Climate disclosures for year ending 30 June 2023

Produced by: The Trustee Directors of the Pearl Group Staff Pension Scheme

Date: December 2023

Introduction

Climate change is affecting the planet, causing extreme weather events, impacting crop production and threatening Earth's ecosystems. Understanding the impact of climate change and the Scheme's vulnerability to climate-related risks will help us to mitigate the risks and take advantage of any opportunities.

The TCFD is an initiative that developed some best practice guidance for climate-risk reporting. New UK regulations require trustees to meet climate governance requirements and publish an annual TCFD-aligned report on their pension scheme's climate-related risks.

Better climate reporting should lead to better-informed decision-making on climate-related risks. And on top of that, greater transparency around climate-related risks should lead to more accountability and provide decision-useful information to investors and beneficiaries.

This document is the first annual TCFD report for the Pearl Group Staff Pension Scheme (the "Scheme"). It has been prepared by the Trustee Directors (the "Trustee") for the year ended 30 June 2023.

What is TCFD?

The Financial Stability Board created the Taskforce on Climate-related Financial Disclosure ("TCFD") to develop recommendations on the types of information that entities should disclose to support investors, lenders, and insurance underwriters in appropriately assessing and pricing risks related to climate change.

The TCFD has developed a framework to help public companies and other organisations, including pension schemes, more effectively disclose climate-related risks and opportunities through their existing reporting processes.

Table of contents

Contents

Executive summary

To produce this report, we have worked with our investment adviser and fiduciary manager of the DC arrangements, Aon, and bulk annuity provider, Phoenix to carefully consider the potential impact climate change could have on the Scheme's investments and how we identify, manage, and mitigate those risks.

This report has been prepared in accordance with the regulations set out under "The Occupational Pension Schemes (Climate Change Governance and Reporting) Regulations 2021" (the "Regulations") and provides a status update on how the Scheme is currently aligning with each of the four elements set out in the regulations (and in line with the recommendations of the TCFD). The four elements covered in the statement are detailed below:

- **Governance:** The Scheme's governance around climate-related risks and opportunities.
- **Strategy:** The actual and potential impacts of climate-related risks and opportunities on the Scheme's strategy and financial planning.
- **Risk Management:** The processes used to identify, assess and manage climate-related risks.
- **Metrics and Targets:** The metrics and targets used to assess and manage relevant climate-related risks and opportunities.

The following pages summarise the Trustee's current position with regards to the TCFD recommendations and those set out in the Regulations.

Overview of the Scheme

Defined Benefit (DB) Section

The Trustee aims to invest the assets of the DB Section prudently to ensure that the benefits promised to members are provided. Following a series of transfers between November 2020 and November 2022, virtually all the assets within the DB Section have been transferred to the Scheme's annuity provider, Phoenix Life Limited, part of Phoenix Group ("Phoenix"). The policies held with Phoenix now cover all of the Scheme's DB liabilities.

As of 30 June 2023, a small amount (approx. £8m) of residual assets remained and were invested in illiquid pooled funds and property. These assets are being wound up. The Scheme also held cash to allow for future Scheme expenses or any other liabilities that the Scheme may need to pay.

Defined Contribution (DC) Section

The DC Section invests across a range of assets, with the aim of providing a range of investments that are suitable for meeting members' long and short-term investment objectives.

Day to day management of the DC assets and how they are invested is delegated to the Scheme's DC provider and fiduciary manager, Aon Investments Limited ("AIL").

The majority of the DC Section's assets are invested in the DC default arrangement: the Aon Retirement Pathway Funds. This default invests in range of assets including equities, bonds and property. Further information on the default arrangement can be found in the Statement of Investment Principles.

This report focuses on the default arrangement which is classified as the Scheme's 'popular arrangement' as it accounts for 10% or more of the assets used to provide money purchase benefits within the Scheme.

Members of the DC section with a Reference Scheme Test underpin have a defined benefit underpin. The Scheme's liability to these members may therefore be met from both defined contribution and defined benefit assets, depending on whether or not the underpin is of greater value than the member's defined contribution assets. This has not been considered in detail in this report and does not impact the required disclosures.

Summary of findings

Governance

We, the Trustee, believe that it is important to consider the effect of current and future global climate change and the direction of travel for business, with reference in particular to the Scheme's investments.

We receive training on climate-related issues, when appropriate, to develop the appropriate degree of knowledge and understanding on these issues to support good decision-making. We expect our advisers to bring important and relevant climate-related issues and developments to its attention in a timely manner, informing of its relevance to the Scheme and incorporating climate related issues into advice.

Strategy

Quantitative climate change scenarios analysis

We have undertaken quantitative climate change scenario analysis to better understand the impact climate change could have on the Scheme's investment strategy (and funding strategy in the DB Section) over the time horizons identified as being most relevant to the Scheme.

The expected impact of climate change on the DB investment portfolio is fairly muted under all of the climate scenarios. This is due to virtually all the assets being transferred to buy-in policies.

The climate change scenario analysis for the DC section focuses on the default strategy. Based on our analysis, we believe that there are some areas of the strategy that are more exposed to climate-related risks, in particular equity investments which members are heavily invested in during the early stages of their retirement journey. However, we are comfortable that sufficient steps have been taken by our fiduciary investment manager to manage this risk on behalf of our members. This includes the inclusion of low-carbon and ESG-aligned equity funds, some of which are net-zero aligned, as well as diversification across asset classes that are less exposed to climate risks as members approach retirement age.

Qualitative risk assessment

For the DC section, we have also carried out a qualitative risk assessment on each asset class that the DC default strategy invests in. From this, we have

identified which climate-related risks and opportunities could have a material impact on DC members' assets, and over which timescales these risks and opportunities may arise.

Based on the analysis carried out we believe the investment in global equities are most exposed to climate-related risks. This is in line with the findings from our quantitative climate change scenario analysis.

Global equities form a significant part of the DC investment strategy, particularly for members who are in the early stages of their retirement journey. This reflects the objective to generate above inflation returns for DC members over the long term whilst they are far from retirement, which is expected to support them in having enough savings to support their lifestyle needs during retirement (i.e. a good retirement outcome). Our DC fiduciary manager has taken proactive steps to mitigate this risk over the past few years including:

- Inclusion of a new Global Equity Climate Transition Fund within the default strategy. This helps manage the risks associated with the transition to a low carbon economy in a just and fair way.
- Inclusion of an ESG overlay and ESG screens in a multi-factor equity index to reduce the carbon intensity of the fund. This entails exclusions of investment in some of the worst-polluting areas such as thermal coal, tar sands oil extraction, and fracking that can be considered to be most exposed to climate-related risks.
- Introduction of an ESG screen on the listed property portfolio used within the default strategy, which helps to reduce the carbon footprint of investments in the portfolio and reduce exposure to climate-related risks.

Risk management

We have established a process to identify, assess and manage the climate-related risks that are relevant to the Scheme. This is part of the Scheme's wider risk management framework and is how we will monitor the most significant risks to the Scheme, in our efforts to support members in achieving a good retirement outcome. More detail is provided on pages 24 – 27.

Metrics and Targets

We have gathered the following climate-related metrics for the Scheme's Buy-in portfolio and DC investments:

- Total Greenhouse Gas (GHG) Emissions;
- Carbon Footprint;
- Data Quality; and
- Proportion of portfolio SBTi aligned.

The description of each metrics and a summary of findings can be found in the metrics and targets section on pages 28 – 40. We will gather and report on these metrics annually.

To support us in the ongoing management of climate-related risks and opportunities we have also set a climate-related target for each section of the Scheme.

DB Section

We have set a target to achieve above 60% coverage of carbon emission data across all asset classes by 5 years' time.

DC Section

We have adopted the same target as our fiduciary investment manager and buy-in provider, which is to achieve net zero by 2050.

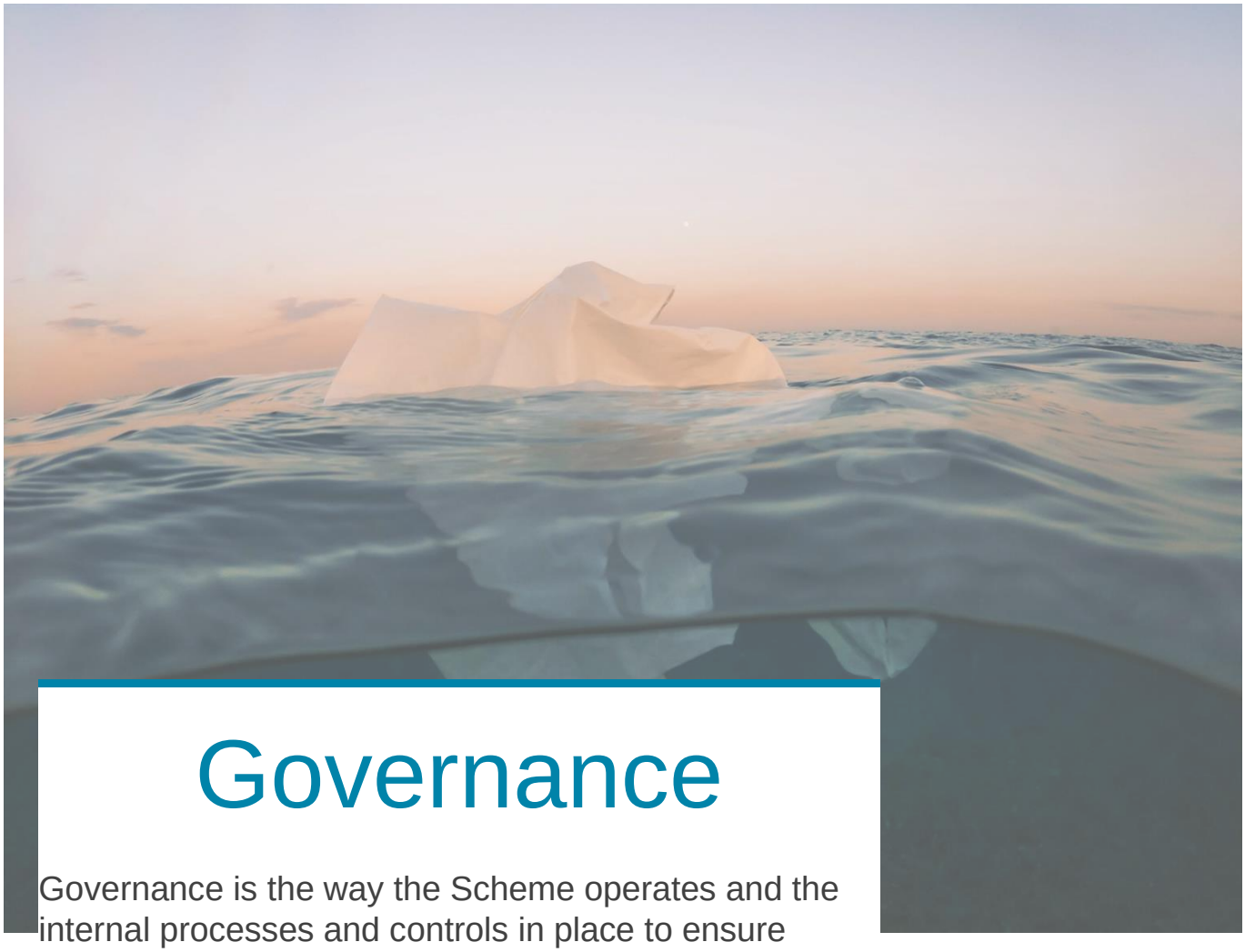
In order to achieve this, we have also adopted the interim target set by our DC provider, AIL, which is to reduce the carbon footprint of the Aon Managed Retirement Pathway Fund (our default strategy) by 50% by 2030 (versus a 2019 baseline).

