

# Smiths Industries Pension Scheme Climate Disclosure Report

## Scheme Year Ended 31 March 2024

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## Executive Summary

This report has been prepared by the Trustee of the Smiths Industries Pension Scheme ('the Scheme') with input from its advisers in accordance with the Occupational Pension Schemes (Climate Change Governance and Reporting) Regulations 2021 ('the Regulations'). This report covers the period from 1 April 2023 to 31 March 2024 ('the Scheme year').

A short summary of the report is included below to help members to understand the key findings. A more detailed report then follows, split into four sections:

- **Governance:** the governance arrangements in place around climate-related risks and opportunities.
- **Strategy:** the potential impacts of climate-related risks and opportunities on the Scheme's investment and funding strategy.
- **Risk Management:** processes in place for the Trustee to identify, assess, and manage climate-related risks, and how these are integrated into overall risk management.
- **Metrics and Targets:** the metrics and targets used to assess, monitor, and manage climate-related risks and opportunities.

These sections address the specific disclosure requirements in the Regulations and have regard to the Statutory Guidance. This report has also been prepared with regard to the Pension Regulator's guidance on the governance and reporting of climate-related risks and opportunities.

The Scheme is a hybrid scheme, with a defined benefit ('DB') Section and defined contribution ('DC') Section. As at 31 March 2024, the DB Section held c.£1bn in invested assets (and a funding level of c.105% on a Technical Provisions basis, excluding annuities); the Section also held annuity policies totalling c.£700m (valued at 31 December 2023). The DC Section held £5.8m in assets on 31 March 2024.

In respect of DB assets and liabilities, the requirements relating to strategy and scenario analysis and metrics in the Regulations relate to the DB Section. In respect of the DC assets, the requirements relating to strategy and scenario analysis and metrics relate to each 'popular arrangement'<sup>1</sup> offered by the Scheme. For the Scheme, the only popular arrangement is the Legal & General Cash Lifestyle Profile; this is the fund in which the majority of the DC members are invested. The four sections that follow therefore include detail on both the DB Section of the Scheme and the popular arrangement of the DC Section of the Scheme.

For brevity, where we refer in this report to risks and opportunities relating to climate change, we mean this to cover both the risks arising from changes in the climate itself and the risks and opportunities presented by the anticipated transition of economies and society to a lower-carbon future.

All analysis in the report is provided by the Scheme's DB investment adviser, Redington Ltd ('Redington'), and the data in the report is sourced from MSCI.

## Governance

Whilst the Trustee has overall responsibility for all investment decisions of the Scheme, certain responsibilities regarding climate policy and strategy are delegated to the Investment Committee ('IC'), with input from its DB investment adviser, Redington, and its DC investment adviser, Aon. The Trustee expects investment managers to consider financially material environmental (including climate change risks), social, and governance issues in investment decision-making. The Trustee also expects investment managers to practise good stewardship, which includes engaging with issuers of debt or

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<sup>1</sup> A popular arrangement is one in which £100 million or more of the Scheme's assets are invested; or one that accounts for 10% or more of the assets used to provide money purchase benefits (excluding assets which are solely attributable to Additional Voluntary Contributions).

equity on financially material environmental, social or governance ('ESG') issues. The Trustee engages with the Scheme's investment managers for this purpose.

## Strategy

The Trustee considers climate-related risks and opportunities across short-term, medium-term and long-term time periods relevant to the Scheme's investment and funding strategy. These risks are assessed via the Scheme's climate-related metrics including, to a degree, via climate scenario analysis of the Scheme's DB and DC assets, DB liabilities, as well as via an assessment of the sponsoring company's exposure to climate-related risks and opportunities. The results of this climate scenario analysis are reported as at 31 December 2022 (as was produced for the 31 March 2023 report), given the Trustee believes this analysis remains appropriate and therefore it did not need to be refreshed for this year's report.

The Trustee recognises the increasing scrutiny of climate modelling and scenario analysis. This scrutiny has highlighted that current methodologies may not fully account for the short- and medium-term climate risks the Scheme could face; the analysis may therefore have limited reliability and usefulness as a decision-making tool. As such, the Trustee does not rely solely on this analysis to inform its strategic decision-making (with the Trustee's wider approach to managing climate-related risks and opportunities being covered in 'Section 3: Risk Management'). Given the Trustee's desire to remain aligned with emerging good practice, the Trustee is considering this topic with its investment consultant and will remain informed on developments.

The Trustee has considered changes that might be made to the investment strategy to limit exposure to climate-related risks and take advantage of climate-related opportunities. To do this, the Trustee considered the levers they could pull to manage climate-related risk and implement a net zero strategy:

- **Strategic asset allocation changes:** the Trustee did not identify any specific areas for improvement within the strategic asset allocation in relation to climate-related risks and opportunities over the year. However, throughout the year, the Trustee was able to redeem its holding in property, with some of the proceeds being invested across the Scheme's multi-class credit holdings and some retained in the Trustee Bank Account for cashflow purposes.
- **Actively engaging with managers:** the Trustee regularly meets with its managers (meeting at least one manager per quarter) to assess and challenge them on their ESG activities, and requests specific examples of where each manager has engaged with underlying companies. Following the Trustee's meeting with Insight in April 2023, the investment guidelines for the Scheme's buy and maintain corporate bond mandate were updated to incorporate the Scheme's decarbonisation target. After the Scheme's year end, the Trustee also performed its latest annual stewardship review with its investment adviser in May 2024, assessing the stewardship approaches of the Scheme's investment managers. This included an overview of some of the engagement activities undertaken by the Scheme's investment managers over the past year, focussing on those relating to the Trustee's chosen stewardship theme, climate change.

## Risk Management

The Trustee acknowledges that the Scheme is exposed to climate-change-related risks and opportunities. It manages these risks through regular reporting, including annual carbon emissions, from its DB investment adviser Redington, and by expecting investment managers to integrate climate change risks into their approach. Climate-related risks have also been integrated into the Scheme's wider risk-management framework, with the Trustee engaging with investment managers regularly to assess their approach to ESG integration and climate-related risk assessment. Redington provide annual climate-related reporting on a fund-by-fund basis on the Scheme's portfolio-level exposure to climate-related risks. Redington also provide an annual assessment of the approach to stewardship taken by each of the Scheme's investment managers. Climate scenario analysis is also considered for the Scheme's assets, liabilities, and sponsor covenant, noting recent criticisms outlining the limitations of current climate scenario analysis methodologies.

## Metrics and Targets

On an annual basis, the Trustee monitors and reports the Scheme's total carbon emissions<sup>2</sup>, carbon footprint<sup>3</sup>, the results of the 'disorderly' Network of Central Banks and Supervisors for Greening the Financial System ('NGFS') scenario<sup>4</sup> and the output of the portfolio alignment Science Based Targets initiative ('SBTi') metric<sup>5</sup>. These metrics are reported on as at the Scheme's year end (31 March 2024), within this report where relevant. The Trustee uses the results to help identify the climate-related risks and opportunities that are relevant to the Scheme. Follow-up actions might include, for example, engaging with fund managers who have material emissions intensity levels, or with other industry participants, exploring low-carbon alternative investment options, and updating investment guidelines for managers where the Trustee has discretion to make such changes. The Trustee has set an aspirational 2050 net-zero target, with an interim target to decrease the carbon footprint of the segregated buy and maintain credit mandate (c.20% of Scheme assets, excluding annuities) by 50% by 2030 (subject to the Trustee's fiduciary and financial objectives).

The following pages summarise the Trustee's current position compared to the recommendations set in the Regulations. We hope you find this report informative and would welcome any feedback.

## 1. Governance

The Trustee has overall responsibility for the Scheme's investment decisions, and for running the Scheme in its members' best interests, including the management and oversight of responsible investment ('RI') and the opportunities and risks associated with climate change.

The Scheme's Investment Committee ('IC') is a sub-group of the Trustee Board and has delegated responsibility to assist the Trustee in monitoring and advising on funding, investment, and covenant matters concerning the Scheme. In addition, certain responsibilities regarding climate policy and strategy have been delegated to the IC. This includes overseeing the implementation of the 'RI policy', and the 'Stewardship & Engagement policy' contained within the Statement of Investment Principles ('SIP'), which provides the framework for the incorporation of ESG and stewardship considerations into the investment strategy, objectives, and policies of the Scheme. In February 2023, the Trustee chose 'climate change' as its key area of focus in relation to investment stewardship going forward. This theme was selected by assessing its relevance to the Scheme and its members, the financially material risks and opportunities it poses, and the relative maturity and development of thinking within the industry that allows for ease of integration into the Trustee's approach.

The Trustee Board determines the composition of the IC. It currently comprises the Chair of the Trustee Board and four further Trustee Directors. Appointments to the IC are not for fixed terms but membership is reviewed periodically. The Trustee and IC understand the importance of allocating sufficient time and resources to the governance of climate-related risks and opportunities (given that the Trustee believes that climate change risk is likely to be a financial risk that will affect all of the Scheme's investments to some degree, as well as the Scheme's liabilities and covenant), and therefore regularly discuss these as part of the Scheme's regular meeting cycle. During the Scheme year, four regular IC meetings took place, with climate-related items being discussed at each meeting, after which the IC reported any relevant items to the Trustee for consideration or sign-off (noting the Trustee has ultimate responsibility for overseeing and signing off on the Scheme's approach to considering climate-related factors). The time set aside is viewed as proportionate to other responsibilities the Trustee has to perform. The time

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<sup>2</sup> This represents the total share of Scope 1, Scope 2 and Scope 3 carbon emissions a fund is responsible for.

<sup>3</sup> Measurement of the CO<sub>2</sub>e emissions of a fund per million pounds of EVIC (enterprise value including cash) using Scope 1, Scope 2 and Scope 3 emissions. Given a company's direct Scope 1 emissions will inevitably be another company's indirect Scope 3 emissions, aggregating the individual Scope emissions results in a higher level of emissions than exists. To mitigate double counting, we apply a scaling factor in accordance with MSCI's methodology.

<sup>4</sup> A disorderly scenario includes higher transition risk due to policies being delayed or divergent across countries and sectors. For example, carbon prices would have to increase abruptly after a period of delay.

<sup>5</sup> SBTi examines whether a voluntarily disclosed company's decarbonisation target is aligned with a relevant science-based pathway. The scores are binary with a "yes" or "no" assessment.

and resource spent on climate-related matters is not constant, but rather changes depending on factors such as regulatory requirements, market developments and advice received.

To effectively carry out these responsibilities, the IC (and the Trustee) receives training from the relevant advisers as required in respect of climate-related risks and opportunities, including training on the regulatory requirements of climate change reporting, climate change risk and its impact on the investment process, and the business risks of climate change. For example, the Trustee has recently received training on the limitations of current climate scenario analysis methodologies, with the implications of this being covered in 'Section 2: Strategy'.

The Trustee will continue to assess skills gaps and undertake training accordingly and will continue to review the climate competency of its advisers to ensure adequate processes are in place. Members of the Scheme's in-house pension team also attend each IC meeting, receiving the aforementioned training. The Scheme's investment advisers are reviewed annually against formal objectives, including objectives on the provision of climate-change-related training and information, ESG advice provision, and climate analysis to demonstrate to the Trustee that adequate steps are taken by its advisers to identify and assess climate-related risks and opportunities. The Scheme's DB investment adviser was reviewed against these in September 2023, and the Trustee was satisfied it met these objectives competently.

The Trustee expects the Scheme's investment managers to take a proactive approach to managing climate-related risks and opportunities where this is possible and appropriate. During the Scheme year, the investment guidelines for the Scheme's buy and maintain corporate bond mandate with Insight were updated to incorporate the Scheme's decarbonisation target. The update to the guidelines helps the Trustee to hold the manager to account on this target and ensure climate-related risks and opportunities are a central part of the manager's decision-making process. In addition, for any new investments, managers' incorporation of ESG considerations (including climate change) is one of the factors that is considered by the Scheme's investment advisers when making recommendations.

To aid the Trustee's monitoring of managers' approaches, the Trustee met with at least one of its managers quarterly, with ESG analysis, carbon metrics reporting, and engagement examples included as part of each meeting. The Scheme's DB investment adviser also performs with the IC a more in-depth annual review of managers' stewardship approaches.

For last year's Climate Disclosure Report, the Trustee was unable to disclose the Science Based Targets initiative metric for the Scheme's DC assets and emissions metrics for its bulk-annuity policies due to a lack of available data. This year, the Trustee continued to challenge the relevant providers on this point and has now been able to include these metrics. The Trustee notes that metrics coverage for the bulk-annuity policies could still be improved, however, and will therefore continue to engage with both bulk-annuity providers to determine whether coverage can be improved for next year's report.

To aid the Trustee's assessment of the resilience of the Scheme against climate-related risks, the Trustee's advisers have performed climate scenario analysis in relation to its DB and DC assets, DB liabilities (published for the Scheme year ended 31 March 2023), and sponsor covenant (updated for the 31 March 2024 year end). This analysis will be performed triennially; interim updates may be performed, for example if there are material changes to the Scheme's strategy or if there are significant changes to the methodology and industry practice relating to the analysis. The Trustee considers annually whether a refresh of the analysis is required. The Trustee is aware of recent scrutiny of climate scenario analysis models, with this being considered in more detail in the sections that follow.

