



ITV PENSION SCHEME
DEFINED BENEFIT SECTION



Scheme Climate Change **REPORT 2023**

Task Force on Climate-Related Financial Disclosures (TCFD)
Report for the year ending 31 December 2023

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About this Report

This document sets out the ITV Pension Scheme' second TCFD report. Following the development of the International Sustainability Standards Board's (ISSB's) inaugural standards, the TCFD has been retired. This does not change the mandatory requirements in respect of climate disclosures and for the purpose of this report, we will continue to refer to the TCFD report interchangeably with climate change report given the existing familiarity with the term.

Key changes

This report has been updated from the Trustee's first report in order to reflect the changes in both the portfolio and the reporting methodology/requirements that occurred from 31 December 2021 to 31 December 2022. Throughout the document we have highlighted these changes using blue text and we have summarised the key changes here.

- Following The Pension Regulator's comments from the recent review of second year reports, we have expanded upon the section referencing the Trustee's expectations of its advisors based on our understanding.
- We have outlined the establishment of the Investments Working Group and explained the ESG-related responsibilities that come under the IWG's remit.
- An overview of the activity that has taken place over the period including training and engagement activities has been included.
- As agreed by the Trustee, the scenario analysis has not been updated as part of this report. In line with regulatory requirements, we have included some commentary in the report explaining why this was not carried out.
- We have referenced the stewardship priorities that were agreed by the Trustee over the period. This is in line with the Pensions Regulator's view that good stewardship is a key aspect of Trustee governance.
- We have explained the changes to reporting requirements, specifically the inclusion of scope 3 assets.
- The report summarises changes in the Scheme's reported metrics over the year and the key factors underlying this.

A message from Sir Clive Jones

As a large pension scheme, we understand that investing sustainably supports long term value, reduces risk and contributes to better outcomes for our members as well as wider society.

Whilst many organisations consider climate change a future risk, we recognise that the increasingly rapid rate of increase in the global temperature makes it a very present risk to the ITV Pension Scheme. A lack of considered and effective action now and in the coming years will mean that climate change will have serious consequences for economies and investments around the world.

I am pleased to present our second Climate Change Report on behalf of the ITV Pension Scheme Trustee. It aims to outline the steps we have taken over the last year and those we plan to take in order to make a difference and shape a better future. It also looks at how we can protect the Scheme from the effects of climate change. The report offers a point of comparison from our first report and shows the progress we have made over the year. The Trustee's primary objective is to provide security to the Scheme's members and their beneficiaries for many years to come. We know that taking action against climate change now will support the financial health of the Scheme in the future and the health of our members.

The Trustee remains committed to addressing the Scheme's Climate Change risks and opportunities, with a target of achieving net zero carbon emissions by 2050. The Trustee firmly believes that resulting actions will benefit the members of the Scheme, the financial system and society as a whole.

Positive progress has been made over the past year, with the Trustee working with its advisors to monitor and manage its exposure to climate change, and holding a ESG-specific meeting with its corporate bond manager (a key part of the Scheme's assets). The Trustee has seen an improvement in the proportion of the portfolio reporting emissions data and in the proportion of the portfolio which has approved science-based targets. The Scheme's carbon footprint, a key measure for the Trustee, increased over the year although this was driven primarily by a combination of an improvement in the availability of data and by change in market conditions rather than decisions of the Trustee or its investment managers. We note that this is a very short period over which to assess the actions being taken on the Trustee's behalf and will continue to work with our advisors and investment managers to reduce the Scheme's exposure to climate change over time.

We recognise however that our actions must work alongside those of other investors, companies, individuals and governments to ensure that the goals of the Paris Agreement are achieved. We will continue to encourage all third parties working with the Scheme to engage with the appropriate bodies to drive change.

This report is important in detailing the Trustee's approach to managing the risks and opportunities that climate change presents and the actions we're taking to achieve our net zero target. We will continue to report on our progress each year going forward.

Sir Clive Jones, Chairperson of the ITV Pension Scheme

Introduction

The Trustee of the ITV Pension Scheme is delighted to issue its second annual Climate Change Report. The ITV Pension Scheme (“the Scheme”) is required to produce disclosures in line with the recommendations of the Task Force on Climate Related 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 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 Climate Change Report sets out the Scheme’s approach to each of these four categories for the year ended December 2023.



The Scheme has both a Defined Benefit (“DB”) Section and a Defined Contribution (“DC”) Section, with assets of around £2,680m and £25m respectively as at 31 December 2023. This report is focussed on the DB Section of the Scheme recognising the significant cost implications, relative to the size of the asset base, of undertaking the analysis required for this report for the DC Section. The Trustee continues to consider climate-related factors in the choice of investment funds for the DC Section and will review the merits of providing detailed analysis relating to these assets in this report in future years.

SECTION 1:

Governance

This section describes the governance structure in place to facilitate the identification, assessment and management of climate-related risks and opportunities which are relevant to the Scheme.

The Trustee of the ITV Pension Scheme (hereinafter referred to as the “Trustee”) maintains responsibility for decision-making with regards to the management of risks and opportunities relevant to the Scheme. Scheme-wide decision making, consideration of climate-related risks and opportunities and the review of the Statement of Investment Principles (the “SIP”) is undertaken with advice from the advisors listed below. The advisors are expected to support the Trustee in achieving its climate-related aims and the Trustee reviews the performance of its advisors and its managers on a regular basis including, where relevant, relative to agreed climate-related objectives. The principal third parties involved in supporting the Trustee in this are:

- Investment consultant (WTW) helps the Trustee to formulate investment beliefs and to reflect these in the Scheme’s investment policies and strategy, for both the DB and DC Sections. As part of its support the investment consultant meets with the Investment Committee (the “IC”) and the Trustee on a quarterly basis, and at additional ad hoc meetings as required. The investment consultant also helps the Trustee with conducting scenario analysis, advises on how climate-related risks and opportunities might affect the Scheme over the short, medium and long term and provides ad hoc specialist advice on a variety of pension matters, including risk management. The investment consultant develops tools in order to analyse the data required and works closely with regulators to understand the various requirements, making them best placed to carry out these responsibilities in the Trustee’s view.

The Trustee undertook a tendering exercise for its investment consultant in 2022 and, in reappointing WTW to this role agreed that they had the credentials necessary to advise the Trustee in relation to the management of climate-related risks and opportunities. The Trustee also continues to assess the investment consultants capabilities on an ongoing basis, including in training sessions and advice papers where relevant.

In December 2023 the IC assessed the investment consultant’s performance over the year based on a number of agreed objectives, including assessing the quality of the consultant’s advice and support relating to climate change. The Trustee was satisfied that these objectives were met.