We will assess the appropriateness of these targets and report on progress annually.

We hope you enjoy reading this report and understanding more about how we are managing climate-related risks and opportunities within the Scheme.

Signed:

On behalf of the Trustee Directors of the Pearl Group Staff Pension Scheme



Governance

Governance is the way the Scheme operates and the internal processes and controls in place to ensure appropriate oversight. Those undertaking governance activities are responsible for managing climate-related risks and opportunities. This includes us, as the Trustee Directors, and others making Scheme-wide decisions, such as those relating to the investment strategy or how it is implemented, funding, and the ability of the sponsoring employer to support the Scheme.

Our Scheme's governance

As the Trustee Directors of the Scheme, we are responsible for overseeing all strategic matters related to the Scheme. This includes the governance and management frameworks relating to environmental, social and governance ("ESG") considerations and climate-related risks and opportunities.

We have discussed and agreed our climate-related beliefs and the Scheme's approach to managing climate change risk and the opportunities these may present. These are set out in the Scheme's Statement of Investment Principles ("SIP"), which is reviewed at least every three years or sooner in the event of a significant change in investment policy.

Our climate beliefs

We believe that it is important for the Scheme, with reference in particular to its investments, to consider the effect of current and future global climate change and the direction of travel for business.

DB Section

We note that the DB Section has secured its liabilities through a series of buy-ins. As a result, it would be inappropriate to make changes to the Scheme's other investments in response to climate change alone and we will, instead, seek to understand the approaches being taken by our investment managers and encourage them to take climate sensitive decisions. We believe it would be right to focus particularly on Phoenix as the buy-in insurer – seeking to understand Phoenix's position in relation to climate change and to encourage and voice support for positive climate related activity. Should the Scheme's circumstances change significantly, we will re-visit this approach.

In line with our beliefs, we consider that the most appropriate time horizon for the DB Section is the short term i.e. the next 1 to 3 years. Where appropriate, we consider transition and physical risks separately. Notwithstanding this, we also assess climate related risks and opportunities over the medium and longer term which we consider to be 4 to 7 years and 7 to 10 years respectively.

We receive training on climate-related issues, when appropriate, to develop the appropriate degree of knowledge and understanding on these issues to support good decision-making. We expect our advisers to bring important and relevant climate-related issues and developments to its attention in a timely manner, informing of its relevance to the Scheme and incorporating climate related issues into advice.

Trustee's update for the year ending 30 June 2023

In August 2022, the Trustee completed training on the importance of climate related risks and familiarised itself with the TCFD reporting requirements on assessing and managing the aforementioned risks.

The purpose of this training session was to better equip the Trustee ahead of the preparation of its inaugural TCFD report.

DC Section

For the DC Section, we assess climate related risks and opportunities over the short, medium and longer term which we consider to be 1 to 3 years, 4 to 10 and 11 to 20 years respectively. We also recognise that younger members in the DC Section are invested for the very long-term and many will have timeframes significantly in excess of 20 years. We therefore also assess climate related risks and opportunities over the very long-term which we deem to be 21+ years.

We have delegated investment decisions to Aon Investments Limited ("AIL"), as our DC provider and fiduciary manager. We expect AIL to consider current and future global climate change in its investment decisions, with reference to the timescales set out above.

Key TCFD activities

The key activities undertaken by the Trustee Directors, with the support of their advisers, are:

- Engaging with Phoenix, AIL and (where appropriate) the Scheme's investment managers, to understand how climate risks are considered in their investment approach.
- Working with Phoenix and the investment managers, including the DC provider and fiduciary manager, to disclose relevant climate-related metrics as set out in the TCFD recommendations.
- Working with the investment adviser to ensure that stewardship activities are being undertaken appropriately on the Scheme's behalf.
- Ensuring that actuarial advice adequately incorporates climate-related risk factors where they are relevant and material.
- Engaging with the Company on climate risk and the potential impact on covenant.

Trustee's update for the year ending 30 June 2023

Over the year, the Trustee discussed governance of the climate related risks in the context of TCFD reporting requirements, and in February 2023, agreed a formal approach regarding the governance of these risks.

In May 2023 the Trustee undertook a workshop with its investment adviser and the Insurer covering climate scenario analysis and climate related metrics for the Scheme's buy-in portfolio. The session also touched on the regulatory changes occurring in 2022, and how this would impact the Scheme. The training covered the introduction of new metrics, including the portfolio alignment metrics and changes to the additional climate metrics.

How we work with our advisers

We expect our advisers, investment managers and other service providers to bring important climate-related issues and developments to our attention in a timely manner, and to have the appropriate knowledge on climate-related matters.

We review the quality of our advisers' provision of advice and support on climate-related issues. For our investment adviser this is part of the annual review of investment consultant objectives.

Investment adviser: the Trustee's investment adviser for the DB and DC sections of the Scheme, Aon, provides investment-related strategic and practical support to the Trustee Directors in respect of the management of climate-related risks and opportunities and ensuring compliance with the TCFD recommendations.

Insurer: the Trustee's insurer, Phoenix, provides appropriate advice and support in respect of the Scheme's buy-in assets. This includes monitoring of the Scheme's assets in line with the insurer's decarbonisation targets; and engaging with underlying managers on the appropriate climate integration practices.

Scheme Actuary: the Scheme Actuary, Neil Wearing at Willis Towers Watson, will help the Trustee Directors assess the potential impact of climate-related risks on the Scheme's funding assumptions where relevant, given the expected lifespan of the Scheme.

Covenant adviser: the Trustee's covenant adviser, PwC, will help the Trustee Directors understand the potential impact of climate-related risk on the industry and employer covenant for the Scheme.

DC provider: The Trustee has agreed that the Scheme's DC provider, AIL, will be responsible for day-to-day management of the DC assets and will provide the information and data that the Trustee requires to meet the TCFD recommendations.

Strategy

It is crucial to think strategically about the climate-related risks and opportunities that will impact the Scheme if we are to stand a chance of mitigating the effects of climate change.

Assessing the climate-related risks and opportunities the Scheme is exposed to is key to understanding the impact climate change could have on the Scheme in the future.

What climate-related risks are most likely to impact the Scheme?

We have carried out a qualitative and quantitative risk assessment of the asset classes that the Scheme is invested in. From this we identified which climate-related risks could have a material impact on the Scheme. We have also considered relevant climate related opportunities.

Climate-related risks

Climate-related risk is the risk that climate change impacts the financial performance of companies and consequently the risk-return profile of the securities they issue. Ultimately, climate-related risks could impact the value of our members' retirement savings.

Climate-related risks include both transition risks and physical risks:

Transition risks are the risks anticipated to arise with transitioning to a low-carbon economy. These might include shifts in government policy, the introduction of new technology or changes in supply and demand in certain sectors. As an example, the introduction of carbon pricing regulations by governments around the world could increase companies' production costs.

Physical risks are the risks associated with the physical impacts of climate change on companies' operations, resulting from, for example, extreme temperatures, flooding, droughts, storms or wildfires. Physical risks also include the chronic effects of climate change, such as rising temperatures and sea-levels, which are felt over many decades.

We have considered climate-related risks for the DC and DB Sections separately, supported by our investment adviser, DC provider and our buy-in provider.

Qualitative climate risk assessment - DC Section

Our qualitative climate-risk assessment is based on two climate scenarios. We believe it is important to consider various climate outcomes to better understand the climate-related risks faced by our members.

Risk categories

In our assessment, we have considered risks for two climate scenarios relative to a base case scenario as follows:

No transition: no further action is taken to reduce greenhouse gas emissions, leading to significant global warning. ***Physical risks dominate this scenario.***

Orderly transition: immediate and coordinated global action to tackle climate change is taken using carbon taxes and environmental regulation. ***Transition risks dominate this scenario.***

Ratings

The analysis uses a RAG rating system where:

Red denotes a much higher level of financial exposure compared with the base case.

Amber denotes a slightly higher level of financial exposure compared with the base case.

Green denotes a similar level of financial exposure compared with the base case.

Time horizons

We assessed the climate-related risks and opportunities over multiple time horizons and these are set out below:

- short term: 1-3 years.
- medium term: 4-10 years
- long term: 10-20 years
- very long term: 21+ years

When deciding the relevant time horizons, we considered the profile of our membership.

More details in relation to transition and physical risks can be found in Appendix 2.

No transition scenario

The table below sets out the results of our qualitative assessment under a no transition scenario.

Sub-asset class	Short Term	Medium Term	Long Term	Very Long Term
Equities	G	A	R	R
Bonds	G	A	R	R
Real assets	A	A	R	R
Government bonds	G	A	A	A
Cash	A	A	G	G

Under a no transition scenario, the physical risks associated with climate change are the most significant risks and are expected to materialise over the long-term. As the intensity of weather events increases, the risks to geographically vulnerable areas increase. In the worst cases, extreme weather events may cause damage that result in failure or a dramatic reduction in the lifespan of those assets relying on physical infrastructure. These climate related headwinds facing the economy act as an increasing drag on economic growth and returns from risk assets such as equities and corporate bonds.

Government bond yields are also expected to rise under this scenario, relative to our adviser's base or central case scenario, as inflationary pressures increase, and the risk premia demanded by investors for holding government bonds also increase over time. This reflects greater fiscal and monetary uncertainty and higher debt levels, due to increased government borrowing required to allow countries to adapt to climate change.

In this scenario, the biggest risks faced by our members are over the long-term and across nearly all asset classes, indicated by the amber and red ratings over the medium to longer term time periods.

