Goldman Sachs UK Retirement Plan

Defined Benefit and Defined Contribution Sections

Task Force on Climate-Related Financial Disclosures (TCFD) Report

For period 1 Jan 2023 to 31 December 2023

July 2024

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Executive summary

The Goldman Sachs UK Retirement Plan ("the Plan") is managed by the Goldman Sachs UK Retirement Plan Pension Trustee Limited ("the Trustee"). The Plan is comprised of a Defined Benefit ("DB") Section, with assets of around £1.0bn as at the Plan's year end, 31 December 2023, and a Defined Contribution ("DC") Section, with assets of around £45m at the same date.

The DB Section was closed to future accrual from March 2016 and the membership remains immature relative to many pension schemes in the UK, with the vast majority of members being deferred pensioners. The Trustee therefore has a long-term mindset when it comes to investing the Plan's assets. The DC Section closed to future contributions from July 2017.

The Trustee recognises climate change as a risk that could impact the Plan if it is not appropriately considered. It will also present opportunities to generate the returns targeted by the Plan, for example by investing in underlying companies or assets that are expected to benefit from the energy transition.

TCFD Report

This report has been prepared to comply with the Occupational Pension Schemes (Climate Change Governance and Reporting) Regulations 2021. The report explains how the Trustee has established oversight and processes to satisfy themselves that the Plan's relevant climate-related risks and opportunities are considered appropriately by all stakeholders involved in the day-to-day management of the Plan. The sub-headings in this report address the specific disclosure requirements in the statutory guidance and which are based on the recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD).

This is the second year that this report has been produced. It is our expectation that additional detail may be included in future years as the quality and availability of data relating to climate risk improves. This report is available online at **gspensions.co.uk**.

This report considers the following four areas, which comprise the TCFD framework:

- Governance: How the Trustee maintains oversight and incorporates climate change into its decision-making;
- Strategy: How potential future climate warming scenarios could impact the Plan;
- Risk Management: How the Trustee incorporates climate–related risk into its risk management processes; and
- Metrics and Targets: How the Trustee measures and monitors progress against different climate related indicators.

A summary of the Trustee's approach to, and activities within, each of these areas is set out below.

<u>Governance</u>

The Trustee has had processes in place for a number of years, documented in its Sustainable Investment Policy (last reviewed and updated in 2023), for managing risks relating to environmental, social and governance ("ESG") considerations. Over the course of the year, the Trustee prepared its first TCFD report, and building upon the work undertaken as part of that, has put in place a framework to monitor the Plan's exposure to climate change and worked with its Fiduciary Implementation Manager to implement the Trustee's stewardship priorities, including setting out the Trustee's view that those managers should be voting in favour of resolutions consistent with achieving the Paris Agreement's goals.

<u>Strategy</u>

In order to better understand the potential impact of climate change on the Plan's funding position and on DC members' benefits, the Trustee commissioned scenario analysis in 2022. This analysis concluded that climate change does represent a potential risk to the Plan's funding position and should be monitored and managed, but that this risk does not outweigh the other risks which the Plan is exposed to, including market risks, interest rate risk and inflation risk. The Trustee recognises that while market risks are likely to dominate risk in the short-term, climate change represents a long-term risk to the funding position of the Plan.

Since the 2022 analysis the Plan's investment strategy has been de-risked, with a resulting decrease in the potential impact of climate change on the funding position.

In August 2023, the Plan's Investment Consultant carried out a review to determine whether the current DC investment strategy remained appropriate in the context of the membership and their expected retirement behaviour and needs. The review concluded that the current DC Plan's strategy remains broadly appropriate, but the Trustee agreed to implement a change to the global equity fund offered to members, to better align with the Trustee's views on sustainable investment.

Risk management

The ultimate responsibility of the Trustee is to ensure that the Plan's DB members receive their benefits in full and that the funds invested in by DC members maximise the likelihood of members achieving their desired outcome. The Trustee aims to take a balanced and proportionate approach to managing climate-related risks and opportunities and will continue to review and develop its policies in this area as the tools and data available improve.

The Trustee's primary focus at the current time is on the DB Section, reflecting the significantly greater size of this Section. The Trustee has a Sustainable Investment Policy which sets out the Trustee's policies with respect to climate change and stewardship, including its expectations with regards to how the Fiduciary Implementation Manager incorporates the Trustee's policies into the way the Plan's assets are invested. The Trustee will continue to work with the Fiduciary Implementation Manager, and other third parties involved with the Plan, to ensure that climate-related risks and opportunities are integrated into the Trustee's decision-making.

The Trustee recognises the potential impact of climate change on the DC Section members and continues to monitor the risks relating to these assets and to consider the appropriateness of potential actions, with a detailed review of the DC Section funds undertaken every three years. As part of the DC investment strategy review carried out in 2023, the Trustee agreed to switch the holdings in the equity fund to incorporate specific Environmental, Social and Governance (ESG) factors to the investment strategy, consistent with changes the manager has already made to their other funds. The change is expected to be implemented in 2024.

Metrics and targets

The Trustee uses a range of metrics to consider the Plan's exposure to risks. Having considered a range of potential metrics relating to climate change, the Trustee agreed in 2022, and has since reconfirmed, its intention to monitor and report on the following four metrics:

1. Total GHG Emissions ("tCO2e")
2. Carbon Footprint (tCO2e / $m invested)
3. Implied Temperature Rise
4. Percentage of the portfolio invested in climate-related opportunities

The Trustee has agreed to target a 50% reduction in the Plan's carbon footprint by 2030, and a 100% reduction by 2050[1] and will work with its Fiduciary Implementation Manager and Fiduciary Strategy Manager towards achieving these targets. The Trustee recognises, however, that its ability to achieve these objectives, and to limit the impact of climate change, is dependent on individuals, companies, regulators and governments working together towards these objectives.

Over the 12 months to 30 June 2023, as detailed in this report, the carbon footprint of the Plan's DB assets fell by around 3% with the primary cause of this being a reduction in the carbon footprint of listed companies. This reduction is broadly in line with the Trustee's net zero objective although the Trustee recognises that this is a short period to consider and the footprint is sensitive to a range of factors which are not fully in the Trustee, or Fiduciary Implementation Manager's control.

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[1] These targets are set relative to a base date of 30 June 2022 and include the carbon footprint from the Plan's equities, real assets and public fixed income assets

The Trustee will continue to monitor the Plan's exposures over time and to engage with its advisors to consider whether any changes are appropriate.

Over 2023 the Trustee engaged with its advisors in relation to data availability and are pleased to include in this report exposures in relation to the Plan's illiquid credit assets for the first time. The Trustee recognises that there remains room for improvement in the availability and quality of data and will continue to engage with its providers on this.

1. Governance

1.1 Trustee's oversight of climate related risks and opportunities

The Trustee holds ultimate responsibility for managing the Plan but also has a number of sub-committees with delegated decision-making powers. The Finance and Investment Committee ("the FIC") has delegated responsibilities relating to investment matters, including climate change-related considerations. The Trustee retains responsibility for setting appropriate frameworks and for key strategic decisions, such as the Plan's net zero target detailed later in this report, and delegates monitoring responsibilities to the FIC. The Trustee and FIC each met four times over the year with climate change discussed at two and three of those meetings (respectively). Those discussions considered the quality of data available, the metrics which should be monitored over time, the requirements of the DWP climate regulations and analysis of the Plan's exposure to climate-related risk.

The FIC and Trustee Board regularly receive training and have discussions around sustainable investing and climate-related risks and opportunities, with the Plan's advisers and Fiduciary Managers attending as appropriate. Ongoing training requirements are monitored as part of the Trustee's training log to ensure sufficient trustee knowledge and understanding. Over 2023 the Trustee's focus was on the preparation of its first TCFD report, including discussions at both the FIC and Trustee Board on the metrics to be adopted, and on embedding the processes agreed over 2022/23 in relation to its key ESG priorities and monitoring of climate-related exposures. The Fiduciary Implementation Manager presented to the FIC on its ESG-related activities in November 2023, with a further update in March 2024. The Fiduciary Strategy Manager also presented to the FIC in November 2023 an overview of the Plan's exposure to climate-related risks.

The Trustee's key overarching investment policies (including those in relation to climate) are detailed in the Trustee's Statement of Investment Principles (SIP) which can be found online at the following link: https://gspensions.co.uk/document-library

The Trustee has also prepared a Sustainable Investment policy for the Plan with guidance from the Investment Consultant. The aim of the policy is to set out the Trustee's beliefs around sustainable investing (including the belief that climate change is a key sustainability issue and therefore deserves ongoing focus under the Plan's strategy), provide a framework to help with the implementation of the Trustee's investment strategy by the Fiduciary Implementation Manager, and provide a basis on which to monitor the sustainability of the Plan including risks and opportunities relating to climate change. This policy document was reviewed and updated during 2023 to reflect, amongst other things, the Trustee's net zero objective and an expression of wishes which details the Trustee's desire that its investment managers vote in favour of resolutions consistent with the Paris goals.

Both the SIP and the Sustainable Investment Policy are typically reviewed by the Trustee on an annual basis. The most recent review of the SIP was undertaken in December 2023 although no changes were required.