<b>Scheme component</b>	<b>Provider of climate scenario analysis</b>
DB assets	Redington (DB investment adviser)
DB liabilities	Aon (Actuary & DC investment adviser)
DC assets	Redington and Aon
DB covenant	Penfida (covenant adviser)

## 2. Strategy

The Trustee considers climate-related risks and opportunities and their potential implications for the Scheme's investment and funding strategy over the short, medium, and long term. To help with this, it receives climate scenario analysis relating to the Scheme's DB and DC assets, DB liabilities, and covenant. This, along with wider climate-related analysis, helps to ensure that climate-related factors are incorporated throughout the Trustee's funding and risk management process, from strategic asset allocation to manager selection and portfolio monitoring, as well as considering potential risks to the covenant of the Scheme.

The Trustee is conscious that, given the diversified nature of the Scheme's investment portfolio, the sources of climate-related risks are likely to be varied. The main known risks to the Scheme are transition risk and physical risk, which are described below. It is important to note that these are not the only risks that schemes will face and there are many others that are either unknown, or not yet considered in climate analysis due to the difficulty in quantifying the risk.

- **Transition risk:** refers to the potential price impact on the Scheme's assets as a result of policy actions taken to encourage economies to decarbonise. Policy actions are expected to affect asset values through channels such as carbon prices, and the greater adoption of renewable energy, for example. The transition to a low-carbon economy is also expected to produce opportunities for investing in businesses that are poised to benefit from the transition, such as producers of renewable energy.
- **Physical risk:** refers to the potential price impact on the Scheme's assets due to changes in weather patterns and extreme weather scenarios, as well as from other physical effects of climate change such as rising sea levels. These risks can affect the value of assets due to direct damage to assets and indirect destabilising impacts from disruptions to supply chains.

During the global transition to a low-carbon economy, climate-related opportunities may also arise over time, for example through improved resource efficiency across production and distribution, adopting low-emission energy uses, supply chain resilience, and the creation of new products or services. These opportunities will likely vary depending on region and industry.

The Regulations require the Trustee to consider climate-related risks and opportunities over different time horizons. Therefore, the Trustee considers the potential impact of these on the Scheme's funding strategy over the short, medium, and long term. For example:

Examples of potential opportunities:

- Short term opportunities may include positive stock price movements resulting from changes to regulation and consumer behaviour favouring specific companies.
- Over the medium term, it is expected that there will be changes in consumer spending habits following changes in technology, such as the uptake in electric vehicles or a reduction in overseas travel.
- In the long term, there may be opportunities for outperformance for organisations that put in place strategies to mitigate these potential risks well in advance of them materialising.

Examples of potential risks:

- Short term risks may include negative stock price movements resulting from increased regulation directed at addressing climate-related issues (i.e. mostly transition risk).
- Over the medium term there may be greater levels of physical damage to real assets (i.e. a combination of transition and physical risk).
- Long term risks may include physical damage to real assets as a result of rising sea levels for coastal property or infrastructure assets (i.e. higher levels of physical risk than over the medium or short term).

The table below sets out the time horizons chosen by the Trustee for both the DB and DC Sections of the Scheme. In setting the time horizons, the Trustee has taken account of the membership profile of the DB and DC Sections respectively and agreed that they were the most relevant to analyse.

Time Horizon	Years	Rationale
Short term	0 – 3 years	<p>For the DB Section, this time horizon aligns with the three-year actuarial valuation cycle. This also captures the more immediate climate risks and opportunities to the DC Section. The Trustee believes this is an appropriate horizon for both Sections.</p> <p>Risks/opportunities are likely to be transition related:</p> <p>Opportunities:</p> <ul style="list-style-type: none"> <li>• Changes in consumer behaviour positively impacting sectors more advanced in relation to climate-related issues.</li> </ul> <p>Risks:</p> <ul style="list-style-type: none"> <li>• Increases in carbon prices.</li> <li>• Increased regulation.</li> <li>• Changes in consumer behaviour negatively impacting sectors that are slower to react.</li> </ul>
Medium term	5 – 10 years	<p>This time horizon aligns with the DB Section’s target full funding date of 2030 (on a solvency basis). This time horizon also demonstrates the importance of significant climate data improvements over the next decade to meet carbon emission reduction targets, hence its relevance to both the DB and DC Sections.</p> <p>Risks/opportunities include a mixture of physical and transition factors.</p> <p>Opportunities:</p> <ul style="list-style-type: none"> <li>• Changes in consumer behaviour positively impacting sectors more advanced in relation to climate-related issues.</li> <li>• Competitive pressures to react to changes in regulation and general economic environment.</li> </ul> <p>Risks:</p> <ul style="list-style-type: none"> <li>• Increases in carbon prices.</li> <li>• Increased regulation.</li> <li>• Changes in consumer behaviour negatively impacting sectors that are slower to react.</li> <li>• Impact of extreme weather events.</li> </ul>
Long term		<p>This time horizon is broadly in line with the DB Section’s liability duration and helps the Trustee to better consider the potential impact of physical risks. This time frame is also helpful given the long term nature of the investments of the DB and DC Sections.</p> <p>Risks/opportunities include a mixture of transition and physical factors that are more prominent than in the medium term.</p> <p>Opportunities:</p> <ul style="list-style-type: none"> <li>• Changes in consumer behaviour positively impacting sectors more advanced in relation to climate-related issues.</li> <li>• Competitive pressures to react to changes in regulation and general economic environment.</li> </ul> <p>Risks:</p> <ul style="list-style-type: none"> <li>• Increases in carbon prices.</li> <li>• Increased regulation.</li> <li>• Changes in consumer behaviour negatively impacting sectors that are slower to react.</li> <li>• Impact of extreme weather events.</li> <li>• Commodity scarcity and food price inflation.</li> </ul>

Please note, each item identified above may be a risk or an opportunity depending on how the companies within the Scheme’s portfolio respond to climate change.

The Trustee has considered whether the potential risks identified across the time horizons outlined above will have an impact on the Scheme's investment or funding strategy. The Trustee currently believes that data that is available is not sufficiently comprehensive or decision-useful for this to directly influence the Scheme's overall investment strategy at present. Instead, the Trustee aims to improve the Scheme's climate risk profile through its emissions reduction target for the buy and maintain mandate, and by engaging with the Scheme's investment managers.

The pages that follow outline the scenario analysis that the Trustee has received from its advisers in order to better understand how these risks and opportunities might affect the Scheme.

## **2.1 Climate scenarios**

The analysis shown in this section uses the climate scenarios developed by the Network of Central Banks and Supervisors for Greening the Financial System ('NGFS'). The NGFS scenarios were first published in June 2020 as a consistent starting point for the financial sector to analyse climate risks, and are now widely used by investors, banks, and regulators, including the Bank of England. The NGFS then published its updated scenarios in June 2021.

The analysis draws on three reference scenarios from the NGFS scenario set, which explore a wide range of different emissions and temperature pathways over the period to 2050. These scenarios were chosen to show a range of lower-risk and higher-risk outcomes. These represent the most recent scenarios that the Trustee has analysed, with the analysis taking place as at 31 March 2023 for the Scheme's assets and liabilities:

- **Hot house world:** in this scenario, emissions continue rising until 2080, leading to an average global temperature increase of above 3°C and severe physical risks such as sea level rises. Physical risks are highest in this scenario, which strongly affects countries closer to the equator and developing economies, where agriculture often makes a significant contribution to total economic output.
- **Orderly transition:** this scenario assumes climate policies are introduced early and gradually become more stringent, limiting average temperature increases to well below 2°C. Physical risks are smaller in this scenario than in the 'hot house world' scenario. In contrast, transition risks are more significant: carbon-intensive sectors experience increasing costs due to rising carbon prices and reduced revenue from falling demand. Low-carbon products and services experience increasing demand over time.
- **Disorderly transition:** this scenario assumes transition policies kick in ten years later than under the 'orderly' scenario, but that the average temperature rise is still limited to well below 2°C. This requires carbon prices that increase more rapidly and that reach higher levels than in the 'orderly' scenario. Fossil fuel volumes are reduced more drastically to enable decarbonisation over a shorter period of time, resulting in greater transition risk.

The 'disorderly' and 'orderly' transition scenarios reflect a large decline in emissions in the period to 2050, driven by large changes in the energy and transport sectors. In contrast, emissions continue to grow throughout the period in the 'hot house world' scenario. The Trustee has chosen to focus its attention on the 'disorderly' scenario, whilst also considering the analysis for the other scenarios. This is in part because the 'disorderly' scenario has the most significant impact on the DB Sections' assets and funding level and is currently considered to be the most likely scenario. Further detail on the scenarios can be found in Appendix A.

The Scheme considered the 'orderly' transition in the analysis as it aligns with the Paris Agreement targets and timelines, meaning that the economy makes a material shift towards low carbon by 2030.

The 'hot house' scenario has high physical risk which occurs further into the future. While this scenario looks at an extended time scale and has the smallest impact on the Scheme, the Trustee is clear that this scenario is not in the best interest of members, given its detrimental impact on people and the environment.

The Trustee recognises the increasing scrutiny of climate modelling and scenario analysis. This scrutiny has highlighted that current methodologies may not fully account for the short and medium term climate risks the Scheme could face; the analysis may therefore have limited reliability and usefulness as a decision-making tool. As such, the Trustee does not rely solely on this analysis to inform its strategic decision-making. Nonetheless, the scenario analysis does help to highlight that climate change risks do exist, and the Trustee therefore believes that appropriate risk management steps should be taken to address and limit their potential impacts. This is covered in more detail in 'Section 3: Risk Management'.

Given the Trustee's desire to remain aligned with emerging good practice, the Trustee is considering this topic with its investment adviser. The Trustee will remain informed on developments and will continue to look for opportunities to alter its approach to scenario analysis and climate modelling as methodologies change.

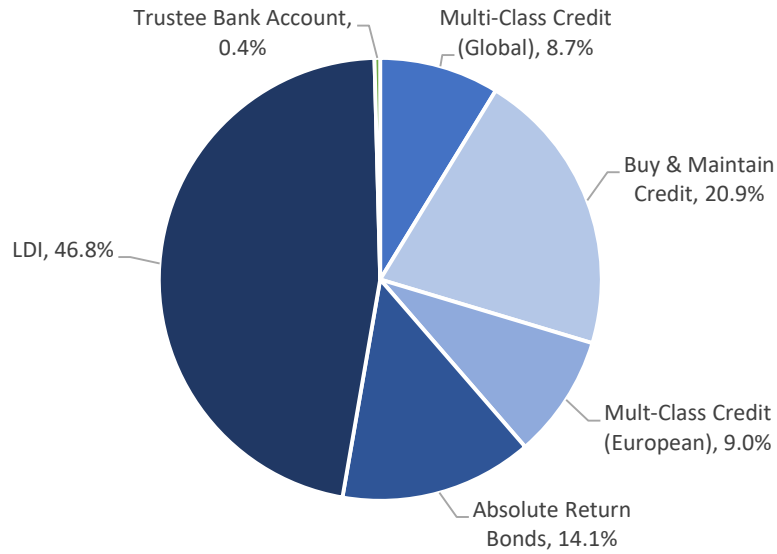
## **2.2 DB Section asset scenario analysis**

Trustees are required to update climate scenario analysis following any changes that are expected to materially alter the results – for example, following material changes to the investment strategy or after significant improvements in data availability and climate scenario analysis methodologies. Since the completion of the most recent scenario analysis (completed for 31 March 2023), there have been no changes that would be expected to meaningfully alter the results of the analysis. As such, the Trustee believes the scenario analysis as at 31 March 2023 remains appropriate, having reviewed this with the Scheme's DB investment adviser; the 31 March 2023 analysis has therefore been included in this report. The Trustee will review the suitability of the scenario analysis again at the next Scheme year end.

This climate scenario analysis is considered alongside other factors when the Trustee sets the strategic asset allocation. Over the Scheme year, the Trustee has considered changes to the investment strategy to limit exposure to climate-related risks and take advantage of climate-related opportunities. To do this, the Trustee considered the levers it could pull in terms of managing climate risks and implement a net-zero-aligned strategy, which included the following:

- **Strategic asset allocation changes:** the Trustee did not identify any specific areas for improvement within the strategic asset allocation in relation to climate-related risks and opportunities over the year. However, during the year, the Trustee was able to redeem its holding in property, with some of the proceeds being invested across the Scheme's multi-class credit holdings and some retained in the Trustee's bank account for cashflow purposes.
- **Actively engaging with investment managers:** the Trustee regularly meets with its investment managers to assess and challenge them on their ESG-related activities over the previous year (meeting at least one manager per quarter), requesting specific examples of where each manager has engaged with underlying companies, particularly in relation to the Trustee's stewardship theme of climate change. The IC performed a more in-depth annual review of the managers' approaches in the May 2024 IC meeting and considered a report from the investment adviser which concluded that there had been improvements in ESG approach across all the investment managers. During the Scheme year, the Scheme's target to reduce the emissions intensity of the buy and maintain credit holdings by 50% by 2030 was reflected in the mandate's investment guidelines.