- Investment managers, who have been delegated responsibility for the day-to-day management of the assets including the consideration of Environmental, Social and Governance (“ESG”) issues. They also provide greenhouse gas (“GHG”) emissions data for the Scheme and implement the policies related to the management of climate-related risks and opportunities as outlined in the Statement of Investment Principles (SIP). The Trustee believes that the Scheme’s investment managers are best placed to carry out this activity as they have direct access to the details of assets held within their funds. The Trustee meets with managers on an ad hoc basis and assesses performance against the policies outlined in the SIP. The investment consultant also provides the Trustee with its assessment of the Scheme’s investment managers in its quarterly meeting papers, and engages with the investment managers as appropriate where there are areas for improvement. The Trustee is satisfied that managers have met expectations over the year.

- The Scheme Actuary, who performs valuations of the Scheme and who advises on how climate-related risks and opportunities might affect the Scheme's funding position over the short, medium and long-term and the implications for the Scheme's funding strategy. The actuary's understanding of the Scheme's membership profile and the sensitivity of the Scheme's liabilities to changes in economic conditions means they can more easily incorporate the impacts of climate change into their assumptions as compared to any other party involved in advising the Scheme. The Scheme Actuary is employed by WTW, and their credentials in relation to advising on climate change were considered as part of the tendering exercise undertaken in 2022. The Trustee received advice on the potential implications of climate change as part of the triennial funding valuation process over 2023/2024.
- The covenant advisor, who provides advice to the Trustee on the ability of the sponsor to support the Scheme and the overall consideration of the impact of climate-related risks and opportunities on the sponsor's covenant over the short, medium, and long-term. This is an important part of assessing the Scheme's ability to meet the Trustee's objectives as the potential real-life impacts of climate change are very difficult to pinpoint, and the strength of the sponsor is a key support to the Scheme. The Trustee has agreed that the covenant advisor will review the sponsor's exposure to climate change in its annual reporting going forward.

The Trustee maintains overall responsibility for investment matters. However, the implementation of the Trustee's sustainable investing policies, including that of climate-related risks and opportunities, is delegated to the Investment Committee ("IC"). These responsibilities include the monitoring and review of the Scheme's investment managers and the investment consultant. The Trustee recognises that ESG factors present a risk and could also present opportunities and should therefore be considered through the investment process.

The Trustee established a TCFD Working Group in 2022 as a subset of the Trustee to ensure that the Trustee met regulatory requirements in the area of Sustainable Investment, including obligations under the TCFD framework. The working group accelerated the pace of the Scheme's progress towards good practice within this area whilst it was in place and prior to the publication of the Scheme's first Climate Change report. This working group was disbanded at the end of 2023 with the establishment of an Investment Working Group (IWG), a sub-group of the Trustee Board, under a new governance structure. These considerations around Sustainable Investments will become a key part of the group's responsibilities throughout 2024.

The SIP sets out the Trustee's policies with respect to the management of ESG-related issues and is reviewed on an annual basis by the IWG and approved by the Trustee.

Over the course of 2023, the Investment Consultant delivered training to the Trustee around regulatory changes in relation to ESG and stewardship, as well as on the evolution of the different stewardship priorities in the investment industry. Following this training and the DWP guidance, the Trustee agreed stewardship priorities against which manager engagement would be conducted. The agreed priorities for the Scheme are Climate Change and Inclusion and Diversity. The Trustee also received a presentation from one of its investment managers, AXA, in June 2023 detailing AXA's approach to the management of ESG-related risks and opportunities. This provided an opportunity for the Trustee to better understand AXA's approach, to challenge them in certain areas and to understand what actions might be taken to achieve the Trustee's net zero ambitions. The Trustee noted that any portfolio changes to achieve this target would also need to take into account other factors, such as the diversification of the portfolio amongst different issuers and yield.

The Trustee seeks to ensure an appropriate amount of time and resource is allocated to overseeing all risks and opportunities relevant to the Scheme, including climate-related risk and opportunities. The IC and Trustee Board meet every quarter. The IC receive performance monitoring on a quarterly basis, including the investment consultant's assessment of the investment managers' approach to ESG issues, and also meets with managers on an ad hoc basis where the management of ESG risks and opportunities is an important topic of review. As mentioned above, these responsibilities will pass to the IWG in 2024 under the newly agreed governance structure.

The Trustee delegates day-to-day decision-making authority to the Scheme's Investment Managers who act on behalf of the Trustee and assess whether the voting and engagement activities are in line with the Trustee's views and policies as set out in the SIP. The Trustee believes that the Scheme's investment managers have a better understanding of how this topic relates to their specific asset class and in most cases dedicate resources to consider how best to engage with the companies being invested in. The Scheme's Implementation Statement provides detail on how and the extent to which, in the opinion of the Trustee, the SIP has been followed during the year and a description of voting and engagement activity undertaken by, or on behalf of the Trustee.

SECTION 2:

Strategy

The Trustee believes that it is part of its fiduciary duty to manage climate associated risks and opportunities within the Scheme's investment portfolio. Climate change is a financially material consideration that will have significant influence on the future success of companies and, importantly for the Scheme, their ability to meet future cash obligations (including the servicing of debt), ensuring the stability of asset values and the Scheme's ability to meet members' benefits. As such, climate-related risks impact all investment strategies and mandates, across both long- and short-time horizons.

The Scheme holds a significant proportion of its assets in long-dated, cashflow-generative investments, including corporate bonds, real estate and renewable energy funds, to better match its liability cashflows. The intention to hold these assets for a significant number of years means that the Trustee is therefore very focused on the sustainability of these assets. Climate-related risk considerations therefore have a significant influence on the design and implementation of the Scheme's investment strategy.

The Trustee has looked at the potential effects of climate change on the Scheme over a range of identified time horizons using 31 December 2021 as the baseline, providing alignment with the Scheme year-end date and representing the start of the Scheme year during which the TCFD requirements came into effect for the Scheme.

When assessing risk, the Trustee considers this holistically in the context of liabilities, assets, covenant and members. The Trustee considers two major categories for climate-related risks and opportunities which it believes to be financially material for the Scheme. Namely, risks and opportunities related to the transition to a lower-carbon economy and risks and opportunities related to the physical impact of climate change.

- **Physical risks:** Physical risks relate to the direct effects of climate change on the Scheme and its members. These risks are expected to primarily impact the Scheme in the long term (around 15+ years). They are expected to be limited in scope to the effects of climate change-related weather (impacting the liability side) and other natural events on the businesses of invested companies (affecting the asset side), and the effect of changing temperatures on the mortality of Scheme members. These could have varying effects on the funding and investment strategy of the Scheme, but the direction and size of the effects is unlikely to be clear for a considerable period of time. Physical risks will create drags on the Scheme's asset return and liability streams, having a more significant impact in the longer term.
- **Transition risks:** Transition risks are an indirect impact of climate change, relating to the risks and opportunities arising from efforts made to transition towards a net-zero economy (both domestically and globally) in order to limit climate change. For example, this may be a relatively short-term cost for a business to meet new climate regulations. These risks and opportunities are generally expected to occur in the medium term, with some perhaps occurring in the short term. As such, the Scheme considers risks 1) affecting its asset portfolio (see below) and 2) affecting the Scheme's operations itself, including changing regulatory requirements and membership/ public expectations, which require ample response from the Scheme to manage the 'regulatory' and 'reputational' risks arising from such changes that will likely impact the Scheme in the short and medium term (c. 2025-2035).