The objectives for each of the Investment Consultant, Fiduciary Strategy Manager and the Fiduciary Implementation Manager include a requirement to take the Trustee's Sustainable Investment Policy into account in their advice and in how the Plan's portfolio is structured. The Trustee's assessment of the performance of these parties considers the consistency of the advice and portfolio composition with this policy. The Trustee also receives support from its Scheme Actuary, Fiduciary Oversight Manager, legal advisor and covenant advisor. The Trustee has reviewed the credentials of each of these parties in relation to the management of, and reporting on, climate-related risks and opportunities, and believes they have the appropriate knowledge and experience.

The Fiduciary Implementation Manager is expected to comply with, or explain any deviation from, the Trustee's Sustainable Investment Policy, understanding that elements of the policy are aspirational in nature. The Fiduciary Implementation Manager will endeavour to manage the portfolio in a manner that reflects the Trustee's beliefs. Where there may be instances or practical constraints which prevent full compliance in all, or a given circumstance, an appropriate rationale for non-compliance should be provided. The Trustee recognises that the current strategy does not yet fully reflect the Trustee's policy and full compliance may take a number of years. This is due to a number of factors including transaction costs associated with switching the portfolio, challenges in accessing quality data to accurately compare all opportunities and the need to balance sustainable investment objectives with other measures of portfolio quality (such as diversification, liquidity and fees). Where compliance is constrained by the opportunity set of investment solutions available, the Trustee expects the Fiduciary Implementation Manager to engage with the industry to see if appropriate innovative solutions can be found, and constraints overcome. In line with such innovation and drive to improve practices over time, the Trustee will continue to review the sustainable investment requirements imposed on the Fiduciary Implementation Manager by the Investment Manager Agreement (IMA).

1.2 Management's role in assessing and managing risks and opportunities

As noted above, both the Trustee Board and the FIC have specific roles in the assessment and management of climate-related risks and opportunities. The FIC is responsible for the detailed monitoring of the Plan's exposures and working with the Fiduciary Implementation Manager to ensure the Trustee's policies are implemented, while the Trustee Board receives summary information on a regular basis and retains responsibility for setting the strategic policies and framework. The FIC reviews the Plan's exposures to the agreed metrics twice a year, and the Fiduciary Implementation Manager provides the FIC with an annual detailed review of the Plan's exposure to a wide range of ESG-related risks, including climate change.

The Trustee has delegated responsibility for the selection, retention and realisation of investments to the Plan's Investment Managers, the majority of whom are overseen by the Fiduciary Implementation Manager. The Trustee has also delegated responsibility for the stewardship of the Plan's assets (including the exercising of voting rights attaching to investments) to the Investment Managers, with an "expression of wishes" which set out the Trustee's expectations of the Plan's investment managers, focusing on a small number of issues which the Trustee believes to be most important, which will enable better analysis of the actual practices of those managers. However, the Trustee and Fiduciary Implementation Manager recognise that an investment's long-term financial success is influenced by a range of financially material factors including climate change-related issues. The degree to which these factors are relevant to any given investment is a function of time horizon, investment style, philosophy and exposures which the Fiduciary Implementation Manager considers in the assessment.

Whilst noting there may be limitations for each Investment Manager and asset strategy, the Fiduciary Implementation Manager expects the Plan's Investment Managers to have ESG processes that align with the investment risk and return characteristics of the strategy. Details of the Fiduciary Implementation Manager's selection and ongoing due diligence process in relation to ESG are included in section "3. Risk Management".

2. Strategy

2.1 Identification and assessment of climate-related risks and opportunities relevant to the Plans

The Trustee considers climate-related risks and opportunities and their potential implications on the Plan's investment and funding strategy over the short term, medium term, and long term. The consideration of these factors is incorporated throughout the investment process, from strategic asset allocation to manager selection and portfolio monitoring.

The Trustee acknowledges that each of the Plan's investments is exposed to climate-related risks to varying extents, and has identified two specific risks which could impact the Plan's investment and funding strategy:

- Physical risks i.e. the risk that asset values may decline, or that members' life expectancies may worsen, as a result of changes in the climate; and
- Transition risks i.e. the risk that asset values may decline, or that members' life expectancies may worsen, because of changes in climate policies, or changes in the underlying economy due to decarbonization.

The Fiduciary Implementation Manager is also currently exploring investment opportunities which are both appropriate for the Plan from an investment perspective and aligned with the Trustee's Sustainable Investment Policy. These include, for example, infrastructure strategies which invest in companies which are committed to the energy transition. The Fiduciary Implementation Manager believes that investing in such opportunities can be positive from a traditional risk/return perspective and are therefore consistent with its fiduciary responsibility.

Short, medium and long-term risks

The Trustee and the Fiduciary Implementation Manager, as the party responsible for decisions on mandates and chosen investment managers, consider climate-related risks over the short, medium and long-term (with base year being 2022 when the first TCFD report was published). These timescales are chosen to align with the Plan's triennial valuation timescale and the Trustee's carbon footprint reduction targets, as detailed later in this report.

Time Horizon (relative to 2022 base date)	Expected climate-related risks and Fiduciary Implementation Manager actions
Short (3-7 years)	Transition risks are expected to impact the Plan first, for example: - Introduction and/or fluctuations in carbon prices - Policy/regulatory changes - Changes in consumer behaviour The Fiduciary Implementation Manager will be focused on engagements with underlying Investment Managers to ensure they understand which companies, of those currently held, contribute most to climate transition risk (for example if a company holds a large amount of stranded assets). It will also be important to ensure that the Investment Managers are taking the necessary steps to reduce their exposure to climate risk by setting up transition plans to move to a low carbon business strategy.
Medium (8-10 years)	The medium-term time horizon aligns with the industry decarbonisation targets in order to support the goals of the Paris Alignment. The Fiduciary Implementation Manager is expected to use a combination of engagement, investing in climate change aligned mandates (such as investing in climate-focussed equity strategies) and impact investing in order to help the Trustee achieve its interim target of a 50% reduction in the Plan's Carbon Footprint (more details in section 4. "Metrics and Target" below).

Long (10+ years)	The Trustee is focused on the long-term performance of the Plan's assets, looking at the potential impact of climate change beyond the next 10 years. Consistent with this view the Trustee has set a net zero objective to be achieved by 2050, a time horizon consistent with the 2050 timescale referenced in the Paris Agreement. The Trustee expects physical risks to become an increasingly large part of climate risk over the longer term. For example, the following could impact the portfolio: • Extreme weather events • Sea level rises • Food price inflation • Population migration Physical risk is currently harder to assess than transition risk. The Fiduciary Implementation Manager expects to consider physical risks as part of future TCFD reports as data availability, particularly in relation to the Plan's private assets, improves. In the shorter term, engagement with the Plan's Investment Managers will include ensuring they understand the physical risks associated with the Plan's assets.

In addition to the risks set out above, the Trustee believes that there are potential investment **opportunities** arising from climate change, including:

- Finance required for transition will open opportunities in the investing and lending space.
- The impact of climate will be varied across industries and companies, which may open opportunities for active management or tilted passive strategies.

The decisions over how best to capitalise on these, or other, opportunities are delegated to the Fiduciary Strategy Manager and Fiduciary Implementation Manager.

2.2 Describe the resilience of the organisation's strategy, taking into consideration different climate related scenarios including a 2°C scenario

In 2022 the Trustee carried out climate change scenario analysis in partnership with its Investment Consultant and Scheme Actuary.

The aim of this analysis was to assess the possible short, medium and long-term impacts of climate change on the Plan's assets and liabilities. For the purpose of this analysis, four scenarios were considered, and these are summarised in Appendix 1. The Trustee believes that the scenarios represent useful stress tests for the Plan. These stress tests are in line with the Investment Consultant's core climate scenarios and thus, linked to regular strategy analysis conducted in respect of the Plan. The Trustee is aware of the limitations of the climate scenario analysis, such as the reliance on third parties for the maintenance of accurate data, validation of assumptions, and the information available at the date of the analysis.

The Trustee considered whether to undertake updated scenario analysis and determined that this was not required. These discussions noted that the changes to the investment strategy over the year would reduce the Plan's exposure to climate change and would not be material to the Trustee's decision-making. The Trustee recognised that there are concerns that the scenarios used by many investors may not capture the potential severity of climate scenarios and will work with the Fiduciary Strategy Manager to consider how best to address this for future analysis.

The Trustee's scenario analysis undertaken in 2022 concluded that returns on the Plan's assets could be around 0.1% to 0.4% pa lower over the next 15 years as a result of climate change in the scenarios considered. In each case the Plan's funding level on the Trustee's low risk measure was still expected to be above 100% after the 15 year projection period allowing for the potential for lower asset returns. The worst projected outcomes for the Plan over this period resulted from scenarios where policymakers took action relatively late in the projection period with more significant actions having to be taken as a result of the delays.

From an asset perspective, the likely implications for the Plan over the short, medium and long term are summarised below:

- Short term – the potential for a sudden repricing of transition risk in markets
- Medium term – Climate change may act as a headwind to returns resulting in a delay in the expected timescale to reach full funding
- Long term – There may be physical risks to the Plan's equity, corporate bond and real assets.

It was also recognised that there is the potential for climate change to directly impact members' health, with reductions in life expectancies possible in scenarios with increased (planet) temperature. Both the level and timing of any impact on life expectancies is unclear.