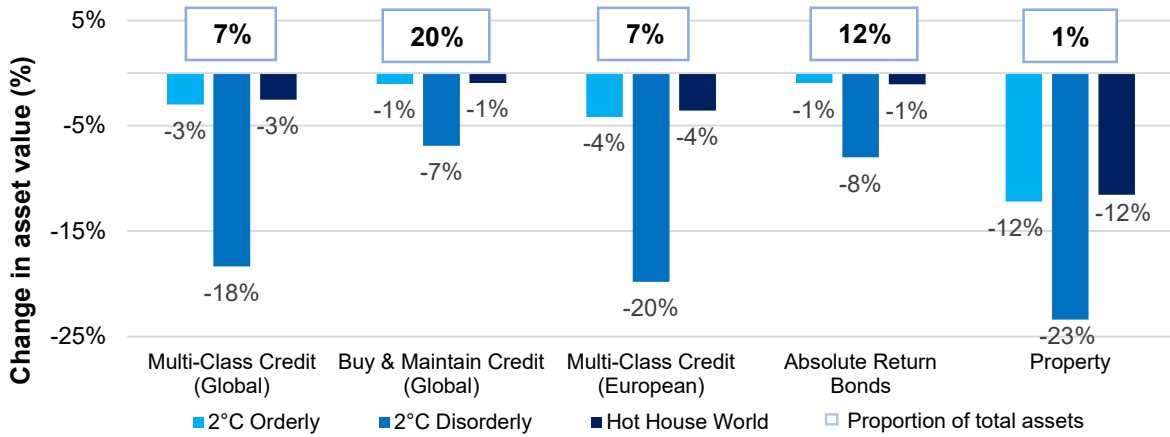
**Figure 1. The DB Section’s strategic asset allocation excluding bulk-annuity purchases as at 31 March 2024**



Source: Redington, based on information from the Scheme's investment managers.

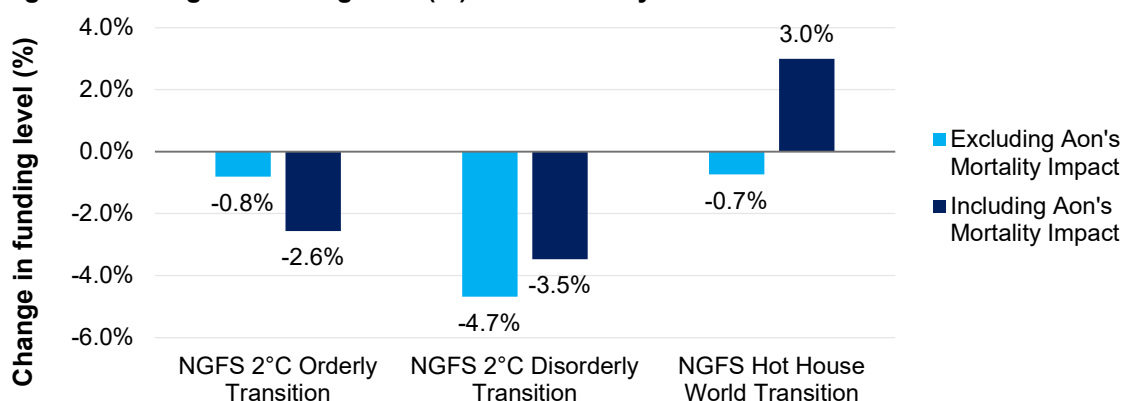
### **2.3 DB Section scenario analysis results and conclusions**

**Figure 2. Change in asset value (%) of the DB Section’s growth assets as at 31 March 2023**



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**Figure 3. Change in funding level (%) on a solvency basis as at 31 March 2023**



The funding level analysis assumes the liability interest rate and inflation impacts are hedged exactly by the LDI assets. Certain information ©2023 MSCI ESG Research LLC. Reproduced by permission.

The scenario that is modelled as posing greater risk to the DB Section is the 2°C disorderly transition scenario, in which climate-related policies are delayed, with the global economy failing to decarbonise in an orderly manner. The impact in this scenario on the Section’s funding level is an approximate c.4.7% fall, excluding the impact of member mortality. Three of the DB Section’s growth asset mandates are modelled as losing 18% of their value or greater.

Including the impact of mortality, the funding level fall is modelled to be an approximate 3.5% fall, as members’ life expectancies are projected to be slightly shorter, leading to a fall in the present value of the liabilities.

The modelled impact in the hot house world scenario is also relatively small. This is in part because there is no transition risk modelled in this scenario (as further policies to encourage a shift to a low-carbon economy are not introduced). Moreover, physical risk is expected to take some time to materialise, and discounting these risks to the present therefore reduces their impact in today’s terms.

To both mitigate the likelihood of the 2°C disorderly transition scenario occurring and improve the Scheme’s resilience if it did, the Trustee continues to engage with the Scheme’s investment managers and their issuers to align with the goals of the Paris Agreement, in turn reducing the Scheme’s exposure to transition-related climate risk. The Trustee also continues to work with its investment adviser to ensure that the DB Section’s funding strategy is sufficiently resilient to the analysed climate risks.

## **2.4 DC Section scenario analysis results and conclusions**

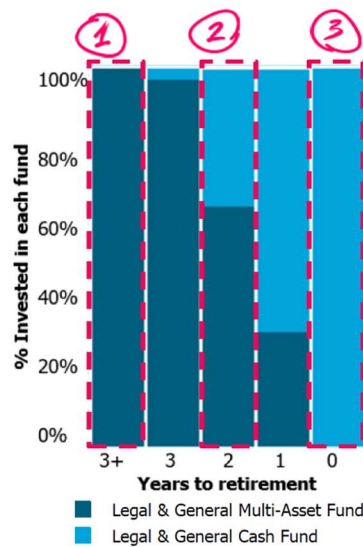
As with the DB Section scenario analysis, the Trustee does not believe there have been any material changes since 31 March 2023 that would warrant refreshing the DC Section climate scenario analysis this year. As such, the Trustee considers the scenario analysis as at 31 March 2023 to remain appropriate. The Trustee will review the suitability of the scenario analysis again at the next Scheme year end.

Guidance requires trustees to perform scenario analysis for each ‘popular arrangement’ (one in which £100 million or more of the DC Section’s assets are invested, or one that accounts for 10% or more of the assets used to provide money purchase benefits) offered by a scheme providing DC benefits. For the DC Section, the Legal & General (‘L&G’) Cash Lifestyle Profile is the only arrangement that is categorised as a popular arrangement. The Cash Lifestyle Profile is made up of a Multi-Asset Fund and a Cash Fund. The Multi-Asset Fund and the Cash Fund were valued at £4.4m and £1.4m, respectively, as at 31 March 2024.

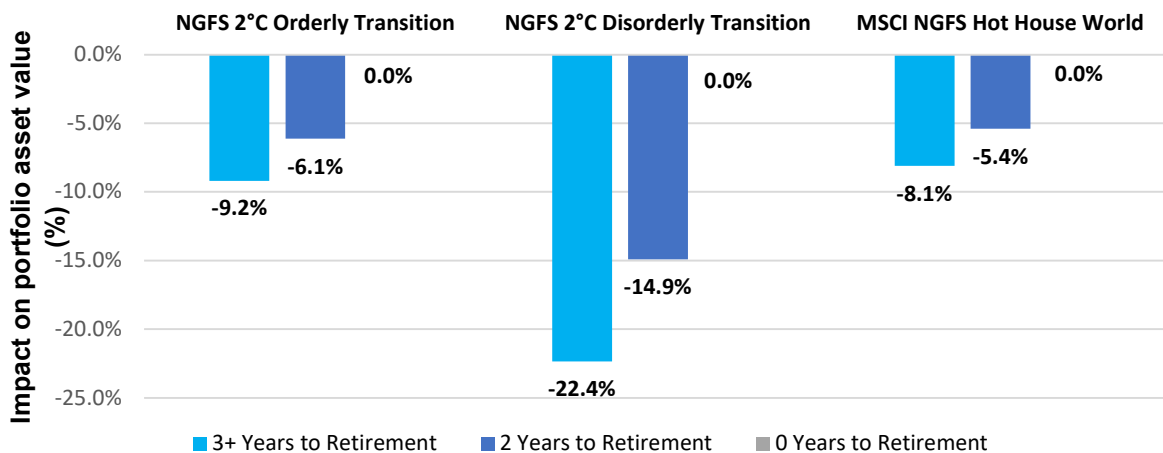
Lifestyle investment profiles are investment options for members where the asset allocation changes over time to de-risk as members approach retirement. This can be seen in ‘Figure 4’, as member allocations de-risk from the Multi-Asset Fund, which invests in a variety of assets from equities to

corporate bonds and property, and transition into the Cash Fund, which invests in instruments such as bank deposits and government bonds. The journey shown starts at 3+ years to retirement, as prior to this point members are invested fully in the Multi-Asset Fund. To analyse how climate risk might affect members at different points on this journey to retirement, the Scheme's investment adviser has performed scenario analysis for three different points: at 3+ years to retirement, 2 years, and 0 years, as shown in 'Figure 4'.

**Figure 4. The L&G 'Multi-Asset Fund' and 'Cash Fund' lifestyle profile**



**Figure 5. Impact on Cash Lifestyle Profile portfolio value as at 31 March 2023**



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The Multi-Asset Fund is the driver of the vast majority of the DC Section's modelled climate risk exposure as it invests in more volatile assets, such as equities – the highest-risk asset class (from a climate risk modelling perspective) out of all the asset classes in which the DC Section invests. Equities are modelled as having higher climate risk than other asset classes, such as debt, as equity investors generally have more direct operational control of a company than other investors.

'Figure 5' shows how the asset allocation translates into lower levels of modelled risk in each scenario as members de-risk as they approach retirement. When the members retire, no climate stress is

currently applied as the profiles are invested entirely in the Cash Fund. This invests in assets such as government bonds which, to date, have not been modelled as having climate risk due to the complexity involved with calculating the emissions associated with them. Methodologies have been evolving, and the Trustee aims to include this in the analysis next time it is performed. This decrease in modelled climate risk as members approach retirement aligns with the investment strategy of the L&G Cash Lifestyle Profile in which investment risk also decreases in a similar fashion as members approach retirement.

## **2.5 Covenant scenario analysis and conclusions**

Whilst the scenario analysis on both the assets and liabilities uses a matching set of scenarios, the covenant analysis relies on qualitative analysis. As the covenant climate reporting evolves, the Trustee will seek to use a unified set of scenarios across the assets, liabilities, and covenant.

The Scheme's covenant adviser, Penfida, provided updated analysis in Q1 2024 focussing on Smiths Group plc's ('Smiths') targets and goals in the context of climate change, key climate scenarios considered by Smiths, how Smiths benchmarks against its peers, and an assessment of the key physical and transition risks faced by Smiths and mitigation actions. At this stage, given the availability of information, the analysis is focussed on Smiths' publicly disclosed information relating to climate change and focusses on qualitative aspects of the risks and opportunities.

As a large industrial conglomerate, Smiths faces several risks relating to the ongoing climate change crisis and has developed goals and strategies for managing the risks and opportunities borne from climate change as part of its responsible business framework. Smiths is aiming to achieve net zero emissions by 2040 for scope 1 and 2 emissions, and by 2050 for scope 3 emissions. In 2022, Smiths set interim greenhouse-gas-related-targets for 2024, which have been passed and superseded by significantly higher targets.

Smiths is currently rated favourably by several third-party ESG rating agencies and in comparison to its UK industrial peers. Whilst Smiths' risk assessment concluded that climate change was unlikely to have a significant short-term negative impact on the company, it is seeking to mitigate potential impacts, and take advantage of potential opportunities, from climate change through adopting globally recognised initiatives and incorporating climate transition risks into planning, strategy, and project evaluation. In 2023, Smiths recognised climate change as a Group principal risk rather than an emerging risk; this is due to the current assessment of the materiality associated with the risk.

In line with the recommendation by the TCFD that the choice of scenarios covers 'a reasonable variety of future outcomes' with 'at least one 2°C scenario or lower', Smiths has considered four climate scenarios for the purpose of its analysis. For physical scenarios, Smiths used the Intergovernmental Panel on Climate Change's ('IPCC') Representative Concentration Pathway RCP 4.5 and RCP 8.5 scenarios. For transition scenarios, Smiths used the International Energy Agency's ('IEA') World Energy Outlook Sustainable Development Scenario ('SDS') and State Policies Scenario ('STEPS'). Smiths has detailed multiple climate-related risks that it believes are the most pertinent to its operations across the value chain.

Smiths has outlined its time horizons for the materialisation of climate risks and opportunities, with the short term being 2023-2028, medium term being 2028-2032 and long term being 2032-2040.

## Physical risks and opportunities to Smiths

Climate risk	Description
Damage to Group assets from extreme weather events	Higher costs and resulting losses in revenue due to repair costs and increasing insurance costs
Damage to key supply chain assets from extreme weather events	Loss of revenue due to disruption/delay of manufacturing processes
Temperature regulation requirements during heatwaves and cold snaps	Elevated health & safety risks from overheating or freezing mean there are higher operating costs from increased air conditioning and heating. Capital costs associated with retrofitting assets to provide sufficient temperature are also elevated
Disruption to transportation and distribution networks from extreme weather events	Reduction in revenue due to delays in getting products to market caused by supply chain disruption

Climate opportunity	Description
Growth in remote sensing market	Revenue uplift from growth in demand for satellite technology for environmental monitoring and tracking
Increased demand for cooling systems	Increased revenue from increased demand for residential and domestic cooling systems, driven by ongoing variation in global temperatures

## Transition risks and opportunities to Smiths

Climate risk	Description
Increased regulations and pricing on greenhouse gas ('GHG') emissions	Increased costs relating to emissions reduction, monitoring, and reporting obligations. A risk exists of reduced access to investment opportunities from failure to meet these
Increased transportation costs	Greater cost of fuel due to increased pricing on GHG emissions
Cost and availability of resources	Supply shortages of materials and components could lead to price volatility and production constraints
New and emerging competitors	Reduction in revenue caused by greater competition in the product market

Climate opportunity	Description
Aviation/aerospace energy efficiency requirements	Revenue from development of more energy-efficient safety and security infrastructure
Growth in energy efficiency products market	Revenue uplift from sealing solutions that reduce hydrocarbon leakage from oil & gas and other infrastructure

Whilst Smiths' assessment recognises that climate-related risks will occur over short, medium and long term horizons, Smiths have determined that climate-related risks and opportunities are likely to affect the business in the medium and long term. Smiths' conclusion is that the business remains resilient to climate risks with the adaptation and mitigation strategies that are in place. It was determined that the climate risks identified do not have a significant impact on the business, although are considered as a Group principal risk in aggregation requiring continued assessment of the materiality of any financial impact arising.