Orderly transition scenario

Sub-asset class	Short Term	Medium Term	Long Term	Very Long Term
Equities	R	G	G	G
Bonds	R	G	G	G
Real assets	R	G	G	G
Government bonds	R	A	G	G
Cash	G	G	G	G

Under an orderly transition scenario, the transition risks associated with tackling climate change are the most significant risks, specifically in the short-term. Increased public awareness of climate change risks galvanises opinion and leads to governments undertaking widespread action globally. Increased taxes, including carbon taxes and a carbon cap, together with a rise in production costs from the rapid shift away from fossil fuels, lead to an inflation spike in the near term and higher interest rates as central banks try to contain inflation.

Over the medium to longer term, the rapid transition to clean technologies and green regulation eventually begin to boost economic growth. Consequently, while risk assets such as equities and corporate bonds perform poorly in the near term, higher growth prospects boost returns over the longer term.

In this scenario, the biggest risks faced by our members relative to our base or central case scenario are experienced over the short term and across nearly all asset classes. While all members are impacted, members closer to retirement or in retirement are expected to be the most affected. Members who are invested over a longer time period and who are perhaps further from retirement would expect to see better outcomes compared with our adviser's base or central case scenario.

Quantitative climate scenario analysis – DC Section

We also have assessed the impact climate change could have on the DC Section via quantitative climate scenario analysis, which includes consideration of three climate change scenarios. Each scenario considers what might happen when transitioning to a low carbon economy under different conditions.

We believe these scenarios provide a reasonable range of possible climate change outcomes. These scenarios were developed by our investment adviser, Aon, and are based on detailed assumptions (which are described in Appendix 2). It is important to remember these scenarios are only illustrative and are subject to considerable uncertainty.

We also established a "base case" scenario against which the alternative climate change scenarios are compared.

Why carry out climate change scenarios analysis?

To assess the resilience of the Scheme's investments to climate-related risks.

Aon's climate change scenarios

Below we provide a summary of the alternative climate change scenarios and "base case" scenario.

	Base case	No transition	Abrupt transition	Smooth transition
	Emission reductions start now and continue in a measured way in line with the objectives of the Paris Agreement and the UK government's legally binding commitment to reduce emissions in the UK to net zero by 2050.	No further action is taken to reduce greenhouse gas ("GHG") emissions, leading to significant global warming.	Action on climate change is delayed for five years, with governments eventually forced to address greenhouse gas emissions due to increasing extreme weather events.	Rapid advancement of green technology and government action on climate change, which achieves a smooth transition to a low carbon economy.
Reach net-zero by	2050	After 2050	2050	2045
Introduction of environmental regulation	Uncoordinated	None	Aggressive	High coordination
Temperature risk by 2100	+1.5ºC – 2.4ºC	+3ºC	+1.5ºC – 2ºC	<1.5ºC

Climate-related risks and opportunities are likely to play out over a long-time horizon and, consequently, the impact on our members' retirement savings will depend on factors including age. Reflecting this, we identified two example members, which align with the different time periods over which we consider climate-related risks and opportunities. We summarise these two example members below:

Member	Age	Current fund value	Salary	Contributions/withdrawals (employer and employee)
Member A	35	£15,000	£25,000	10% p.a.
Member B	55	£40,000	£35,000	10% p.a.

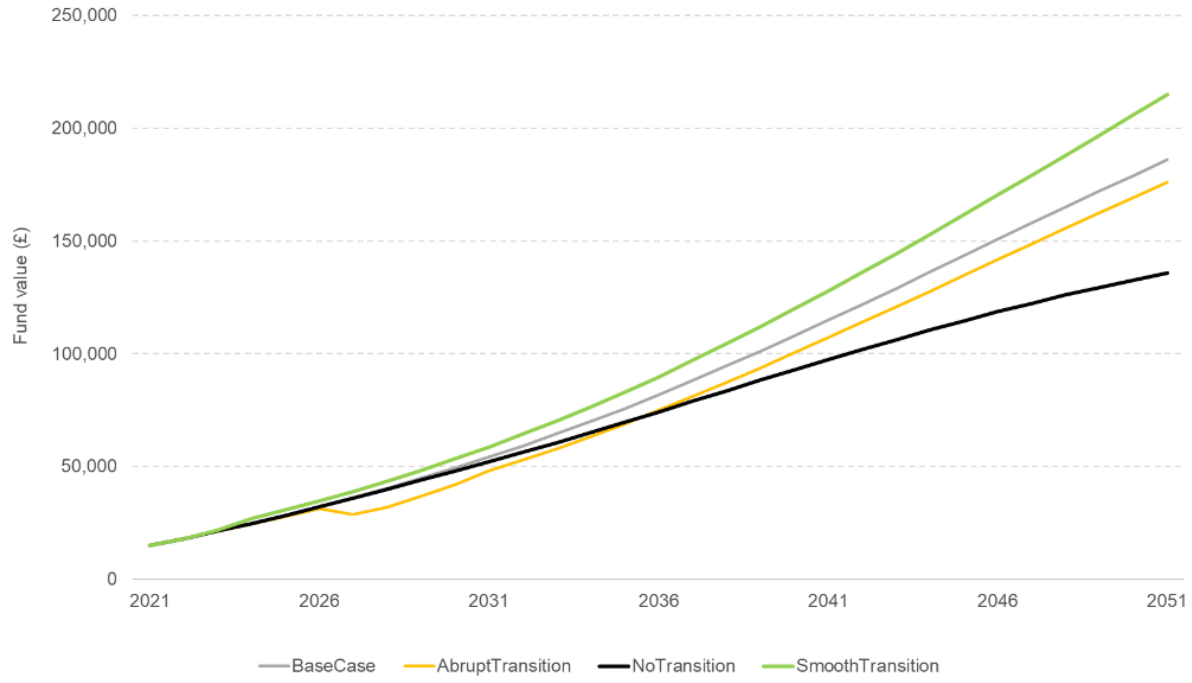
The charts below illustrate the projected real fund value over the next 30 years for each of our climate change scenarios, together with our base case scenario (grey line) for the two members.

The projections allow for investment growth and assume our representative members continues to pay contributions to their pension. The projections are shown in real terms i.e. in today's money. For the purpose of this analysis we focussed on our default arrangements (the Aon Retirement Pathway Funds), which is where climate risk is most concentrated within the DC Section.

Analysis has been carried out based on market conditions and assumptions as at 31 December 2021. This reflects the analysis carried out by our DC provider and fiduciary manager, AIL. We have confirmed with our adviser that we would not expect any significant differences to the analysis and conclusions from re-running the analysis at a date within the Scheme year.

Member A: 35-years old active member invested in the Aon Managed Retirement Pathway Funds

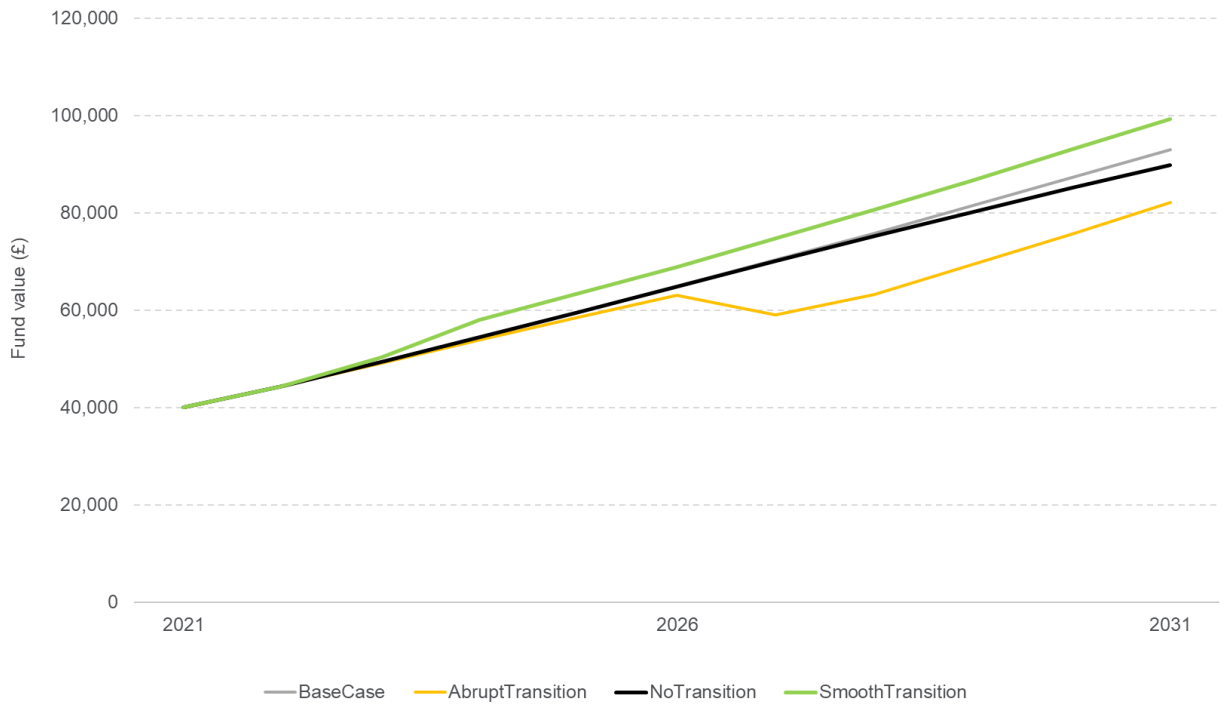
Projected real fund value



Source: Aon. Fund values are shown in real terms projected from 31 December 2021. Note these projections assume no withdrawals from the asset pool over the modelling period and contributions into the fund are assumed to be paid half-way through the year.

Member B: 55-years old active member invested in the Aon Managed Retirement Pathway Funds

Projected real fund value



Source: Aon. Fund values are shown in real terms projected from 31 December 2021. Note these projections assume no withdrawals from the asset pool over the modelling period and contributions into the fund are assumed to be paid half-way through the year.

The quantitative analysis shows that the default investment strategy exhibits reasonable resilience under most of the climate scenarios, with both representative members expected to achieve a positive investment return upon reaching retirement age across all climate scenarios.

For younger members (such as member A), the biggest risk is under the Abrupt Transition scenario (yellow line) over the medium-term. Poor asset returns, particularly from equities, in the medium-term cause the value of members' pension savings to fall. The overall decline however is mitigated by the ESG overlays and low carbon tilts in place. This strategy positioning also means Member A is better positioned to benefit from asset recovery in later years, and by retirement age their retirement outcome is broadly similar to the base case.

For the older representative member, who only has a 10 year time horizon to retirement age, they are expected to be worst off under the abrupt transition as there is insufficient time following the initial shock to asset prices for the value of their savings to recover. That said, the overall value of the shock is smaller as members closer to retirement are invested across a more diversified portfolio of assets as opposed to predominantly equities, helping to protect them from the worst of the asset falls.