The Trustee is comfortable that the risks being run by the Plan are supportable by the Sponsor, after considering the potential impact on the Sponsor's profitability in those scenarios.

The Trustee's overall conclusion is that there is a risk to the Plan's funding position from climate change but that this does not outweigh the other risks which the Plan is exposed to including market risks, interest rate risk, liquidity risk and inflation risk. The Trustee recognises that while market risks are likely to dominate risk in the short-term, climate change represents a long-term risk to the funding position of the Plan. The Trustee also believes that the sponsor covenant will remain robust to the scenarios considered and able to support the Plan if the downside events considered were to transpire. Further work will be undertaken with the Plan's covenant advisor as part of the December 2024 triennial funding valuation to better understand the sponsor's exposure to climate change.

3. Risk management

3.1 Processes for identifying and assessing climate risks

The Trustee recognises climate change as a cross-cutting risk for the Plan, in that other risks may be accentuated by the effects of climate change, and that there is an increasingly stronger link between climate risks and the future profile of investment risks and returns.

The Trustee's overall process is for the FIC to review climate risk reporting and to provide reports back to the Trustee board on an ongoing basis. This includes regular reviews of the Plan's risk register and Integrated Risk Management framework.

The Trustee has also asked to receive, twice a year, additional climate-related reporting from its Fiduciary Implementation Manager. This reporting contains relevant climate metrics as set out under the Department for Work and Pensions' (DWP's) adoption of the recommendations of the TCFD (and as further discussed under section 4. "Metrics and Targets"). This allows the Trustee to better identify and manage the climate-related risks which are relevant to the Plan on an ongoing basis.

The Trustee monitors the carbon emissions profile of the portfolio using a range of metrics including total GHG emissions and carbon footprint and the alignment of the portfolio with the Paris Agreement's objective of limiting temperature rises to well below 2^{o}C above pre-industrial levels. In addition to this, the Trustee has also undertaken scenario analysis to understand the potential impact of climate change on the Plan's projected financial position, considering both assets and liabilities.

3.2 Risk management process

In order to manage climate-related risks, the Trustee has adopted an internal control and risk management process. The process aims to identify, measure, monitor and manage the main climate risks the Plan has exposure to. Climate risk is managed according to the nature, duration, magnitude, and time horizon of the risk itself. The Trustee has a Sustainable Investment Policy document setting out its approach, with the implementation of this delegated to the Fiduciary Implementation Manager.

For all appointed investment managers, the evaluation of ESG risk management, which includes climate-related risks, is an explicit part of both the selection process and continued due diligence and monitoring undertaken by the Fiduciary Implementation Manager.

All the Plan's Investment Managers receive an ESG rating, which is determined and reviewed by the Fiduciary Implementation Manager's Research team as part of the ongoing due diligence. In appointing and retaining any investment manager, the Research team's due diligence process includes a dedicated annual ESG questionnaire and stewardship survey and assesses engagement at both the firm and strategy levels. The questionnaire has a section dedicated to Stewardship & Engagement; questions include detail on stewardship process, tangible examples, collaborative engagement, ESG areas of focus, reporting, voting guidelines and examples, and policies. The ESG questionnaire tracks a manager's involvement in sustainable initiatives such as the Climate Action 100+, and additionally tracks firm-level and strategy-level exclusion policies, which include environmentally oriented areas including oil sands and thermal coal, and whether strategies have carbon related exclusions or targets.

The Research team of the Fiduciary Implementation Manager uses the following framework to integrate ESG into the regular manager selection process. The framework may consider asset class-specific nuances but will be largely focused on the following factors:

- Firm Ethos: The extent to which the firm is committed to ESG and incorporates sustainable practices into the management of its business.
- Investment Philosophy: The degree to which ESG is viewed as a material driver of risk and returns.
- Investment Process: The degree to which ESG-related factors are formally incorporated into the investment process with the objective of enhancing risk-adjusted returns.
- Upskilling Human Capital: The depth, breadth, and organisation of the team incorporating ESG; the level and use of other / external resources.

- Engagement: The level and type of engagement with portfolio companies on ESG; ability to add value post investment and degree to which this is reflected in outcomes.

The Fiduciary Implementation Manager has a suite of tools that enables portfolio analysis to identify a broad range of ESG risks, including climate risk, conduct, and historical controversies. The investment relevant insights from these tools from an investment perspective can be used to engage managers and improve monitoring. The Fiduciary Implementation Manager considers the managers' stewardship and ESG polices relative to both its own and the Trustee's Sustainable Investment Policy.

The FIC also reviews the ESG ratings of the investment managers, with the Fiduciary Implementation Manager highlighting any changes.

The Trustee believes that engagement with the Plan's Investment Managers is one of the main ways in which the Trustee is able to manage climate-related risks and opportunities. This engagement is carried out on behalf of the Plan by the Fiduciary Implementation Manager, based on the Trustee's beliefs and policies as documented in the Trustee's Sustainable Investment Policy.

For example, the Fiduciary Implementation Manager's Research team:

- Engages with Investment Managers to discuss the implementation of responsible business practices and the disclosure of critical ESG issues as it relates to underlying investments.

- Seeks to invest with managers that provide high-quality reporting and full transparency on the ESG characteristics of their strategies.

- Looks to understand how the Trustee's focus areas of alignment with the Paris Agreement and board diversity is incorporated into the managers' voting and engagement policies.

The Plan's equity and real asset investments come with voting rights covering the underlying invested companies. The Trustee expects their Investment Managers to actively vote wherever possible and has also provided the Fiduciary Implementation Manager with an expression of wishes, detailing that the Trustee expects its managers to vote in favour of resolutions which are consistent with the goals of the Paris Agreement. Generally, Investment Managers are responsible for exercising votes on the Trustee's behalf. The Trustee reviews the significant votes (as determined by the Investment Manager) made on their behalf as part of the annual Implementation Statement and expect the underlying Investment Managers to consider climate risk in their responses.

3.3 Integration of climate into the overall risk management framework of the Plan

The Trustee recognises the impact which climate change could have on a wide range of areas affecting the Plan's financial position, including the returns which will be achieved on the Plan's assets, the health (and therefore life expectancy) of the Plan's members and the strength of the Sponsor. The Trustee believes scenario analysis to be an important part of its approach to assessing the potential risks to the Plan and undertook this analysis (see Appendix 1) during 2022.

The Trustee also reviewed and updated its risk register, Integrated Risk Management Plan and Sustainable Investment Policy to ensure that these reflect the Trustee's intended approach to managing the potential risks relating to climate change. This risk is also listed in the Plan's Statement of Investment Principles ("SIP") as a significant financial risk.

As noted earlier in this report the Fiduciary Implementation Manager and the Fiduciary Strategy Manager are expected to incorporate climate-related risks into the investment of the Plan's assets. The Trustee has also implemented a process to monitor the Plan's exposures going forward.

Stewardship

One of the other risk and opportunity assessment tools the Trustee uses is stewardship. As mentioned in other parts of the report, this is a key way in which the Trustee can influence the actions of companies and broader industry. This, in turn, is expected to mitigate the climate risk the Plan is exposed to and enhance the potential opportunities available as part of the transition.

In addition to the actions covered in the previous sections, over the Plan Year the Trustee has, through its Fiduciary Implementation Manager, communicated to the Plan's managers the Trustee's views on key areas of focus, namely:

- Climate change, where the Trustee expects a high level of support for votes requiring greater disclosure or setting a business transition strategy consistent with the Paris Agreement
- Board diversity, where managers are expected to use votes and engagement activities to encourage the improvement of diversity within a board.

The Plan's Investment Managers have been asked, going forward, to provide further detail on their voting and engagement activities relating to these areas in particular, and this will be accounted for in future Implementation Statement reports.

4. Metrics and Targets

4.1 Metrics used by the Trustee to assess climate-related risks and opportunities in line with its strategy and risk management process

The Trustee has agreed to report on the following metrics:

Metric	Definition	Rationale
Total GHG Emissions ("tC02e")	A measure of greenhouse gas emissions attributable to the Plan.	Required by the regulator.
Carbon Footprint (tCO2e / $m invested)	A measure of how many tonnes of CO2 (and other greenhouse gas) emissions are emitted per $m invested.	By adjusting the Plan's absolute emissions to reflect the size of assets invested it provides a simple comparable measure across portfolios
Implied Temperature Rise	A forward-looking measure of the extent to which a portfolio is aligned with the Paris Agreement target of restricting global warming to well below 2 degrees Celsius	Whilst recognising that the approach used for this metric continues to evolve the Trustee believes that it provides the most appropriate indication of the level of alignment to the Paris agreement.
Percentage of the portfolio invested in climate-related opportunities	A measure of the portfolio's exposure to the investments which are the most likely to benefit from transition to a low carbon economy.	The Trustee wishes to encourage the Fiduciary Implementation Manager to seek opportunities to manage the Plan's risk, and add to returns, from the climate transition and this measure forms part of its monitoring programme.

The Trustee recognises that the availability and quality of data, and metrics, is improving and will continue to review the appropriateness of the metrics monitored and seek to improve their robustness.