To mitigate the impact of climate-related risks, Smiths' long term strategic direction is in line with the transition to a low-carbon economy. Specific control actions in the context of climate risks include:

- A 2040 scope 1 and 2 emissions net zero road map and further ambition to achieve net zero scope 1, 2, and 3 emissions by 2050, with action examples including a commitment to pursue science based targets under the Science Based Target initiative ('SBTi'), with an intention to have GHG reduction targets approved by the SBTi, zero emissions from all company vehicles, and commitment to the 1.5°C Business Ambition under the UN Race for Zero;
- Smiths have committed to interim targets for a reduction in scope 1 and 2 emissions of 50% by 2032, and 50% of suppliers by spend with science based targets by 2028;
- Smiths has established a Science, Sustainability and Excellence Committee of the Board; and
- Metrics measuring the reduction in GHG emissions form part of long term incentive plans for Smiths.

Given the significant headroom in the covenant, the diversified nature of the sponsor and the actions that are currently being undertaken by Smiths to address the potential climate change risks, Penfida believe the Trustee's buyout target date of 2030 is reasonable.

Considering the asset, liability and covenant analysis together, the Trustee is comfortable with the results of the analysis in light of the Scheme's 2030 buyout target date. As mentioned previously, whilst the analysis suggests that the Scheme's investment and funding strategy may be relatively resilient to climate-related risks in the scenarios modelled, the Trustee is aware of the limitations of the methodologies used to produce this analysis. As a result, the Trustee does not currently place great emphasis on this analysis when making investment decisions. Instead, greater emphasis is placed on portfolio decarbonisation where the Trustee has scope to influence this (hence the decarbonisation target for the buy and maintain portfolio) as well as wider engagement with the Scheme's investment managers as means of improving the Scheme's climate risk profile.

## 3. Risk Management

### **3.1 Climate risk monitoring and management**

Climate-related risks and opportunities are considered in terms of the physical risks to assets that are expected to result from climate change, and in terms of the transition risks associated with the global shift to a low-carbon economy. Over the next few decades transition risk is expected to be of greater impact than physical risk, but as we approach the middle of the century physical risks are likely to become more significant. In the scenario analysis performed, the modelling suggests the Scheme might be marginally more exposed to transition risks than physical risks. The multi-class credit mandates (c.18% of the Scheme's assets) are shown as being the most exposed to climate-related risks in the scenarios modelled, as demonstrated in 'Figure 2', acknowledging the aforementioned limitations of climate scenario analysis as a means of assessing climate risk.

As noted in 'Section 2.1: Climate scenarios' of the report, the Trustee recognises the increasing scrutiny of climate modelling and scenario analysis. As such, the Trustee does not rely solely on this analysis to inform its strategic decision-making. Nonetheless, the scenario analysis does help to highlight that climate change risks do exist, and the Trustee therefore believes that appropriate risk management steps should be taken to address and limit their potential impacts.

The Trustee has integrated climate change into the Scheme's wider risk management, with climate change being considered where relevant alongside wider Scheme matters at quarterly IC and Trustee meetings. As described in 'Section 1: Governance', the Trustee and the IC have clearly defined climate-related responsibilities to ensure climate-related factors are considered alongside other risk considerations. Climate risks and opportunities are identified in part through annual reporting received

by the Trustee (more information included below), but will also be identified by the Scheme's advisers should any specific risks or opportunities emerge.

At the level of individual investments, the Trustee expects the appointed investment managers to consider climate-related opportunities when making investments and to engage with portfolio companies to encourage them to take advantage of relevant opportunities. Engagement with the Scheme's investment managers on climate change has been integrated into quarterly meetings, with the Trustee's stewardship theme of climate change having been selected to aid the Trustee and IC's engagement with investment managers on this topic. Detail on the investment managers' approaches is included in the Scheme's annual Implementation Statement.

The Trustee receives additional climate-related reporting from Redington on an annual basis through detailed fund-by-fund ESG reporting. This reporting contains relevant climate metrics to assist with the identification of climate-related risks as set out under the DWP's adoption of the recommendations of the TCFD. Where risks are identified, they will be addressed in the first instance by the IC considering appropriate actions before consulting the Trustee Board. The Trustee also uses the metrics included in this report to monitor progress towards the climate target stated in 'Section 4: Metrics & Targets', with any material developments escalated by the IC to the Trustee as appropriate.

The Scheme's investment advisers advise on differing approaches to responsible investment to help the Trustee decide on a responsible investment strategy and adopt appropriate responsible investment objectives for the Scheme, including climate-risk-mitigating objectives, and opportunities to invest in climate solutions. The responsibilities of the investment advisers were set out in more detail in 'Section 1: Governance'.

As described below, the Trustee has been taking action on climate change where this is expected to improve the risk/return profile of the Scheme and aims to continue to do so.

Examples of climate risk monitoring and integration by the Trustee over the Scheme year includes:

- The IC, on behalf of the Trustee, met with at least one of their investment managers at each quarterly meeting. As part of this, the investment managers' ESG approaches and progress are discussed and questioned, with specific examples of engagement with underlying companies included.  
In February 2023, the Trustee selected 'climate change' as its key area of focus in relation to investment stewardship going forward. This theme was selected by assessing its relevance to the Scheme and its members, the financially material risks and opportunities it poses, and the relative maturity and development of thinking within the industry that allows for ease of integration into the Trustee's approach.
- Following the Trustee's meeting with Insight in April 2023, the investment guidelines for the Scheme's buy and maintain corporate bond mandate were updated to incorporate the Scheme's decarbonisation target.

### **3.2 Engagement and voting**

The Trustee believes that engagement and voting are core components of sound risk management. Engagement is aimed at ensuring companies manage the physical and transitional risks that climate change poses. Direct engagement with underlying companies in which the Trustee owns shares and/or debt is carried out by the Scheme's investment managers. Voting is not currently carried out given the Scheme does not currently hold any equity investments (equity investments have voting rights attached to them). The Trustee's ability to influence investment managers' stewardship activities will depend on the nature of the investments held. Due to the nature of the DB Section's assets, the Trustee has limited scope to directly influence managers' stewardship activities; however, to better focus the Scheme's engagement, the Trustee selected 'climate change' as the Scheme's key stewardship theme in February 2023.

Engagement examples by the Scheme's investment managers include:

- Engagement by **CQS**, one of the Scheme's DB credit managers, identified issues with a pharmaceutical company headquartered in Germany, Cheplapharm Arzneimittel. Whilst the company published their scope 2 emissions in their 2022 ESG report, CQS's proprietary climate analysis showed that they did not publish scope 1 or scope 3 emissions, have decarbonisation targets or a net zero commitment publicly available. Following CQS's engagement with the company, they responded that they have plans to publish scope 2 emissions and an approximate value for scope 3 emissions in their 2023 ESG report. They also noted that the publication of target values and an indication of a realistic achievement of net zero will be included in their report.
- **M&G**, another of the DB Section's credit managers, engaged with Dutch financial institution, ING, on their climate targets and strategy to allow them to better measure and track the company's progress, as well as to encourage a net zero commitment beyond their near-term commitment. Following M&G's dialogue with the company, the company is reviewing the latest guidance from the Science Based Targets initiative ('SBTi') and expects to submit its targets to SBTi for approval in 2024.
- **TwentyFour**, another of the DB Section's credit managers, engaged with National Express, the intercity and inter-regional coach operator, to seek an update on the company's decarbonisation target and its SBTi progress given its decision to withdraw its application in 2021. Following TwentyFour's engagement with the company, the company reversed its decision to pull out of the SBTi and submitted its SBTi targets. The company also made further progress in shifting from fossil-fuel-powered vehicles to more environmentally friendly vehicles.
- **Insight**, the DB Section's buy and maintain credit manager, engaged with the British multinational universal bank, Barclays plc, to discuss the bank's sustainable finance framework, given some elements of its environmental programme lagged behind its peers. Following Insight's recommendations, the bank enhanced its oil sands policy and introduced a Client Transition Framework, demonstrating how the bank is evaluating its corporate clients' transition progress towards low-carbon business models. The bank also acknowledged its risk policy guidelines are due for an update.

## 4. Metrics and Targets

### 4.1 Metrics introduction

The DWP's guidance for pension schemes submitting climate disclosure reporting suggests that the following metrics are chosen: a total greenhouse gas ('GHG') emissions metric (total carbon emissions), an emissions intensity metric (carbon footprint), an additional non-emissions-based metric, and a portfolio alignment metric.

The Trustee has chosen the following metrics:

DWP suggested metric	Metric selected	Applicable Section of the Scheme	Rationale
Total Greenhouse Gas ('GHG') emissions	Total carbon emissions	DB and DC	This is the total GHG emissions metric recommended by the DWP
Emissions intensity	Carbon footprint	DB and DC	This is the emissions intensity metric recommended by the DWP
Additional - climate change	Impact on the funding level / asset value under an NGFS stress test, specifically, under the 2°C 'disorderly' scenario	DB – Impact on the Section's funding level  DC – Impact on the Section's assets	This metric is the output of the scenario analysis and is key to assessing the potential level of downside risk exposure of the Scheme's assets and any potential hedging provided by assets that may benefit from climate-related opportunities
Portfolio Alignment	Science-based target initiative ('SBTi') alignment metric	DB and DC Sections	This metric examines whether a voluntarily disclosed company decarbonisation target is aligned with a relevant science-based pathway. There is evidence that companies that have set science-based targets are delivering emissions reductions in line with their ambitions, making this a key metric to monitor to drive positive change.

The chosen metrics are reviewed annually to ensure they remain relevant and appropriate for the Sections. Recognising the nascency of climate metrics in an investment context, there may be situations in which the Trustee considers updating or replacing the metrics due to changes in data quality and availability, the emergence of new, more robust metrics and methodologies and/or industry improvements. In February 2024, the Trustee reviewed these metrics with its investment adviser and agreed that the selected metrics remained appropriate.

The Trustee uses these results to help identify the climate-related risks and opportunities that are relevant to the Sections. These might include, for example, engaging with fund managers who have material emissions intensities or with other industry participants, exploring low-carbon alternative investment options. The Trustee may also update investment guidelines for investment managers where the Trustee has discretion to make such changes, similar to work already undertaken, as mentioned earlier in this report.

## DB Section emissions metrics coverage (metrics 1 and 2)

	Fund value	Allocation*	MSCI Metrics Coverage %
Multi-Class Credit (Global)	£90.1m	8.7%	74.1%
Buy & Maintain Credit	£215.6m	20.9%	89.5%
Multi-Class Credit (European)	£92.6m	9.0%	-
Absolute Return Bonds	£145.4m	14.1%	88.4%
LDI	£482.6m	46.8%	-
Trustee's Bank Account	£4.4m	0.4%	-

\*Please note the figures might not sum to 100% due to rounding.

As with last year's report, for the purpose of this analysis, emissions from government bonds and cash are currently excluded. However, the Trustee expects to be able to report emissions for government bonds in next year's report. It is expected that this will change the results of the analysis presented in this report materially given the size of the Scheme's government bond holdings.

The emissions-based metrics have been calculated using line-by-line portfolio holding information from the DB Sections' investment managers and climate data from the ESG data provider, MSCI. Where it was not possible to reflect a fund using line-by-line emissions data analysis from the MSCI data feed, the metrics have been modelled at an asset-class level. This approach has been applied wherever line-by-line data coverage for a particular fund was below 50%. Line-by-line data has been used for all but two of the Scheme's non-LDI mandates. Asset class proxying has been used for the global multi-class credit fund due to the lack of available line-by-line data. As metrics methodologies continue to develop, the Trustee will review its approach to calculating climate metrics to ensure that the Scheme is aligned with industry best practice.

The DB Section has also purchased bulk annuity transfer policies ('buy-ins') issued by Pension Insurance Corporation plc ('PIC') and Canada Life Limited ('Canada Life') to cover benefits for a subset of core legacy pensioners and dependants. In line with DWP guidance, the Trustee has engaged with these providers to understand the emissions relating to the DB Section's buy-ins. Whilst both providers have shared emissions data for the Scheme, the Trustee notes that coverage is low and that Canada Life were not able to provide scope 3 data. The data is set out in 'Section 4.4: Bulk annuity transfer policy metrics'. The Trustee will continue to work with the insurers to improve the data the Trustee receives.

## 4.2 DB Section metrics results

### **Metric 1 – Total greenhouse gas ('GHG') emissions (Scope 1, 2 & 3) – total carbon emissions (tonnes CO<sub>2</sub> equivalent)**

The Trustee has chosen total carbon emissions as the main metric for total greenhouse gas ('GHG') emissions – the metric shows the total greenhouse gas emissions that are financed by the DB Section's investments, also known as category 15 (investment emissions) in the Greenhouse Gas Protocol.