In the longer-term, for most of our members, and particularly members in the early to mid-part of their career, the biggest risk is the No Transition scenario (black line). Again, the inclusion of an ESG overlay on the equity portfolios is expected to improve outcomes for members relative to being invested in the broader market.

Key takeaways

The biggest climate-related risk faced by the Scheme's DC members comes from the allocation to global equities. Global equities form a large part of the DC investment strategy, reflecting the need to generate above inflation returns for members over the long term and our relatively young member base.

Our DC provider has taken proactive steps over the past few years to mitigate this risk, including:

- Adopting an ESG overlay on the equity portfolios and incorporating a climate transition equity strategy.
- Incorporating climate considerations into all underlying fund reviews, including the appointment of underlying investment managers with specific sustainability and climate objectives.
- Close monitoring of stewardship activities carried out by the investment manager, to ensure it is appropriately engaging with investee companies on the management of climate risks.

AIL has also implemented ESG screening on our passive regional equities used within our default strategies. This allows AIL to invest in companies which are actively contributing to solutions to tackle climate change in a variety of ways.

DB Section

Phoenix has carried out climate change scenario analysis to support us in better understanding the impact climate change could have on the Scheme's buy-in portfolio.

This analysis considers a range of different climate transition scenarios, whereby the difference between scenarios is the applied climate temperature rise. Each scenario considers what may happen to the Scheme when transitioning to a low carbon economy under different temperature-related environmental conditions.

The analysis of different scenarios allows us, the Trustee, to be able to build in resilience for all plausible climate conditions, by understanding the effect that different temperature rises may have on the buy-in portfolio projections. This reduces the risk of uncertainty and allows better strategic decision making concerning the investments.

Phoenix, the Trustee's insurer, has utilised three Network for Greening the Financial System ("NGFS") climate scenarios for the analysis. These scenarios provide a reasonable range of possible climate change outcomes; however, they are only illustrative and are subject to considerable uncertainty.

Network for Greening the Financial System (NGFS)

To cover a broad range of physical and transition risks, the NGFS has designed 6 scenarios with the help of a group of renowned academic research institutions. These scenarios share similar socio-economic assumptions. They assume a continuation of current economic and population trends, though accounting for a COVID shock.

Further detail can be found here.

For this report, the NGFS' naming convention of the scenarios has been aligned with the naming conventions of Aon's climate scenarios.

The scenarios and their respective temperatures are summarised below.

1

Smooth Transition

This scenario assumes that ambitious climate policies are introduced immediately. Carbon Dioxide Removal (CDR) is used to accelerate the decarbonisation but kept to the minimum possible and broadly in line with sustainable levels of bioenergy production.

2

Abrupt Transition

This scenario assumes new climate policies are not introduced until 2030 and the level of action differs across countries and regions based on currently implemented policies, leading to a "fossil recovery" out of the economic crisis brought about by COVID-19. The availability of CDR technologies is assumed to be low pushing carbon prices higher than in Net Zero 2050.

3

No Transition

The scenario assumes that only currently implemented policies are preserved, leading to high physical risks. Emissions grow until 2080 leading to about 3 °C of warming and severe physical risks. This includes irreversible changes like higher sea level rise.

Source: NGFS.

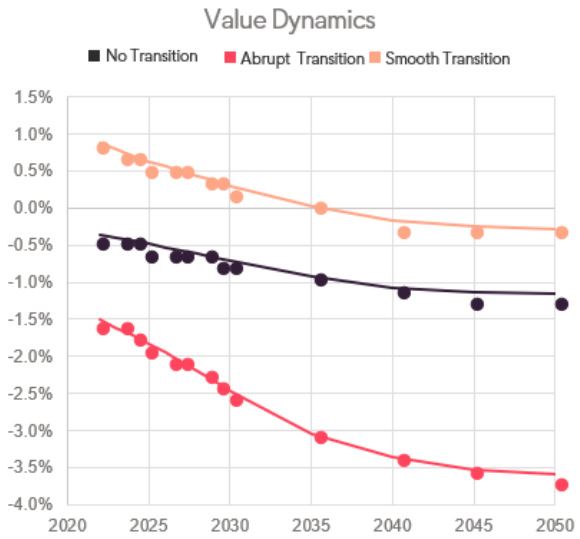
Impact Assessment – Buy-in Portfolio

The table below represents a present value impact to the portfolio under each scenario.

Smooth Transition	Abrupt Transition	No Transition
0.89%	-1.51%	-0.35%

Source: Phoenix.

Modelled Portfolio Impact Under Scenarios



Source: Phoenix.

What does the chart show?

The chart shows what might happen to the Scheme's buy-in portfolio under each climate scenario up to 30 years into the future. Each line represents a different scenario.

Depending on the scenario, the portfolio value is projected to fluctuate.

Due to the nature of the buy-in portfolio, the funding level assessment is not applicable for the Scheme.

Approach

- Each quoted portfolio stress measures the cumulative impact of climate change under the corresponding scenarios to 2050. The numbers are discounted to represent a net present value (NPV) impact to the portfolio based on overall impact considering the following factors: physical impact, adaptation, demand destruction, demand creation, direct carbon costs, abatement, market impacts and sovereign asset class impacts with the discounting applied at different time horizons.
- The assessment consisted of a portfolio wide aggregation of bottom-up security level stress calculations.
- The model also looked at the initial carbon profile of a counterparty security, considering the impact of the company's profitability once the impact of the scenario (including carbon prices) was taken into account. This was then translated into a security price impact.

Conclusions

Based on the analysis undertaken, we have concluded that the impact of climate on the Scheme's buy-in portfolio is expected to be fairly muted under all climate scenarios. The potential impact on the funding strategy is expected to be limited due to the buy-in portfolio; virtually all the Scheme's assets have been transferred to Phoenix to insure the Scheme's DB liabilities.

We are satisfied that Phoenix has taken appropriate steps to identify, assess and manage climate-related risks, as described in detail in Phoenix's latest annual Climate Report for 2022.

Whilst scenario analysis provides useful insights on possible risk exposures, the results should not be used as a sole factor in strategy design given potential uncertainty that still surrounds each outcome. The Trustee

continually reviews and monitors its investment strategy. Alongside this it receives regular updates in relation to the sponsoring employer.

We review the strength of the sponsor covenant as part of our overall assessment of Phoenix's capability as the Scheme's bulk annuity provider.

We acknowledge that at the time of writing the Scheme has some small residual investments in addition to the buy-in portfolio. These residual investments have been excluded from the analysis described in this section, on the grounds of their materiality relative to the buy-in portfolio.

Climate-related opportunities

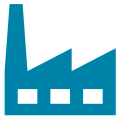
The transition to a low-carbon economy will inevitably create winners and losers. While this is a risk, as described earlier, this also creates opportunities. Examples of climate related opportunities we identified are outlined below:

Cleaner energy

Green power generation,
clean technology innovation,
sustainable biofuels

Environmental resources

Water,
agriculture,
waste management



Energy and materials efficiency

Advanced materials,
building efficiency,
power grid efficiency

Environmental services

Environmental protection,
business services

DC Section

AIL has previously identified opportunities to invest in companies which are actively contributing to solutions to tackle climate change in a variety of ways (and wider social issues too). An allocation to the Aon Managed Global Impact Fund is included withing the Aon Managed Retirement Pathway Funds (our default strategy) which gives the Scheme's DC members exposure to these opportunities.

In addition to this, there is a separate allocation within the default strategy to a climate transition equity strategy. Through this strategy AIL allocates more of our members' savings to companies involved with renewable energy and green technology, as well as to companies contributing to a 'just and fair' transition.

AIL, our DC provider is planning to extend its ESG approach to investments in corporate and government bonds and is actively considering opportunities in these areas. This includes the use of active fixed income funds with an impact or sustainability focus for inclusion within the Aon Managed Retirement Pathway Funds which will allow our members to invest in climate-related opportunities within the bond market.

We are comfortable that AIL is actively seeking to capture further opportunities through the investment strategy, where this is aligned with supporting members in achieving a good retirement outcome and fiduciary duty.

Risk management

We must have processes to identify, assess and manage the climate-related risks that are relevant to the Scheme and these must be integrated into the overall risk management of the Scheme.

Reporting on our risk management processes provides context for how we think about and address the most significant risks to our efforts to achieve appropriate outcomes for members.

Our process for identifying and assessing climate-related risks

We have established a process to identify, assess and manage the climate-related risks that are relevant to the Scheme. This is part of the Scheme's wider risk management framework and is how we monitor the most significant risks to the Scheme in our efforts to achieve appropriate outcomes for members.

Qualitative assessment

The first element is a qualitative assessment of climate-related risks and opportunities which is prepared by our DC provider and reviewed by us.

Quantitative analysis

The second element is quantitative in nature and is delivered by means of climate change scenario analysis, which is provided by both our Insurer and DC provider and reviewed by us.

Trustee comment

This process of identifying and assessing climate related risks has been reviewed in the process of producing this TCFD report and is deemed to be suitable for the Trustee.

Together these elements give us a clear picture of the climate-related risks that the Scheme is exposed to. Where appropriate, we distinguish between transition and physical risks. And all risks and opportunities are assessed with reference to the time horizons that we have identified as relevant to the Scheme.

Our process for managing climate related risks

The Trustee recognises the long-term risks posed by climate change and has taken steps to integrate climate-related risks into the Scheme's risk management framework.

The Trustee has developed the following risk management plan, to help with its ongoing management of climate related risk and opportunities. The risk management framework gives clear understanding on the different entities involved in this related management, the frequency to which activities are conducted, and the relevant attached dates. The management of climate related risks and opportunities is summarised in the tables below.

Governance

Activity	Responsibility	Adviser / supplier support	Frequency of review
Climate change governance framework *(this document)*	Trustee	Aon / Phoenix	Annual
Publish TCFD report	Trustee	Aon / Phoenix	Annual
Add / review climate risks and activity on key Scheme documentation (risk register, work plan)	Trustee	Aon / Phoenix	Ongoing
ESG beliefs (including climate change)	Trustee	Aon / Phoenix	Triennial
Trustee training	Trustee	Aon / Phoenix	Ongoing
Review SIP	Trustee	Aon	Annual
Publish Implementation Statement	Trustee	Aon	Annual

Trustee update

The Trustee monitors the above activities as part of its climate related risks and opportunities management. The Trustee has received training during the year on the regulatory changes occurring in 2022, and how this would impact the Scheme. The training covered the introduction of new climate risk metrics, including the portfolio alignment metrics and changes to the additional climate metrics. The purpose of this training was to better equip the Trustee ahead of the preparation of its first TCFD report.

