed to supporting the goal of net zero greenhouse gas emissions by 2050 or sooner, in line with the goals of the Paris Agreement.
<b>Paris Agreement</b>	This is an international agreement aiming to limit global temperature rises to well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius
<b>Physical Risk</b>	The direct impacts from climate change such as more volatile weather conditions and frequent natural disasters
<b>Portfolio Alignment</b>	The percentage of the portfolio aligned with a particular initiative
<b>Sustainable Investing</b>	Sustainable investment (SI) describes long-term, finance-driven strategies that integrate environmental, social and governance (ESG) factors, effective stewardship and real-world impact in investment arrangements
<b>Science-Based Target Initiative</b>	Defines and promotes best practices in emissions reductions and net-zero targets in line with climate science. Currently a voluntary standard.
<b>Scope 1 Emissions</b>	All direct emissions from the activities of an entity or the activities under its control
<b>Scope 2 Emissions</b>	indirect emissions from electricity purchased and used by an entity which are created during the production of energy which the entity uses e.g. heating
<b>Scope 3 Emissions</b>	All other indirect emission across the whole value chain. These may include emissions related to the production of materials used by the Company or the transportation, distribution and disposal of goods produced.
<b>Stewardship</b>	Stewardship is the responsible allocation, management and oversight of capital to create long-term value for clients and beneficiaries leading to sustainable benefits for the economy, the environment and society. This typically includes voting and engaging with the underlying companies the Scheme invests in.
<b>TCFD</b>	The Financial Stability Board created the Task Force on Climate-related Financial Disclosures (TCFD) to improve and increase reporting of climate-related financial information
<b>Transition Risk</b>	Indirect impacts arising as a result of changes in society to combat or adapt to climate change, such as costs for businesses from meeting regulations (asset side) or improvements in mortality from healthier lifestyles
<b>UK Stewardship Code</b>	A voluntary code in the UK which sets out a number of principles defining how stewardship should be positively governed.