The Trustee understands the short term to relate to the next 3-5 years. This period is likely to be defined primarily by transition risk and therefore market risk (in this context the risk of a sudden repricing of assets in response to changing views on climate transition). The impact of climate change on the Scheme in this time will depend heavily on regulations and the improvement in understanding emissions data. Over this period the risk management tool for the Trustee will be the ability of the Scheme's investment managers to identify those companies which are likely to be most affected by climate transition, both positively and negatively, and to position the Scheme's investments taking this into account.

Medium-term risks are those that will be present in the next 5 to 15 years, namely longer term market risk and the early signs of physical risks. This is expected to be the most important period where action taken will have a definitive impact on the ability of the global economy, and the Scheme, to reach the desired net zero targets. In addition to identifying those companies likely to be most affected by climate transition risk (and future potential physical risks), the ability of the Trustee's investment managers and advisors to engage with underlying companies, regulators and other investors over this period will be key to managing the risks relating to climate change.

In the long-term (15+ years) the physical risks resulting from climate change will begin to appear. The precise impact of these is very difficult to ascertain at this point, limiting the ability of the Trustee to manage these risks. We would expect the Scheme's managers to work over the coming years to improve the quality of data and the resources available to better understand the risks and opportunities and to position the Scheme's investments accordingly. The Trustee will also continue to explore the Scheme's exposure and to consider what further changes might be made to ensure the security of members' benefits.

Scenario Analysis

The Trustee carried out climate change scenario analysis as at 31 December 2021 in partnership with its investment consultants and actuarial advisers. The aim of this analysis was to help the Trustee to quantify the potential effects of climate change on the Scheme's assets, liabilities and covenant.

The scenario analysis has not been repeated or updated since the Scheme's first report published last year. The Trustee's view is that, due to the costs associated with scenario analysis, and the uncertainties relating to the assumptions, this analysis will be carried out every three years unless there is:

- A material increase in availability of data
- A significant/material change to the investment and/or funding strategy or some other material change in the Scheme's position
- An improvement in the availability of new or improved scenarios or modelling capabilities/events that might reasonably be thought to impact key assumptions within scenarios
- A change in industry practice/trends on scenario analysis

The Trustee is comfortable that a review isn't needed this year on the grounds that there has been no material change in any of the above factors. However, the Trustee is aware that there is general feedback across the industry that the current "worst case" scenarios that most providers are adopting aren't severe enough. The investment consultant is currently considering the options of what a scenario more severe than "Lowest Common Denominator" might look like and how this could be considered. The Trustee will engage with the investment consultant once their review has been completed to assess whether scenario analysis will be repeated for the next climate change report. The Trustee considered four separate scenarios which are in part defined through their success, or otherwise, in meeting the Paris Agreement target of a sub-2.0°C temperature rise. 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. For example, the Climate Emergency scenario, where decisive action is taken, and the Inevitable Policy Response scenario, where transition is more disorderly due to delays in meaningful action, represent bigger transition risks than the Global Coordinated Action scenario, which reflects a more managed response to tackling climate change.

At the time they were carried out, the Trustee's view was that they cover a plausible and comprehensive range of climate outcomes over the long-term:

1. A clear transition narrative that describes the socioeconomic pathway, both globally and regionally, from climate policies implemented and resulting in technological and societal shifts that occur.
2. Modelled emissions pathways resulting from the implementation of public policies and technologies resulting in the level of temperature rise.
3. A set of economic costs and benefits resulting from physical and transition risks and opportunities.
4. The impact on financial returns at the asset class level.

Whilst there were no issues with the data or its analysis which have limited the comprehensiveness of the assessment of the scenarios, the Trustee recognises that there is a great deal of uncertainty around the assumptions used, and the expected outcome, under each of the scenarios.

The Trustee understands that its investment consultant made a series of simplifying assumptions to shield the analysis from being obscured by other factors. The key assumptions were as follows:

- The investment strategy in place over the projection period is the strategic asset allocation in place at the date of the analysis
- The discount rate used to value the Scheme's liabilities is expressed as a fixed margin above the yield on UK government bonds
- The impact of the climate scenarios is assumed to emerge gradually over time (the Trustee notes that, in practice, the timing of these impacts, if they were to emerge, is highly uncertain)
- The impact of climate change is time dependant, with transition risk being front-loaded over the first 10 years, and physical risk following over the remainder of the projection period (up to 20 years)
- Gilt yields will not be materially impacted by climate risk over the short term (the Trustee recognises that, in practice, yields might rise or fall but the direction and magnitude of change is not clear)

While each of the scenarios selected reflect pathways for global temperature increases, it is broadly acknowledged that there is material uncertainty in all aspects of climate scenario modelling. It is not yet known which energy transition pathway will transpire and it could look quite different to those modelled. The projections served to illustrate the possible future range of long-term returns from different asset classes and their inter-relationship, but it is recognised that no economic model can be expected to capture perfectly future uncertainty, particularly the risk of extreme events. The projections also served to illustrate the potential variability, but it is recognised that these are subjective and arguments could be made for different outcomes. The scenario analysis takes no account of developments after the date of its presentation to the Trustee.

	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 completely 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
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 (longer term)	High	Low - Medium	Low	Low
Asset and liability return impacts (over 20 years)	The analysis shows that the impact of this scenario on the asset return was -0.03% p.a. along with a -0.17% p.a. change to the liability return (relative to the base case).	The analysis shows that the impact of this scenario on the asset return was -0.21% p.a. along with a -0.08% p.a. change to the liability return (relative to the base case).	The analysis shows that the impact of this scenario on the asset return was -0.06% p.a. along with an increase of 0.11% p.a. to the liability return (relative to the base case).	The analysis shows that the impact of this scenario on the asset return was -0.17% p.a. along with a -0.02% change to the liability return (relative to the base case).
Projected 2041 funding level	130%	117%	116%	116%

Summary of climate risk scenarios on the Scheme

The analysis identified that three of the four scenarios considered are expected to have a negative effect on the Scheme's projected funding level in 2041 with this most pronounced in the "Global Co-ordinated Action" scenario – a loss over the full 20-year period crystallised today would see the funding level fall by around 3.6% (relative to the base case). By contrast, it was identified that the "Lowest Common Denominator" scenario is favourable for the funding level (with longevity improving significantly less than current expectations), but most harmful to the climate, the global economy and members' life expectancies. The impact from the "Global Co-ordinated Action" scenario is more driven by an increase in the value of the liabilities. The Scheme has mitigated this risk, to an extent, implementing a cashflow matching strategy for the portfolio. In each case, however, the Scheme was still projected to be more than 100% funded on the Technical Provisions measure by 2041.