Strategy

Activity	Delegated responsibility	Adviser / supplier support	Frequency of review
Identify climate-related risks and opportunities (over agreed time periods) for investment & funding strategy	Trustee	Aon / AIL / Phoenix	Annual
Scenario analysis – review and agree the wording	Trustee	AIL / Phoenix	Annual
Scenario analysis - undertake modelling	Trustee	AIL / Phoenix	Triennial
Actuarial valuation	Trustee	Willis Towers Watson	Triennial

Trustee update

The Trustee has spent dedicated time throughout the year to analyse climate related risks and opportunities for the Matching Portfolio invested with Phoenix. This was done through a quantitative assessment of how the Scheme's matching portfolio is affected under various deterministic climate scenarios. This is discussed in detail in the Strategy section. The Trustee also reviewed climate change scenario analysis produced by AIL to support it in understanding the climate related risks faced by the DC members of the Scheme.

Risk management

Activity	Delegated responsibility	Adviser / supplier support	Frequency of review
Identify, assess and manage key climate related risks	Trustee	AIL / Phoenix	Ongoing

Trustee update

The Trustee reviews its process of identifying and assessing climate related risks as part of the annual TCFD process. As part of this the Trustee will seek to understand the approaches being taken by Phoenix, AIL and the underlying investment managers in the DC Section and encourage them to continue to integrate climate (and other ESG) related factors in their investment decision making.

Metrics and Targets

Activity	Delegated responsibility	Adviser / supplier support	Frequency of review
Agree approach for metrics	Trustee	Aon / Phoenix	Annual
Agree target	Trustee	Aon / Phoenix	Annual
Obtain data for agreed metrics	Trustee	Aon / AIL / Phoenix	Annual

Trustee update

The Trustee collected metrics data on the Scheme's investments in order to understand the current baseline of the portfolio regarding its emissions. This data is evaluated in order to assess the Scheme against the Trustee's chosen target to improve data quality over time. The Trustee has collected its emissions-based metrics in line with industry practice and supported by the Trustee's advisers. More detail is descried in the Metrics and Targets section of this report.

Metrics & Targets

Metrics help to inform our understanding and monitoring of the Scheme's climate-related risks. Quantitative measures of the Scheme's climate-related risks, in the form of both greenhouse gas emissions and non-emissions-based metrics, help us to identify, manage and track the Scheme's exposure to the financial risks and opportunities climate change will bring.

Our climate-related metrics

We use some quantitative measures to help us understand and monitor the Scheme's exposure to climate-related risks.

Measuring greenhouse gas emissions related to our assets helps us to assess our exposure to climate change. Phoenix and AIL collected greenhouse gas emissions information for the DB and DC Sections respectively. The Scheme's residual DB assets have been excluded from this exercise similar to the Strategy section of this report described earlier. Phoenix and AIL collated this information to calculate the following climate-related metrics for the Scheme's portfolio of assets.

Measuring greenhouse gas emissions

Greenhouse gases are produced by burning fossil fuels, meat and dairy farming, and some industrial processes. When greenhouse gases are released into the atmosphere, they trap heat in the atmosphere causing global warming and contributing to climate change.

Greenhouse gases are categorised into three types or 'scopes' by the Greenhouse Gas Protocol, the world's most used greenhouse gas accounting standard.

Scope 1

All direct emissions from the activities of an organisation which are under their control; these typically include emissions from their own buildings, facilities and vehicles

Scope 2

These are the indirect emissions from the generation of electricity purchased and used by an organisation

Scope 3

All other indirect emissions linked to the wider supply chain and activities of the organisation from outside its own operations – from the goods it purchases to the disposal of the products it sells

Scope 3 emissions are often the largest proportion of an organisation's emissions, but they are also the hardest to measure. The complexity and global nature of an organisation's value chain make it hard to collect accurate data. For more information, please see the appendix.

The metrics we use

Total Greenhouse Gas emissions

The total greenhouse gas (GHG) emissions associated with the portfolio. It is an absolute measure of carbon output from the Scheme's investments and is measured in tonnes of carbon dioxide equivalent (tCO2e).

This year the Trustee was able to obtain scopes 1, 2 and 3 emissions for the portfolios in scope.

Carbon footprint

Carbon footprint is an intensity measure of emissions that takes the total GHG emissions and weights it to take account of the size of the investment made. It is measured in tonnes of carbon dioxide equivalent per million pounds invested (tCO2e/£m).

This year the Trustee was able to obtain scopes 1, 2 and 3 emissions for the portfolios in scope.

Data quality

A measure of the proportion of the portfolio that the Trustee has high quality data for (i.e., data which is based on verified, reported, or reasonably estimated emissions, versus that which is unavailable).

This has been selected on the basis that it provides a consistent and comparable measure of the level of confidence in the data. The Trustee did not make any estimations as the data was directly provided by the Insurer and DC provider.

Portion of portfolio SBTi aligned

A metric which gives the alignment of the Scheme's assets with the climate change goal of limiting the increase in the global average temperature to 1.5˚C above pre-industrial levels.

It is measured as the percentage of underlying portfolio investments with declared net-zero or Paris-aligned targets that have been verified by the Science based Target initiative.

DB Section - Methodology for Data Collection

When collecting the data, the Trustee noted the following calculation methodology that was used by Phoenix:

- Corporate bond GHG Emissions calculated against underlying holdings as Σ(company's emissions * amount held / EVIC)
- Listed equity GHG Emissions calculated against underlying holdings as Σ(company's emissions * amount held / MCAP)
- Sovereign bond GHG emissions calculated as Σ(Sovereign emissions * amount held[1] / PPP Adjusted GDP)[2]
- Economic Intensity (i.e. Carbon footprint) is calculated against underlying holdings as (Σ(company's emissions * amount held / EVIC))/AuM with emissions data
- Revenue Intensity (i.e. Weighted Average Carbon Intensity [WACI]) is calculated against underlying holdings as (Σ(company/country Revenue intensity * amount held))/ AuM with emissions data

[1]Amount held – where nominal value for bonds is unavailable, market value will be used as a proxy.
[2]Updated formula for 2023 reporting.

Note that the Scheme's DB investments comprising outside of the buy-in portfolio were not included in the analysis on grounds of materiality.

DB Section - Buy-in portfolio climate-related metrics

Carbon emission data

The table below shows a more detailed breakdown of the emissions on an asset class level for the buy-in portfolio.

Asset class	Data coverage	Total GHG emissions	Total GHG emissions	Carbon footprint	Carbon footprint
		Scopes 1 & 2 tCO_2e	**Scope 3** tCO_2e	**Scopes 1 & 2** $tCO_2e/£m$	**Scope 3** $tCO_2e/£m$
Equities and Corporate Bonds	84.0%	23,149	186,748	54	438
Sovereign Bonds	92.7%	34,318	20,419	155	93
Total	46%	57,467	207,166	89	320

Source: Phoenix.

Commentary

Emissions are currently evaluated for equity, credit and government debt.

The Scheme's buy-in portfolio has a high allocation to government debt relative to corporate debt. It also has a high allocation to asset categories that aren't currently evaluated for carbon emissions (private debt, Equity Release Mortgages etc.).

- Scope 1 & 2 Sovereign Bond emissions are relatively high due to territorial emissions being used for Scope 1, which double counts the emissions of corporate holdings within sovereign borders.

- Scope 3 emissions for equities and corporate debt captures the value chain emissions of the investee counterparties and is considerably larger than their operational emissions (Scopes 1 & 2). However, Scope 3 data is less mature and not considered to have the same level of accuracy as Scope 1 & 2 data.

Data quality score

The table below shows an asset class split and data quality score for the corresponding asset class:

Asset class	Policy Invested	Total assets with emissions	Data Quality scores
	(£m)	**(£m)**	**Scopes 1 & 2**
Equity and Corporate Bonds	507.5	426.1	1.4
Sovereign Bonds	238.5	221.11	2.0
Real Assets	0	-	-
Supranational & Other Assets	647.1	-	-
Municipals	49.1	-	-
Derivatives	-44.7	-	-
Total	**1,397.5**	**647.2**	**1.6**

Source: Phoenix. Please note that Data Quality Score was provided for Scope 1 & 2 emissions only.

Commentary

The data quality score is used to indicate the quality/ reliability of the source data used to derive emissions values for individual Issuers. The portfolio's data quality score is the market value weighted sum of data quality scores for the constituent holdings.

Partnership for Carbon Accounting Financials ("PCAF") defines a data quality scale with 1 being the most reliable and 5 the least. The approach that Phoenix used is calibrated in line with the PCAF approach insofar as possible.

The data quality score for the buy-in portfolio is reasonably high. 66.9% of Equity and Corporate Bonds emissions are from assets classified as being within the Materials, Utilities and Energy sectors. Assets within these sectors account for 11% of Equity and Corporate Bonds invested value.

Proportion of assets with Science Based Targets

The table below shows the proportion of assets with Science Based Targets (SBTs) for equity and credit asset classes:

	With Target		Without Target
	Approved SBT	Committed SBT	
Portfolio Alignment	24%	12%	64%

Source: Phoenix.

Commentary

A Science Based Target (SBT) provides a clearly defined pathway for companies to reduce GHG emissions, helping prevent the worst impacts of climate change and future-proofing business growth. GHG reduction targets are considered 'science-based' if they are in line with the latest climate science data necessary to meet the goals of the Paris Agreement – limiting global warming to well-below 2°C above pre-industrial levels and pursuing efforts to limit warming to 1.5°C.

The long-term nature of SBTs provides a clear direction of travel and can offer insight into important market trends that will be shaped by the low carbon transition. The targets are created by the Science Based Targets initiative ("SBTi") and are scientifically confirmed requirements that will set the path for transitioning to a low (preferably zero) carbon economy.

The Scheme's climate-related metrics – DC Portfolio

The reported greenhouse gas emissions metrics for our DC portfolio does not include all emissions. This is because not all companies currently report their greenhouse gas emissions. Additionally, scope 3 emissions are not widely reported by companies and hence limited data is available. As a result, the metrics show the greenhouse gas emissions to be lower than they really are.

We expect that in the future better information, including more scope 3 data, will be available from underlying companies, investment managers and data providers and this improvement will be reflected in the coming years' reporting.

The table below shows the metrics separately for each asset class because the methodology used for each is different, so combining them would not make sense. We also show scope 1 & 2 and scope 3 emissions data separately.

The carbon footprint below refers to the corresponding funds held within the Aon Master Trust. We have relied on these metrics due to similarity in the underlying investments. The carbon footprint has been calculated for the data that is available. Where data was not available, this was excluded from the calculation.

Total GHG emissions have been inferred by AIL, using the carbon footprint for the relevant funds and multiplying it by the corresponding funds' asset values and the appropriate data coverage. Data coverage included the % of assets for which data was reported and estimated.