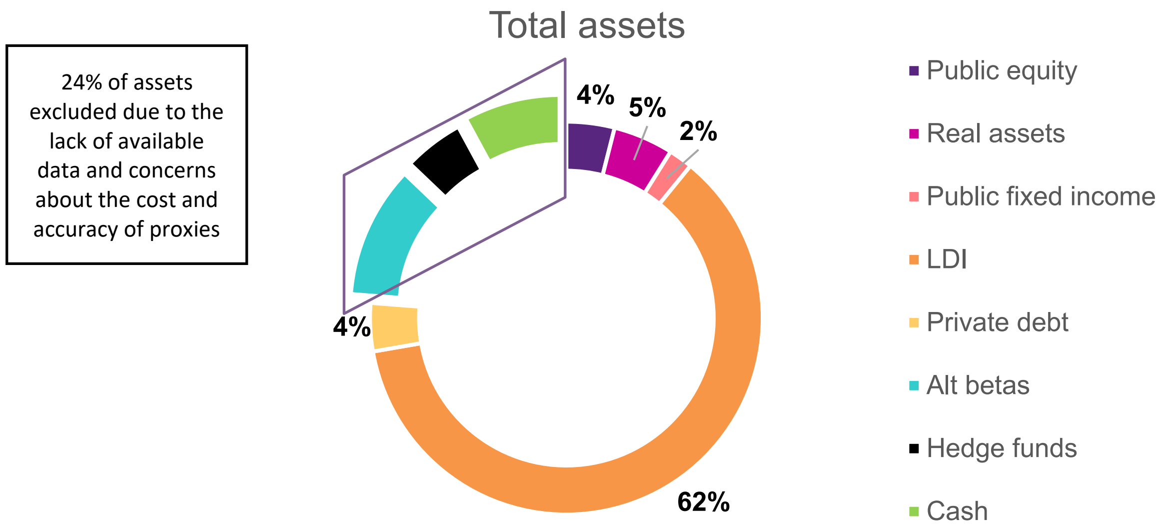
4.2 Scope 1 and Scope 2 greenhouse gas (GHG) emissions and the related risks

In quantifying the Plan's exposures to the metrics above the Trustee has considered cost, the quality and accuracy of the data available and views of others in the industry. For this report the Trustee has focussed on the Plan's equity, listed real asset and fixed income holdings, and has included both scope 1 and scope 2 emissions. These assets comprised around 10% of total Plan assets as at 30 June 2023. Data on the exposure of the Plan's LDI holdings (around 60% of assets as at 30 June 2023) and illiquid credit assets (around 10% of assets as at 30 June 2023) are also included although the Trustee recognises that the methodology in respect of the carbon exposure of these assets is continuing to evolve and, based on the methodology used for LDI assets, results in some double- counting of carbon exposure. These figures are therefore considered separately to the other assets.

The data provided in this report is based on the Plan's investments as at 30 June 2023, with the figures as at 30 June 2022 also shown for comparison purposes.

Due to the nature of the emissions, Scope 3 emissions are significantly more difficult to calculate than Scope 1 or Scope 2 emissions for any given entity. It is also the case that, for some assets, even Scope 1 and Scope 2 emissions are difficult to calculate. The Trustee has included Scope 1, 2 and 3 emissions within this report. Scope 1 and 2 emissions are reported separately to Scope 3 emissions given their differences in data quality and application. Further detail on the Trustee's views in relation to scope 3 emissions data is set out below.

The following chart sets out the asset classes included and excluded in this report as at 30 June 2023:

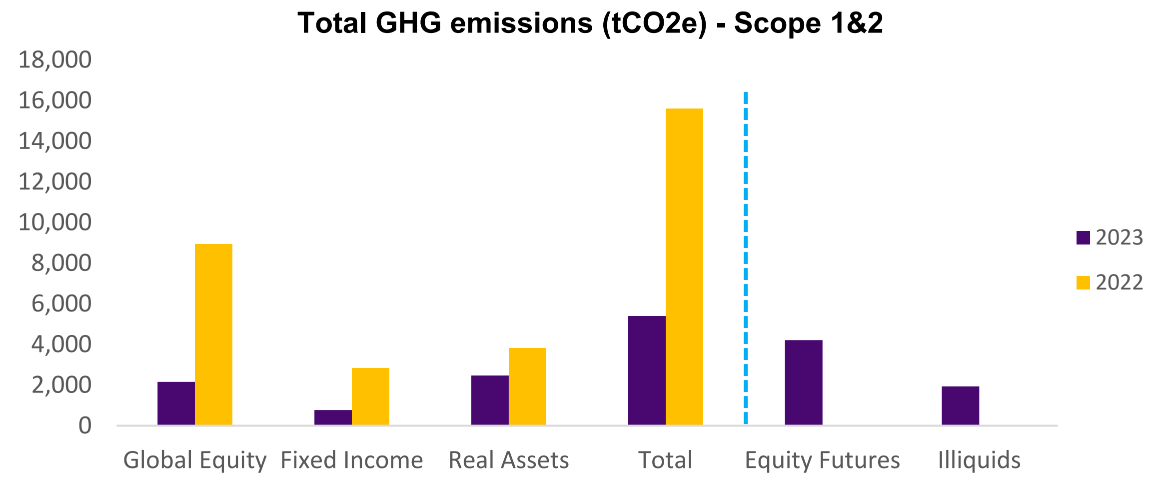


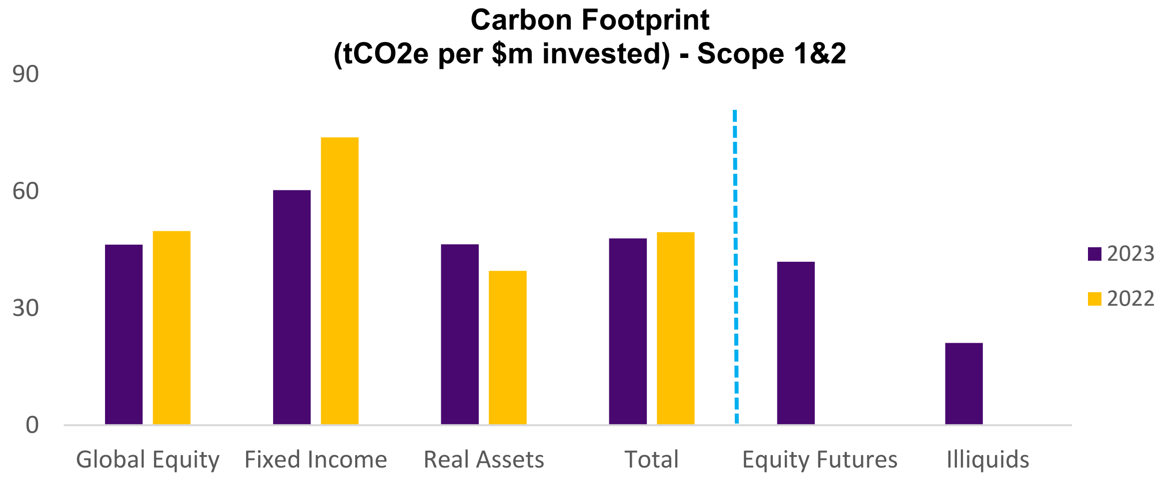
Equities, Real assets and Public fixed income[1,2]

For the four metrics chosen by the Trustee, the charts below set out the exposure to climate-related risk from the Plan's equities, real assets and public fixed income as at 30 June 2023.

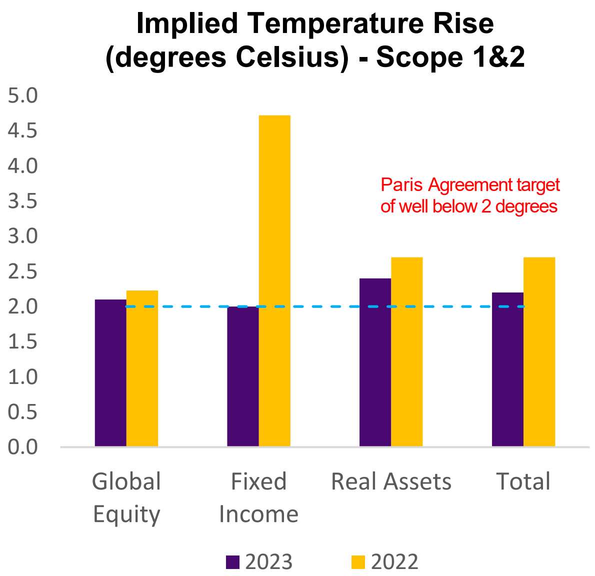
The Trustee has, for the first time this year, included exposure data in relation to the Plan' s illiquid assets (covering two of the five funds currently invested in, based on the data available). This data has been quoted separately to the rest of the Plan's assets both to allow better comparison of data relative to the previous year's position but also recognising that this data is inherently more approximate due to the nature of the asset class.