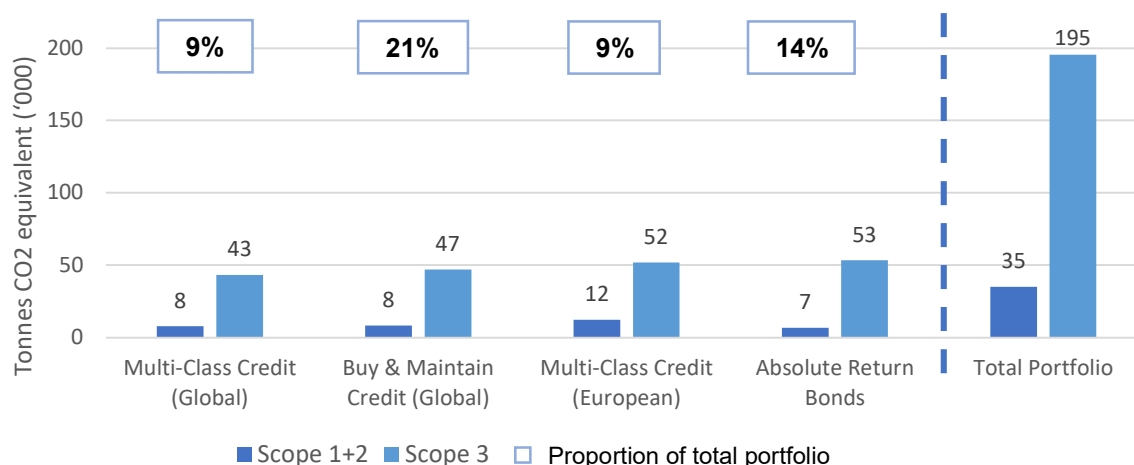
There are three scopes of carbon emissions:

- **Scope 1:** emissions are direct emissions from an entity's owned or operationally controlled sources;
- **Scope 2:** emissions are those from the use of electricity purchased by an entity; and
- **Scope 3:** emissions are indirect emissions from the use of company's products, or any other emissions across its supply chain.

This metric shows the share of greenhouse gas emissions stemming from the DB Section's assets. Given the abundance and prominence of carbon dioxide as a greenhouse gas, all the other GHGs are considered carbon equivalent.

Total emissions are calculated as the proportional share of the scope 1 and scope 2 GHG emissions for each relevant investment, based on the size of the investment relative to the EVIC (enterprise value including cash) of the respective company – EVIC is a measure of a company’s total value. ‘Total emissions’ is therefore sensitive to a fund’s investment holding size (£m). Further detail on the analysis is included in Appendix B.

**Figure 6. Total carbon emissions for the DB Section as at 31 March 2024**



Carbon metrics are proxied where there is insufficient data for funds. ESG and MSCI Carbon Metrics meet the current minimum UK DWP’s TCFD-aligned “Metrics and Targets” regulations. However, regulations are subject to change. Redington monitors developments closely. Certain information ©2024 MSCI ESG Research LLC. Reproduced by permission.

The total GHG emissions of a mandate are naturally in part a function of the mandate’s size, with larger mandates in terms of assets invested being likely to have larger total emissions. Consistent with this relationship, the analysis showed that the DB Section’s buy and maintain global credit mandate had the largest total GHG emissions, followed by the absolute return bond mandate. Whilst this information is a useful starting point to understand the DB Section’s total carbon emissions, it is difficult to compare across asset classes and funds of differing size.

**Key takeaway:** Total scope 1 and scope 2 emissions remained at the same level while scope 3 emissions fell by a small amount. Of the DB Section’s assets, the European multi-class credit is the largest contributor. The buy and maintain global credit mandate was the largest contributor last year but has seen a reduction in the total emissions.

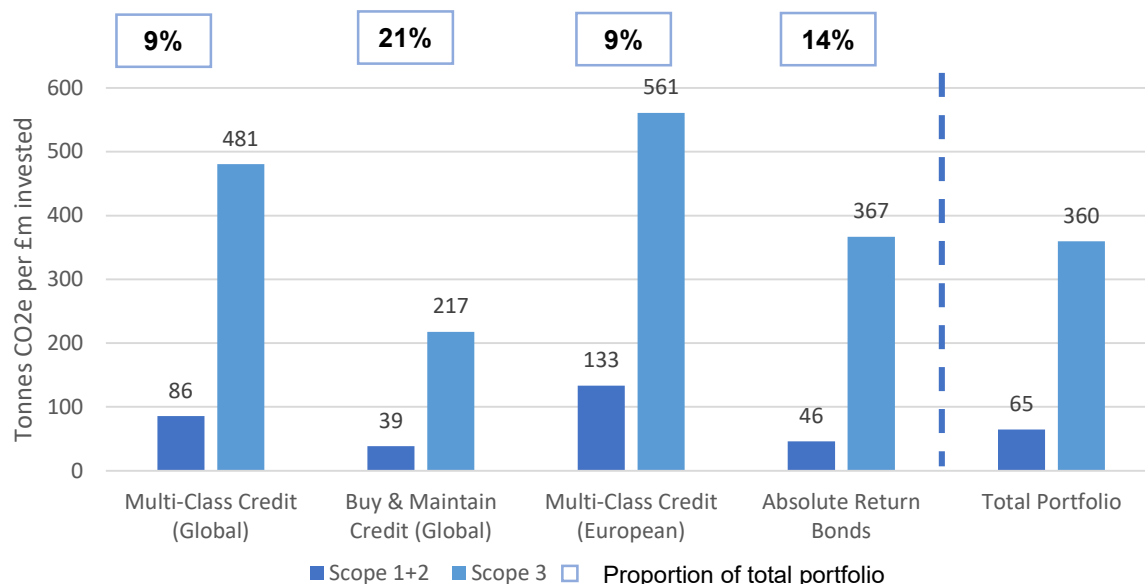
**Metric 2 – Emissions intensity (Scope 1, 2 & 3) – carbon footprint (tonnes CO<sub>2</sub> equivalent per million pounds invested)**

The Trustee monitors carbon footprint as its emissions intensity metric. Carbon footprint measures the carbon efficiency of a portfolio in terms of emissions per million pounds invested. In other words, it normalises the total carbon emissions for the value of the portfolio. As it shows the emissions per millions of pounds invested, the metric is comparable between investments of different sizes.

At a portfolio level, the emissions intensity measures are calculated as the average of the emissions intensity of the underlying holdings, weighted by the value of each holding. A portfolio with a high emissions intensity will have a steeper route towards decarbonisation than a less intensive one. Hence, measuring the emissions intensity across the DB Section is useful for gauging how difficult (or easy) it will be to progressively decarbonise its portfolio.

Differences in portfolio emissions intensities are driven by differences in sector and company exposure. Portfolios with higher exposures to high-carbon sectors such as utilities, non-energy materials, energy and industrials tend to exhibit higher emissions intensities. The DB Section's total GHG emissions are shown for the DB Section's credit assets (i.e. its non-LDI assets), which tend to be more carbon intensive than other asset classes. Further detail of the carbon metric analysis is included in Appendix B.

**Figure 7. Carbon footprint for the DB Section as at 31 March 2024**



Carbon metrics are proxied where there is insufficient data for funds. ESG and MSCI Carbon Metrics meet the current minimum UK DWP's TCFD-aligned "Metrics and Targets" regulations. However, regulations are subject to change. Redington monitors developments closely. Certain information ©2024 MSCI ESG Research LLC. Reproduced by permission.

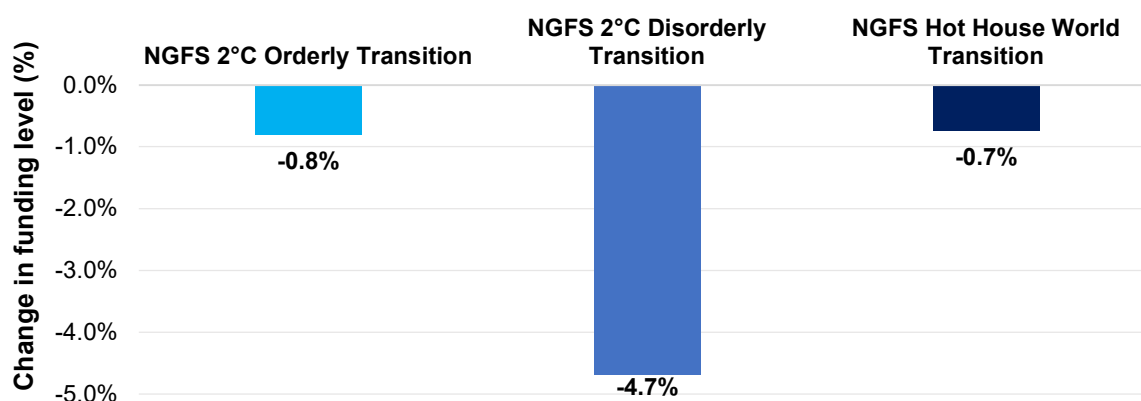
**Key takeaway:** the Scheme's overall carbon intensity across scopes 1-3 emissions has fallen slightly over the year. However, the carbon intensity of the DB Section's European multi-class credit fund has increased significantly since 31 March 2023 (69 tonnes CO<sub>2</sub>e per £m invested for scope 1 and 2 as at 31 March 2023). Each of the other asset classes saw a reduction in their scope 1-3 carbon footprint from 2023.

### **Metric 3 – Additional climate change metric: impact on DB Section funding level in the 'disorderly transition' NGFS climate scenario**

For the non-emissions-based metric, the Trustee has opted to utilise the NGFS 'disorderly' scenario. As mentioned previously, the Trustee is aware of the limitations of current climate scenario analysis methodologies and the limited usefulness of the analysis for decision-making.

As noted in 'Section 2.2: DB Section asset scenario analysis', since the completion of the analysis for this metric as at 31 March 2023 for the 2023 Climate Disclosure Report, in the Trustee's view there have been no material changes that would be expected to meaningfully alter this analysis since it was produced for the 31 March 2023 Climate Disclosure Report. As such, the results from the latest scenario analysis completed as at 31 March 2023 (as included in the 2023 report), are presented in 'Figure 8'.

**Figure 8. Change in funding level excluding mortality impact (%) on a solvency basis as at 31 March 2023**



Carbon metrics are proxied where there is insufficient data for funds. ESG and MSCI Carbon Metrics meet the current minimum UK DWP’s TCFD-aligned “Metrics and Targets” regulations. However, regulations are subject to change. Redington monitors developments closely. Certain information ©2024 MSCI ESG Research LLC. Reproduced by permission.

**Key takeaway:** ‘Figure 8’ shows the impact of modelled climate risk on the funding level of the DB Section under the different climate scenarios tested. Due to the combination of transition and physical risk, under the ‘2°C disorderly’ NGFS scenario, the DB Section’s funding level is modelled as falling by c.4.7%.

#### Metric 4 – Portfolio alignment: Science Based Targets initiative (‘SBTi’) metric

The Trustee has chosen the SBTi alignment metric as the DB Section’s portfolio alignment metric, which captures a company or issuer’s progress against a self-developed decarbonisation target using a science-based methodology. The target can be aimed at one or all of: the short term, long term or net zero, with each company being scored with a binary ‘yes’ or ‘no’ assessment on the following target categorisations: “SBTi Approved 2°C”, “SBTi Approved Well Below 2°C” or “SBTi Approved 1.5°C”. Each of the categorisations denotes the implied global temperature increases that coincide with the decarbonisation target. Whilst the Trustee is aware that the “SBTi Approved 2°C” categorisation will be gradually phased out in line with the initiative’s raised ambition to 1.5°C, the Trustee will continue to report under the “SBTi Approved 2°C” categorisation to capture companies currently on a 2°C path.

The holdings in the LDI portfolio and cash in the Trustee’s bank account are not covered by this metric as it only covers corporate entities.

#### DB Section – SBTi metric

Fund	Fund Value	Allocation	SBTi Score
Multi-Class Credit (Global)	£90.1m	8.7%	19.7%
Buy and Maintain Credit (Global)	£215.6m	20.9%	30.3%
Multi-Class Credit (European)	£92.6m	9.0%	9.6%
Absolute Return Bonds	£145.4m	14.1%	21.1%
<b>Overall SBTi Score</b>			<b>22.6%</b>

Where presented, “Science Based Target initiative” scores are all based on look-through data where it is available and never proxied. ESG and MSCI Carbon Metrics meet the current minimum UK DWP’s TCFD-aligned “Metrics and Targets” regulations. However, regulations are subject to change. Redington monitors developments closely. Certain information ©2024 MSCI ESG Research LLC. Reproduced by permission.

**Key takeaway:** The DB Section's total SBTi score is 22.6%, meaning that 22.6% of portfolio companies have had their climate targets approved by the SBTi. This is an improvement from last year's score of 17.9%. Notably, the global multi-class credit score has improved significantly from the previous report (4.7% as at 31 March 2023).

The buy and maintain mandate has the highest score, whilst the European multi-class credit fund has the lowest score. This is to be expected, given SBTi submissions are voluntary and are performed only by companies that issue public debt/equity, meaning investments like those held in the European multi-class credit fund are expected to have a lower score.

### 4.3 DC Section metrics results

The results of the analysis for the funds that make up the DC Section portfolio that classify as a popular arrangement are set out within this section. The GHG emissions metric, emissions intensity metric, and 'impact on DC Section assets' in the 'disorderly' NGFS climate scenario metric were calculated by Redington, the Scheme's DB investment adviser, using data provided by Aon, the Scheme's DC investment adviser, as well as the DC Section's investment manager.