The metrics are applicable for long only positions and are shown on the next page:

Fund	Assets (self-select and default) as at 31/12/22 (£ million)	Data Quality (%)		Total GHG emissions (tonnes CO_2e)		Carbon footprint (tonnes CO_2e / £million)	
		Scopes 1&2	Scope 3	Scopes 1&2	Scope 3	Scopes 1&2	Scope 3
Equity Funds[1]							
Aon Managed Global Equity Fund*	39.20	100%	76%	1,955	29,674	50.6	1,013.2
Aon Managed Global Impact Fund*	2.99	99%	77%	162	8871	55.9	388.1
Multi-Asset & Property Funds							
Aon Managed Diversified Asset Fund*	6.30	63%	37%	747	1,866	203.3	864.2
Aon Managed Property and Infrastructure Fund*	2.68	100%	65%	120	82	45.4	47.6
Bond & Cash Funds							
Aon Managed Diversified Multi Strategy Bond Fund*	1.41	43%	16%	336	111	598.3	522.3
Aon Managed Passive Corporate Bond Fund*	4.52	51%	43%	152	900	65.4	463.7
Aon Managed Pre-Retirement Bond Fund*	0.08	74%	39%	6	14	101.1	428.9
Aon Managed Short Term Inflation Linked Fund*	0.63	100%[2]	0%	109	-	174.3	-
Aon Managed Long Term Inflation Linked Fund	0.31	100%[2]	0%	53	-	174.3	-
Aon Managed Up To 5 Years UK Gilt Index Fund*	0.62	100%[2]	0%	109	-	174.3	-
Aon Managed Liquidity Fund*	1.40	78%	70%	25	73	32.7	107.2

Source: Aon, MSCI, underlying investment managers. Based on underlying holdings as at 31 December 2022 and available emissions data at the same date. Figures may not reconcile exactly due to rounding.
[1]The data was not available for Aon Managed Active Global Equity Fund, Aon Managed UK Equity (Legacy) Fund and Aegon BlackRock UK Equity Index Fund.
[2]100% of emissions is estimated.
*These funds are part of the Retirement Pathway default strategies.

Commentary

Greenhouse gas emissions

The greenhouse gas emissions for the Equity Funds are relatively high in contrast to other asset classes, this is mostly due to the Equity Funds accounting for majority of the DC Portfolio.

Additionally, we were able to obtain scope 3 carbon emissions data from majority of the underlying companies within our equity funds. Scope 3 carbon emissions for equities are based on the emissions beyond the underlying companies' direct operations, capturing the indirect greenhouse gas emissions that occur throughout the value chain, which can be significant. As a result, the total greenhouse gas emissions for equities are higher than other asset classes.

We note there is no industry standard way of calculating emissions on sovereign bonds and hence our approach may change over time as methodologies improve and evolve.

Carbon footprint

The carbon footprint for our bond and cash funds are relatively high in contrast to our other assets. This is due to the emissions for sovereign bonds which capture all emissions associated with a country including personal consumption, which are extremely high. By contrast, carbon emissions for equities, for example, are based on the emissions associated with the underlying companies invested in, which are smaller, and so the carbon footprint for sovereign bonds is higher than other assets. Looking forward, we are reliant on individual governments taking action to implement policies / changes to achieve reductions in emissions.

The lower carbon footprint for the Scheme's equity funds is also a reflection of the nature of the equity funds utilised in the investment strategy which are designed to have a lower carbon footprint in order to manage climate-related risks.

Scope 3 data

These are indirect emissions linked to the wider supply chain and activities of an organisation, from the goods it purchases to the disposal and use of the products it sells.

By their nature, scope 3 emissions can often not be attributable to a single company or organisation. For example, the scope 3 emissions associated with driving a car would be attributed not only to the car manufacturer but to the oil company who supplied the fuel. These emissions would also be included in the total emissions for an individual country. As a result, there will be significant overlap and double counting in scope 3 emissions. Scope 3 emissions also tend to be significantly higher than scope 1 and 2 emissions.

This can be seen in the scope 3 emissions for our assets, which, with the exception of sovereign bonds, are materially higher than our scope 1 and 2 emissions.

We do not show scope 3 emissions for sovereign bonds, as our scope 1 and 2 emissions already include an estimate of all emissions associated with a country's activity including personal consumption.

Data quality

AIL has been able to obtain data for majority of the DC portfolio. This includes data reported by the underlying companies and estimated data provided by MSCI. AIL has also been able to obtain data for most of the sovereign bond portfolio, although by its nature this is estimated.

The data availability for scope 3 data is lower than for scope 1 and 2 data. This reflects that it is much harder to collect and calculate scope 3 emissions. For example, a car manufacture will not know many miles each car will be driven each year over its lifetime, nor how it will be disposed. Over time we expect more scope 3 data to become available.

The table below shows the breakdown of the data quality for each asset class for which proportion of the data was reported (verified and unverified) and estimated.

Asset class	Scope 1 &2			Scope 3		
	Reported - Verified	Reported - Unverified	Estimated	Reported - Verified	Reported - Unverified	Estimated
Aon Managed Global Equity Fund		100%[1]			76%[1]	
Aon Managed Global Impact Fund	72%	10%	17%	64%	6%	7%
Aon Managed Diversified Asset Fund	36%	4%	23%	30%	2%	4%
Aon Managed Property and Infrastructure Fund		100%[1]			65%[1]	
Aon Managed Diversified Multi Strategy Bond Fund	15%	2%	25%	14%	1%	2%
Aon Managed Passive Corporate Bond Fund	42%	3%	6%	39%	2%	2%
Aon Managed Pre-Retirement Bond Fund	39%	2%	33%	37%	1%	1%
Aon Managed Short Term Inflation Linked Fund	-	-	100%	-	-	-
Aon Managed Long Term Inflation Linked Fund	-	-	100%	-	-	-
Aon Managed Up To 5 Years UK Gilt Index (BLK) Fund	-	-	100%	-	-	-
Aon Managed Liquidity Fund	69%	1%	7%	67%	1%	2%

Source: Aon, MSCI, underlying investment managers.
[1]Data has been calculated

SBTi alignment

This is measured as the percentage of underlying investments with a declared net-zero or Paris-aligned target that has been verified by the Science-based Target Initiative (SBTi).

The tables below show a breakdown of the portfolio alignment metric for each of the funds offered within the DC Portfolio. We do not include any data for sovereign bonds, as SBTi targets only apply to companies.

We show both the proportion of the underlying investments that has an approved SBTi target and the proportion that has committed to an SBTi target (not yet approved).

The metrics are shown on the next page.

Asset class	Assets as at 31/12/22 (£ million)	SBTi Approved	SBTi Committed but not approved
Aon Managed Global Equity Fund	39.20	50%	13%
Aon Managed Global Impact Fund	2.99	55%	13%
Aon Managed Diversified Asset Fund	6.30	35%	5%
Aon Managed Property and Infrastructure Fund	2.68	55%	6%
Aon Managed Diversified Multi Strategy Bond Fund	1.41	23%	3%
Aon Managed Passive Corporate Bond Fund	4.52	45%	5%
Aon Managed Pre-Retirement Bond Fund	0.08	71%	4%
Aon Managed Short Term Inflation Linked Fund	0.63	100%	-
Aon Managed Long Term Inflation Linked Fund	0.31	100%	-
Aon Managed Up To 5 Years UK Gilt Index (BLK) Fund	0.62	100%	-
Aon Managed Liquidity Fund	1.40	45%	4%

Source: Aon, MSCI, underlying investment managers. Figures may not reconcile exactly due to rounding. Based on underlying holdings as at 31 December 2022 and available data at the same date.

AIL was able to obtain data on virtually all the underlying investments in our equity funds and on a large portion of our remaining assets.

Within our equity portfolio, around half of the underlying companies have an approved SBTi target, with a further 13% committed but not yet approved.

Within our sovereign or government bond portfolio, the majority of the underlying countries have an approved SBTi target. This reflects that a large portion of our sovereign bond portfolio is invested in UK government bonds and the UK government has committed to a net zero target in line with the SBTi.

A lower proportion of the corporate bond and cash portfolio has an approved SBTi target.

We recognise there is further work to do, and we will be working with our investment manager to identify actions we can take through our stewardship activity to encourage the underlying companies in our portfolio to make a commitment.

DC data methodology

Our DC provider, AIL, collected information from all the underlying investment managers used within our default strategies.

AIL used the data provided to calculate the greenhouse gas emissions and carbon intensity for our default strategies. This calculation uses the latest available data on greenhouse gas emissions published by the underlying companies held, as provided by MSCI. It can take several months for a company to publish data on their greenhouse gas emissions, hence the metrics shown above may include prior year's data and may not fully represent greenhouse gas emissions emitted in 2022.

Where data on greenhouse gas emissions for specific stocks / securities is not available (for example, loans and derivatives), AIL has considered whether to use a proxy. The use of a proxy can help provide a better picture of the overall level of greenhouse gas emissions. In most cases, a suitable proxy could not be used – either because one was not available (for example, on the loan portfolio), or because there is presently no agreed methodology for calculating emissions.

Where data on greenhouse gas emissions for specific stocks / securities is not currently available and a suitable proxy is also not available, AIL has not allowed for these emissions within the carbon metrics. Consequently, the greenhouse gas emissions shown only relate to that part of the portfolio where data is available. This in line with current regulations and is reflected in the data quality metric shown above.

Please note AIL has relied on the data provided to it by the underlying managers and data provided to it by MSCI in carrying out these calculations.

We have established certain parameters and assumptions in order to standardise the data in a manner consistent with the regulatory guidance at the time of writing. For the sake of clarity, these, together with further information on the methodology used, are provided in Appendix 4.

AIL plans to engage with the data provider it uses to obtain greenhouse gas emissions to enhance the data available and increase coverage over time, along with the relevant managers where data has been provided and relied upon directly.

SBTi alignment

AIL used the data provided to it by the underlying managers and data provided to it by MSCI to calculate the proportion of the underlying investments with a declared net-zero or Paris-aligned target that has been verified by the SBTi.

We have not made any estimates for missing data. Our SBTi alignment metric only represents the portion of the assets for which we have data. Further detail on the methodology and assumptions used to calculate the metrics are set out in Appendix 4.

How we collected the data

AIL collected data from all the underlying investment managers used within our default strategies.

All the underlying managers, with the exception of the gold and commercial property managers, were able to provide a full list of holdings for each underlying fund. The commercial property manager has provided greenhouse gas emissions for the portfolio of underlying properties.

Looking to the future
Our climate-related target

Climate-related targets help the Trustee track its efforts to manage the Scheme's climate-change risk exposure.