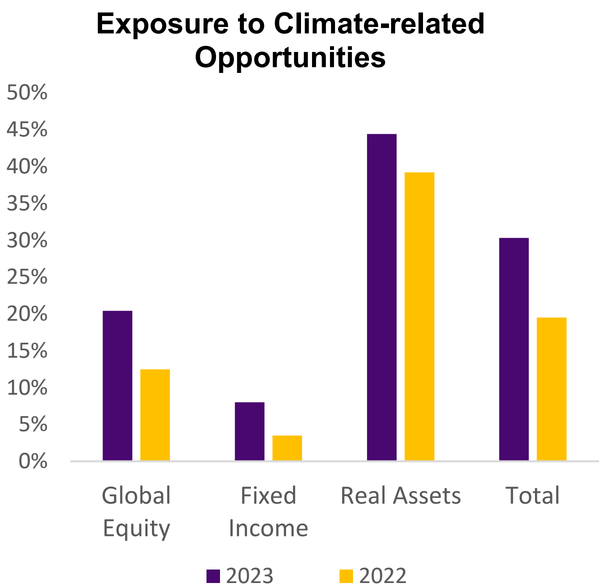
The Trustee has also included information on the carbon emissions of equity futures positions held in the Plan as at 30 June 2023. The Plan's Growth assets (and equity in particular) portfolio was in transition as at 30 June 2023 with a material exposure to equity futures held to ensure that the Plan had an appropriate exposure to equity markets at that time, while the portfolio changes were being implemented. The Trustee has therefore included these figures to allow for better comparison with the previous year's figures. Whilst the equities referenced by the futures were not directly held, the Trustee notes that, if they had been held in physical equities, the Plan's "total" carbon footprint reported below would have fallen from 48 (tCO2e per $m invested) to 45, as at 30 June 2023.





*The total emissions and carbon footprint do not include the exposure from equity futures and illiquid assets





Total emissions from these assets have fallen sharply over the year due to a combination of derisking of the investment strategy, moving from return-seeking assets (and equities in particular) into lower risk UK Government bonds. In addition, over 2023 the Trustee held a significant proportion of the Plan's equities in the form of equity futures, the exposure for which is not included in these numbers.

Carbon footprint is less affected by the changes above because it is adjusted for the size of the allocation. The Plan's carbon footprint has also fallen by around 3% over the year with the primary cause of this being a reduction in the carbon footprint of listed companies.

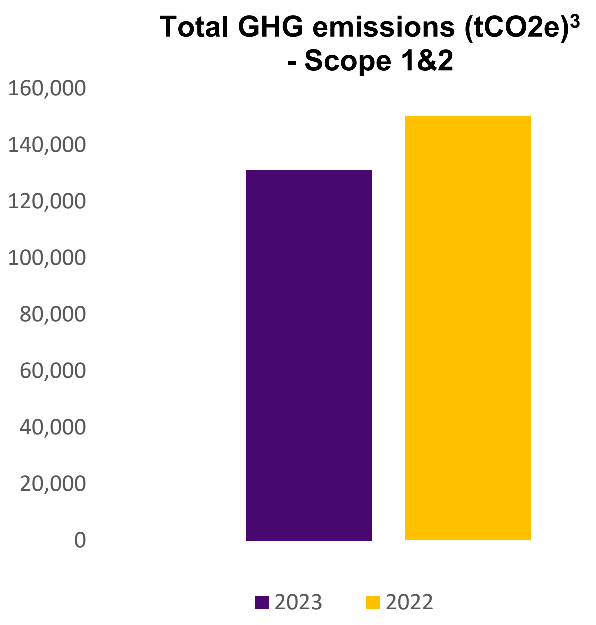
The Plan's exposure to climate-related opportunities increased over the past year, mainly due to an increased allocation to the Real Assets portfolio in 2023, which traditionally has a larger exposure to climate solutions. Additionally, the Global Equity portfolio also saw a notable increase in exposure to climate solutions, although its overall weight in the total portfolio has reduced compared to the previous year.

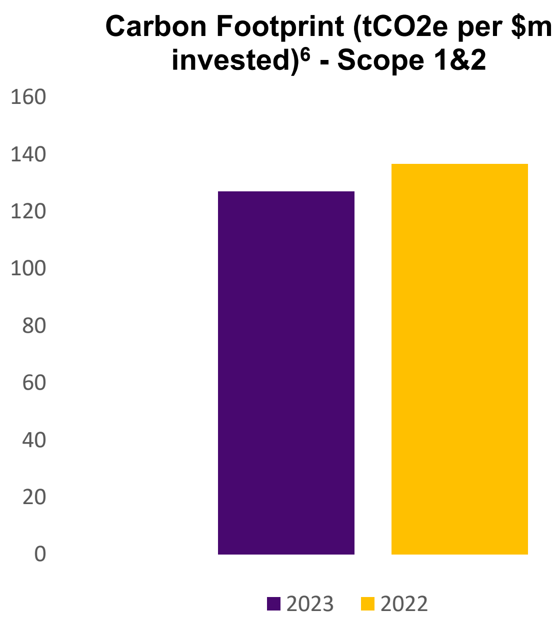
The reduction in the Plan's implied temperature rise over 2023 could be largely attributed to the exclusion of an emerging market debt mandate with very poor emissions coverage from the 2023 data. Furthermore, contributions from the equity and real asset portfolios were lower in the most recent year.

Metrics in respect of LDI assets[1,2]

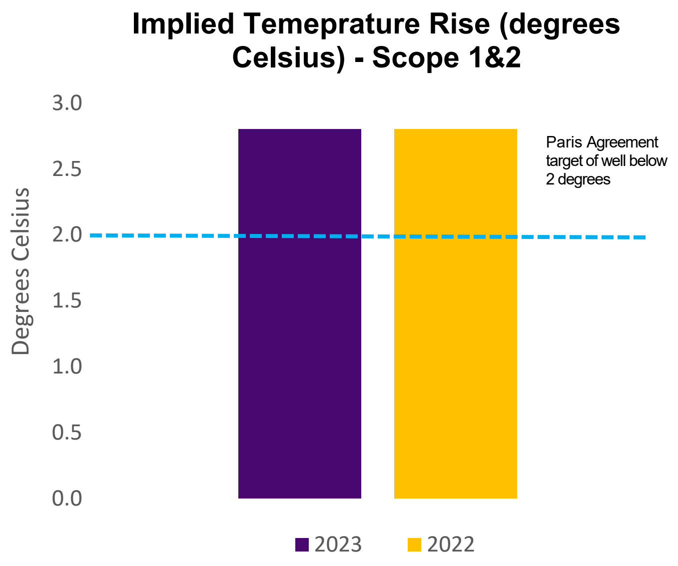
The chart below sets out the exposure to climate-related risk from the Plan's LDI holdings (around 61% of assets), as at 30 June 2023, for the Metrics chosen by the Trustee. While included, the Trustee recognises that the methodology in respect of the carbon exposure of these assets is continuing to evolve and, based on the methodology used, results in some double- counting of carbon exposure which is why these figures are quoted separately.

The total emissions and carbon footprint of the Plan's LDI portfolio have both fallen using the methodology adopted.





Implied Temperature Rise (degrees Celsius)[3,5]



Notes

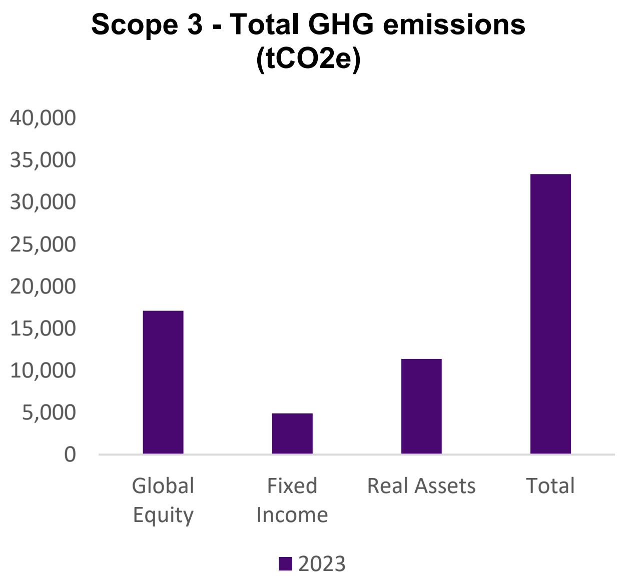
1. Data provided by Fiduciary Implementation Manager based on MSCI data and information on underlying Investment Manager holdings
2. Data is based on the Plan's exposures and MSCI information as 30 June 2023
3. Emissions are calculated as the metric tonnes of CO2 and equivalents for the United Kingdom multiplied by the value of gilts in the portfolio and divided by the total value of public debt. The value of the Plan's gilts is based on the value of index linked gilts and conventional gilts owned by the Plan as at 30 June 2023 including those posted out as collateral and gilts funded using repo
4. Metric tonnes of CO2 and equivalents per public debt USD million
5. This is the sovereign temperature alignment data from MSCI
6. The 2022 value for this metric has been restated following the availability of more up to date information

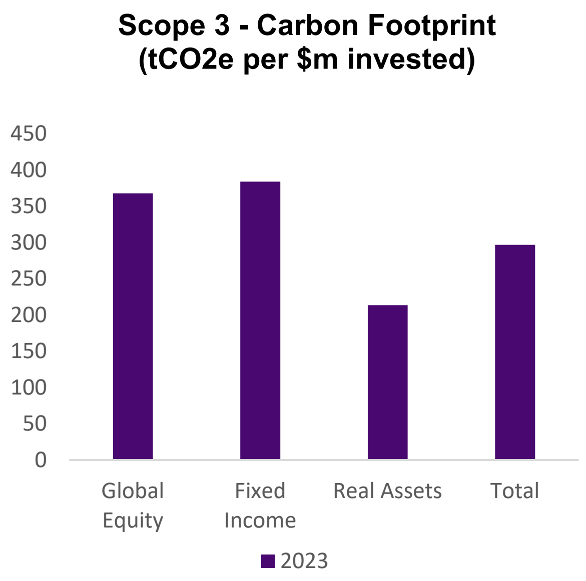
The Trustee's view on approaching scope 3 emissions

Scope 3 emissions data is important to help build a better picture as we decarbonise our portfolios. However, the Trustee believes that current reported scope 3 emissions data is largely inadequate for purposes including making accurate climate-informed investment decisions. Further, given data issues, the Trustee believes that disclosing the scope 3 emissions of investment portfolios at this stage will be limited in coverage, subject to large estimation errors, and not fit for meaningful comparison between investors or over time.