The emissions-based metrics have been calculated using line-by-line portfolio holding information from L&G and climate data from the ESG data provider, MSCI. As with the DB section, for the purpose of this analysis, emissions from cash are currently excluded. More details are provided in Appendix B. Note that, as with the cash and gilts allocations in the DB Section, emissions metrics are not currently available for the L&G Cash Fund.

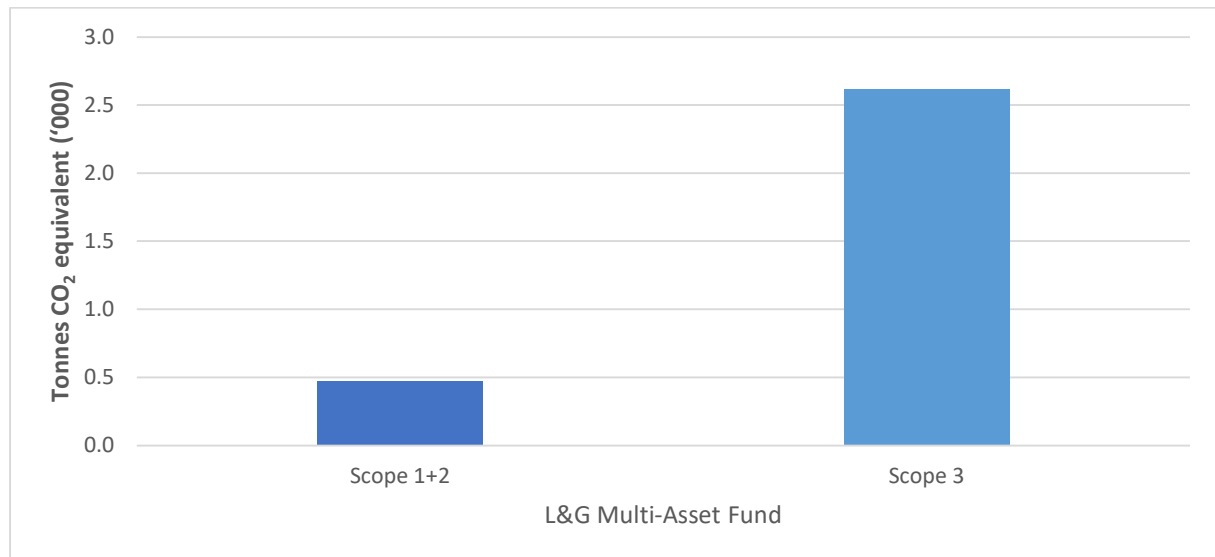
#### DC Section asset portfolio and emissions metrics coverage (metrics 1 and 2)

Fund	Fund value	Allocation	MSCI Metrics Coverage %
L&G Multi-Asset Fund	£4.4m	76.3%	70.5%
L&G Cash Fund	£1.4m	23.7%	-
<b>Total</b>	<b>£5.8m</b>		

Source: LGIM

#### Metric 1 – Total greenhouse gas (GHG) emissions (scope 1, 2 & 3) – total carbon emissions (tonnes CO<sub>2</sub> equivalent)

Figure 9. Total carbon emissions for popular arrangement of the DC Section as at 31 March 2024

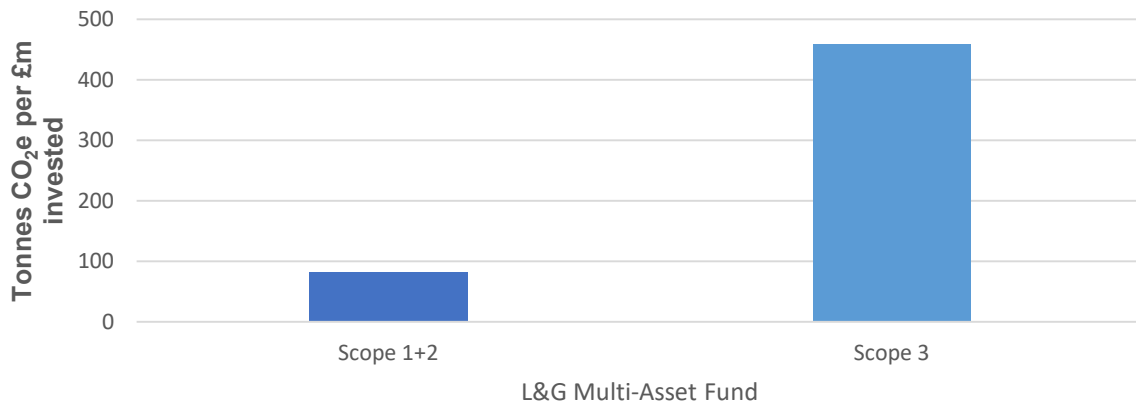


Carbon metrics are proxied where there is insufficient data for funds. ESG and MSCI Carbon Metrics meet the current minimum UK DWP's TCFD-aligned "Metrics and Targets" regulations. However, regulations are subject to change. Redington monitors developments closely. Certain information ©2024 MSCI ESG Research LLC. Reproduced by permission.

**Key takeaway:** The total emissions of the Multi-Asset Fund of the DC Section are around 1.34% of the total emissions of the DB Section.

**Metric 2 – Emissions intensity (scope 1, 2 & 3) – Carbon footprint (tonnes CO<sub>2</sub> equivalent per million pounds invested)**

**Figure 10. Carbon footprint for the popular arrangement of the DC Section as at 31 March 2024**



Carbon metrics are proxied where there is insufficient data for funds. ESG and MSCI Carbon Metrics meet the current minimum UK DWP's TCFD-aligned "Metrics and Targets" regulations. However, regulations are subject to change. Redington monitors developments closely. Certain information ©2024 MSCI ESG Research LLC. Reproduced by permission.

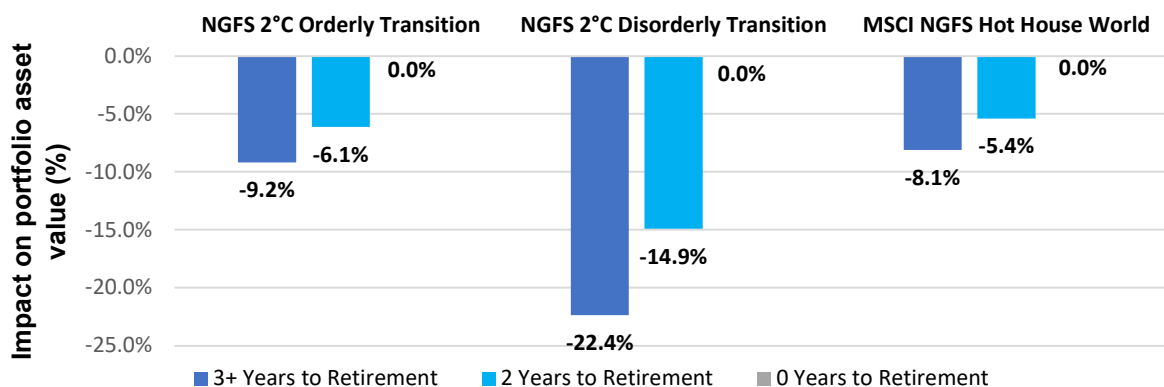
**Key takeaway:** The carbon footprint of the Multi-Asset Fund of the DC Section is slightly higher than that of the DB Section assets (excluding cash and LDI).

**Metric 3 – Additional climate change: Impact on DC Section asset value in the 'disorderly' NGFS climate scenario**

As the funding level is not applicable to the DC Section, the impact on *portfolio asset value* is shown for this metric.

As noted in 'Section 2.4: DC Section asset scenario analysis', since the completion of the analysis for this metric as at 31 March 2023 for the 2023 Climate Disclosure Report, in the Trustee's view there have been no material changes that would be expected to meaningfully alter this analysis since it was produced for the 31 March 2023 Climate Disclosure Report. As such, the results from the latest scenario analysis completed as at 31 March 2023 (as included in the 2023 report), are presented in 'Figure 11'.

**Figure 11. Impact on Lifestyle Investment Portfolio value as at 31 March 2023**



Carbon metrics are proxied where there is insufficient data for funds. ESG and MSCI Carbon Metrics meet the current minimum UK DWP's TCFD-aligned "Metrics and Targets" regulations. However, regulations are subject to change. Redington monitors developments closely. Certain information ©2024 MSCI ESG Research LLC. Reproduced by permission.

**Key takeaway:** ‘Figure 11’ shows how the asset allocation translates into lower levels of modelled risk in each scenario as members de-risk as they approach retirement. When the members retire, no climate stress is currently applied as the profiles are invested entirely in the Cash Fund.

#### **Metric 4 – Portfolio alignment: Science Based Targets initiative**

As noted above, L&G were able to provide line-by-line holdings for this year’s report, and therefore SBTi scores are now available for the DC Section. Note that the holdings in the L&G Cash Fund are not covered by this metric as SBTi only covers corporate entities.

#### **DC Section – SBTi metric**

<b>Fund</b>	<b>Fund Value</b>	<b>Allocation</b>	<b>SBTi Score</b>
L&G Multi-Asset Fund	£4.4m	76.3%	28.9%

Where presented, “Science Based Target initiative” scores are all based on look-through data where it is available and never proxied. ESG and MSCI Carbon Metrics meet the current minimum UK DWP’s TCFD-aligned “Metrics and Targets” regulations. However, regulations are subject to change. Redington monitors developments closely. Certain information ©2024 MSCI ESG Research LLC. Reproduced by permission.

#### 4.4 Bulk annuity transfer policy metrics

##### Metric 1 – Total greenhouse gas ('GHG') emissions (scope 1, 2 & 3) – total carbon emissions (tonnes CO<sub>2</sub> equivalent)

The Trustee has engaged with the two providers, PIC and Canada Life, to better understand the emissions data relating to the DB Section's buy-ins. Both PIC and Canada Life provided data as at 29 December 2023 as 31 March 2024 data was not available.

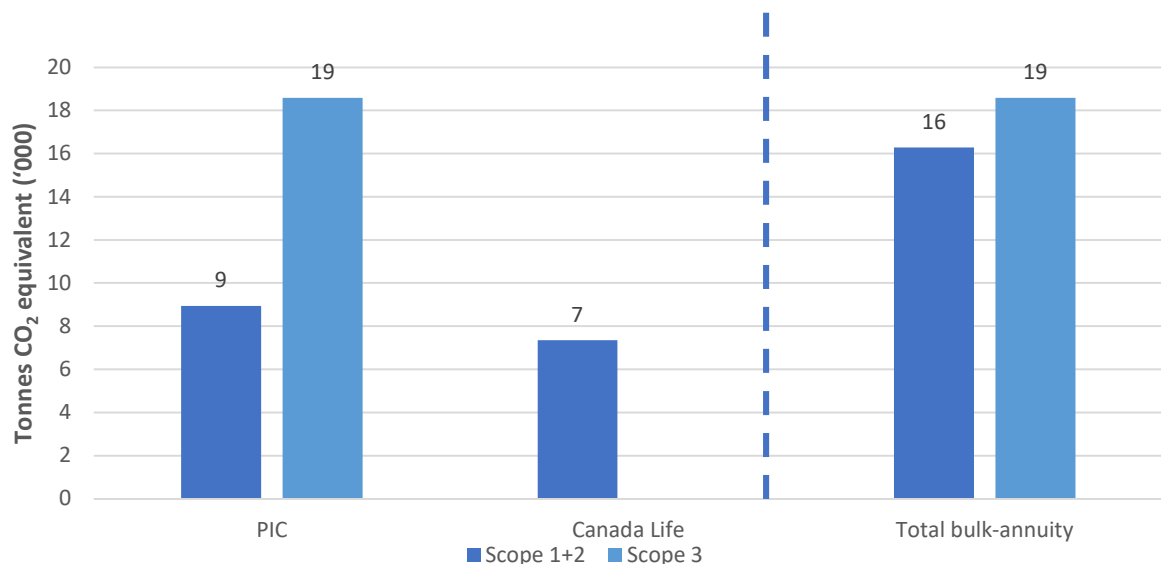
The emissions data received was the aggregate level of emissions for each provider's total bulk annuity portfolio; this was then scaled by the proportion of the portfolio related to the Scheme. The table below shows the value of the bulk-annuity providers' portfolios and the value of the Scheme's buy-ins with them, also reflected as a proportion of their total bulk annuity portfolios.

Insurer	Scheme's insured liability value	Total bulk-annuity portfolio	Scheme Proportion
PIC	£145.1m	£36.8bn	0.4%
Canada Life	£531.8m	£18.8bn	2.8%

Source: PIC and Canada Life as at 29 December 2023.

Canada Life were not able to provide scope 3 emissions for this year's report. In addition, they were only able to provide scope 1 and 2 emissions data for assets in their matching adjustment portfolio that are covered by their emissions goals for listed corporate bonds (c.22% of their overall bulk annuity portfolio). PIC's data coverage was also relatively low (c.55% for scopes 1 and 2 and c.28% for scope 3). The Trustee will engage further with PIC and Canada Life to understand how their, and subsequently the Scheme's, reporting can be improved.