Conclusion on Scheme resilience

The analysis completed showed that climate change is a material but manageable risk and is not outsized relative to the other risks that the Scheme faces.

- Climate change is a material risk to the Scheme but the buffer within the strong funding level and low risk strategy would be able to absorb this in most scenarios (absent any other downside events). The Trustee has adopted a cashflow matching approach with the focus on ensuring a high degree of confidence that future asset income will meet future projected benefit payments. The Trustee is less focussed on day-to-day movements in the value of the Scheme's assets. For a strategy of this nature the key risk is that future asset cashflows are not received (for example due to higher levels of companies defaulting on their debt payments) rather than price fluctuations, and therefore risk of immediate repricing is less of an issue, unless this implies greater risk of default.
- The timing of the impacts is key. The largest risk to the Scheme from climate change is from high transition cost scenarios (Inevitable Policy Response and Climate Emergency).
- The scenario analysis suggests that members' life expectancies might increase more slowly (relative to the base case) under some of the scenarios considered. Whilst this would be beneficial to the Scheme's funding level, there remains considerable uncertainty relating to the potential impact. Therefore, hedging these liabilities remains an important part of the Scheme's risk management. The Scheme uses longevity swaps to reduce the risk of changes of life expectancy on the security of members' benefits.

SECTION 3:

Risk Management

The Trustee views climate change as a risk which cuts across the majority of the other risks faced by the Scheme, in that those risks may all be changed, mitigated or worsened by the effects of climate change.

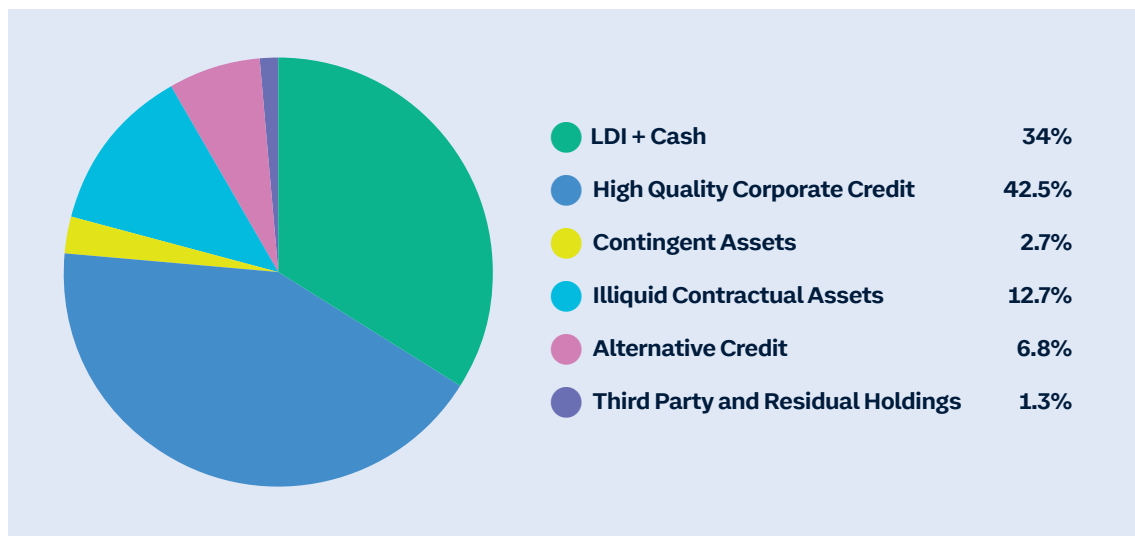
The Trustee's policy is to delegate to the investment managers responsibility for stewardship activities such as the exercise of rights attaching to investments, including voting rights (not currently applicable), and engagement with issuers of debt and equity and other relevant persons about relevant matters including specific consideration of sustainable investment/ESG characteristics. The Trustee expects that investment managers will engage on its behalf in a manner that is consistent with the agreements of the relationship and the Scheme's SIP. This stewardship activity is documented on an annual basis as part of the Scheme's Implementation Statement.

In 2023, the Trustee developed and established stewardship priorities. For both engagement and voting, the Trustee assesses the extent to which their managers' stewardship policies and priorities are aligned with their own. The priorities agreed by the Trustee are Climate Change and Inclusion and Diversity, and are aligned with the Company priorities. The SIP has also been updated to reflect these stewardship priorities.

As a result of the discussions held with the investment managers over the year, including a presentation from the Scheme's corporate bond manager, AXA, in June 2023, and the Trustee's ongoing monitoring process, the Trustee is satisfied that the investment managers' objectives and guidelines are consistent with its policies relating to suitability and responsible investment (where relevant to the mandate in question) and that no further action is required. The Trustee continues to monitor its managers and engage with them on ESG matters.

The scenario analysis undertaken by the Trustee, mentioned in the previous section, provides the Trustee with a holistic overview of the ways in which climate change may affect the Scheme's funding and investment positions. The Trustee can consider this at overall Scheme level or can look at individual asset classes.

The below table illustrates the Scheme's asset allocation as at 31 December 2022. Since the Scheme year end date, the Trustee has disinvested the Scheme's alternative credit holdings.



In order to manage the Scheme's climate risks, the Trustee has also developed the structure for a "Carbon Journey Plan", which the Trustee believes will act as a tool in helping the Scheme to meet its ultimate net zero goals, and lead to effective decision-making along the way.

Considerable time has been spent establishing a suitable governance structure for the Carbon Journey Plan, which is ultimately owned by the Trustee but incorporated into the IC's activities. As covered in more detail in the following section, the Trustee has set a target of net zero by 2050 and an interim target of a 50% reduction in the Scheme's carbon footprint by 2030, starting with a baseline of 31 December 2021.