The Trustee has set a target for improving the data quality metric, based on data quality summarised in previous section. Without meaningful data from the investment managers, it is very hard for the Trustee to measure its climate-risk exposure. So, it is important to set a target to improve the quality of GHG emissions data from the managers.

DB Section:
2028 data coverage target

60%

DC Section:
2030 carbon footprint reduction target

Goal to reduce the carbon footprint of the Aon Managed Retirement Pathway Fund (our default strategy) by

50%

By 2030 (versus a 2019 baseline, scope 1 and 2 emissions).

Additionally, the Trustee acknowledges that the Scheme's assets will be targeting net zero by 2050 for both the DB and DC Sections of the Scheme. This target is in line with the net zero commitment made by the Scheme's buy-in provider, Phoenix. The Scheme's DC Provider, AIL, has also committed for its UK delegated investment portfolios to be net zero by 2050.

The Scheme's performance against the target will be measured and reported on every year. Over time, this will show the Scheme's progress against the target.

What is the Trustee doing to reach the target?

To reach its target, the Trustee plans to engage with Phoenix and AIL to improve carbon data quality.

AIL and Phoenix will support the Trustee in these actions, through:

- Engagement with underlying managers who were unable to provide data.
- Ensure managers are providing consistent data.

Appendices

Glossary

Governance	refers to the system by which an organisation is directed and controlled in the interests of shareholders and other stakeholders.[1] Governance involves a set of relationships between an organisation's management, its board, its shareholders, and other stakeholders. Governance provides the structure and processes through which the objectives of the organisation are set, progress against performance is monitored, and results are evaluated.[2]
Strategy	refers to an organisation's desired future state. An organisation's strategy establishes a foundation against which it can monitor and measure its progress in reaching that desired state. Strategy formulation generally involves establishing the purpose and scope of the organisation's activities and the nature of its businesses, taking into account the risks and opportunities it faces and the environment in which it operates.[3]
Risk management	refers to a set of processes that are carried out by an organisation's board and management to support the achievement of the organisation's objectives by addressing its risks and managing the combined potential impact of those risks.[4]
Climate-related risk	refers to the potential negative impacts of climate change on an organisation. Physical risks emanating from climate change can be event-driven (acute) such as increased severity of extreme weather events (e.g., cyclones, droughts, floods, and fires). They can also relate to longer-term shifts (chronic) in precipitation and temperature and increased variability in weather patterns (e.g., sea level rise). Climate-related risks can also be associated with the transition to a lower-carbon global economy, the most common of which relate to policy and legal actions, technology changes, market responses, and reputational considerations.[5]
Climate-related opportunity	refers to the potential positive impacts related to climate change on an organisation. Efforts to mitigate and adapt to climate change can produce opportunities for organisations, such as through resource efficiency and cost savings, the adoption and utilization of low-emission energy sources, the development of new products and services, and building resilience along the supply chain. Climate-related opportunities will vary depending on the region, market, and industry in which an organisation operates.[6]

[1] A. Cadbury, Report of the Committee on the Financial Aspects of Corporate Governance, London, 1992.
[2] OECD, G20/OECD Principles of Corporate Governance, OECD Publishing, Paris, 2015.
[3] TCFD, Recommendations of the Task Force on Climate-related Financial Disclosures, 2017
[4] Ibid
[5] Ibid
[6] Ibid

Greenhouse gas emissions ("GHG") scope levels[7]	Greenhouse gases are categorised into three types or 'scopes' by the Greenhouse Gas Protocol, the world's most used greenhouse gas accounting standard. Scope 1 refers to all direct GHG emissions. Scope 2 refers to indirect GHG emissions from consumption of purchased electricity, heat, or steam. Scope 3 refers to other indirect emissions not covered in Scope 2 that occur in the value chain of the reporting company, including both upstream and downstream emissions. Scope 3 emissions could include: the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, electricity-related activities (e.g., transmission and distribution losses), outsourced activities, and waste disposal.[8]
Value chain	refers to the upstream and downstream life cycle of a product, process, or service, including material sourcing, production, consumption, and disposal/recycling. Upstream activities include operations that relate to the initial stages of producing a good or service (e.g., material sourcing, material processing, supplier activities). Downstream activities include operations that relate to processing the materials into a finished product and delivering it to the end user (e.g., transportation, distribution, and consumption).[9]
Climate scenario analysis	is a process for identifying and assessing a potential range of outcomes of future events under conditions of uncertainty. In the case of climate change, for example, scenarios allow an organisation to explore and develop an understanding of how the physical and transition risks of climate change may impact its businesses, strategies, and financial performance over time.[10]
Net zero	means achieving a balance between the greenhouse gases emitted into the atmosphere, and those removed from it. This balance – or net zero – will happen when the amount of greenhouse gases add to the atmosphere is no more than the amount removed.[11]

[7] World Resources Institute and World Business Council for Sustainable Development, The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition), March 2004.
[8] PCC, Climate Change 2014 Mitigation of Climate Change, Cambridge University Press, 2014.
[9] TCFD, Recommendations of the Task Force on Climate-related Financial Disclosures, 2017
[10] Ibid
[11] Energy Saving Trust, What is net zero and how can we get there? - Energy Saving Trust, October 2021

Appendix 1 – Phoenix technical notes on data and carbon analysis

Data calculation and usage

- The carbon profile of the Scheme has been calculated by Phoenix's Sustainable Investments team, part of Asset Management, in line with PCAF methodology as employed for the Phoenix Group TCFD reporting which was independently reviewed.
- The calculations have been peer reviewed within the Sustainable Investment team and independently reviewed by Asset Management's Business Governance and Control team.
- The Business Governance and Control team is part of the Phoenix Asset Management team tasked with providing risk and control assurance, oversight and advice to asset management. They provide an independent review of the calculations used to populate the CET template by reviewing all spreadsheet formulas which precede the final outputs and by recalculation of a sample of metrics for a sample of policies/funds.
- The Sustainable Investments team continually assess the suitability of evolving climate methodology to ensure best practices are employed and data coverage is increased in line with industry standards.
- Data coverage is calculated using the asset type's primary emissions scope.
- PCAF have recommended a sovereign calculation methodology leveraging country emissions / PPP Adjusted GDP as proxy for economic intensity. The choice of PPP Adjusted GDP as a normalising factor makes this analogous to revenue intensity.
- Market value has been used as a proxy for nominal value for corporate bonds.
- Due to the low coverage and quality of reported scope 3 corporate data, estimated emissions are used in the calculations.
- Cash, derivatives, private equity and real assets are out of scope of emissions evaluation at this time.

Data Sources

- The data vendor for market data (i.e. counterparty level carbon emissions and SBTi status) is ISS – Institutional Shareholder Services.
- PPP Adjusted GDP figures have been sourced from The World Bank.
- Country Emissions data sourced from EDGAR and the OECD. EDGAR is a multipurpose, independent, global database of anthropogenic emissions of greenhouse gases and air pollution. The OECD is an intergovernmental organisation founded in 1961 to stimulate economic process and world trade.
- Exchange Rates used are spot rates from Bloomberg aligned with the date of the holdings information supplied.
- Data has been taken from these sources without correction, adjustment or further validation and includes reported, estimated and modelled information.

- Fund constituents have been sourced from Fund Managers. In some cases the weightings provided may not total 100% due to rounding differences and the inclusion of complex or commercially sensitive elements which cannot be disclosed. In order to ensure that reconciliation controls are effective an adjustment is applied as “other investments” to balance this. If the discrepancy is greater than 0.01% then an investigation is carried out with the Fund Manager to identify and resolve any data errors that may be causing this. An adjustment is then applied for any remaining gap and an explanation of this will be supplied in notes accompanying our outputs.
- Only data from the above sources is used. The Sustainable Investments team do not employ sector average proxy climate metrics where vendor data is unavailable.

Basis

- Fund data is as at the 31/12/2022. The market data used is consistent with these dates and climate data sourced from the vendor on the 31/12/2022.
- Carbon data for counterparties is sourced from the vendor’s database for datasets prevailing at YE 2022 (which, due to the lag with climate data, utilises counterparty emissions and revenue data from the prior year).
- PPP Adjusted GDP figures, actual and estimates, are as at fiscal year 2021.
- For listed equities and corporate bonds, we have evaluated emissions intensity on 2 bases - ‘economic’ by normalising absolute emissions by enterprise value including cash (EVIC) and ‘revenue’ by normalising with sales revenue.
- For sovereign bonds, we evaluated emissions intensity on a single basis by normalising sovereign emissions by PPP Adjusted GDP.
- We evaluate alignment with science based targets by referencing a company’s affiliation with the Science Based Target initiative (SBTi) ; we only consider assets of companies that have committed to an SBTi aligned target or those who already have targets approved by SBTi as having science based targets.
- Counterparty data may be unavailable because either the security has not been recognised by our data vendor or the counterparty data required for evaluation is not present.

Appendix 2 – Aon climate scenario modelling assumptions

The purpose of the climate scenario modelling is to consider the impact of climate-related risks on the Scheme's DC assets over the long-term.

The climate change scenarios were developed by our DC provider, Aon, and are based on detailed assumptions. It Is important to remember they are only illustrative and are subject to considerable uncertainty.

The scenarios consider the exposure of the Aon Managed Retirement Pathway Funds to climate-related risks and the approximate impact on the value of our members' retirement savings over the long-term.

The scenario modelling assumes a deterministic projection of assets for each representative member, using standard actuarial techniques to discount and project the expected cashflows.

i. It models the full yield curve as this allows for a more accurate treatment of the asset cashflows and more realistic modelling of the future distribution of interest rates and inflation.

ii. The modelling parameters vary deterministically for each scenario.

iii. No allowance is made for expenses, with modelled asset cashflows left unaffected by these factors.

iv. For active members the projections assume contributions are paid mid-year and continue to be paid until retirement. The projections allow for expected future salary growth.

v. For deferred members, no allowance for future contributions is made.

vi. The projections assume members retire at age 65, no withdrawals are made from the asset pool over the modelling period and do not allow for withdrawals in retirement. The exception is the at-retirement member, where the projections assume withdrawals of £3,000 p.a. (3% of the assumed starting fund value) from the asset pool over the modelling period. These are assumed to be paid half-way through the year. No contributions are made into the fund after retirement.

The scenario modelling focuses on the impact of climate change on the Aon Managed Retirement Pathway Funds' assets, highlighting areas where risk might be reduced through changing the investment strategy. When making changes to the investment strategy we will also consider other relevant issues, such as governance, cost and implementation.

The scenario modelling does not consider the impact climate change could have on mortality risk and subsequent cost of securing benefits in retirement for individual members. Also, the modelling does not consider non-investment risks such as the timing of when members take their benefits, or operational risks.