Figure 12. Total carbon emissions for bulk-annuity policies as at 29 Dec 2023



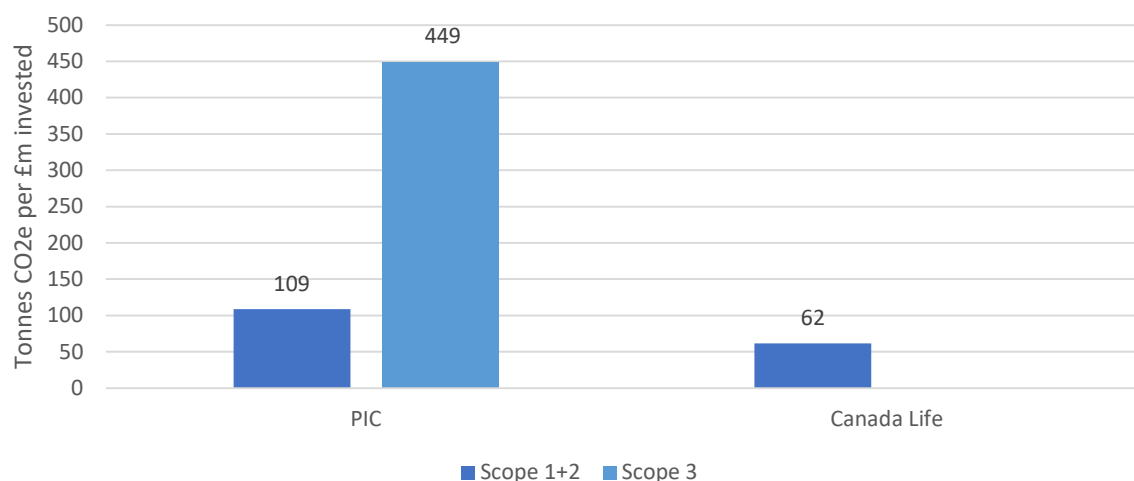
Source: PIC and Canada Life as at 29 December 2023. Emissions data for Canada Life was provided for assets in their matching adjustment portfolio that are covered by their emissions goals for listed corporate bonds (c.22% of their overall bulk annuity portfolio); PIC's data coverage was 55% for scope 1 and 2 and 28% for scope 3.

**Key takeaway:** Canada Life were not able to produce scope 3 emissions for this year's report, hence the total scope 3 emissions value is not fully representative of the emissions from the bulk annuity policies. In addition, data coverage from both insurers is relatively low (c.22% for scopes 1 and 2 for Canada life vs c.55% for PIC). The Trustee will further engage with both bulk annuity providers to determine whether coverage can be improved for next year's report.

## Metric 2 – Emissions intensity (Scope 1, 2 & 3) – carbon footprint (tonnes CO<sub>2</sub> equivalent per million pounds invested)

PIC were able to provide carbon footprint data for Scopes 1-3 emissions; Canada Life were able to provide data only for Scopes 1 and 2.

**Figure 13. Carbon footprint for the bulk annuity transfer policies as at 29 December 2023**



Source: PIC and Canada Life as at 29 December 2023. Emissions data for Canada Life was provided for assets in their matching adjustment portfolio that are covered by their emissions goals for listed corporate bonds (c.22% of their overall bulk annuity portfolio); PIC's data coverage was 55% for Scope 1 and 2 and 28% for Scope 3.

**Key takeaway:** The Trustee has received data for the carbon footprints of the Scheme's bulk annuity policies from both bulk annuity providers, but notes again that emissions data coverage is relatively low, with scope 3 data also not being available for the Canada Life policy.

### **4.5 DB Section target**

The Trustee believes that it should look to align its investment strategy with achieving the goals of the Paris Agreement. It is generally accepted that to achieve the goals of the Paris Agreement, the world economy needs to reach net zero by 2050 or sooner.

The Trustee has therefore set an aspirational long-term target of net zero scope 1, 2 and 3 emissions by 2050, with an interim target of reducing the emissions intensity of the buy and maintain credit holdings by 50% by the year 2030, using a base year of 31 March 2022 to monitor progress against this annually. This is measured using the carbon footprint metric selected by the Trustee, more details on which are included in Appendix B. The interim target is the target that has been selected in accordance with the DWP's regulations, and 'Figure 14' relates to the progress towards the interim target. The buy and maintain holdings were selected as this mandate is the only segregated non-LDI mandate that the DB Section invests in; there is therefore more scope to directly influence the

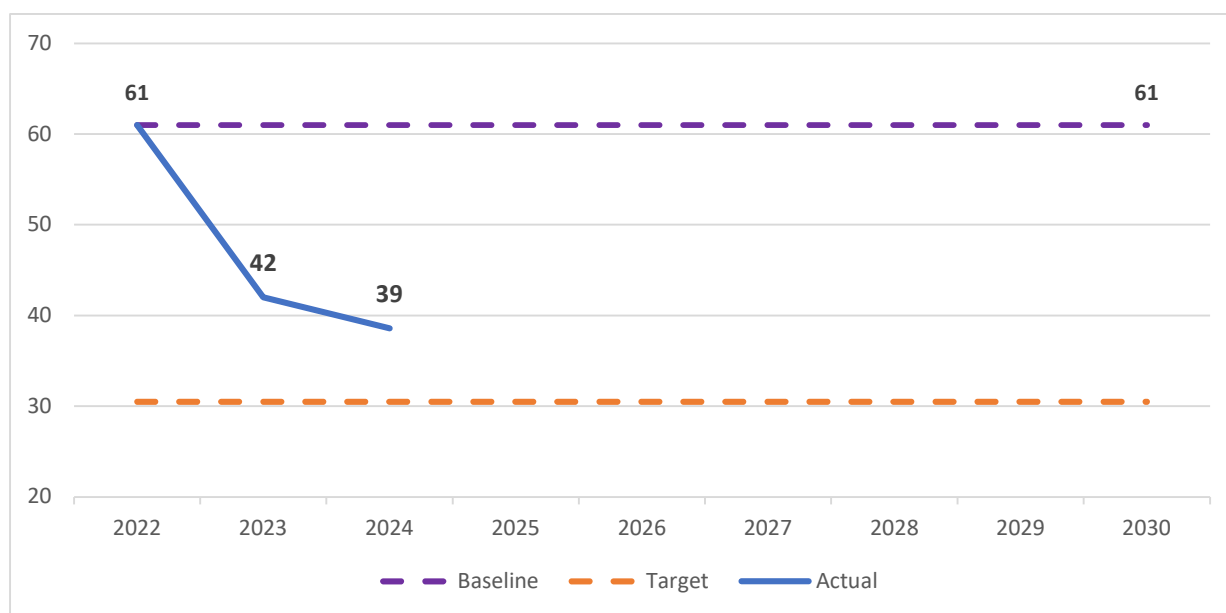
manager’s actions to reduce emissions than with the Scheme’s pooled fund holdings. The Trustee is aware that progress towards this target may not occur in a linear fashion and the carbon footprint of the mandate may increase in some years and decrease in others. It is, however, the trend over time that is important and that will be the key focus of the Trustee. Due to its relatively small size, the Trustee has not set a target in relation to the DC Section.

With a view towards achieving this target, the Trustee engaged with Insight, its buy and maintain credit manager, in April 2023 to formally apply limits on the emissions intensity of the portfolio over time – in line with a 2050 net zero target – where this is consistent with the investment risk and return objectives of the mandate and wider portfolio. In addition, climate risk management credentials will also be strongly considered in any ongoing and future manager appointment exercises.

The Scheme’s target is embedded within the governance, strategy, and risk management processes through its inclusion in the ESG reporting that is provided annually to the Trustee. On an annual basis, the Trustee will measure performance against this target and furthermore determine whether this target remains the most appropriate for managing the DB Section’s exposure to climate-related risk. Should the Trustee determine in the future that a more suitable target exists, then this section will be updated accordingly, along with the Trustee’s reasoning for the change.

The Trustee discussed and reaffirmed this target in February 2024, following discussion with its advisers. The Trustee will continue to monitor this target and will continue to engage with Insight to determine any further steps required to achieve the target.

**Figure 14. Progress towards the scope 1 and 2 carbon footprint reduction interim target as at 31 March 2024**



Analysis performed by Redington as at 31 March 2024, using data from MSCI.

**Key takeaway:** The total carbon footprint of the buy and maintain mandate has fallen from the baseline of 31 March 2022. Over the Scheme year 1 April 2023 to 31 March 2024, the carbon footprint has reduced by 8%.

## APPENDIX A: Scenario Analysis

The NGFS is a group of 91 central banks and supervisors and 14 observers committed to sharing best practices and developing environment-related risk management in the financial sector to support the low-carbon transition. The NGFS scenarios have been developed to provide a common starting point for analysing climate risks to the economy and financial system. They incorporate important themes including increasing electrification and a spectrum of new technologies to tackle remaining hard-to-abate emissions.

NGFS explores scenarios consistent with the framework published in the First NGFS Comprehensive Report covering:

- **Orderly (1.5°C or 2°C)** - climate policies are introduced early and become gradually more stringent. Both physical and transition risks are relatively subdued.
- **Disorderly (1.5°C or 2°C)** - higher transition risk due to policies being delayed or divergent across countries and sectors. For example, carbon prices would have to increase abruptly after a period of delay.
- **Hot house world** - some climate policies are implemented in some jurisdictions, but globally efforts are insufficient to halt significant global warming. The scenarios result in severe physical risk including irreversible impacts like sea-level rise.

### Limitations of NGFS scenarios

Current scenario analysis methodologies may not fully account for the short- and medium-term climate risks the Scheme could face; the analysis may therefore have limited reliability and usefulness as a decision-making tool.

Stress tests are based on scenarios constructed by the NGFS in June 2021 and therefore present a world view as at that date and have not been updated since.

Stress tests are based on a strategic mapping of the Scheme's assets to Redington's generic asset class universe and do not consider the individual composition of the Scheme's funds.

Redington proxies are based on index composition as at Dec 2022 and do not allow for changes since. Redington asks users of these stresses to bear this in mind when reviewing stresses of assets with more volatile sector compositions such as those with significant Momentum-style tilts.

## APPENDIX B: Carbon Emissions Analysis for the DB and DC Sections

Where possible and where there is reasonable data coverage, the Trustee monitors 'line-by-line' emissions reporting for funds. These tend to be more generic, long-only asset classes such as corporate credit. However, for funds with less than 50% coverage, funds with more than 2% in short positions, and illiquid assets, the Trustee monitors 'asset class level' carbon estimates in the absence of reliable, reported line-by-line emissions data from MSCI. The Trustee notes that using asset class modelling of emissions for assets where this data is not available enables a more holistic view of the Scheme's total portfolio emissions, albeit recognising that the modelled data is not perfect.

Redington, on behalf of the Trustee, calculates the carbon emissions for a series of building blocks, proxied using equity and credit indices that are mapped to the rest of the asset class universe, mapped in line with Redington's risk and return modelling assumptions. The modelling of this generic universe is reviewed on an annual basis and centrally approved by Redington's Investment Strategy Committee. Where the asset class proxy is unavailable, a judgement has been made based on nature of the fund on a best endeavours basis. This is done for:

- **Total Greenhouse Gas ('GHG') Emissions (tCO<sub>2</sub>e):** Total carbon emissions associated with the underlying investments of a portfolio. On a portfolio level, issuer's emissions are scaled by ownership – the total portfolio metric is a sum of the proportionate carbon emissions of portfolio companies based on the investor's ownership share.
- **Carbon Footprint (tCO<sub>2</sub>e / EVIC £m invested):** Measurement of the estimated CO<sub>2</sub>e emissions of a fund per million pounds of EVIC. It is calculated as the total GHG emissions normalised by the invested £m.

Redington's data processing systems are reviewed centrally on a quarterly basis by in-house developers and their ESG Analytics team. Automated and manual checks on the calculation and aggregation of the ESG metrics are also completed.

Emissions metrics will be calculated in line with the GHG Protocol Methodology, the global standard for companies and organisations to measure and manage their GHG emissions. The GHG Protocol provides accounting and reporting standards, sector guidance and calculation tools. It has created a comprehensive, global, standardised framework for measuring and managing emissions from private and public sector operations, value chains, products, cities, and policies to enable greenhouse gas reductions across the board.

For calculation of the progress towards the Scheme's interim target, the DB Section's buy and maintain Credit fund carbon footprint has been calculated using line-by-line asset data both as at 31 March 2022, 2023 and 2024. This is to use as a baseline with which to not only measure progress against, but also to calculate the target carbon footprint.

### Limitations of Carbon Metrics

TCFD-based regulations require trustees to report on portfolio climate metrics without asset class adjustments. Therefore, metrics in funds with a lower coverage (below 80%), or in multi-asset funds and liquid / semi-liquid credit need to be evaluated with more context. This is because a low coverage means a larger part of emissions are unknown, and because the carbon risk of equity holdings will tend to be higher than that of credit holdings.

Specific line-by-line modelling of emissions is currently available only for publicly listed equity and credit assets. For unlisted asset classes, we currently carry out asset-class-level estimations of carbon emissions. This gives a broad and longer-term understanding of what the portfolio's emissions are and where the largest amount of emissions come from. This is enough from a strategic asset allocation perspective but will not capture specific actions managers are taking to reduce their CO<sub>2</sub>e footprint.

Due to lags in company carbon reporting and database updates, carbon footprint numbers have a one-to two-year lag. Redington's carbon numbers are updated at the start of every year.