There are a number of ways in which the Trustee is aiming to achieve this, all of which will feature heavily on the agenda of the IWG and wider Trustee Board in the years ahead. These include:

- 1. Engagement** – The Trustee believes that engaging with companies, regulators and other investors will be key to reducing the Scheme's carbon emissions and managing risk. The IWG will continue to engage with managers of key mandates and expects managers to do the same with the underlying companies invested in. By way of example, the Trustee meets with its managers on an annual basis and challenges them over the ESG credentials of their respective strategies and the engagements undertaken on the Trustee's behalf. The Trustee also encourages its investment consultant to engage with regulators and other key stakeholders on issues relating to climate change.
- 2. Mandate changes** – the Trustee will continue to review mandate guidelines, restrictions and benchmarks, to review the Scheme's investment strategy to understand any disproportionately emitting strategies, and where appropriate, to disinvest from assets that are most exposed to climate risk in the longer-term portfolio. Day-to-day decisions on the investments to be held are delegated to the investment managers. The Trustee also received training from AXA about the largest emitters in its corporate bonds portfolio and the impact of excluding these issuers from its portfolio. Notwithstanding this the Trustee's focus is on engagement, which the Trustee believes is preferable in driving down global emissions.
- 3. Impact investments** –The Trustee has made investments focussed on the generation of renewable energy which it expects to support the transition to a low carbon economy and will continue to review the current and future strategy to understand opportunities to add impact investments, providing capital to market participants offering new technology and/or solutions to reduce emissions. These investment decisions will consider the impact on the Scheme's climate-related exposure alongside other relevant factors such as the return which is expected to be generated and the liquidity of the investments.
- 4. Industry progress** – The Trustee recognises that its actions alone will not be sufficient to ensure that the goals of the Paris Agreement are met. As other investors, individuals, companies, governments and regulators act to transition the global economy to a low carbon world the Trustee would anticipate the Scheme's carbon emissions and footprint falling, all else being equal. Engagement will act to support this.

Portfolio construction

Sustainable investment, including management of climate risk, has been an increasingly important focus for the Trustee over recent years when considering the construction of the Scheme's investment portfolio. The Trustee's approach to monitoring and integrating ESG issues into the management of the Scheme has evolved over time.

The Trustee believes that ESG factors, including climate change, are financially material considerations that will have significant influence on the ability of the Scheme's investments to generate the cashflows needed to pay members' benefits. Integration of ESG factors is fundamental to the design and implementation of the investment strategy of the Scheme.

In appointing investment managers, the Trustee, with input from WTW as investment consultant, considers in detail these managers' experience and capabilities in managing ESG factors and sustainability in the securities or assets in which they invest. This assessment forms a part of the regular ongoing monitoring of the investment managers.

The Trustee expects managers to integrate ESG considerations into their management of the Scheme's assets and recognises that, as an investor in a diversified portfolio of various underlying asset classes with different objectives and characteristics, a 'one size fits all' approach to ESG is not optimal. Therefore, the expectations of managers are not uniform across all of the Scheme's funds but based upon the individual characteristics of the Scheme's different mandates.

Metrics and targets

In order for the Scheme's investment strategy to match the Trustee's ambitions in managing climate risk, the Trustee has set a number of climate-related targets and will monitor performance against them. The Trustee has set a long-term target of reaching net zero greenhouse gas emissions by 2050 and an interim target of 50% reduction to current carbon footprint by 2030.

In line with regulation, the Trustee has undertaken to calculate and monitor Scope 1, 2 and 3 emissions as defined below, on investments held across the Scheme's investment portfolio, where it can collect the necessary data:

- **Scope 1 emissions:** all direct emissions from the activities of an entity or the activities under its control. For example, the fuel combustion used to run delivery vehicles across the country, and leaks of greenhouse gases from retail store air conditioning units.
- **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. For example, lighting and heating in retail stores.
- **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. For example, the transport and distribution of products from stores around the world.

This analysis was initially conducted using data as at 31 December 2021 and since then the industry knowledge and requirements around the analysis have evolved. As part of this second report, the Trustee has reported Scope 1 & 2, as well as Scope 3 emissions where available. The Trustee expects Scope 3 emissions to become an increasingly important part of TCFD reporting given their material size, and therefore overall impact on metric changes. However there remain significant concerns over the availability and accuracy of data in relation to scope 3 emissions. The Trustee's net zero target continues to relate to scope 1 and 2 emissions only.

In line with regulation, the Trustee has agreed and calculated a set of climate change metrics, which they will report against. These are:

1. **Total Carbon Emissions** – This is an 'absolute emissions' metric which gives the total greenhouse gas emissions attributable to the Scheme's assets. This is calculated in line with the guidance provided by the Greenhouse Gas Protocol. This metric uses estimates for direct and indirect (Scope 1, 2 and 3) emissions. Absolute metrics such as this are also easy to understand however can be difficult to compare through time and against peers, as the larger the investor, the larger the expected carbon footprint.
2. **Carbon Footprint** – This is an 'emissions intensity' metric which is normalised by the market value of the portfolio, and the primary metric that will be monitored as part of the Scheme's Carbon Journey Plan. This metric gives the total greenhouse gas emissions attributable to the Scheme's assets, per £m invested. This is an important complement to the total carbon emissions metric, as well as aiding comparability over time and to industry peers. This is also the preferred metric as set out in DWP guidance, helping to ensure regulatory alignment. The methodology for the calculation of this metric takes the total carbon emissions as calculated and divides it by the total value of the assets to which the emissions refers.

3. **Percentage of assets with approved SBTi targets** – This is an ‘alignment’ metric which is a forward-looking metric aiming to communicate a direction of travel and consider the Scheme’s exposure to future climate risks, by assessing the extent to which the companies invested in by the Scheme are making formal plans to reduce their carbon emissions. The percentage of assets with approved SBTi targets has been chosen to allow comparisons of portfolios with peers and track progress over time. The Science Based Targets initiative (SBTi) is a partnership between CDP, the United Nations Global Compact, World Resources Institute (WRI) and the World Wide Fund for Nature (WWF) enabling companies to set science-based emissions reduction targets.
4. **Number and percentage of portfolio engagement which is climate-related** – This measure reflects a desire to have a metric that is forward looking and impactful. It aims to quantify the number of issuers with whom managers have engaged on climate-related engagements, and what percentage of the engagements undertaken related to climate change. The Trustee expects the number and percentage of climate-related engagements to increase over the coming years in order to push for change by companies.

We do not expect these metrics to remain static over time – instead they will evolve to reflect industry best practice. The Trustee seeks to improve the usefulness and accuracy of these metrics where possible to make them more effective for decision making. This year, there have been improvements in methodology and the introduction of coverage for Scope 3 emissions. In line with regulations, we have presented Scope 1 & 2 data separately from Scope 3. Given this is the first-year reporting on Scope 3 emissions, the report will show standalone data rather than comparative data. It is worth noting that the Scope 3 emissions are almost entirely estimated and there is considerable double counting across the scopes once Scope 3 is incorporated.

The exercise in gathering and interrogating data has been carried out by the Scheme’s investment consultant, using manager-provided data. The tables below set out information as at 31 December 2022 reflecting the most up to date asset allocation. Later in this report we have also shown the change in metrics since 31 December 2021 representing the baseline date for the Scheme and the start of the Scheme year during which the formal reporting requirements came into force for the Scheme.