The scenario modelling reflects recent market conditions and current market views. The model may produce different results for the same strategy under different market conditions.

This report, and the work relating to it, complies with 'Technical Actuarial Standard 100: Principles for Technical Actuarial Work' ('TAS 100'). The model complies with TAS 100.

Key Assumptions

	Temperature risk by 2100	**Reach net zero by**	**Carbon price (2030/2050)**	**Introduction of environmental regulation**
No transition	+4C	After 2050	$40/$50	None
Disorderly transition	<3C	After 2050	$65/$340	Late and aggressive
Abrupt transition	1.5C – 2C	2050	$135/$280	Aggressive
Orderly transition	1.3C – 2C	2050	£100/$215	Coordinated
Smooth transition	<1.5C	2045	$80/$165	High coordination

Appendix 3 – Greenhouse gas emissions in more detail

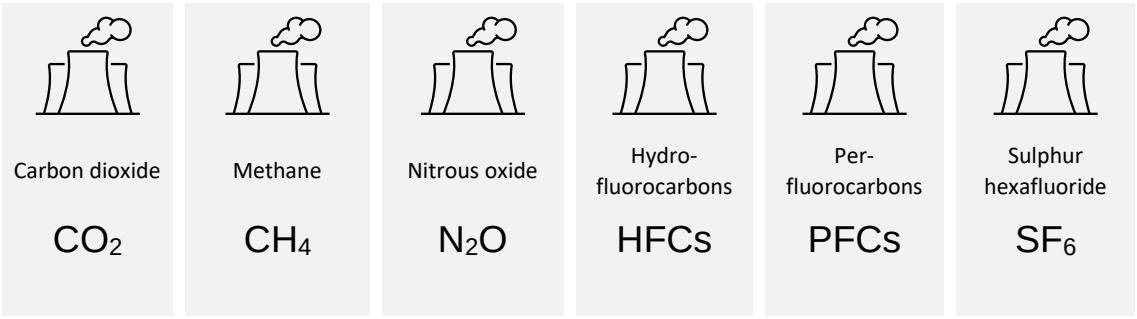
Greenhouse gases in the atmosphere, including water vapour, carbon dioxide, methane, and nitrous oxide, keep the Earth's surface and atmosphere warm because they absorb sunlight and re-emit it as heat in all directions including back down to Earth. Adding more greenhouse gases to the atmosphere makes it even more effective at preventing heat from leaving the Earth's atmosphere.

Greenhouse gases are vital because they act like a blanket around the Earth making it the climate habitable. The problem is that human activity is making the blanket "thicker". For example, when we burn coal, oil, and natural gas we send huge amounts of carbon dioxide into the air. When we destroy forests, the carbon stored in the trees escapes to the atmosphere. Other basic activities, such as raising cattle and planting rice, emit methane, nitrous oxide, and other greenhouse gases.

The amount of greenhouse gases in the atmosphere has significantly increased since the Industrial Revolution. The Kyoto Protocol[12] identifies six greenhouse gases which human activity is largely responsible for emitting. Of these six gases, human-made carbon dioxide is the biggest contributor to global warming.

Each greenhouse gas has a different global warming potential and persists for a different length of time in the atmosphere. Therefore, emissions are expressed as a carbon dioxide equivalent (CO_2e). This enables the different gases to be compared on a like-for-like bases, relative to one unit of carbon dioxide.

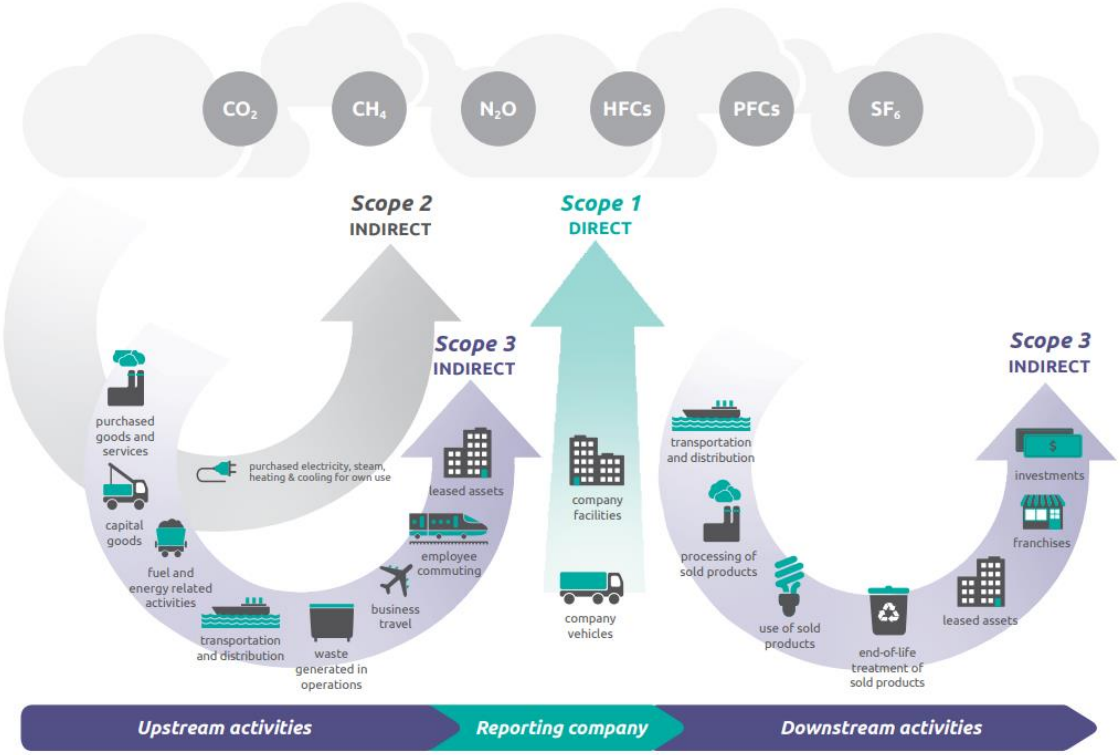
Six main greenhouse gases identified by the Kyoto Protocol



[12] https://unfccc.int/kyoto_protocol

Greenhouse gases are categorised into three types or ‘scopes’ by the Greenhouse Gas Protocol, the world’s most used greenhouse gas accounting standard.

Overview of GHG Protocol scopes and emissions across the value chain



Source: Greenhouse Gas Protocol, Corporate value chain (scope 3) Accounting and Reporting Standard, 2011

Appendix 4 – Methodology and assumptions used to calculate climate metrics

We have established certain parameters and assumptions in order to standardise the data in a matter consistent with the regulatory guidance at the time of writing. For the sake of clarity, these are set out below.

1. The reported investments are based off our long physical positions, which exclude any short positions and synthetics / derivatives and include assets in the following categories:
    a. Public Equities: includes publicly traded equities, equity index funds, listed REITs and infrastructures,
    b. Public Credits: includes corporate bonds, asset-backed securities and credit funds,
    c. Sovereigns: includes sovereign and municipal bonds, and gilt-linked funds,
    d. Commercial Properties: includes our direct investments in Columbia Threadneedle
    e. Cash: includes only certificates of deposits and commercial papers and short-term liquidity funds
2. AIL has not derived carbon metrics attributed to our short positions and synthetics / derivatives due to the novelty of the topic and related discussions. Our investment has also not derived carbon metrics attributed to our allocation to gold, in line with current industry guidance.
3. Total greenhouse gas emissions are calculated as the MasterTrust's share of the greenhouse gas emissions for each underlying company / entity. This is calculated as the value invested (£ million) in each company / entity, divided by the Enterprise Value Including Cash (EVIC) for each company / entity. EVIC represents the total value of a company, based on both its equity (measured by total market capitalisation for both common and preferred shares) and debt (measured by the market value of outstanding debt in issuance). Cash and cash equivalents on the balance sheet are also included in this figure. This is calculated separately for each default strategy.
4. For sovereign bonds, total greenhouse gas emissions are calculated as the MasterTrust's share of the greenhouse gas emissions for each underlying country. This is calculated as the value invested (£ million) in sovereign bonds of each country, divided by the Gross Public Debt for each country.
5. Carbon footprint is calculated as the total greenhouse gas emissions of each asset class used in the default strategy within the MasterTrust (as calculated in note 1 and 2 above), divided by the current value invested in

each asset class used in each default strategy for which greenhouse gas emissions data is available.

6. Greenhouse gas emissions are a mixture of emissions reported by the underlying companies / entities and estimated emissions, as provided by MSCI. There are some asset classes, e.g., commercial property, where MSCI does not have oversight of such data. As far as practicable, our investment manager has sourced the emissions data from the underlying investment managers and / or relied on published estimation methodologies to derive the related figures. These are discussed in detail in notes 6 and 7 below. Furthermore, it should be noted that estimated emissions will vary by data provider. For equities, corporate bonds and cash, most of the emissions data is reported emissions, with a smaller proportion relating to estimated emissions. Emissions data for sovereign bonds is estimated.

7. Where data has been provided in US Dollar terms, this is converted into Sterling by MSCI using the appropriate exchange rate.

8. For our sovereign bonds, our investment manager has obtained estimated scope 1 and 2 greenhouse gas emissions for the most recent period ending 31 December 2021 from MSCI; this used to calculate greenhouse gas emissions on our sovereign bond portfolio for the periods ending 31 December 2022 and 2021. Historical greenhouse gas emissions for the period ending 31 December 2019 are no longer available through MSCI and instead is sourced from the Postdam institute for Climate Impact Research PRIMAP historic scope analysis.

9. For our sovereign bonds, AIL has used data published by the International Monetary Fund's World Economic Outlook Database to obtain Total Gross Government Debt for each country for each period ending 31 December.

10. For commercial property, AIL has relied on greenhouse gas emissions data provided by the underlying property manager, Columbia Threadneedle Investments. As the greenhouse gas emissions for the 12 months ending 31 December 2022 are not finalised, the reported and estimated scope 1 & 2 greenhouse gas emissions for the 12 months ending 31 December 2021 were used. For the Threadneedle Pensions Limited Pooled Property Fund these were 4,013 tonnes over the 12 months to 31 December 2021 (12,665 tonnes for the 12 months to 31 December 2019). The AUM for the Threadneedle Pensions Limited Pooled Property Fund was GBP 2,267M as at 31 December 2021 and GBP 2,048M as at 31 December 2019.

11. Reflecting the latest DWP and PCAF guidance we have not calculated nor disclosed greenhouse gas emissions for our gold allocation.

12. The proportion of companies with a SBTi aligned target has been obtained from MSCI and reflects the latest available data. AIL has used the Net Zero Tracker dataset to identify those countries which have made a net-zero / zero carbon commitment.