## APPENDIX C: An output of impact of climate change on mortality

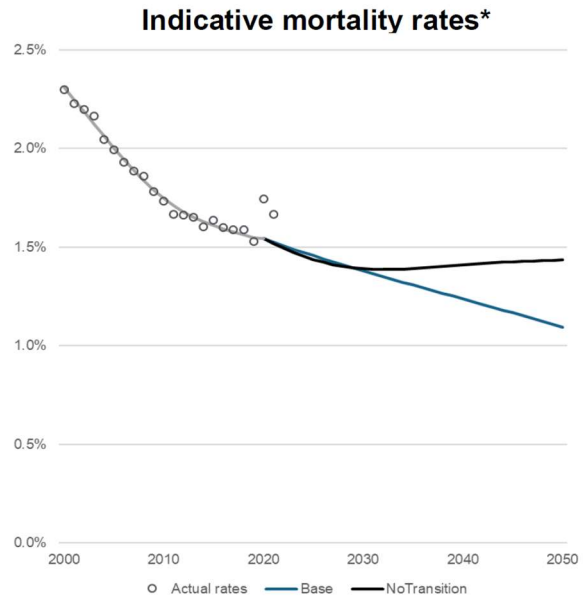
### No transition (Hot House World)

#### S01. No Transition

Limited consideration is given to environmental challenges. Governments and businesses rely on the (false) hope that market forces will provide engineering solutions to mitigate and adapt to climate change naturally, without worldwide government intervention. In the short-term more money may be spent on health services, perhaps reducing mortality slightly.

There is growing awareness of a changing environment and the damaging effects a lack of action is having, over the intermediate term. There is a higher incidence of damaging storms, water shortages, higher pollution levels and reduced agricultural yields (leading to higher food prices). Markets become more volatile and climate change begins to have a growing drag on economic growth and asset returns. In such an environment, there may be no long-term future improvements in mortality (consistent with what we saw between 2014 and 2018).

In terms of the direct climate impacts, fewer deaths from warmer winters may more than offset any impact of heatwaves but the impact is likely to be marginal.



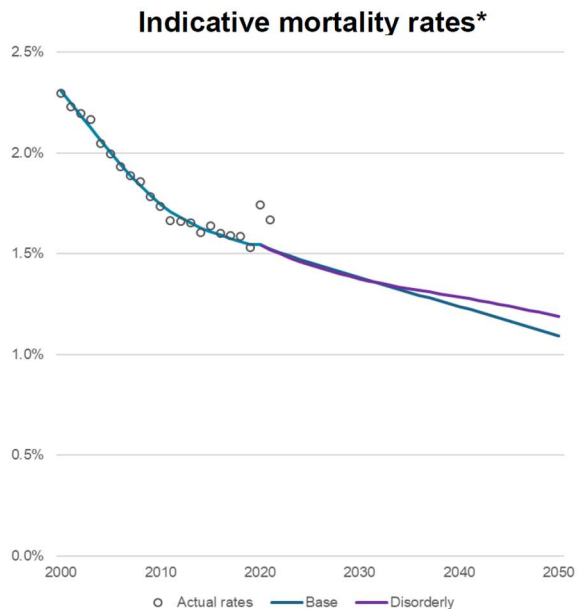
\*Pension scheme (SAPS S3PMA) mortality  
Standardised using European Standard Population 2013  
Males aged 50-90

### Disorderly transition

#### S02. Disorderly Transition

Disruption to health and social care services, and damage to related infrastructure, due to extreme weather (potentially coinciding with increased demand) may increase mortality.

Significant falls in GDP start from around year 10. Prolonged recession leads to issues with the provision of healthcare and ultimately to falls in life expectancy, with overall improvements at 1% p.a. over the long term.



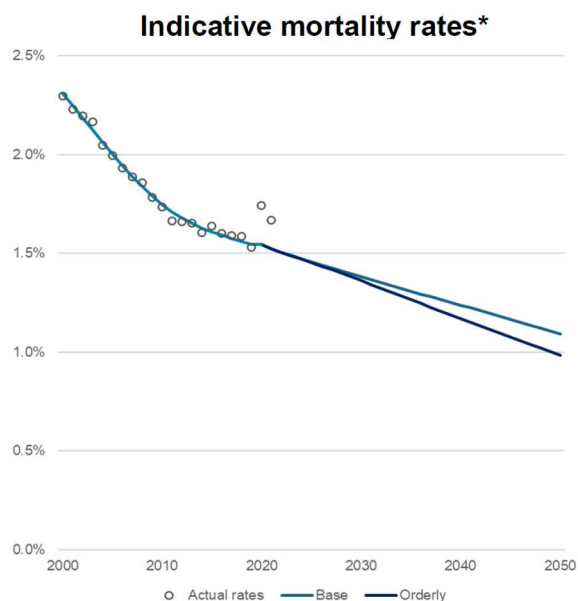
\*Pension scheme (SAPS S3PMA) mortality  
Standardised using European Standard Population 2013  
Males aged 50-90

## S04. Orderly Transition

Over the first three years, the global economy experiences a period of turmoil and lower growth as the economy arduously divests away from fossil fuels. Global growth and market returns remain strong relative to the base case in the long-term, supported by a brighter sustainable outlook and the positive spill-over effects from green policy adoption.

Disruption to health and social care services, and damage to related infrastructure, due to extreme weather (potentially coinciding with increased demand) may increase mortality. However, the disruption is likely to be short-lived.

In longer-term, better air quality and improved health conditions may lead to higher longevity: overall around a 0.5 year improvement in life expectancy for the average 60-year-old.



\*Pension scheme (SAPS S3PMA) mortality  
Standardised using European Standard Population 2013  
Males aged 50-90

## Orderly transition

### Liability impact of each scenario:

Redington scenario	Aon Scenario	Aon assumed Long-term improvement in mortality	Ultimate liability impact (age 60) from mortality
N/A	Base case	1.5% p.a.	-
No Transition	No Transition	0.0% p.a.	-4%
Fast Transition	Disorderly	1.0% p.a.	-1.5%
Slow Transition	Orderly	2.0% p.a.	+2%

### Modelling Assumptions:

- Data used: deaths and populations for years 1960-2020 as published by ONS and used by CMI in the industry standard CMI mortality projections model CMI\_2020. 2021 data added to historic data points (but CMI model not updated to CMI\_2021 at this stage.)
- For charts, mortality standardised using the European Standard Population 2013 for ages 50-90 as set out in this paper: Revision of the European Standard Population -Report of Eurostat's task force -2013 edition -Products Manuals and Guidelines -Eurostat (europa.eu)
- Model: industry-standard mortality projections model CMI\_2020 with varying parameters to reflect short-and long-term impacts of different scenarios on mortality. The key parameters used were the Initial Addition (A) parameter which increases or decreases improvements in the near-term, and the long-term rate parameter (LTR) which increases or decreases improvements in the long term. Adjustments were applied to assumed base mortality to ensure that the rate used in 2020 was the same across all scenarios.

- In the charts in the presentation, male mortality rates are used, assuming standard (SAPS S3PMA) mortality rates. Circles for “actual rates” are based on a run of the CMI model without using the standard smoothing parameters.
- Charts illustrate mortality rates up to 2050, but rates were provided up to 2150 to enable liabilities to be calculated. Descriptions of each scenario and its possible impact on future mortality (short-term and long-term) are provided in the scenario slides.
- Liability impacts of each scenario were calculated based on the ratio of male life expectancy at age 60 and rounded to the nearest 0.5%. It is noted that the impact could be different depending on discount rate. A difference might also be expected for joint life annuities although it’s not likely that they will be significantly different given that figures are rounded to 0.5%.

**Limitations:**

These scenarios provide an indication as to what might be expected in particular scenarios, to provide an impact of mortality on liabilities to place alongside the impact from financial variables on the liabilities and the impact on assets from investment returns of the given scenario. The scenarios are not intended to provide the highest or lowest possible outcomes, and are not intended to show what will happen, rather they give a reasonable range of impacts against which to consider the possible impact of climate change on a particular pension scheme. The scenarios are deliberately not given likelihoods, we have not sought in any way to estimate how likely each scenario is.

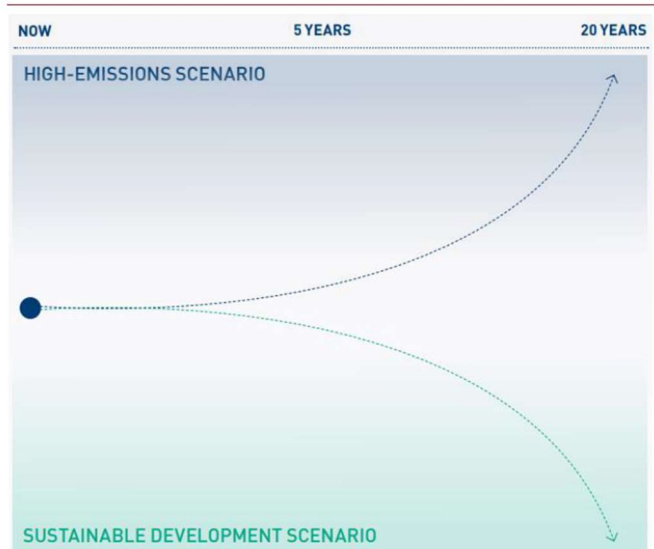
Scenarios are essentially expressed relative to a pension scheme’s current position (i.e. the central scenario). If a pension scheme is already specifically reflecting a particular belief on the current path (for example, if it is believed that we are heading to a “No transition” scenario) then variations should be expressed relative to that scenario rather than the central one, otherwise the liability impact of that scenario would be incorrect for that scheme. At this stage we don’t believe pension schemes are reflecting views on climate change in this way, but this may be (explicitly or implicitly) the case in future.

## APPENDIX D: Details of Penfida’s Covenant Climate Scenarios

**High-emissions scenario:** Intergovernmental Panel on Climate Change (“IPCC”) representative concentration pathway (“RCP”) 8.5 high emissions scenario which represents a future where levels of GHG emissions continue to rise throughout the 21<sup>st</sup> century resulting in warming of c.4.3°C by 2100, relative to pre-industrial temperatures.

**Sustainable development scenario:** The World Energy Outlook 2020 Sustainable Development Scenario (“SDS”) which models a significant reallocation of investment away from fossil fuels towards a low carbon economy/renewable energy and GHG reductions in line with achieving the Paris Agreement of limiting global warming to 2.0 C, with anticipated warming of c.1.6°C by 2100, relative to pre-industrial temperatures.

Climate and environmental policy scenarios



## APPENDIX E: Glossary of Terms (ESG and Carbon Metrics)

**Enterprise Value Including Cash ('EVIC'):** Defined as the sum of market capitalisation of shares and book values of total debts and minority interests at fiscal year end. No deductions of cash or cash equivalents are made to avoid potential negative enterprise values. This is the recommended denominator metric for carbon attribution according to the GHG Protocol, the global standard for carbon accounting endorsed by the European Union and the DWP.

**Estimated Total Carbon Emissions (tonnes):** Represents the total share of Scope 1, Scope 2 and Scope 3 carbon emissions a fund is responsible for. Please note the metric is sensitive to the investment holding size in the fund.

**MSCI Climate Metrics Coverage:** The proportion by value of a fund for which carbon metrics are available from MSCI. Climate metrics are proxied where coverage is low and in this case, the MSCI Climate Metrics Coverage will be assumed to be.

**Tonnes of Carbon Dioxide Equivalents (tCO<sub>2e</sub>):** Tonnes of greenhouse gases including methane, nitrous oxide, carbon dioxide, and fluorinated gases. Given the abundance and prominence of carbon as a greenhouse gas, all the other gasses are considered carbon equivalents.

**Scope 1 & 2 Carbon Footprint (tCO<sub>2e</sub> / £m invested):** Measurement of the scope 1 & 2 CO<sub>2e</sub> emissions of a fund per million pounds of EVIC. Scope 1 emissions refer to those which are directly connected to the production of a company's product or service. For example, the burning of fossil fuels to power the electricity grid. Scope 2 emissions refer to those from the electricity used to power the facilities and machinery of a company.

**Total Carbon Footprint (tCO<sub>2e</sub> / £m invested):** Measurement of the CO<sub>2e</sub> emissions of a fund per million pounds of EVIC using scope 1, scope 2 and scope 3 emissions. Given a company's direct Scope 1 emissions will inevitably be another company's indirect Scope 3 emissions, aggregating the individual Scope emissions results in a higher number of emissions than exists. To mitigate double counting, we apply a scaling factor in accordance with MSCI's methodology. This metric may be used to assess a fund's contribution to global warming versus other funds. Previous Total Carbon Emissions (tCO<sub>2e</sub> / £m invested) are estimated by looking at the funds' respective holdings and emissions 12 months ago.

**Weighted Average Emissions Intensity (tCO<sub>2e</sub> / sales £):** A weighted average of the scope 1 & 2 emissions intensity of companies, defined as a company's total emissions divided by its total sales. This metric can be interpreted as a measure of the relative carbon efficiency of a fund, can be used for sovereign assets, and is not affected by movements in companies' valuation. However, it is sensitive to movements in price.

**SBTi Score:** The Science-Based Targets initiative ("SBTi") sets out a framework through which companies can set out their decarbonisation pathway and have them assessed against the goals set out in the Paris Agreement – limiting global warming to 1.5°C above pre-industrial levels or well-below 2°C. The SBTi Score is the proportion of assets invested that are classified as being Paris-aligned.

For SBTi scores, Redington use line-by-line data to calculate the proportion of assets invested that correspond to each SBTi target category in a fund/portfolio. A scheme-level score is then calculated as the value weighted average of the fund level scores.