The Trustee recognises the limitations in the calculation and gathering of data from the investment managers. These limitations include the lack of common definitions/ standards for presenting climate-related data, differences in methodologies, and reliance on assumptions. Some data is also less readily available for certain asset types and there may be data gaps that are filled using varying proxy methodologies. Recognising these limitations, the analysis has been carried out on a “best endeavours” basis, and the Trustee will work with managers and the pensions industry to improve the quality and consistency of data reported over time. As compared to 31 December 2021, when the baseline was calculated, there has been improvements in the data availability which is a contributing factor to some metrics appearing to have increased over the period.

For the absolute emissions and intensity metrics (metric 1 and metric 2) the Trustee has made efforts to represent the emissions of the Scheme’s underlying portfolio as accurately as possible. The Trustee recognises, however, that this is a developing area, which currently gives rise to a number of limitations. Where data is not available some investment managers have either considered the use of suitable proxies to estimate the relevant data or scaled the data to cover the total portfolio. A manager-by-manager breakdown of data availability and the approach taken can be referenced in the Appendix, however the table below provides a high level breakdown of this by asset class. The Trustee is committed to improving the robustness and consistency of the data over time, through engagement with its investment advisor and investment managers, amongst others.

The following tables set out the data quality as at 31 December 2022 showing the proportion of the asset class for which scope 1 & 2 and scope 3 absolute emissions are reported, estimated (using proxy data) or unavailable (i.e. not reported). Where data has been “not reported” in some cases the data provided has been scaled up to better reflect the exposure of the Scheme. Further detail is set out in the Appendix.

Coverage Scope 1&2 absolute emissions:

Asset Class	Portfolio weight 31/12/2022	Reported	Estimated	Not reported
LDI	34.0%	100% ¹	0%	0%
High Quality Corporate Credit	42.5%	69%	0%	31%
Third Party & Residual Holdings	1.3%	0%	0%	100%
Illiquid Contractual Assets	12.7%	63%	23%	14%
Alternative Credit*	6.8%	22%	53%	25%

¹Carbon emissions and carbon footprint numbers in respect of the LDI portfolio include emissions in respect of the Scheme’s UK Government bonds, including interest rate exposure accessed through the use of UK Government bond repo and total return swaps. Further detail on the methodology used in the estimation of these figures is set out in the appendix.

The Trustee has seen an increase overall in the proportion of emissions reported compared with the previous year for all asset classes with the exception of the BlackRock LDI portfolio which has remained stable. There has been a notable increase in the proportion of the high quality credit coverage (from 53% to 69% of the mandate) and a greater proportion of the alternative credit holdings covered by estimates. Whilst recognizing that the estimated positions may not fully reflect the Scheme’s actual holdings the Trustee believes the use of estimated data gives a better estimate of the Scheme’s overall emissions.

Coverage Scope 3 absolute emissions:

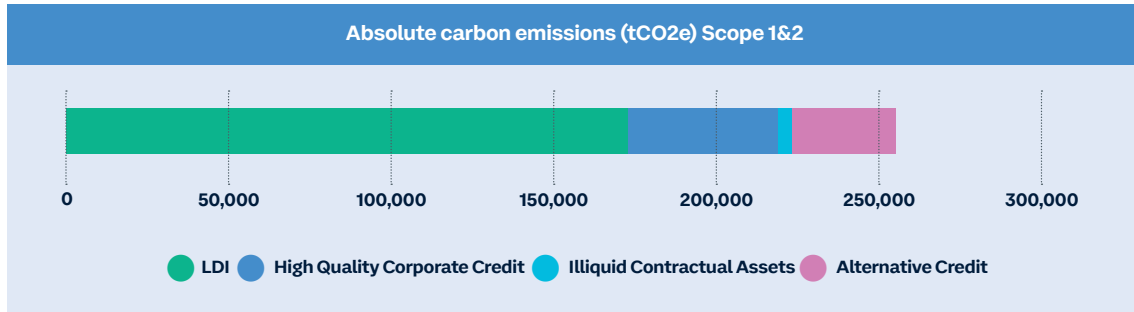
Asset Class	Portfolio weight 31/12/2022	Reported	Estimated	Not reported
LDI	34.0%	0%	0%	100%
High Quality Corporate Credit	42.5%	68%	0%	32%
Third Party & Residual Holdings	1.3%	0%	0%	100%
Illiquid Contractual Assets	12.7%	36%	40%	24%
Alternative Credit*	6.8%	Not provided	Not provided	Not provided

*Note: The alternative credit manager provided aggregate coverage figures for Scope 1,2 and 3 emissions in the table above. The manager was unable to provide a separate breakdown of the coverage data for Scope 3 emissions. However, we understand these details are expected to be available for next year’s reporting.

LDI emissions figures are based on the Scheme’s holdings of gilts and index-linked gilts, including those on repo. The coverage levels represent the value of these holdings as a percentage of the value of the Scheme’s total LDI portfolio.

Metric 1 – Absolute emissions

The total Scope 1&2 carbon emissions for the portfolio as at 31 December 2022 was 255,098 tonnes of carbon dioxide (CO₂) equivalent (tCO₂e). Excluding the LDI portfolio this has fallen from the emissions from 31 December 2021 (460,654 tCO₂e). The chart below shows this broken down by asset class:



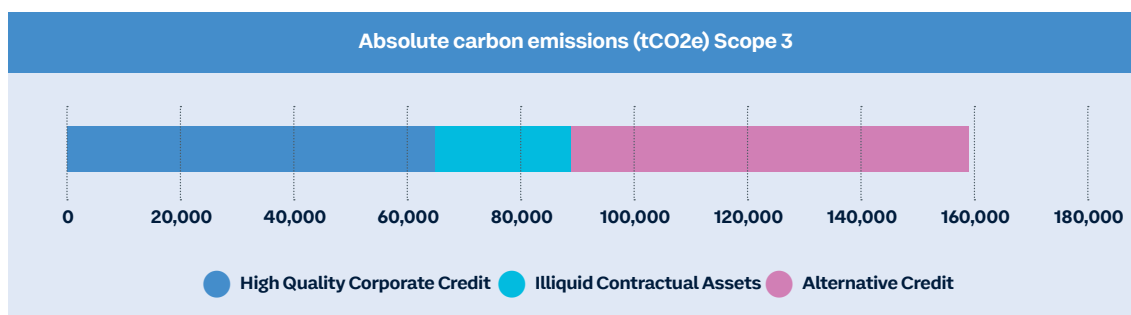
The fall in emissions is driven almost entirely by the LDI portfolio. This is driven primarily by a change in the methodology used in the calculation of the LDI portfolio carbon emissions from that adopted in the previous report. This reflects continuing industry discussions regarding the most appropriate approach to adopt in respect of government bonds. The approach adopted in the previous report, as provided by the LDI manager, apportioned total UK emissions based on the value of the Scheme's gilts exposure as a percentage of total UK government debt. For this year's approach we have adopted the approach recommended by the Partnership for Carbon Accounting Financials, which apportions total UK emissions based on the value of the Scheme's gilt exposure as a percentage of UK Purchasing Power Parity-adjusted GDP. The Trustee notes that the challenges associated with the calculation of emissions relating to government debt, and related derivatives, and will continue to monitor for any changes in best practice in this area.