Data providers, like MSCI, have tried to solve for this problem by providing scope 3 datasets using proprietary models and internally vetted methodologies. However, current solutions rely significantly on top-down sector emissions data with limited use of bottom-up data (which is company-specific). Models that rely on sector information limit users' ability to distinguish companies from peers. While there is sizable support from the investment industry and others for better disclosures, there continues to be considerable doubt around the reliability of scope 3 data available.

Given these considerations, the Trustee believes any scope 3 emissions disclosures should be disaggregated from Scope 1 and 2 emissions. The charts below set out, separately, the exposure to Scope 3 carbon emissions and carbon footprint from the Plan's equities, real assets and public fixed income as at 30 June 2023.





4.3 Targets used by the Trustee to manage climate-related risks and opportunities and performance against target.

The Trustee recognises that measurement of progress of the Plan and the whole investment industry in stewarding the transition to a net zero and climate-resilient economy is an important issue. There is no single definitive metric that can be used to adequately measure progress as climate is a multi-dimensional issue, and the data and analytics in this space are rapidly evolving. In line with the regulations, the Trustee has set a target of reducing its Carbon Footprint metric by 50% by 2030 with a 100% reduction by 2050, relative to a 30 June 2022 baseline position. The Trustee will work with its Fiduciary Implementation Manager and Fiduciary Strategy Manager to achieve these objectives but recognises that its ability to reduce the Plan's carbon footprint in this way will be dependent upon the actions of other investors, companies, regulators, governments and individuals.

It is acknowledged in the industry that there are several difficulties associated with measuring progress against a carbon footprint goal, such as data quality, backdating of metric information and the fact that changes in the metric are often driven largely by noise (e.g. a company value changing) rather than reductions in real world emissions. The Trustee therefore measures success by monitoring change in multiple metrics and also by reviewing the actual actions taken by the Trustee board and the third parties that it collaborates with.

Medium Term Target

50% reduction in GHG footprint of the Group's portfolio of assets (excluding government bonds) by 30 June 2030 (Scope 1 & 2 emissions) from 30 June 2022

Long Term Target

Net-zero GHG footprint of the Group's portfolio of assets (excluding government bonds) by 2050 or sooner (Scope 1 & 2 emissions) from 30 June 2022

Over the year the Carbon Footprint of the Plan's DB assets fell by around 3%, which is broadly in line with the long-term net zero objective of the Trustee, although this represents a very short time period and, given the fact that the Plan's portfolio was in transition as at 30 June 2023 no firm conclusions can be drawn at this stage. The Trustee will continue to monitor this over the coming years.

Over time, the Trustee expects that the longer-term trend of the Plan's carbon footprint will continue downwards, towards the Trustee's net-zero target. The Trustee, however, also recognises that there may be short term deviations in some years. This could be due to changes in underlying holdings and ongoing developments within the industry (such as data availability and methodology changes). The Trustee also recognises that a key driver of change will be the actions of governments, consumers and corporates and while the Trustee will do what it can to ensure the objective is achieved, there is reliance placed on the actions of others.

4.4 Going forward

The Trustee will review the target that has been set to consider whether it remains fit for purpose and to take account of some of the limitations referred to above. As mentioned, the target aside, the Trustee continues to focus on taking appropriate actions to manage the risks and opportunities and to monitor a range of climate metrics in line with the belief that climate change will have a material impact on financial outcomes in the future.

The Trustee is continuing to monitor the evolving climate measurement landscape with the expectation that the robustness of the metrics will improve over time. The Trustee looks forward to sharing updates on their progress in monitoring and managing climate risks and opportunities next year.

5. DC Section

The DC Section is administered by the Phoenix Group and assets are invested in a number of different funds. A default lifestyle is provided for members, who also have the option to invest in a different manner should they wish. As at 30 June 2023 around £39.2m was invested in Global Equity (UK Bias) fund, representing around 92% of the total DC Section assets at that date. This fund is part of the default lifestyle available to members. Recognising that the significant majority of the DC Section's assets are invested in this fund the Trustee has focused on this fund for the purposes of this report.

The Trustee delegates responsibility for the monitoring of performance and the assessment of risks, including climate-related risks and opportunities to the FIC. Where appropriate, the FIC makes recommendations to the Trustee Board on changes to be made and provides summary information. The FIC receives advice relating to the DC Section from the Investment Consultant.

The FIC reviews the funds available to members, and the default lifestyle option, at least every three years. This review takes account of a range of factors including the suitability of the default, expected returns, the range of options open to members and the risks relating to each fund, including climate-related risks. The last such review was completed in 2023. This review concluded that it would be appropriate to transition the equity holdings to a fund with an ESG tilt. Whilst this fund is expected to take climate risk into consideration in the holdings, there are also a number of other ESG areas taken into account. This change is expected to be implemented over 2024.

When considering risks the Trustee considers short, medium and long-term risks. The timescales considered are consistent with those outlined earlier in this report (Section 2.1). In terms of the risks facing members:

- short-term – the impact of the transition-related risks over this period are of most concern for older members with larger investment pots, in particular those who have not switched their funds to less risky investment strategies

- medium-term – these risks are of most relevant for members in mid-career

- long-term – these risks are of most relevance to members in the early stages of their career with a long-term time horizon to retirement. These members will be exposed to long-run physical costs resulting from a failure to address climate change appropriately

The Global Equity (UK Bias) fund is an index-tracking fund, which limits the ability of the manager to differentiate between companies based on their climate-related risks. The choice of an index-tracking fund, however, balances the other objectives of the investment including cost management and target returns. Actions taken to manage climate-related risks are focused on engagement and the Trustee considers the investment manager's approach to engagement as part of its reviews of the fund choices.

A key part of the Trustee's assessment of the impact of climate change on the DC Section assets is the use of scenario analysis. For the DC Section, the scenario analysis needs to be carried out on any "popular" arrangement, defined as any fund of strategy holding at least £100m of the Plan's DC assets or 10% of the total DC assets. The Trustee commissioned scenario analysis from its Investment Consultant over 2022 which, for the DC analysis, focused on two different aspects:

1. The impact climate change could have on the expected pot size at retirement for two example members who are invested in the default Annuity Lifestyle strategy; and
2. The potential income loss from a 1-in-20 shock to pension pot values.

The analysis, using the scenarios described in Appendix 1, suggested that expected returns on the Global Equity (UK Bias) fund might fall by between 0.3% and 0.7% pa relative to the base case over the next 15 years. As the Plan's DC default Annuity Lifestyle strategy is equity-focused, members were assumed to be worse off in each of the scenarios considered.

Younger members were naturally more exposed than older members under these assumptions, to all scenarios, due to longer holding periods and the physical risks that are incurred further into the future. Older members, however, are exposed to climate change costs if they were to materialise as a "shock" in a single year.

The Trustee is comfortable that an update wasn't needed this year as there has been no material change in investment strategy, the availability of scenarios or data availability.

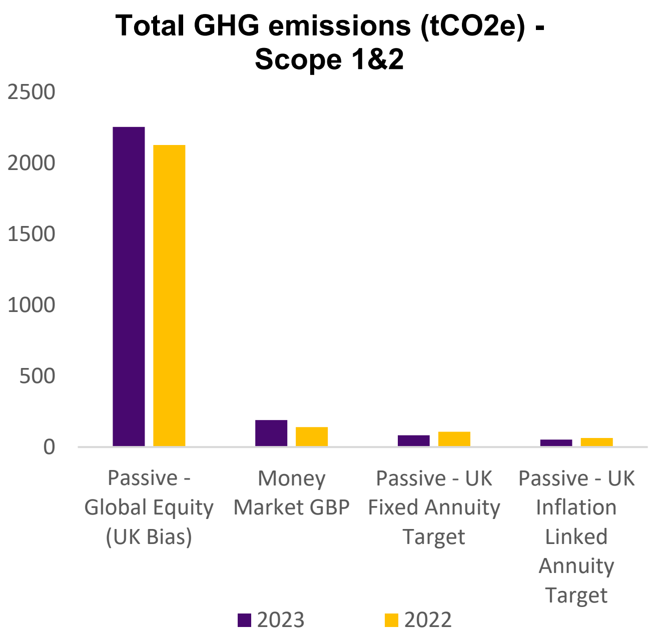
Metrics

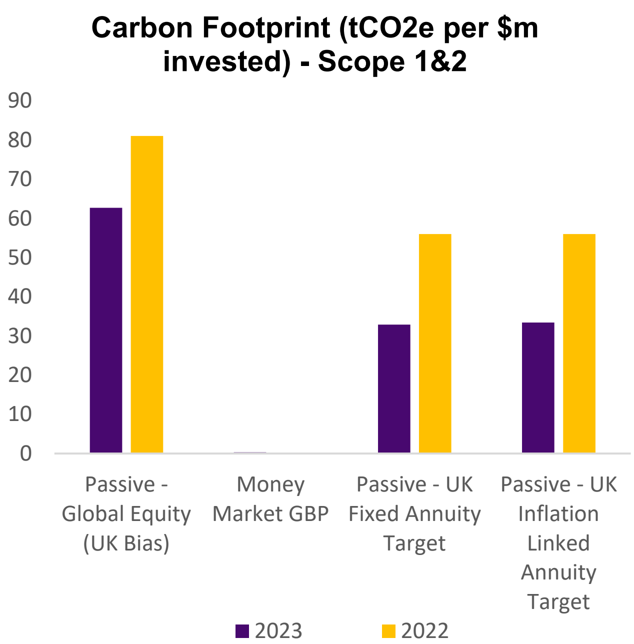
The DC metrics have been provided by the DC provider, Phoenix, the manager (LGIM) and the Fiduciary Strategy Manager.