Notwithstanding the change in methodology the Scheme's LDI portfolio continues to be the largest contributor to total emissions, with approximately 68% of the Scheme's total emissions. The Trustee believes that the carbon emissions from the Scheme's LDI holdings are not an accurate representation of the climate-related risk from holding UK Government bonds and, for the purposes of the other metrics below, has excluded the emissions from the LDI portfolio.

The total emissions of the Scheme's High Quality Corporate Credit were broadly unchanged over the year.

The Scheme's Alternative Credit portfolio as at 31 December 2022 was held entirely in the TWIM Alternative Credit Fund. The Scheme fully redeemed this holding in January 2023 but the emissions have been included in the metrics set out in this report because the assets were still held as at the date of the report. The emissions from this asset class increased materially over the year, primarily driven by an increase in the use of estimated data to approximate the emissions.

Scope 3 emissions are a new requirement for TCFD reporting. The total Scope 3 carbon emissions for the portfolio as at 31 December 2022 was 158,915 tonnes of carbon dioxide (CO₂) equivalent (tCO₂e). The chart below shows this broken down by asset class (excluding LDI assets, where there is no agreed methodology for their calculations and noting that the Trustee believes any scope 3 emissions data would significantly increase the risk of double-counting):



The Scheme's Alternative Credit portfolio is a significant contributor to the Scheme's Scope 3 emissions, equating to 45.1% of the total emissions, based on the data available. High Quality Corporate Credit also contributes a significant portion of the emissions at 40.4%. The Illiquid Contractual Assets contribute the remaining 14.5% of total Scope 3 emissions.

Metric 2 – Intensity

The table below shows a breakdown of carbon footprint by asset class excluding LDI.

	Carbon footprint (tCO ₂ e/£m invested)	Portfolio weight (ex LDI)*	Weighted carbon footprint (tCO ₂ e/£m invested)
High Quality Corporate Credit	64	68%	44
Third Party & Residual Holdings	0	0%	0
Illiquid Contractual Assets	67	20%	14
Alternative Credit	174	11%	19
Total			77

*Portfolio weights and carbon footprint figures also exclude exposures from Alcentra and Nephila where data has not been provided

The key driver of the increase in carbon footprint over the year (from 57 to 77) is a higher reported footprint from the Scheme's Illiquid Contractual Asset managers as a result of improved data availability. As companies start to better measure carbon intensity and improve their understanding of how their investments contribute to emissions, the Trustee expects to see changes in the reported levels of carbon intensity. The Trustee notes that any increase in reported carbon intensity may therefore be due to changes in data rather than actions of either the Scheme's investment managers or the underlying companies being invested in. The Trustee continues to monitor both the availability of data being provided and the actions of its investment managers.

The carbon footprint of the Scheme's High Quality Credit holdings also increased over the year, which was a result of rising bond yields leading to a reduction in the value of those bonds. Total emissions from these assets were broadly unchanged, resulting in a higher carbon footprint. The Trustee recognises the potential for changes in the value of the Scheme's assets, as well as the quality and availability of data, to distort the overall picture in relation to the Scheme's progress towards its targets.

The Absolute carbon footprint for LDI is 156 tCO₂e/£m invested as at 31 December 2022 (compared to 169 tCO₂e/£m invested as at 31 December 2021).

Metric 3 – Alignment

As at 31 December 2022, 31% of the applicable underlying investments held in the portfolio had declared alignment with SBTi targets.

	% of SBTi targets	% weight in the portfolio (ex LDI and third party holdings)	Weighted
High Quality Corporate Credit	43%	69%	30%
Illiquid Contractual Assets	1%	21%	0%
Alternative Credit	11%	11%	1%
Total			31%

Includes only applicable funds and funds for which data was provided (excludes LDI and third party holdings)

The table above shows the alignment of each underlying asset class where applicable. As we would expect, due to the fact that the debt being held relates to large publicly listed companies, the high quality corporate credit investments have the highest percentage of assets aligned with SBTi targets with 43% (2021: 31%) alignment.

The Trustee is pleased to see that the weighted percentage of applicable holdings with SBTi targets has increased by 12% since last year's report and views this as positive progress by the Scheme's managers towards the Trustee's long term target of reaching net zero greenhouse gas emissions by 2050. Performance against the target is assessed annually.

The Trustee and its investment consultant will continue to work with the Plan's investment managers to improve the proportion of portfolio companies that have set SBTi aligned climate targets and develop a better understanding of the steps the investment managers are taking to engage with portfolio companies.

Metric 4 – Engagement

The Scheme's chosen metric is the number and percentage of climate-related portfolio engagements. It aims to represent the proportion of the portfolio for which the Trustee has high quality engagement and is a key area in which the Trustee is striving for improvement over the coming years. This metric is applicable to the Scheme's investments in high quality corporate credit and alternative credit.

Asset class	Number of issuers engaged	Percentage of all portfolio engagements related to climate
High Quality Corporate Credit	12	36%
Alternative Credit	85	27%

The percentage of all portfolio engagements that were climate-related has increased since last year's report for both high quality corporate credit (previously 30.4%) and alternative credit (previously 22.9%). The Trustee is pleased to see progress being made in this area over the reporting period and will look to continue to monitor this over time.



Conclusion

The Trustee believes that recognising the contribution of the Scheme to climate change continues to be an important step to understanding the actions that can be taken to help shape a better future. The Trustee is committed to achieving the targets set out in this report and will work with its investment managers and advisors to monitor the Scheme's progress and consider what changes should be made.

The Scheme has made progress over recent years in the monitoring and management of climate-related impacts. The Trustee will continue to identify future investment opportunities that can contribute towards the Scheme's ultimate goals and seek to manage the risks resulting from climate change. However, the Trustee also wishes to reassure members and their beneficiaries that securing members' pensions will always be its priority.

Appendix 1

The table below outline's the data availability for each of the Scheme's investment managers.

Manager	Portfolio Coverage Scope 1&2 (%)	Portfolio Coverage Scope 3 (%)	Comments
BlackRock	100% ¹	Not applicable	<p>The data presented is for UK sovereign bonds and does not capture bonds issued by supranational, non-UK sovereigns and agencies or by Network Rail, interest rate swaps, inflation swaps and cash holdings.</p> <p>Absolute emissions for sovereigns is defined as metrics tonnes of CO2 and equivalents per country x (Value of gilts in the portfolio / UK GDP on a PPP-adjusted basis). This is based on MSCI data, ONS data and the value of the gilts held. Noting that the value of gilts includes exposure from both gilt-based repo and gilts total return swaps²</p> <p>Footprint defined for sovereigns as: metric tonnes of CO2 and equivalents divided by the market value of gilts in issuance (including exposure from both gilt-based repo and gilts total return swaps).</p>
AXA	69%	68%	<p>Absolute emissions data is based on the data provided by companies with no adjustment.</p> <p>For the intensity-based metrics the figures have been scaled up to the size of the portfolio so assuming the companies not reporting data is assumed to be the same as those reporting.</p>
Alcentra	Not applicable	Not applicable	The manager does not currently collect the data required.
Alpha Real	Not applicable	68%	<p>For the cases where actual data is not available, data has been scaled up to 100% of the portfolio using country and property-type specific proxies, with the support of MSCI Climate VaR. For data collected in 2023 (with respect to 2022 calendar year) proxy data corresponded to 32%.</p> <p>The manager has informed us that absolute emissions reported in last year's report related to Scope 3 only. All fund investments consist of FRI leases, and as such, the fund, as landlord, does not have operational control over the asset. As a result, Scope 1 & 2 emissions at Fund level are zero.</p>

Manager	Portfolio Coverage Scope 1&2 (%)	Portfolio Coverage Scope 3 (%)	Comments
Equitix II	59%	10%	Those assets where data is not available have been excluded.
Equitix IV	57%	33%	
Equitix V	45%	24%	
Greencoat	100%	100%	-
KFIM	100%	79%	Scope 3 data has been scaled up to reflect an estimated 100% data collection across the portfolio.
Waypoint	Not applicable	55%	Data has been scaled up to reflect an estimated 100% data collection across the portfolio.
TWIM	22%	Not applicable	Where data has not been provided the manager has identified appropriate proxies for 53% of the value of the fund, with no data provided, and no scaling of data applied, for 25% of the fund. These coverage figures reflect aggregate coverage figures for Scope 1,2 and 3 emissions. The manager was unable to provide a separate breakdown of the coverage data for Scope 3 emissions.
Alinda	Not applicable	Not applicable	The underlying investments of the fund were fully realized as of the end of December 2022. Alinda do not have TCFD compliant metrics available as the cash is waiting to be distributed back to the Scheme.
Nephila	Not applicable	Not applicable	The manager does not currently collect the data required.

¹Carbon emissions and carbon footprint numbers in respect of the LDI portfolio include emissions in respect of the Scheme's UK Government bonds, including interest rate exposure accessed through the use of UK Government bond repo and total return swaps. Further detail on the methodology used in the estimation of these figures is set out below

²The methodology used in the calculation of the LDI portfolio carbon emissions has changed from that adopted in the previous report. This reflects continuing discussions regarding the most appropriate approach to adopt in respect of government bonds. The approach adopted in the previous report, as provided by the LDI manager, apportioned total UK emissions based on the value of the Scheme's gilts exposure as a percentage of total UK government debt. For this year's approach we have adopted the approach recommended by the Partnership for Carbon Accounting Financials, which apportions total UK emissions based on the value of the Scheme's gilt exposure as a percentage of UK Purchasing Power Parity-adjusted GDP.

Appendix 2

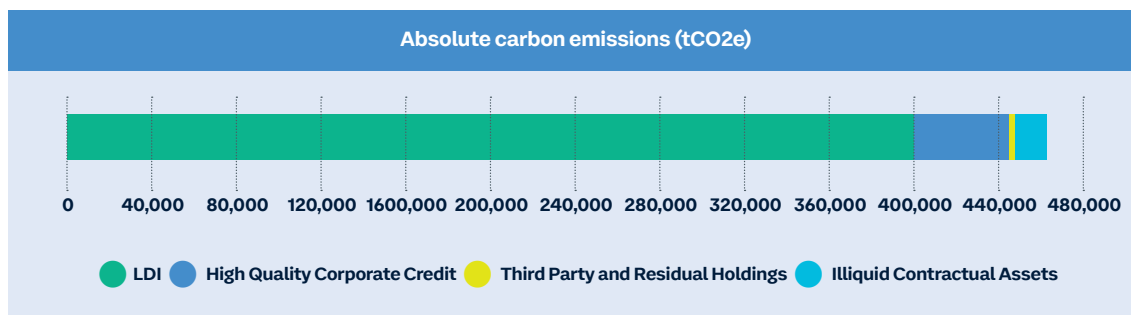
The following table sets out the data quality for our previous Climate Change Report using data as at 31 December 2021. This table shows the proportion of the asset class for which scope 1 and scope 2 absolute emissions are reported, estimated (using proxy data) or unavailable (i.e. not reported).

Asset Class	Portfolio weight 31/12/2022	Reported	Estimated	Not reported
LDI	48%	100% ¹	0%	0%
High Quality Corporate Credit	38%	53%	0%	47%
Third Party & Residual Holdings	1%	35%	0%	65%
Illiquid Contractual Assets	8%	66%	16%	18%
Alternative Credit*	5%	18%	26%	56%

¹Carbon emissions and carbon footprint numbers in respect of the LDI portfolio include emissions in respect of the Scheme's UK Government bonds, including interest rate exposure accessed through the use of UK Government bond repo and total return swaps. Further detail on the methodology used in the estimation of these figures is set out in Appendix 1.

Metric 1 – Absolute emissions

The total carbon emissions for the portfolio as at 31 December 2021 was 460,654 tonnes of carbon dioxide (CO₂) equivalent (tCO₂e). The chart below shows this broken down by asset class:



Metric 2 – Intensity

The table below shows a breakdown of carbon footprint by asset class excluding LDI.

	Carbon footprint (tCO ₂ e/£m invested)	Portfolio weight (ex LDI)*	Weighted carbon footprint (tCO ₂ e/£m invested)
High Quality Corporate Credit	50	74%	37
Third Party & Residual Holdings	330	0%	1
Illiquid Contractual Assets	19	16%	3
Alternative Credit	164	9%	15
Total			57

*Portfolio weights and carbon footprint figures exclude exposures from Alcentra and Nephila where data has not been provided

Metric 3 – Alignment

As at 31 December 2021, 25% of the applicable underlying investments held in the portfolio had declared net zero targets.

	% of SBTi targets	% weight in the portfolio (ex LDI and third party holdings)	Weighted
High Quality Corporate Credit	31%	74%	23%
Illiquid Contractual Assets	3%	16%	1%
Alternative Credit	17%	9%	2%
Total			25%

Includes only applicable funds and funds for which data was provided (excludes LDI and third party holdings)

Metric 4 – Engagement

The Scheme's chosen metric is the number and percentage of portfolio engagement. This metric is applicable to the Scheme's investments in high quality corporate credit and alternative credit.

Asset class	Number of issuers engaged	Percentage of all portfolio engagements related to climate
High Quality Corporate Credit	17	30.4%
Alternative Credit	88	22.9%