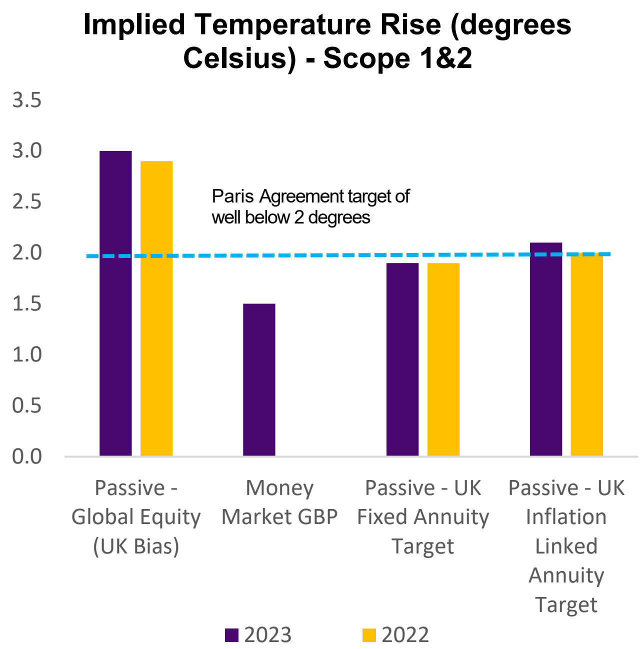
The Trustee has set a carbon footprint reduction target for the Global Equity (UK Bias) Fund in line with that for the DB Section, namely a 50% reduction by 2030 and a 100% reduction by 2050, both measured relative to the position as at 30 June 2022. The index-tracking nature of this fund is such that the Trustee recognises that the achievement of these carbon footprint reduction objectives will be heavily dependent upon the actions of the underlying companies.

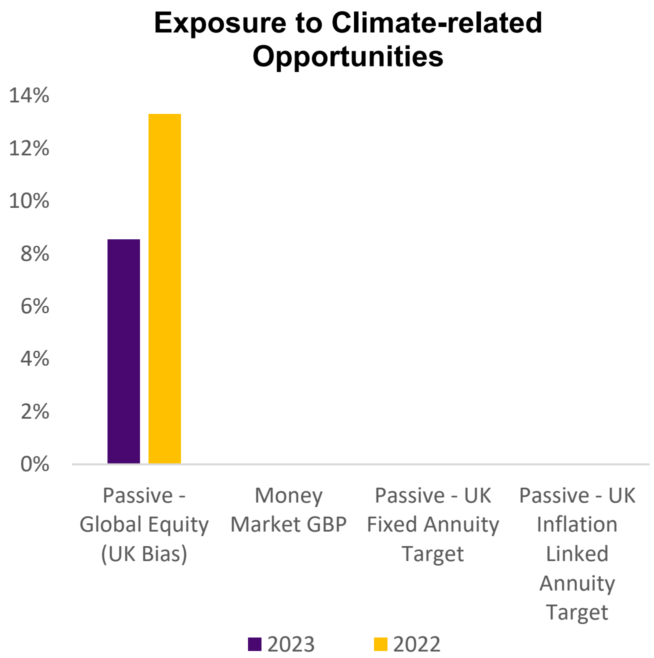
Total greenhouse gas emissions increased slightly over the year due in part to data being lagged and the impact of the COVID pandemic on economic activity levels. The Trustee would hope to see it fall over the longer term. The Plan's carbon footprint fell by around 22% over the year with the primary cause of this being an increase in the value of the equities in the fund. The Trustee notes that these figures are sensitive to a wide range of factors, and therefore assesses the portfolio on a range of metrics.

A change has been made to the methodology underlying one of the metrics for these DC assets, the percentage of climate-related opportunities in the assets. The calculation methodology used for 2023 now incorporates a "good governance" screen within the requirements, which is a more challenging target for companies to meet. This change has decreased the percentage of the fund which is counted towards the total climate-related opportunities for the equity fund, and accounts for most of the difference we have seen over the year for this metric. The Trustee notes that the methodology for climate-related statistics continue to be reviewed and developed and are subject to change in future years.



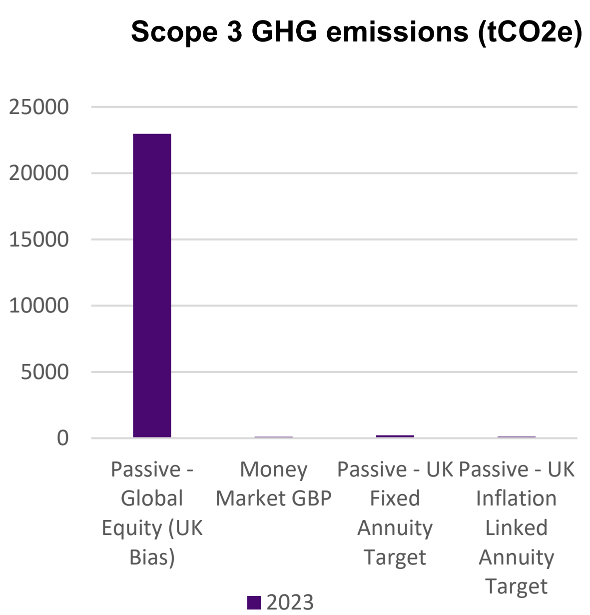


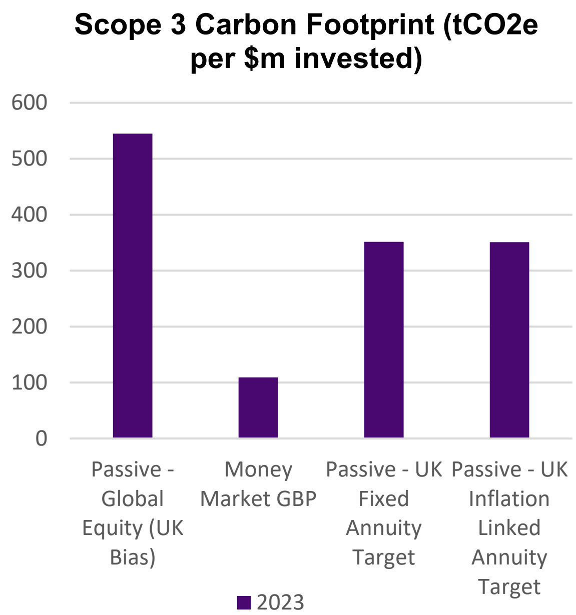




Scope 3

The charts below set out the exposure to Scope 3 carbon emissions and carbon footprint from the Plan's DC assets as at 30 June 2023. The Trustee's view on the use of scope 3 emissions is set out earlier in this report.





Notes

1) Data provided by DC Provider (Phoenix), except for 'Carbon Footprint (tCO2e per $m invested)' which was taken from LGIM's ESG reports and 'Exposure to Climate-related Opportunities', which was calculated using the Fiduciary Strategy Manager's Sustainable Investment tool.
2) The 'Carbon Footprint (tCO2e per $m invested)' metric excludes emissions in respect of bonds issued by sovereigns (primarily UK Government bonds).
3) No data on the 'Exposure to Climate-related Opportunities' metric is available for the money market fund or annuity target funds as at 30 June 2023.

Appendix 1: Scenario Analysis

The scenarios differ in the size of the physical risks, based on the resulting temperature impacts, but also in the size of the transition risks. The climate emergency scenario, where decisive action is taken, and the Inevitable Policy Response scenario, where transition is more disorderly due to delays in meaningful action, represent bigger transition risks than the Global Co-ordinated Action scenario.

The table below summarises the four climate change scenarios we have constructed and considered.

	Lowest Common Denominator	Inevitable policy Response	Global Coordinated Action	Climate Emergency
Description	A "business as usual" outcome where current policies continue with no further attempt to incentivise further emissions reductions. Socioeconomic and technological trends do not shift markedly from historical patterns.	Delays in taking meaningful policy action result in a rapid policy shift in the mid/late 2020s. Policies are implemented in a somewhat but not completely co-ordinated manner resulting in a more disorderly transition to a low carbon economy.	Policy makers agree on and immediately implement policies to reduce emissions in a globally coordinated manner. Companies and consumers take the majority of actions available to capture opportunities to reduce emissions.	A more ambitious version of the Global coordinated action scenario where more aggressive policy is pursued and more extensive technology shifts are achieved, in particular the deployment of Negative Emissions Technologies at scale.
Temperature Rise	~3.5ºC	~2.0ºC	~2.0ºC	~1.5ºC
Renewable energy by 2050	30-40%	80-85%	65-70%	80-85%
Physical risk level	High	Low – Medium	Low – Medium	Low
Transition risk level	Low	High	Low – Medium	Medium

Appendix 2: Data Coverage

As noted below the Trustee has excluded certain assets from the above analysis. Where data is not available, the Trustee, after taking all such steps as are reasonable and proportionate to calculate the Plan's exposures, taking into account costs and the time required by the Trustee or other third parties has taken the decision to exclude the assets for the time being, rather than make use of proxies in the calculation of the metrics. This is particularly relevant for the Plan's Alternative Risk Premia assets, Private Return-Generating Assets and Hedge Funds (for the purposes of external publication). The Trustee particularly noted that only a relatively small proportion of assets would be covered by a proxy, and that the determination (and, over time, update) of the proxy would likely be time-consuming, not entirely accurate and not materially impact the overall position.

DB Section asset allocation as at 30 June 2023

Asset Class	Are they included or excluded in the emissions data?	Reasons for exclusion (if applicable)	Allocation (at 30 June 2023)
Public equity	Included	N/A	4%
Real assets	Included	N/A	5%
Public fixed income	Included	N/A	2%
Private return-generating assets	Included	N/A	11%
LDI	Included	N/A	62%
Alternative risk premia	Excluded	Data is not currently available in respect of the mandates invested in and the Trustee has concerns regarding the cost and accuracy of any possible proxy methodologies	4%
Hedge funds	Excluded		5%
Cash	Excluded	This was a temporary holding with an assumed nil exposure	8%

DB Section data coverage (excluding LDI assets)

The data coverage figures below are a measure of the proportion of the Plan's assets for which the Trustee has high quality audited data. The Trustee has decided not to use proxied data due to its unreliability. The Trustee believes it is important to monitor this as climate metrics are at an early stage and data is currently limited. It also believes that improved data quality and coverage is an area that the Trustee can most influence its investment managers and improvements would allow better decision making on future carbon metrics. For the assets where relevant data is available (Equities, Fixed Income and Real Assets) the coverage figures below are a measure of the proportion of these assets for which high quality audited data is available. The Trustee will continue to monitor the data coverage levels and encourage improved data provision.

Metric – Scope 1&2	Data coverage 2023 (2022)*
Total GHG emissions (tCO2e)	96.4% (87.3%)
Carbon Footprint (tCO2e per $m invested)	96.4% (87.2%)
Implied Temperature Rise (degrees Celsius)	96.7% (87.7%)
Exposure to Climate-related Opportunities	94.2% (86.2%)

Metric – Scope 3	Data coverage 2023
Total GHG emissions (tCO2e)	96.3%
Carbon Footprint (tCO2e per $m invested)	96.3%

Data provided by Fiduciary Implementation Manager

DC Section data coverage

Metric – Scope 1&2	Data coverage 2023 (2022)*
Total GHG emissions (tCO2e)	99.6% (99.0%)
Carbon Footprint (tCO2e per $m invested)	88.4% (86.8%)

Metric – Scope 3	Data coverage 2023
Total GHG emissions (tCO2e)	99.6%
Carbon Footprint (tCO2e per $m invested)	88.4%

Total GHG emissions data provided by DC provider (Phoenix). Data on Carbon Footprint provided by LGIM, the manager of the underlying funds.

Appendix 3: Glossary

Fiduciary Strategy Manager

The Fiduciary Strategy Manager's responsibilities are in relation to the DB Section of the Plan. The Fiduciary Strategy Manager has discretion to manage the Plan's strategic asset allocation and the Plan's risk overlays, with the objective of maximising the probability of achieving the Plan's investment objective set by the Trustee. The Fiduciary Strategy Manager's discretion is subject to guidelines set by the Trustee.

Fiduciary Implementation Manager

The Fiduciary Implementation Manager's responsibilities are in relation to the DB Section of the Plan. The primary responsibility of the Fiduciary Implementation Manager is to manage the Plan's assets on a discretionary basis against the strategic asset allocation that has been set by the Fiduciary Strategy Manager, with the aim of outperforming the strategic asset allocation for a given level of investment risk. It is also responsible for the selection, de-selection, monitoring and ongoing management of the relationship with the Investment Managers.

Investment Consultant

The Investment Consultant's responsibilities in relation to the DB Section of the Plan include advising the Trustee and the FIC on the SIP, the high level investment strategy, and the appointment (and dismissal) and monitoring of Investment Managers for those assets outside the remit of the Fiduciary Implementation Manager and Fiduciary Strategy Manager. The Investment Consultant's responsibilities in relation to the DC Section of the Plan include assisting the Trustee and the FIC in the revision of the SIP and investment strategy, and appointing and monitoring Investment Managers. The Investment Consultant is also responsible for providing regular written advice on retained DC investments.

GHG emissions

The Trustee refers to GHG emissions, which is used as shorthand for the six main greenhouse gases (GHGs), defined by the Kyoto Protocol (Carbon dioxide (CO2); Methane (CH4); Nitrous oxide (N2O); Hydrofluorocarbons (HFCs); Perfluorocarbons (PFCs); and Sulphur hexafluoride (SF6)). As an equivalence measure for WACI in the charts shown in the TCFD Statement, 1 tCO2e/Mio GBP is currently comparable to 4,000 pounds of coal burned or 8.5 barrels of oil consumed, according to estimates provided by the United States Environmental Protection Agency.

Absolute Emissions Metric: Total GHG emissions (tCO2e) (scope 1 & 2)

Total amount of greenhouse gas emissions ("CO2 equivalents") (as mandated by the Kyoto Protocol) emitted by the underlying portfolio companies, attributed to the investor based on the total investment in each company.

$$\sum_{n}^{i}\left(\frac{Current\ value\ of\ investment_{\ i}}{Investee\ company\ enterprise\ value_{\ i}}\right)\times investee\ company's\ scope\ 1\ and\ 2\ emissions_{\ i}$$

Emissions Intensity Metric: Carbon Footprint (tCO2e / EVIC $m) (scope 1 & 2)

An intensity measure of emissions that assesses the level of greenhouse gas emissions (as mandated by the Kyoto Protocol) arising from $1 million investment (based on Enterprise Value Including Cash) in a company.

$$\frac{\sum_{n}^{i}\left(\frac{Current\ value\ of\ investment_{i}}{Investee\ company\ enterprise\ value_{i}}\right) \times investee\ company's\ scope\ 1\ and\ 2\ emissions_{i}}{Current\ value\ of\ all\ investments\ (\$\ millions)}$$

Alignment Metric: Implied Temperature Rise

The Implied Temperature Rise ("ITR") metric is intended to provide an estimate of how companies & investment portfolios align to global climate targets, such as referring to the Intergovernmental Panel on Climate Change (IPCC) goal of limiting the global temperature increase in the year 2100, compared to pre-industrial levels, to 2°C. or the 1.5°C limit, which was also popularized by the Paris Agreement.

Key to understanding the ITR is the concept of a carbon budget: how much the world can emit and, by extension, how much a company can emit and remain within the limitations required to meet a 2°C warming scenario by 2100. The Implied Temperature Rise, expressed in degrees Celsius (°C), estimates the global implied temperature rise (in the year 2100 or later) if the whole economy had the same carbon budget over-/undershoot level as the company (or portfolio) in question.

Additional Metric: Exposure to Climate-related Opportunities

The metric shows the total exposure value of securities (as a percentage of the portfolio that is covered by the analysis), for which the aggregated revenue from six underlying themes is more than 5% of its total revenue (capped at 100%). The six themes are Alternative Energy, Energy Efficiency, Green Buildings, Pollution Prevention, Sustainable Water and Sustainable Agriculture.

The metric at the holding level is binary; if the sum of the total revenue derived from any of the themes surpasses 5%, then the metric is TRUE (otherwise FALSE). The exposure value of the securities for which the data point is 'TRUE' are then added to give the total exposure to these securities.

Net zero

As noted by the Intergovernmental Panel on Climate Change (IPCC), net zero emissions are achieved when anthropogenic emissions of greenhouse gases to the atmosphere are balanced by anthropogenic removals over a specified period. Anthropogenic in terms of climate change refers to the impact humans have had on climate change, primarily through emissions of greenhouse gases.

Scope 1 Greenhouse Gas Emissions

Scope 1 emissions refer to all direct GHG emissions, or in other words, emissions from sources that are owned or controlled by the operating company.

Scope 2 Greenhouse Gas Emissions

Scope 2 emissions refer to all indirect GHG emissions stemming from the consumption of purchased electricity, heat or steam.

Scope 3 Greenhouse Gas Emissions

Scope 3 emissions are all indirect emissions not covered in Scope 2. This includes both upstream and downstream supply chains, such as the extraction and production of purchased materials and fuels, flight emissions, waste disposal and investments.

Enterprise Value Including Cash (Enterprise Value, 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.